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THE CANADIAN

PATENT OFFICE RECORD

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VOLUME XXVIII

OTTAWA:
GOVERNMENT PRINTING BUREAU
1901

VOLUME XXVIII., 1900.—ANNUAL INDEX.

INDEX OF INVENTIONS.

INDEX OF PATENTEES.

The Canadian Patent Office Record

Vol. XXVIII.—No. 1. JANUARY 31st, 1900. Price free by post in Canada and the United States, $2.00. SINGLE NUMBERS, - - - 20 Cts

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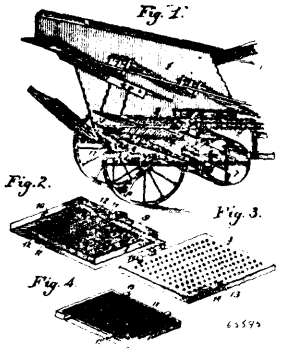
INVENTIONS PATENTED.

NOTE.—Patents are granted for 18 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 65,595. Thrashing Machine. (*Moulin à battre.*)



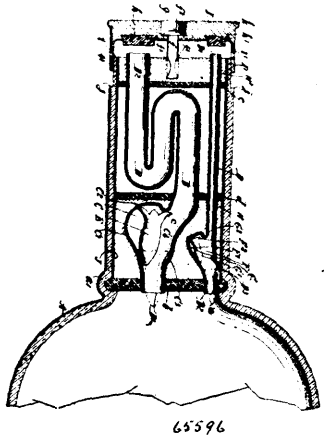
Madison Bowman, John Bowman and Robert C. Willis, all of Toledo, Illinois, U.S.A., 2nd January, 1900; 6 years. (Filed 9th December, 1899.)

Claim.—1st. In a thrashing machine, the combination with a stepped conveyer and a chaffing screen below the working surface thereof, of a fine screen 9 having its frame seated upon the chaffing screen and provided with the vertical and diagonal notches, the vertical and diagonal retainers attached to the chaffing screen and fitting in the notches of the screen frame, and fasteners to hold the screen 9 against displacement, substantially as described. 2nd. In a thrashing machine, the combination with a stepped conveyer, a chaffing screen arranged contiguous to and in a plane below the irregular surface of the conveyer, a riddle 4, and a screw conveyer casing in rear of said riddle, of the fine screen 9 co-extensive in area to the chaffing screen and having interlocking connection therewith to lie flush with the irregular surface of the conveyer, another fine screen directly over the screw conveyer casing and in line with the riddle, and fasteners for detachably securing the fine screens to the riddle and the chaffing screen, respectively, substantially as described.

No. 65,596. Bottle. (*Bouteille.*)

Joshua Van R. Van Name and John Elsworth Stevens, both of Mariner Harbor, New York, U.S.A., 2nd January, 1900; 6 years. (Filed 27th November, 1899.)

Claim.—1st. A non-fillable bottle having mounted in the neck thereof, liquid outflow and air inlet tubes, both of which are formed with recesses or chambers deflected to one side of the bottle, and float valves mounted in said tubes normally to close the same, and

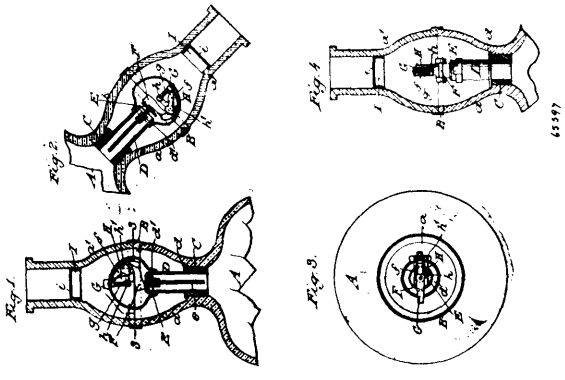


adapted when the bottle is tilted, to fall into the recesses and permit the liquid and the air respectively to flow thereover, means for closing the lower neck of the bottle otherwise than through said tubes, and means tending to guard or prevent access to the valve of the liquid outflow tube. 2nd. In a bottle or similar vessel, a liquid outflow tube or passage, the upper portion of which is formed or adapted to prevent direct access to the lower portion thereof, said lower portion being formed into a chamber deflected to one side of the bottle, and provided with a diagonal lower wall, and a float valve mounted in said chamber and adapted to close the lower end of the liquid outflow tube. 3rd. In a bottle or similar vessel, a liquid outflow tube or passage, the upper portion of which is formed or adapted to prevent direct access to the lower portion thereof, said lower portion being formed into a chamber deflected to one side of the bottle, and provided with a diagonal lower wall, and a float valve mounted in said chamber and adapted to close the lower end of the liquid outflow tube, said valve being provided upon its upper face with a plurality of outwardly directed wings, and the lower portion thereof being conoidal. 4th. In a bottle or similar vessel, the combination with a liquid outflow tube or passage, of a hollow float valve sectionally circular, and having the lower portion thereof conoidal and tapered, and the upper portion thereof formed with outwardly projected curved wings. 5th. In a bottle or similar vessel, a liquid outflow tube, the upper portion of which is formed or adapted to prevent direct access to its lower portion, said lower portion being formed into a chamber or recess deflected to one side of the bottle, and downwardly flaring toward the lower mouth of said tube, and a valve within said chamber or recess and adapted to close the lower end of said tube, said valve being sectionally circular in form, and having its lower end conoidal and tapered and provided at its upper end with a plurality of outwardly directed curved wings offering a resisting surface to inflowing liquids, and tending to prevent the valve from lodging in the upper portion of the tube, and shoulders formed between said upper portion of said tube and the recess. 6th. The combination with a bottle or similar vessel, having a liquid outflow tube and an air inlet tube, of a cap slidably mounted upon the mouth of the vessel and carrying means to loose each

of said tubes when said cap is depressed and having apertures in alignment with said tubes, and means for preventing rotation of said cap. 7th. The combination with a bottle or similar vessel have a liquid outflow and an air-inlet tube, of a cap slidably mounted upon and surrounding the mouth of the vessel having apertures in the rim or vertical portion thereof in alignment with said tubes, which apertures are open when the cap is raised and closed when it is depressed, stoppers mounted upon the under surface of the cap in alignment with each of the tubes, and means for preventing rotation of said cap. 8th. The combination with a bottle or similar vessel having a liquid outflow tube and an air inlet tube, of a sectionally rectangular post having the lower end thereof secured immovably between said tubes, and a head upon the upper end, a cap slidably mounted upon said post and apertured to receive said head, stoppers upon the under surface of said cap above said tubes, and a rim depending from said cap and surrounding the mouth of the bottle, and having apertures therein in alignment with said tubes. 9th. In a bottle or similar vessel, a liquid outflow tube, the upper portion of which is formed into an S-shaped trap to prevent direct access to its lower portion, said lower portion being formed into a chamber or recess deflected to one side of the bottle and having a downwardly inclined side on which said valve rests when opened, and a flat upper wall, between which and the tube is a downwardly projecting shoulder, the opposite side of said chamber being tapered or curved and provided with an inwardly ranging shoulder, and the end of said chamber terminating in a tubular valve seat, and a valve within said chamber or recess and adapted to close the lower end of said tube, said valve being hollow and air filled, whereby it floats, and being sectionally circular in form, the lower portion thereof being conoidal and tapered, and provided at its upper end with a plurality of outwardly directed curved wings, and an air inlet tube mounted within the bottle adjacent to the liquid outflow tube, and provided with a valve in the lower portion thereof. 10th. A non-fillable bottle having mounted in the neck thereof, liquid outflow and the air inlet tubes, both of which are formed with recesses or chambers deflected toward the same side of the bottle, valves mounted in said tubes normally to close the same, and adapted when the bottle is tilted to fall into their respective recesses, and permit the liquid and air respectively to flow thereover, and a washer or disc mounted in the lower portion of the neck of the bottle and holding said tubes. 11th. A non-fillable bottle having mounted in the neck thereof, a disc firmly secured in position, liquid outflow and air inlet tubes mounted in said disc and having their lower end projecting therethrough, chambers projecting to one side of said tubes, valves mounted therein, a disc mounted above said chambers, a filling between said discs and surrounding said tubes, a disc below the top of the bottle through which the liquid outflow and air inlet tubes pass, said liquid outflow tube being formed into an S-shaped trap in the intervening space, a filling above the top disc, a post inserted in said filling and provided with means to prevent rotation thereof, said post being sectionally rectangular and provided with a head, and a cap slidably mounted upon said post having a recess in which said head works, and a depending ring surrounding the mouth of the bottle, and provided with apertures in lateral alignment with the liquid outflow and air inlet tubes, said cap carrying stoppers upon its under surface to close the respective tubes.

No. 65,597. Non-refillable Bottle.

(*Bouteille non-réemplissable.*)



James R. Latham and Robert Millbank, both of New York City, New York, U.S.A., 2nd January, 1900; 6 years. (Filed 6th December, 1899.)

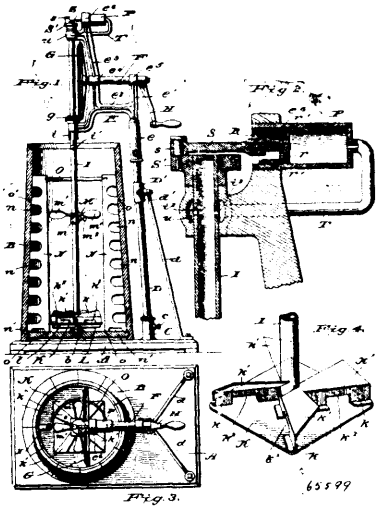
Claim—1st. The combination with a bottle having a two-part neck, the sections of the neck being permanently united, of a valve arranged to open and close communication between the interior of the neck and the interior of the body of the bottle and means for positively locking the valve in its closed position when the bottle is in any position nearer upright than horizontal, substantially as set forth. 2nd. A non-refillable bottle comprising a body portion, a bulging neck portion, the two parts of the neck portion being formed in separate sections jointed along the bulged portion of the neck and permanently united, and means for preventing the inflow of liquid through the neck into the body of the bottle when the bottle assumes a position nearer the upright than the horizontal position, substantially as set forth. 3rd. The combination with the bottle having a bulge shaped neck, of the stopper, the tube, the reciprocating valve, the weighted lever, the lever lock, and means for mounting the lever and its lock in rotary adjustment to hold the valve closed whenever the bottle is in a position nearer the upright than the horizontal. 4th. The combination with the bottle and its bulged neck, of the cut-off mechanism comprising a reciprocating valve, a weighted lever and lever locking device and a guard cap permanently seated in the neck intermediate of the mouth of the bottle and the cut-off mechanism, substantially as set forth.

No. 65,598. Sole and Heel. (*Semelle et talon.*)

The "N. L." Syndicate, London, England, assignee of Franz Gatzsche, Freiberg, Germany, 2nd January, 1900. (Filed 6th December, 1899.)

Claim.—1st. The improved composition to be used for the soles and heels of boots and shoes, consisting of waste from paper manufactories, asphaltum, resin, turpentine oil, peroxide of iron, and tallow, in the proportions specified, and substantially as described. 2nd. The method of manufacturing soles and heels for boots and shoes from the ingredients named, by placing the paper waste in a mixture of all the other ingredients at a temperature of about 80 centigrade until it is entirely impregnated, then pressing the entire mixture between rollers so as to form sheets of suitable thickness from which soles and heels for boots and shoes are made, substantially as described.

No. 65,599. Churn. (*Baratte.*)



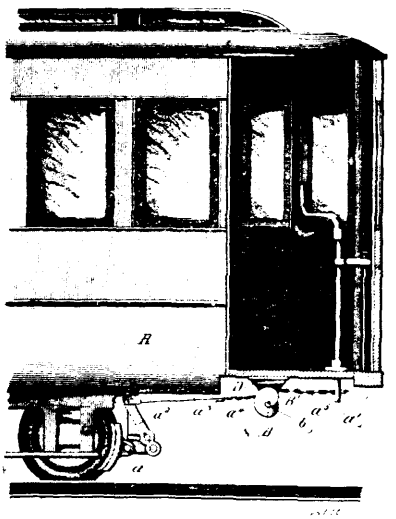
Nelson J. Tubbs, Knoxville, Tennessee, and Tom J. Landrum, Louisville, Kentucky, U.S.A., 2nd January, 1900; 6 years. (Filed 5th December, 1899.)

Claim.—1st. In a churn, the combination of the supporting frame presenting bearings for the dasher rod and driving shaft, the upper bearing for the dasher rod forming an air chamber and the supporting frame extended upward beyond said air chamber and provided with a threaded opening, a hollow dasher rod having an opening entering the air chamber and extended above the latter, and bevel gears for turning the dasher rod from the driving shaft, together with a wrist wheel secured to the extended upper end of the dasher rod, a cylinder screwed into the threaded opening of the supporting frame, a pipe connecting the cylinder to the air chamber, a piston working in the cylinder, and a pitman rod connecting the piston to the wrist wheel, as herein shown and described. 2nd. In a churn, the combination, of a supporting frame for the driving mechanism, comprising a standard D, and frame or casting E, the latter consisting of a socket e receiving the upper end of the standard, a vertical bearing arm e^1 extending upward from said socket, and arm e^2 projecting horizontally from the former arm, and a vertically disposed yoke e^3 having upper and lower bearing for the dasher rod, a central bearing on the line with the bearing of the arm e^1, and an upper extension e^6 provided with a threaded opening horizontally disposed, the upper bearing for the dasher rod forming an air chamber below the plain of the threaded opening, together with a jointed hollow dasher rod extended above the air chamber and having an opening entering the latter, a wrist wheel fixed on the extended end of the dasher rod, a cylinder screwed into the threaded opening of the frame, a pipe connecting the cylinder to the air chamber, a piston working in the cylinder, and a pitman rod connected to the piston and wrist wheel, substantially as shown and described. 3rd. In a

churn, the combination with the body, of the boards or breakers N provided with a vertical series of openings n and an opening n^1 at their lower end, spurs o and o^1 projecting from the breakers, and a curved cross bar engaging the upper ends of said breakers, together with a dasher comprising a plate, blades projecting upward from the plate and flared outward at their upper ends, the vertical portion of the blades having openings therethrough, and tubes on the under side of the plate provided with outlet openings at their outer ends, a hollow dasher rod carrying the dasher and connected to the tubes, and means for forcing air into the hollow dasher rod, substantially as shown and described.

No. 65,600. Car Brake. (*Frein de chars.*)

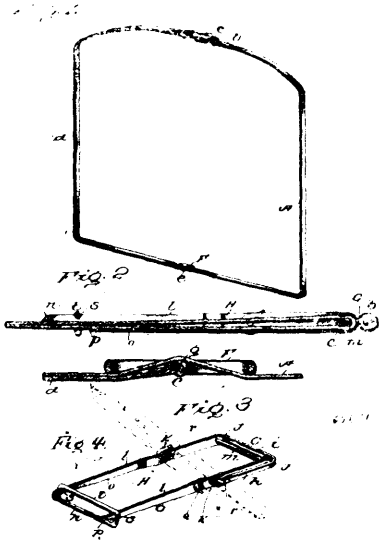
Fig. 1.



Louis M. Lymburner, and John E. Matthews, assignees Camille Richard, all of Montreal, Quebec, Canada, 2nd January, 1900; 6 years. (Filed 5th December, 1899.)

Claim.—1st. A brake mechanism, comprising a brake shoe, a lever pivoted thereto, a double cam lever, connection between said double cam lever and the brake lever, a brake rod, and a connection between said brake rod and said double cam lever, substantially as described. 2nd. A brake mechanism, comprising a brake shoe, a lever pivoted thereto, a hanger frame, a double cam lever journalled in said frame, said cam being constructed in the form of a helix and arranged side by side, a connection between said double cam lever and the brake lever, a brake rod, a connection between said brake rod and said cam lever, substantially as described.

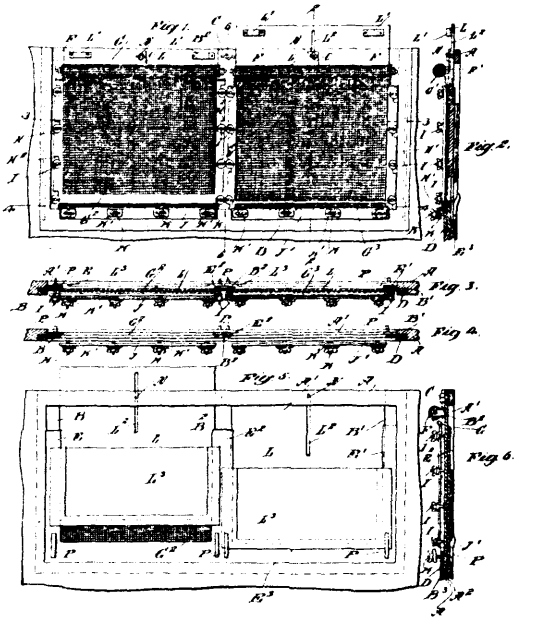
No. 65,601. Strap Fastener. (*Attache de courroie.*)



Orville A. Stoneman and Ernest F. White, both of Norfolk, Virginia, U.S.A., 2nd January, 1900; 6 years. (Filed 21st August, 1899.)

Claim.—1st. A fastening and tightening device for the meeting ends of straps and the like, comprising a yoke having a cross bar at one end to receive one of the meeting ends of a strap, hooks at the free ends of its side arms, a lever comprising a rectangular link having cross bars at its ends, the front cross bar being adapted to receive the other meeting end of the strap, trunnions located eccentrically upon its side arms, and a link to engage the rear cross bar of the lever to hold the same closed. 2nd. A fastening and tightening device for the meeting ends of straps and the like, comprising a yoke having at one end a cross bar to receive one of the meeting ends of a strap and its opposite end open and provided at the free ends of its side arms with hooks facing in the direction of said cross bar, a lever comprising an elongated link frame provided at its inner or front end with a cross bar adapted to receive the other meeting end of the strap, at its rear end with a cross bar recessed upon its underside and provided on its side arms with trunnions in advance of its centre to engage the hooks of the yoke, and a link adapted to engage notches in the side arms of the lever adjacent to said cross bar to hold said lever closed. 3rd. A strap fastening for trunks, etc., comprising a strap or band having an adjusting loop formed by folding one of the ends of the straps upon itself, an adjusting device slidably engaging the body of the band and connected to the free end of said looped portion, a yoke having a cross bar at one end to which the opposite end of the strap is secured and hooks at the free ends of its side arms, a lever having trunnions located in advance of its centre to engage said hooks and front and rear cross bars, said front cross bar having the closed or return end of the looped portion of the strap passed therearound, and a link adapted to engage notches in the side arms of the lever adjacent to said rear cross bar to hold said lever closed in fastening position.

No. 65,602. Stamp Mill Screen. (*Tamis de bocard.*)



65602

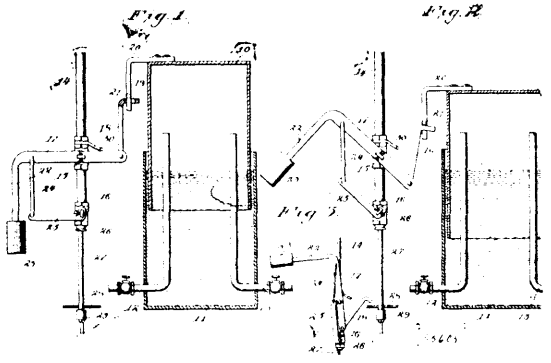
Martin R. Driscoll and William H. Richardson, both of Frisco, California, U.S.A., 2nd January, 1900; 6 years. (Filed 30th August, 1899.)

Claim.—1st. A stamp mill, having an apertured frame, a roll of screen material mounted above the aperture and having a portion extending over the aperture, a clamping frame extending about the lower and side edges of the aperture and covering the edge of the screen material, said frame having vertically extending bolt recesses in its side bars, clamping bolts within said recesses and an auxiliary clamping bar engaging the outer face of the lower side of the clamping frame, substantially as described. 2nd. A stamp mill, having an apertured frame, a roll of screen material mounted above the aperture and having a portion extending over the aperture, a clamping frame extending about the lower and side edges of the aperture and covering the edges of the screen material, means for releasably securing the members of the clamping frame, and the screen beneath it to the screen frame, and an auxiliary clamping bar engaging the outer face of the lower side of the clamping frame, substantially as described. 3rd. A stamp mill, having an apertured mortar, a roll of screen material mounted above the aperture and having a portion extending over the aperture, a clamping frame extending about the lower and side edges of the aperture and covering the edges of the screen material, means for releasably securing the members of the

clamping frame and the screen beneath it to the screen frame, an auxiliary clamping bar engaging the outer face of the lower side of the clamping frame, a gate mounted to slide vertically at the rear of the screen, and inclined guides engaging the lower edge of the gate to force it laterally to its seat as it reaches its lowermost position, substantially as described.

No. 65,603. Acetylene Gas Generator Water Feed.

(*Alimentateur d'eau de machine à gaz acétylène.*)



William P. Masson and Hylas L. Reed, both of Commercial Point, Ohio, U.S.A., 2nd January, 1899; 6 years. (Filed 19th May, 1899.)

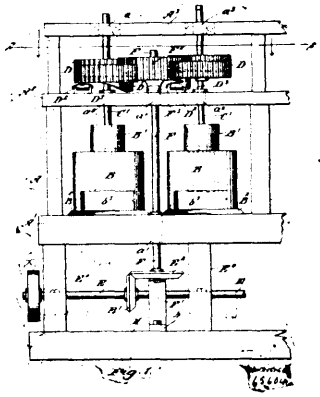
Claim.—1st. A water feed pipe for an acetylene gas generator provided with an upper and a lower valve, in combination with connections operated by the rise and fall of the gas bell whereby one valve is opened while the other is closed, substantially as described. 2nd. A water feed pipe for an acetylene gas generator provided with two valves, the passages of which are arranged at right angles to each other, a lever for each valve connected for simultaneous operation, and means carried by the gas bell for operating said levers, substantially as described. 3rd. The combination in an acetylene gas generator, of a gas bell, a water feed pipe, two valves therein, one above the other, a lever on the upper valve, connections with the gas bell, a weight on the opposite end of the lever, a lever for the lower valve, and a link connecting the two levers, substantially as described. 4th. The combination in an acetylene gas generator, of a water feed pipe, two valves therein, one above the other with their passages at right angles to each other, a lever on each valve, a connecting link between said levers, and a reducer in the pipe below the valves, substantially as described. 5th. In an acetylene gas generator, a water feed pipe provided with two valves, set at right angles to each other, and a reducer at the lower end of the pipe to regulate the supply of water to suit the capacity of the generator, substantially as described. 6th. The combination with the gas bell and water feed pipe of the upper and lower valves, set at right angles to each other, a lever for each valve, a link connecting the two levers, an extension at one end of the lever of one of the valves, a weight thereon, a bar pivotally connected at the other end of said lever having a slotted horizontal extension on said bar, a vertical rod secured to the gas bell passing downward through said slot, and a removable key in said rod adapted to engage the top of the horizontal extension of the pivoted bar, when the gas bell falls, substantially as described.

No. 65,604. Ore Stamping and Crushing Mill.

(*Bocard à minerai et machine à broyer.*)

Wallace D. McDougall, San Francisco, California, assignee of Edward F. Parker, Denver, Colorado, U.S.A., 2nd January, 1900; 6 years. (Filed 30th March, 1899.)

Claim.—1st. In an ore stamping mill, the combination with a suitable frame, a horizontal shaft journalled in said frame, and a pulley fixed thereon, a bevel gear fixed on said shaft, a vertical shaft journalled in said frame, a bevel gear fixed on said vertical shaft and meshing with the bevel gear on said horizontal shaft, and a wide faced cog wheel also fixed upon said vertical shaft, of a plurity of vertical shafts journalled in said frame around said vertical shaft, and capable of vertical movement, cog wheels fixed upon said vertically movable shafts, and each having a cam on its under side, rollers mounted upon said frame beneath said cog wheels and adapted to be struck by said cams as the wheels rotate, a plurality of shells for holding the ore while being stamped, mounted in said frame, and plunger heads connected to said vertically movable shafts mounted in said shells, substantially as described. 2nd. In an ore stamping mill, the combination with a vertical shaft and means for rotating the same, a wide faced cog wheel fixed on said vertical shaft and having a rotation constantly in the same horizontal plane, of a plurality of shells grouped around said vertical shaft, plunger heads mounted in said shells, vertical shafts having



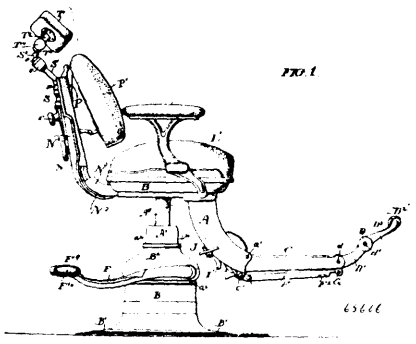
screw threaded ends engaging in said plunger heads and working through openings in said shells, cog wheels mounted upon said vertical shafts and meshing with said wide faced cog wheel, rollers journalled in brackets mounted upon the frame of the mill beneath the cog wheels on said plunger shafts, and cams D^1 on the under side of said wheels adapted to slide over said rollers as said wheels rotate, and to impart to said plunger shafts a vertical movement in addition to the rotary movement imparted by the said wide faced cog wheel, substantially as described. 3rd. In an ore stamping mill, the combination with a horizontal shaft, and means for rotating the same, a bevel gear on said shaft, a vertical shaft, a bevel gear fixed on said vertical shaft and gearing with the bevel gear on said horizontal shaft, the wide faced cog wheel F^2 fixed on said vertical shaft and adapted to rotate constantly in the same horizontal plane, a plurality of shells grouped around said vertical shaft, plunger heads mounted in said shells, vertical shafts having screw threaded ends in engaging in said plunger heads and working through openings in said shells, cog wheels mounted upon said vertical shafts and meshing with the cog wheel F^2, rollers journalled in brackets mounted upon the frame of the mill beneath the cog wheels upon said plunger shafts, and cams D^1, on the under side of said wheels adapted to slide over said rollers as said wheels rotate, and to impart to said plunger shafts a vertical movement in addition to the rotary movement imparted by the cog wheel F^2, substantially as described. 4th. In an ore stamping mill, the combination with a suitable frame, a horizontal shaft journalled in said frame and a pulley fixed thereon, a bevel gear fixed on said horizontal shaft, a vertical shaft also journalled in said frame, a bevel gear fixed on said vertical shaft and meshing with the bevel gear on said horizontal shaft, and a wide faced cog wheel F^2, rigidly mounted upon said vertical shaft, a plurality of hollow shells B, each having reduced cylindrical upper portion B^1, with central opening b^0, therein, mounted upon a solid metallic base B^2, seated upon said frame, a die seated in a recess in the upper face of said base B^2, a funnel shaped wire netting in each of said shells surrounding said die at its lower edge and adapted to receive the uncrushed ore at its top through an opening in the larger portion of said shell, a solid plunger head provided with a hardened shoe at its lower end mounted in each of said shells, a vertical shaft having a screw threaded end engaging in each of said plunger heads, a cog wheel fixed upon each of said shafts and meshing with said cog wheel F^2, a roller journalled in a bracket mounted upon the frame beneath each of said cog wheels, and a cam on the under side of each of said cog wheels adapted to slide over said rollers, and impart to said shafts a vertical movement, substantially as described.

No. 65,605. Writing Ink. (*Encre.*)

Isaac Lichtentag, Alexander Lichtentag, and Simon Weis, all of New Orleans, Louisana, U.S.A., 2nd January, 1900; 6 years. (Filed 2nd December, 1898.)

Claim.—1st. In the production of writing inks of the class herein described, namely: those consisting of water, holding in suspension finely divided carbon, the process of suspending the carbon in the water and of rendering it unwashable when written on paper, which consists in supplying a substance which dissolves in the water and holds up the finely divided carbon, and which causes the water to penetrate into the paper on which it may be written, carrying with it the carbon and uniting the same to the fibre of the paper, said substance consisting of soap. 2nd. The process of making writing ink, which consists in intimately mixing finely divided carbon with soap, thereby giving each particle of carbon a soap coating, and subsequently adding such coated carbon to water, whereby the soap is dissolved and the carbon suspended in the solution, substantially as described.

No. 65,606. Dental Chair. (*Fauteuil de dentiste.*)



The S. S. White Dental Manufacturing Company, Philadelphia, Pennsylvania, assignee of Basil Manly Wilkerson, Baltimore, Maryland, U.S.A., 2nd January, 1900; 6 years. (Filed 1st December, 1899.)

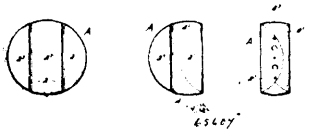
Claim.—1st. The combination, in a dental chair, of the cylindrical pedestal having a closed bottom and forming an oil reservoir, a supporting frame consisting of an outer cylindrical section and an inner cylindrical section, the said outer section having supporting and rotating connection with said pedestal, and the inner section extending above the top of the outer section and connected thereto by a horizontal web located below the top of the pedestal and above the oil in the reservoir, and a detachable cap closing the space between the inner and outer sections of the supporting frame above said horizontal web, substantially as and for the purpose described. 2nd. The combination, in a dental chair, of the supporting frame consisting of connected inner and outer cylindrical sections, the inner section extending above the outer section, a chair body supporting plunger mounted to move up and down in the said inner section of the supporting frame, plunger elevating mechanism mounted inside the supporting frame, and a cap detachably connected with said supporting frame, and closing the space between the inner and outer sections thereof, said cap being independent of said elevating mechanism, whereby when said cap is detached, the said elevating mechanism is exposed to view and the operation of the same is not interfered with, substantially as described. 3rd. The combination, in a dental chair, of a supporting frame having an inner cylindrical section, a fixed plunger cylinder rigidly connected to said supporting frame, a cylindrical telescopic plunger member movable up and down in said fixed plunger cylinder, a guide cylinder connected to the upper end of said cylindrical plunger member and movable up and down therewith, said guide cylinder surrounding the said fixed plunger cylinder and having bearing in the upper end of said inner cylindrical section of the supporting frame, a piston member of the telescopic plunger fitted to move up and down in said cylindrical member of said plunger, and also having bearing in said guide cylinder at the top thereof, and a chair body mounted upon the upper end of said piston member of the telescopic plunger, substantially as and for the purpose set forth. 4th. The combination, in a dental chair, of the non-rotatable base, a supporting frame having bearing in said base and adapted to be horizontally rotated therein, and means for automatically locking said supporting frame to said base, substantially as and for the purpose set forth. 5th. The combination, in a dental chair, of the non-rotatable base, the chair body mounted thereon and adapted to be horizontally rotated relatively thereto, automatic clamp mechanism for normally locking the chair body to the base against horizontal rotation, and means for releasing the automatic clamp mechanism for permitting the chair body to be rotated, substantially as set forth. 6th. The combination, in a dental chair, of the non-rotatable pedestal, a supporting frame having bearing in said pedestal and adapted to be horizontally rotated therein, a clamp rod mounted to turn in bearings in said supporting frame, a clamp actuated by said clamp rod, a spring acting upon said clamp rod for normally causing said clamp to clamp said supporting frame to the pedestal against rotation therein, and means for turning said clamp rod against the stress of said spring for unclamping said supporting frame and permitting the same to be rotated, substantially as described. 7th. The combination, in a dental chair, of the non-rotatable pedestal, a supporting frame having bearing in said pedestal and adapted to be horizontally rotated therein, a clamp rod mounted to turn in bearings in said supporting frame, a clamp actuated by said rod, a bell crank lever connected to said clamp rod, a spring connected to one arm of said bell crank lever for causing said clamp to normally clamp said supporting frame to the pedestal against rotation, and a controlling lever for acting upon the other arm of said bell crank lever for unclamping said supporting frame and permiting the same to be rotated, substantially as described. 8th. The combination, in a dental chair, of the non-rotatable pedestal, a supporting frame having bearing in said pedestal, and adapted to be horizontally rotated therein, a vertical clamp rod mounted to turn in bearings in said supporting frame and having a cam surface, a clamp block mounted to slide horizontally in a bearing in said supporting frame and adapted to bear against said pedestal, said clamp block being borne upon by the cam surface of said clamp rod, and means for actuating said clamp rod for causing the clamp block to clamp and unclamp the supporting frame to and from the pedestal, substantially as described. 9th. In a dental chair body support, the combination of the plunger, the cylinder in which said plunger is movable up and down, a buffer rod fitted in the lower end of said plunger, and means for nomally projecting said buffer rod from said plunger, substantially as and for the purpose described. 10th. In a dental chair body support, the combination of the plunger formed with an oil chamber in its lower end, the cylinder in which said plunger moves up and down, a buffer rod having a head movable up and down in said oil chamber, the oil being adapted to pass said head to and from said oil chamber, whereby when the buffer rod strikes the bottom of said plunger cylinder, the oil confined in the oil chamber gradually escapes and cushions the final downward movement of the plunger, substantially as described. 11th. In a dental chair body telescopic supporting plunger, the combination of the fixed plunger cylinder, the cylindrical plunger member movable up and down therein, the guide cylinder connected to said cylindrical plunger member and movable up and down therewith and surrounding said fixed plunger cylinder, and a buffing device on the lower end of said guide cylinder, substantially as and for the purpose described. 12th. In a dental chair body telescopic supporting plunger, the combination of the fixed plunger cylinder, the cylindrical plunger member movable up and down therein, the guide cylinder connected to said cylindrical plunger member and movable up and down therewith and surrounding said fixed plunger cylinder, a buffing device on the lower end of said guide cylinder, the piston number of the plunger movable up and down in said cylindrical member and said guide cylinder, and a buffing device located between the top of said guide cylinder and the bottom of said piston member, substantially as and for the purpose described. 13th. The combination, in a dental chair, of a vertically movable chair body supporting plunger, clamping mechanism therefor comprising a horizontally movable toggle lever, a spring acting upon said toggle lever for causing the same to normally clamp said plunger and means for unclamping said toggle lever, the said clamping mechanism acting to clamp the plunger against upward and downward and lateral movement at all times except when acted upon by the means for unclamping it, substantially as described. 14th. The combination, in a dental chair, of a telescopic supporting plunger, separate locking devices for each member of telescopic plunger, a horizontally movable toggle lever for simultaneously operating said locking devices, and means for actuating said toggle lever, substantially as and for the purpose set forth. 15th. The combination, in a dental chair, of a telescopic supporting plunger, separate clamping devices for each member thereof, a toggle lever, a spring acting upon said toggle lever for causing the clamping devices to normally clamp the telescopic supporting plunger, and means for simultaneously unclamping said clamping devices, substantially as and for the purpose described. 16th. The combination, with a chair body supporting plunger, of clamping mechanism therefor comprising a toggle lever, the outer member of which is composed of two parts having sliding connection with each other, and an adjustable fulcrum piece against which one part of said outer member of the toggle lever has bearing, substantially as and for the purpose described. 17th. The combination, in a dental chair, of a telescopic supporting plunger, separate locking devices for each member thereof, a toggle lever, one member of which is provided with two arms, a spring acting upon the toggle lever through one of its arms for causing the separate locking mechanisms to simultaneously grip the respective members of the telescopic plunger, and means for acting upon the toggle lever through its other arm for causing said locking mechanism to release the said plunger member, substantially as and for the purpose set forth. 18th. The combination, in a dental chair, of the supporting frame, the telescopic plunger movable up and down therein, the clamp bar arranged parallel with the outer member of the telescopic plunger, the clamp block fitted to move in an opening in the outer member of the telescopic plunger to bear upon the inner member thereof and be acted upon by the clamp bar, and a toggle lever for simultaneously causing the clamp bar and clamp block to clamp the members of the plungers together and to the supporting frame, substantially as and for the purposes described. 19th. The combination, in a dental chair, of the supporting frame, a telescopic supporting plunger movable up and down in a cylinder of said supporting frame, a clamp bar arranged parallel with the outer member of said telescopic plunger to which said clamp bar is connected in such a way as to be capable of being rocked horizontally, means for horizontally rocking said clamp bar to force it to clamp the outer member of the telescopic plunger to the said supporting frame, and means for transmitting the movement of said clamp bar to the inner member of said telescopic plunger, whereby when the clamp bar is actuated the members of the telescopic plunger are simultaneously clamped in the supporting frame in any position of vertical adjustment they may occupy, substantially as described. 20th. In elevating mechanism for dental chair, the combination of the pump cylinder, and its top or gland, the piston movable up and down therein and formed with an enclosed oil space and an exposed oil recess, and also having a passageway between said oil space and said oil recess, the said passage way opening into the oil space a short distance above its

lower end, whereby just before the piston reaches the end of its upstroke the said passageway is closed and the oil confined in the oil space serves to cushion the piston at the end of its upstroke, substantially as described. 21st. The combination, in a dental chair, of a base, a detachable cap or dome for the same, a plunger cylinder supported therein, an upright pump cylinder supported by the side of said plunger cylinder, a communicating passageway between said cylinders, a valve containing plug screwing into the top of said passageway and located in a plane above the top of the upright pump cylinder in a readily accessible position, a normally closed outlet or lowering valve contained in said plug, and means for tripping said valve whereby when the detachable cap or dome is removed the said valve containing plug is exposed and may be readily detached, substantially as and for the purpose described. 22nd. The combination, in a dental chair, of the base, a detachable cap or dome for the same, a plunger cylinder supported therein, an upright pump cylinder supported by the side of said plunger cylinder, a communicating passageway between said cylinders, a valve containing plug screwing into the top of said passageway and located in a plane above the top of the upright pump cylinder in a readily accessible position, a normally closed outlet or lowering valve contained in said plug, means for tripping said valve, a valve for preventing return of oil to the pump cylinder from said plunger cylinder also contained in said plug, whereby when the detachable cap or dome is removed the said valve containing plug is exposed, and may be readily detached, substantially as described. 23rd. The combination, in a dental chair, of the base, a supporting frame mounted therein, a plunger cylinder fixed to said supporting frame, a casting having detachable connection with said supporting frame, a pump and its valves carried by said casting, a passageway in said supporting frame communicating with the plunger cylinder, a passageway in said casting communicating with the pump, said passageways being adapted to register with each other when the casting is in place, and a bolt passing through said casting into the said supporting frame for detachably connecting said casting to said supporting frame, the head of said bolt extending above the top of the pump in a readily accessible position, whereby the casting, the pump and its valves may be removed as a whole from the base without disturbing other mechanisms contained within said base, substantially as described. 24th. In elevating and lowering mechanism for dental chairs, the combination of the outlet or lowering valve the stem of which projects above the top of the plug in which the valve is mounted, and a flanged cap secured to said valve stem above said valve plug, substantially as and for the purpose described. 25th. In elevating and lowering mechanism for dental chairs, the combination of the outlet or lowering valve the stem of which projects above the top of the plug in which the valve is mounted, and a flanged cap secured to said valve stem above said valve plug, the flange of said cap loosely surrounding the top of said valve plug, whereby the oil escaping from around the valve stem when the valve is opened, strikes against the flanged cap and is thereby deflected downwardly, substantially as described. 26th. In a dental chair, the combination of the base, a supporting frame mounted to rotate horizontally therein, mechanism for locking said supporting frame to said base, a vertically adjustable supporting plunger, clamping mechanism for the same, plunger elevating and lowering mechanism, and a single operating lever for controlling all of said mechanisms, substantially as and for the purposes described. 27th. In a dental chair, the combination of the base, a supporting frame mounted to rotate horizontally therein, mechanism for locking said supporting frame to said base, a vertically adjustable supporting plunger, clamping mechanism for the same, plunger elevating mechanism, and a single operating lever for controlling all of said mechanisms, substantially as and for the purposes described. 28th. In a dental chair, the combination of the base, a supporting frame mounted to rotate horizontally therein, mechanism for locking said supporting frame to said base, a vertically adjustable supporting plunger, clamping mechanism for the same, plunger lowering mechanism, and a single operating lever for controlling all of said mechanism, substantially as and for the purpose described. 29th. In a dental chair, the combination of the base, a supporting frame mounted to rotate horizontally therein, mechanism for locking said supporting frame to said base, a vertically adjustable supporting plunger, elevating and lowering mechanism therefor, and a single operating lever for controlling all of said mechanisms, substantially as and for the purpose described. 30th. In a dental chair, the combination of the base, a supporting frame mounted to rotate horizontally therein, mechanism for locking said supporting frame to said base, a vertically adjustable supporting plunger, mechanism for locking said plunger, and a single operating lever for controlling said mechanisms, substantially as and for the purpose described. 31st. The combination, in a dental chair, of the base, the supporting frame supported by and adapted to rotate horizontally therein, mechanism for clamping the supporting frame to said base, the chair body supporting plunger vertically adjustable in the supporting frame, mechanism for elevating the supporting plunger, and a single lever for both operating the plunger elevating mechanism and for controling the mechanism for clamping the supporting frame to the pedestal, substantially as set forth. 32nd. The combination, in a dental chair, of the base, a supporting frame mounted to rotate horizontally therein, a vertically adjustable supporting plunger elevating mechanism for the same, automatic clamp mechanism for normally locking said supporting frame to said base, and means for releasing said automatic clamp mechanism for permitting said supporting frame to be rotated, said means being under the control of the operating lever of the plunger elevating mechanism, substantially as and for the purpose described. 33rd. In a dental chair the combination of the base, the supporting frame, the plunger, plunger elevating mechanism, a post mounted upon said supporting frame and having horizontal turning connection therewith, and an operating lever for said plunger elevating mechanism connected at its inner end to said post by a horizontal pivot, whereby said operating lever may be rocked vertically independently of said post and be moved horizontally therewith, substantially as and for the purposes described. 34th. The combination, in a dental chair, of the vertically adjustable supporting plunger, the fixed plunger cylinder, the pump, an operating lever for actuating said pump by vertical movement, a communicating passage way between said pump and said fixed plunger cylinder, an outlet valve in said passage way, a pivoted arm bearing upon the stem of said outlet valve and adapted to be rocked downwardly for tripping said outlet valve by horizontal movement of said operating lever, substantially as described. 35th. The combination, in a dental chair, of a vertically adjustable supporting plunger, plunger clamping mechanism, plunger elevating mechanism, a lever connected to said plunger clamping mechanism, a spring connected to said lever for causing the plunger clamping mechanism to normally clamp the plunger, an operating lever for the plunger elevating mechanism, and connections between said operating lever and said lever of the plunger clamping mechanism, whereby when the operating lever is moved into a position for operating the plunger elevating mechanism, the plunger clamping mechanism is automatically unclamped, substantially as described. 36th. The combination, in a dental chair, of a vertically adjustable supporting plunger, plunger clamping mechanism, plunger elevating mechanism and plunger lowering mechanism, a lever connected to said plunger clamping mechanism, a spring connected to said lever for causing the plunger clamping mechanism to normally clamp the plunger, a single operating lever for the plunger elevating and lowering mechanisms, and connections between said operating lever and said lever of the plunger clamping mechanisms, whereby when the operating lever is moved to operate either the plunger elevating mechanism or the plunger lowering mechanism, the plunger clamping mechanism is automatically unclamped, substantially as described. 37th. The combination, in a dental chair, of the base, the supporting frame rotatably mounted therein, mechanism for clamping said supporting frame to said base, a vertically adjustable supporting plunger, clamping mechanism for the same, plunger elevating mechanism, plunger lowering mechanism, a lever, a spring connected to said lever for causing the supporting frame clamping mechanism and the plunger clamping mechanism to normally act, a single operating lever and connections, whereby when said operating lever is moved in one direction to operate either the plunger elevating mechanism or the plunger lowering mechanism, the plunger clamping mechanism is automatically unclamped and the clamping mechanism for the supporting frame is undisturbed, and when said operating lever is moved in the opposite direction, said clamping mechanism for the supporting frame is unclamped, substantially as described. 38th. In a dental chair, the combination of the base, the supporting frame mounted to rotate horizontally therein, mech nism for clamping the supporting frame to said base, a vertically adjustable supporting plunger, mechanism for elevating said supporting plunger, and a single lever which operates said plunger elevating mechanism when moved vertically and unclamps the supporting frame clamping mechanism when moved horizontally in one direction, substantially as and for the purpose described. 39th. The combination, in a dental chair, of the base, the vertically adjustable chair body supporting plunger, elevating and lowering mechanism therefor, a single operating lever for controlling these mechanisms, said operating lever having its pivotal and operative connections inside said base, substantially as and for the purpose described. 40th. The combination, in a dental chair, of a base, the vertically adjustable chair body supporting plunger, elevating, lowering and clamping mechanism therefor, and a single operating lever for controlling these three mechanisms, said operating lever having its pivotal and operative connections inside said base, substantially as and for the purpose described. 41st. The combination, in a dental chair, of the base, the supporting frame rotatably connected with said base, the vertically adjustable chair body supporting plunger, locking mechanism between the base and the supporting frame, plunger elevating, lowering and clamping mechanism, and a single operating lever for controlling all of these mechanisms, said operating lever having its pivotal and operative connections inside said base, substantially as and for the purpose described. 42nd. An operating lever for dental chairs pivoted to rock vertically and turn horizontally and provided with an arm which moves vertically with said lever, and with a controlling arm which moves horizontally with said lever but is not affected by vertical movement of the same, substantially as and for the purpose described. 43rd. The combination, in a dental chair, of a vertically movable chair body supporting plunger, clamping mechanism therefor comprising a horizontally movable toggle lever, a spring acting upon said toggle lever for causing the same to normally clamp said plunger, and means under the control of the operating or elevating lever of the chair for unclamping said toggle lever, substantially as described. 44th. An operating lever for dental chairs, having a flange thereon

inside the chair base or pedestal for the purpose of deflecting all oil on the inner portion of the lever into the oil reservoir and preventing the same from reaching that portion of the lever which projects outside of said base or pedestal, substantially as described. 45th. The combination, in a dental chair, of the vertically adjustable supporting plunger, the pump for elevating said plunger, an operating lever for said pump, and a piston rod having ball and socket connection with said operating lever and also with the piston of said pump, whereby said operating lever may be moved horizontally as well as rocked vertically, substantially as described. 46th. The combination with the seat of a dental chair, of the foot board supporting frame hinged thereto, the foot board hinged to the lower end of said frame, means for maintaining parallelism of said foot board relatively to said seat when the former is vertically adjusted, a foot rest carried at the outer end of said foot board and normally occupying a position above the level of the plane of the same, and means for automatically moving the foot rest into position on a level with or below the upper surface of the foot board when said foot board is moved into position on a level with said seat, substantially as and for the purpose described. 47th. The combination with the seat of a dental chair, of the foot board supporting frame hinged thereto, the foot board hinged to the lower end of said supporting frame, a foot rest hinged to the outer end of said foot board and normally occupying a position above the level of the same, a main controlling rod pivoted to said seat and to said foot board, a secondary controlling rod pivoted to the main controlling rod and to the foot rest, whereby when the foot board is raised to the level of the seat, the foot rest is automatically moved into a position on a level with the foot board, and means for locking the foot board in any position to which it may be adjusted, substantially as and for the purpose described. 48th. The combination with the seat of a dental chair, of the foot board supporting frame hinged thereto, the vertically adjustable foot board hinged to the lower end of said foot board frame, mechanism for locking the foot board in its vertically adjusted position, and a lever located substantially on a line with the plane of said foot board for controlling said locking mechanism and by means of which the foot board may be raised and lowered, substantially as and for the purpose described. 49th. The combination with the seat of a dental chair, of a foot board supporting frame hinged thereto, a vertically adjustable foot board hinged to the lower end of said supporting frame, a controlling rod pivoted to said seat and to said foot board, a rack upon said controlling rod, and a rocking pawl carried by said supporting frame, substantially as and for the purpose described. 50th. The combination with the foot board of a dental chair, of a foot rest pivoted to the outer end thereof, means for sustaining said foot rest in an upright operative position above the level of said foot board, and means whereby said foot rest may be caused to drop into an inoperative position to or below the level of said foot board, substantially as and for the purpose described. 51st. The combination with the foot board of a dental chair, of a foot rest pivoted to the outer end thereof, and a toggle lever connection between said foot board and said foot rest, whereby when the toggle lever is straightened out the foot rest is sustained in an upright operative position above the level of the foot board and when the toggle lever is opened the foot rest is permitted to drop to or below the level of the foot board into an inoperative position, substantially as and for the purpose described. 52nd. The combination with the seat of a dental chair, of a foot board supporting frame hinged thereto, a foot board hinged to the lower end of said supporting frame, a foot rest pivoted to the outer end of said foot board, a main controlling rod pivoted to said chair seat and to said supporting frame, a secondary controlling rod connected at one end with said main controlling rod, and a toggle lever connection between the opposite end of said secondary controlling rod and said foot rest, whereby when said toggle lever connection is straightened out the foot rest is normally sustained in an upright operative position above the level of said foot board and when said foot board is raised to its uppermost position on the level with said chair seat, the foot rest is automatically moved to a position on a level with or below the surface of said foot board, and when said toggle lever connection is opened or broken the said foot rest drops to or below the level of the foot board independently of the movement of said foot board, substantially as described. 53rd. The combination, in a dental chair, of the foot board, the foot rest pivoted to the outer end thereof and adapted to normally occupy an operative position above the level of said foot board, and a supplemental foot rest pivoted to the outer end of said foot rest, and adapted to be turned into two operative positions nearer to and farther away from the foot board, by rocking it about its pivotal connection with said foot rest, substantially as and for the purpose described. 54th. The combination, in a dental chair, of a metallic seat frame, an upholstered seat fitted thereon, and provided with a wood base having slots or recesses in its opposite sides, a foot board and side arms forming the supporting frame for said foot board and pivoted to said metallic seat frame, said side arms extending a short distance above their pivotal connections with said metallic seat frame, said extensions being adapted to enter the slots or recesses in the wood base of the upholstered seat when the foot board is in any of its low positions, substantially as and for the purpose described. 55th. The combination, in a dental chair, of the seat, a back supporting frame hinged thereto and adapted to be rocked vertically, means for locking said back supporting frame in any position to which it may be rocked, and a controlling handle pivoted to said back supporting frame to rock transversely thereof, whereby said locking means may be controlled by moving said lever transversely of the back supporting frame, substantially as and for the purpose described. 56th. The combination, in a dental chair, of the seat, a back supporting frame hinged thereto and adapted to be rocked vertically, an automatic lock for normally locking said back supporting frame in any position to which it may be rocked, a controlling lever for said lock pivoted to said back supporting frame and having its handle projecting from the side thereof, whereby when the handle of said controlling lever is pressed inward, the lock is released and the back supporting frame is free to be rocked vertically, substantially as described. 57th. The combination, in a dental chair, of the seat provided with a fixed arc-shaped hinge member having detent notches therein, a back supporting frame provided with an arc-shaped hinge member having sliding connection with said fixed hinge member, a pawl pivoted to said back supporting frame and normally in engagement with the detent notches of said fixed hinge member, a controlling lever pivoted to said back supporting frame near its upper end and having its handle projecting from the side thereof, and a connection between said pawl and said controlling lever, whereby when the handle of the latter is pressed inward the pawl is disengaged from the notches of the fixed hinge member, substantially as and for the purpose described. 58th. The combination, in a dental chair, of the seat, a vertically adjustable foot board hinged to the front thereof, a foot rest carried at the outer end of said foot board and normally occupying a position above the level of the same, a back re t hinged to the rear of said seat frame, and connections between said back rest and said foot board and between said foot board and said foot rest, whereby the back rest and the foot board may be independently adjusted to various operating positions within certain limits, but when the back rest is lowered to a level with the seat, the foot board is automatically elevated to a level with said seat and said back rest and the foot rest is automatically lowered to or below the level of said foot board, to bring the back rest, the seat, the foot board and the foot rest into alignment, substantially as and for the purpose described. 59th. The combination, in a dental chair, of the seat a vertically adjustable foot board hinged to the front thereof, a back rest hinged to the rear of said seat and adapted to rock vertically, both the back rest and the foot board being capable of adjustment to a level with said seat, a link pivoted to the foot board and provided with a side lug, and having its rear end notched, a fixed guide plate having a curved flange or ledge upon which the said side lug of the link rests and travels and a stud on the back rest adapted to engage the notched end of said link, whereby when the back rest is lowered to a level with the seat the foot rest is thereby automatically elevated to a level with said seat, substantially as and for the purpose described. 60th. The combination, in a dental chair, of the seat frame, trusses extending from front to rear thereof and substantially parallel with the sides of said frame, said trussses also extending above the top of said frame, a chair body supporting plunger, and a yoke or cross head connected to said plunger, the seat frame being journalled to said cross head by way of the trusses, the journals being located at a point above the level of the seat frame, substantially as and for the purpose described. 61st. The combination of a head rest supporting stem or carrier composed of sections, universal joints between the sections of said stem, a handle located upon one of the sections, means controlled by said handle for locking all of said joints simultaneously and by one movement of the handle, and means for yieldingly supporting the stem when the joints have been unlocked by the handle, substantially as and for the purpose described. 62nd. In combination with a chair back, a head rest supporting stem or carrier composed of sections, universal joints between the sections of said stem, a vertically sliding connection between the lower section of said stem and said chair back, means for simultaneously locking said universal joints and said vertically sliding connection, and means for yieldingly clamping said joints and said connection, when said locking means are unlocked, substantially as and for the purpose described. 63rd. In combination with a chair back, a head rest supporting stem composed of sections, universal joints between the sections of said stem, a vertically sliding connection between the lower section of said stem and a chair back, a handle located upon said lower section, means under the control of said handle for simultaneously locking said universal joints and said vertically sliding connections, means for yieldingly clamping said universal joints when said locking means are unlocked, and means, also under the control of said handle, for either yieldingly clamping said vertically sliding connection or leaving the same free, substantially as described. 64th. The combination with a chair back, of a head rest supporting stem composed of sections, ball and socket joints between the sections of said stem, a vertically sliding connection between the lower section of said stem and said chair back, means carried by said lower section for rigidly clamping the same in its position of vertical adjustment on said chair back, a push piece mounted in the upper end of said lower section for clamping the ball and socket joint between said lower section and the section connected thereto, a slide piece located between said push piece and said means for clamping the stem to the chair back for transmitting locking or clamping pressure from said clamping means to said ball and socket joint, and a spring acting with a tendency to force said push piece and said slide piece away from each other, substantially as and for the purpose described. 65th. The combination in a head

rest, of an adjustable supporting stem or carrier, a supporting bar adjustably connected midway its length to said supporting stem or carrier, studs projecting at right angles from the opposite ends of said supporting bar, two clamp links each of which is fitted at one end to swivel about the respective studs of the supporting bar, whereby said links are capable of being rocked in a line with the plane of said supporting bar or toward and away from each other, two head rest pads each pivoted to the outer end of the respective clamp links, whereby said pads are capable of being rocked in the line of movement of said clamp links, and means for simultaneously clamping the pivotal connections of each clamp link and its respective head rest and stud of the supporting bar, the clamping means for one link being independent of the clamping means for the other link, substantially as described.

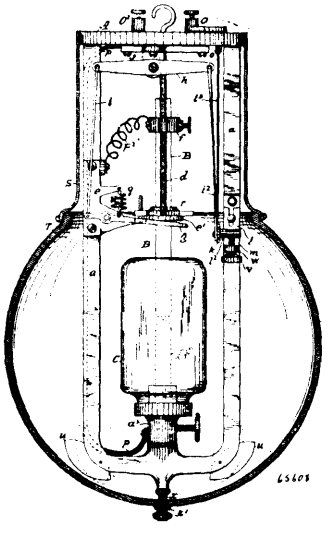
No. 65,607. Biscuit Manufacture. (*Fabrication de biscuit.*)



William Theodore Carr, Carlisle, Cumberland, England, 2nd January, 1900; 6 years. (Fild 23rd May, 1898.)

Claim.—1st. In the manufacture of biscuit, the herein described process, consisting in forming the dough into discs or blanks, impressing the same with transverse grooves and then folding the impressed blanks along the lines of the grooves. 2nd. In the manufacture of biscuits, the employment of apparatus constructed and operating substantially as herein described. 3rd. In the manufacture of biscuits, the herein described means for folding the prepared blanks, comprising a carrier and wires stretched between the extremities of arms revolving in opposite directions and serving to engage beneath the edges of the biscuits, substantially as set forth.

No. 65,608. Electric Arc Lamp. (*Lampe électrique à arc.*)

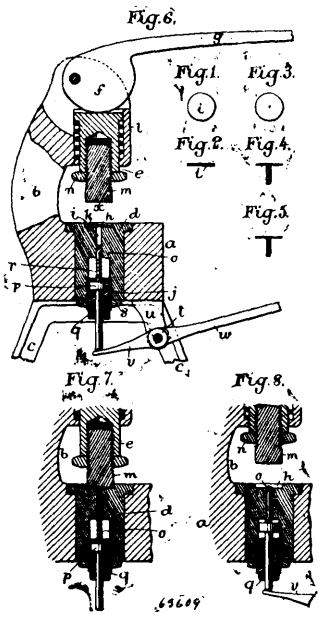


Julius Tuteur, Cleveland, Ohio, U.S.A., 2nd January, 1900; 6 years. (Filed 22nd August, 1898.)

Claims.—1st. An arc lamp having connected in the circuit the series of thermo-expansive strips joined by intermediate levers, one of which is adjustable, and terminating with a spring-actuated lifting lever adapted to lift the feeding clamp and carbon when the strips are expanded by the current, substantially as described. 2nd. In an arc lamp, the combination with the frame and carbon feeding mechanism of a lever spring actuated to lift the feeding clamp and carbon, an intermediate lever having a fixed pivot, a lever pivoted to an adjustable piece, thermo-expansive strips connecting said three levers and a like strip connecting the adjustable lever to a binding post connected in the circuit of the lamp, substantially as described. 3rd. In an arc lamp, the combination with the frame and carbon holding devices, the thermo-expansive strips, the lifting lever, the intermediate lever, and the adjusting lever, of a hood, a globe detachably engaging said hood, and gravity acting catches at the bottom of the frame adapted to receive and hold the globe when detached from the hood and lowered to give access to the lamp mechanism, substantially as described. 4th. In an arc lamp, the combination with the frame and carbon holding devices, the thermo-expansive strips, the lifting lever, the intermediate lever, and the adjusting lever, of a hood, a globe engaging said hood, gravity acting catches at the bottom of the frame adapted to receive and hold the globe when detatched from the hood, and a detachable support for the globe, substantially as described. 5th. In an arc lamp, the combination of the top plate and side bars having pivoted catches at their lower ends, the guiding rods, a carbon clamp sliding thereon, a bracket arm supporting the feeding clamp and the guiding rods, the lifting lever, intermediate lever and adjusting lever supported on the lamp frame, thermo-expansive strips connecting said levers, a third thermo-expansive strip connecting the adjusting lever with a binding post to which the lamp circuit is connected, a conductive connection from the lifting lever to the carbon clamp, and a conducting connection from the lower carbon holder to the other binding post of the lamp circuit, substantially as described.

No. 65,609. Pin Making Apparatus.

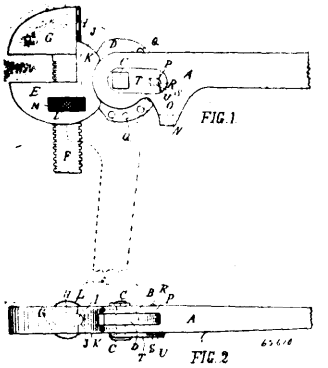
(*Machine à fabriquer les épingles.*)



George Washington Lee, Binghampton, New York, U.S.A., 2nd January, 1900; 6 years. (Filed 15th April, 1899.)

Claim.—1st. The hereindescribed method of shaping cold metal consisting in forclug the metal composing the blank to flow inwardly in a direction away from the periphery and thence laterally away from the blank, substantially as set forth. 2nd. Means for confining a piece of metal edgewise to prevent its expansion, a support for the piece of metal provided with a hole leading away from the face of the support and means for exerting pressure upon the face of the piece of metal to force a portion of the metal into the hole to form a pin integral with the metal.

No. 65,610. Wrench. (*Clé à écrou.*)



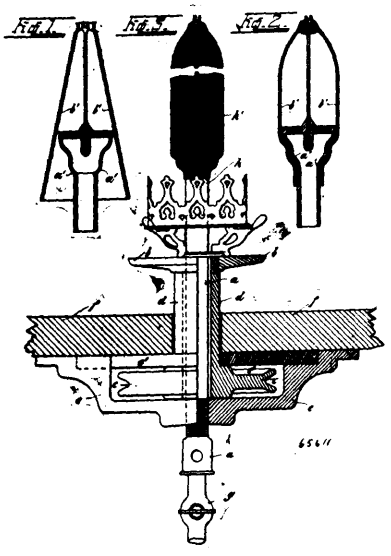
John Stynsberg, Biwabick, Minnesota, U.S.A., 2nd January, 1900; 6 years. (Filed 18th April, 1899.)

Claim.—In a monkey wrench, the combination of the primary jaw E, having the groove J, angular arm K, the two intersecting

apertures H and M and the segmental plate D, provided with a segmental row of apertures Q, the secondary jaw G, having the screw threaded arm F inserted in the aperture H, and the rib I guiding in the groove J the milled nut L, inserted in the aperture M and engaging the arm F, which extends beyond the primary jaw, the handle A pivotally secured at the centre of the plate D, and having a hole or aperture adapted to register with either of the holes Q in the plate D, a headed pin adapted to be inserted up to its head in the said registering holes, a friction held latch pivoted to the handle and normally covering the head of the pin, said handle having the side arm O with the notch N, adapted when in normal position to guide and support the jaw arm F, substantially as shown and described and for the purpose set forth.

No. 62,611. Incandescent Mantle Manufacture.

(*Fabrication de manteau incandescent.*)

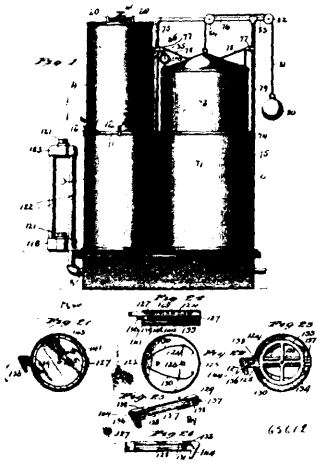


Wilhelm H. A. Sieverts, Hamburg, Uhlenhorst, Germany, 2nd January, 1900; 6 years. (Filed 13th September, 1898.)

Claim.—The method of forming incandescent bodies, consisting in suspending the incandescent body after having been reduced to ashes from the top of a Bunsen burner, substantially placing the burner together with the incandescent body upon a disc which is adapted to be rotated around the burner, then igniting the gas traversing the Bunsen burner, and finally exposing the burning and rotating incandescent body to the action of a suitable jet or blast furnace, passing in a downwardly direction, substantially as described.

No. 65,612. Acetylene Gas Generator.

(*Générateur de gaz acétylène.*)



Philippe Laperle and Oscar P. Boulard, both of Montreal, Quebec, Canada, 2nd January, 1900; 6 years. (Filed 17th December, 1898.)

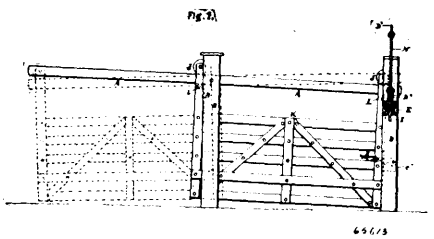
Claim.—1st. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, said runway having an open top, means for forming compartments in said runway, each compartment having an open top, and means for precipitating the contents of one of said compartments into the generating chambar. 2nd. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, said runway having an open top, means automatically operated by the increase and decrease of the volume of gas for forming compartments in said runway, each compartment having an open top, and means for precipitating the contents of one of said compartments into the generating chamber. 3rd. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, said runway having an open top, doors located in said runway, movable into and out of a position within said runway, forming compartments, each compartment having an open top, and means for precipitating the contents of one of said compartments into said generating chamber. 4th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway formed therein, said runway having an open top, doors mounted to have a movement into and out of said runway, said doors being movable in opposite directions whereby compartments will be formed, each compartment having an open top, and means for precipitating the contents of one of said compartments into the generating chamber. 5th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, said runway having an open top, doors mounted to have a movement into and out of said runway, the movement of the doors being simultaneous, the movement of each door being in a direction opposite that of the other, whereby compartments will be formed, each compartmant having an open top, and means for precipitating the contents of one of said compartments into the generating chamber. 6th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway, the movement of the doors being simultaneous, the movement of each door being in a direction opposite that of the other, whereby compartments will be formed, and means for precipitating the contents of one of said compartments into the generating chamber. 7th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, said runway having an open top, doors mounted to have a movement into and out of said runway, said doors being movable in opposite directions, whereby compartments will be formed, each compartment having an open top, means for imparting movement to said doors intermittently, and means for precipitating the contents of one of said compartments into the generating chamber. 8th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, said runway having an open top, doors mounted to have a movement into an open top, doors mounted to have a movement into and out of said runway, the movement of the doors being simultaneous, the movement of each door being in a direction opposite that of the other, whereby compartments will be formed, each compartment having an open top, means for imparting movement to said doors intermittently, and means for precipitating the contents of one of said compartments into the generating chamber. 9th. A carbide charge former, comprising a carbide runway, a series of doors movable into and out of a position within said runway, said doors moving vertically from the lower side of said runway, in opposite directions, one of said doors being adapted to separate the charge from the bulk carbide, and means for imparting movement to said doors. 10th. A carbide charge former, comprising a carbide runway having an open top, a series of doors movable into and out of a position in said runway, said doors moving vertically from the lower side of said runway in opposite directions, one of said doors being adapted to separate the charge from the bulk carbide, and means for imparting movement to said doors. 11th. A carbide charge former, comprising a carbide runway, a series of doors movable into and out of position in said runway, said doors moving vertically from the lower side of said runway, in opposite directions, the movement of said doors being simultaneous, one of said doors being adapted to separate the charge from the bulk carbide, and means for imparting movement to said doors. 12th. A carbide charge former, comprising a carbide runway, having an open top, a series of doors of a width equal to the width of the runway and movable into and out of position in said runway, said doors moving vertically from the lower side of said runway, in opposite directions, the movement of said doors being simultaneous, one of said doors being adapted to separate the charge from the bulk carbide, and means for imparting movement to said doors. 13th. An acetylene gas generator, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway, said doors having rack bars, pinions mounted between said doors and co-operating with said rack bars, and means for imparting movement to said pinions, whereby said doors will be given a positive and simultaneous movement in opposite directions. 14th. An acetylene gas generator, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into

and out of said runway, to form compartments therein, said doors having rack bars, pinions mounted to have a positive co-operating relation to each of said doors, means for imparting movement to said pinions, whereby said doors will have a positive and simultaneous movement, and means for precipitating the contents of one of said compartments into the generating chamber. 15th. An acetylene gas generator, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway to form compartments therein, said doors having rack bars, pinions mounted to have a positive co-operative relation to each of said doors, means for imparting movement to said pinions, whereby said doors will have a positive and simultaneous movement, means for limiting the movement of said pinions, whereby the length of movement of said doors will be regulated, and means for precipitating the contents of one of said compartments into the generating chamber. 16th. An acetylene gas generator, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway, to form compartments therein, said doors having rack bars, pinions mounted to have a positive co-operating relation to each of said doors, means for imparting movement to said pinions, whereby said doors will have a positive and simultaneous movement, and means for precipitating the contents of one of said compartments into the generating chamber, said means being operated at a predetermined point in the movement of said compartment, forming means whereby the movement of said pinions in one direction will be automatically limited and the length of movement of the doors be regulated. 17th. An acetylene gas generator, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway, to form compartments therein, said doors having rack bars, pinions mounted to have a positive co-operating relation to said rack bars, a vertically moving frame located within said generator, connections between said frame and said pinions for imparting a positive and simultaneous movement to said doors when said frame has reached a predetermined point in its movement, and means for percipitating the contents of one of said compartments into the generating chamber. 18th. An acetylene gas generator, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway, to form compartments therein, said doors having rack bars, pinions mounted to have a positive co-acting relation to said rock bars, a segmental gear adapted to impart movement to said pinions, a vertically moving toothed frame located in said generating chamber, said frame, during a predetermined period of its movement, imparting a movement to said gear, whereby said doors will be given a positive and simultaneous movement, and means for precipitating the contents of one of said compartments into the generating chamber. 19th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a carbide receptacle located within said generator, a generating chamber, a carbide runway mounted within said chamber and adapted to receive the carbide from said receptacle, and said runway having an open top, whereby the generated gas will be allowed to mingle with the carbide in said runway and said receptacle, thereby drying the gas, and means for delivering the carbide in automatically regulated quantities from said runway, to be decomposed. 20th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide receptacle located therein, a carbide runway formed in said receptacle, means mounted in said runway for positively forcing the carbide along said runway, means for forming a carbide charge during the passage of the carbide over said runway, and means located in said runway for precipitating a quantity of the carbide into the generating chamber. 21st. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide receptacle located therein, a carbide runway located in said chamber, means mounted within said runway for positively forcing the carbide along said runway, doors located in said runway and movable into and out of a position within said runway to form compartments therein, means for imparting movement to said doors, and means for precipitating the contents of one of said compartments into the generating chamber. 22nd. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide receptacle located therein, a carbide runway located in said chamber, means automatically operated by the movement of the gasometer bell for positively forcing the carbide along said runway, doors located in said runway and moveable into and out of a position within said runway to form compartments therein, means for imparting movement to said doors, and means for precipitating the contents of one of said compartments into the generating chamber. 23rd. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, a door mounted in said runway and movable in the direction of movement of the carbide, adapted to move the carbide along said runway, means for imparting movement to said door, charge forming mechanism located in said runway adapted to form a carbide charge, and means for precipitating said formed charge into the generating chamber. 24th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, a door pivotally mounted within said runway and movable in the direction of movement of the carbide adapted to move the carbide along said runway, means for imparting movement to said door at predetermined periods, charge forming mechanism located in said runway, adapted to form a carbide charge, and means for precipitating said formed charge into the generating chamber. 25th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, a door pivotally mounted in and forming a part of said runway and movable in the direction of movement of the carbide, adapted to move the carbide along said runway, means for imparting movement to said door, charge forming mechanism located in said runway adapted to form a carbide charge, and means for precipitating said formed charge into the generating chamber. 26th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway to form compartments therein, means for imparting movemet to said doors, a pivotally mounted door located at one end of and forming a portion of said runway, means operated at a predetermined period of movement of said compartment forming means, for imparting movement to said door, whereby the carbide will be positively forced along said runway, and means for precipitating the contents of one of said compartments into the generating chamber. 27th. An acetylene generator comprising a generating chamber, a carbide runway located therein, doors mounted to have a movement into and out of said runway, to form compartments therein, said doors having rack bars, pinions mounted to have a positive co-operating relation to said rack bars, a vertically moving frame located within said generator, connections between said frame and said pinions for imparting a positive and simultaneous movement to said doors when said frame has reached a predetermined point in its movement, a pivotally mounted door located in and forming a part of said runway, operative connections between said door and and said frame, for imparting movement to said door when said frame is at a predetermined point in its movement, and means for precipitating the contents of one of said compartments into the generating chamber. 28th. An acetylene gas generator, comprising a generating chamber, a carbide receptacle located therein a carbide runway formed in said chamber, mechanism for forming a carbide charge during the passage of the carbide over said runway, an opening for the passage of the carbide, formed at the end of said runway, said opening being normally closed, and means, operated by the movement of the carbide charge forming mechanism, for releasing said closing mechanism. 29th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide receptacle located the rein, a carbide runway located in said chamber, said runway having an open top, doors located in said runway, movable into and out of position within said runway, to form compartments therein, said doors having a simultaneous movement, means for imparting a movement to said doors, and means, operated by said compartment forming means, for precipitating the contents of one of said compartments into the generating chamber. 30th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising chamber, a carbide receptacle located therein, carbide charge forming mechanism located in the path of movement of the carbide, a door pivotally mounted, adapted to receive said formed charge, said door being normally held closed, and means, operated by the forming mechanism, for tripping said holding mechanism, whereby said charge will be precipitated into the generating chamber. 31st. An acetylene gas generator, comprising a generating chamber, a carbide receptacle located therein, a carbide runway located in said chamber, means for forming compartments in said runway, a door pivotally mounted for receiving the contents of one of said compartments, said door being normally held closed, and means operated positively and solely by said compartment forming means, for tripping said holding mechanism, whereby said contents will be precipitated into said generating chamber. 32nd. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, means mounted therein for positively forcing the carbide along said runway, means for forming compartments in said runway, a door pivotally mounted, for receiving the contents of one of said compartments, said door being normally held closed, and means for tripping said holding mechanism at a predetermined period whereby said contents will be precipitated into the generating chamber. 33rd. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber a carbide runway located therein, means, mounted therein, for positively forcing the carbide along said runway, means for forming compartments in said runway, a door, pivotally mounted, for receiving the contents of one of said compartments, said door being normally held closed, and means automatically operated, for tripping said holding mechanism, whereby said contents will be precipitated into the generating chamber. 34th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, said runway having an open top, means for forming compartments within said runway, each compartment having an open top, a door pivotally mounted, adapted to receive the contents of one of the compartments, said door being normally held closed, and means operated by said compartment forming means, for tripping said holding mechanism, whereby said contents will be precipitated into said generating chamber. 35th. An acetylene gas generator adapted to

generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway formed therein, doors mounted to have a movement into and out of said runway, whereby compartments will be formed, mechanism for imparting movement to said doors, a tilting platform mounted at one end of said runway, adapted to receive the contents of one said compartments, said platform being normally held in a closed position, and means for tripping said holding mechanism at a predetermined period of movement of said compartment forming mechanism. 36th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, carbide runway, means for forming compartments in said runway, a tilting platform located in said runway, adapted to receive the contents of one of said compartments and precipitate the same into the generating chamber, means for normally holding said platform in one position, and means, operated positively and solely by the compartment forming means, for tilting said platform. 37th. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide receptacle located therein, carbide charge forming mechanism located in the path of movement of the carbide, a door, pivotally mounted, adapted to receive the formed charge, said door being normally held closed, means, operated by said charge forming mechanism for tripping said holding mechanism, whereby said charge will be precipitated into the generating chamber, and means for returning said door to its normal position. 38th. An acetylene gas generator, comprising a generating chamber, a carbide runway formed therein, said runway having an open top, means for forming compartments within said runway, each compartment having an open top, a door pivotally mounted, adapted to receive the contents of one of said compartments, said door being normally held closed, means operated by said compartment forming means, for tripping the holding mechanism, whereby said contents will be precipitated into said generating chamber, and means for returning said door to its normal position. 39th. An acetylene gas generator, comprising a generating chamber, a carbide receptacle located therein, carbide charge forming mechanism located in the path of movement of the carbide, a door adapted to receive the formed charge, said door being normally held closed, means operated by the charge forming mechanism, for tripping said holding mechanism, whereby the charge will be precipitated into the generating chamber, and means, independently operated, for automatically returning said door to its normal position. 40th. An acetylene gas generator, comprising a generating chamber, a carbide runway formed therein, means for forming compartments within said runway, a door, pivotally mounted, to receive the contents of one of said compartments, said door being normally held closed, means, operated by said compartment forming means, for tripping the holding mechanism, whereby said contents will be precipitated into said generating chamber, and independent means for returning said door to its normal position. 41st. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway formed therein, doors mounted to have a movement into and out of said runway, whereby compartments will be formed, mechanism for imparting movement to said doors, a tilting platform mounted in juxtaposition to the delivery end of said runway, adapted to receive the contents of one of said compartments, said platform being held normally in a closed position, means located in the path of movement of said compartment forming mechanism, for tripping said holding mechanism at a predetermined period of movement of said compartment forming mechanism, and means for returning said platform to its normal position. 42nd. An acetylene gas generator, adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway formed therein, doors mounted to have a movement in and out of said runway, whereby compartments will be formed, mechanism for imparting movement to said doors, a tilting platform mounted in juxtaposition to the delivery end of said runway, adapted to receive the contents of one of said compartments, said platform being normally held in closed position, means located in the path of movement of said compartment forming mechanism, for tripping said holding mechanism at a predetermined period of movement of said compartment forming mechanism, and means for automatically returning said platform to its normal position, said means being operated independently of the movement of said compartment forming mechanism. 43rd. An acetylene gas generator adapted to generate gas from carbide introduced in bulk, comprising a generating chamber, a carbide runway located therein, doors movable into and out of said runway to form compartments therein, a door pivotally mounted at one end of said runway, adapted to receive the contents of one of said compartments, said door being normally held in its closed position, mechanism for imparting movement to said movable doors, and tripping mechanism, located in the path of movement of said door moving mechanism, for automatically releasing said door from its normal position, whereby the charge located on the said door will be precipitated into the generating chamber at a predetermined period in the movement of said doors. 44th. An acetylene gas generator, comprising a generating chamber, a carbide runway located therein, doors movable into and out of said runway to form compartments therein, mechanism for imparting movement to said doors, a door mounted at the lower end of said runway, adapted to receive the contents of one of said compartments, said door being normally held in a closed position, tripping mechanism located in the path of movement of said door moving mechanism, for automatically releasing said door from its normal position, whereby the charge located thereon will be participated into the generation chamber, and independent means for returning said door to its normal position. 45th. In an acetylene gas generator, the combination with a carbide runway adapted to receive the carbide from the carbide receptacle, of a tilting platform mounted in juxtaposition to said runway, means for imparting an intermittent pivotal movement to said platform, and a yielding partition mounted to receive the impact of the platform when returning to its closed position. 46th. In an acetylene gas generator, the combination with a carbide runway adapted to receive the carbide from the carbide receptacle, of a tilting platform mounted in juxtaposition to and forming the lower end of said runway, means for imparting an intermittent pivotal movement to said platform, and a yielding partition, forming the movement limiting end of the runway forming the carbide, mounted to receive the impact of the platform when returned to its normal position. 47th. An actelene gas generator, comprising a generating chamber, a carbide receptacle located at the top thereof, said receptacle having a delivery opening, a series of plates extending vertically within said chamber, below said receptacle, said plates being located on opposite sides of the diameter of the generator, the opening in said receptacle being located to deliver the contents of the space between said plates, a bottom formed between said plates, forming a runway, and a tilting platform mounted at the end of said bottom, said platform being adapted to deliver the carbide to be decomposed, whereby the generated gas is allowed to mingle with the carbide, thereby drying the gas. 48th. An acetylene gas generator, comprising two members held in telescopical relation to each other, a peripherial support for the inner member, secured to the outer member, a water seal formed between said members, and a series of locking devices, carried by said inner members, adapted to engage with said outer member removably, to hold said members in their telescoped position. 49th. An acetylene gas generator, comprising an outer and an inner member arranged to telescope, a flange secured about the inner periphery of said outer member, to support said inner member, a water seal formed between said members, said seal covering said flange, means, carried by said inner member, for preventing the passage of the carbide into said water seal, and a series of locking devices, carried by said inner member, adapted to removably engage with said outer member, to hold said members fixedly in their telescoped position. 50th. A water supply fer acetylene gas generating apparatus, comprising a reservoir, having its water level held uniformly on the same horizontal plane, means for supply water thereto, and independent connections between said reservoir and the generating chamber and the gasometer, for holding the level of the water seals in said chamber and said gasometer at approximately the same horizontal plane independently of each other. 51st. A water supply for acetylene gas generating apparatus, comprising a reservoir, means for supplying water thereto, independent connections between said reservoir and the generating chamber and the gasometer, for holding the level of the water seals in said chamber and said gasometer at approximately the same plane as the water level in said reservoir, independently of each other. 52nd. An acetylene gas generator, comprising a generating chamber, a carbide receptacle located therein, an opening formed in said generator leading to said receptacle, said opening being adapted to allow of the entry of carbide, means for automatically holding said opening closed, a refilling device removably connected to said generator over said opening, said device being normally closed, means for releasing said closing means after said device is in position, whereby said generating chamber will remain closed during the filling operation, and means for feeding the carbide to said generating chamber. 53rd. The combination with an acetylene gas generator automatically held sealed against the entrance of air, of a refilling device normally closed, removably connected to said generator, the opening of said device, when filled and in position, allowing the carbide to disturb the sealed condition of the generator without permitting the air to enter therein. 54th. An acetylene gas generator, comprising a generating chamber, an opening formed at the top thereof, a cushion formed contiguous to said opening, a door hingedly mounted to be normally held seated against said cushion and automatically close said opening, and a refilling device, adapted to be passed into said opening, the contents of said refilling device serving to move said door from its closing position, substantially as described. 55th. A water supply for acetylene gas generating apparatus, comprising a reservoir, means for supplying water thereto, a valved connection between said reservoir and the generating chamber, to prevent the return of water therefrom, and a connection between said reservoir and the gasometer, said connections being independent of each other, and adapted to retain an independent uniform level in said chamber and said gasometer. 56th. The combination with an acetylene gas generator having a bottom adapted to receive the residue, said bottom having an opening, of a tube, normally sealed, connected to said opening, said tube having a valved passageway, and a water supply pipe serving to agitate the contents of said tube and cause the residue to be withdrawn therefrom. 57th. The combination with an acetylene gas generator, having a bottom adapted to receive the residue, said bottom having an opening, of a tube normally sealed, connected to said opening, said tube having a plurality of passageways and outlets each controllable, and a water supply pipe, adapted to agitate the contents of said tube and cause the residue to be

withdrawn therefrom. 58th. The combination with an acetylene gas generator having a bottom adapted to receive the residue, said bottom having an opening, of a tube, normally sealed, connected to said opening, said tube having a plurality of valved outlets located at varying heights relatively to said generator, and a water supply pipe adapted to agitate the contents of said tube and cause the residue to be withdrawn therefrom. 59th. The combination with an acetylene gas generator, having a bottom adapted to receive the residue, said bottom having an outlet, of a tube connected to said outlet, said tube extending upwardly and then downwardly outside said generator, a valve located at the upper bend of said tube, a valved connection between the upward and downward portions of said tube, said connection being below said upper bend, and a pipe connected to a source of water supply, extending into said tube, whereby the residue will be forced through said tube with varying degrees of pressure.

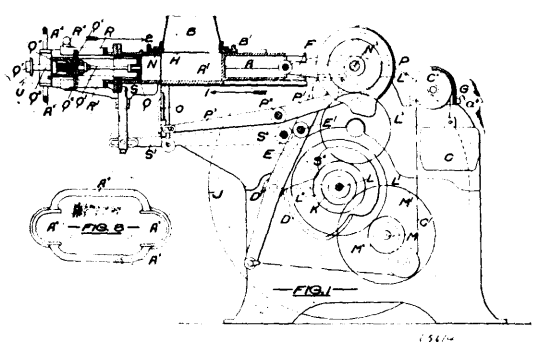
No. 66,613. Gate. (*Barrière.*)



Eliphalet E. Gustin, The Dallas, Oregon, U.S.A., 2nd January, 1900; 6 years. (Filed 15th June, 1899.)

Claim.—1st. In a rolling gate, the two slotted posts, the brackets secured to opposite sides thereof, the extension arms pivoted in the brackets and having their inner ends extended through the slots in the posts, the connecting strips, the operating levers, and the rods connected to their outer ends, combined with the extension to which the inner ends of the lever are loosely connected, the suspension bar pivoted at its centre, a rolling gate suspended from the bar, and the posts between which the bar is pivoted, substantially as set forth. 2nd. The posts B, B^1, slightly separated from each other, a suitable support placed in between the two posts, and a notched plate placed upon the support, combined with a rolling or sliding gate having a pivoted latch, the outer end of which latch passes between the gateposts and engages with the notched plate, substantially as specified.

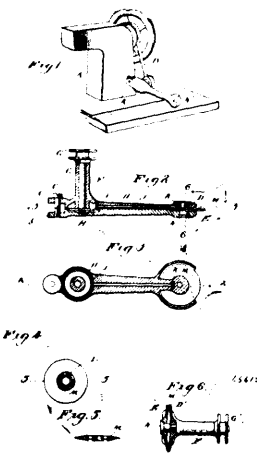
No. 65,614. Dough Dividing Machine.
(*Machine à peser la pâte.*)



Charles Edward Pointon and John Edward Pointon, both of Wellington, Salop, England, 2nd January, 1900; 6 years. (Filed 11th April, 1899.)

Claim.—1st. In machines for dividing dough and like plastic material into portions of uniform weight, the combination with the division box N having the brackets R, R^1 secured thereto, and the cross head Q^2 to which the plunger rods Q^1 are attached, of the adjustable bush or sleeve Q^4 and the extension rod having a collar Q^7 fixed to its outer end, substantially as set forth. 2nd. In machines for dividing dough and like plastic material into portions of uniform weight, the combination with the reciprocating cross head Q^2 to which the plunger rods Q^1 are attached, of the spring buffers T^1, T^2, substantially as set forth. 3rd. In machines for dividing dough and like plastic material into portions of uniform weight, the combination with the guides A^2, A^3 for the sliding cross head Q^2 and division box N, of the detachable bars or rails U, U^1, substantially as set forth. 4th. In machines for dividing dough and like plastic material into portions of uniform weight, the combination with the ram A, of the lever *a* having its fulcrum upon the upper end of the ram operating lever E and provided with a detachable end a^2, substantially as set forth. 5th. In machines for dividing dough and like plastic material into portions of uniform weight, the construction in one piece with the main top box A^1 and the cross head and division box guides A^2, A^3, of the arched cross stays A^4, A^5 at the outer or front end of the said guides A^2, A^3, substantially as set forth. 6th. In machines for dividing dough and like plastic material into portions of uniform weight, the combination with the ram operating cam D, the division box operating cams N^1, N^2, the cutting off knife operating cam P, and the scraper operating cam S^4, of the combined driving wheel and gearing guard J connected with the whole of the said cams by a single set of gearing, substantially as set forth.

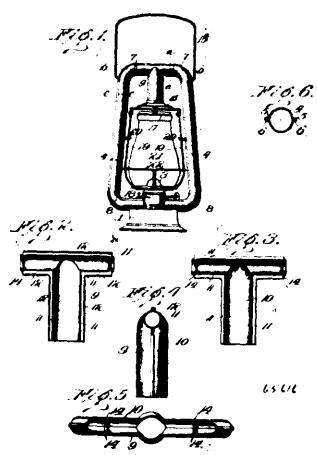
No. 65,615. Sewing Machine Ripping Device.
(*Appareil à decoudre pour machines à coudre.*)



Glen A. Emery, William J. Cunningham and John H. Wittman, all of Toledo, Ohio, U.S.A., 3rd January, 1900; 6 years. (Filed 29th July, 1899.)

Claim.—In a ripping attachment for sewing machines, the combination of the parts D and E, provided at their inner ends with pivoted lugs and at their outer ends with a recess to receive a cutter, the part D being also provided with a laterally projecting tube or bearing F, the shaft G journalled in said bearing and provided on its outer end with a groove pulley and at its inner end with a crown wheel, the shaft J journalled in an opening extending longitudinally through the part D, a pinion on its inner end meshing with the crown wheel H, a pinion on its outer end, a cutter journalled in the recess between the parts D and E, and a crown wheel formed on one side thereof, meshing with the pinion K, substantially as described.

No. 65,616. Lantern. (*Lanterne.*)

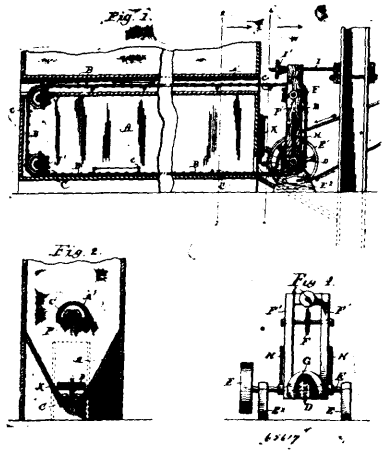


The C. T. Ham Manufacturing Co., assignee of Charles T. Ham, all of Rochester, New York, U.S.A., 3rd January, 1900; 6 years. (Filed 2nd August, 1899.)

Claim.—1st. In a tubular lantern, the combination with the oil pot and the side tubes having the upper and the lower elbows thereon, of the top piece embodying the upper horizontal tube and the

central depending tube, the ends of the horizontal tube being rigidly secured to the upper elbows of the side tubes the bell sliding on the central tube, and the ball or handle connected directly to the upper ends of the side tubes. 2. In a tubular lantern, the combination with the oil pot, and the side tubes having the upper and lower elbows thereon, of the top piece embodying the upper horizontal tube, and the central tube, the ends of said horizontal tube telescoping with and rigidly secured to the upper ends of the side tubes above the elbows, the bell sliding on the central tube and the bail or handle connected directly to the upper portions of the side tubes. 3rd. In a tubular lantern, the combination with the oil pot and the side tubes having the upper and lower elbows thereon, of the top piece embodying the upper horizontal tube and the central tube the horizontal tube having the reduced ends said top piece formed of the two sheet metal sections connected by the seams at the sides extending on the plane of the tubes, said reduced ends fitting in the side tubes and rigidly secured thereto, the bell sliding on the central tube and the bail connected directly to the upper portions of the side tubes. 4th. In a tubular lantern, the combination with the oil pot and the side tubes embodying the upper and lower elbows and each composed of two pieces of sheet metal united by seams extending on the outer and inner sides in the plane of the elbows, of the top piece embodying the horizontal and vertical tubes and composed of the two sheet metal sections united by seams and extending in the plane of the tubes, the ends of the horizontal tubes being reduced to enter the upper elbows of the side tubes and rigidly secured thereto, the bell sliding on the central tube and the ball or handle connected to the side tubes.

No. 65,617. Conveyer. (*Transport.*)



Anderson H. Richner, Crawfordsville, Indiana, U.S.A., 3rd January, 1900; 6 years. (Filed 11th December, 1899.)

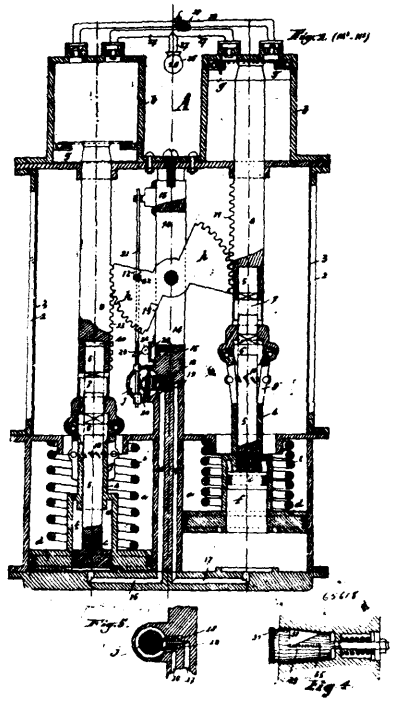
Claim.—1st. In a conveyer, the combination with a bin or hopper, having a passage or chainway therethrough, of a conveyer chain, and sprocket wheels mounted so as to guide the chain through the chainway and over the bottom of the bin or hopper, a bar or post fulcrumed at one end on the shaft of the driven sprocket, a trip for the flights of the conveyer chain carried by the bar or post, and a threaded bar and its nut for moving the bar upon its fulcrum to tighten the conveyer chain, substantially as shown and for the purpose set forth, 2nd. In a conveyer, the substantially with a series of sprocket wheels, of a conveyer chain having a series of inwardly projecting carriers, a bar or support upon which is journalled a pair of the series of the sprocket wheels, and a trip positioned in the path of the carriers of the chain, substantially as shown. 3rd. In a conveyer, the combination with a bin or hopper having a covered passage or chainway therethrough, of a carrier chain, sprockets which guide the chain through the chainway and over the bottom of the bin or hopper, a support for one of the sprockets fulcrumed upon the shaft of the driven sprocket, means for adjusting the support to tighten the carrier chain, and a trip carried by the support so as to be engaged by the carriers of the chain, substantially as shown and for the purpose set forth.

No. 65,618. Railway Aero-electric Brake.

(*Frein aéro-électrique.*)

Charles Luyers, Brussels, Belgium, 3rd January, 1900; 6 years. (Filed 15th September, 1898.)

Claim.—1st. An aero-electric brake with variable action according to the load, railway trains, distinguished by a compression pump communicating through the intermediary of a working cock with a principal reservoir on the one hand, and on the other hand with a main air conduit existing along the whole length of the train, this same cock communicating also depression chambers with the principal reservoir, all the said apparatuses being fixed on the locomotive and by ensemble of apparatuses placed under each

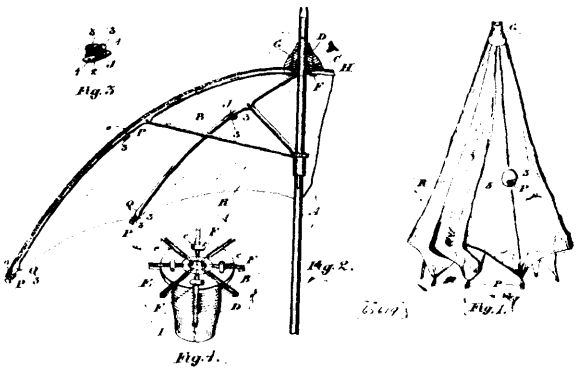


vehicle, and comprising a principal reservoir communicating on one hand with auxiliary reservoirs by means of a multiplex-way cock regulated by hand or automatically, and on the other hand with a main air conduit by means of a regulating distributor, the said distributor also communicating the principal reservoir of the vehicle, with the brake cylinder working the two brakes of each carriage supplied with a wearing compensator. 2nd. In an aero-electric brake, the combination of a compression pump distinguished by the steam pistons, composed each of two combined pistons, the small piston working alone the compression piston during the first half of its course, and the two pistons acting simultaneously during the remaining half. 3rd. In an aero-electric brake, the combination of a working cock distinguished by a cock properly so called provided with a series of grooves forming a communication either between the principal reservoir and the main conduit to effectuate the feeding of the latter or between the depression chambers and compartments provided with diaphragms, one of the said diaphragms serving to refill the general tube, and the other to produce a depression in the main air tube. 4th. In an aero-electric brake, the combination of a regulating distributor distinguished by a piston putting the main air tube in communication with the reservoir of the vehicle for feeding it, the rod, the said piston being supplied with a box successively communicating the brake cylinder, either with the atmosphere for the evacuation of the air contained in the cylinder, or with the reservoir of the vehicle for the feeding which is produced by means of a diaphragm working under the influence of the depression transmitted by the general air tube into the distributor, and which can be produced instantaneously in this latter by an electric aspirator composed of an electro-magnet and a suction valve or by a compressed air aspirator composed of a diaphragm worked as soon as a depression is produced in the main tube, these two aspirators can be joined together or both joined to the distributor. 5th. In an aero-electric brake, the combination of a multiple-way cock and auxiliary reservoirs distinguished by a cock properly so called supplied with grooves permitting the feeding of the auxiliary reservoirs and communicating these latter with the principal reservoir of the vehicle, the said cock being regulated by hand or automatically by a special arrangement, so that the number of auxiliary reservoirs put in communication may be proportionate with the load, the capacity of these reservoirs being regulated by means of their plugs, which are provided with a rod of variable volume. 6th. In an aero-electric brake, the combination of an automatic regulating arrangement of the multiple-way cock distinguished by a piston moving in a cylinder and having one of its faces submitted to the action of the compressed air and the other face to the action of a spiral spring, the said piston being supplied with a rack rod gearing with a pinion fixed to the multiple-way cock and terminating in a needle articulated with it, the said needle being held horizontally by two springs and coming in contact with a stopper formed of a toothed inclined plane, the said stopper being fixed in a fixed position, whilst on the

contrary all the other organs of the arrangement and the multiple-way cock are fixed to the frame of the vehicle, giving way under the action of the load owing to the flexion of the springs. 7th. In an aero-electric brake, the combination of a brake cylinder distinguished by the fact that the piston is formed of two pistons combined, the small piston being worked alone during the first half stroke simply to draw the brake blocks to the friction drum, the two pistons then acting simultaneously during the remainder of the course to apply the blocks on the drum, the return of the blocks to their primitive position being obtainable instantaneously by means of an electric aspirator composed of an electro-magnet and a suction valve, allowing the rapid emptying of the brake cylinder of the air which it contains. 8th. In an aero-electric brake, the combination of a brake with wearing compensator distinguished by a friction drum to which four brake blocks are applied, arranged two by two on each side of the pulley, each of the right blocks forming with one of the left blocks an ensemble worked by a connecting rod articulated with a balance worked by the piston rod of the brake cylinder, each ensemble or whole being composed of brake blocks, block holder, a connecting rod and levers working the blocks, one of the said levers being worked at one of its extremities by the wearing compensator arrangement, which is composed of two rods articulated by an axle, which also supports the block holders, with a rod suspended to an iron fixed rigidly to the axle boxes of the vehicles, each of the said rods terminating in a socket in which is fixed another socket supplied with a wedge and threaded on the inside, the thread of the two sockets being in a contrary direction, as also the threads of a transversal axle which screws into the sockets, and on the middle of which is fixed a ratchet wheel worked by a catch articulated to the extremity of a rod which is also connected with one of the levers working the blocks, the wedges of the sockets sliding moreover in a longitudinal groove of the rod supporting the compensating arrangement and acting upon the extremity of a lever which works the brake blocks, the extremity of the lever sliding in a mortise of the support rod, and being provided with a transversal axle sliding in the same groove as the wedge.

No. 65,619. Umbrella Frame Cover.

(*Couverture de parapluie.*)



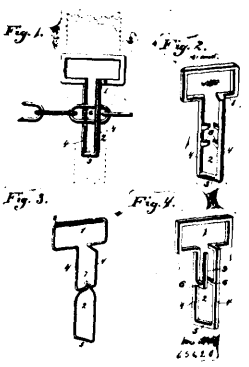
Elizabeth Graham Webber, Toronto, Ontario, Canada, 3rd January, 1900; 6 years. (Filed 9th December, 1899.)

Claim—1st. A detachable covering for umbrella frames comprising the covering proper, suitable means for securing the covering in place at its apex to the ribs and rod of the umbrella frame, and suitable devices secured to the said covering in alignment with the ribs of the umbrella frame, for securing the said covering to the said ribs near their lower ends and intermediate of their length, as set forth and for the purpose specified. 2nd. In combination with the frame of an umbrella and the rod thereof, of a covering A, suitable means at the apex thereof for detachably securing said covering to the umbrella frame and rod thereof, and suitable means secured in alignment for securing the covering to the ribs of the umbrella frame near their ends thereof, and intermediate of their length, as set forth and for the purpose specified. 3rd. The combination with the ribs, rod, and flanged sleeve C, and enlarged portions Q of said ribs, of the covering, externally threaded thimble D, recesses *e*, catches F, internally threaded retaining cap G, and series of spring snaps J, secured in alignment and designed to engage with and clutch the ribs of the umbrella, all arranged as set forth and for the purpose specified.

No. 65,620. Trace Carrier. (*Porte-traits.*)

James Thomas Holland, Stanton Depot, 3rd January, 1900; 6 years. (Filed 11th December, 1899.)

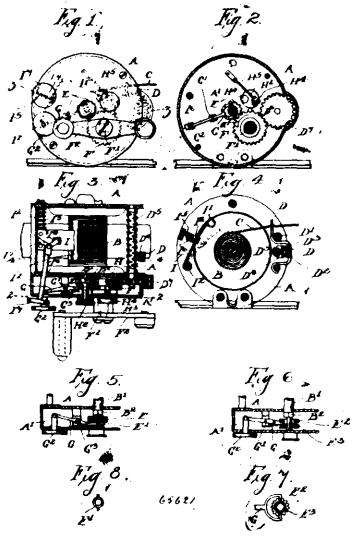
Claim.—As an article of manufacture, a combined back band loop and trace carrier, in which the plane of the trace loop is oblique to the plane of the back band loop and the side bars of the trace loop relatively rigid, an oblique bar connecting the lower ends of the side bars of the trace loop and forming a trace rest, and another trace rest at a higher elevation consisting of rigid projections extending laterally from the respective side bars in opposite directions, side by side in the same horizontal plane but spaced apart to permit the



trace when deflected to be passed between them, said projections extending in planes parallel to each other but oblique with respcet to the plane of the trace top, substantially as specified.

No. 65,621. Fishing Rod Reel.

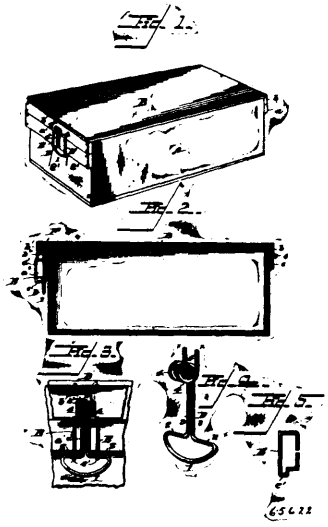
(*Devidoir pour lignes de pêches.*)



George O. Brosnaham, jr., Pensacola, Florida, U.S.A., 3rd January, 1900; 6 years. (Filed 6th December, 1899.)

Claim.—1st. A fishing reel having a gear wheel connected to revolve with the reel, a swinging locking member adapted to engage the gear wheel to prevent its turning in one direction and means for making and breaking the connection of the gear wheel with the reel at will. 2nd. A fishing reel having a gear wheel connected to revolve with the reel, a swinging locking member adapted to engage the gear wheel to prevent its turning in one direction, a spring acting on said swinging member to hold it in either adjusted position, an exteriorly projecting handle on the swinging member, and means for making and breaking the connection of the gear wheel with the reel at will. 3rd. A fishing reel having a gear wheel connected to revolve with the reel, a swinging locking member adapted to engage the gear wheel to prevent its turning in one direction, a spring acting on said swinging member to hold it in either adjusted position, an exteriorly projecting handle on the swinging member, a clutch mechanism connecting the gear wheel with the reel, and a shifting lever therefor having a finger piece projecting from the case whereby the reel may be freed or locked at will. 4th. A fishing reel provided with a line guide mounted to slide transversely on the reel casing, a nut on said guide, a revoluble double thread screw rod for moving the nut and its guide transversely, and means for rotating said screw rod independently of the spool, substantially as shown and described. 5th. A fishing reel provided with a brake comprising a spring pressed lever carrying a brake shoe for engaging the line on the spool, toggle links, one of which is connected with the lever and the other is fulcrumed on a fixed point, and an operating rod connected with the said links, substantially as shown and described.

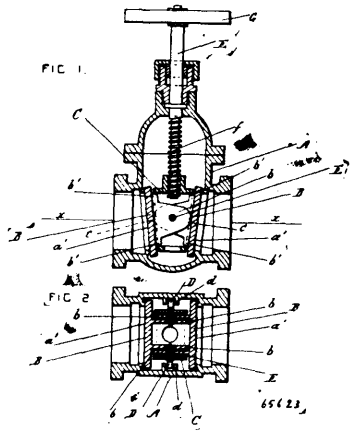
No. 65,622. Box Fastener. *(Attache de boîte.)*



Edward Allen Page, Berlin Heights, Ohio, U.S.A., 3rd January, 1900; 6 years. (Filed 22nd November, 1899.)

Claim.—In a box fastener, a box provided with a cleat upon one end, and which cleat is provided with a vertical groove through which the chank of the fastener extends, and a cleat upon the end of the cover having a recess formed in its lower edge above the groove in the cleat upon the box, combined with a spring fastener formed from a single piece of wire having a head upon its lower end, a shank which extends through the groove in the cleat on the box a spring formed near the upper end of the wire and having annealed points or tips which are forced through the cleat on the cover, the portion of the fastener being located in the recess in the lower edge of the cleat upon the cover, and the clips having noses behind which the head of the spring catches, substantially as shown and described.

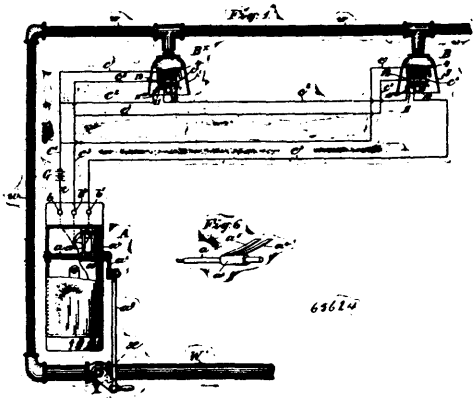
No. 65,623. Valve. *(Soupape.)*



Henry J. Schmitt, Wyndmoor, and Russell Bonnell, Philadelphia, both in Pennsylvania, U.S.A., 3rd January, 1900; 6 years. (Filed 17th May, 1899.)

Claim.—1st. The combination, with a valve casing provided with seats, of a hollow carrier, and discs provided with lugs which have shoulders arranged near the peripheries of the discs and engaging pivotally with the carrier, the lugs on each discs being arranged to overlap the lugs on the other disc and to bear against its central portion, whereby both discs are pressed uniformly upon the said seats, substantially as set forth. 2nd. The combination, with a valve casing provided with seats, of hollow carrier, discs provided with lugs which have shoulders arranged near the peripheries of the discs and engaging pivotally with the carrier, the lugs on each disc being arranged to overlap the lugs on the other discs and to bear against its central portion, and a pin passing loosely through holes in two of the said lugs and the side of the carrier and preventing the discs from falling apart from the carrier when the carrier is removed from the valve casing, substantially as set forth.

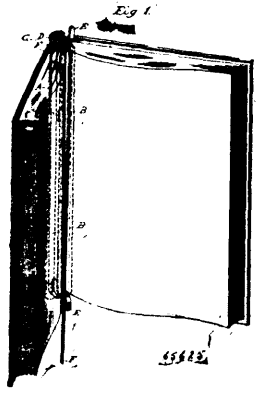
No. 65,624. Fire Extinguisher. *(Extincteur d'incendie.)*



Joseph Butcher, Jersey City, New Jersey, U.S.A., 3rd January, 1900; 6 years. (Filed 14th November, 1899.)

Claim.—1st. The combination with a water service pipe having an outlet for the discharge of water for extinguishing fires, a cut off cock in said service pipe, and a valve closing said discharge outlet, of an electric motor, as described, adapted to open and close said cut off cock, a generator of electricity, an electro magnetic releasing device at the discharge outlet to release the valve thereat when an electric current flows through the coil of the magnet of said device, an electric circuit including said generator and motor and having a normally broken branch openings circuit through the coil of said magnet, and a normally closed, branch closing circuit, and a thermostat at the discharging point and adapted to break said closing circuit and close the opening circuit when the temperature rises above a predetermined point at said thermostat, whereby the motor is adapted to close the cut off cock automatically when the thermostat completes the closing circuit, substantially as set forth. 2nd. The combination with a water service pipe having a plurality of outlets for the discharge of water for extinguishing fires, a cut off cock in said service pipe, and valves closing the several discharge outlets, of an electric motor, as described, adapted to open and close said cut off cock, a generator of electricity, an electro magnetic releasing device at each discharge outlet to release the valve thereat when an electric current flows through the coil of the magnet of said device, an electric circuit including said generator and motor and having normally broken, branch opening circuits through the coils of the respective magnets, and a thermostat at each discharging point and adapted to break said closing circuit and close the opening circuit when the temperature rises above a predetermined point at said thermostat, whereby the motor is adapted to close the cut off cock automatically when any thermostat completes the closing circuit, substantially as set forth. 3rd. The combination with the outlet nozzle 1, and the valve 3, closing said nozzle, of the electro magnet 4, situated below said valve with its axis horizontal, the armature 5, of said magnet having an arm 5^a which takes under said valve and holds it closed normally, a generator, a thermosat situated below the electro magnet and supported on the nozzle, a normally open electric circuit including the coil of said magnet, and a circuit closer controlled by said thermostat, whereby when the temperature rises the thermostat will complete the circuit through said magnet, substantially as set forth.

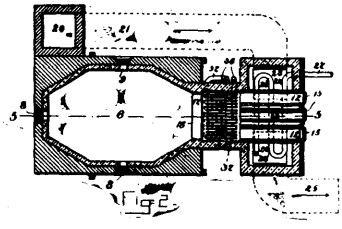
No. 65,625. Book Mark. *(Signet.)*

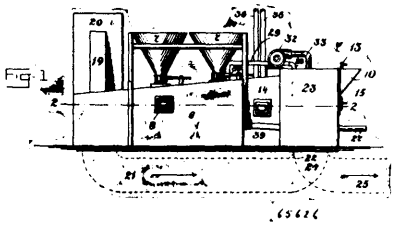


Silas J. Sawyer, Milwaukee, Wisconsin, U.S.A., 3rd January, 1900; 6 years. (Filed 10th October, 1899.)

Claim.—1st. In a page, leaf or reference marker for books, the combination of a flexible band of a length several times greater than the length of the book, and adapted to be passed back and forth between a series of leaves, means for securing the band to the back of the book at one end thereof, and means carried at the opposite end of the back adapted and designed to receive and hold loops of the band as it is passed back and forth between the leaves, substantially as described. 2nd. In a page, leaf or reference marker for books, the combination of a clamp adapted to be secured to the back of a book, hooks extending out over the book from said clamp, and a long flexible band secured at one end to one of said hooks. 3rd. In a page, leaf or reference marker for books, the combination of a longitudinally extensible clamp adapted to be secured to the back of a book, hooks extending out over the book from said clamp, and a long flexible band secured at one end to one of said hooks. 4th. In a page, leaf or reference marker for books, the combination of a longitudinally extensible clamp provided with tongues adapted to pass behind the back of a book, substantially as described, hooks extending out from each end of said clamp, and a long flexible band secured at one end to one of said hooks. 5th. In a page, leaf or reference marker for books, the combination of members A and C slidably connected to each other, ears D extending out from said members, hooks E formed at the outer ends of the members A and C, and a band F connected to one of said hooks.

No. 65,626. Smelting Furnace. (*Fourneau de fusion.*)





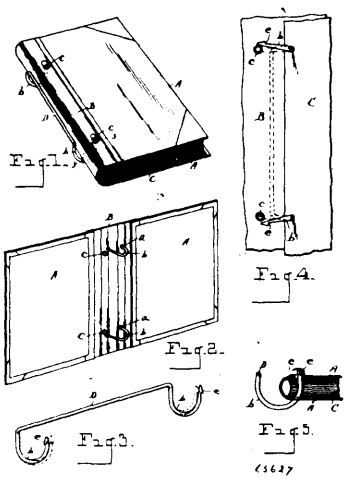
Harrison B. Meech, Denver, Colorado, U.S.A., 3rd January, 1900; 6 years (Filed 10th October, 1899.)

Claim.—1st. In a smelting furnace, an ore smelting oven, a retort oven, and a fire box located between said ovens. 2nd. In a smelting furnace, an ore smelting oven, a retort oven, a firebox located between said ovens, and a return flue connecting said ovens. 3rd. In a smelting furnace, an ore smelting oven, a retort oven, a firebox located between said ovens, a return flue connecting said ovens, and a hot air coil located in said retort oven and connected by an outlet pipe to said smelting oven. 4th. In a smelting furnace, an ore smelting oven, a retort oven, a firebox located between said ovens, a return flue connecting said ovens, and a blower located betweeen said retort oven and said firebox, and connected thereto by pipes, in such a manner as to enable said blower to force the hot gases in the retort oven into the firebox. 5th. In a smelting furnace, an ore smelting oven, a retort oven, a firebox located between said ovens, and a steam pipe arranged to discharge steam beneath the grate bars of said firebox. 6th. In a smelting furnace, an ore smelting oven, a retort oven, a fire box located between said ovens, and a gas supply pipe arranged to discharge gas in said firebox. 7th. In a smelting furnace, an ore smelting oven, a retort oven, a firebox located between said ovens, in combination with retorts located in said retort oven, the ends of said retorts adjacent to said fire box being open, the opposite ends being provided with a hopper, and slide openings connecting said hopper and retorts. 8th. In a smelting furnace, an ore smelting oven, a retort oven, a firebox located between said ovens, in combination with retorts located in said retort oven, the ends of said retorts adjacent to said firebox being open, the opposite ends being provided with doors, substantially as described and for the purpose specified.

No. 65,627. Temporary Binder. (*Reliure temporaire.*)

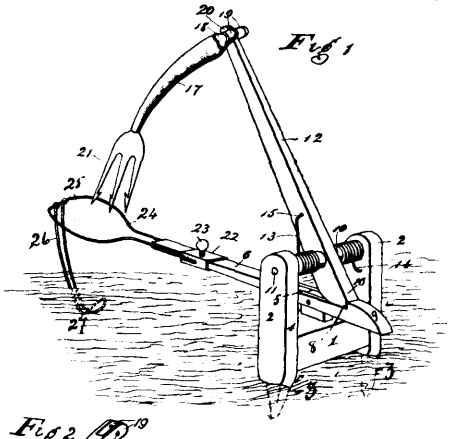
Frederick J. Schleede, Ann Arbor, Michigan, U.S.A., 3rd January, 1900; 6 years. (Filed 9th October, 1899.)

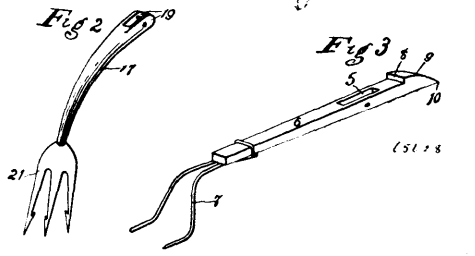
Claim.—1st. In a temporary binder, the combination of the cover, the binding strand consisting of a straight portion provided with right angled end portions curved in the arc of a circle and provided with hooks on their outer faces, open eyelets in the back of



the cover through which said curved portions o the binding strand are adapted to be passed, and closed eyelets in the back of the cover opposite said open eyelets in which the hooked ends of the curved portions are adapted to engage. 2nd. In a temporary binder, the combination of the cover having a set of open and a set of closed eyelets in the back thereof, a binding strand consisting of a straight portion having curved end portions provided with hooks, said curved portions being adapted to be passed through the open eyelets into the back of the cover, and to be sprung into said closed eyelets to cause the hooks to engage the edges thereof.

No. 65,628. Animal Trap. (*Piège.*)



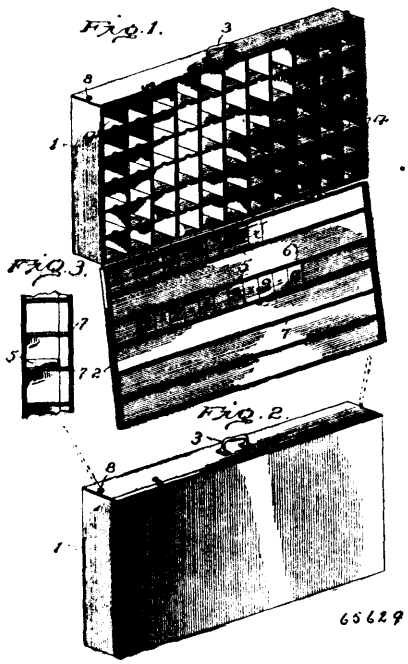


John A. Cooper, Adair, Iowa, U.S.A., 3rd January, 1900; 6 years. (Filed 3rd January, 1899.)

Claim.—1st. The herein described animal trap, consisting of the body, anchoring stems secured thereto, an actuating lever pivoted to said body, standards erected upon said body, a driving lever ournalled in said standards, an impaling arm adjustably secured to the outer end of the driving lever, a spring so disposed upon the driving lever that it will be normally directed downward and a suitable clutch mechanism provided upon the actuating lever and designed to co-operate with the end of the driving lever, all operatively combined in the manner and for the purpose set forth. 2nd. In animal traps, the combination of a frame having a vertical ear, a slotted actuating lever pivoted on said ear, said lever carrying on its end a trigger mechanism, a driving lever pivoted in the frame

and carrying an impaler, and means to actuate the driving lever, as set forth. 3rd. In animal traps, the combination of a frame, a driving lever pivoted in the frame and carrying an impaler, an actuating lever pivoted in said frame and carrying an adjustable sleeve, and devices connecting the trigger to said sleeve, said levers being locked together, and means to actuate the impaling lever when set free, all arranged as set forth. 4th. In animal traps, the combination of a frame, a driving lever carrying an impaler adjustably pivoted thereto, an actuating lever carrying an adjusting device and a trigger attached thereto, both levers being pivoted in the frame and co-operatively connected, all arranged as set forth.

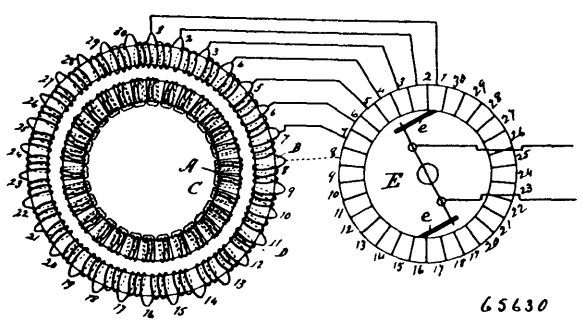
No. 65,629. Education Appliance. (*Appareil d'éduca.tion.*)



Alice Perry, Cherokee, Kansas, U.S.A., 3rd January, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—The herein described portable educational appliance, consisting of a cabinet subdivided by partitions into compartments to receive blocks bearing letters, numerals and like characters, and provided with a handle, a cover hinged at its lower longitudinal edge to the cabinet and adapted to swing outward and downward and secured at its free edge when closed by fastenings applied thereto and to the cabinet, and longitudinal strips applied to the inner side of the cover and provided in number and position to register with the longitudinal partitions of the cabinet when the cover is closed to permit the ends of the blocks to be projected beyond the walls of their compartments into spaces formed between the said longitudinal strips upon tilting the cabinet, whereby the blocks can be conveniently and readily grasped when required, said longitudinal strips also forming supports for the blocks when selected and collated to demonstrate a lesson, substantially as described.

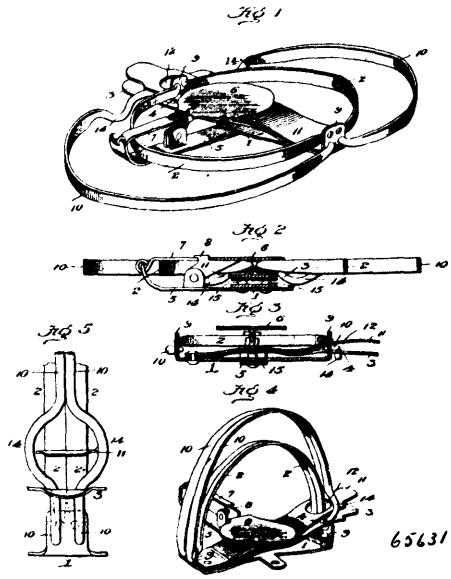
No. 65,630. Electric Motor. (*Moteur électrique.*)



Léon Marie Joseph Clement Lavasseur, Puteau, France, 3 janvier, 1900; 6 ans. (Déposé 5 octobre, 1898.)

Résumé.—Je revendique le moteur électrique, ci-dessus décrit consistant en deux tores concentriques, l'un fixe, l'autre mobile, autour desquels sont enroulées des bobines dont celles de l'inducteur forment un circuit fermé, tandis que celles de l'induit peuvent être accouplées de toutes les façons possibles, des fils de communication partant des points de jonction des bobines de l'inducteur pour arriver aux lames d'un collecteur contre lequel peuvent tourner deux ou un plus grand nombre de balais mis en communication avec les fils amenant les courants.

No. 65,631. Animal Trap. (*Piège.*)



Claude R. Willing, Nanticoke, Maryland, U.S.A., 3rd January, 1900; 6 years. (Filed 6th January, 1899.)

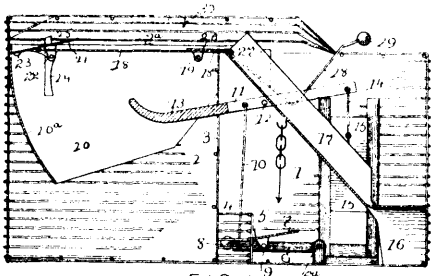
Claim.—1st. In a steel jaw trap, the inner and the outer pairs of jaws, the outer pair pivoted below the pivots of the inner pair, closing in the same direction and spanning the inner pair, in combination with a pair of spring plates the tripping plate and its latch, said spring plates secured one upon the other, each having a slot at its free end, the inner jaws passing through the slot of the upper spring and the outer jaws passing through the slot of the lower spring and having the open way forming side abutments between which the upper spring has freedom for movement and against which abutments the lower spring acts to close the outer jaws in the way described. 2nd. In a steel jaw trap, the inner and the outer pairs of jaws, the outer pair pivoted below the pivots of the inner pair, in combination with a pair of spring plates, one overlying the other, the under spring engaging the outer jaws and the upper spring engaging the inner jaws, a fulcrum bearing mediately of the length of said springs over and upon which they are set, a tripping plate and a latch, both sets of jaws closing in the same way, the outer set spanning the inner set.

No. 65,632. Animal Trap. (*Piège.*)

James Hardin Hoover, Macon, near Argenta, Illinois, U.S.A., 3rd January, 1900; 6 years. (Filed 11th March, 1899.)

Claim.—1st. In a trap having a trap compartment, an adjacent cage compartment and a passageway extending from the trap compartment to the upper part of the cage compartment, a tilt plate hinged in the passageway with its swinging end extended out over the cage compartment and a trip plate on the swinging end of the tilt plate holding the tilt plate in a horizontal position and releasable by the weight of an animal. 2nd. In a trap having a trap compartment, an adjacent cage compartment and a passageway extending from the trap compartment to the upper part of the cage compartment, a tilt plate hinged in the passageway with its swinging end extended out over the cage compartment, and a closure plate at the pivot of the tilt plate movable across the passageway by the downward swing of the tilt plate. 3rd. In a trap having a trap compartment, an adjacent cage compartment and a passageway extending from the trap compartment to the upper portion of the cage compartment, a tilt plate hinged in the passageway with its swinging end extended out over the cage compartment, a trip catch on the swinging end of the tilt plate releasable by the weight of an animal and a closure plate near the pivot of the tilt plate swingable across the passageway by downward swing of the tilt plate. 4th. In a trap having a trap compartment provided with a door, an adjacent cage compartment and a passageway extending from the trap compartment to the cage compartment, a tilt plate hinged in the passageway with its swinging end extended out over the cage

compartment, a trip catch on the tilt plate releasable by the weight of an animal and a pivoted arm connected with the door at one end



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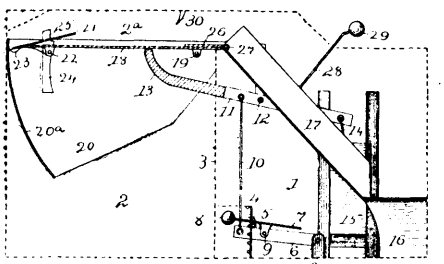


F·9 2

and extending under the tilt plate at the other end, substantially as set forth. 5th. In a trap having a trap compartment, a cage compartment and a passageway extending from the trap compartment to the upper part of the cage compartment, a tilt plate hinged in the passageway extending out over the cage compartment, a door for the trap compartment, a connection between the door and the tilt plate whereby downward motion of the plate will raise the door, and an end wall to the passageway following the path of the end of the tilt plate throughout the upper part of its swing, whereby the door must be entirely opened before the animal can escape from the passageway, substantially as set forth.

No. 65,633. Feed Water Regulator for Acetylene Gas Generators. (*Régulateur d'eau d'alimentation pour générateurs de gaz acétylène.*)

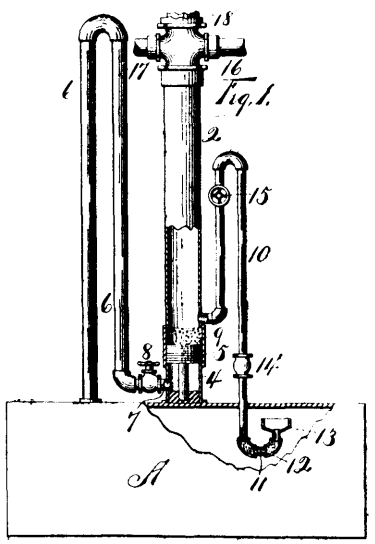


Fig. 1.

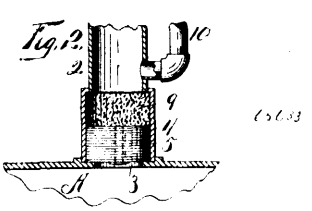


Fig. 2.

Ira Cameron Curtis, Fulton, New York, U.S.A., 3rd January, 1900; 6 years. (Filed 10th August, 1899.

Claim.—1st. The combination with a gas generator, of a feed water pipe, enlarged within it, and a flowable medium within the pipe of a density to prevent the passage of water through it, while in the normal bore of said pipe, but permiting such passage when spread out in such enlargement. 2nd. The combination with a gas generator, of a pipe connected thereto and enlarged both exteriorly, and a flowable medium between said enlargements and exposed to the pressure of two exposing agents, whereby the excess of pressure of one agent will force it into one of said enlargements to permit the passage of such agent through it. 3rd. The combination with a gas generator, of a water column a vertically reciprocated piston and packing therein, a feed pipe enlarged exteriorly and interiorly to said generator, and an intermediate liquid packing medium under pressure of the water and gas as opposing agents whereby the excess of pressure of one agent will force it into one of said enlargements to permit the passage of such agent through it. 4th. The combination with a gas generator, of a feed pipe, a water column, a reciprocatory piston and packing therein, and a gas pipe connecting said generator to said piston chamber and projecting upward to a height greater than that of the column of water, to prevent water entering said gas pipe. 5th. The combination with a gas generator, a water column, a piston and column of mercury in a chamber therein exposed to the pressure of the gas therein, of a feed water pipe connecting said water column to said generator, and a mercury column in said pipe adapted to be reciprocated therein by the variation of the pressure upon it. 6th. The combination with a gas generator, a water column pipe and a feed water pipe connecting it to said generator, of a four-way coupling mounted upon said column and comprising a water inlet connection, an overflow connection, and a vent. 7th. The combination with a gas generator, a water colum and a feed pipe connecting them, of a column of mercury in said feed pipe adapted to be shifted in one direction by the water pressure to permit the passage of water, and in the opposite direction when the gas pressure exerts the greater force, to permit the escape of the surplus gas through the feed pipe and water column.

No. 65,634. Ring Case. (*Etui pour bagues.*)

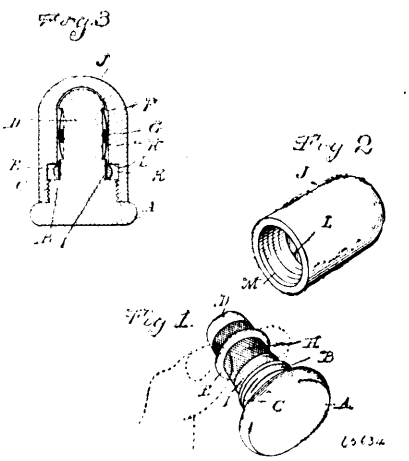


Fig. 3

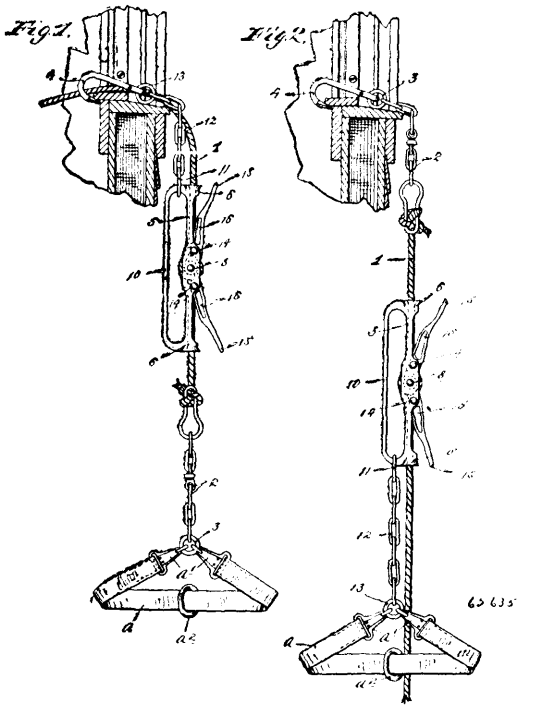
Fig. 2

Fig. 1.

August A. Caille, Detroit, Michigan, U.S.A., 3rd January, 1900; 6 years. (Filed 9th September, 1899.)

Claim.—1st. In a ring case, the combination of a base, a standard over which the ring is adapted to engage, a section of abrasive material upon the standard, whereby in slipping the ring on the standard the abrasive material cleans the inner surface of the ring, and a cap for covering said standard. 2nd. In a ring case, the combination of a base, a standard thereon over which the ring is adapted to engage, adjacent sections of abrasive and polishing material upon the standard and a cap for covering said standard. 3rd. In a ring case, the combination of a base, a standard thereon over which the ring is adapted to engage, a band of abrasive material and a band of polishing material upon said standard, said bands being arranged one above the other, and a cap for covering the standard. 4th. In a ring case, the combination of a base, a standard thereon over which the ring is adapted to engage, a cushioned band of abrasive material upon the standard a band of polishing material below the abrasive band, and a cap for covering the standard. 5th. In a ring case, the combination with the base provided with a reduced portion thereon, of a standard upon said reduced portion, a band of abrasive and a band of polishing material upon the standard, and a cap for covering the standard engaging over the reduced portion of the base, said cap having an annular shoulder formed upon its interior adapted to bear against the ring.

No. 65,635. Fire Escape. (*Sauveteur d'incendie.*)



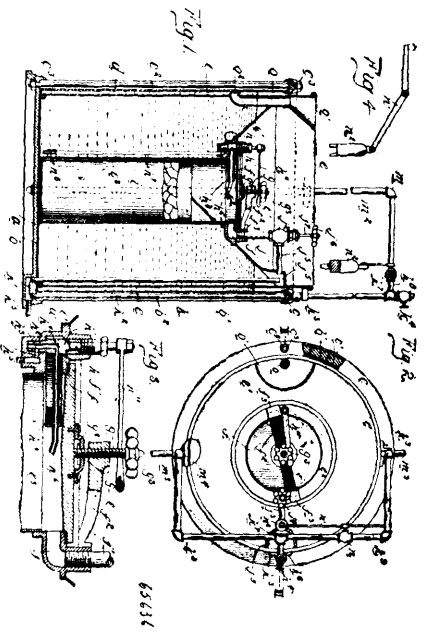
Ira Lorenzo Gleason, Hutchison, Minnesota, and Ellis Lorenzo Gleason, Chicago, Illinois, all in the U.S.A., 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. The combination with a rope or other flexible connection, of a traveler or bracket having the friction stud or block about which the rope is turned, and provided with suitable guide channels for the rope, including the eyes or loops at the ends of the bracket, the pair of brake levers pivoted to the traveler on opposite sides of the friction stud, the bail extending from end to end of the said bracket or traveler and a sling or body strap secured to and sliding on the bail, substantially as described. 2nd. The combination, of the bracket or traveler 5, having the end loops or eyes 6, central friction studs 7 and bail 10, the brake levers 15 pivoted to said bracket 5, one on each side of the stud 7, the chain or connection 12 sliding on said yoke 10, and a hook or grapple and a sling or body strap, both adapted to be detachably secured either to the end of said rope or to the said chain or connection 12, at will, substantially as described.

No. 65,636. Acetylene Gas Generator.
(*Générateur de gaz acétylène.*)

The Heckert Light Company, assignee of William Heckert, all of Finlay, Ohio, U.S.A., 4th January, 1900; 6 years. (Filed 23rd October, 1899.)

Claim.—1st. In an acetylene gas generating apparatus, the combination of a water tank, an inverted gas holder therein having a re-entrant top with a calcium carbide receptacle depending therefrom within the tank so as to be practically immersed in the water therein, and having a restricted water inlet at the top in communication with the interior of the tank, a gas conduit leading out of the upper part of the calcium carbide receptacle into the upper part of the inverted gas holder and extending through the space inclosed by the re-entrant top where it is provided with a valve, and a suitable service outlet from the gas holder. 2nd. In an acetylene gas generating apparatus, the combination of a water tank, an inverted gas holder therein having a calcium carbide receptacle with a restricted water inlet at the top supplied from the tank, a gas conduit leading out of the upper part of the calcium carbide receptacle into the upper part of the inverted gas holder, and a service pipe having its inlet end in proximity to the outlet end of said conduit, said service pipe extending down through the gas holder and tank and passing out underneath the former. 3rd. In acetylene gas apparatus, the combination of a water tank, an inverted gas holder therein carrying an open ended tube which extends vertically along the inner wall of the gas holder and through the top of the same and is formed with a bend at its lower end where it passes through the side wall of the gas holder and opens into the tank, a calcium carbide receptacle carried by the gas holder and having a restricted water inlet at its upper part about on a level with the bend in said tube, said water inlet being supplied from the tank through the gas holder, a gas conduit leading out of the upper part of the calcium carbide receptacle and into the upper part of the gas holder, and a suitable service outlet from the latter. 4th. In acetylene gas generating apparatus, the combination of a water tank, an inverted gas holder therein having



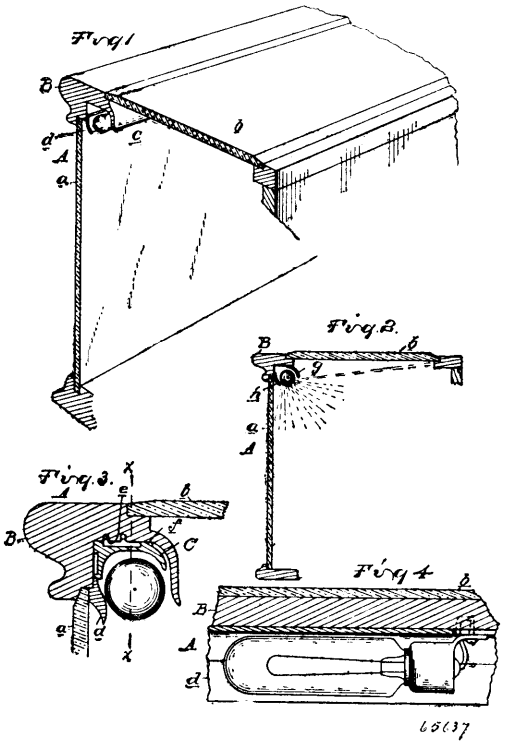
a calcium carbide receptacle with a restricted water inlet at the top supplied from the tank, a valve plug controlling said inlet and having a spigot to conduct the restricted flow of water to the middle of the receptacle, said spigot being moved to one side when the valve plug is turned to close the water inlet, a gas conduit leading out of the upper part of the calcium carbide receptacle into the upper part of the gas holder, and a suitable service outlet from the latter. 5th. In acetylene gas generating apparatus, the combination of a water tank, an inverted gas holder therein having a calcium carbide receptacle depending from the top with a suitable closure thereat, said receptacle adapted to contain a pail or can of calcium carbide and having a restricted water inlet at its upper part communicating with the tank through the gas holder, a valve plug controlling said inlet and having a spigot adapted to conduct the restricted flow of water to a point over the pail of calcium carbide and to swing to one side when the valve plug is turned to close the inlet so as to permit the removal of said pail, a valved gas conduit leading out of the upper part of the receptacle into the upper part of the gas holder, and a service pipe leading out of the latter. 6th. In acetylene gas generating apparatus, the combination of a water tank, and inverted gas holder therein having a calcium carbide receptacle depending from its top with a suitable closure thereat, said receptacle adapted to contain a pail or can of calcium carbide having a restricted water inlet at its upper part communicating with the tank through the gas holder a valve plug controlling said inlet and having a spigot adapted to conduct the restricted flow of water to a point over the pail of calcium carbide and to swing to one side when the valve plug is turned to close the inlet so as to permit the removal of said pail, a handle on the valve plug projecting therefrom correspondingly with the spigot so as to extend over the closure of the calcium carbide receptacle when the water inlet to the latter is open, a valved gas conduit leading out of the upper part of the receptacle into the upper part of the gas holder, and a service pipe leading out of the latter. 7th. In acetylene gas generating apparatus, the combination of a water tank, an inverted gas holder therein having a calcium carbide receptacle with a restricted water inlet at the top supplied from the tank, a gas conduit leading out of the upper part of the calcium carbide receptacle into the upper part of the inverted gas holder, service piping leading out of the later, and an escape branch pipe having a safety valve and means for opening the same operated by the gas holder in rising, substantially as described. 8th. In acetylene gas generating apparatus, the combination of a water tank, an inverted gas holder therein having a calcium carbide receptacle with a restricted water inlet at the top supplied from the tank, a gas conduit leading out of the upper part of the calcium carbide receptacle into the upper part of the calcium carbide receptacle into the upper part of the inverted gas holder, service piping leading out of the latter, and a waste water pipe communicating with the tank at an elevated point and connected with the service piping, substantially as and for the purpose described.

No. 65,637. Show Case. (*Boîte d'étalage.*)

John Petz and John Phillips, both of Detroit, Michigan, U.S.A., 4th January, 1900; 6 years. (Filed 5th October, 1899.)

Claim.—1st. In a show case, the combination with transparent top and front plates, of a frame rail to which said plates are secured,

a lamp secured to said rail within the case and a depending flange on said rail adapted to shield the direct rays of said lamp from pass-

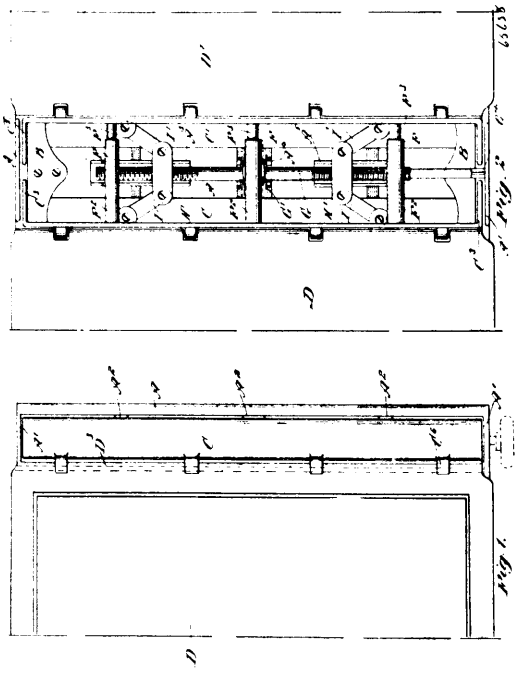


ing out from the case. 2nd. In a show case, the combination with transparent top and front plates, of a frame rail to which the adjacent edges of said plates are secured, having a recess formed therein, and an electric lamp or other illuminant placed in said recess for the purpose described. 3rd. In a show case, the combination with transparent top and front plates, of a frame rail to which the adjacent edges of said plates are secured, the inner portions of said rail being formed with a longitudinal groove or channel, and a series of electric lamps or other illuminants placed in said groove for the purpose described. 4th. In a show case, the combination with transparent top and front plates, of a frame rail to which the adjacent edges of said plates are secured, having a longitudinal groove or channel formed in its inner portion, a series of electric lamps secured in said groove, and a lining for said channel forming a heat shield. 5th. In a show case, the combination with transparent top and front plates, of a frame rail to which the adjacent edges of said plates are secured, having a longitudinal groove or channel formed in its inner portion, a lining strip secured within said groove separated from the walls thereof to form an air space and a series of electric lamps secured within said groove for the purpose described.

No. 65,638. Binder Frame. (*Cadre de lieuse.*)

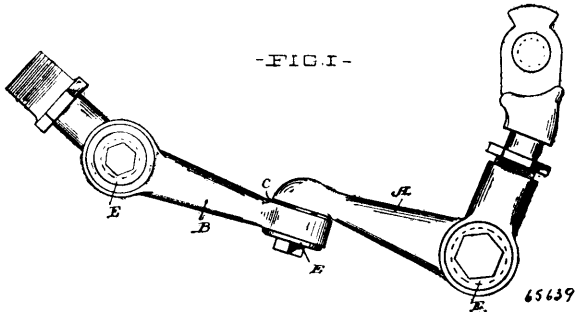
The Jones Perpetual Ledger Company, assignee of Harvey Pierce Jones, all of Chicago, Illinois, U.S.A., 4th January, 1900; 6 years. (Filed 1st March, 1899.)

Claim—1st. A binder frame, comprising a back, cover plates fitted to slide thereon, a screw rod mounted to turn on said back, and having right and left hand screw threads, nuts engaging said screw threads and guided lengthwise on said back, and links connecting the nuts with said cover plates, to move the latter simultaneously toward or from each other on turning said screw rod, substantially as shown and described. 2nd. A binder frame, comprising a back having top and bottom flanges, guideways transverse of the back, and L-shaped cover plates fitted to slide on said guideways, and having end flanges fitted close to said back flanges, to form at all times a casing with the back whether the cover plates are moved inward or outward, substantially as shown and described. 3rd. A binder frame, comprising a back having top and bottom flanges, guideways transverse of the back, L-shaped cover plates fitted to slide on said guideways, and having end flanges fitted close to said back flanges, to form at all times a casing with the back whether the cover plates are moved inward or outward, and means for simultaneously moving said cover plates toward or from each other, as set forth. 4th. A binder frame, comprising a back having top and bottom flanges, guideways transverse of the back, L-shaped cover plates fitted to slide on said guideways, and having end flanges fitted close to said back flanges, to form at all times a casing with the back, whether the cover plates are moved inward or outward, means for simultaneously moving said cover plates toward or from each other, said means comprising a bearing on said back, a screw rod mounted to turn on said bearing and having right and left hand



threads, nuts screwing on said screw rod, guideways for the nuts to slide on and held on said back, and links connecting the nuts with said cover plates, substantially as shown and described. 5th. A binder frame, provided with a cover plate having aligned eyes, a cover formed with a key, a metal hinged leaf having an opening for the reception of a pintle, said hinged leaf being cut out for said eyes, and a pintle inserted in said leaf opening and passing through said eyes, substantially as shown and described. 6th. A binder frame having cover plates mounted to move toward or from each other, and pins for carrying the leaves and supported by said cover plates, each pin comprising a stud and a sleeve secured to one cover plate and concentric to one another, the other cover plate carrying a sleeve fitted to slide on said stud inside of the concentric sleeve, substantially as shown and described.

No. 65,639. Pipe Joint. (*Joint de tuyau.*)

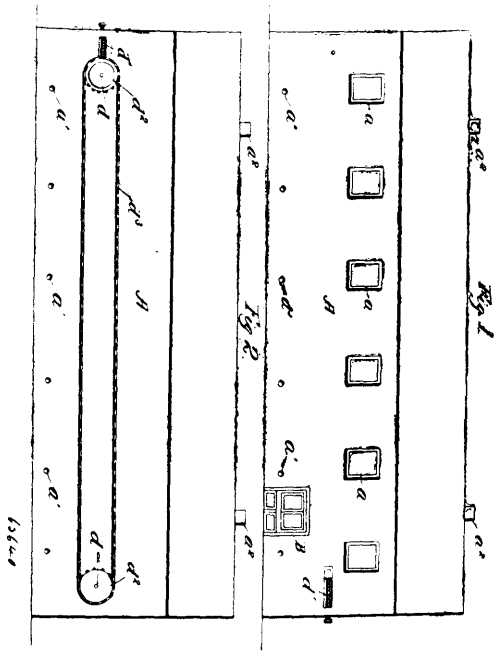


The Flexible Pipe Joint Company, Chicago, Illinois, U.S.A., assignee of Charles H. Weaver and Lemuel H. Houghton, both of Elkhart, Indiana, U.S.A., 4th January, 1900; 6 years. (Filed 25th March, 1899.)

Claim.—1st. In a flexible pipe joint, the combination of two couplings, a connecting joint rigid with one coupling, a packing ring located intermediate of said connecting joint and second coupling, and a pressure device exerting pressure against said connecting joint and packing ring, substantially as set forth. 2nd. In a flexible joint, the combination of two couplings, a connecting joint rigid with one coupling and loosely fitting in the second coupling, a packing ring interposed between said second coupling and connecting joint, and a spring pressure device having bearing against said connecting joint, substantially as set forth. 3rd. In a flexible pipe joint, the combination of two couplings, one provided with a connecting joint, a conical packing ring interposed between said second coupling and said connecting joint, and a spring pressed spider

seated in said connecting joint, substantially as set forth. 4th. In a flexible pipe joint, the combination of two couplings, one of said couplings provided with a connecting joint having an annular shoulder bearing against said coupling, a screw cap threaded in said second coupling, carrying a spring and a spider, said spider having bearing against said connecting joint and a packing ring interposed between said connecting joint and second coupling, substantially as set forth.

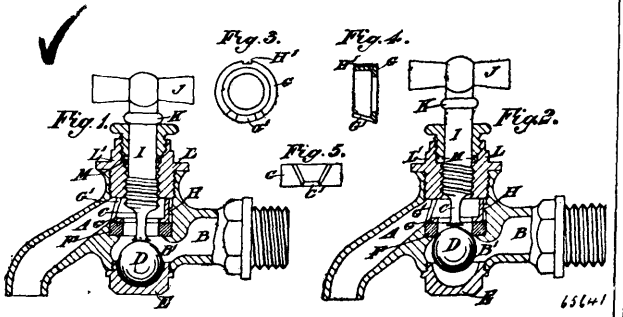
No. 65,640. Fruit Drier. (*Sechoir à fruit.*)



Edgar McClatchey, Leamington, Ontario, Canada, 4th January, 1900; 6 years. (Filed 25th September, 1899.)

Claim.—1st. A drier, comprising a fire proof building having suitable doors at each end thereof, inspection windows formed in the sides of said building, air openings formed on both sides of the building at the lower part thereof, suitable ventilators mounted on the upper part of said building, a furnace, hot air pipes leading therefrom throughout the said building, a shaft journalled in each end of the building, a roller fixed upon each of said shafts, an end less conveyer belt passed about said rollers, a sprocket wheel secured to each of said shafts, a sprocket wheel connecting said sprocket wheels, a power driven pulley fixed on one of said shafts, and a scraper pivotally secured to the sides of the said building and adapted to bear at its lower end upon the upper surface of said belt, substantially as described.

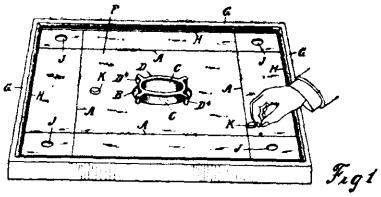
No. 65,641. Cock or Tap. (*Robinet ou cancelle.*)

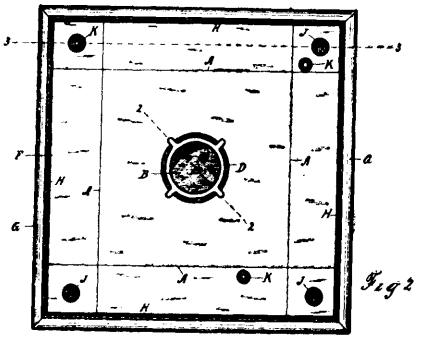


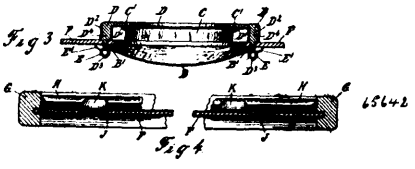
George Onno Homfeld Klopp, London, England, 4th January, 1900; 6 years. (Filed 7th January, 1899.)

Claim.—1st. A cock or tap comprising a body formed with an inlet chamber having a discharge aperture, a ball valve located in the inlet chamber, a ring or washer adapted to serve as a valve seat, a non-rotatable clamp ring for said seat and means whereby the said ball valve can be forced from its seat to permit the discharge to take place, substantially as set forth. 2nd. A cock or tap comprising a body formed with an inlet chamber having a discharge aperture, a ball valve located in the inlet chamber and formed of hard material, an elastic ring or washer adapted to serve as a valve seat, a non-rotatable clamp ring for said seat and means whereby the said ball valve can be forced from its seat to permit the charge to take place, substantially as set forth. 3rd. A cock or tap comprising a body having inlet and outlet chambers or passages separated by a wall formed with a discharge aperture, a ball valve of hard material located in the inlet chamber and a larger diameter than said aperture, an elastic ring or washer adapted to serve as a valve seat, a non-rotatable clamp ring for said seat, and a screw spindle whereby the said ball valve can be forced from its seat to permit the discharge to take place, substantially as set forth. 4th. A cock or tap comprising a body having an inlet chamber B, and an outlet chamber A, separated from each other by a wall formed with a discharge aperture, a ball valve D, located in the inlet chamber, and of larger diameter than said aperture, an elastic ring or washer F, a non-rotatable clamp ring G, and a stuffing box LL^1, with screw spindle I, substantially as described. 5th. A cock or tap comprising a body formed with an inlet chamber having a discharge aperture, a ball valve located in the inlet chamber, a ring or washer adapted to serve as a valve seat, a non-rotatable clamp ring for said seat and means whereby the said ball valve can be forced from its seat to permit the discharge to take place, the said ball valve being adapted when left free to be automatically returned to the normal position and to allow the ball valve to close on its seat, substantially as described. 6th. A cock or tap comprising a body having inlet and outlet chambers or passages separated by a wall formed with a discharge aperture, a ball valve of hard material located in the inlet chamber and of larger diameter than said aperture, an elastic ring or washer adapted to serve as a valve seat, a non-rotatable clamp ring for said seat, a screw spindle I^1, the thread of which is formed with a quick pitch, a spindle C, attached to the said screw spindle, and means to limit the movement of the spindle I^1, substantially as described.

No. 65,642. Game Board. (*Tableau de jeu.*)







Henry L. Haskell, Ludington, Michigan, U.S.A., 4th January, 1900; 6 years. (Filed 1st April, 1899.)

Claim.—1st. In a game board, the combination of a face, a central pocket opening, a frame supported by posts on the face and surrounding the pocket opening, a curtain depending from the frame and guarding the pocket opening, a bottom for the pocket and means for securing the posts of the frame and the bottom of the pocket, substantially as described. 2nd. In a game board, the combination of a face, a projecting rim, lines running parallel with the rim and crossing near the corners to form squares, depressions in the said squares, and a central pocket having an opening guarded by a curtain, substantially as described. 3rd. In a game board, the combination of a face, a projecting rim, a cushion on the rim, lines running parallel with the rim and crossing near the corners to form squares, depressions in the said squares, and a central pocket having an opening guarded by a curtain, substantially as described. 4th. In a game board, the combination of a face, a projecting rim, base lines, corner pockets, and a central opening in the face forming the

mouth of a pocket, a frame projecting above the face and a flexible curtain hung from the frame and depending within the mouth of the pocket, substantially as described. 5th. In a game board, the combination of a face, a projecting rim, corner pockets, a central opening in the face forming the mouth of the pocket, a frame projecting from the face and surrounding the mouth of the pocket, a curtain hung from the frame and extending into the mouth of the pocket, fabric forming a bottom for the pocket, a set of posts supporting the frame, and means for securing said posts and the bottom of the pocket to the board, substantially as described. 6th. In a game board, a face, a series of base lines and a pocket between the base lines for the retention of surface projectiles, having a curtain or fringe suspended above and encircling the inner side of the pocket opening, substantially as described. 7th. In a game board, the combination of a face, base lines, a pocket within the base lines, a frame above the pocket and a curtain or fringe depending from the frame into the mouth of the pocket, substantially as described.

No. 65,643. Game Device. (*Appareil de jeu.*)

FIG. 1

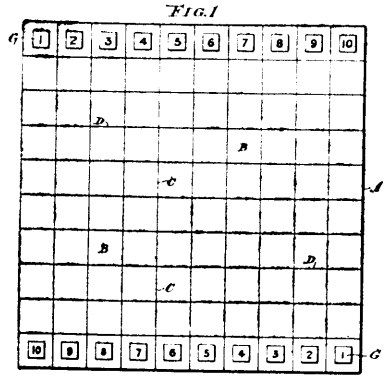


FIG. 2

65643

FIG. 3

Alexander Lang, Carman, Manitoba, Canada, 4th January, 1900; 6 years. (Filed 19th May, 1899.)

Claim.—1st. A game device comprising a board which is divided into squares, and two sets of blocks or cubes, the blocks or cubes of one set differing in colour from those of the other, and each block or cube of each set being provided on each of the sides or faces thereof with a number, substantially as shown and described. 2nd. A game device comprising a board, which is divided into squares, and two sets of blocks or cubes, the blocks or cubes of one set differ in colour from those of the other, and each block or cube of each set being provided on each of the sides or faces thereof with a number, and the amount of the numbers of the separate sides or faces of each block being the same, substantially as shown and described. 3rd. A game device comprising a board which is divided into squares, and two sets of blocks or cubes, the blocks or cubes of one set differing in colour from those of the other, and each block or cube of each set being provided on each of its sides or faces with a number, and the aggregate amount of the numbers of the sides or faces of each block being the same, and the amount of the numbers on all of the blocks of each set being the same, substantially as shown and described.

No. 65,644. Toy. (*Jouet.*)

Joseph Orson Hebert, Montreal, Quebec, Canada, 4th January, 1900; 6 years. (Filed 29th July, 1899.)

Claim.—1st. In a trundle toy, the combination of a removable handle, a wheel, a pair of metallic blanks located at opposite sides of the wheel and doubled upon themselves, and having the folded portions bent into circular outlines, to provide bearings in which the end portions of the wheel are journalled, and having the folded parts secured together at an intermediate point, and having the end portions embracing the handle, an upright frame straddling the wheel and mounted upon the circular portions of the said blanks, and a jointed figure mounted on the handle and secured to the upright frame, and eccentrically connected with the hub, substantially as described. 2nd. In a trundle toy, the combination of a removable handle, a wheel journalled thereto, an upright frame, a

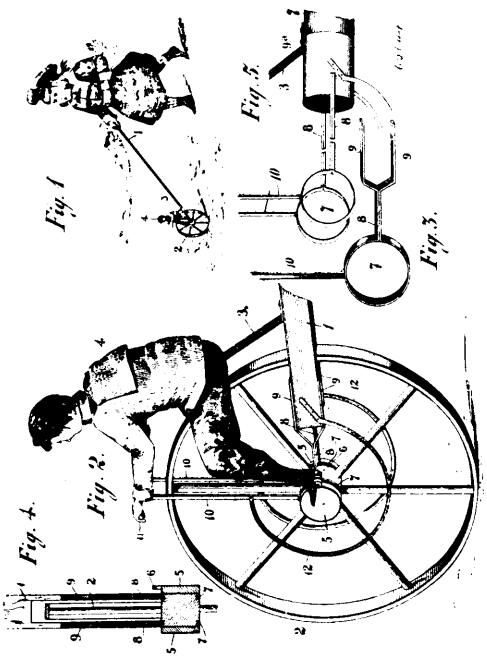
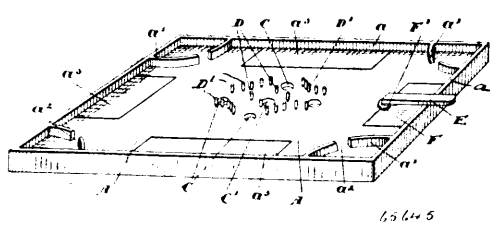


figure mounted upon the handle, and having its upper portion connected with the same frame, and the lower jointed parts eccentrically connected with the wheel, and curved wires forming guards to protect the lower jointed parts of the figure, and secured at their ends to the aforesaid frame and handle respectively, substantially as and for the purpose set forth. 3rd. In a trundle toy, the combination of a handle, a wheel, metallic blanks secured to the handle at opposite sides of the wheel, and bent into circular shape, to provide bearings for the hub of the same, plates secured to the ends of the hub of the wheel and retaining the latter in the bearings, and a figure mounted on the handle, and having jointed parts eccentrically connected with the plates, substantially as described. 4th. In a trundle toy, the combination of a handle, a wheel, metallic blanks secured to the handle and bent into circular shape, to provide bearings for the wheel, plates mounted on the ends of the hub of the wheel and retaining the latter in the bearings, a jointed figure mounted on the handle and eccentrically connected with the plates, and curved guards secured to the handle and extending in advance of the lower portions of the figure, substantially as described. 5th. In a trundle toy, the combination of a removable handle, a wheel journalled in suitable bearings and connected with the handle, an upright frame located above the hub of the wheel and connected with the handle, a jointed figure attached to the upright frame, and the curved guards extending in front of the hub and connected with the frame and with the handle, and protecting the jointed parts of the figure, substantially as described. 6th. A toy comprising a trundle wheel, a handle removably secured thereto, an upright frame secured to the hub of the wheel, a jointed figure secured to said frame, and curved guards extending in front of the hub and connected with the frame, to protect the jointed parts of the figure, substantially as described.

No. 65,645. Game Apparatus. (*Appareil de jeu.*)



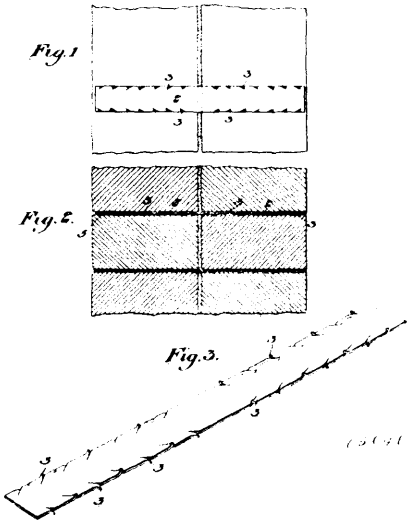
65645

Richard Pike, Montreal, Quebec, Canada, 4th January, 1900; 6 years. (Filed 2nd August, 1899.)

Claim.—A parlor game comprising a board with suitable bounding sides, arc-shaped corner barriers with central ports, the five centrally disposed holes having the centre one forming the centre of an imaginary square, in the corners of which the other holes are

ocated, the arc shaped rows of pegs between the outer holes and the four pegs situated around the central hole, and marbles for playing the game, as and for the purpose specified.

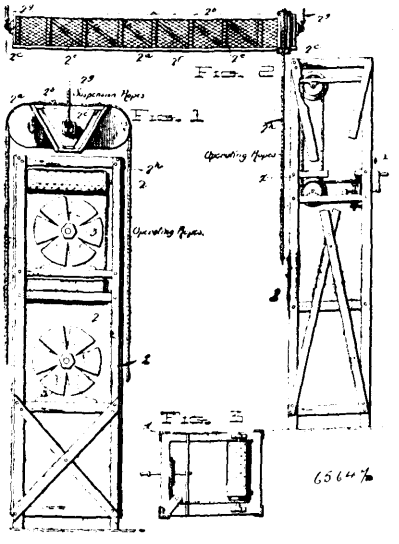
No. 65,646. Tie for Brick Works, etc.
(Lien pour ouvrages en brique, etc.)



John Grant McDowell, Pittsburg, Pennsylvania, U.S.A., 4th January, 1900; 6 years. (Filed 16th August, 1899.)

Claim.—1st. A tie for bricks having upward and downward projections, said projections being inclined toward the centre of the tie, so that the projections upon one side are inclined in the opposite direction from those of the other side, substantially as described. 2nd. A wall composed of at least two courses of bricks or tiles having between their faces ties provided with upward and downward projections, said projections being inclined towards the centre of the tie and engaging the faces of the bricks or tiles so as to tie the courses together, substantially as described. 3rd. A tie for bricks having upward and downward projections cut from its side edges, said projections being all inclined toward the centre of the tie so that the projections upon one side are inclined in the opposite direction from those of the other side, substantially as described.

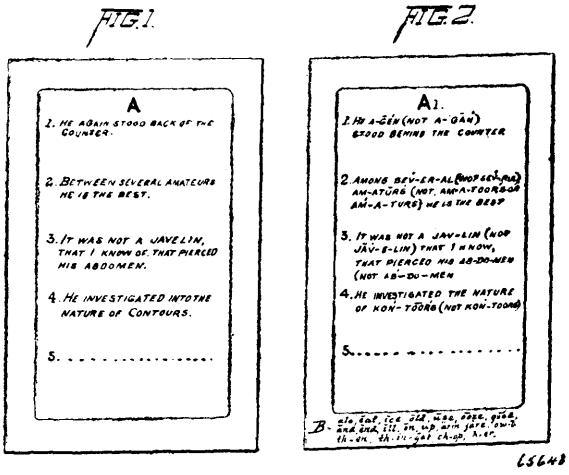
No. 65,647. Theatrical Stage Apparatus.
(Appareil de scène théâtral.)



Joseph Rhode Grismer, Bayside, Long Island Queens, New York U.S.A., 4th January, 1900; 6 years. (Filed 2nd October, 1899.)

Claim.—In a device of the character described, the combination with the flake dropper, of means for dropping a pulverized or granular substance, and means for blasting or driving the falling mass across the stage, whereby the flakes and pulverized or granular substances are mixed and a realistic snow storm produced, substantially as and for the purpose set forth.

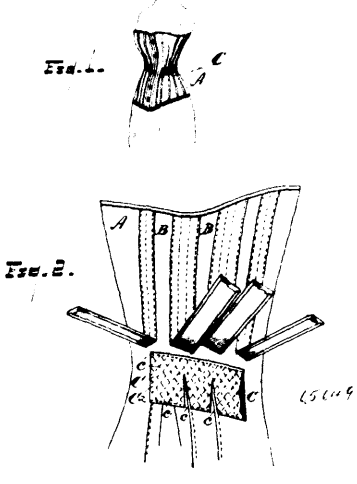
No. 56,648. Game. *(Jeu.)*



Thomas Bickford, Chicago, Illinois, U.S.A., 4th January, 1900; 6 years. (Filed 9th December, 1899.)

Claim.—1st. A game consisting of a pack or series of cards of suitable form, size and number, each of said cards having indicated thereon, words, phrases and sentences expressing ideas and thoughts, said cards being printed or arranged in pairs, the cards of each pair provided with means whereby they are correlated, and one of each pair having the words without pronunciation marks, and having the phrases and sentences in defective, incorrect and incomplete form, according to a companion or correlative card having the same words with pronunciation marks, and the same ideas and thoughts expressed in an approved form used as a standard. 2nd. A game consisting of a pack or series of cards of suitable form, size and number, arranged in pairs, the cards of each pair provided with means whereby they are correlated, each pair bearing a distinctive number or character, one card of each pair having phrases or sentences expressing ideas or thoughts, and the companion or correlative card having phrases or sentences expressing the same ideas or thoughts, but in better or standard form. 3rd. A game consisting of a series or pack of cards of suitable form, size and number, arranged in pairs according to the matter printed thereon, each pair bearing a distinctive number or character, one card of each pair having words indicated thereon without marks and notes indicating pronunciation, and the correlative card with marks and notes indicating pronunciation, to be used as a standard. 4th. A game consisting of a series or pack of cards of suitable form, size and number, arranged in pairs, one of the cards in each pair having words, phrases or sentences printed thereon, in one language, and the other card in each pair having printed thereon the corresponding words, phrases and sentences in another language.

No. 65,649. Corset. *(Corset.)*

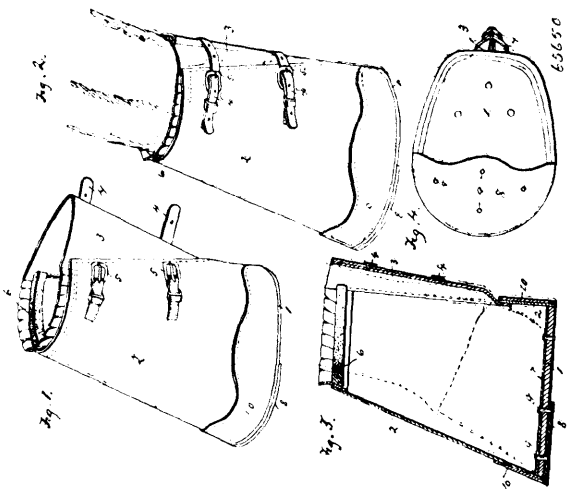


Joseph Siegel, Detroit, Michigan, U.S.A., 4th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—In a corset, a continuous reinforcing strip secured at or near the waist line and gored at suitable intervals whereby it may

conform to the shape of the corset, the strips B adapted to cover the gores in the reinforcing strip whereby the same are concealed, substantially as described.

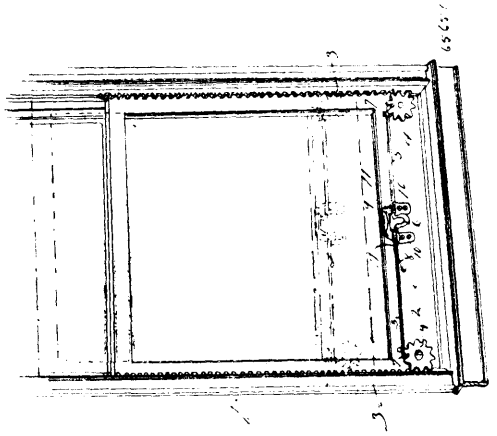
No. 65,650. Veterinary Poultice Boot.
(*Botte vétérinaire pour cataplasmes.*)



William C. Agnew, Creston, Illinois, U.S.A., 4th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—An improved horse boot comprising the rigid sole 1, and the rigid upper 2, entirely encompassing the sole and stitched thereto, the flexible tongue 3, forming a continuation of the upper, the felt packing strip extending around the inner face of the open end of said upper, the sheet metal insole 7, the top plate 8, extending across the front end of the bottom of the sole, the rivets 9, 9 passing through the insole, sole and toe plate, and the reinforcing strip 10 extending entirely around the sole and upper, substantially as shown and described.

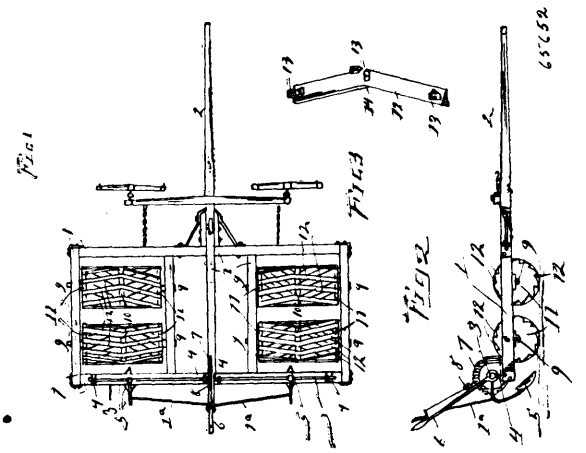
No. 65,651. Sash Fastener. (*Arrête-croisée.*)



William Harrison Akens, Linesville, Pennsylvania, U.S.A., 4th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. A sash fastener, comprising a window frame having rack bars secured on its inner sides, a sash carrying pinions at its opposite sides meshing with the rack bars, and a rod journalled on said sash and having its central portion bent to form a finger hold and its outer ends bent to form catches to engage with the teeth of said pinions, substantially as described. 2nd. A sash fastener, comprising a window frame having rack bars secured on its inner sides, a sash carrying pinions at its opposite sides meshing with said rack bars, a thumb catch on said sash recessed in its central portion to afford two arms, each of said arms being provided on its side next the sash with an open recess affording a journal bearing, a rod mounted in said journal bearings and having its central portion bent to form a finger hold located beneath the hook of said thumb catch, and a catch at each end of said rod for engaging the teeth of said pinions, substantially as described.

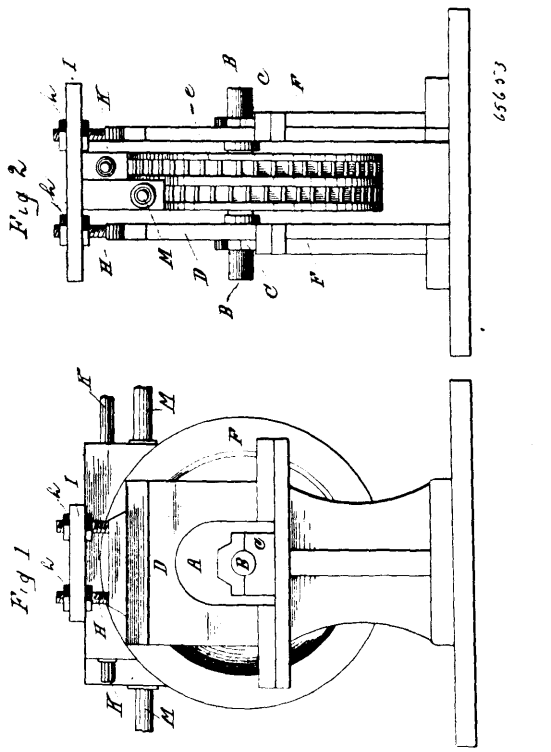
No. 65,652. Clod Crusher. (*Brise-motte.*)



Arthur J. Aucoin, Thibodeaux, Louisana, U.S.A., 4th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. A clod crusher roller having a series of crushing blades, the centre of each blade being bent out of the radial transverse plane of the blade ends. 2nd. A clod crushing and pulverizing roller, comprising a series of centrally bent blades, and discs to which the blades are secured, with their bends pointing in one and the same direction. 3rd. The combination with the frame, of the front rollers having centrally bent blades, the bends of which all point in the same direction, and the rear rollers having like blades, the central bend of which point in the opposite direction to the bend of the front roller blades. 4th. In a clod crusher and cultivator, the combination of the frame, the bent blade rollers journalled in the frame, the shaft journalled on the frame, the plough points secured to the shaft and connected together and to a suitable hand lever for operating the plough points, and the pawl and ratchet for controlling the movement of the shaft, substantially as for the purpose set forth.

No. 65,653. Rotary Engine. (*Machine rotatoire.*)



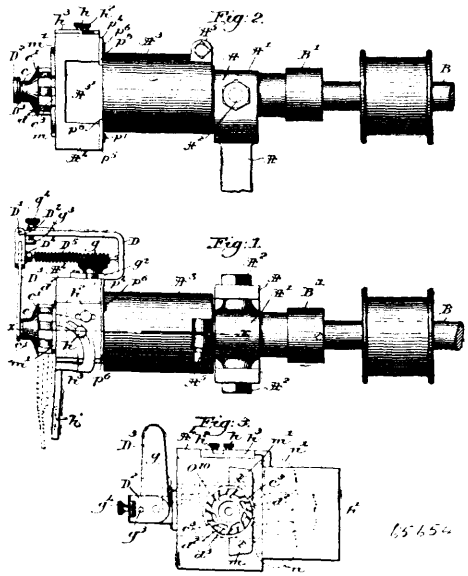
Kasper Selfried, Mamaroneck, New York, U.S.A., 4th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. In a rotary engine, the combination of a wheel containing two sets of buckets arranged to rotate the wheel in either

direction, with a steam chest provided with two sets of steam expansion and exhaust ports, packing surrounding each set of ports arranged between the chest and wheel, and ports leading from the steam ports to the back of each of the packings, whereby the packing is set up on the wheel receiving the impact of the steam, substantially as described. 2nd. In a rotary engine, the combination of a wheel containing buckets arranged to rotate the wheel in either direction, with a steam chest provided with reversing steam and exhaust ports, packing surrounding ports, and ports leading from the steam ports back to the packings, whereby one or the other of the packings are set up on reversing the engine, substantially as described.

No. 65,654. Heel Trimming Machine.

(Machine à acheter les talons.)



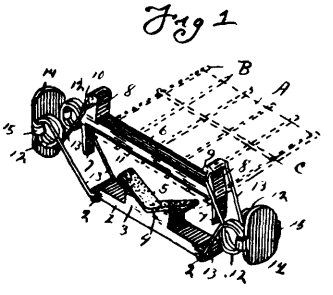
The McKay Shoe Machinery Company, Portland, Maine, U.S.A., 4th January, 1900; 6 years. (Filed 24th November, 1899.)

NOTE.—Patent No. 65,654 is a re-issue of Patent No. 61,477, dated October 22nd, 1898.

Claim.—1st. For heel trimming, a rotary cutter and rand guide having co-operating with them an independent rotary rest disconnected from said rand guide and presenting a series of projections occupying the spaces between the blades of the cutter to form a rest for the edge of the sole, the rand guide and rest being movable one toward and from the other to adapt the cutter to trim heels of different heights, substantially as described. 2nd. A rotary cutter, a rand guide, and a rotating rest, substantially as described, for the edge of the sole, combined with a feather edge device located at one side of said rest to contact with the corner of the sole near its edge as the heel is being trimmed, substantially as set forth. 3rd. A rotary cutter, a slotted sleeve to which it is attached, a shaft on which said sleeve is mounted, a rotary rest having a series of projections entering the spaces between the blades of the cutter, a bearing for the hub of the said rest, and means to connect the said hub and shaft through the said sleeve to thus drive the said rest in unison with the cutter, substantially as described. 4th. A slotted sleeve provided with a rotary cutter, a rand guide, and a rotating rest having projections entering the spaces between the blades of the said cutter, combined with an auxiliary guide presenting a guiding edge to co-operate with said rest in controlling the presenting of the heel to the cutter, substantially as described. 5th. A rotary cutter and attached rand guide, and a rotating edge rest having projections entering the spaces between the blades of the said cutter, combined with two auxiliary guides, one at each side of the said rotary cutter, and presenting guiding edges in line with said rotating rest, to operate, substantially as described. 6th. In a heel trimming machine, a rotating sleeve and a rotary cutter, and a rand guide attached thereto, a rotating feather edge, and a rest, presenting arms inserted between the blades of the cutter, a rotating shaft as B, and connections between it and said sleeve, to enable the said sleeve with its attached cutter and the rand guide to slide to and from the feather edger and rest according to variations in thickness of heel, combined with a stationary sole support occupying a position at one side of said cutter in a plane at an angle to the vertical plane in which the cutter rotates, and means to adjust and then fix the said support in its adjusted position, whereby said support may be inclined more or less according to the inclination desired for the edge of the heel, substantially as described. 7th. A rotary cutter, its rand guide, a sleeve carrying said cutter and said guide, a rotating rest having projections to enter the space between the blades of said cutter, combined with a spring held plate or finger acting on the said rand guide and normally keeping it and the cutter in position to trim the heel of average thickness, letting the said rand guide and cutter move, however, in unison to adapt themselves to the increasing thickness of the heel, substantially as described. 8th. A rotary cutter, its rand guide, a sleeve carrying said cutter and said guide, a rotating rest having projections to enter the spaces between the blades of said cutter, and a spring held plate or finger acting on the said rand guide and normally keeping it and the cutter in position to trim a heel of average thickness, letting the said rand guide and cutter move, however, in unison to adapt themselves to the increasing thickness of the heel, combined with an adjusting device co-operating with said finger to adapt it to changes in width of cutter used, substantially as described. 9th. In a heel trimming machine, a head, a bearing *e*, connected therewith, a rotating rest mounted in said bearing, a rotating sleeve extending through said rest and having an attached cutter, the projections of the said rest entering the spaces between the blades of the said cutter, and a hollow box A^3, combined with an adjusting device composed of a screw attached to one end of said hollow box, and a nut held loosely in a yoke carried by said head and fitting the threads of said screw, the rotation of said nut adjusting the said head, the bearing and the rest, substantially as described. 10th. For heel trimming, a rotary cutter and rand guide having co-operating with them a rotating rest presenting a series of projections occupying only the rear parts of the spaces between the blades of the cutter, the rand guide and cutter being freely movable together longitudinally of the axis of rotation of the cutter to expose more or less of the cutting edges of the cutter and thus adapt it to trim heels of different heights, substantially as described. 11th. In a heel trimming machine, a rotating shaft, and a rotating cutter and rand guide movable together longitudinally of the axis of rotation of the cutter, to thereby enable the cutter to trim the heels of different thickness, combined with a sole support held stationary during the operation of trimming a heel, substantially as described. 12th. In a heel trimming machine, a rotary cutter movable longitudinally of its axis of rotation, and a co-operating rand guide, combined with a sole support made as a flat table, and auxiliary supporting means for guiding the edge of the sole located near one edge of said table, the face of said support occupying a position at one side of said cutter in a plane at an angle to the axis of rotation of the cutter, and means to hold said support stationary throughout the operation of trimming a heel, substantially as described. 13th. In a heel trimming machine, the following instrumentalities, viz: a rotating shaft, and a rotating cutter and rand guide movable together longitudinally of the axis of rotation of the cutter to thereby adapt them to trim heels of different thickness, combined with a sole support held stationary during the operation of trimming a heel, and a rotary rest d^2, it also occupying a defined position with relation to the said stationary sole support during said heel trimming operation, substantially as described. 14th. In a heel trimming machine, a sole support in combination with a rand guide and a rotary cutter yieldingly supported so as to be movable to and from the sole support to expose more or less of the cutting edges of the cutter for trimming heels of varying thickness, substantially as described. 15th. In a heel trimming machine, a rand guide and a rotary cutter freely movable longitudinally of the axis of rotation of the cutter, in combination with a guide for the edge of the sole upon which the latter is supported adjacent to the point at which the trimming is taking place to assist in governing the depth of the cut, substantially as described. 16th. In a heel trimming machine a sole support, a rand guide, and a rotary cutter yieldingly supported so as to move to and from the sole support to expose more or less of the cutting edges of the cutter for trimming heels of varying thickness, in combination with a guide for the edge of the sole upon which the latter is supported adjacent to the point at which the trimming is taking place to assist in governing the depth of the cut, substantially as described. 17th. In a heel trimming machine, the following instrumentalities, viz: a stationary sole support, a rotatable cutter to trim the heel, a rand guide connected therewith and adapted to run in the rand crease, said guide being freely movable toward and from said support and taking the cutter with it as the heel varies in thickness, substantially as described. 18th. In a heel trimming machine, the following instrumentalities, viz:—a stationary sole support, a rotatable cutter to trim the heel, a rand guide connected therewith and adapted to run in the rand crease, said guide being freely movable toward and from said support and taking the cutter with it as the heel varies in thickness, and a spring to control automatically the position of the rand guide and connected cutter with relation to said support as the heel being trimmed varies in thickness, substantially as described. 19th. In a heel trimming machine, the following instrumentalities, viz:—a stationary sole support, a rotatable cutter to trim the heel, a rand guide connected therewith and running in the rand crease, said guide being freely movable toward and from said support and taking the cutter with it as the heel varies in thickness, and means to adjust said support to change the position of its face with relation to the centre or axis of rotation of the said cutter, to vary thereby the inclination of the heel between its tread face and the rand crease, substantially as described. 20th. In a heel trimming machine, rand guide and a rotary cutter freely movable longitudinally of the axis of rotation of the cutter to trim a heel of varying thickness, substantially as described. 21st. In a heel trimming machine, a sole support in combination with a rand guide and a rotary cutter freely movable longitudinally of the cutter to

trim a heel of varying thickness, substantially as described. 22nd. In a heel trimming machine, a rand guide and a rotary cutter movable longitudinally of the axis of rotation of the cutter, in combination with a guide for the edge of the sole, located outside of the path of the cutter, upon which the sole is supported adjacent to the point at which the trimming is taking place to assist in governing the depth of the cut, substantially as described. 23rd. In a heel trimming machine, a rand guide and a rotary cutter movable longitudinally of the axis of rotation of the cutter by the positioning of the work, in combination with a rotary rest, substantially as described. 24th. In a trimming machine, a rotary shaft having an attached rand guide, and a cutter, and a feather edger loose on said shaft and having teeth to enter between the blades of the cutter, said feather edger rotating with said cutter and being movable longitudinally on or with relation to said shaft, combined with an independent, spring controlled table made movable into line parallel with the axis of rotation of the said shaft, to follow the feather edger in adapting itself to material of varying thickness, substantially as described. 25th. In a trimming machine for boots and shoes, a rotary shaft, a connected rand guide and a rotating cutter, a spring controlled feather edger rotatable with said cutter and adapted to be moved to and from said rand guide by varying thicknesses of material being trimmed, combined with a table support and a table made adjustable on said support, to thereby change its angle with relation to the axis of said shaft, said table support and table being movable in a line parallel to the axis of rotation of said shaft, and in unison with the feather edger, substantially as described. 26th. In a trimming machine, a rotary shaft having an attached rand guide, and a cutter, a feather edger surrounding said shaft and rotatable therewith and with said cutter, combined with an independent table support, and a table pivotally mounted thereon near the circumference of said feather edger, and a spring to keep the table pressed in a yielding manner toward the rand guide, substantially as described. 27th. In a trimming machine, a rotary shaft having an attached rand guide, and a cutter, a feather edger surrounding said shaft and rotatable with it and said cutter, a spring surrounding said shaft and acting upon said feather edger, to move it toward said cutter, combined with an independent table support, and a table pivotally mounted thereon, and a spring to normally depress said table support toward said rand guide, substantiallya as described. 28th. In a trimming machine,a rotary shaft having an attached rand guide, and a cutter, a feather edger surrounding said shaft loosely and rotative with said shaft, through the said cutter, and a spring to move said feather edger toward said cutter, combined with a table support independent of said feather edger and movable longitudinally with relation to the axis of said shaft, said table support having pivoted upon it near the circumference of the rand guide a table, and means to hold said table in adjusted position, substantially as described.

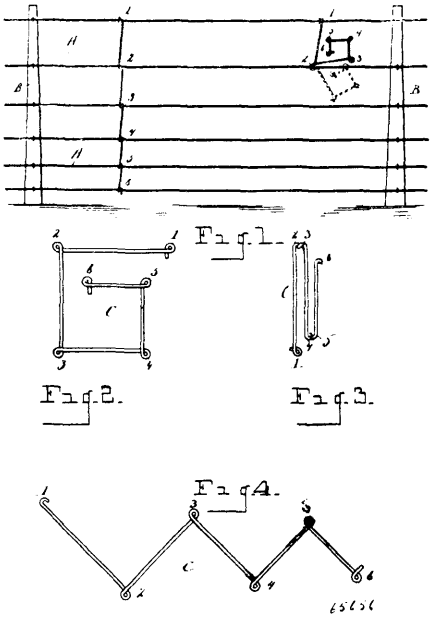
No. 65,655. Guitar String Clamp. (*Serre corde de guitare.*)



Cyrus M. Averitt and Albert Lewis, both of Kansas City, Missouri, U.S.A., 5th January, 1900; 6 years. (Filed 2nd June, 1899.)

Claim.—1st. A string clamp for musical instruments comprising a cross bar to engage the under side of the instrument neck, a bridge bar for engagement with the strings of the instrument, springs holding said bridge bar down upon the strings of the instrument, with a yielding pressure, hand plates mounted upon said springs, whereby the latter may be operated and said bridge bar raised from the strings of the instrument, substantially as described. 2nd. A string clamp for musical instruments, comprising a cross bar for engagement with the under side of the instrument, a bridge bar for engagement with the strings of the instrument and provided with depending guide arms at opposite sides of the neck of the instrument and springs holding said bars against the instrument and the strings clamped firmly down upon the adjacent fret, substantially as described. 3rd. A string clamp for musical instruments, comprising a cross bar for engagement with the under side of the instrument, a bridge bar engaging the strings of the instrument, and provided at one end with a V-shaped slot, a pair of springs provided with diverging arms pivotally engaging the ends of said cross bar and bridge bar, the upper arm of the left hand spring engaging said V-shaped slot, substantially as described.

No. 65,656. Wire Fence Stay. (*Etai pour clôtures de fil de fer.*)



The American Wire Fence Co., Detroit, assignee of Evan W. Cornell, Adrian, all of Michigan, U.S.A., 5th January, 1900; 6 years. (Filed 28th August, 1899.)

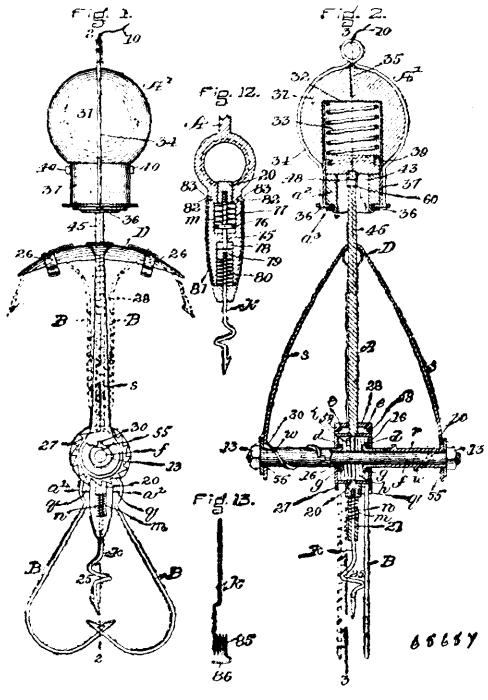
Claim.—1st. A stay for wire fences consisting of a single strand of wire bent to form a series of straight sections standing at right angles to one another, which sections are united by a single coil. 2nd. A stay wire for fences consisting of a single strand of wire bent so as to describe a quadrangular figure and provided at each bend thereof with a partially closed coil, substantially as set forth. 3rd. A stay for wire fences consisting of a single strand of wire bent to form a series of straight sections standing at angles to one another, which sections are united by a single coil whose extremities at the point of junction with said straight sections cross and stand apart.

No. 65,657. Animal Trap. (*Piège.*)

Jacob Cartier and Arthur George Pelletier, both of Biddeford, Maine, U.S.A., 5th January, 1900; 6 years. (Filed 30th August, 1899.)

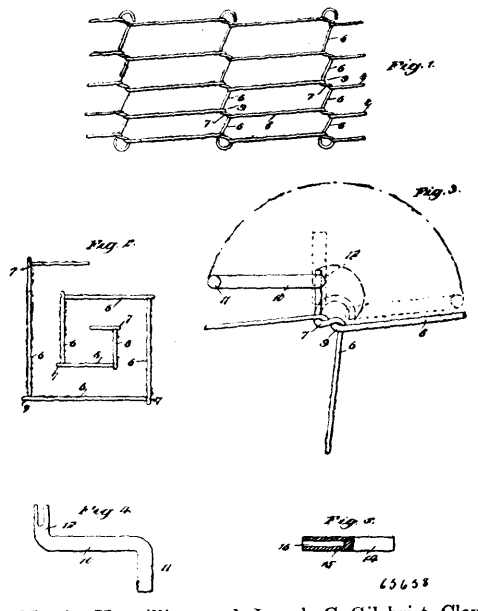
Claim—1st. A fish and animal trap comprising a central stem or support, a pair of spring actuated arms provided with hooks, and secured to hubs provided with peripheral notches, and arranged to rotate in opposite directions on a pivot pin or support at the lower end of said central stem as said arms are swung upward and downward, and the vertically sliding bait holding rod and tripping bar adapted to enter the peripheral notches of said hubs when brought into line therewith, whereby the spring actuated arms are held in a raised position when the trap is set, substantially as described. 2nd. In a fish and animal trap, the combination with a central stem having annular enlargement at its lower end recessed or rabbeted on each side, of a pair of hubs mounted on a pivot pin and provided with peripheral notches, said hubs fitting within the rabbeted edges of the said annular enlargement, and carrying a pair of spring actuated arms provided with hooks or barbs, and a spring actuated bait holding rod and tripping bar sliding within the lower end of the central stem, and adapted to enter the notches in said hubs when brought into line therewith to hold the hook arms in a raised position, and release the same to spring the trap when drawn down by the seizing of the bait, and suitable stops projecting from the lower end of the stem to limit the movement of the hook arms when released, substantially as described. 3rd. In a fish and animal trap, the combination with the central stem or support, of the hubs carrying the hook arms and rotating in opposite directions upon a pivot pin, a single spring coiled around the pivot pin, and having its ends connected with said hubs to simultaneously rotate the same in opposite directions to swing the hook arms downward, and a bait holding tripping bar engaging said hubs to hold the hook arms in a

raised position when the trap is set, substantially as described. 4th. In a fish and animal trap, the combination with the central stem o.



support, of the spring actuated hook arms secured to notched hubs rotating on a pivot pin, said hubs having connected therewith sleeves encircling said pivot pin, and having spiral ribs, a pair of spring arms secured at their upper ends to the central stem, and fitting over the said sleeves, and provided with slots for receiving said spiral ribs, whereby the hook arms may be raised by pressing said spring arms toward each other, and a sliding bait holding tripping device adapted to engage said hubs, and hold the spring actuated hook arms in a raised position when the trap is set, substantially as described. 5th. In a fish and animal trap, the combination with the spring actuated hook arms and their notched hubs, of a vertically sliding bait holding rod provided at its upper end with a detachable block or piece adapted to engage and hold said hubs when the said hook arms are swung upward to set the trap, substantially as described. 6th. In a fish and animal trap, the combination with the central stem or support, of the spring actuated hook arms and their notched hubs, the bait holding tripping bar sliding in a guide at the lower end of said central stem, and having a detachable block or piece adapted to enter the notches of the hubs and hold the same when the hook arms are swung upward, and a spiral spring encircling the bait holding rod, and tending to force the same upward to keep it engaged with the hubs, substantially as described. 7th. In a fish and animal trap, the combination with the central stem or support, of the spring actuated hook arms and their hubs, the block 20, rod 75, block 79, bait holding rod k, and the springs 77 and 80 of different degrees of strength, and acting on the bait rod in opposite directions, all operating substantially as and for the purpose described. 8th. In a fish and animal trap, the combination with the stem A and the spring actuated hook arms and their hubs, the latter provided with ratchet teeth, of the slide 28 adapted to move freely on said stem, and provided with projections adapted to engage the ratchet teeth of the hubs to lock the hook arms when swung down, said slide being supported near the upper end of the stem by said hook arms when raised to set the trap, substantially as described. 9th. In a fish and animal trap, the combination with the stem, the spring actuated hook arms and the curved guard plate D, of the sliding safety rings open at the bottom to admit the hook arms B when raised, and adapted to be partially rotated on said guard plate to catch and lock said arms, substantially as described. 10th. In a fish and animal trap, a bait holding rod and tripping bar provided at its lower end with a spiral bait holding coil 85 and with a lower horizontally extending portion 86 located beneath said coil, substantially as described. 11th. In a fish and animal trap, the combination with the stem A provided at its upper end with a head 60, of the sinker A^1 consisting of the rotary portion 31 provided with a recess 32 and slots 42 and the spring 33, the wire frame 34, the tube 37 secured thereto, and having slots 41, the block 39 with its lugs 40, and the lower block a^2 having an aperture 43 for the passage of the upper portion 45 of the stem A, and having at its upper end a transverse groove 48 for the reception of the head 60, said rotary portion 31 when turned to carry its slots 42 out of line with the slots 41 of the tube 37 serving to lock the sinker to the stem A, substantially as described.

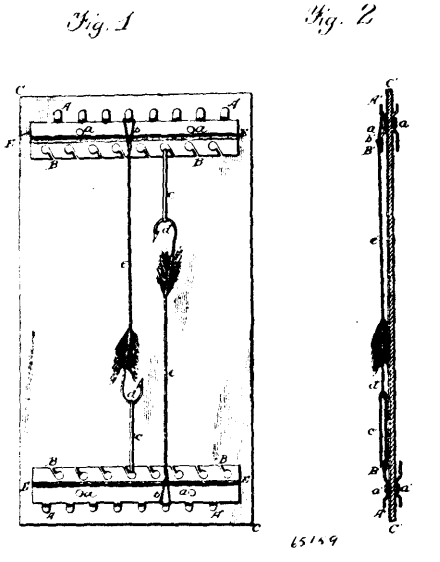
No. 65,658. Wire Fence. (*Clôture de fil de fer.*)



Herman Martin, Vermillion, and Joseph C. Gilchrist, Cleveland Ohio, U.S.A., 5th January, 1900; 6 years. (Filed 28th October 1899.)

Claim.—1st. A stay for wire fences, the stay being formed of an integral length of wire bent into the form of an angular volute, each angle of the said volute having a kink thereat, which kinks are each produced by two bends forming a straight laterally extended portion between them, thus placing the contiguous runs of the stay out of plane with each other. 2nd. A stay for wire fences, the stay having a number of runs with kinks situated between the runs such kinks being formed by two bends, producing a straight laterally extended portion disposed approximately at right angles to the contiguous runs of the stay and being capable of being turned around the running wires of the fence. 3rd. A fence, having running wires formed with a number of diagonal kinks therein, and a stay having a number of kinks respectively turned around the kinks of the running wires whereby to secure the stays to the running wires, the kinks of the stays being formed of two bends producing a straight laterally extending portion disposed approximately at right angles to the contiguous runs of the stay, whereby when the kinks of the running wires and stay are interlocked, the stays are prevented from sliding on the wires, and the wires

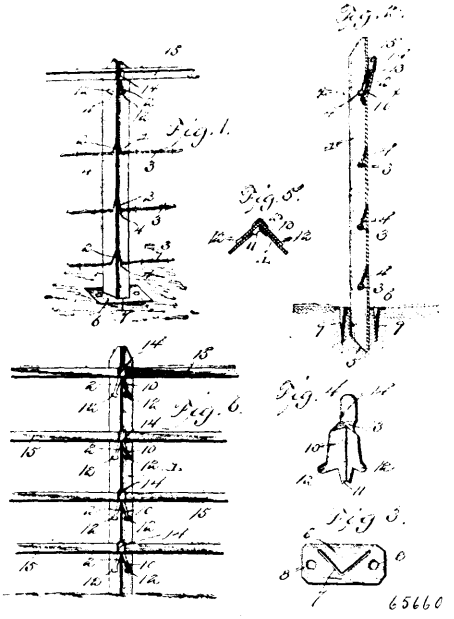
No. 65,659. Snood Fishing Hook Keeper.
(*Etui pour hameçons.*)



Jacob Smith and John Hart Campbell, both of Harrisburg, Pennsylvania, U.S.A., 5th January, 1900; 6 years. (Filed 6th November, 1899.)

Claim.—1st. In a snood fishing hook keeper, the combination with the book leaf, of metal plates E, E, provided with tongues A, and slotted holes B, in their opposite edges arranged to alternate one with the other and secured to the face of said leaf near its ends with the tongues A pointing in the direction of the ends of said book leaf, the tongues A, and the slotted holes B, of said metal plates opposing and alternating one with the other, substantially as specified. 2nd. In a snood fishing hook keeper, the combination with the book leaf, of the metal plates E, E, provided with the tongues A, and slotted holes B, arranged to alternate the one with the other in opposite edges of said plates, said tongues being on the outer edges of said metal plates, elastic bands engaging the slotted holes B, snoods *c* having loops *b* engaging the tongues A, and hooks *d* engaging the elastic bands *c*, substantially as specified.

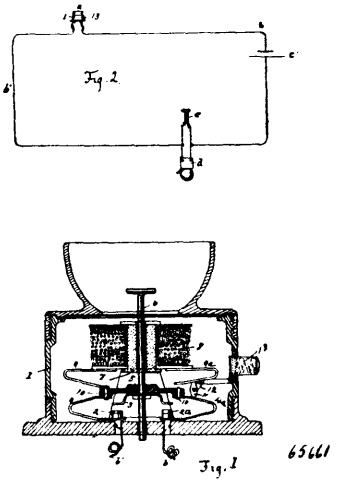
No. 65,660. Fence Post Attachment.
(*Attache de poteau de clôture.*)



Walter H. Sawyer and John B. Felder, both of Americus, Georgia, U.S.A., 5th January, 1900; 6 years. (Filed 7th December, 1899.)

Claim.—1st. The combination with a fence post having a tongue cut therefrom, of a detachable bracket clamped between the tongue and the body of the post, and provided with a lateral shoulder located above the upper end of the tongue, substantially as shown and described. 2nd. The combination with a fence post having a tongue cut therefrom, of a detachable bracket clamped between the tongue and the body of the post, and provided with a lateral shoulder located above and supported upon the upper end of the tongue, substantially as shown and described. 3rd. The combination with a substantially hollow fence post having a tongue cut therefrom, of a detachable bracket clamped between said tongue and the body of the post, said bracket being provided at its lower end with a pendant foot fitting snugly against the inner side of the post, and a lateral shoulder located above the upper end of the tongue, substantially as shown and described. 4th. The combination with a fence post, having a tongue cut therefrom, of a detachable bracket adapted to be fitted between the tongue and the adjacent side of the post, and provided with lateral ears embracing the post, and a lateral shoulder for supporting a board or rail, substantially as described. 5th. The combination with a fence post, having a tongue cut therefrom, of a detachable bracket adapted to be fitted between the tongue and the adjacent side of the post, said bracket having a foot at its lower end and fitting against the inner side of the post, oppositely extending lateral ears embracing the outer side of the post, and a lateral outwardly extending shoulder for supporting a board or rail, substantially as shown and described. 6th. The combination with a metallic fence post, substantially V shaped in cross section, and having a tongue cut from the angled edge thereof, of a detachable angled bracket adapted to be fitted between the tongue and the adjacent sides of the post, said bracket having pendent angled foot fitting snugly in the vertex of the angled sides of the post, opposite laterally extending ears embracing the opposite outer sides of the post, a lateral outwardly extending shoulder at the upper end of the bracket, and a flange projecting upwardly from the shoulder and offset from the post, substantially as and for the purpose set forth. 7th. The combination with an angled fence post having a tongue cut from the angled edge thereof, of an angled detachable bracket fitting snugly the outer angled side of the post, and between the latter and the tongue and provided with a pendent angled foot fitting snugly the inner angular side of the post, and a lateral shoulder located above the upper end of the tongue, substantially as shown and described.

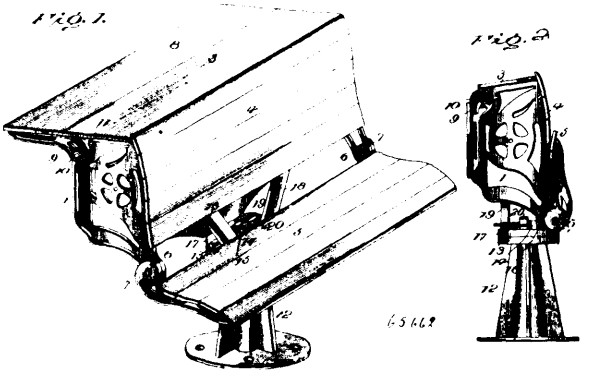
No. 65,661. Telephone and Push Button.
(*Téléphone et bouton de commutateur.*)



Kate McC. Smith, Bay City, Michigan, U.S.A., 5th January, 1900; 6 years. (Filed 9th December, 1899.)

Claim.—1st. In combination with a telephone structure, a push-button included therewith and forming a part thereof, the stem of the push button passing through the core and diaphragm of the telephone, together with a cam or equivalent means for holding the circuit normally broken, and a push button connected therewith for completing the circuit while the telephone is in use, all substantially as described and for the purpose set forth. 2nd. The combination with a telephone structure of a push button forming a part thereof, the stem of the push button passing through the core and diaphragm of the telephone, flexible conducting springs attached to the push button terminals for raising the push buttons and also to complete the telephone circuit, a contact piece attached to the stem of the push button for completing the call bell circuit, flexible conducting springs, attached to the terminals of the telephone coil for completing the telephone circuit, and a spring operated cam for raising the conducting spring and holding the telephone circuit normally broken, substantially as and for the purpose described.

No. 65,662. School Desk. (*Pupitre d'école.*)



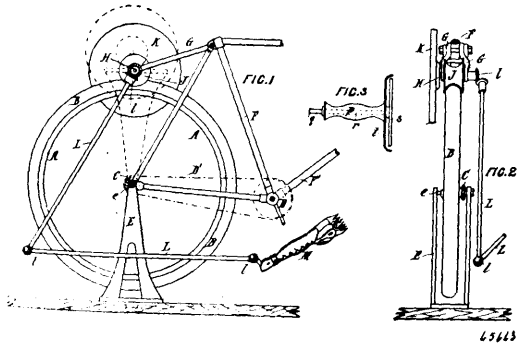
Simon William Convell and Edward C. McConvill, both of Opal, Wyoming, U.S.A., 5th January, 1900; 6 years. (Filed 15th December, 1899.)

Claim.—1st. A central support comprising a circular plate and a centrally disposed vertical journal, a second plate mounted to turn horizontally upon the first mentioned plate and centrally apertured to receive the said journal, a desk, spaced bars projecting upward from the second plate and attached to the desk and bracing the latter, and a spring actuated bolt slidably mounted in the said bars above the plate and adapted to interlock with the aforesaid vertical journal, substantially as set forth. 2nd. A stand having an outer flange and a vertical journal, a plate mounted upon the said journal and flange to turn thereon and provided with a horizontal bar and upwardly extending bars, a desk secured to the said bars of the plate, and means provided on the plate to engage with the said journal to

hold the plate in the required position, substantially as set forth. 3rd. A stand having an outer flange and vertical journal, a plate mounted upon said flange and journal and provided with a keeper and upwardly extending bars, a desk secured to said bars, and a spring actuated pin or bolt applied to the said keeper and adjacent bar and adapted to engage with the aforesaid journal, as and for the purpose set forth. 4th. In combination a central support, a desk mounted for horizontal adjustment about a vertical axis coincident with the vertical axis of the support, a seat pivotally connected with the desk to open and close by a swinging movement, and braces secured to the seat and adapted to engage at their inner ends with the said central support at any horizontal adjustment of the desk and hold the seat when in a horizontal position, substantially as described. 5th. In combination with a support, a desk and a folding seat, a middle and side braces applied to the lower side of the seat, the side braces inclining in opposite directions, and the middle brace extending at a right angle to the length of the seat, and the several braces having their inner ends notched to straddle the corner of said support, as and for the purpose described. 6th. In combination. a stand having an outer flange and a vertical journal at its upper end, an apertured plate mounted upon the said flange and journal and provided with upwardly divergent bars and a horizontal bar, a desk having its bottom secured to the said horizontal bar and the rear side of its front attached to the said divergent bars, and a spring actuated pin or bolt applied to said plate and serving to hold the desk to and stand in a required position, substantially as set forth.

No. 65,663. Motor For Sheep Shears.

(*Moteur pour forces à tondre les moutons.*)



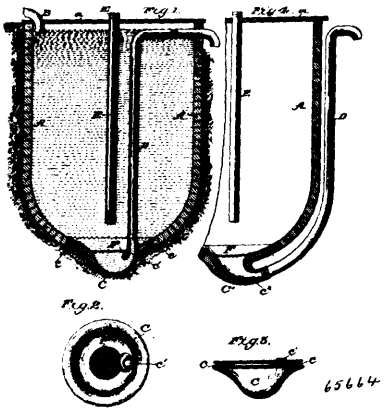
John Howard, Chatswood, New South Wales, Australia, 5th January, 1900; 6 years. (Filed 31st May, 1899.)

Claim.—1st. In combination, a bicycle or tricycle, a stand for raising the driving wheel of such vehicle from the ground, a friction pinion in contact with the tire of the driving wheel, a sharpening disc on the same spindle or axis as the friction pinion, the said sharpening disc, also acting as a fly wheel and thus ensuring a regular and steady motion to a flexible shaft by means of which the rotary motion of the spindle is conveyed to the implement it is desired to work, as and for the purposes specified. 2nd. In combination, a bicycle or tricycle, a stand for raising the driving wheel of such vehicle from the ground, a friction pinion in contact with the tire of the driving wheel, a sharpening disc on the same axis as the friction pinion, and a flexible, or universally jointed, shaft for the purpose of developing power and conveying the same to a machine sheep shear or other similar implement, as and for the purposes herein set forth. 3rd. In combination, a bicycle or tricycle driving wheel, a friction pinion in contact with the tire of the wheel, whereby rotary motion is imparted to a flexible shaft which is connected to the axis of the friction pinion, and a sharpening disc or face tool for sharpening the cutters of machine sheep shears, such disc being connected to the free end of the flexible shaft, as and for the several purposes specified.

No. 65,664. Cistern. (*Citerne.*)

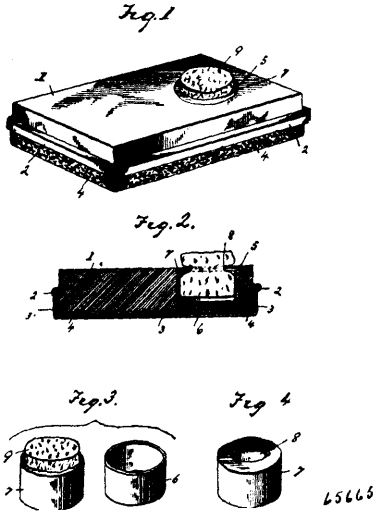
Willliam J. Slack, La Grange, Indiana, U.S.A., 5th January, 1900: 6 years. (Filed 11th September, 1899.)

Claim.—1st. A cistern attachment forming the bottom thereof and having a central conical cavity or depression, a curved discharge passage communicating with the centre thereof, an eduction pipe that communicates with such passage and extends upward to a point near the top of the cistern for use in drawing off sediment or foul water, as shown and described. 2nd. A cistern bottom and sediment collector constructed with a central conical depression or cavity, a discharge passage which communicates therewith and extends upward through its adjacent sloping surface, and a pipe connected with such passage and extending up through the body of the cistern, for use in drawing off sediment, substantially as shown and described. 3rd. The combination with the cistern bottom and sediment collector having a central, conical depression, of a screen which rests and is



secured upon the sloping wall of said bottom, substantially as shown and described.

No. 65,665. Slate Washer. (*Appareil à laver les ardoises.*)



Levi Knott, Altoona, Pennsylvania, U.S.A., 5th January, 1900; 6 years. (Filed 11th December, 1899.)

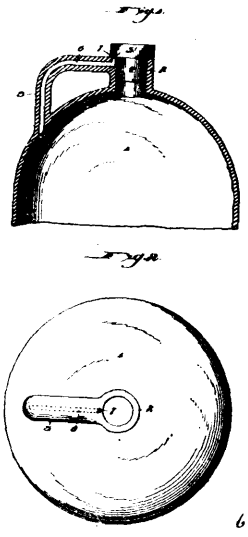
Claim.—As a new article of manufacture, the herein described slate cleaner, comprising a block provided on its upper side with a mortise for a water receptacle, a removable flanged metal plate on its opposite or lower side, an absorbent covering for said flanged plate having its edges extending within the cap flange or rim of said plate for securing it to the block, a water receptacle located in the mortise within the plane of the block and having a flanged and perforated top, and an absorbant material in said receptacle arranged to project through the opening in the top of said water receptacle, all substantially as described.

No. 65,666. Jug. (*Pot.*)

Frank H. Bonnette and James M. Boren, both of New Brighton, Pennsylvania, U.S.A., 5th January, 1900; 6 years. (Filed 11th December, 1899.)

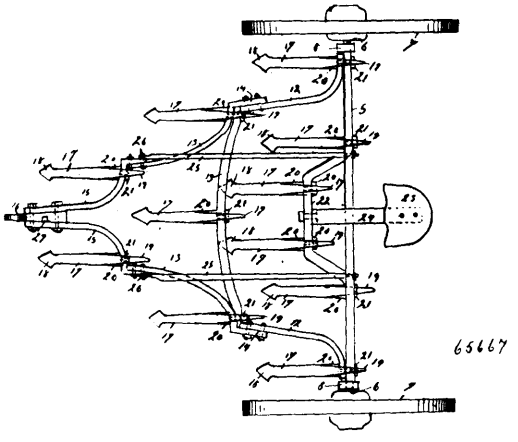
Claim.—A jug provided with a neck portion having its opening of the same relative diameter throughout, a handle formed integral at one end with the periphery of the neck portion and having its upper face at its junction with the neck registering with the top thereof and its opposite end formed integral with the body portion of the jug, said handle being provided with an air passage extending entirely through the same, said air passage having a portion thereof extending vertically from its opening into the body portion and a portion thereof extending horizontally to its joint with the neck portion, a vent arranged in the neck portion between the inner face and the periphery thereof and extending downwardly

from the top of the neck to and registering with the end of the horizontal portion of the air passage at its joint with the periphery



of the neck, in combination with a stopper provided with an enlarged head which when in position will close the vent.

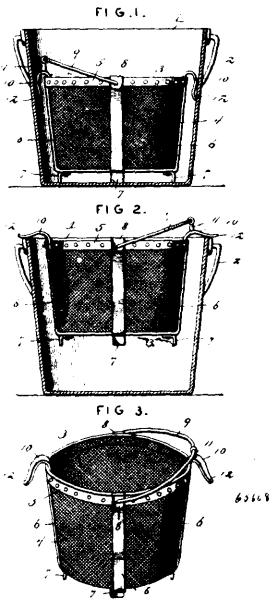
No. 65,667. Harrow. (*Herse.*)



Christian Sorenson, Round Rock, Texas, U.S.A., 5th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. A harrow, comprising a frame provided with transverse bars or supports, and harrow teeth secured to said bars or supports and in front thereof, said teeth being provided centrally thereof with a backwardly directed arm by means of which they are connected with said bars or supports, the points of said teeth being curved downwardly and forwardly, and the upper ends thereof upwardly and backwardly over said bars or supports, substantially as shown and described. 2nd. A harrow tooth of the form herein described, said tooth being provided centrally with a backwardly directed arm by which it may be secured to a support, and the point thereof being curved downwardly and forwardly in the front of said arm, and the upper end thereof being curved upwardly and backwardly over said arm, substantially as shown and described. 3rd. In a device of the class herein described, an axle provided with end wheels, vertically adjustable standards connected with said axle at or near each end thereof, a harrow frame, the rear end of which is connected with the lower ends of said standard, and the front end of which is provided with a vertically adjustable support, said frame being provided with teeth, the points of which project downwardly and forwardly, and the opposite ends upwardly and backwardly over the frame, substantially as shown and described. 4th. In a device of the class herein described, an axle provided with end wheels, vertically adjustable standards connected with said axle at or near each end thereof, a harrow frame, the rear end of which is connected with the lower ends of said standards, and the front end of which is provided with a vertically adjustable support, said frame being provided with teeth, substantially as shown and described.

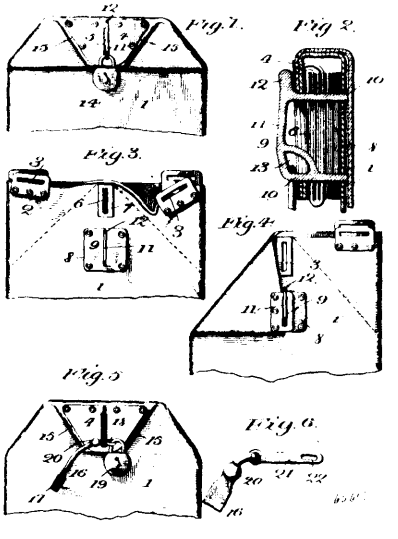
No. 65,668. Cooking Utensil. (*Ustensile de cuisine.*)



Jennie R. Morgan, Colorado Springs, Colorado, U.S.A., 5th January, 1900; 6 years. (Filed 25th November, 1899.)

Claim.—1st. A receptacle for the purpose specified, having a bail-shaped handle pivotally connected thereto, in combination with a button or bail support pivotally connected to or journalled upon the central portion of the bail, substantially as and for the purpose described. 2nd. A receptacle for the purpose specified, having a pivoted bail-shaped handle, and a button or bail support pivotally mounted upon the central portion of the bail, in combination with diametrically opposite fingers attached to the upper edge of the receptacle and located in position to form rests for said button or support, substantially as described.

No. 65,669. Mail Bag or Pouch. (*Sac à malle ou poche.*)

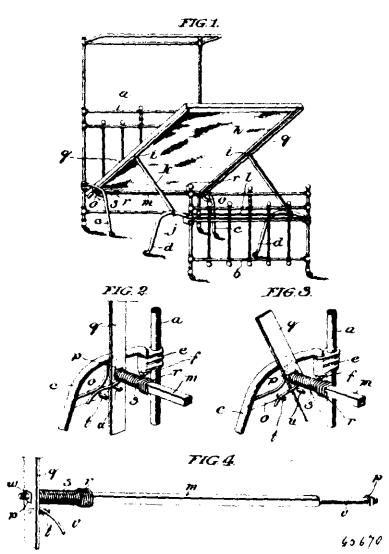


Daniel Roby Hering, Sykesville, Maryland, U.S.A., 5th January, 1900; 6 years. (Filed 22nd May, 1899.)

Claim.—1st. A mail bag having slotted portions at the upper opposite corners thereof, the slots of which are arranged to register, a slot in the upper rear face of the bag at the centre, a similar registering slot in the opposite front face of the bag, a staple secured to the front face of the bag in position to receive the said slotted portions of the bag when folded as described, and an extension on the said staple arranged to overhang the said folded portions, substantially as described. 2nd. A mail bag having slotted portions at the upper opposite corners thereof, the slots of which are arranged to register when the bag is folded, as described, a triangular shaped plate secured to the rear face of the bag at the upper central position, the edge walls of said plate lying parallel

with and indicating the folding lines for the upper foldable portions of the bag, the said plate being provided with a slot, a similar registering slot in the opposite front face of the bag, a staple secured to the said front face of the bag at a point below the top and in position to receive the said slotted portions thereof when the mouth end of the bag is folded as described, and an extension on the staple arranged to overhang the said triangular plate to retain the folded portions of the bag in position, substantially as described. 3rd. A mail bag having slotted portions at the upper opposite corners thereof, and additional slots in the front and rear faces respectively at the upper central portion of the bag, all of said slots being arranged to register when the mouth end of the bag is folded as described, a staple secured in the front face of the bag in position to receive the said slotted portions, a strap secured at one end to the bag and having its opposite end provided with means to receive a lock, and a stop lug or button near the free end of the strap, said strap being arranged to pass through an eye in the staple, and said stop lug or button acting upon the staple to limit the passage of the strap therethrough, substantially as described. 4th. A mail bag having its mouth end provided upon opposite sides with two pairs of slotted plates, the slots of which are made to register, a slotted plate secured to the upper rear face of the bag at the centre, a similar registering slot in the opposite front face of the bag, a staple secured to the front of the bag at a point below the top and in a position to receive the said slotted plates when the mouth end of the bag is folded over, as described, and a rearward extension on the said staple adapted to overhang the said slotted plates. 5th. A mail bag having its mouth end provided upon opposite sides with two pairs of slotted plates, the slots of which are made to register, a slotted plate secured to the upper rear face of the bag at the centre, a similar registering slot in the opposite front face of the bag, a staple secured to the front of the bag at a point below the top, and in a position to receive the said slotted plates when the mouth end of the bag is folded, as described, a small lock opening or eye in the lower part of the staple, and a rearward extension at the upper part of the staple adapted to overhang the said slotted plates. 6th. A mail bag having slotted portions at the opposite upper corners thereof, the slots of which are made to register, a slotted plate secured to the upper rear face of the bag at the middle, a similar registering slot in the opposite front face of the bag, a staple secured to the front face of the bag in a position to receive the said slotted portions of the bag when folded as described, a strap secured at one end to the bag, and having its opposite end provided with an opening or holder for a lock, and a stop lug or button near the free end of the strap, said strap being arranged to be passed through an eye in the staple, substantially as described.

No. 65,670. Bedstead. (*Bois de lit.*)



James Welsh Pepper, Philadelphia, Pennsylvania, U.S.A., 5th January, 1900; 6 years. (Filed 11th December, 1899.)

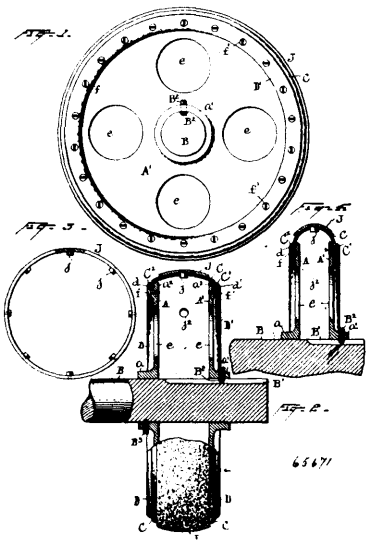
Claim.—1st. In a folding bedstead, the combination of head and foot members, supplemental feet removably secured thereto, a bed bottom rotatably secured to the supplemental feet of one member and pivotally linked to the supplemental feet of the other member. 2nd. In a folding beadstead, the combination of head and foot members, supplemental feet, a lug and recess connection whereby the supplemental feet are detachably secured to the head and foot members, a bed bottom rotatably secured to the supplemental feet of one member and pivotally linked to the supplemental feet of the other member, substantially as described. 3rd. In a folding bedstead, the combination of head and foot members provided with apertures, supplemental feet with lugs adapted to fit in said apertures, and a bed bottom rotatably secured to the supplemental feet of one member and pivotally linked to the supplemental feet of the other member. 4th. In a folding bedstead, the combination of head and foot members provided with tapered apertures, supplemental feet with tapered lugs adapted to fit in said apertures, and a bed bottom rotatably secured to the supplemental feet of one member and pivotally linked to the supplemental feet of the other member. 5th. In a folding bedstead, the combination of head and foot members provided with tapered apertures, supplemental feet with tapered lugs adapted to fit in said apertures, said tapered lugs having threaded ends and co-acting nuts thereon, to secure the same in the said apertures, and a bed bottom rotatably secured to the supplemental feet of one member and pivotally linked to the supplemental feet of the other member. 6th. In a folding bedstead, the combination of head and foot members, supplemental feet removably secured thereto, with horizontal cross bars detachably connecting the supplemental feet of each member, as a brace therefor, and a bed bottom rotatably secured to the supplemental feet of one member and pivotally linked to the supplemental feet of the other member. 7th. In a folding bedstead having stationary and movable members, a crossbar rotatably secured to the stationary member and normally rigid with the movable member, a coiled spring upon said crossbar, stops upon said members whereby the spring encounters with its free end the fixed member, after a required preliminary movement of the movable member, in opening or unfolding the bedstead, substantially as described. 8th. In a folding bedstead having stationary and movable members, a crossbar rotatably securing the movable to the fixed member, a spring coiled upon said crossbar and secured at one end thereto, with its free end adapted to encounter the fixed member and means for adjustably locking the crossbar with the movable member after it has been turned to secure the desired tension of the spring. 9th. In a folding bedstead having stationary and movable members, a spring having one end rigid with the movable member, a projection on said movable member adapted to check the free end of the spring so that a certain preliminary movement of the movable part from the closed towards the open position is required before the free end of said spring encounters the fixed member. 10th. In a folding bedstead having fixed and movable members, a spring having one end rigid with the movable member, a projection on the movable member to check the free end of the spring so that a certain preliminary movement of the movable part from the closed towards the open position is required before the free end of said spring encounters the fixed member of said bedstead, and means for adjustably securing the tension of said spring means. 11th. In a folding bedstead having stationary and movable members, a laterally movable crossbar rotatably securing said members, a spring coiled upon and secured to the bar at one end and free at the other end to contact with the stationary member and means for locking the bar rigid with the movable member after it has been turned sufficient to secure the desired tension of the spring. 12th. In a folding bedstead having stationary and movable members, a laterally movable crossbar rotatably securing said movable member, a spring coiled and secured to the bar at one end and free at the other end to contact with the stationary member, means for locking the bar rigid with the movable member after it has been turned sufficient to secure the desired tension of the spring, and a projection on the movable member adapted to engage with the spring near its free end to prevent its engaging with the fixed member until after the required preliminary movement of the movable member. 13th. In a folding bedstead having fixed and movable members, a spring balance therefor and means for permitting the preliminary movement of the movable member from the closed towards the open position before exerting its resistance thereto. 14th. In a folding bedstead having fixed and movable members, a spring balance therefor and means for permitting the preliminary movement of the movable member from the closed towards the open position before exerting its resistance thereto, and means for winding up or unwinding said spring to secure the proper adjustment thereof.

No. 65,671. Polishing Wheel. (*Roue à polir.*)

Edward Dinsmore Woods, Granville, New York, U.S.A., 5th January, 1900; 6 years. (Filed 2nd November, 1898.)

Claim.—1st. In a polishing wheel, a tire capable of movement in a radial direction, and adapted to be held in operative position by centrifugal force as the wheel rotates, and a stop for limiting the outward movement of the tire. 2nd. In a polishing wheel, a tire composed of an outer portion and an inner portion connected together, the inner portion adapted to project inside of a stop and to bear radially outward against the stop when the wheel is rotated, said tire being capable of movement in a radial direction, and adapted to be held in operative position by centrifugal force as the wheel rotates, and a stop for limiting the outward movement of the tire. 3rd In a polishing wheel, a tire composed of an outer portion, an inner portion and a smaller connecting portion so arranged as to leave a space at each side of the connecting portion between the outer and the inner portions, said tire being capable of movement in a radial direction and adapted to be held in operative position by centrifugal force as the wheel rotates, and retaining flanges connected with the sides of the wheel and projecting into the spaces between the outer and inner portions of the tire to limit the out-

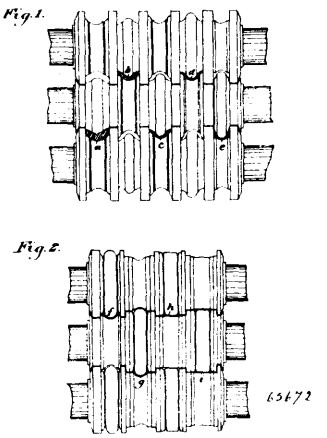
ward movement of the tire. 4th. In a polishing wheel, a tire capable of movement in a radial direction, and adapted to be held in opera-



tive position by centrifugal force as the wheel rotates, a stop for limiting the outward movement of the tire, and a removable polishing band adapted to be slipped upon the tire when the wheel is at rest, and to be firmly held thereon as the wheel rotates. 5th. In a polishing wheel, a tire composed of an outer portion and an inner portion connected together, the inner portion adapted to project inside of a stop and to bear radially outward against the stop when the wheel is rotated, said tire being capable of movement in a radial direction, and adapted to be held in operative position by centrifugal force as the wheel rotates, a stop for limiting the outward movement of the tire, and a removable polishing band adapted to be slipped upon the tire when the wheel is at rest, and to be firmly held thereon as the wheel rotates. 6th. In a polishing wheel, a tire composed of an outer portion, an inner portion, and a smaller connecting portion so arranged as to leave a space at each side of the connecting portion between the outer and inner portions, said tire being capable of movement in a radial direction, and adapted to be held in operative position by centrifugal force as the wheel rotates, retaining flanges connected with the sides of the wheel and projecting into the spaces between the outer and inner portions of the tire to limit the outward movement of the tire, and a removable polishing band adapted to be slipped upon the tire when the wheel is at rest, and to be firmly held thereon as the wheel rotates. 7th. In a polishing wheel, a removable side, means for locking the side in position, a tire capable of movement in a radial direction and adapted to be held in operative position by centrifugal force as the wheel rotates, and a stop for limiting the outward movement of the tire. 8th. In a polishing wheel, a removable side, means for locking the side in position, a tire composed of an outer portion, an inner portion, and a smaller connecting portion so arranged as to leave a space at each side of the connecting portion between the outer and the inner portions, said tire being capable of movement in a radial direction and adapted to be held in operative position by centrifugal force as the wheel rotates, and a retaining flange on each side of the wheel projecting into the space between the outer and inner portions of the tire to limit the outward movement of the tire. 9th. In a polishing wheel, a removable side, a groove in the shaft of the wheel, a screw threaded pin projecting from the hub of the said removable side into said groove, whereby the said side may be locked to the shaft in any desired position along the groove and be caused to rotate with the shaft, a tire capable of movement in a radial direction and adapted to be held in operative position by centrifugal force as the wheel rotates, and a stop for limiting the outward movement of the tire. 10th. In a polishing wheel, a removable side, a groove in the shaft of the wheel, a screw threaded pin projecting from the hub of the said removable side into said groove, whereby the said side may be locked to the shaft in any desired position along the groove and be caused to rotate with the shaft, a tire capable of movement in a radial direction and adapted to be held in operative position by centrifugal force as the wheel rotates, composed of an outer portion, an inner portion, and a smaller connecting portion, so arranged as to leave a space at each side of the connecting portion between the outer and the inner portions, said tire being capable of movement in a radial direction and adapted to be held in operative position by centrifugal force as the wheel rotates, and a retaining flange on each side of the wheel projecting into the space between the outer and inner portions of the tire to limit the outward movement of the tire.

No. 65,672. Rolling Flanged Plate and Bar.

(*Laminior pour plagues à rebord.*)

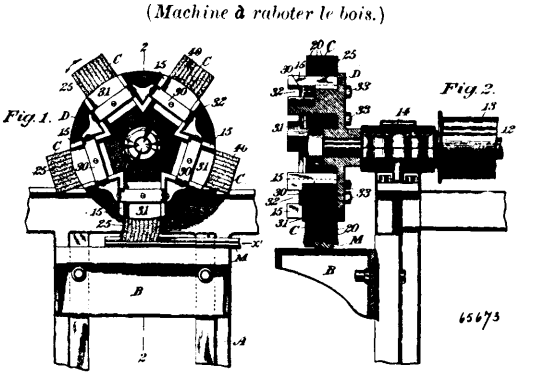


Andrew Morrison, Pittsburg, Pennsylvania, U.S.A., 5th January, 1900; 6 years. (Filed 24th March, 1899.)

Claim.—1st. In the manufacture of flanged plates, rolls having passes arranged to form a bar of irregular cross section with a side flange, said bar being of greater cross sectional length than a straight line connecting its opposite edges, and passes arranged to flatten the bar and increase its width while preventing the moving out of the flange, substantially as described. 2nd. In the manufacture of flanged plates, plates, rolls having passes, rolls having passes arranged to form a flanged plank, with surplus metal inside the flange, and passes for forcing this surplus metal outwardly into a side extension while preventing the moving out of the flange, substantially as described. 3rd. In the manufacture of flanged plates, rolls having passes arranged to form a flanged bar of bent or bowed cross sectional form, and passes arranged to flatten the bar and increase its width, while preventing the moving out of the flange, substantially as described. 4th. In the manufacture of flanged plates, rolls having passes arranged to form a bar having side flanges, the body of the bar being bent or bowed in the opposite direction to that of the flanges, and passes arranged to flatten the bars and increase its width, while preventing the moving out of the flanges, substantially as described. 5th. In the manufacture of flanged plates, rolls having passes arranged to form a bar of irregular shaped cross section with lateral flanged side portions, passes arranged to bend up the flanges and decrease the width of the plate, and passes arranged to flatten the plate and increase its width while preventing the moving out of the flanges, substantially as described. 6th. The method of rolling flanged plates, consisting in forming a flanged bar of a greater cross sectional length than a straight line connecting the outer edges, and then flattening the bar and increasing its width, while preventing the moving out of the flanges, substantially as described. 7th. The meteod of forming flanged plates, consisting in forming a flanged bar of greater cross sectional length than a straight line connecting the opposite edges and with surplus metal inside the flanges, flattening the bar and forcing the surplus metal outwardly so as to increase the width of the plate, and preventing the moving out of the flanges, substantially as described. 8th. In the manufacture of flanged bars, rolls having passes arranged to form a bar having side flanges and a body bent or bowed in the direction of the flanges, and passes arranged to flatten the bent or bowed portion and widen the plate beyond the flanges, while preventing the outward movement of the flanges, substantially as described.

No. 65,673. Machine for Dressing Wood.

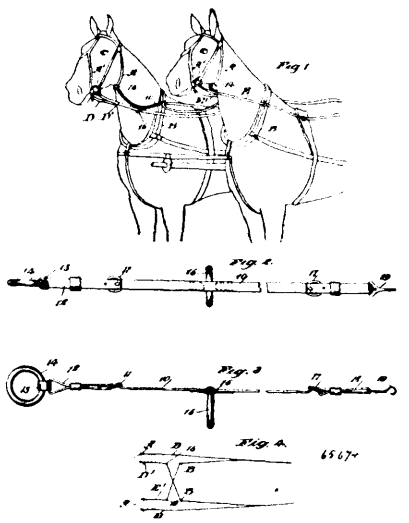
(*Machine à raboter le bois.*)



Joseph Edward Almon, Montpelier, Vermont, U.S.A., 5th January, 1900; 6 years. (Filed 26th April, 1899.)

Claim.—1st. In a wood dressing machine, the combination, with a carrier, of a dressing device thereon including a series of slitted sheets roughened on their working faces. 2nd. A dressing device for wood and the like including a series of sheets roughened upon one side and slitted, said sheets being secured together to form a unitary article. 3rd. In a wood dressing machine, the combination with a rotatively supported carrier, of a radially adjustable dressing device thereon including a series of slitted sheets roughened on their working faces. 4th. In a wood dressing machine, the combination, with a carrier having a series of angular projections, of a series of dressing devices fitted between the adjacent branches of said projections, U-shaped clamping devices fitted in notches in the projections, and extending through openings in the carrier, and nuts on the legs of the clamping devices. 5th. In a wood dressing machine, the combination, with a support for the work, of a shaft, a carrier on said shaft, and a series of dressing devices secured to the carrier and each including a series of roughened slitted sheets adapted to act edgewise against the work, said sheets being laterally yieldable.

No. 65,674. Harness Attachment. (*Attache de harnais.*)



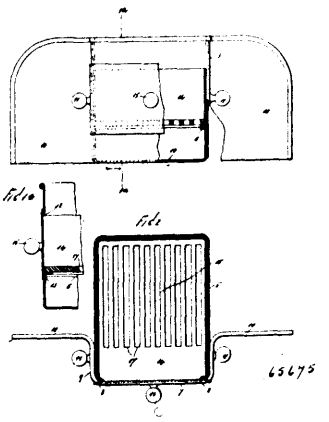
John Garrett Ryckman, Knappa, Oregon, U.S.A., 5th January, 1900; 6 years. (Filed 3rd November, 1899.)

Claim—1st. In a harness, the combination with the hames, the bridle and the driving rein, of a strap, one end of which is secured to the bridle and the other end to the hames, and a guide secured to the central portion of said strap, the driving rein passing through said guide, whereby a support for the rein will be provided a short distance from and in front of the hames. 2nd. A harness attachment, comprising a flexible strap, of a length to reach from the bridle to the hames and provided with means at its end for securing it to the bridle and hames, and with a ring intermediate of its ends, through which one of the reins is adapted to pass, substantially as described. 3rd. A harness attachment, consisting of a flexible strap of a length to reach from the throat latch of the bridle to the hames, the said strap being provided with a ring at one end through which the throat latch of a bridle is adapted to be passed, a snap hook at its other end for engaging a ring of the hames, and a ring intermediate of its ends, through which one of the reins is adapted to be passed, substantially as described. 4th. A harness attachment, consisting of a flexible strap of a length to reach from the throat latch of the bridle to the hames and provided with means at its ends for securing it to throat latch and hames, and intermediate of its ends, with a guide, through which one of the reins is adapted to pass, the said strap being adjustable in length at each end, whereby the strap can be adjusted for different horses and the position of the guide with respect to the ends of the strap maintained, as set forth.

No. 65,675. Ash Pan. (*Cendrier.*)

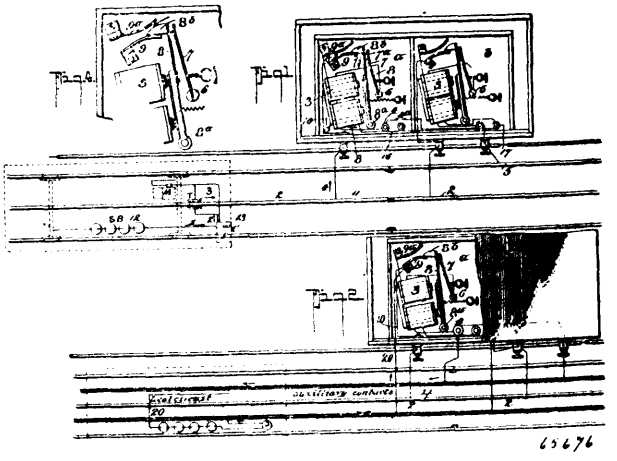
David William Huges and William Edwards, both of Newton' Glamorganshire, South Wales, 5th January, 1900; 6 years. (Filed 3rd November, 1899.)

Claim—1st. An ash pan consisting of a casing open at the top and provided with a front having an opening through which a drawer or tray may be inserted, and a draw or tray which is adapted to be inserted into said casing through said front opening, said drawer or tray being provided with a grid shaped or perforated bottom, and said casing being also provided with a bottom receptacle, substantially as described. 2nd. An ash pan, comprising an oblong casing open at the top and provided with a front plate having an opening adapted to receive a drawer or tray, and a drawer or tray which is adapted to be inserted into said opening, and the rear portion of the bottom of which is provided with openings or perforations, and said casing being also provided with a bottom receptacle, substantially as shown and described. 3rd. An ash pan, comprising an



oblong casing open at the top and provided with a front plate having an opening adapted to receive a drawer or tray, and a drawer or tray which is adapted to be inserted into said opening, and the rear portion of the bottom of which is provided with openings or perforations, and said casing being also provided with a bottom receptacle, said front plate being also provided with backwardly directed extensions having handles, and side wings formed on said extensions, substantially as shown and described. 4th. An ash pan, comprising an oblong casing open at the top and provided with a front plate having an opening adapted to receive a drawer or tray, and a drawer or tray which is adapted to be inserted into said openings, and the rear portion of the bottom of which is provided with openings or perforations, said front plate being also provided with backwardly directed extensions having handles, and side wings formed on said extensions, and the bottom portion of said casing being also provided with a movable drawer or tray having a closed bottom, and which is adapted to be inserted through the front plate, substantially as shown and described. 5th. An ash pan, comprising an ablong rectangular casing open at the top and provided with a front plate which is secured thereto and provided with backwardly directed side extensions and laterally projecting side wings, said side extensions being provided with knobs or handles, and two removable drawers or trays which are adapted to be inserted into said casing through the front plate, the upper drawer or tray provided with a bottom having openings or perforations, and each of said drawers or trays being provided with knobs or handles, substantially as shown and described.

No. 65,676. Electric Switch. (*Commutateur électrique.*)



The Safety Third Rail Electric Company, assignee of John McL. Murphy, Torrington, Connecticut, U.S.A., 8th January, 1900; 6 years. (Filed 13th August, 1898.)

Claim.—1st. An electric magnet switch mechanism of the character described, comprising an electro magnet having a high resistance coil in circuit through its armature lever to the contact rail and thd ground or return rail, and a low resistance coil connecting the feee wire and the conductor rail, means for energizing the high resistance coil to throw the armature to close the main line or low resistance circuit, and a contact common to both the low and high resistance circuits held in continuous engagement with the armature switch in its different vibratory movements, as specified. 2nd. An electro

magnetic switch mechanism of the character stated, comprising electro magnets, an armature switch, a main line circuit having contacts adapted to be engaged and closed by the shifting of the armature switch, a local circuit for energizing the magnets to throw the switch, said local circuit having a contact member continuously held in engagement with the switch during its vibrating movement, substantially as shown and for the purposes set forth. 3rd. In an electro magnetic switch mechanism for electric railway systems, the combination, substantially as described, of a main line circuit, a local or energizing circuit, electro magnets having windings in both the local and main circuit, an armature switch lever, an adjustable connection joining such lever with the local circuit, said connection being arranged to become disconnected from the lever when such lever is moved by the local or initial energy in the magnets, and contacts in the main line adapted to be electrically joined by the lever as it is drawn over by the initial energy of the magnets, as specified. 4th. In an electric switch mechanism as described, the combination with the doubly wound magnets, the local circuit connected to the inner windings, the main line circuit connected with the outer winding of such magnets, said main circuits having contacts 9, 9^a, of the switch having a head continuously in engagement with the contact 9, and the contact plate 7, normally held in engagement with the switch, having a limited forward swing movement therewith and in electric connection with the local circuit, as specified. 5th. The combination with the magnets having outer and inner windings, the contacts 9, 9^a, the lead wire 10, connected with the contact 9, the main or feed circuit connected with the contact 9^a, and the outer magnet winding, the local circuit connected with the inner windings of the magnet, the switch lever 8, having its head continuously in engagement with the contact 9, the adjustable plate 7, held in contact with the switch and having a limited forward movement therewith, and means for energizing the local circuit, substantially as shown and described.

No. 95,677. Swivel Pivot and Bearing for Gun Mounts.
(*Pivot et coussinet pour affûts de canons.*)

Fig. 1

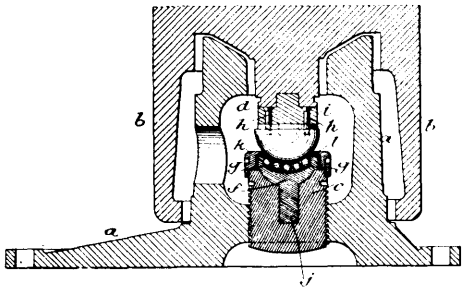
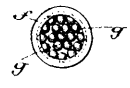


Fig. 2.



65677

Walter W. Bostwick, New York City, New York, assignee of J. J. Clarke, Washington, District of Columbia, U.S.A., 8th January, 1900; 6 years. (Filed 14th June, 1899.)

Claim.—1st. The combination with a base and a racer or body to swivel thereon, of a spherical pivot provided on said body, a cup in which is a spherical seat conforming to said spherical pivot, and antifriction balls in said cup for the support of said pivot and swiveling body, substantially as herein described. 2nd. The combination with a base and a racer or body to swivel thereon, of a spherical pivot affixed to said body, a cup in which is a spherical seat conforming to said spherical pivot and containing antifriction balls for the support of said pivot and swiveling body, and an adjusting screw on which said cup is supported in the base, substantially as herein described. 3rd. The combination with a base and a racer or body to swivel thereon, of a spherical pivot affixed to said body, a cup in which is a spherical seat conforming to said spherical pivot and containing antifriction balls for the support of said pivot and swiveling body, an adjusting screw on which said cup is supported in the base, and a cap ring applied to the head of said screw to protect the cup and balls, substantially as herein described.

No. 65,678. Hose Nozzle. (*Lance de boyau.*)

Merritt J. Gordon and Walter Ingles Agnew, both of Olympia, assignees of Benjamin Chapman Crane, Montesano, all in Washington, U.S.A., 8th January, 1900; 6 years. (Filed 16th January, 1899.)

Claim.—1st. A nozzle, combining in its structure a stream pipe, an annular spray nozzle surrounding said stream pipe, and two independent cut-off gates or valves, one adapted to close both the stream pipe and spray nozzle and the other adapted to close the

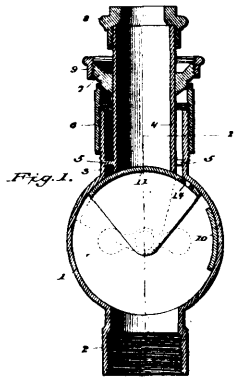
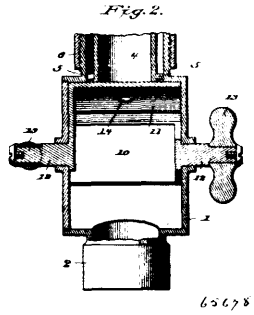


Fig. 1.

Fig. 2.



65678

stream pipe alone, substantially as set forth. 2nd. A nozzle, consisting of a casing, a stream pipe extending therefrom, and an annular spray nozzle surrounding said stream pipe, in combination with two independent cut-off gates or valves rotatable in said casing and each having a bushing projecting centrally through opposite sides of said casing for manipulating the same, one of said gates or valves adapted to close both the stream pipe and spray nozzle and the other adapted to close the stream pipe alone, substantially as set forth. 3rd. A nozzle, consisting of a casing, a stream pipe extending therefrom, a projection surrounding said stream pipe and providing an annular intermediate spray passage, a spray nozzle adjustable longitudinally on said projection, a disc on said stream pipe toward and from which said spray nozzle may be adjusted to provide a varying annular outlet for the spray passage, and a deflecting collar adjustable on said disc for varying the angle of projection of the spray, substantially as set forth. 4th. A nozzle, combining in its structure a stream pipe, an exteriorly screw threaded projection surrounding said stream pipe and providing an annular intermediate spray passage, a spray nozzle engaged with said threaded projection and adjustable longitudinally on the exterior thereof, a disc on said stream pipe toward and from which said spray nozzle moves in its adjustment to provide a varying annular ontlet for the spray passage, and a deflecting collar adjustable on said disc for varying the angle of projection of the spray, substantially as set forth. 5th. A nozzle, combining in its structure a stream pipe, a projection surrounding said stream pipe and providing an annular intermediate spray passage, a spray nozzle adjustable longitudinally on said projection, a disc on said stream pipe toward and from which said spray nozzle may be adjusted to provide a varying annular outlet for the spray passage, a deflecting collar adjustable on said disc for varying the angle of projection of the spray, and means for cutting off both the stream pipe and the spray passage or the stream pipe alone, substantially as set forth.

No. 65,679. Tailless Kite. (*Cerf-volant.*)

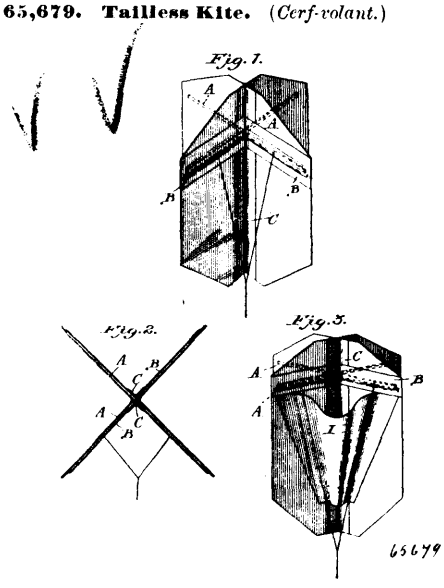


Fig. 1.

Fig. 2.

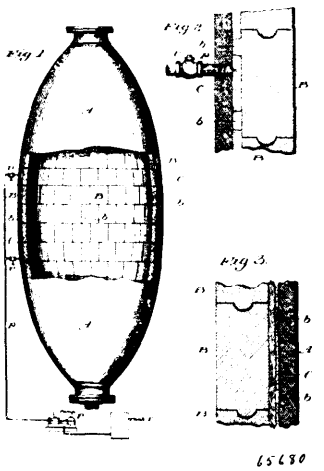
Fig. 3.

65679

The Zimmerman Flying Machine Company, assignee of Charles Zimmerman, all of Frederick, New York, U.S.A., 8th January, 1900; 6 years. (Filed 11th September, 1899.)

Claim.—A tailless kite, comprising a plurality of isometric wings meeting at the longitudinal axis of the kite and with or without stiffening arms or pocket, constructed, arranged and operating, substantially in the manner and for the purpose set forth in the above specification and illustrated in the accompanying drawings.

No. 65,680. Wood Pulp Digester. (*Digesteur de pulpe.*)

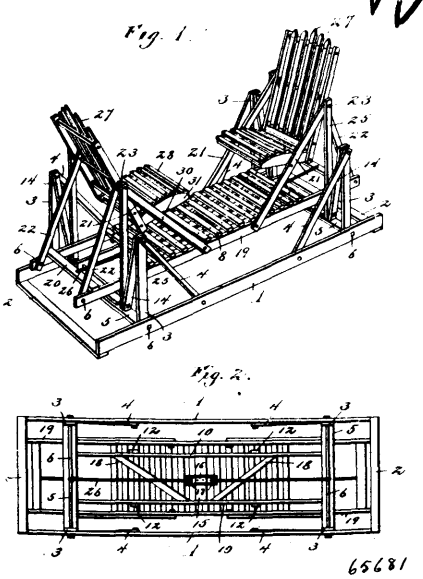


65680

The Imperial Sulphite System Company, New York City, New York, assignee of James Lide Coker, Jr., Hartsville, South Carolina, both in the U.S.A., 8th January, 1900; 6 years. (Filed 18th August, 1899.)

Claim.—1st. The method of stopping leaks in brick or cement linings of digesters, which consists in introducing under pressure into the digester, between the shell and its lining, a solution containing a salt which will combine with the acid or acids of the digester to form an insoluble precipitate, substantially as and for the purposes hereinbefore set forth. 2nd. The method of treating digester linings, which consists in introducing into the digester, between its shell and the lining, a solution under pressure containing a salt which will combine with the acid or acids of the digester to form an insoluble precipitate, and varying said pressure during the cooking operation so that it shall alternately and at suitable intervals exceed and fall below the internal pressure at which the digester is working, substantially as and for the purposes hereinbefore set forth. 3rd. The combination of the digester shell, the lining separated from the shell by an interspace, means for introducing a salt solution under pressure into said interspace, and an absorbent filling in said interspace which backs and supports the lining and holds the solution, substantially as hereinbefore set forth.

No. 65,681. Swing. (*Balancoire.*)



65681

Morris Lary, New York City, New York, assignee of David F. Graham, Springfield, Massachusetts, U.S.A., 8th January, 1900; 6 years. (Filed 24th October, 1899.)

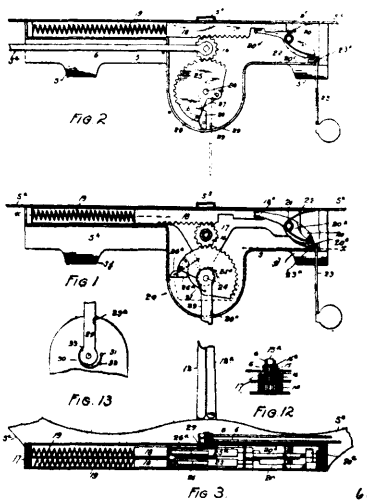
Claim.—1st. In a swing, the combination of a relatively stationary base support, a foot platform supported on the base to have reciprocating movement, a chair frame supported to reciprocate in the same direction as the foot platform, and rope and pulley connections between the base support, the platform and the seat carrying frame, substantially as described. 2nd. In a swing, the combination of a relatively stationary base support carrying vertical standards a foot platform, links pivoted at their upper ends to the standards and at their lower ends to the platform, a chair frame, links pivotally connected at their lower ends to the platform and at their upper ends to the chair frame, and connections substantially as described, between the base support, the platform and the chair frame to transmit movement from the platform to the chair frame, the movement of the latter being greater than that of the former, substantially as described. 3rd. In a swing, the combination of a relatively stationary base support carrying vertical standards, a foot platform supported by the standard to have reciprocating movement, a chair frame supported by the platform to reciprocate in a plane substantially parallel with the base support, connections to transmit movement from the platform to the chair frame, and chairs carried by the chair frame, said chairs being higher than the standards, substantially as described. 4th. In a swing, the combination of a relatively stationary base support, a foot platform supported by the base to have reciprocating movement, a chair frame supported to reciprocate in the same direction as the foot platform, a pair of pulleys attached to the platform, ropes passing around said pulleys, said ropes leading in opposite directions and their respective ends being connected to chair, frame and base, respectively, substantially as and for the purpose specified. 5th. In a swing, the combination with a base frame and a pair of oppositely arranged standards firmly secured to the base frame at each end, of a foot platform suspended by four links pivoted respectively at their upper ends to the upper ends of the respective standards, a chair frame, four links pivotally connected at their upper ends to the chair frame, and at their lower ends to the platform, a pair of pulleys on the platform, and a pair of ropes respectively looped around the respective pulleys and leading in opposite directions, one end of each rope being secured to an end of the platform and the other end to the adjacent end portion of the base frame, substantially as described. 6th. In a swing, the combination with the base support carrying standards and a platform supported by the standards to have a longitudinal reciprocating movement, of a chair frame comprising a skeleton frame, oppositely inclined braces arranged in pairs at each end portion of the frame and secured at their lower ends to the sides of the frame, rods extending transversely of the frame and to which the upper ends of the braces are connected, four links pivoted at their upper ends to the said rods and at their lower ends to the platform support, chairs supported between the said braces, and rope and pulley connections between the chair frame, the base and the platform, substantially as described. 7th. In a swing, a chair frame supported to have a reciprocating movement, pairs of oppositely inclined braces secured at their lower ends to the sides of the frame, and a rod extending transversely across the frame and connecting the upper ends of the braces, combined with a chair back pivoted intermediate its ends on said rod between the braces, a seat hinged at its rear edge to the lower end of the back and provided with a series of recesses in each of its side rails, and a bar supported by the braces to be engaged by the recesses in the sides of the seat, substantially as and for the purpose set forth. 8th. In a swing, the combination of a base frame carrying standards, a frame carrying a foot platform, rods extending across the ends of said platform frame, links pivoted respectively at their upper ends to the upper ends of the respective standards and at their lower ends to the said rods, a chair frame having oppositely inclined braces secured at their lower ends to the sides of the frame, rods extending across the frame and connecting the upper ends of the braces, and links pivoted at their upper ends on the last named rods, and at their lower ends on the first named rods, substantially as described.

No. 65,682. Leaf Turner. (*Tourne feuille.*)

James E. Pellow, Denver, Colorado, U.S.A., 8th January, 1900; 6 years. (Filed 28th July, 1899.)

Claim.—1st. The combination with a suitable case, of a pinion journaled in the case, a leaf turning arm attached to the pinion spindle, a spring actuated, cogged rack engaging said pinion, a spring held lever engaging one end of the rack and holding it against its spring when under tension, and a releasing lever engaging the opposite arm of the locking lever and protruding from the case. 2nd. The combination with a suitable case, of a pinion journaled in said case, a leaf turning arm attached to the pinion, a cogged rack engaging the pinion, a spring engaging one extremity of the rack, a locking lever adapted to engage the opposite extremity of the rack, and releasing lever engaging the locking lever. 3rd. The combination with a suitable case or frame of a plurality of pinions suitably journaled therein one above another, and having a common centre, a leaf turning arm connected with each pinion, a spring actuated rack engaging each pinion, one extremity of each rack being grooved and provided with a guard flange in front of the groove and extending beyond the extremity of the body of the rack, and a locking lever adapted to engage the grooved extremity of the rack, the said flange limiting the movement of the lever when the

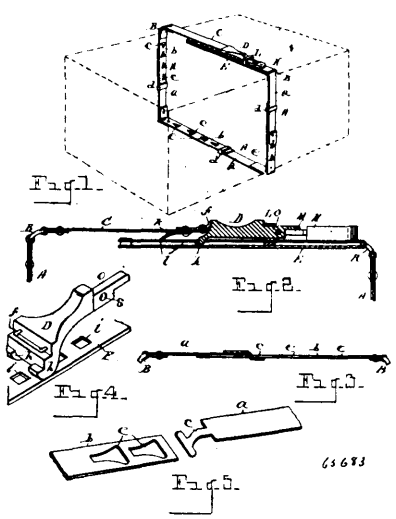
rack is unlocked. 4th. The combination with a suitable case or frame, of a plurality of pinions journaled in the case one above



another and having a common centre, suitable leaf turning arms connected with the respective pinions, a spring actuated rack engaging each pinion, a locking lever engaging each rack, a single releasing lever adapted to actuate all the locking levers, the adjacent extremities of the locking levers being so arranged that the said levers may be separately actuated by the releasing lever. 5th. The combination with a suitable case or frame, of a plurality of pinions journaled in the case one above another and having a common centre, suitable leaf turning arms connected with the respective pinions a spring actuated rack meshing with each pinion, one extremity of the rack being grooved and provided with a guard flange in front of the groove, a locking lever adapted to engage the grooved extremity of each rack, the guard flange limiting the movement of the lever when the rack is unlocked, and a single releasing lever adapted to actuate all the locking levers, the adjacent arms of the several locking levers being so arranged that the said levers may be separately actuated by the releasing lever. 6th. The combination with a suitable case or frame, of a plurality of pinions journaled in the case one above another, suitable leaf turning arms connected with the respective pinions, a spring actuated rack meshing with each pinion, one extremity of the rack being grooved and provided with a guard flange in front of the groove, a locking lever adapted to engage the grooved extremity of each rack, the guard flange limiting the movement of the locking lever when the rack is unlocked, and a single releasing lever adapted to actuate all the locking levers, the adjacent arms of the several locking levers being so arranged that the said levers may be separately actuated, the first locking lever actuated having a projection long enough to engage the next lever to be actuated, whereby the releasing lever is brought in direct contact with only one locking lever. 7th. The combination with a suitable case or frame, of a plurality of pinions journaled in the case, one above another, suitable leaf turning arms connected with the respective pinions, a spring actuated rack engaging each pinion, a locking lever engaging each rack, a single releasing lever adapted to actuate all the locking levers, the adjacent extremities of the locking levers being so arranged that the said levers may be separately actuated by the releasing lever, the first lever actuated having a projection long enough to engage the next lever to be actuated, whereby the releasing lever is brought in direct contact with only one locking lever, and suitable means limiting the movement of any locking lever when unlocked, to prevent its unlocking the next lever in order. 8th. The combination with a suitable case, a pinion journaled therein, a spring actuated rack engaging said pinion, one extremity of said rack being grooved and provided with a guard flange located in front of the groove and extending beyond the extremity of the body of the rack, a locking lever engaging the grooved extremity of each rack, and a releasing lever engaging the locking lever. 9th. The combination with a suitable case, of a plurality of pinions journaled therein, a spring actuated rack engaging each pinion, a leaf turning device connected with each pinion, means for locking the racks in place, and means for releasing the locking devices, of a gear meshing with each pinion, a spring held dog normally projecting beyond the periphery of each gear, a lever adapted to engage the dogs and actuate the gears when the said lever is moved in one direction, but adapted to force the dogs inwardly and slip past them when moved in the opposite direction, one of the gears being provided with means for forcing the dog of the other gear inwardly to allow the lever to act on the gears separately. 10th. The combination of the case and the enclosed mechanism for actuating the leaf turning devices, the back plate of said case being provided with a socket 5*s*, a T-shaped part 10 adapted to enter the said socket, two upright jaws 12 and 12*a*, the jaw 12 being fast on the part 10, while the jaw 12*a* is connected therewith by a rivet or pin which passes through a transverse slot formed in the lower part of the jaw whereby the said jaw is adjustable on the part 10, each jaw consisting of an angle plate composed of two portions 22*d* and 12*h*, the part 12*d* of each jaw tapering from its lower extremity toward the top which is narrowest, the part 12*h* of each jaw extending forwardly, and a vertically sliding clasp engaging the parts 12*d* of the two jaws, whereby the opening between the parts 12*h* is controlled. 11th. The combination of a case adapted to hold leaf turning mechanism and provided with a back plate having extensions at both extremities, bent forwardly at right angles forming offsets for a book to rest upon, said extensions being bent upwardly forming arms to support the book in front, the back plate of said case being provided with a socket, a T-shaped part 10 adapted to enter said socket, two upright jaws 12 and 12*a*, the jaw 12 being fast on the part 10, while the jaw 12*a* is connected therewith by a pin which passes through a transverse slot formed in the lower part of the jaw, whereby the said jaw is adjustable on the part 10, each jaw consisting of an angle plate composed of two parts 12*d* and 12*h*, occupying positions at right angles to each other, the part 12*d* of each jaw tapering from its lower extremity toward the top which is narrowest, the part 12*h* of each jaw extending forwardly, and a vertically sliding clasp connecting the parts 12*d* of the jaws, whereby the opening between the parts 12*a* is controlled. 12th. The combination with a suitable case, of a pinion journaled in the case, a leaf turning arm attached to the pinion, an upright rod attached to the arm, a leaf clasp mounted on the rod, a cogged rack engaging the pinion, a spring engaging one extremity of the rack, a locking arm adapted to engage the opposite extremity of the rack, and a releasing lever engaging the locking lever.

No. 65,683. Metal Strap for Trunks.

(*Courroie métallique pour coffres.*)



Thomas B. Smith, Carl Nilsson, and Alfred T. Jones, all of Pocatell, Idaho, U.S.A., 8th January, 1900; 6 years. (Filed 26th September, 1899.)

Claim—1st. A trunk strap consisting of three sections united by links permanently secured in the ends thereof, each of said sections consisting of two overlapping pieces adjustably united by a tongue and slot connection, and a locking section consisting of two parts, one of which carrying an engaging locking lever and the other part a series of apertures in which the points of said lever engage. 2nd. A trunk strap consisting of a series of adjustable sections flexibly united by coupling links, a locking section consisting of one part having a spring detent depending therefrom, a lever carrying a staple to which the free end of said part is pivoted, said lever having lugs projecting therefrom below said point of pivot, a complementary section consisting of a perforated part lying under said part carrying the locking lever having a series of apertures on opposite sides which register with the lugs of the locking lever and adapted to be engaged by said detent, and the lock for securing said lever when in horizontal position, substantially as set forth.

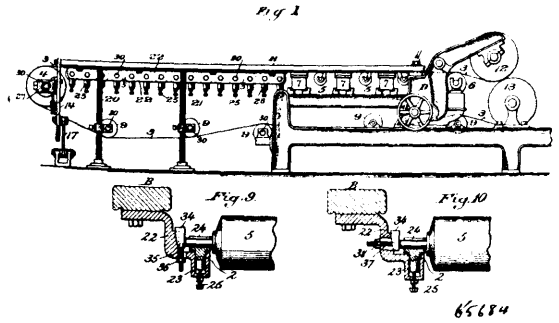
No. 65,684. Paper Making Apparatus.

(*Appareil pour la fabrication du papier.*)

Thomas H. Savery, Wilmington, Delaware, U.S.A., 8th January, 1900; 6 years. (Filed 24th October, 1899.)

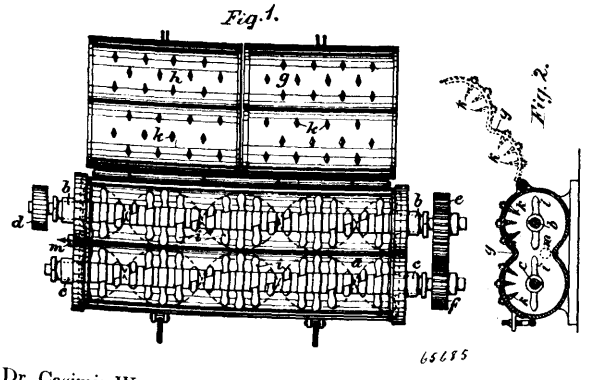
Claim 1st. In a fourdrinier paper making machine, the combination with the shaking section and rolls mounted therein and by which the wire cloth for the forming web is supported, guided and moved to and fro, of adjusting means for taking endwise play of the rolls in the shaking section to secure the concerted movement of the rolls with the section, substantially as described. 2nd. In a fourdrinier paper making machine, the combination with the

shaking section and rolls mounted therein and by which the wire cloth for the forming web is supported, guided and moved to and



fro, of members engaging the ends of the rolls to compel their movement with the section, and means for adjusting the relative position of said members and the rolls to take up endwise play of the rolls in the shaking section and secure the concerted movement of the rolls with the section, substantially as described. 3rd. The combination with the shaking device and vibrating wire cloth of a fourdrinier paper making machine and a roll over which the wire cloth passes, of adjusting means for taking up endwise play of the roll in the shaking section to secure the concerted movement of the roll with the shaking section, substantially as described. 4th. The combination with the shaking section, and vibrating wire cloth of a fourdrinier paper making machine, and a roll over which the wire cloth passes, of members at opposite ends of the rolls moving with the shaking section and engaging the roll to compel its movement with the section, and means for adjusting said members to take up endwise play of the roll in the shaking section and secure the proper position and movement of the roll, substantially as described. 5th. In a fourdrinier paper making machine, the combination with the shaking section and a series of table rolls mounted therein, of members engaging the rolls to compel their endwise movement with the section and adjustable to take up endwise play of the rolls in the shaking section and secure the concerted movement of the rolls with the section, substantially as described. 6th. In a fourdrinier paper making machine, the combination with the shaking section and a series of table rolls mounted therein, of adjusting devices for adjusting independently of each other the position of the different rolls and taking up endwise play between the rolls and the parts of the shaking section by which they are actuated, substantially as described. 7th In a fourdrinier paper making machine, the combination with the shaking section and a series of table rolls mounted therein, of adjustable devices at opposite ends of the rolls for securing the proper position of the rolls and taking up endwise play of the rolls in the shaking section to compel their concerted movement with the section, said devices being arranged for adjustment of the different rolls independently of each other, substantially as described.

No. 65,685. Pulp Making Machine. (*Machine à pulpe.*)

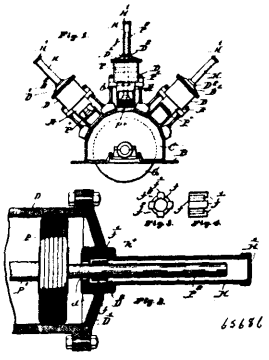


Dr. Casimir Wurster, London, N. W., England, 8th January, 1900; 6 years. (Filed 2nd November, 1899.)

Claim—1st. In a machine for pulping up paper and paper materials, a substantially horizontal trough having an unarmed surface, shafts passing through said trough, means for rotating said shafts, blades carried by said shafts, a lid for said trough armed with blades or spikes, and means for throwing said lid into and out of position to co-operate with the blades on said shafts. 2nd. In a machine for pulping up paper and paper materials, a substantially horizontal trough having an unarmed surface, shafts passing through said trough, means for rotating said shafts, blades carried by said shafts, a lid for said trough armed with blades or spikes and formed of a plurality of parts, and means for independently throwing said parts into and out of position to co-operate with the blades on said shafts. 3rd. In a machine for pulping up paper and paper materials, a substantially horizontal trough, shafts passing through said trough, means for rotating said shafts, blades carried by said shafts, and blades or spikes arranged to co-operate with the blades on said shafts for a portion only of their length, whereby kneading and pulping may be accomplished at the same time.

No. 65,686. Pulp Grinding Machine.

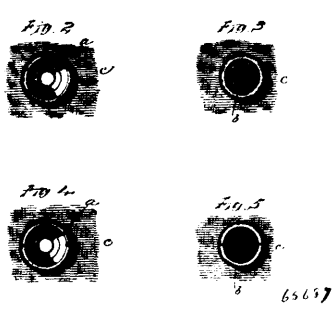
(*Machine à broyer la pulpe.*)



Herbert Josephus Frink, Holyoke, Massachusetts, U.S.A., 8th January, 1900; 6 years. (Filed 24th November, 1899.)

Claim.—1st. In a pulp grinder, a pressure cylinder, its piston, a piston rod having an extension loosely passed through the outer cylinder head, a channeled guide bearing mounted on the latter, for the rod extension, and a head secured to the cylinder head and maintaining the guide bearing in place, the hood communicating with the cylinder through the channels of the guide and enclosing the exposed portion of the rod extension. 2nd. In a pulp grinder, a pressure cylinder having its outer head provided with a hollow boss, a guide therein and provided with fluid passages, a closed hood mounted on the head and retaining the guide in place, a piston, and an extension rod attached thereto, extended loosely through the boss and into the hood, the guide forming a bearing for and directing said extension rod.

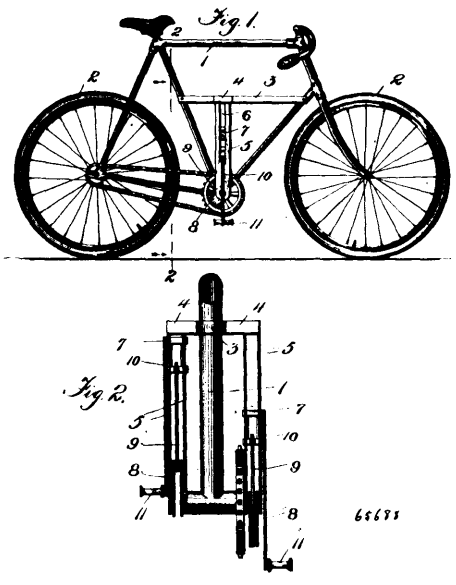
No. 65,687. Fastening Device. (*Appareil d'attache.*)



James V. Washburne, Waterbury, Connecticut, U.S.A., 8th January, 1900; 6 years. (Filed 13th November, 1899.)

Claim.—1st. A fastening device, comprising two members, each of which consists of a cup having an inwardly turned side wall, and substantially corresponding to each other in form, but in diameter differentiated from each other enough to permit the cup of the smaller diameter to enter and be virtually contained within the cup of the larger diameter when the two cups are forced together under pressure, after which the cup of the smaller diameter is held by the edge of the inwardly turned side wall of the cup of the larger diameter, which embraces the largest diameter of the smaller cup, which is thus held within the larger cup. 2nd. A fastening device, comprising two members, each of which consists of a shallow disc-like cup having an inwardly turned side wall, and adapted to be secured in place so as to present their open faces to each other, the two cups substantially corresponding to each other in form, but in diameter differentiated from each other enough to permit the cup of the smaller diameter to enter and be virtually contained within the cup of the larger diameter when the two cups are forced together under pressure, after which the edge of the inwardly turned side wall of the larger cup will embrace the largest diameter of the smaller cup, which is thus held within the larger cup.

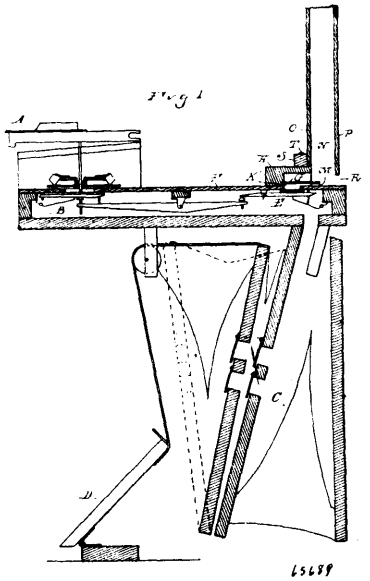
No. 65,688. Bicycle. (*Bicycle.*)



William Smith, of LaBaie du Febore, and Alphonse Smith, Maddington Falls, Quebec, Canada, 8th January, 1900; 6 years. (Filed 1st August, 1899.)

Claim.—The combination with the frame of a bicycle, of the drive sprocket wheel, a frame secured to the frame of the bicycle and forming vertical guideways arranged one on each side of said sprocket wheel, a vertically moving slide mounted in each of said guideways, a crank arm connected to each end of the sprocket shaft, a link connecting each of said crank arms with each of said slides, and a pedal connected with each of said slides, substantially as described.

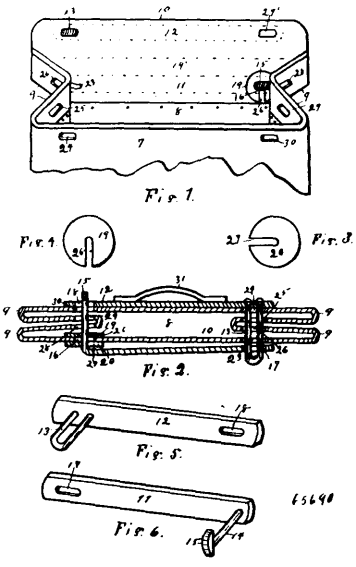
No. 65,689. Reed Organ. (*Orgue.*)



Joseph H. Dickinson, Detroit, Michigan, U.S.A., 8th January, 1900; 6 years. (Filed 13th April, 1899.)

Claim.—1st. In a reed organ, a bank of qualifying tubes, comprising a series of division strips arranged at different distances from each other, the spaces between said strips varying in size the length of the bank, and a front and rear wall placed at an angle to each other, forming unitedly the front and rear walls of the tube, said tubes being stepped off at their upper ends. 2nd. In a reed organ, the combination with the sounding board, a reed block thereon having formed therein a series of reed cells, and a series of reeds upon the sounding boards, each extending within its respective cell, of a qualifying device for the reeds consisting of a casing comprising front and rear walls, the front wall resting upon the reed block, and a series of division strips between said walls and extending below the latter into contact with the sounding board.

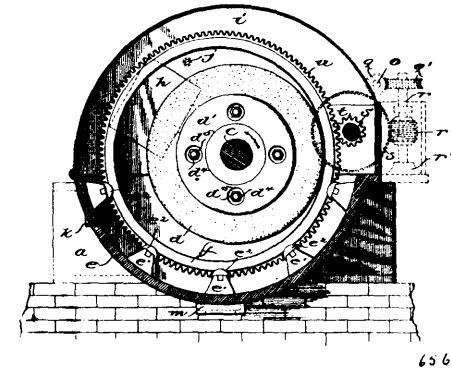
No. 65,690. Mail Pouch. (*Sac de malle.*)



Mottram Hill, Vicksburg, Michigan, U.S.A., 8th January, 1900; 6 years. (Filed 12th January, 1899.)

Claim.—The combination of the pouch having the folds at the sides of the top and the registering slots through the pouch and folds, the staple bar and lock bar with their staple loop and T-headed projection and slotted ends, and the plates attached to the pouch and having their open slots at angles to each other when astride of the projection of the lock bar, substantially as set forth.

No. 65,691. Pulp Grinding Machine.
(*Machine à broyer la pulpe.*)

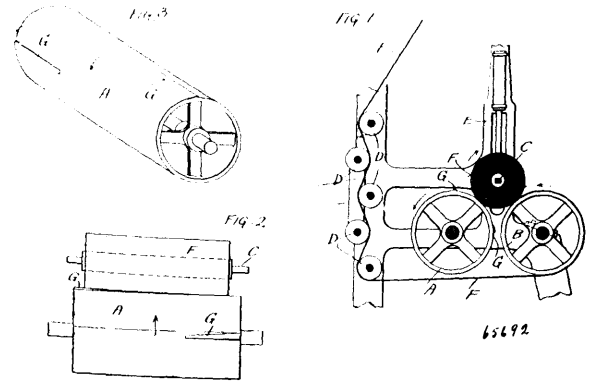


Albert W. Priest, Kaukauna, Wisconsin, U.S.A., 8th January, 1900; 6 years. (Filed 17th January, 1899.)

Claim.—1st. A pulp machine comprising supports, a rotary grinder turning in bearings outside of the vat, a rotary feed ring encircling and eccentric to the grinder, bearings in the vat on which the feed ring is supported and turns, and means for driving the grinder and feed ring. 2nd. A pulp machine comprising a rotary grinder and a rotary feed ring encircling and eccentric to the grinder, the motion of the two at the point of nearest proximity being upward, whereby the material is all fed forward at the crushing point by the motion of the parts and never by gravity, and external supports or bearings for the ring immediately opposite or adjacent to the point where the grinding takes place whereby to sustain and resist the outward strain at that point. 3rd. A pulp machine comprising a suitable support, a vat adjustably connected with the support, a grinder revolubly supported in bearings on the support, and a rotary feed ring movable laterally with the adjustable vat. 4th. A pulp machine comprising a vat, a rotary grinder and a feed ring revolubly supported in the vat, the vat being capable of adjustment with respect to the grinder to compensate for wear. 5th. The combination in a pulp machine, of supports, vat, a shaft turning in bearings in the supports, a grinder on said shaft, a feed ring revolubly supported on bearings in the vat, a rack on the exterior of the ring, a counter shaft, a pinion thereon which meshes with the teeth of the rack, a worm wheel on the counter shaft, a shaft o, a worm q, a shaft r, worm wheel q^1, which meshes with worm q, on shaft o, and pro-

vided with a worm r^2, which meshes with the worm wheel on the counter shaft and means for communicating motion from the grinder shaft to shaft o.

No. 65,692. Paper Reel. (*Devidoir à papier.*)

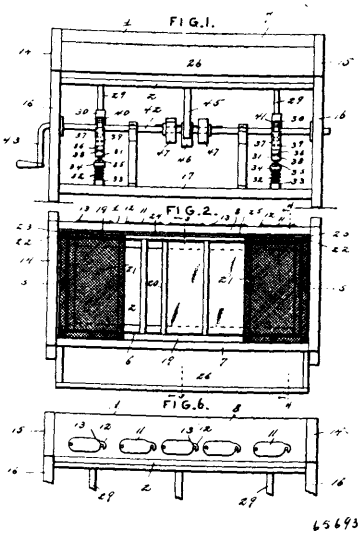


65692

William Antone Libert, Kaukauna, Wisconsin, U.S.A. 8th January, 1900; 6 years. (Filed 15th March, 1899.)

Claim.—A paper reel driving cylinder provided at its ends with longitudinal peripheral ribs each of which is tapered on one side and has a bevelled working face gradually reduced in thickness toward the inner end, its other side being straight and at a right angles to the cylinder.

No. 65,693. Screen. (*Tamis.*

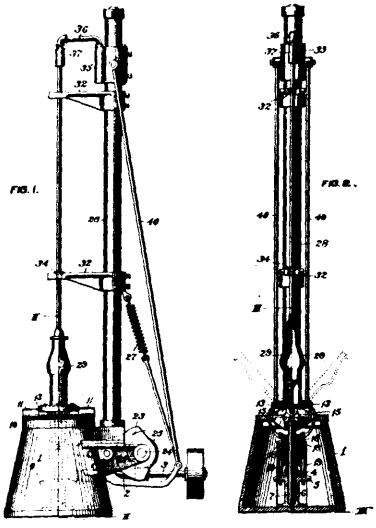


65693

Charles W. Pickett, Watertown, New York, U.S.A., 8th January, 1900; 6 years. (Filed 29th May, 1899.)

Claim.—1st. The combination with a screen, of a diaphragm located there below, a standard in operative relation with the diaphragm, a spring designed to cushion the movement of the standard and to retain it in its elevated position, an adjustable block carried by the standard and a cam wheel in operative relation with the block and designed to actuate the standard in opposition to the spring, substantially as specified. 2nd. The combination with a screen, of a diaphragm located there below, a plate imposed against the under surface of the diaphragm, a standard dependent from the plate and provided with an adjustable block, a cam wheel in operative relation with said block, a spring designed to substantially urge the standard in the direction of the diaphragm, and means for regulating the tension of the spring, substantially as specified. 3rd. The combination with a stationary screen, of an imperforate flexible diaphragm secured along its edges, and means for imparting an undulatory vibration to the diaphragm, substantially as specified. 4th. The combination with a stationary screen, of an imperforate flexible diaphragm located there below, and secured along its edges, and means for imparting opposed vibrations to the opposite ends of the diaphragm, substantially as specified. 5th. The combination with a stationary screen, of a flexible diaphragm secured along its edges, and a rocking plate imposed against the under surface of the diaphragm, substantially as specified. 6th. The combination with a stationary screen and a flexible diaphragm secured along its edges, of a rocking plate imposed against the under surface of the diaphragm, and an oscillatory arm designed to impart motion to the plate, substantially as specified. 7th. The combination with a screen and diaphragm, of a rocking plate imposed against the under surface of the diaphragm, a vibratory arm extending from said plate and a series of cam wheels adjustably mounted in order to permit either of said cams to be brought into operative relation with the arm, substantially as specified. 8th. The combination with a screen box, of a diaphragm frame located within the box, and of sufficiently smaller dimensions to leave a space surrounding the diaphragm frame, a hinged screen frame above the diaphragm frame, and provided with screens, a dam plate located against the inner face of one side of the screen box, and designed to control the openings therein, and a screening box secured to the screen box, and designed to receive the screenings discharged from the screen box through an opening in its front side, substantially as specified. 9th. The combination with a screen box, of a diaphragm frame located therein, a hinged screen frame above the diaphragm frame, and a dam plate located against the inner face of one side of the box, and provided with a securing strip designed to retain the screen plate in place, substantially as specified. 10th. The combination with a screen box, of a diaphragm frame therein and of sufficiently less dimensions to leave a space around its edge, diaphragms mounted upon the diaphragm frame, a screen frame hinged at one edge and supported by the diaphragm frame, a dam plate located against the inner face of one side of the box and provided with a rail bearing upon the screen frame, said screen box being provided with a series of openings in its rear wall, and with a longitudinal opening at the bottom of its front wall, cover plates for said series of openings, and a screening box designed to receive screenings discharged through the opening in the front wall, the side bars of the screen frame being recessed to permit the discharge of the screenings from the diaphragms, substantially as specified.

No. 65,694. Glass Blowing Machine.
(*Machine pour souffler le verre.*)



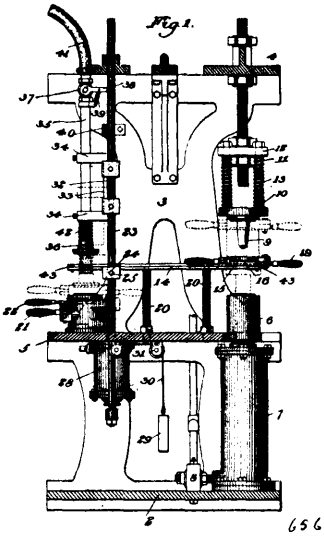
65694

Charles Henry William Ruhe, Pittsburg, Pennsylvania, U.S.A., 8th January, 1900; 6 years. (Filed 29th August, 1899.)

Claim.—1st. In a glass blowing machine, the combination of movable mould sections, means for continuously rotating said sections, means for opening and closing the sections during their rotation, and means for holding a blow pipe stationary in proper relation to the mould sections, substantially as set forth. 2nd. In a glass blowing machine, the combination of movable mould sections means for continuously rotating said sections, means for opening and closing the mould sections, means for holding the blow pipe stationary, and means for connecting the blow pipe to a source of fluid under pressure operative simultaneously with the closing of the mould, substantially as set forth. 3rd. In a glass blowing machine, the combination of pivotally mounted plates or leaves, mould sections detachably secured to said leaves or plates, a disc adapted to form the bottom of the mould and a removable support therefor, substantially as set forth. 4th. In a glass blowing machine, the combination of a turntable, mould sections pivottally mounted on the turntable, a movable block, arms connecting the block to the mould sections, and means for continuously rotating the turntable and raising and lowering the block, substantially as set forth. 5th. In a glass blowing machine, the combination of movable mould sections, a hollow post or standard provided with a port, a block movable on the post, a valve head carried by the block, a valve adapted to be unseated by the blow pipe when the block is

lowered, the block having a passage adapted to be connected to the port in the standard, supports for the blow pipe, and means for simultaneously rotating and opening, and closing the mould sections and shifting the block, substantially as set forth.

No. 65,695. Apparatus for Forming Hollow Glass Articles. (*Appareil pour la formation d'articles de verre.*)



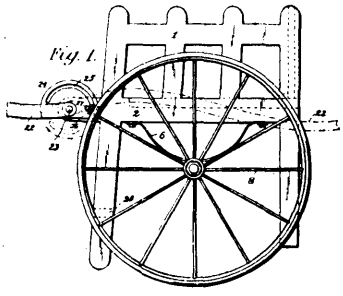
William Buttler, Redkey, Indiana, and Henry Hale Clough, Elyria, Ohio, U.S.A. 8th January, 1900; 6 years. (Filed 2nd October, 1899.)

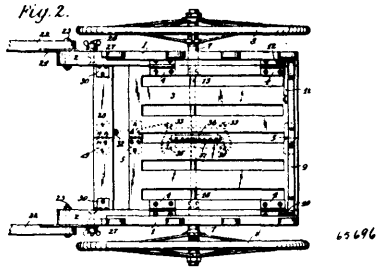
Claim.—1st. The combination with a track, of a press mould and a plunger located at a fixed point along the track and movable relative to each other, and a mould ring having supports normally at the track level and movable therealong, said supports being arranged to be moved to a different level by the pressing apparatus, substantially as described. 2nd. The combination with a track, of glass pressing mechanism and glass blowing mechanism, each having a mould located at a fixed point along the track, and a mould ring having supports normally at the track level and movable therealong, said supports being arranged to be moved to a different level by the pressing mechanism and the blowing mechanism, substantially as described. 3rd. The combination with a horizontally extending track having a vertically movable portion, of pressing apparatus and blowing apparatus at different points in the length of the track, a mould ring resting upon and movable along the track, and mechanism for moving the mould ring and movable track section to a different level than the normal track level, while operating upon the glass, substantially as described. 4th. The combination with a track, of a mould ring having supports normally at the track level, and movable therealong, said mould ring resting loosely on the track so as to be easily lifted therefrom, a press mould and plunger located at a fixed point along the track, a blow mould and blow head located at another fixed point along the track and mechanism for raising the press mould and thereby lifting the mould ring and its supports above the track, substantially as described. 5th. The combination with a track, of a blow head and blow mould, located at a fixed point along the track and movable relative to each other, a press mould and plunger located at another fixed point along the track and a mould ring having supports normally at the track level, and movable therealong, said supports being arranged to be moved to a different level by the blowing apparatus, substantially as described.

No. 65,696. Perambulator. (*Voiture.*)

Thomas Ballantine, South Melbourne, Victoria, Australia, 8th January, 1900; 6 years. (Filed 25th January, 1899.)

Claim.—1st. In combination a perambulator having hinged floor, axle having two hinged parts pivoted together in the centre with means for locking said parts in a horizontal position in line or approximately each in a vertical position, substantially as and for the purposes set forth. 2nd. In combination hinged axle rod as 13 carrying slotted segmental plate as 15, hinged axle rod as 18 pivotly connected to said plate and having pin passing through slot of plate with means of securing same in position, substantially as and for the purposes set forth. 3rd. In combination shafts as 22 pivoted to rail and having attached thereto slotted plates as 24 and means for forming a secure hold upon the plates, substantially as and for the purposes set forth. 4th. In a collapsible carriage of the kind described, a hinged footboard which collapses correspondingly with the carriage, substantially as set forth. 5th. In combination cord as 31 connecting hinged step with hinged floor, cord as 34 connecting the two parts of floor and having a handle as 36, substantially as and for the purposes set forth. 6th. In combination side frames of a perambulator, a lateral door or doors, means by which door is





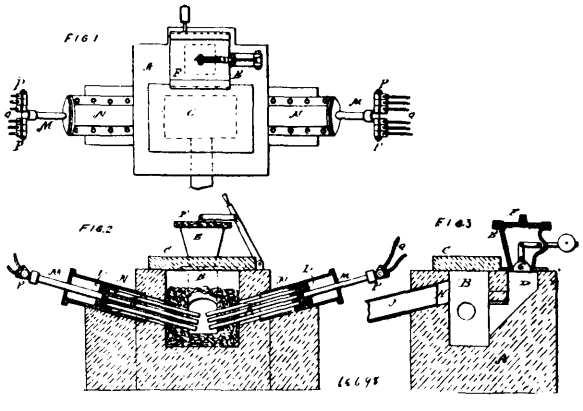
hinged to one side of perambulator and means for securing the other end of such door to frame on that side, substantially as and for the purposes set forth. 7th. In combination perambulator having hinged frame with means for securing same to side frame, floor in two parts hinged to side frames and together in the centre, step in two parts hinged to side frame and together in the centre, a connecting cord between the said floor and step, a handle, an axle having two hinged parts pivoted together in the centre and having means for radiating and securing same in position in a horizontal line and in substantially a vertical position, shafts pivoted to the side rails and means for holding same in a forward or back position, substantially as set forth.

No. 65,697. Decolorized Dyed Fibrous Materials.
(*Procédé de décoloration de matières fibreuses.*)

Francis Herbert Oldroyd, Nieder-Gorpe, Naumburg, Bober, Germany, 8th January, 1900; 6 years. (Filed 21st August, 1899.)

Claim.—Improved process of completely decolorizing dyed fibrous materials, consisting in treating these material first in a dissolving bath subjected to the action of heat until the dye adhering to the fibre no longer dissolves, then washing such materials in a decomposing bath containing bi-sulphite of soda and powder or zinc or other substances forming sulphurous and hyposulphurous acids, until the dye is completely removed and also washing and drying the materials in the usual manner, substantially as described and for the purpose set forth.

No. 65,698. Process of Obtaining Phosphorus.
(*Procédé pour obtenir du phosphore.*)



Albright and Wilson, Limited, Oldbury, near Birmingham, England, assignee of James Burgess Readman, Edinburgh, Scotland, 9th January, 1900; 6 years. (Filed 30th May, 1899.)

NOTE.—Patent No. 65,698 is a re-issue of re-issue Patent No. 61,494, bearing date the 25th day of October, 1898.

Claim.—The process of obtaining phosphorus by subjecting materials containing it to heat generated by an electric current within the furnace chamber containing the materials and applied directly to them, substantially as herein set forth.

No. 65,699. Musical Instrument. (*Instrument de musique.*)

Fig. 1.

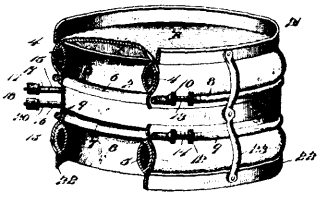


Fig. 3.

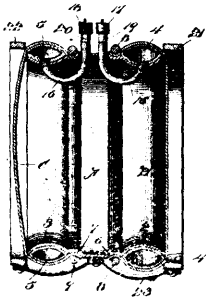
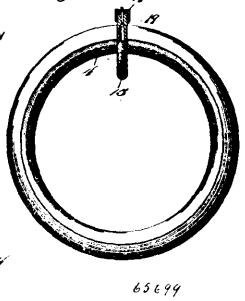


Fig. 2.



65699

Isaac H. Sapp and William T. Stuart, both of Oakland, California, U.S.A., 9th January, 1900; 6 years. (Filed 8th September, 1899.)

Claim.—1st. A musical instrument, including a stretchable head and an expansile head tensioning tube, substantially as described. 2nd. A musical instrument, including a stretchable head and an endless expansile head tensioning tube, substantially as described. 3rd. A musical instrument, including a stretchable head and an expansile endless head tensioning device, substantially as described. 4th. A musical instrument, including a stretchable head, an expansile head tensioning tube, and means for limiting the movement of the latter, substantially as described. 5th. A musical instrument, including a body, a stretchable head secured to the body, and an expansile head tensioning tube located between the head and the body, substantially as described. 6th. A musical instrument, including a body having a groove, a head on the body, means for securing the head in place, and an expansile head tensioning device located in said groove, substantially as described. 7th. A musical instrument, including a body, a head stretched over the same, means for securing the marginal portion of the head to the body, and an expansile head tensioning device located between the head and the body, substantially as described. 8th. A musical instrument, including a body, a head stretched over the same, means for securing the head to the body, a tube adapted to receive a fluid and constituting a head tensioning device, and a supply pipe communicating with said tube and provided with a detachable cap, substantially as described. 9th. A musical instrument, including a body, a head stretched over the same, means for securing the head to the body, a tube adapted to receive a fluid and constituting a head tensioning device, and a supply pipe communicating with said tube and provided with a detachable cap, and also having a valve, substantially as described. 10th. A musical instrument, including a body, a head stretched over the same, an expansile tube situated between the head and the body, and a supply pipe extending through said body and having a removable cap, substantially as described. 11th. A musical instrument, including a body, a head, a tubular tensioning device, and a split ring surrounding the head and serving to hold the latter in place on the body, substantially as described. 12th. A musical instrument, including a body having a groove, a head stretched over the body and the edge thereof being disposed in said groove, a ring for holding said edge in said groove, and a tubular tensioning device disposed between the stretched over portion of the head and the body, substantially as described. 13th. A musical instrument, having two grooves, a head stretched over the body of the instrument, a split ring for securing the edge of the head in one of the grooves, a tubular tensioning device disposed in the other groove, a ring surrounding the head, and means for connecting the said ring with the body of the instrument, substantially as described. 14th. A musical instrument, including a body having two grooves, a head stretched over the body, a split ring for securing the head in one of the grooves and having lugs, an adjusting screw carried by said lugs, a tubular expanding device exposed in the other groove between the head and the body, a supply pipe communicating with said tube and provided with a detachable cap, a ring surrounding the stretched over portion of the head, and rods connecting said last mentioned ring with said body, substantially as described.

No. 65,700. Electricity Transforming Apparatus. (*Appariel à transformer l'électricité.*)

Fig 1

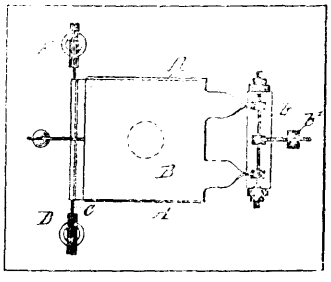
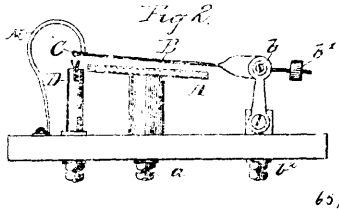


Fig 2.

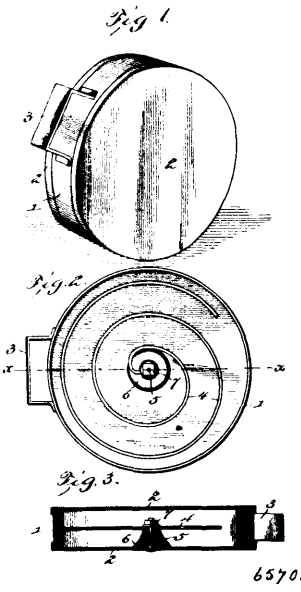


65700

John F. Kelly, and Cummings C. Chesney, both of Pittsfield, Massachusetts, U.S.A., 9th January, 1900; 6 years. (Filed 17th November, 1899.)

Claim.—1st. In combination, a part carrying electrical energy, a part to be protected, a normally open local circuit, both terminals of the local circuit being connected to the system at points traversed by normal currents and means moved by electrical action adapted to automatically close said local circuit on electrical connection between said first part and said part to be protected, and means to vary the flow of current in one of said parts operated at a consequence of the current in said local circuit when it is closed. 2nd. In a device of the character described in a combination, a part carrying electrical energy, a part to be protected, two vanes insulated from each other, and in electrostatic relation and relatively movable, one of said vanes being electrically connected to said part to be protected, a local circuit, both terminals of the local circuit, being connected to the system at points traversed by normal currents, a circuit breaking device operated as a consequence of the current in said local circuit when it is closed, and means for closing said local circuit operated as a consequence of the relative movement of said vanes. 3rd. In a system of distribution by alternating currents the combination of a transformer, a normally open local circuit having both its terminals electrically connected to said transformer, an electrostatically operated device closing said local circuit upon the passage of current from the primary to the secondary circuit of said system and a circuit interrupting device operated as a consequence of the current flowing in said local circuit when closed. 4th. In a device of the character described in combination, a transformer, an electrostatically operated device having two relatively movable vanes insulated from each other, one being electrically connected to the secondary conductor, a local circuit in parallel with a translating device in the secondary circuit, means for closing said local circuit operated by the relative movement of said vanes, and a circuit rupturing device, whose operation is due to the closing of said local circuit. 5th. In combination, a part carrying electrical energy, a part to be protected, a normally open circuit, one of the terminals of which is electrically connected to said part to be protected and the other to one of said parts, and means moved by electrical action to automatically close said local circuit on electrical connection between said first part and said part to be protected, and a circuit breaking device operated as a consequence of the flow of current through said local circuit. 6th. In a device of the character described in combination, a part carrying electrical energy, a part to be protected, two vanes insulated from each other and in electrostatic relation and relatively movable, one of said vanes being electrically connected to said part to be protected, a local circuit, both terminals of the local circuit being connected to the system to points traversed by normal currents, a circuit breaking device operated as a consequence of the current in said local circuit when it is closed, and means for closing said local circuit operated as a consequence of the relative movement of said vanes.

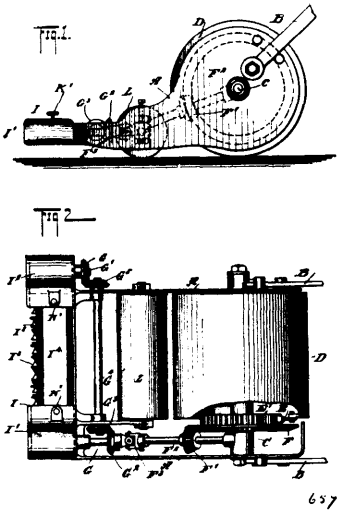
No. 65,701. Tambourine. (*Tambour.*)



Orlando Richards, Bristol, Wisconsin, U.S.A., 9th January, 1900; 6 years. (Filed 12th December, 1899.)

Claim.– 1st. In a tambourine, the combination, with a rim, of a laterally projecting substantially bail shaped handle secured thereto, an unobstructed head secured to each end of the rim, and a convolute gong secured at one end to one of the heads with its outer coil adjacent to the rim and adapted to be thrown into engagement with the head when the gong is vibrated. 2nd. In a tambourine, the combination, with a cylindrical rim, of a bail shaped handle secured thereto, a flat disc shaped head secured to each end of the rim, one of which is perforated at its centre, a perforated collar upon the inner face of said head, a convolute gong upon the collar, the inner end of which is provided with an eye, a pin through the eye, the collar and the perforation of the head, and a nut upon the inner end of the pin, said heads being parallel with each and unobstructed upon their outer faces and the gong lying in a plane parallel therewith and substantially midway therebetween.

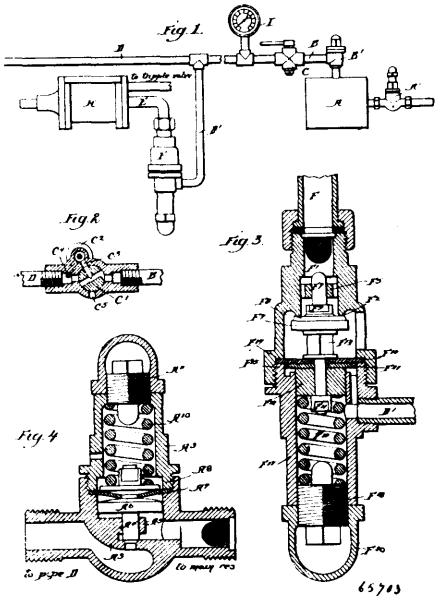
No. 65,702. Lawn Mower. (*Faucheuse de pelouse.*)



Mark N. Cormack, New York City, New York, U.S.A., 9th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. A lawn mower having a frame, a casing mounted on the frame, a sprocket wheel mounted in each end of the casing, an endless line of cutters movable in the casing and driven by the sprocket wheels, a top plate forming part of the casing and movable independently thereof, springs pressing the top plate against the top line of cutters, and set screws held in the casing and bearing on the casing and bearing respectively against the springs to sustain the same. 2nd. A lawn mower having individual cutters arranged to be driven in a continuous path, each cutter being formed of a plate provided as one edge with a guide flange and at the opposite edge with a knife blade, the plate having its ends bent up into proximity with each other, and having flanges struck up from an intermediate point on the plate to form an orifice in the plate for engagement with a sprocket wheel. 3rd. A lawn mower having a frame, a casing carried on the frame, a series of cutters mounted in the casing, means for driving the cutters in a continuous endless line, a top plate forming part of the casing and movable independently thereof and bearing down on the cutters, a spring pressing the top plate, and a screw set carried on the casing and engaging the spring to sustain the same. 4th. A mower provided with a series of separate individual cutters adapted to travel in a continuous endless line and being disposed in two oppositely moving runs, one above the other and in direct contact with each other, so that the edges of the cutters move directly past each other to perform the cutting, and means for carrying and driving the cutters. 5th. A lawn mower having a casing, a middle portion of which is contracted to form a narrow passage, a sprocket wheel mounted in one end of the casing, and an endless line of separate individual cutters mounted in the casing to travel continuously therein, the cutters at the middle portion or said narrow passage of the casing being disposed in two runs, one above the other and in direct contact with each other, so that the edges of the oppositely moving cutters will co-act to perform the cut. 6th. A lawn mower having a casing, provided with a contracted middle portion and with enlarged end portion, a sprocket wheel mounted in each end portion of the casing, a rib fitted in each end portion of the casing, respectively adjacent to the sprocket wheels, and a series of separate individual cutters mounted in the casing to move in a continuous endless line, and being driven by the sprocket wheels, the cutters at the middle of the casing being disposed in two oppositely moving parallel runs arranged in direct contact with each other, so that the edges of the cutters will move past each other and operate jointly to perform the cut. 7th. A lawn mower having a casing, the middle portion of which is contracted to form a narrow passage, and the end portions of which are enlarged to form loops, a series of separate individual cutters adapted to travel in said narrow passage and being disposed in two oppositely moving runs one above the other and in direct contact with each other, so that the edges of the cutters move directly past each other to perform the cutting, and means situate in said loops by which to push the cutters continuously through the casing.

No. 65,703. Air Brake for Railway Trains.
(*Frein à air pour chars.*)

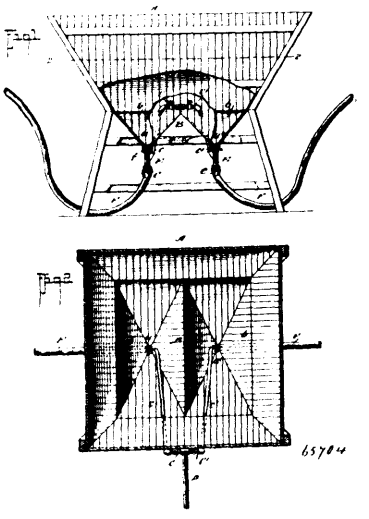


Jeremiah F. Voorhees, Philadelphia, Pennsylvania, U.S.A., 9th January, 1900; 6 years. (Filed 12th December, 1899.)

Claim.—1st. In an automatic fluid pressure brake apparatus, the combination of a brake cylinder, a quick acting relief valve connected directly to a brake cylinder, and means for enabling an engineer from a locomotive to regulate the maximum load of said relief valve, substantially as and for the purpose specified. 2nd. In combination with a fluid pressure brake apparatus, a storage reservoir, a pressure reducing valve, an auxiliary engineer's valve, a retaining pipe, a quick acting system of relief valves adapted to automatically release fluid pressure from each brake cylinder in excess of an amount determined by a pressure controlled by an engineer from a locomotive and acting in conjunction with a spring at each relief valve to regulate the pressure in each brake cylinder immediately to the atmosphere as rapidly as it can enter said brake

cylinder, whereby the accumulation of pressure therein is automatically limited to conform to an amount predetermined by an engineer through said auxiliary engineer's valve previous to an application of the brakes, regardless of the amount of pressure stored in the auxiliary reservoirs, or its free admission to the brake cylinders, substantially as set forth. 3rd. The combination of a brake cylinder, a quick acting relief valve connected to said brake cylinder, a retaining pipe, an auxiliary engineer's valve, means whereby the maximum load of said relief valve can be regulated by an engine man from a locomotive, thereby enabling the maximum accumulation of pressure in said brake cylinder to be determined by the engineer previous to an application of the brakes, and according to the probable resistance to their action regardless of the free admission of pressure to said brake cylinder, substantially as specified. 4th. In a fluid pressure brake apparatus, the combination of an auxiliary reservoir, a tripple valve, a brake cylinder, an automatic relief valve connected to said brake cylinder, a retaining pipe, an auxiliary engineer's valve, and means whereby a pressure controlled by an engineer can act in conjunction with a spring to regulate the maximum load of said relief valve, whereby a pressure in said auxiliary reservoir sufficient to furnish a braking force in the brake cylinder connected thereto proportionately greater than the weight of the car is rendered ineffectual to apply the brakes with greater force than determined by the engineer previous to an application of the brakes, and without an undue loss of pressure in said brake cylinder in case of the train parting. 5th. The combination with a fluid pressure brake apparatus, of a valve casing connected with a brake cylinder through a pipe or port, and with an engineer's valve through a system of pipes, and containing a relief valve interposed immediately between a brake cylinder and the atmosphere, a diaphragm or piston interposed between said valve and engineer's valve, a seat for the relief valve having a sufficiently large opening through it to release fluid pressure from a brake cylinder as rapidly as it can enter the same, by a slight movement of the valve from its seat, thereby reducing by expansion into the chamber within the valve casing the exhaust fluid to atmospheric pressure without causing appreciable back pressure on the surface of the valve exposed to the atmosphere, a spring acting in conjunction with fluid pressure admitted into the connecting pipes through said engineer's valve to act on said interposed diaphragm to determine the load of said relief valve, substantially as specified. 6th. The combination with an automatic fluid pressure brake system, of a storage reservoir, a line of pipe connected with said storage reservoir, or with the atmosphere through a valve controlled by an engine man at a locomotive, and with a valve casing interposed immediately between a brake cylinder and said line of pipe, said casing containing a valve controlling a port opening immediately to the atmosphere from the interior of the valve casing subject to fluid pressure acting simultaneously on the piston on the brake cylinder to apply the brakes and said valve in direction to move it from its seat against the resistance of a spring acting in conjunction with fluid pressure admitted into the connecting pipe through said engineer's valve to act on a piston or diaphragm in direction to retain the valve on its seat, whereby the accumulation of pressure in a brake cylinder exceeding an amount determined by the resistance of a spring is automatically regulated to conform to an amount determined by a pressure controlled by an engine man from a locomotive, substantially as set forth. 7th. The combination of a valve casing, a diaphragm or piston fitted therein and connected with a valve controlling a connection between the interior of said casing subject to pressure from a brake cylinder and the atmosphere, a seat for the valve situated in a manner that pressure within an opening through the seat acts on said valve in direction to move it from its seat while the opposite surface of the valve is exposed to the atmosphere, and the relative area of the valve to that of said diaphragm determines the effectiveness of similar pressures acting in opposite directions to control the action of the valve, a stop for limiting the movement of the valve from the seat, thereby reducing the pressure of the exhaust fluid by expansion into the space between the valve and its actuating diaphragm, a port or pipe for admitting fluid pressure to act on the comparatively large area of said display in direction to retain said valve on its seat, for regulating a fluid pressure within a brake cylinder by a proportionate less amount of controlling pressure, substantially as specified. 8th. A valve casing connected directly with a brake cylinder through a pipe or port, and to an auxiliary train pipe, and containing a relief valve opening from said brake cylinder to the main body of the casing open to the atmosphere, said relief valve being controlled by fluid pressure in said auxiliary train pipe acting on a piston or diaphragm interposed between said auxiliary train pipe, and the main body of the casing open to the atmosphere and carrying a stem or projection to engage with said relief valve, an adjustable spring acting in concert with fluid pressure acting on said diaphragm to counteract pressure in said brake cylinder acting to open the relief valve, substantially as specified. 9th. In a fluid pressure brake apparatus, an automatic valve controlling a connection between a main fluid pressure supply and a pipe for supplying fluid pressure to an auxiliary train pipe, said valve being opened by fluid pressure from the main supply and closed by the action of a spring, substantially as specified. 10th. The combination with the main fluid pressure supply of an automatic brake apparatus, of a supply pipe A^2, an automatic retaining valve A^1, an auxiliary storage reservoir A, a pressure reducing valve B^1, pipe B, and an engineer's valve C, for regulating a flow of fluid pressure from said main supply to an auxiliary train pipe, substantially as specified. 11th. In combination with a fluid pressure brake apparatus, a supply pipe A^2, an automatic retaining valve A^1, a storage reservoir A, connecting pipe B, reducing valve B^1, an engineer's valve C, retaining pipe D, branch pipe D^1, quick acting relief valve F connected to a brake cylinder H, substantially as specified.

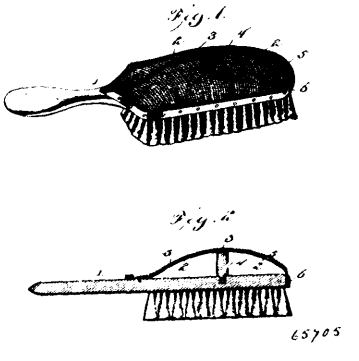
No. 65,704. Grain Trimming Apparatus.
(*Appareil à charger le grain.*)



Charles T. Sudeman and George W. Lacy, both of Galveston Texas, U.S.A., 9th January, 1900; 6 years. (Filed 12th December, 1899.)

Claim.—1st. A collecting trough having a converging bottom terminating in a plurality of separate discharges, a pendent boot member secured to each discharge, a cut off valve in each boot, a feed pipe adapted to receive the air under pressure, said pipe being located outside the bin and having valved laterals terminating in downward extensions discharging into the boots at a point below the cut off valves therein. 2nd. An apparatus for the purposes described, comprising a bin having converging sides whereby a contracted bottom is formed, a transverse pyramidal partition B, separating the said bottom into two collecting compartments, a discharge boot projected from the bottom of each compartment, said boots having cut off valves, a feed pipe adapted to convey air under pressure, said pipe having valved laterals adjacent the outer side of the bin, said laterals extending into the bin and terminating at points in line with the discharge orifices of the collecting space and then projected down through the bottom of the bin and communicating with the boots at a point below the valve thereof, and a flexible offtake pipe F, connected with each boot, all being arranged, substantially as shown and described.

No. 65,705. Clothes Brush. (*Brosse pour vêtements.*)

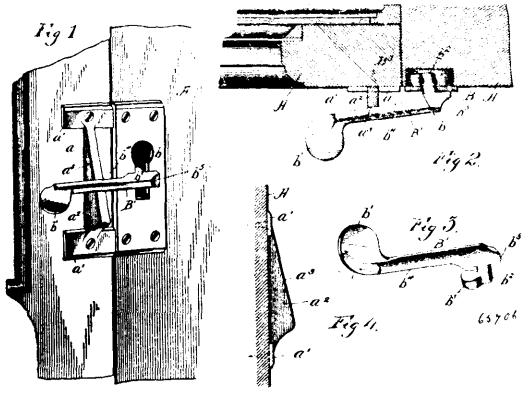


Louis Frederitzi, Maxville, Missouri, U.S.A., 9th January, 1900; 6 years. (Filed 12th December, 1899.)

Claim.—The combination with the back of a brush, of a wire gauze supporting frame comprising an arched wire 2 extending longitudinally of the brush and secured at its ends thereto, a similarly arched wire 3 crossing said longitudinal wire at or near the centre of its length, and a post 4 secured to the back of the brush and engaging said arched wires at their point of intersection for upholding them, a wire gauze covering 5 held removed from the back of the brush at its center by said supporting frame and having

its edges secured to the brush, and a binding strip 6 secured to said brush and covering the edges of the wire gauze, substantially as described.

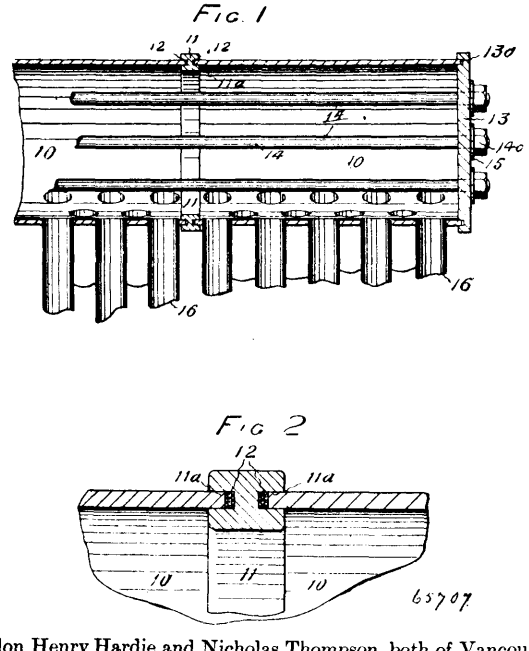
No. 65,706. Sash Holder. (*Arrête croisée.*)



Josiah Bruce Payne, Granby, Quebec, Canada, 9th January 1900; 6 years. (Filed 13th December, 1899.)

Claim.—1st. A sash holder, comprising a plate adapted to be secured to a window frame and having a suitable slot, a cam plate adapted to be secured to the window sash, and a lock bar pivotally connected to said slotted plate and adapted to engage the said cam plate for locking the parts together, substantially as described. 2nd. A sash holder, comprising a plate adapted to be secured to a window frame and having a suitable slot, a cam plate adapted to be secured to the sash and provided with an outwardly projecting rib having an inclined edge, and a lock bar removably pivoted to said alotted plate and adapted to engage the inclined edge of said cam plate for locking the parts together, substantially as described.

No. 65,707. Boiler. (*Chaudière.*)



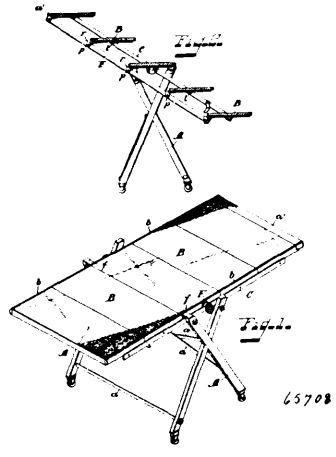
Gordon Henry Hardie and Nicholas Thompson, both of Vancouver, British Columbia, Canada, 9th January, 1900; 6 years. (Filed 14th December, 1899.)

Claim.—In a sectional boiler, cylinders 10, rings 11 having annular grooves on opposite sides thereof, packing in such grooves to support the ends of the cylinders, heads 13 having annular grooves 13*a* therein similar to the grooves in the said rings, packing in such grooves and one or more stay rods 14 passing through the cylinder and the heads and nuts on the ends of the said rods, substantially as and for the purposes set forth.

No. 65,708. Shelf and Table. (*Tablette et table.*)

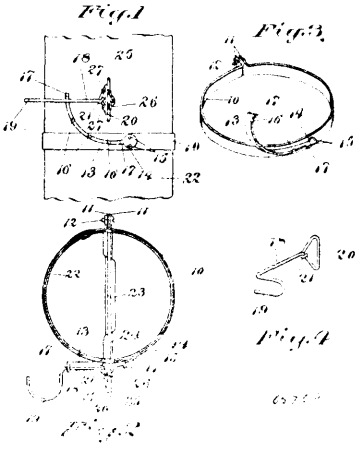
Edward B. Weston, Dayton, Ohio, U.S.A., 9th January, 1900; 6 years. (Filed 14th December, 1899.)

Claim—1st. In a convertible shelf and table, the combination, with suitable supports, of a series of shelves, single side bars pivoted to the supports and a rear bar pivoted to the shelves, said bars being pivoted respectively at or near the middle of the sides and rear edges



of the shelves, with means for locking said pivoted parts, whereby the pivoted shelves may be swung in alignment with the fixed shelf, and locked in any desired position, substantially as shown and described. 2nd. In a convertible shelf and table, the combination, with suitable supports, of a series of shelves, with bars pivoted thereto and to the supports, radially toothed plates on the supports with corresponding toothed plates on the bars at their pivoted connection therewith, and a rod, with means for tightening same, passing through said locking plates, whereby same may be drawn together for locking the device in any desired position, substantially as shown and described. 3rd. In a convertible shelf and table, the combination, with suitable supports, of a series of shelves with bars pivoted thereto and to the supports, said shelves carrying lugs at the rear, to receive and serve as a rest for the next succeeding shelf, with locking device therefor, whereby said shelves may be converted into a rigid and secure horizontal table, substantially as shown and described. 4th. In a convertible table and shelf, the combination, with suitable supports, of a series of shelves with side bars pivoted thereto, and a rear bar pivoted to the shelves, said shelves carrying lugs at the rear corners and a lug at or near the centre of the rear edges thereof to which said rear bar is pivoted, said lugs forming stops or rests for the next succeeding shelf, substantially as shown and described. 5th. In a convertible shelf and table, the combination, with suitable supports, of a series of shelves with bars pivoted thereto and to the supports, catches pivoted to said bars at the meeting point of the two lower shelves, shaped to catch under the lowest shelf when adjusted as a table to hold the same rigidly in place, substantially as shown and described. 6th. In a convertible shelf and table, the combination, with suitable supports, of a series of shelves, with bars pivoted thereto and to the supports, and a rod provided with a head at one end and a thumb screw at the other, said rod being connected with the supports and pivoted bars, whereby the bars may be clamped in any desired position by tightening the thumb screw, substantially as shown and described.

No. 65,709. Stove Damper Lock. (*Serrure de clé de poêle.*)

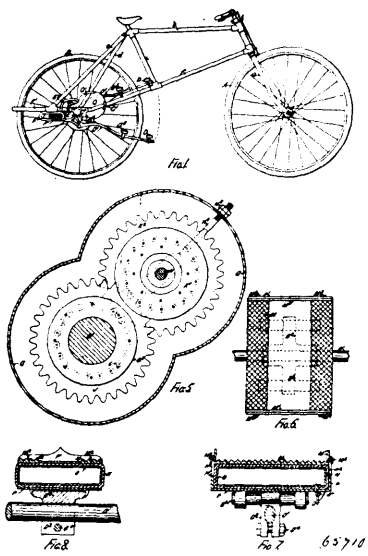


Thomas F. Fallon, Lawrence, Massachusetts, U.S.A., 9th January, 1900; 6 years. (Filed 14th December, 1899.)

Claim.—1st. A damper or locking device consisting of a divided band or collar having means for clamping the same around a stove

pipe, a yieldable arm or stem having a head for attachment to a damper, and a notched holding segment attached at one end to said band or collar and extending outwardly therefrom to lie in the path of said yieldable arm or stem, which arm, by its inherent elasticity, is adapted to spring into engagement with either of the notches in said segment, substantially as described. 2nd. The combination with a stove pipe and a damper, of a band or collar clamped to said pipe, a notched segment fixed to said band or collar and an elastic arm or stem having one end thereof bent to form a broad head which is applied against one side of and is united firmly to a finger piece on the damper, said arm springing into engagement with the notched segment to be held thereby in its adjusted positions, substantially as described.

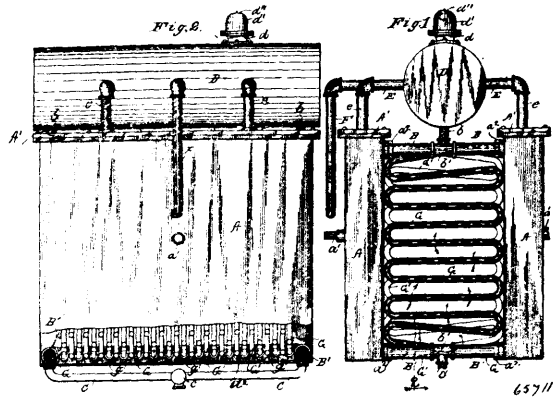
No. 65,710. Pedal Driven Machinery.
(*Moteur à pédale.*)



William James Thompson, West Kogarah, near Sydney, New South Wales, Australia, 9th January, 1900; 6 years. (Filed 27th December, 1898.)

Claim.—1st. The combination with a driving axle having a crank, and a driving wheel on the axle, of a plurality of fulcra guides of different configuration, and a pedal lever pivotally connected with the axle crank and having a plurality of fulcra to bear, respectively, against the fulcra guides and each of said fulcra at certain parts of its travel leaving or passing from engagement with its guide and at other parts of its travel bearing against its guides, substantially as and for the purposes described. 2nd. The combination with a driving axle having a crank, and a driving wheel on the axle, of a plurality of fulcra guides of different configuration arranged in operative relation and one having an extremity terminating at the extremity of another, and a pedal lever pivotally connected with the axle crank and carrying a plurality of fulcra to bear, respectively, against the fulcra guides and each of said fulcra at certain parts of its travel leaving or passing from engagement with its guide, and one of said fulcra at certain parts of its travel moving from one of the fulcra guides onto another, substantially as and for the purposes described. 3rd. The combination with a driving axle having a crank, a driving wheel loose on the crank, and multiplying gearing operated by the axle to turn the driving wheel, of a plurality of fulcra guides of different configuration arranged above the level of the crank axle, and a pedal pivotally connected with the axle crank and having a plurality of fulcra in rear of the axle to bear, respectively, on the fulcra guides and each of which at certain parts, of its travel leaves or passes from engagement with its guide and at other parts of its travel bears against its guide, substantially as and for the purposes described. 4th. The combination with an axle having a crank, a driving wheel loose on the axle, and gearing for driving the wheel from the axle, of fulcra guides located in rear of the axle, one being curved and the other substantially rectilinear and having one extremity terminating at one extremity of the curved guide to form practically a continuation thereof, and a pedal lever pivotally connected with the axle crank and carrying a plurality of fulcra rollers or wheels to travel, respectively, against the fulcra guides and each leaving or passing from engagement with its guide at certain of its travel, one of said fulcra rollers or wheels arranged to move from the rectilinear to the said curved guide, substantially as and for the purposes described.

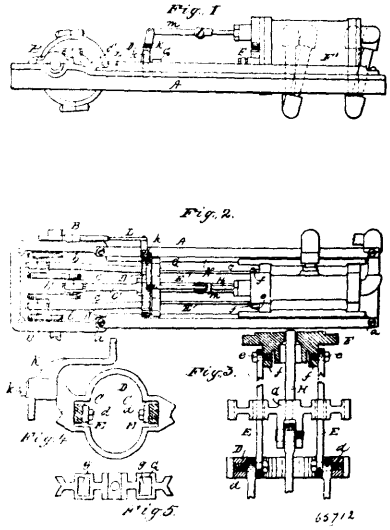
No. 65,711. Steam Boiler. (*Chaudière à vapeur.*)



Emmett McConville, Pittsburg, Pennsylvania, U.S.A., 9th January, 1900; 6 years. (Filed 15th December, 1899.)

Claim.—1st. In combination with two oppositely arranged water boxes, continuous water coils for generating steam arranged in series, each alternate coil being secured to its independent vertical box, and said boxes tied together by water and steam circulating tubes. 2nd. In combination with two oppositely arranged water boxes having reinforcing strips thereon, continuous water coils arranged so that each alternate coil is secured to its independent box through the medium of screw bushings and flanges on the free ends of said coils contacting soft metal washers or gaskets as specified. 3rd. In combination with two water or steam boxes, continuous water or steam coils arranged so that each alternate coil is secured to its independent water or steam box through the medium of screw bushings, of braces supporting each coil by means of adjacent collars and secured to the water or or steam boxes as specified. 4th. In a steam generator consisting of water and steam boxes tied together by means of four ends of tubing having a tee centrally located in each of the four sets of tubing, and a feed water pipe connecting the two lower sets of tubing for delivering water to said generators at four distinct and distant points in combination with water and steam coils secured individually to each water and steam box as specified. 5th. In combination with two water boxes having reinforcing strips thereon tied together by means of water and steam circulating tubing, water and steam coils secured to said water boxes by bushings and braces, one trunnion attached to each of the two water boxes for supporting the same in a movable position as shown and specified.

No. 65,712. Steam Engine. (*Chaudière à vapeur.*)



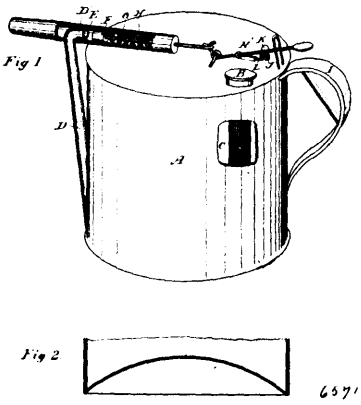
Emmett McConville, Pittsburg, Pennsylvania, U.S.A., 9th January, 1900; 6 years. (Filed 15th December, 1899.)

Claim.—1st. In combination with a reciprocating steam cylinder moving on ways or guides, friction rollers interposed between said cylinders and guides, longitudinal grooves in projections integral with said cylinder, also similar grooves in the ways or guides secured to the engine bed, said guides being adapted to receive friction rolls which are provided with annular ribs for entering said longitudinal grooves in the cylinder and ways, for the purpose as shown and described. 2nd. In combination with a reciprocating engine

mounted on ways secured to an engine bed and operated by two reach rods and three connecting rods and also two cross heads, of an eccentric and valve rod connection through the medium of a lever pivoted to a movable yoke cross head, as specified. 3rd. In combination with a steam engine, a connecting rod provided with a bisected box, an enlarged head surrounding said box, springs at the opposite ends or sides of said box located in recesses formed in the same, and projections integral with the connecting rod and extending into said recesses against said springs, substantially as described.

No. 65,713. Liquid Dispensing Can.

(*Bidon dispensateur de liquides.*)



Charles McAllister Husted, Prescott, Arizona, U.S.A., 9th January, 1900; 6 years. (Filed 16th December, 1899.)

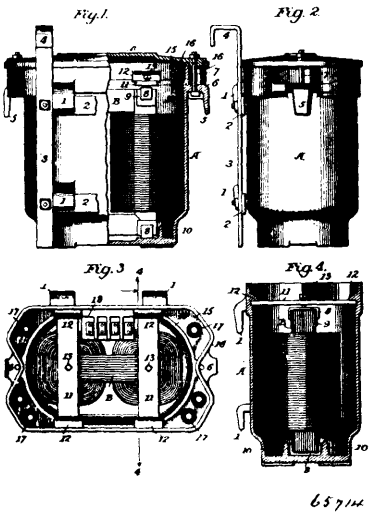
Claim.—1st. A dispensing can, having a tube extending horizontally outward from the top thereof, a nozzle having the lower end connecting with the bottom of the can, the upper end extending into the horizontal tube and having its end within the tube turned in the direction opposite to the discharge nozzle, and a spring pressed stopper adapted to close against said end. 2nd. In a dispensing can, a horizontal tube fixed upon the top of the can, a nozzle having the lower end in open communication with the interior of the can near the bottom, the upper end extending into the horizontal tube and turned backwardly from the discharge end of said tube, a spring pressed valve closable against said open end, a valve stem extending through the rear end of said tube, and a bell crank lever, one arm of which connects with said stem, and the other is provided with a press button approximately in line above the handle of the can whereby the valve may be opened by pressure of the thumb of the hand holding the can. 3rd. In a dispensing can, a tube fixed horizontally upon the top of the can and projecting outwardly therefrom, a nozzle the lower end of which is in open communication with the lower part of the can and the upper end extending into the horizontal tube and turned backwardly from the discharge end thereof, a spring pressed valve closable against the end of said nozzle, a stem extending from said valve through the rear end of the horizontal tube, a bell crank lever, one end of which is connected with the valve stem, and the other provided with a thumb piece approximately in line above the handle of the can, an air vent passage, a stopper therefor, a lever arm, a fulcrum shaft carrying the stopper and a lever arm extending from said shaft and engaging the lever which acts to open the pouring valve whereby said valve and the vent are simultaneously opened and closed. 4th. In a dispensing can, a pouring spout with interior reversed nozzle connecting with the bottom of the can, spring pressed controlling valve, an air vent connected actuating levers, a filling opening for the can, and a screen or strainer removably connected therewith, substantially as described.

No. 65,714. Electric Transformer.

(*Transformeur électrique.*)

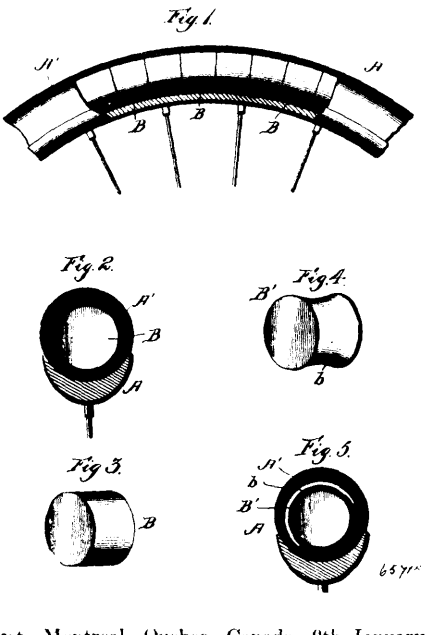
James W. Packard, Warren, Ohio, U.S.A., 9th January, 1900; 6 years. (Filed 21st June, 1899.)

Claim.—1st. In a converter core, the side sections composed of groups of strips of equal length, the groups being arranged side by side and having square and inclined ends alternating, and the extreme ends of all of the strips being arranged to register, whereby the sections are provided with solid ends adapted to be held in a chuck for winding, substantially as described. 2nd. In a converter core, the side sections composed of groups of strips of equal length which are square at one end and inclined at the other, the groups being arranged side by side with the square and inclined ends alternating, and the extreme ends of all of the strips being arranged to register, whereby the sections are provided with solid ends adapted to be held in a chuck for winding, substantially as described. 3rd. A converter core, having its sides and ends built up of groups of strips each having a square end and an inclined end, the said groups being arranged with the inclined ends alternately facing in opposite directions, the ends of all the strips in the side sections being arranged to register, and the inclined ends of the strips in the



end sections being arranged to break joints with the adjacent square ends of said end sections and to fit between the square ends of the side sections, substantially as described. 4th. In a converter, the combination with the casing and the core, of the projections upon the bottom of the casing for holding the lower end of the core, shoulders at the upper end of the casing, transverse bars inserted under the shoulders and above the core, and set screws extending through said bars and bearing upon the upper end of the core, substantially as described. 5th. In a converter, the combination with the casing and two pairs of depending hooks upon the back thereof, of the frame comprising horizontal bars for engaging said hooks and vertical bars attached to the horizontal bars and provided with hooks at their ends, substantially as described.

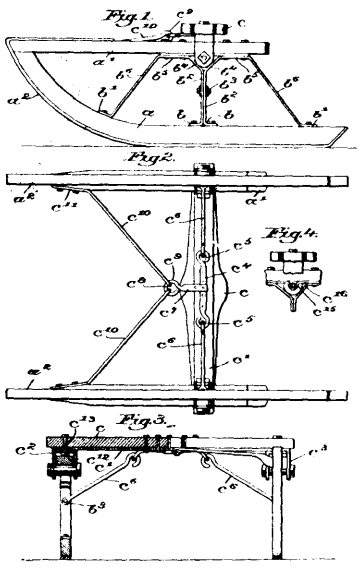
No. 65,715. Pneumatic Tire. (*Bandage pneumatique.*)



Alfred Fiset, Montreal, Quebec, Canada, 9th January, 1900; 6 years. (Filed 3rd July, 1899.)

Claim.—1st. A pneumatic tire, comprising an elastic tire and a plurality of elastic chambers filled with compressed air and compacted within said tire, whereby said tire is distended to its maximum capacity, said air chambers having concaved peripheries, substantially as described. 2nd. A pneumatic tire, comprising an elastic tire and a series of flexible tubes adapted to be inserted in said tire, each tube containing a plurality of removable elastic chambers filled with compressed air and compacted within said tube, substantially as described.

No. 65,716. Sled. (*Traineau.*)



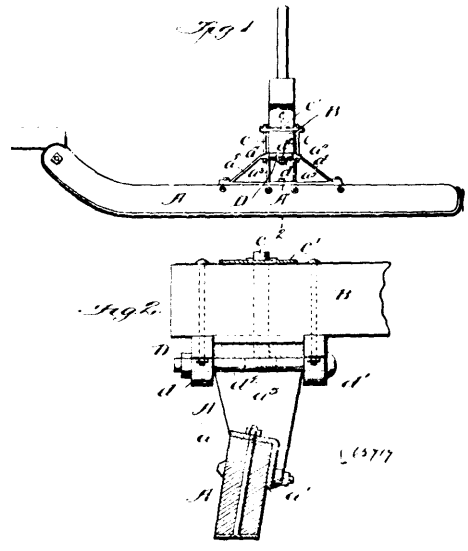
Homer Almonte Spalding, Marlboro, Massachusetts, U.S.A., 9th January, 1900; 6 years. (Filed 17th August, 1899.)

Claim.—1st. In a sled of the kind described, opposite runners connected by a cross beam, said cross beam having secured on its underside a single plate with downturned ends, L-shaped pieces secured adjacent and opposite said ends, the downhanging parts of said pieces and said adjacent ends being perforated and closing between them the upper parts of said runners, bolts passed through said perforations and clamping said runners in place, substantially as described. 2nd. In a sled of the kind described, opposite runners connected by a cross beam, said cross beam having secured on its underside a single plate with downturned ends, L-shaped pieces secured adjacent and opposite said ends, the downhanging parts of said pieces and said adjacent ends being perforated and closing between them, the upper parts of said runners, bolts passed through said perforations and clamping said runners in place, the runners having horizontal plates with depressions therein partially surrounding said bolts and constituting bearings therefor, substantially as described. 3rd. In a sled of the kind described, opposite runners each having a top beam and a runner, braces connecting them and including a two part knee made of heavy plate metal having its vertical parts bolted together and a divergent top part b^4, a horizontal plate having a depression between said divergent parts, a cross beam connecting said two runners and carrying on its underside a plate with downturned ends, depending ears secured to said plate adjacent said ends, the top beams of said runners being held between said downturned ends and said ears, and bolts connecting said ends and ears and having bearings in said depressions, substantially as described. 4th. In a sled of the kind described, each having a top beam and a runner, braces connecting them and including a two part knee made of heavy plate metal having its vertical parts bolted together and a divergent top part b^4, a horizontal plate having a depression between said divergent parts, a cross beam connecting said two runners and carrying on its underside a plate with downturned ends, depending ears secured to said plate adjacent said ends, the top beams of said runners being held between said downturned ends and said ears, and bolts connecting said ends and ears and having bearings in said depressions, braces secured at their inner ends to and beneath said cross beam, and at their outer ends being bifurcated to enclose said two part knee and being bolted thereto, substantially as described. 5th. In a sled of the kind described, opposite runners each having a top beam and a runner, braces connecting them and including a two part knee made of heavy plate metal having its vertical parts bolted together and a divergent top part b^4, a horizontal plate having a depression between said divergent parts, a cross beam connecting said two runners and carrying on its underside a plate with downturned ends, depending ears secured to said plate adjacent said ends the top beams of said runners being held between said downturned ends and said ears, and bolts connecting said ends and ears and having bearings in said depressions, and forwardly extending braces connected at their rear ends to said cross beam, and at their forward ends to said opposite runners, substantially as described.

No. 65,717. Sleigh. (*Traineau.*)

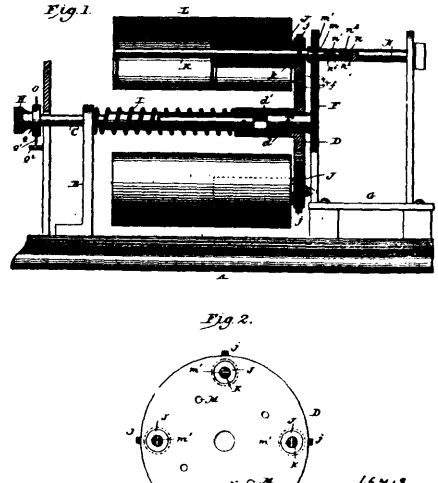
William Richard Hatton, Holland, Manitoba, Canada, 9th January, 1900; 6 years. (Filed 29th June, 1899.)

Claim.—1st. In a sleigh, the combination with the runner thereof, of a bracket secured thereto, a cross beam secured to said bracket and having a rocking movement thereon, and reevepins secured in the upper part of said bracket and connected to said cross beam, substantially as described. 2nd. In a sleigh, the combination with the runner thereof, of a bracket secured to said runner and compris-



ing a base plate and vertical and inclined braces, a cross beam mounted upon said inclined brace and having a rocking movement thereon, a clip secured to said beam, the clip bolt of which passing beneath the inclined brace, and reeve pins secured in openings in the inclined brace and connected to the said cross beam, substantially as described. 3rd. In a sleigh, the combination with the runner thereof, of a bracket secured to said runner and comprising a base plate and vertical and inclined braces, a depending flange integral with said base plate and extending down on the inner side of the runner, a cross beam mounted upon said inclined brace, reeve pins secured in openings in the inclined brace and connected to said cross beam, clip heads secured to the under side of the cross beam and spaced to engage the opposite sides of said inclined brace, a clip bolt passing through openings in said clip heads and located beneath said inclined brace, and a nut threaded on said clip bolt for securing the parts together, substantially as described.

No. 65,718. Phonograph Multiple Mandrel.
(*Mandrin de phonographe multiple.*)

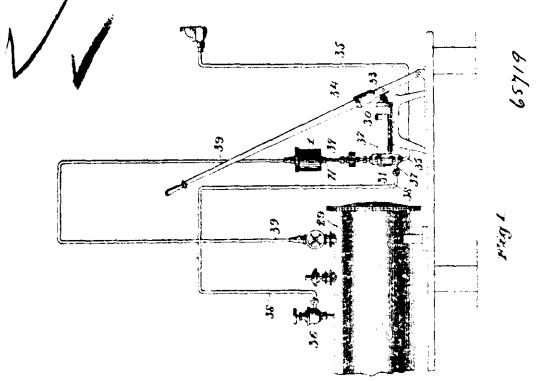


Arthur Bremer Robinson, Dickinson, North Dakota, U.S.A., 9th January, 1900; 6 years. (Filed 1st September, 1899.)

Claim.—1st. The combination of a supporting frame, a reel comprising a shaft, a disc, and laterally projecting sleeves, a series of mandrels each having a mandrel shaft fitting a sleeve, devices for detachably securing the mandrel shafts to the sleeves, a power shaft and devices for clutching the power shaft to a mandrel shaft. 2nd. The combination of a supporting frame, a magazine shaft mounted in bearings therein, a disc secured to the shaft, a spring for moving the shaft in one direction, a series of sleeves detachably secured to the disc and projecting laterally therefrom, a series of mandrels

each having a shaft detachably connected with a sleeve, means for turning the magazine shaft, a power shaft, and devices for clutching the mandrel to the power shaft. 3rd. The combination of a supporting frame, a magazine shaft mounted in bearings therein, a disc having a hub attached to the magazine shaft, a spring surrounding the shaft, a handle on the shaft for moving it longitudinally against the force of the spring and for turning it, an indicator on the shaft adjacent to the handle, a series of sleeves detachably secured to the disc and projecting laterally therefrom, a series of mandrels each having a shaft, detachably connected with a sleeve, a power shaft and devices for clutching a mandrel shaft with the power shaft.

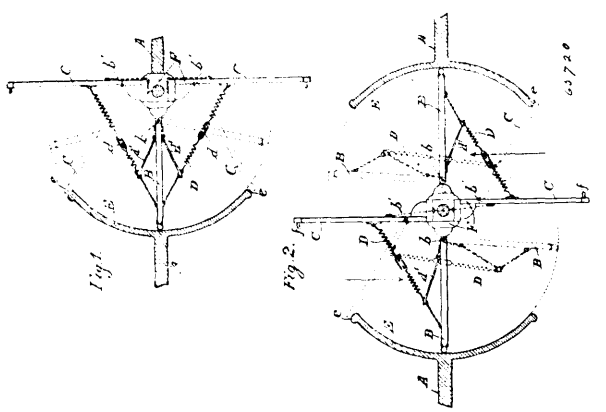
No. 65,719. Filter. (*Filtre.*)



Peter E. Malmstrom, New York City, New York, U.S.A., 9th January, 1900; 6 years. (Filed 22nd November, 1898.)

Claim.—1st. In a filter, the combination with a casing having an inlet through the centre of its bottom, a cover detachably connected thereto, an outlet tube made integral with said cover, and projecting into said casing from the centre of said cover, a shoulder formed on said tube just inside of said cover and a shoulder formed thereon near the lower end of said tube, the said tube closed at its lower end, and screw threaded below said lower lugs, inlets into the bore of said tube between said lugs, a washer fitted on said upper lug just inside of said cover, a cap screwed on the lower end of said outlet tube, a washer on the upper face of said cap, a filtrant having a bore substantially equal in diameter to that of said lugs, inclosing said exit tubes and supported between the said washer on the said upper lug and the washer on the said cap, substantially as described. 2nd. In a filter, the combination with a casing having an appertured lug formed in its bottom at the centre thereof, said lug being interiorly screw threaded and squared outside to form a nut, the aperture therethrough forming the inlet into said filter, a cover detachably connected to said casing, an apertured lug formed upon the outside of said cover at the centre thereof and integral therewith, and squared outside to form a nut, a tube formed integral with said cover, extending into said filter, and forming a continuation of the opening through the lug on the outside of said cover, said tube being closed at its lower end, and provided with a lug at its upper end, and one near its lower end, and having lower end openings into the bore between said lugs, a cap screw threaded on the lower end of said tube, and a filtrant held between said cap and the cover, washers being inserted between the cap and cover and the filtrant, said filtrant inclosing said outlet tube, substantially as described.

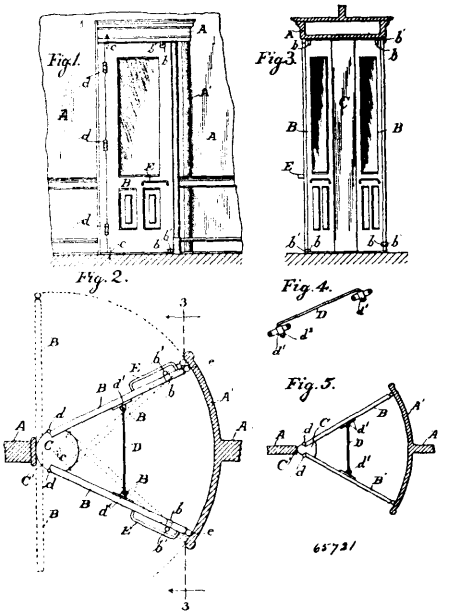
No. 65,720. Storm Door. (*Contre porte.*)



Oscar Cobb, Chicago, Illinois, U.S.A., 10th January, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. The combination with a door casing having one side made in the form of an arc, of a door pivoted to that side of the casing which is opposite to the arc so as to swing through the arc and open the passage way in either direction, flaps adapted to cover the passage way on either side and oppositely hinged to the same side of the casing as the door and springs connecting the flaps with the door as specified. 2nd. The combination with a door casing having one side made in the form of an arc, of a door pivoted to that side of the casing which is opposite to the arc so as to fill the opening and swing out of the arc in one direction for opening the passage, a flap adapted to cover the passage opening and hinged to the same side of the casing as the door so as to swing in the same direction with the door, and a spring connecting the flap with the door and adapted to cause the flap to move with the door as specified.

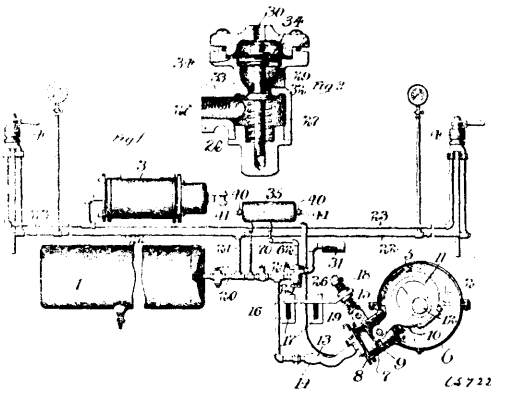
No. 65,721. Storm Door. (*Contre porte.*)



Oscar Cobb, Chicago, Illinois, U.S.A., 10th January, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. The combination with casing forming a segmental arc on one side of the opening, of the doors pivoted so as to turn on the casing at the side of the opening opposite to the arc, the doors being at an angle inclosed by the arc, and stops adapted to operate with relation to the doors and arc casing, substantially as specified. 2nd. The combination with the casing forming a segmental arc on one side of the opening, of the doors B, B, mounted on the pivoted standard C at an angle to one another and adapted to turn into and from the arc side of the casing, and means for preventing them from moving through the arc, substantially as specified.

No. 65,722. Compressor for Air Brake Systems.
(*Compresseur pour freins à air.*)



Neils Anton Christensen, Milwaukee, Wisconsin, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

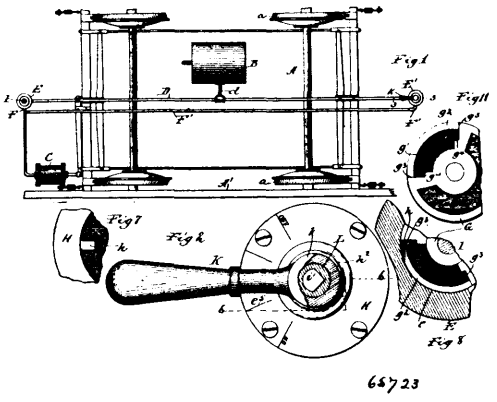
Claim.—1st. An automatic governor for fluid compressors, comprising, in combination with a compressor, a reservoir, and a check valved reservoir pipe therebetween, a fluid pressure actuated vent valve device communicating with said reservoir pipe at a point

between the compressor and the check valve, fluid pressure mechanism communicating with said reservoir pipe at a point between the reservoir and the check valve and adapted to admit reservoir pressure to the vent valve device when the reservoir pressure has reached a predetermined point, and means for automatically releasing such admitted pressure. 2nd. An automatic governor for fluid compressors or pumps, comprising, in combination with a compressor, a reservoir and a checked valved connection therebetween, a vent valve device independent of the compressor and communicating with said connection on the compressor side of the check valve to form, when operated a vent for fluid to escape without compression, valve mechanism communicating with said connection on the reservoir side of the check valve and actuated by maximum or excess reservoir pressure to admit pressure to operate the vent valve, and means for automatically releasing such admitted pressure. 3rd. In combination with a pump or compressor, a reservoir and a check valved connection located therebetween, and having a normally closed exhaust port or passage on the compressor side of the connection, a fluid pressure actuated vent valve which the pressure from the pump tends to seat and which is independent of the pump and its working parts for governing such port and means controlled by the reservoir pressure for admitting pressure to vent valve device and thereby open the exhaust port when the reservoir pressure reaches maximum. 4th. An automatic governing device for fluid compressors comprising, in combination with a compressor, a reservoir and a check valved connection or reservoir supply pipe therebetween, a vent valve device comprising a casing having a port connecting with the atmosphere, a second port with the said connection on the compressor side of the check valve and a third port in communication with said connection on the reservoir side of the check valve, a valve in said casing for governing the communication between the first and second ports and held seated by pressure through said second port, a movable abutment for actuating said valve and exposed to pressure through said third port and a governor interposed in said connection between the vent valve device and the said supply pipe and adapted to admit pressure to said movable abutment when the reservoir pressure has reached maximum, whereby the vent valve will permit fluid to escape to atmosphere directly from the compressor without compression. 5th. An automatic governor for fluid compressors, comprising, in combination with a compressor, a reservoir and a check valved reservoir supply pipe therebetween, a fluid pressure actuated vent valve device communicating with said pipe on the compressor side of the check valve, a connection between the vent valve and said pipe on the reservoir side of the check valve and a governor interposed in said last mentioned connection for regulating the admission of pressure to actuate the vent valve when the reservoir pressure has reached maximum, which governor comprises a casing having a chamber having ports communicating respectively with the supply pipe and with the vent valve, a spring pressed movable abutment in said chamber exposed to reservoir pressure, and a valve actuated by the abutment to control the port to the vent valve and having a lost motion with respect to such abutment. 6th. In combination with a fluid compressor, reservoir and a pipe or passage therebetween, a vent valve device having ports communicating with such passage and with the atmosphere, a fluid pressure actuated valve in said device for governing the passage between such ports, pipe or passage from the reservoir admit pressure to actuate said valve, an automatic governing valve in said last named passage to admit or cut off the pressure therethrough and means whereby, after the governing valve is closed, that pressure is released which actuated the vent valve. 7th. In combination with a fluid compressor, its reservoir and the reservoir pipe or connection therebetween, a vent valve device comprising a casing having a port to atmosphere, a second port from said pipe and a third port in normally interrupted communication with the reservoir, a valve in the casing governing the passage between the first two ports, movable abutment actuating such valve and exposed to pressure from the third port, an automatically operating governor valve in the communication between the reservoir and such third port for admitting reservoir pressure against the movable abutment, and means actuated by the governor valve for releasing the pressure against the abutment after the governor valve has closed. 8th. An automatic governor for fluid compressors comprising in combination with a compressor, a reservoir and a check valved reservoir supply pipe therebetween, a fluid pressure actuated vent valve communicating with said pipe on the compressor side of the check valve, a connection between the vent valve and said pipe on the reservoir side of the check valve and a valve for governing the admission of pressure through said last named connection to operate the vent valve and a valve actuated by such governing valve to exhaust the pressure in the connection between the governing valve and the vent valve when the governing valve is closed. 9th. In combination with a fluid compressor, its reservoir and the reservoir pipe therebetween, a vent valve device separate from the compressor and having a casing with ports to the atmosphere and the reservoir pipe respectively, a valve in the casing for normally closing the connection between the ports, a movable abutment in such casing for actuating said valve and means for automatically admitting reservoir pressure to the casing to actuate said abutment and its valve by moving the same against the pressure in the casing from the compressor when the reservoir pressure has reached maximum. 10th. In combination with a fluid compressor, its reservoir and the reservoir pipe therebetween, a vent valve device communication through ports with the reservoir pipe and with the atmosphere, a valve governing said ports, a movable abutment to actuate said valve and a governor for automatically admitting pressure to the movable abutment and comprising a casing having a chamber in always open communication with the reservoir, and having a normally closed port communicating with said movable abutment, a movable abutment in such chamber exposed on one side to reservoir pressure and on the other to atmospheric pressure, a valve actuated thereby and governing said normally closed port and a valve actuated by the abutment of the governor for exhausting the pressure admitted to the vent valve against its abutment. 11th. In combination with a fluid compressor, its reservoir and the reservoir pipe therebetween, a fluid pressure actuated vent device communicating with said pipe, and an automatic governor for controlling fluid pressure to actuate such vent device and comprising a casing having a chamber communicating respectively with the vent device to admit pressure thereto and with the reservoir, a movable abutment exposed to reservoir pressure on one side and spring pressed on the other side, a stem on the abutment having an opening at its free end within the chamber, a valve having a stem extending into such opening and governing the communication to the vent device, and a cap or sleeve adjustably secured to the stem and through the end of which the valve passes, such valve having a slight slack or lost motion between the stem and cap. 12th. A governor for controlling the admission of pressure to a fluid pressure actuated vent valve device for the compressor of air brake systems and comprising a casing having a movable abutment operative in a chamber provided with an inlet port from the reservoir and an outlet port to the vent valve device, a valve actuated by the abutment to govern the outlet port and having a lost motion with respect to the abutment and means for varying the amount of such lost motion. 13th. A governor for controlling the admission of pressure to a fluid pressure actuated vent valve device for the compressor of air brake systems, and comprising a casing having a movable abutment operative in a chamber provided with an inlet port from the reservoir and an outlet port to the vent valve device through a pipe or passage, an admission valve actuated by the abutment to govern the outlet port, and a valve device also actuated by the abutment to control an exhaust port from said passage and adapted to normally maintain such exhaust port open when the admission valve is closed and to close the same when such latter valve is open. 14th. A governor for controlling the admission of pressure to a fluid pressure actuated vent valve device for the compressor of air brake systems and comprising a casing having a movable abutment operative in a chamber provided with an inlet port from the reservoir and an outlet port to the vent valve device through a pipe or passage, an admission valve actuated by the abutment to govern the outlet port, a stem actuated by the abutment, a valve device operatively connected with the stem and controlling an exhaust port from said passage and means for adjusting the valve device with respect to said operating stem. 15th. The compact form of governor device comprising a vent valve controlling an exhaust port from the delivery pipe of the compressor, a check valve between the compressor and a reservoir and a governor for actuating the vent valve, the check valve, vent valve and governor being arranged in immediate juxtaposition and within substantially the same casing. 16th. A vent valve device for a compressor comprising a casing having an abutment chamber with ports respectively to the atmosphere and to a valve governed connection with a reservoir, a passage or second chamber with a port to the delivery pipe of the compressor and communicating with the first chamber through a vent port, a vent valve governing such vent port and exposed on one side to pressure from the compressor and on the other side to atmospheric pressure and a movable abutment operating in such first chamber to actuate the vent valve and normally exposed on both sides to atmospheric pressure but adapted to be actuated by excess reservoir pressure on one side to open the vent valve against the pressure from the compressor which tends to hold it seated. 17th. A vent valve device for a compressor comprising a casing having a chamber with ports communicating respectively with the atmosphere, the delivery pipe of the compressor and a reservoir, a vent valve governing the second named port, a movable abutment in the chamber for actuating the vent valve and adapted to be operated by excess reservoir pressure to permit the pressure from the compressor to first enter the chamber and then escape through said port to atmosphere. 18th. In a brake system, a combined axle driven compressor and casing therefor comprising a casing arranged around the axle and enclosing the working parts of the compressor and having a portion extended substantially as shown to form a cylinder, an axle driven piston working in such cylinder, suction and discharge valves, in combination with means for flexibly connecting the cylinder and casing to a car. 19th. In a brake system, the combination, with a car, of a cylindrical casing around the car axle having one side extended substantially as shown to form a cylinder, a head or plate closing the outer end of the cylinder and having suction and discharge valves, a piston in the cylinder, an eccentric on the axle for driving the piston, and an automatic governing device independent of such valves for regulating the pressure in the reservoir. 20th. An automatic governor for fluid compressors, comprising, in combination with a compressor, a reservoir having a supply pipe connecting with the compressor, a fluid pressure actuated vent valve device communicating with the reservoir supply pipe, a governor actuated by maximum reservoir pressure and adapted to admit reservoir pressure to said vent valve

device to open the same, and automatic means for releasing such admitted pressure.

No. 65,723. Air Brake for Street Cars.

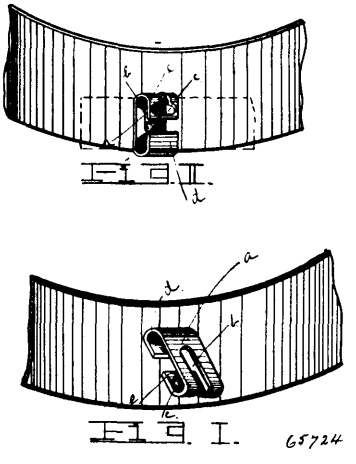
(*Frein à air pour chars de rue.*)



Niels Anton Christensen, Milwaukee, Wisconsin, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. In a fluid pressure brake system, the combination of an air reservoir, a brake cylinder, a valve device controlling communication between the reservoir and brake cylinder and between the brake cylinder and atmosphere and comprising a casing provided with four ports, two ports thereof having direct and uninterrupted connection with the reservoir, the third with the brake cylinder and the fourth being an exhaust port leading to the atmosphere, a valve located within the casing and adapted to connect said ports, said valve in normal position connecting the brake cylinder to the atmosphere to exhaust the brake cylinder and in applying the brakes gradually for ordinary service work, said valve connecting the brake cylinder with one of said two reservoir ports and adapted to connect the other of said two reservoir ports with the brake cylinder when a heavier application of the brakes is required. 2nd. In a fluid pressure brake system, the combination of an air reservoir, a brake cylinder, a valve device controlling communication between the reservoir and brake cylinder and between the brake cylinder and atmosphere and comprising a casing provided with four ports, two of which ports connect with the reservoir, the third with the brake cylinder and the fourth with the atmosphere, a valve located within the casing and provided with a recess which in normal position connects the brake cylinder with the port to atmosphere to exhaust the brake cylinder, and which for ordinary service work connects the brake cylinder with one of said reservoir ports and for quicker work connects the brake cylinder with the other of said reservoir ports. 3rd. In a fluid pressure brake system, the combination with an air reservoir, a brake cylinder, a valve device controlling communication between the reservoir and brake cylinder, and between the brake cylinder and atmosphere, and comprising a casing E provided with four ports and passages, the ports e and e^1 communicating with the reservoir, the port e^2 with the brake cylinder, and the port e^3 with the atmosphere, a disc valve G movable within the casing and provided with a circular recess g which in normal position connects the brake cylinder with the port to atmosphere to exhaust the brake cylinder, and which in service action connects the brake cylinder with one or both of said reservoir ports, and means for turning the disc valve. 4th. In a brake system, the combination of an air reservoir, a brake cylinder, a valve device controlling communication between the reservoir and brake cylinder, and between the brake cylinder and atmosphere, and comprising a casing provided with four ports or passages, two of which are in direct uninterrupted communication with the reservoir, a third port communicating with the brake cylinder and the fourth communicating with the atmosphere, a disc valve located in the casing for governing said ports or passages and provided with a circular recess which in normal position connects the brake cylinder with the port to atmosphere for exhausting the brake cylinder and which in the application of the brakes connects one or both of said reservoir ports with the brake cylinder and closes the exhaust port. 5th. In a brake system, the combination of an air reservoir, a brake cylinder, a valve device controlling communication between the brake cylinder and atmosphere, and between the brake cylinder and reservoir, and comprising a casing having ports and passages communicating respectively with the brake cylinder, air reservoir and atmosphere, a disc valve within the casing for governing said ports and a removable handle for operating said disc valve, which handle is removable only at a position between running or normal position and service position. 6th. In a brake system, the combination of an air reservoir, a brake cylinder, a valve device controlling communication between the brake cylinder and atmosphere and between the brake cylinder and reservoir, and comprising a casing provided with ports communicating respectively with the reservoir, brake cylinder and atmosphere, a disc valve within the casing for governing said ports or passages and provided with a single recess, an operating handle connected to the valve, which handle when turned to one extreme position causes the valve to exhaust the brake cylinder and when turned to the other extreme position causes the valve to close the exhaust and admit pressure to the brake cylinder from the reservoir, and means whereby such handle may be removed only at an intermediate and lap position, between the running and service position of the handle. 7th. In a brake system, the combination of an air reservoir, a brake cylinder, a valve device controlling communication between the brake cylinder and atmosphere and between the brake cylinder and reservoir and comprising a casing provided with ports communicating respectively with the reservoir, a brake cylinder and atmosphere, a disc valve within the casing and provided with a recess for governing said ports, a stem for the valve, an operating handle removably connected to the valve stem, which handle in one extreme position causes the valve to exhaust the brake cylinder and in the other extreme position causes the valve to connect the brake cylinder and reservoir and apply the brakes, a flange located upon the casing and provided with a central notch between the running and service position of the handle, and a projecting piece connected to the handle and engaging under the flange and preventing the removal of the handle except at the intermediate position of the handle when the projecting piece is free to pass through said notch. 8th. In a brake system, the combination of an air reservoir, a brake cylinder, a valve casing having ports and passages communicating respectively with the brake cylinder, the reservoir and the atmosphere, a valve within the casing for governing said ports and passages and a removable handle for operating said valve, which handle is removable only at a position between the brakes on and the brakes off position of the handle. 9th. In a brake system, the combination of an air reservoir, a brake cylinder, a valve casing having ports and passages communicating with the reservoir, the brake cylinder and the atmosphere, a valve within the casing for governing said ports and passages, a removable handle for operating said valve, a flange connected with the casing and provided with a central notch located between the brakes on and the brakes off position of the handle, and a projecting piece connected to the handle and engaging the flange and preventing the removal of the handle except at said intermediate position of the handle when the projecting piece is free to pass through said notch. 10th. In air brakes for street cars, a valve G, in combination with a valve stem 1, a case cap H, up through which the valve stem passes through an opening in the top of said cap, two rings, O and P, the lower one of metal and the upper one of flexible material, two washers being interposed between the upper end of the said spring and the top of case cap H, and completely filling the space between the valve stem and the inner surface of the said case cap H, substantially as shown and described. 11th. In air brakes for street cars, a valve G, with circular depression g^5, in combination with balls M, set loosely therein. a ring N, mounted loosely on the valve stem I, a spring J, surrounding the valve stem and resting loosely at its lower end on ring N, and the washers O, and P, the lower one of metal and the upper one of flexible material, arranged closely around the upper end of the valve stem I, between the top of the case cap H, and the upper end of said spring J, and completely filling the space between the case top and the valve stem I, substantially as described.

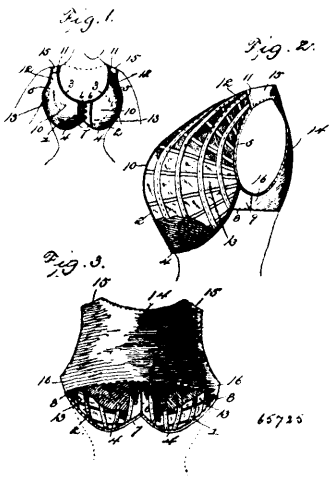
No. 65,724. Necktie Holder. (*Porte-cravate,*)



Grant Quick, Plimpton, Ohio, U.S.A., 10th January, 1900; 6 years. (Filed 16th December, 1899.)

Claim.—A necktie retainer comprising a plate having its ends re-turned and lying parallel with the body portion, and a slot in the body portion extending into one of the re-turned ends, the extremity of the slot lying in the bent over end being laterally broadened.

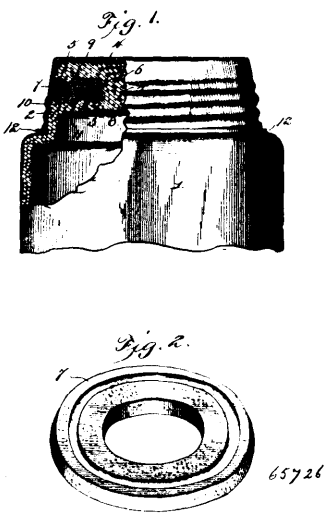
No. 65,725. Bust Form. (*Forme de buste.*)



Jessamine Quigley, Indiana, U.S.A., 10th January, 1900; 6 years (Filed 16th December, 1899.)

Claim.—A bust form comprising front sections adapted to be separately joined at the centre and each regularly distended to simulate the human form and having therein devices for maintaining the desired contour, neck and armhole recesses being partially formed in each section, and a back composed of a piece of material having portions extended across the shoulder part of the form and connected with the upper front portion of the said sections, and also provided with a portion of the neck and arm holes to continue with those in the sections, the said back extending downwardly only a short distance below the location of the armholes of the form.

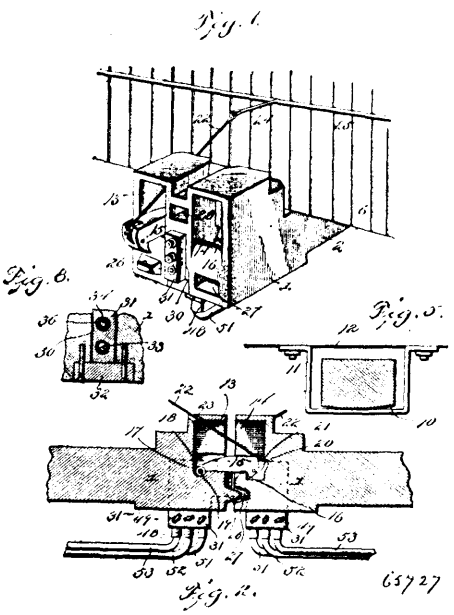
No 65,726. Fruit Jar Cover. (*Couvercle de jarre à fruits.*)



William Paul Sihler, Decorah, Iowa, U.S.A., 10th January, 1900; 6 years. (Filed 16th December, 1899.)

Claim.—1st. The combination with a receptacle having a neck with a slight inward oblique deflection and terminating in a horizontal inturned lip, the outer surface of the neck being screw threaded and the lip having an annular groove in its upper surface surrounding at its inner termination a central circular space, a cap provided with an upper outwardly extending flange having a bevelled periphery adapted to align with the outer surface of the neck and formed with an under circumferential bend to be disposed over the circumferential groove in the lip of the neck, said cap having also a lower flange forming the lower wall of a channel of which the upper outwardly projecting portion or flange of the cap in part provides the upper wall, a packing ring fitted on the upper portion of the neck and lip and extending into the channel of the cap being held locked through the medium of the head of the latter and the groove of the lip, and a lid or cover removably fitted over the cap and neck and conforming in the obliquity of the latter. 2nd. The combination of a receptacle having at its mouth an inturned lip disposed horizontally and snrrounding a central open space, a cap for closing the mouth of the receptacle and having a central pendent core with a lower flange above which a channel is formed limited by an upper outwardly projecting portion or flange which extends over the lip and upper portion of the mouth of the receptacle the flange on the pendent core registering with the inner termination of the lip, an annular packing ring disposed horizontally and seated in the channel formed in the cap and lying across the joint between the lower flange of said cap and the inner termination of the lip, the lower part of said packing ring being exteriorly exposed and a lid or cover removably applied to the cap and the mouth of the receptacle.

No. 65,727. Car Coupler. (*Attelage de chars.*)

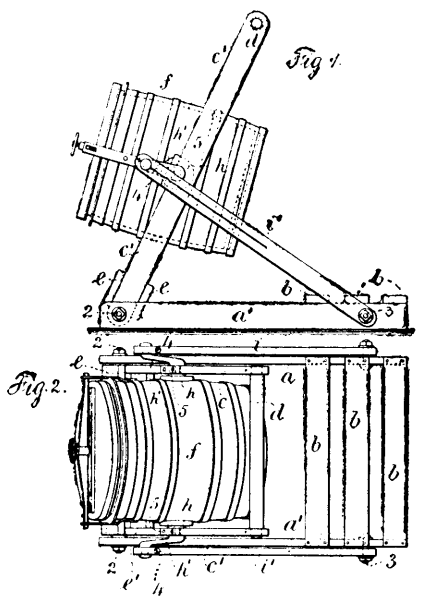


Jacob P. Shafer, Terra Alta, West Virginia, U.S.A., 10th January, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. In a device of the described, the combination of a draw head provided at opposite sides with cavities 13 and 14 being provided at its back with a shoulder, a coupling hook mounted in the cavity 13, and a pivoted catch mounted on the outer end of the hook and having a beveled lower edge, substantially as described. 2nd. In a device of the class described, the combination of a draw head provided at opposite sides with cavities 13 and 14 and having a longitudinal recess located between the said cavities, a hook mounted in one of the cavities, and a block or plate yieldingly mounted in said recess and provided with bores or passages and having pipe connections with the same, substantially as described. 3rd. In a device of the class described, the combinaton of a draw head provided at opposite sides with cavities and provided with a recess located between the same, a coupling device mounted in one of the cavities, a block guided in the recess and provided with bores or passages extending from the outer end of the block and terminating at a point in advance of the rear face of the same, pipes connected with the said bores or passages, and a spring arranged within the recess and engaging the rear face of the block, substantially as described. 4th. In a device of the class described, the combination of a draw head provided at opposite sides of its upper portion with cavities 13 and 14 and having at its centre the longitudinal opening 30 and the link cavity 28, said draw head being provided at its bottom at one side with the socket 27, the lug 26 projecting from the opposite side of the draw head, a coupling hook mounted in the cavity 13, and a block guided in the longitudinal recess 30 and provided with pipe couplings, substantially as described. 5th. In a device of the class described, the combination of a draw head provided with cavities 13 and 14 and having a socket 27, located beneath the cavity 14, said draw head being provided between its cavities with a link cavity 28, a lug projecting from the draw head and arranged beneath the cavity 13, and a hook pivotally mounted in the cavity 13, substantially as described. 6th. In a device of the class described, the combination of a draw head, a block mounted in a recess in the draw head and having a bore or passage, a short tube arranged within the bore, a tubular valve operating in the short tube and provided at its rear or inner end with a flange and having openings in advance of the same, and springs engaging the tubular valve and the block, substantially as described. 7th. In a device of the class described, the combination of a draw head having a longitudinal opening, a substantially L-shaped block mounted within the opening of the draw head and projecting outward therefrom and depending from the bottom of the same a spring arranged in rear of the block, and pipes connected with the block at the bottom thereof, substantially as described. 8th. In a device of the class described, the combination of a drawhead having an opening, a block mounted in the

opening of the drawhead, extending in advance of the same and depending from the bottom thereof, said block being provided with bores or passages, automatic valves arranged at the outer ends of the bores or passages, pipes connected with the bottom of the block, and valves located beneath the drawhead and extending entirely through the block and adapted to be operated from either side of a car, substantially as described.

No. 65,728. Churn. (*Baratte.*)



65728

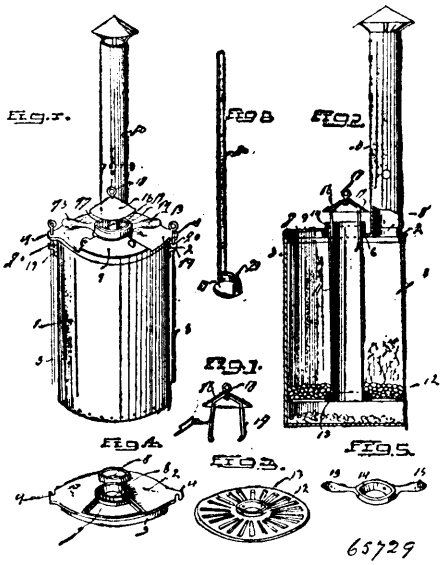
Lewis Augustus Aspinwall, Jackson, Michigan, U.S.A., 10th January, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. The combination with the barrel churn and a platform, of a hand operated oscillating frame pivoted to the platform and to which the barrel is pivotally connected, trunnions for pivotally supporting the barrel churn and cranks connected therewith and pitman bars also pivoted to the platform at one end to the cranks at their other ends for imparting to the barrel churn both a rotary and oscillating movement, substantially as set forth. 2nd. The combination with the barrel churn and a platform, of a hand operated oscillating frame pivoted to the platform at one end and having a handle at the other end, trunnions connected to the barrel and pivoted in the oscillating frame about midway and having cranks connected to said trunnions, pitman bars pivoted to said platform at one end and connected to the cranks at the other end for imparting a rotary and oscillating movement to the churn, substantially as set forth. 3rd. The combination with the barrel churn and the trunnions and cranks connected therewith, of a platform comprising parallel bars connected at one end by a series of cross strips, an oscillating frame composed of parallel bars, a handle connecting the same at the upper end and pivot bolts connecting the same at their lower ends to the parallel bars of the platform, and brace bars between the lower ends of the parallel bars of the oscillating frame, pitman bars pivoted at one end to the opposite end of the parallel bars of the platform and adjacent to the series of connecting strips, said pitman bars being split at their free ends and provided with bearings engaging the cranks and screw bolts for clamping the same, substantially as and for the purposes set forth.

No. 65,729. Tank Heater. (*Chauffeur de citerne.*)

Albert Duis, Streator, Illinois, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. In a heater, the combination of a body having its cover formed with an opening, a draft pipe passing through said opening and adapted to have movement therein, a grate secured to the draft pipe, and a handle extending laterally from the draft pipe for imparting movement to the same, substantially as described. 2nd. In a heater, the combination of a body having its cover formed with an opening, a draft pipe passing through the said opening, a grate secured to the lower end of the draft pipe, and a collar secured to the upper end of the draft pipe and adapted to engage with the cover and hold the draft pipe and grate in suspension, and provided with handles by means of which the draft pipe can be turned and elevated, substantially as set forth. 3rd. In a device of the nature indicated, a body, a cover closing the upper end of the body and having upward movement therefrom to uncover the body, said cover being provided with an opening, a draft pipe passing through the opening and adapted to be elevated, and a grate secured to the draft pipe and adapted when elevated to engage the cover and remove it from the body, substantially as described. 4th. In a combination



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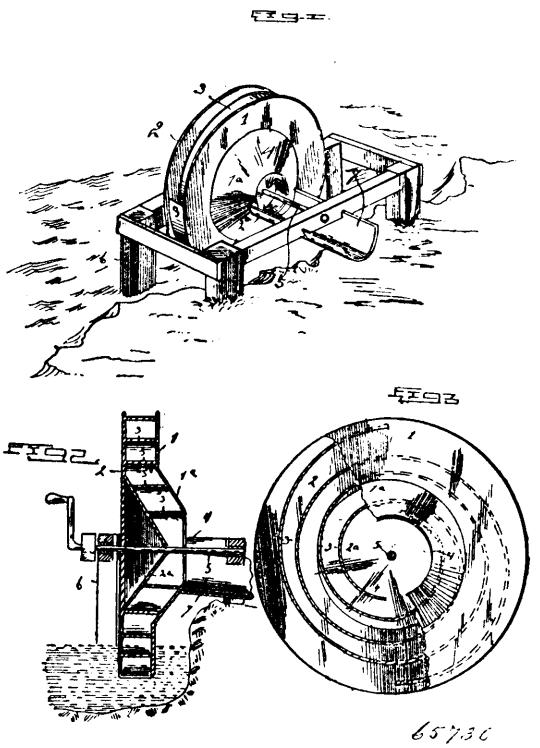
a body, a cover closing the upper end of the body and having a depending rim and an opening, a draft pipe passing through the opening and adapted to be elevated, and a grate secured to the lower end of the draft pipe and adapted when elevated to engage with the rim of the cover and remove it from the body substantially as described. 5th. In tank heater, the combination of a body having offstanding ears, anchoring rods passing through openings in the said ears and having stops or shoulders to engage with the upper sides thereof so as to retain the body in place, and a cover detachably fitted to the body and having offstanding ears provided with passages to receive the upper ends of the aforesaid rods, substantially as and for the purposes set forth.

No. 65,730. Water Elevator. (*Elevateur d'eau.*)



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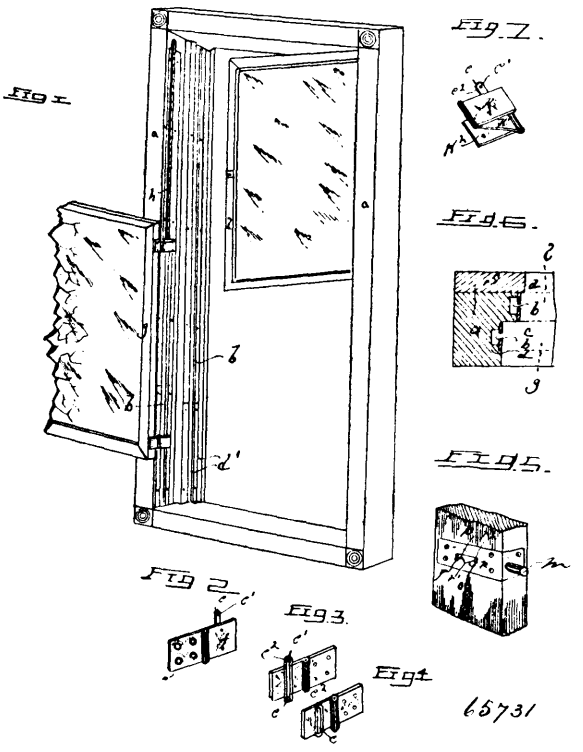
Arthur D. Morey, Oroyhee, Oregon, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—An elevator consisting of the side plates or heads 1, 2, the parallel cone portions 1*a* 2*a*, which are concentric with the axis of

rotation and bulge laterally toward the discharge opening 4 and the shaft 5, upon which the wheel is journalled, combined with interposed spiral blades or wings arranged in gradually widening curves around the axis of the wheel, a trough 7 for carrying off the water, and a suitable framework in which the wheel and the trough are mounted, substantially as shown and described.

No. 65,731. Window Sash. (*Châssis de fenêtre.*)



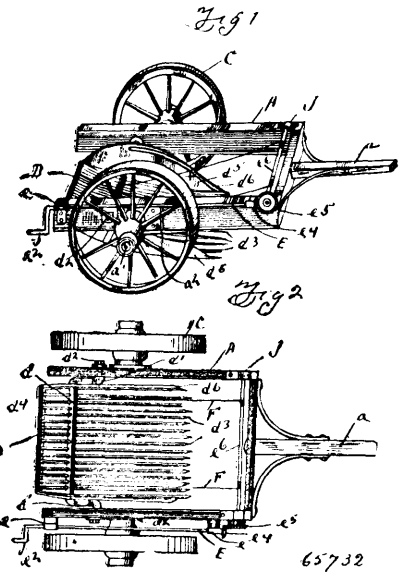
Kohath Anthony, Altoona, Pennsylvania, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. In a window sash, a hinge secured to one edge of said sash, a slide secured to and projecting away from the free side of said hinge, said slide having its upper end rounded and provided with an aperture, a weight-cord attached to said slide and engaging pulleys in the upper part of the frame, the inside face of said frame being divided into two portions having faces on different planes, each of said portions being provided with longitudinal grooves, strips secure to each portion and extending over the grooves, said slides operating in the longitudinal grooves and held in position by the strips, and suitable locking means carried by the sash, substantially as herein shown and described. 2nd. In a window sash, a hinge secured to one edge of said sash, a slide secured to and projecting away from the free side of said hinge, said slide being provided with an opening in the upper end thereof, and having rounded corners, a weight-cord secured to said slide, and engaging pulleys secured to the upper part of the frame, said frame being divided into two portions having their inner face on different planes, one of said portions engaging the outer side of the lower sash, a longitudinal groove formed in each of said portions, strips secured to each portion and extending over the grooves, said slide operating in said grooves and held in position by the strips, a weather-strip secured to the outside of said frame and suitable fastening means carried by the sash, substantially as herein shown and described.

No. 65,732. Manure Loader. (*Charge-engrais.*)

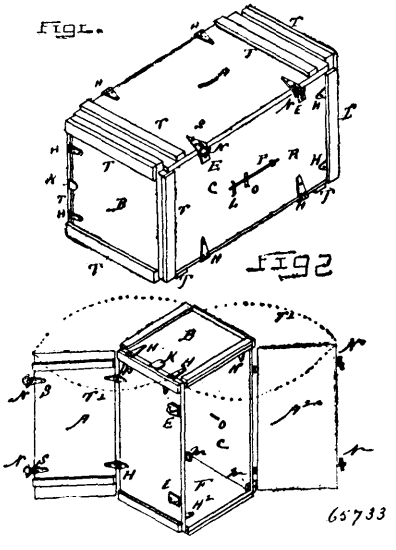
William Bell, Dodge Center, Minnesota, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. A manure loader and spreader comprising in its construction a rectangular frame mounted on two wheels, the scraper having tines, said scraper being pivoted in the frame, and means for raising and lowering the said scraper and holding it in the adjustable position comprising a rod secured to the frame, an operating handle secured to said arm and having a gear wheel at its opposite end adapted to engage a corresponding gear wheel of a rod secured to the front top of the frame, and ropes connecting the rectangular frame of the scraper with the forward rod, substantially as shown and described. 2nd. A manure loader and scraper comprising in its construction a rectangular frame open at its rear and mounted on two wheels, and arched or U-shaped bar pivoted in the sides of the frame, a balanced scraper proper, said scraper comprising tines and solid sides which are connected to the arched bar, said tines being



disconnected at their front ends and extending in a disconnected manner to the arched bar, so that they will have a spring action, and means for raising and lowering the said scraper proper and holding it in an adjusted position, substantially as described. 3rd. A manure loader and spreader comprising in its construction a rectangular frame open at the rear and mounted on two wheels, the scraper having tines, said scraper being pivoted in the frame by means of a U-shaped bar located near the rear of the scraper and through which the tines pass, vertical solid sides on said scraper which are secured to the outer tines and to the U-shaped bar, a bar connecting the rear ends of the tines, and means for raising and lowering the scraper and holding it at the desired adjusted position, substantially as described.

No. 65,733. Box. (*Boîte.*)

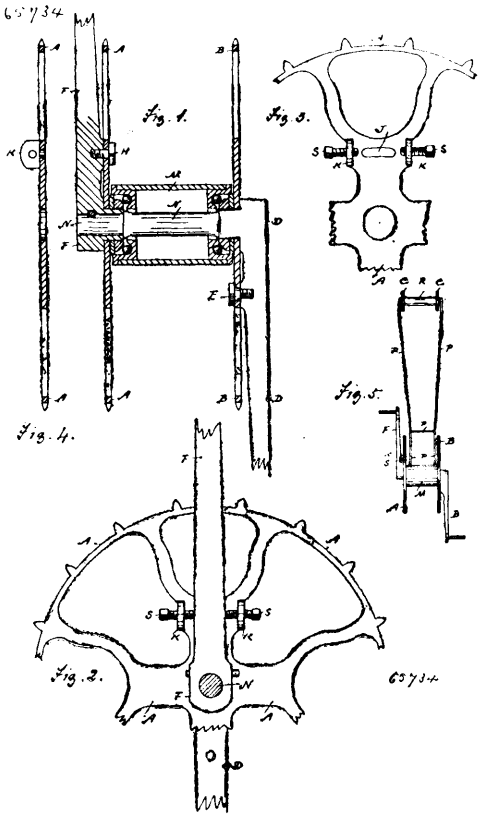


John H. Chenoweth, Terre Haute, Indiana, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. In a folding or collapsible box, the combination of the two side boards C and D, the end boards B and F, joined at their adjacent edges by the outside strap hinges H, and the inside strap hinges H^1, the spring rod K, fastened at one end by the staple P^1, passing through the loop L^1, and the opening O, together with the lids A and A^1, joined to the side boards C and D, by the strap hinges H, the eye strap S, the staple E, and the spiral ring N, and the catch K, substantially as shown and described. 2nd. In a folding or collapsible box, the transverse portable partition V, the hinges H^2, and H^3, the long strips J, in combination with the box composed of the sides C and D, the ends B and F, joined at their

adjacent edges by the hinges H and H¹, the lids A and A¹, joined to the sides D and C, by the strap hinges H, and fastened to the sides C and D, respectively by the eye straps S, the staples E, and the spiral rings N, the catch K, the opening O, and the spring rod R, substantially as shown and described. 3rd. A folding or collapsible box, comprising the sides C and D, and the ends B and F, joined at their contiguous edges by the strap hinges H and H¹, the staples E, the catch K, the opening O, the spring rod R, the lugs M and M, in combination with the hinged lids A and A¹, provided with eye straps S, and the spiral rings N, substantially as shown and described.

No. 65,734. Bicycle. (*Bicycle.*)



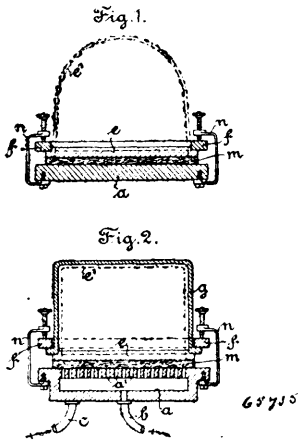
Stephen Launsbury and William J. Winn, both of Milton, Ontario, Canada, 10th January, 1900; 6 years. (Filed 9th June, 1899.)

Claim.—1st. Bicycle driving mechanism of the character described, comprising double driving sprocket wheels, and double rear sprocket wheels in line, said driving sprocket wheels on the double crank axle, one at each end of the said double crank hanger, and secured to the inner side of said cranks, as set forth. 2nd. Bicycle driving mechanism of the character described, comprising double driving sprocket wheels, rear sprocket wheels in line thereto, said driving sprocket wheels on the double crank axle, and secured to the inner sides of said cranks, one of the said driving sprocket wheels capable of rotary adjustment, by means of a slot concentric with and through the sprocket wheel, a securing screw through said slot, and lugs with adjusting screws, on said wheel, as set forth. 3rd. In a bicycle, a driving sprocket wheel on the crank axle thereof, and capable of rotary adjustment on said axle by means of a slot concentric with said wheel, a fastening screw through said slot and into the inner side of the crank, lugs on said wheel adjusting screws through said lugs, a fixed driving sprocket wheel at the opposite end of said crank axle, and secured to its crank, the rear sprocket wheels in line with said driving sprocket wheels, as described.

No. 65,735. Glass Article Manufacture.
(*Fabrication d'article en verre.*)

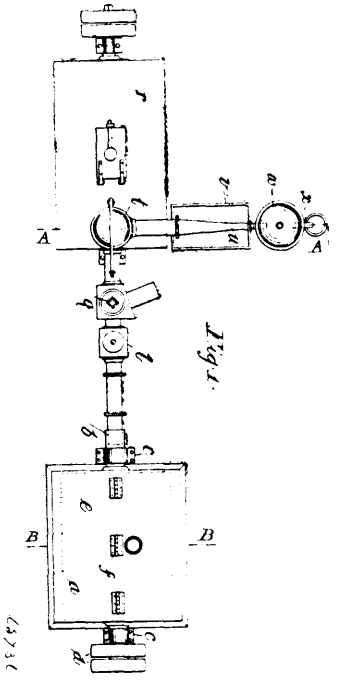
Paul Theodor Sivert, Dresden, Germany, 10th January, 1900; 6 years. (Filed 5th July, 1899.)

Claim.—The process herein described of producing hollow glass bodies from a flat layer of plastic glass, consisting in depositing such flat layer of glass on a moist mat of incombustible fibrous material, such as asbestos, etc., generating steam pressure by the contact of said hot glass layer with the moist mat, pressing a shape giving frame or frames, or hollow mould or moulds, upon the plastic glass, to allow the glass to blow out to the desired shape by the steam pressure within said frame or mould, and regulating the action of said steam pressure during the formation of the hollow glass body



or bodies, by more or less pressure of the frame or mould on the hot plastic layer of glass.

No. 65,736. Apparatus for Utilizing the Waste Products of Coffee. (*Appareil pour utiliser les déchets de café.*)

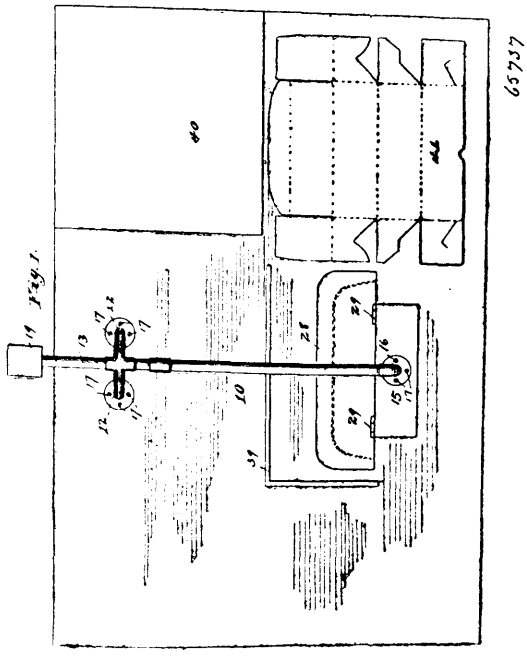


Leopold Hesse, South Melbourne, Victoria, Australia, 10th January, 1900; 6 years. (Filed 5th August, 1899.)

Claim.—1st. The herein described method of utilizing the waste products when roasting coffee, consisting in conducting the vapours from the roasting coffee into and through a vessel containing chicory, malt or other suitable absorbent material, substantially as and for the purposes herein described and explained. 2nd. The herein described method of utilizing the waste products when roasting coffee, consisting in conducting the vapours from the roasting coffee into and through a vessel containing chicory, malt or other suitable absorbent material, and subsequently passing the escaping vapours into a condenser, substantially as and for the purposes herein described and explained. 3rd. In apparatus for utilizing the waste products of coffee during roasting, a roaster as *a*, in combination with an impregnator as *r*, and either with or without a two-way cock or valve inserted in the pipe connecting them, substantially as and for the purposes herein described and explained. 4th. In apparatus for utilizing the waste products of coffee during roasting, a roaster and impregnator combined with a condenser, the latter being connected with a safety valve upon said impregnator,

substantially as and for the purposes herein described and explained. 5th. In apparatus for utilizing the waste products of coffee during roasting, a roaster as *a*, and an impregnator as *r*, together with a pump or fan for forcing the vapours generated in the former into or through the latter, in combination with a collector as *n*, for intercepting the solid particles given off from the berries during the roasting, substantially as and for the purposes herein described and explained.

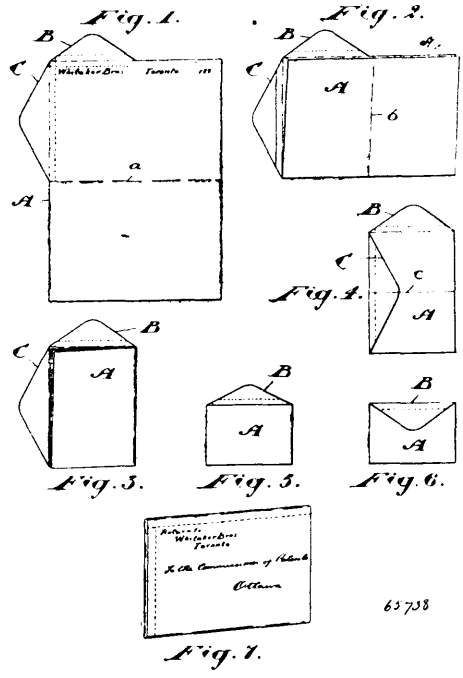
No. 65,737. Paper Box Making Machine.
(*Machine à faire les boîtes en papier.*)



Frank Max Peters, Chicago, Illinois, U.S.A., 10th January, 1900; 6 years. (Filed 19th September, 1899.)

Claim.—1st. A machine for making boxes of fixed interior dimensions for packing biscuits, crackers and the like, comprising a former having an outer contour substantially that of the inner fixed contour of the box to be formed, and a bed or table having a flat continuous supporting surface for the blank, of an area equal to at least that portion of the box blank forming the bottom of the box when folded, and the table and former having a relative movement, and suitable means for actuating the movable member, substantially as described. 3nd. In a machine for forming boxes for biscuit, crackers and the like, the combination with a bed or table having a flat continuous supporting surface for the blank, of a movable former supported above the bed or table and having an external contour substantially like the interior contour of the box to be formed into position over blank to permit the latter to be around it and for withdrawing it from the box when formed, substantially as described. 3rd. In a machine of the character described, the combination, with a bed or table, a former movable towards and from said bed or table, and a swinging folding blade pivotally supported on said table, of a foot lever, and connecting mechanism whereby movement of said foot lever in one direction will actuate the former, while movement of said foot lever in the opposite direction will actuate the folding blade, substantially as described. 4th. In a box machine, the combination, with a bed or table having a continuous supporting surface on which a box blank may lie flat, of a former movable towards and from said bed or table, said bed or table being provided with an aperture adjacent to the former, a folding blade pivotally connected with the table above said aperture and normally lying substantially in the plane of its top, and a foot lever operatively connected with said folding blade to swing the same upward towards the former and thereby fold the rear portion of the blank against the same, substantially as described. 5th. In a box machine, the combination, with a bed or table, of an arm pivotally supported thereon and carrying a box blank, a folding blade pivotally supported on said table, a foot lever, and operating rods connecting said foot lever with the former carrying arm and folding blade, said rods and foot lever having a pin and slot connection whereby said foot lever is adapted to actuate either of said rods without affecting the other, substantially as described. 6th. In a box machine, the combination with a bed or table on which the box blank may lie flat and a former movable towards and from the the same, of a folding blade pivotally supported on said bed or table and normally lying substantially in in the plans of its top, a foot lever, connecting mechanism between said foot lever and folding blade whereby the latter may be swung against the former, and means for positively returning said blade to its normal position, substantially as described. 7th. In a machine of the character described, a box former having its faces, which receive the tucking flaps of the box blanks, recessed to facilitate the tucking of said flaps, substantially as described.

No. 65,738. Envelope and Letter Blank.
(*Enveloppe et blanc de lettre.*)



William H. Whitaker, Brantford, and Charles H. Whitaker, Toronto, both in Ontario, Canada, 10th January, 1900; 6 years. (Filed 21st September, 1899.)

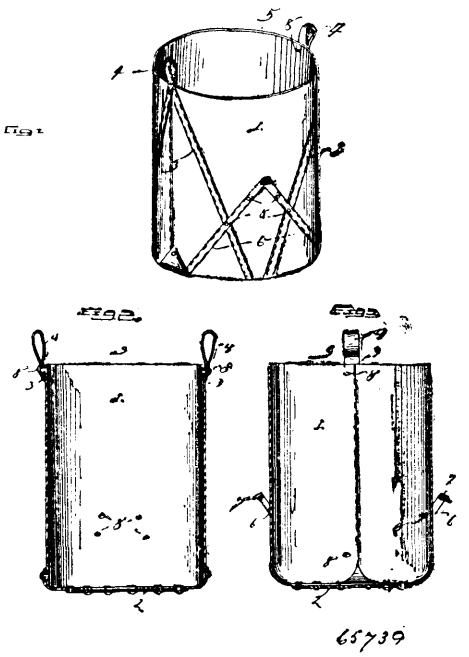
Claim.—1st. In a combined envelope and letter blank a sheet of paper provided at one corner with two flaps each respectively less in width than the width and the length of the sheet, substantially as for the purpose described. 2nd. In a combined envelope and letter blank, a sheet of paper provided with a flap formed at one end thereof, of less width than the width of the sheet, and a flap at one side thereof of less width than the length of the sheet, substantially as and for the purpose specified. 3rd. In a combined envelope and letter blank, a sheet of paper provided at one corner with two flaps each respectively less in width than the width and length of the sheet, the base of each flap having two adjacent lines of perforations formed therein and also small projections formed at one end of the strip between the lines of perforations, substantially as and for the purpose specified. 4th. An envelope provided with a flap the base of which has two adjacent lines of perforations formed therein and also small projections formed at one end of the strip between the lines of perforations, substantially as and for the purpose specified.

No. 65,739. Coal Sack. (*Sac à charbon.*)

John Swain Nickerson, Woburn, Massachusetts, U.S.A., 10th January, 1900; 6 years. (Filed 19th December, 1899.)

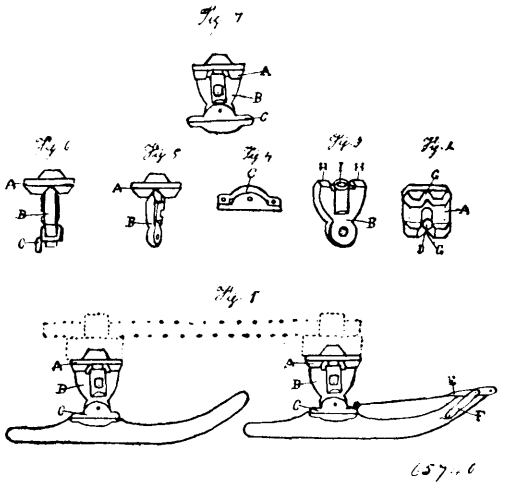
Claim.—1st. A coal sack having a pair of straps extending diagonally over opposite portions thereof and arranged at the top of the sack to provide oppositely disposed hand gripping loops and a second pair of shorter straps extending diagonally over opposite lower portions of the sack and arranged to provide a pair of oppositely disposed lower hand loops. 2nd. A coal sack having a pair of straps extending diagonally over opposite portions thereof and arranged at the top of the sack to provide oppositely disposed hand gripping loops, and a second pair of shorter straps extending diagonally over opposite lower portions of the sack to provide a pair of oppositely disposed lower hand loops, said shorter straps crossing the first named straps and secured to each other and to the sack at the points of intersection. 3rd. A coal sack consisting of a body of suitable material having straps extending diagonally upward over opposite portions thereof and projected above the mouth to form hand strips, and lower straps secured to and crossing the first mentioned straps and continuing around or encircling the body of the sack

neck near the bottom thereof, and having the upper portions upon opposite sides thereof, loose to provide lower hand grips which are



out of line both vertically and horizontally with the upper hand grips.

No. 65,740. Bob Sleigh. (*Traineau-jumeau.*)



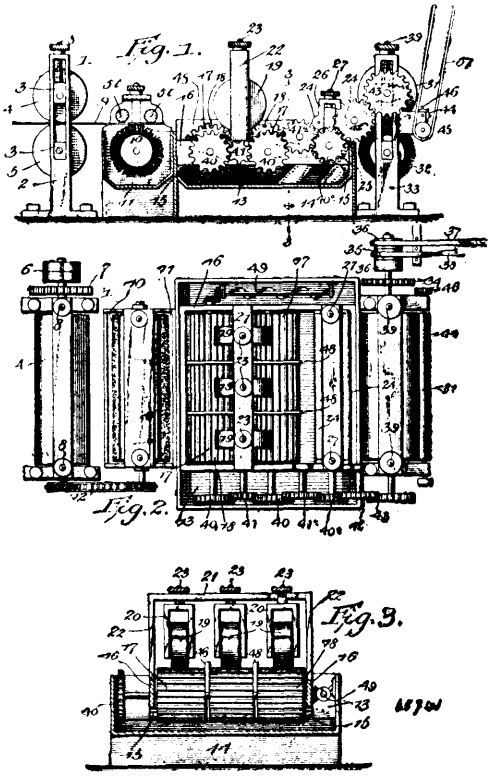
Onésime Isaie Bergeron, St. Grégoire, Québec, Canada, 10 janvier, 1900; 6 ans. (Déposé 22 septembre, 1899.)

Résumé.—1° Le support A et ses cavitées coniques G G le support B et ses parties coniques H H sa cavitée I dans laquelle entre le tourilons D du support A, le support inférieur G sa charnière conjointement avec le support du centre B, et les ferrures E et F qui fixent les timons a la voiture. 2° Le support A ses cavitées coniques GG, le support B et ses parties coniques HH et sa cavitée I, le support G, et les ferrures E et F, telque cidessus décrits et indiquées.

No. 65,741. Apparatus for Cleaning and Coating Sheet Metal Plates. (*Appareil pour nettoyer et enduire les plaques de metal en feuille.*)

Charles C. Roberts and John Grimshaw, both of Ansonia, Connecticut, U.S.A., 11th January, 1900; 6 years. (Filed 13th March, 1899.)

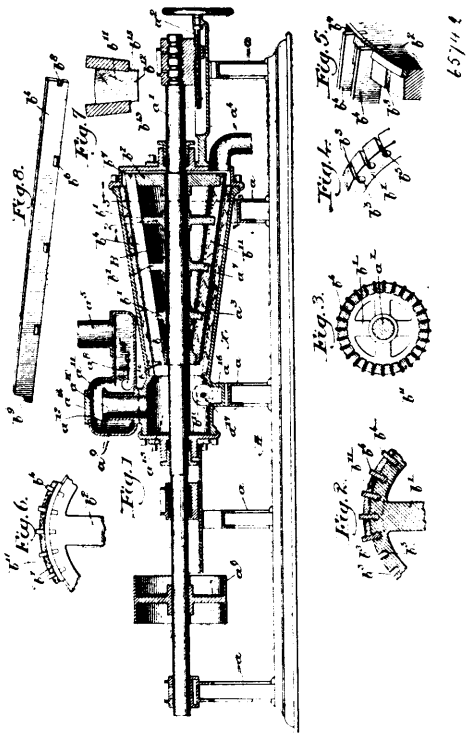
Claim.—1st. In an apparatus for coating metal sheets or plates, the combination of a pot for molten metal, a tinning roll mounted to rotate in said pot and having a roughened surface to throw molten metal upward against the under side of a plate or sheet of metal carried over said roll, means for applying pressure to the upper side of said sheet or plate of metal, rotary wipers between which the coated sheet is passed to wipe molten metal from said sheet, a fluted



roll located between the tinning rolls and the wipers, and means for reversing the rolls and the wipers, substantially as described. 2nd. In an apparatus for coating metal sheets or plates, the combination of a pot for molten metal, a tinning roll mounted in said pot and having a roughened surface to throw molten metal upward against the under side of a sheet or plate of metal carried over said roll, means for applying pressure to the upper side of said sheet or plate of metal, a fluted roll to remove surplus coating metal from the coated plate or sheet, rotary wipers geared within the tinning roll, and means for reversing the rotation of said wipers and rolls, substantially as described. 3rd. In an apparatus for coating metal sheets or plates, the combination of an acid tank having a rotary brush or swab mounted therein, a pot for molten metal, a tinning roll or rolls mounted to rotate in said pot and throw molten metal upward against the under side of the plate or sheet of metal to be coated, means for applying pressure to the upper side of said plate or sheet, rotary wipers geared with the tinning roll or rolls, and means for reversing the rotation of the wipers and said roll or rolls, substantially as described. 4th. In an apparatus for coating metal sheets or plates, the combination of a pot for molten metal, tinning rolls mounted to rotate in said pot for the purpose of applying molten metal to the underside of a sheet or plate of metal carried over said rolls, a number of spaced apart and separately adjustable pressure rolls mounted across the machine above the space between the tinning rolls, wipers for wiping and finishing the coated metal sheet or plate, a fluted roll located between the tinning rolls and the wipers, and means for reversing the rotation of the rolls and the wipers, substantially as described. 5th. In an apparatus for coating metal sheets or plates, the combination of a pot for molten metal, a frame supported in said pot and having standards projecting above the same, tinning rolls mounted in said frame, pressure rolls mounted in the standards above the tinning rolls to bear upon a sheet or plate of metal carried between them and the tinning rolls, a fluted roll mounted in said frame, means for adjusting the pressure on said metal sheet or plate, rotary wipers geared with the tinning rolls, means for reversing the direction of rotation of said wipers and rolls, and mechanism for feeding the metal sheet or plate, substantially as described. 6th. In an apparatus for coating metal sheets or plates, the combination of an acid tank having a rotary brush or swab mounted therein, a pot for molten metal, tinning rolls mounted to rotate in said pot for the purpose of applying molten metal to the underside of a metal sheet or plate carried over said rolls, pressure rolls mounted over the tinning rolls, rotary wipers between which the coated metal sheet or plate is passed, a fluted roll located between the tinning rolls and wipers, and means for reversing the rotation of the rolls and wipers, substantially as described. 7th. In an apparatus for coating metal sheets or plates, the combination of feeding in rolls, an acid tank having mounted therein a rotary

brush or swab driven from one of the feeding in rolls, a pot for molten metal, tinning rolls mounted in said pot, means for driving the tinning rolls faster than the feed of the metal sheet or plate, pressure rolls mounted above the tinning rolls, a fluted roll, rotary wipers to receive the coated sheet or plate from the fluted roll, means for reversing the rotation of the fluted and tinning rolls and the wipers, and feeding out rolls, substantially as described. 8th. In an apparatus for coating metal sheets or plates, the combination of a pot for molten metal, a transverse tinning roll composed of separate sections, spaced apart, a shaft supporting the sections, longitudinal guides consisting of bars interposed between the section of the tinning rolls, and means for applying pressure to the upper side of said sheet or plate, substantially as described. 9th. In an apparatus for coating metal sheets or plates, the combination of a pot of molten metal, feeding in rolls disposed transversely of the apparatus, a transverse tinning roll arranged parallel with the feeding in rolls and a screw located at one end of the tinning roll and disposed at right angles to the same, said screw being connected by gearing with the tinning roll, substantially as and for the purpose described.

No. 65,742. Refining Engine. (*Machine à épurer.*)



Irwin Peter Dillon and Henry Clay King, both of Lawrence, Massachusetts, U.S.A., 11th January, 1900; 6 years. (Filed 24th March, 1899.)

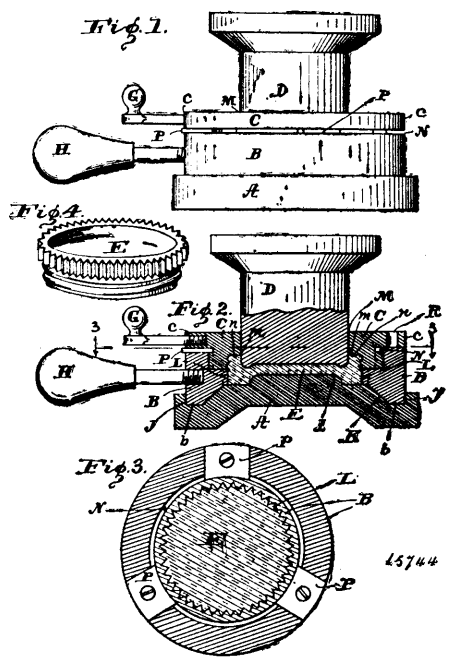
Claim.—1st. In a paper making machine, the combination with a refining engine having a rotary plug, of an inlet thereto for the paper stuff, and a settling chamber between said inlet and said engine, said settling chamber containing means to divert the direct flow of the stuff to the engine and precipitate by gravity heavy foreign materials contained in the stuff, and a sand box in the neck of the engine, but out of range of the rotating plug thereof, substantially as described. 2nd. The combination with a refining engine, of a vertical pipe a^{10}, projecting from the inlet of the engine, a drum or enlarged chamber surrounding said pipe, and a stuff inlet pipe connected to said chamber at one side thereof below the upper end of said pipe, substantially as described. 3rd. In a plug of a paper stuff refining engine, a head having a plurality of radial notches cut transversely in its periphery, each notch having at its bottom an enlarged recess extending only partially through the head, in combination with the bars of the plug fitting in said notches and provided with enlargements for said recesses, substantially as described. 4th. In a plug of a paper stuff refining engine, a head having a plurality of radial notches cut transversely in its periphery, in combination with the bars of the plug adapted to fit in said notches, said bars being cut down from their outer edges to provide shoulders at their inner edges adjacent, one peripheral edge of said head, and a ring secured in clamping position about said head and on said shoulders, substantially as described. 5th. In a plug of a paper stuff refining engine, a head having a plurality of radial notches cut transversely in its periphery, in combination with the bars of the plug adapted to fit in said notches, said bars being cut down from their outer edges to provide shoulders at their inner edges adjacent one peripheral edge of said head, said shoulders extending from their outer ends obliquely toward the inner edges of said bars, and a ring tightly secured about said head and resting in clamping engagement on said shoulders, substantially as described. 6th. A plug for a paper stuff refining engine, comprising a plurality of longitudinal bars and a plurality of supporting heads therefor spaced apart and each provided with transverse peripheral notches having a width corresponding to said bars, the intermediate heads being bored out at the bottoms of their notches only part way through and on the forward sides thereof, and the bars having bosses or enlargements to fit said bored out porticos, the rear end head having a peripheral ring secured thereon across the open side of its notches, and the rear ends of the bars being notched to engage and be held by said ring, the forward ends of said bars being cut away to provide shoulders, and a ring secured peripherally on the forward end engaging said shoulders, and serving to lock said bars in place with the enlargements thereof in the bored out portions of the intermediate heads, and the end notches thereof in engagement with the said rear ring, substantially as described. 7th. In a plug for a paper stuff refining engine, a plurality of longitudinal bars held rigidly spaced apart radially on the plug, and filling timbers between said bars, said plug being freely open for the flow of water within it behind said timbers, said timbers having their edges projecting freely behind the inner edges of said bars and clinched there behind by the lateral swelling of the projecting edges of the timbers produced by the presence of the water within the plug, substantially as described.

No. 65,743. Fibrous Stock Making Process.
(*Procédé pour la fabrication d'articles fibreux.*)

The French-Hickman Flax Fibre Company, London, England, assignee of Francis Hickman, Bound Brook, New Jersey, U.S.A., 11th January, 1900; 6 years. (Filed 6th June, 1899.)

Claim.—1st. A paper stock consisting of the bast fibres and other cellulosic tissue of the flax plant or straw freed from fats, waxes and other encrusting material. 2nd. The herein described process of treating flax straw to reduce it to a paper stock, consisting in dissolving free sulphur in a hot solution of caustic soda in substantially the proportions specified, and then cooking the straw in the liquor thus prepared.

No. 65,744. Mould for Glassware.
(*Moule pour verreries.*)



George B. M. Gray, Marion, Indiana, and Walter H. Wrazer, Oakland, both in the U.S.A., assignees of G. H. Gray, of Marion, aforesaid, 11th January, 1900; 6 years. (Filed 14th August, 1899.)

Claim.—1st. In a glass mould, the combination of the mould base, the mould ring seated thereon and having a central hole with means to prevent rotation of the glass articles therein and means to be grasped by the head to prevent the rotation of the mould ring, and the screw ring revolubly mounted in the mould ring and having a central opening of two diameters, the larger being inside and forming a shoulder with the smaller outside part of said opening and the walls of the inside portion being screw threaded, substantially as

described. 2nd. In a glass mould, the combination of the mould base, the old ring seated thereon having a central hole with indents or means for preventing rotation of the glass article therein, the screw ring mounted in the mould ring having a central opening, the lower or inner portions of which is screw threaded, and means for connecting the screw ring to the mould ring to permit rotation but not separation, substantially as described. 3rd. In a glass mould, the combination of the mould base, the mould ring seated thereon, said mould ring having a vertical bore with indents or the like to prevent rotation of the glass article therein, the screw ring mounted in the mould ring and having a central hole or bore screw threaded at its lower or inner portion, means for lifting the two rings off of the base together and for rotating the screw ring while holding the mould ring against rotation, and a plunger arranged to reciprocate through the hole in the screw ring, substantially as described. 4th. In a glass mould, the combination of the mould base having an annular groove near the edge of its upper surface, a mould ring having a flange to fit in the grooved base and having a corrugated central opening and a larger circular opening concentric with and above the corrugated opening, said ring having a handle, a screw ring fitting in the larger upper opening of the mould ring, the central opening of said screw ring having approximately its lower part screw threaded, said screw ring having a flange to rest on top of the mould ring and said screw ring having a crank handle, a locking plate or plates secured to the mould ring and entering the grooves in the screw ring and a plunger arranged to reciprocate through the hole in the screw ring, substantially as described.

No. 65,745. Nut Lock. (*Arrête écrou.*)

FIG. 1

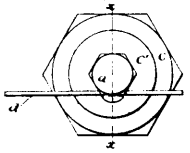


FIG. 2

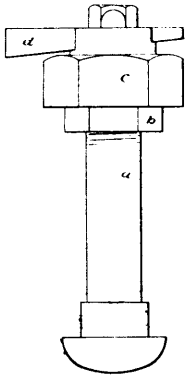
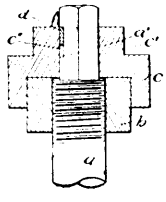


FIG. 3



65745

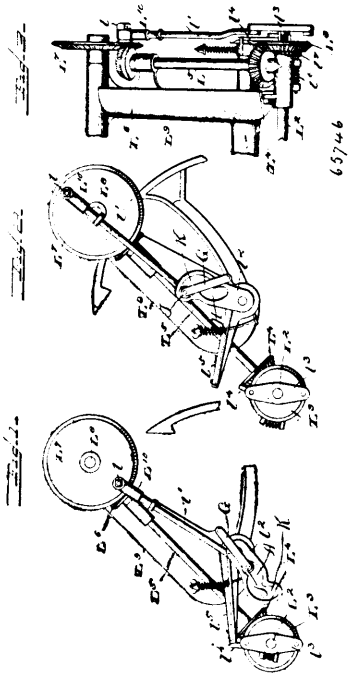
Smith Ferris, New York City, New York, and Edward Shelton, Hartford, Connecticut, U.S.A., 11th January, 1900; 6 years. (Filed 13th November, 1899.)

Claim.—In combination the screw threaded bolt provided with the polygonal surface and with the key portions, the nut, the nut cap provided with the boss fitting interiorly to the polygonal surfaces of the bolt and also provided with the wedge bottomed key slot, and the wedge shaped key, all substantially as described and for the purpose set forth.

No. 65,746. Grain Binder Mechanism.
(*Mécanisme de lieuse à grain.*)

The Warder, Bushnell and Glessner Company, Chicago, Illinois, assignee of Herbert B. Sperry, Springfield, Ohio, U.S.A., 11th January, 1900; 6 years. (Filed 14th December, 1899.)

Claim.—1st. In a grain binder, a needle shaft and needle, a pitman for actuating the same, an operating gear to which said pitman is connected, and means for varying the leverage through which said pitman actuates said shaft, in proportion to the variation of power exerted by said gear, as and for the purpose set forth. 2nd. In a grain binder, a needle shaft and needle, a crank arm mounted on said shaft, an operating gear, a pitman connected at one end to said operating gear, and at the other end connected to said crank arm, and means for moving the crank arm connection of said pitman to vary the leverage exerted by said pitman in proportion to the variation in power exerted by said drive gear, as and for the purpose set forth. 3rd. In a grain binder, a needle shaft and needle, a crank arm connected to said shaft, said crank arm provided with a curved slot, a pitman engaging in said curved slot, a rod connected to the framework and to said pitman, and an operating gear for said pitman, as and for the purpose set forth. 4th. In a grain binder, a



65746

needle shaft and needle, a crank arm connected to said shaft and provided with a cam slot, said slot having a reversely curved portion, a pitman engaging in said slot, a rod connected to the framework and to said pitman, an operating gear for said pitman, and gearing for actuating said operating gear, as and for the purpose set forth. 5th. In a grain binder, a needle shaft, a needle, a crank arm connected to said shaft and provided with a cam slot, a pitman carrying a projection arranged to extend into said slot, a rod connected at one end to the frame work, and at the other end to said projection, a gear to which pitman is eccentrically connected, and means for actuating said gear, as and for the purpose set forth.

No. 65,747. Steering Apparatus for Vessels.
(*Appareil à gouverneur les vaisseaux.*)

Fig. 1.

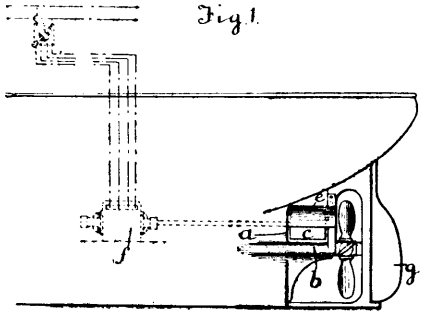
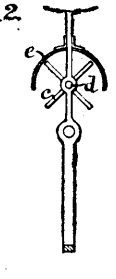


Fig. 2.

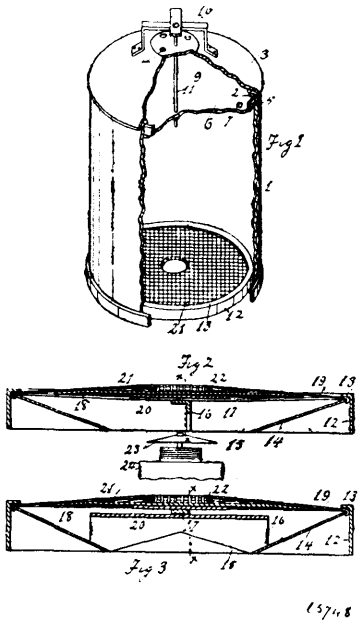


65747

Ebric L. Moore John N. Moore, and George N. Moore, all of New York City, New York, and James G. Foster and Matthew Bruce, also of New York City, New York, U.S.A., 11th January, 1900; 6 years. (Filed 26th May, 1899.)

Claim.—The combination with the hull of a vessel, of an exterior steering wheel, located at one end, below the water level with its axis parallel with the keel, and a part covered by a hood and geared with a motor for rotating it in either direction, substantially as described.

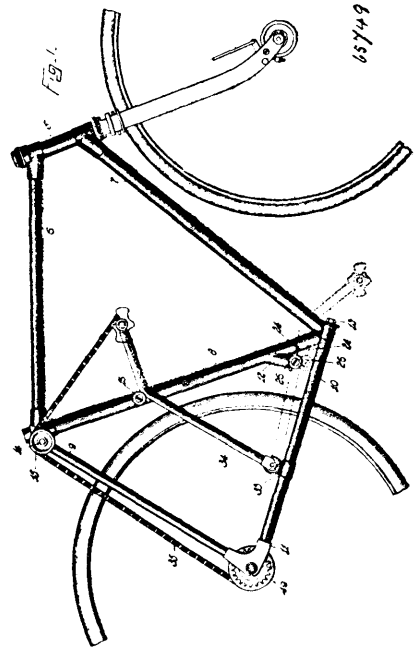
No. 65,748. Oven and Toaster for Gas and Gasoline Stoves. (*Fourneau pour poêles à gaz et gazoline.*)



James Inglis Sloan, John F. Schmeltz and Joseph F. Shifferd, all of Kansas City, Kansas, U.S.A., 11th January, 1900; 6 years. (Filed 14th December, 1899.)

Claim.—1st. In an oven for gasoline stoves, a casing open at both ends and having an inturned flange around its upper edge, a collar arranged to engage said flange, an inner cover having draught opening draught openings near its periphery arranged to engage said collar, an outer cover having draught openings near its centre arranged over said casing, and means for securing said outer to said inner cover, substantially as set forth. 2nd. In an oven for gas and gasoline stoves, a casing open at both ends and having an inturned flange around the upper edge, a collar arranged to engage said flange, an inner cover having draught openings near its outer edge arranged to engage said collar, an outer cover having the draught openings near its centre arranged over said casing, a pair of handles set at right angles to each other upon said outer cover, and a bolt passing through said handles and through said outer and inner covers, and provided with a nut for binding said parts together, substantially as set forth. 3rd. An oven for gas and gasoline stoves consisting of the combination with a casing open at both ends and having an inturned flange around its upper edge, a collar arranged to engage said flange, an inner cover having draught openings near its outer edge arranged to engage said collar, an outer cover having draught openings near its centre arranged over said casing, and means for securing together said outer and said inner covers, of a ring of smaller diameter than the casing arranged within the same, a cone shaped distributer carried on said ring, a bracket mounted in said distributer, a protecting plate of smaller diameter than said distributer carried on said bracket, a sheet of woven wire arranged over said plate secured at its outer edge upon said distributer and provided with a central opening and a ring surrounding said openings arranged to elevate said wire off of said plate, substantially as set forth. 4th. In an oven for gas and gasoline stoves, the combination with a ring having a flanged edge, of a cone shaped distributer having a central opening engaging the ring at the flanged edge, a protecting plate of smaller diameter than the ring carried on the distributer, a bracket resting on the distributer and supporting said protecting plate, and a sheet of woven wire secured upon the distributer and covering said protecting plate, substantially as set forth. 5th. In an oven for gas and gasoline stoves, the combination with a flanged ring, of a cone shaped distributer having a central opening arranged within said ring, a protecting plate of smaller diameter than the ring arranged over the opening in said ring, a a sheet of woven wire having a central opening arranged over said protecting plate, and a ring around said opening to raise said wire off of the surface of said plate, substantially as set forth. 6th. In an oven for gas and gasoline stoves the combination with a flanged ring, of a cone shaped distributer having a central opening arranged within said ring, a protecting plate of smaller diameter than said ring arranged over said opening in the distributer, a strap secured upon said distributer, carrying said plate, a bracket resting on said distributer arranged to support said plate, a sheet of woven wire having a central opening covering said plate, and a ring surrounding said opening arranged to raise said wire off of the surface of said plate, substantially as set forth.

No. 65,749. Bicycle. (*Bicycle.*)



John Charles Robbins, Waltham, Massachusetts, U.S.A., 11th January, 1900; 6 years. (Filed 20th March, 1899.)

Claim.—1st. A lever bicycle having a frame, levers pivotally mounted on the frame, and spring buffers mounted on the frame and adapted to limit the downward movement of the levers. 2nd. A lever bicycle having a frame provided with a rearwardly extending wheel fork, levers pivotally mounted on said fork, and stops mounted on the frame at a point forward of the lever pivots and adapted to intercept the levers. 3rd. A lever bicycle having a frame member as 8, a casing on said member, a spring supported slide in said casing, and laterally extending buffers mounted at the lower end of the said slide. 4th. A lever bicycle having a frame member 8, furnished with the casing 12, the cap 17 secured in the lower end of said casing, the spring 23 mounted on the cap, the bolt 19, reciprocal through the perforation in the cap and provided with the washer 21, bearing on the spring, and having a cross sleeve at its lower end, and a shaft supported in said sleeve and carrying buffers. 5th. In a lever clutch operated bicycle, a spring tension device adapted to exert a reverse action on the clutch, mounted in the frame independent of the clutch and connected therewith. 6th. In a lever clutch operated bicycle, a tubular frame member, and a spring tension device contained therein and connected with the clutch. 7th. In a bicycle having a rearwardly extending fork formed of tubular members, a friction clutch rotatably mounted between the fork members, a lever pivotally mounted on one of said members, a connection between the lever and the clutch, and a tension device contained within one of said tubular members and connected with the clutch. 8th. The combination with the frame member 10, of the spring tension device contained therein and comprising the spring 27, secured to said frame member, the tube 28, secured to the opposite end of the spring, the nut 29 bearing on the forward end of the tube 28, and having the tubular portion 30, the screw 31 screwed into said tube, and a clutch connection extending from the screw 31. 9th. A clutch for a lever driven bicycle, comprising a clutch member secured to the wheel hub and having ball pockets in its periphery, balls in the pockets, a chain pulley having a collar embracing the clutch member and having a ball way bearing on the balls, a face plate secured in said collar and having a ball way, complemental to that of the collar, and a laterally extending sleeve, and bearing on which said sleeve may rotate. 10th. In a clutch for a lever driven bicycle, the combination with the shaft 36, the cone 37, screwed thereon and having a sleeve, the double cone 40, sliding on the shaft and having a sleeve, the double cone 39, mounted on the sleeves of the cones 37 and 40, means for preventing the independent rotation of either cone, and balls between the cones, of the plates 55 having the laterally extending sleeve 56 bearing on said balls, and a clutch with which said plate is adapted to co-act. 11th. The combination with the shaft 36, the cone 37 screwed thereon, the

double cone 40 free to slide thereon, the double cone 39 mounted on the sleeves of the cone 37 and 40, balls between the cones, the plate 55 having the sleeve 56 mounted on said balls and having the end flange 57, said plate 56 also having the notched periphery and the annular ball way 54, and the chain pulley 49, having the collar 50, adjustably secured to the plate 55, having the ball way 52 and means for engaging the notched periphery of the plate 55, of the wheel hub, the clutch member secured thereto embracing a portion of the sleeve 55 and having at this portion a pocketed periphery, balls in the pockets bearing on the ways 52 and 54, and balls between the inner face of the cone 40 and the inner surface of the clutch member, substantially as and for the purpose described. 12th. The combination with the frame having the upper member 6, the inclined member 8 and the fork member 9 and 10, the shaft 14 secured in said frame adjacent to the upper end of the member 9, the idle pulley 15 on said shaft, the stop 16 secured to the member 8, and a stop or buffer at the lower portion of the frame, of a clutch mounted in the rear fork, a lever pivotally mounted on the member 10 and adapted to swing between the stops, and a flexible connection, between the lever and the clutch, which works over the pulley 15, as described.

No. 65,750. Belt and Strap. (*Courroie.*)

Fig. 1.

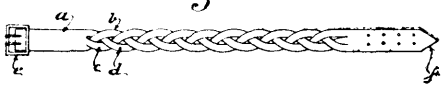


Fig. 2.

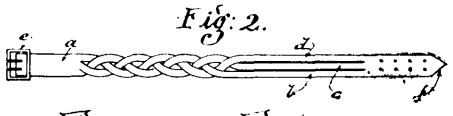


Fig. 3.

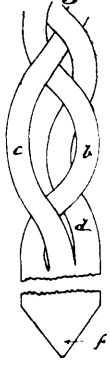
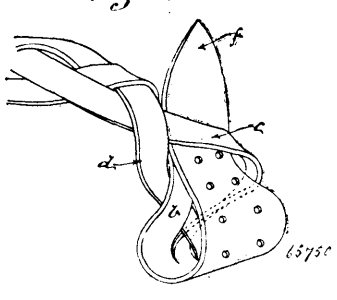


Fig. 4.



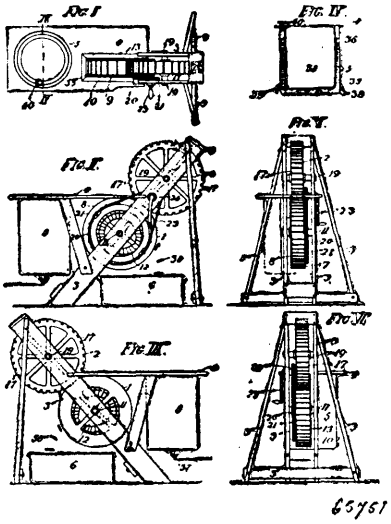
Edward Candish Millard, London, England, 11th January, 1900; 6 years. (Filed 27th December, 1898.)

Claim.—1st. As an article of manufacture, a belt or strap which is cut or slit the required distance of its length into strips which may be plaited together, substantially as described and illustrated herein. 2nd. In means for plaiting belts or straps, cutting or slitting the belt or strap the required distance, plaiting the strips so cut and terminating the plait in the manner described and illustrated herein for the purpose of providing a continuous belt or strap plaited the required distance.

No. 65,751. Pop Corn Press. (*Presse pour blé rôtie*)

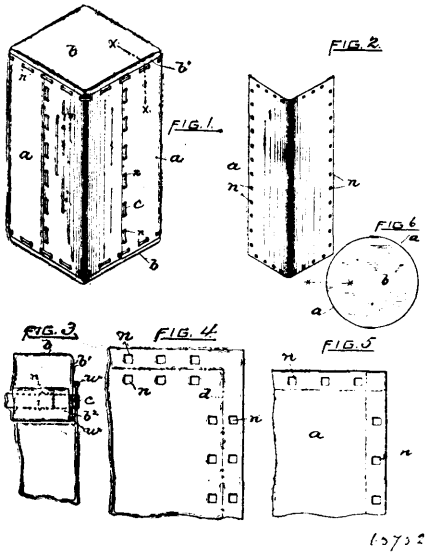
Aaron Christian Grube, Pasadena, California, U.S.A., 11th January, 1900; 6 years. (Filed 28th September, 1899.)

Claim.—1st. In a pop corn press, the combination of a wheel having a series of moulds, a series of plungers movably supported in said wheel, a cam for giving outward direction to said plungers, and means for connecting said plungers movably to each other, substantially as set forth. 2nd. In a pop corn press, the combination of an open wheel having a series of moulds on its periphery, a series of radially extending plungers, a cam upon which the inner ends of said plungers ride, and a flexible cord connecting said plungers with each other, substantially as set forth. 3rd. In a pop corn press, the combination of an open wheel having a series of moulds, a series of movable plungers, flanges located on each side of said plungers, cross rods extending through said flanges and between the plungers, and a cam for giving outward direction to said plungers, substantially as set forth. 4th. In a pop corn press, the combination of an open wheel, a series of plungers, a series of moulds, means for moving said plungers, a pressure wheel having a series of dies adapted to enter said moulds and intervening spaces between said dies adapted to straddle the division walls between the adjoining moulds, substantially as set forth. 5th. In a pop corn press, the combination of a wheel having a series of plungers, a series of moulds, division strips between the moulds, a pressure wheel having a series of



dies which decrease in width inwardly, and a series of spaces between said dies which increase in width inwardly, and means for operating said mechanism, substantially as set forth.

No. 65,752. Metallic Bale Covering.
(*Couverture de ballot métallique.*)



Mark A. Heath, Providence, Rhode Island, U.S.A., 11th January, 1900; 6 years. (Filed 5th May, 1899.)

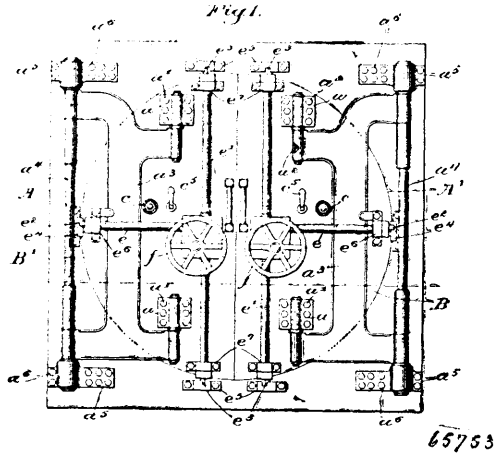
Claim.—1st. A metallic bale covering composed of side and end sections having overlapping edges provided with holes registering with each other, metallic lacing ribbons interlaced through said holes for securing the said sections together, and having one or both of the end sections provided with a guide flange arranged at the rear of the said ribbon receiving holes, substantially as hereinbefore described and for the purpose set forth. 2nd. In a metallic bale covering, the combination with the side sections having suitably arranged lacing holes *n* formed therein, of an end section or plate having apertured vertical sides arranged with respect to said side sections, the lacing holes in the side and end sections registering with one another, lacing ribbons adapted to be inserted in said holes for securing the several sections together, and an inner guide flange b^2 formed by bending and folding rearwardly the lower portion of the said vertical sides of the end section or sections, substantially as set forth.

No. 65,753. Safe. (*Coffre-fort.*)

George Leonard Damon, Cambridge, Massachusetts, U.S.A., 11th January, 1900; 6 years. (Filed 9th December, 1899.)

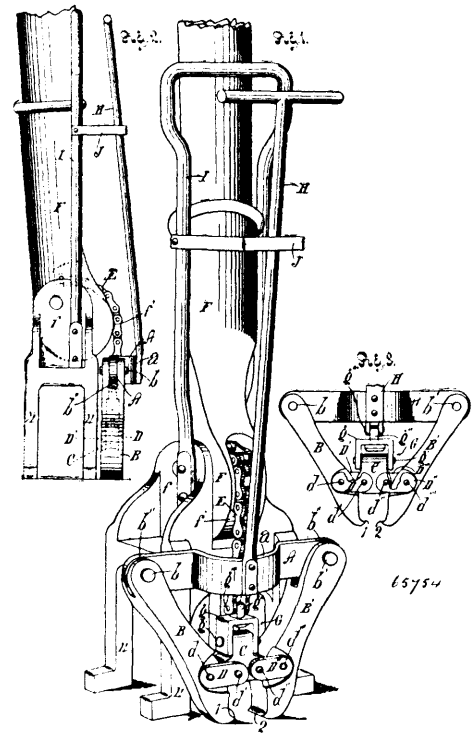
Claim.—1st. A vault having a circular stepped entrance and two semi-circular doors having their edges correspondingly stepped to

co-operate with and close said entrance, and hinges supporting said doors and connected to the vault. 2nd. A vault, having a circular



entrance, semi-circular doors closing said entrance, a mullion extending diametrically across said entrance and having its ends curved to correspond with the said entrance, the doors and the edges of the entrance and the ends of the mullion being provided with notches and projections, making a ground joint to preclude the passage of fire, powder or liquor explosive to the interior of the vault. 3rd. A vault, having a circular entrance and two semi-circular doors, and a mullion to which both doors may be locked, said mullion being mounted to swing entirely from the door space. 4th. A vault, having a circular entrance, two semi-circular doors, and a mullion to which both doors may be locked, said mullion being adapted to be carried by one door as the latter is being opened to thus remove the mullion completely from the entrance. 5th. A vault, having a circular entrance, two semi-circular doors, a mullion, to which both doors may be locked, and locking means at the opposite ends of said mullion to secure said mullion diametrically in the entrance of the vault. 6th. A vault, having a circular entrance, a mullion, locking means to retain the mullion diametrically in said entrance, two doors, each fitted to be locked on the mullion, and means to lock the mullion to the last door to be opened, whereby when the mullion is unlocked from the entrance it will be locked to the door to be moved thereafter with the door in its opening and closing movements, whereby removing the mullion from the entrance. 7th. In a vault, having a circular entrance, a mullion, and means to lock it in diametrical position in the said entrance, said means consisting of a notch and a detachable projection, substantially. 8th. In a vault, having a circular entrance, a mullion provided at opposite ends with bolts, combined with a shaft, and means to actuate the same to withdraw or project said bolts as it is desired to unlock or lock the mullion in position diametrically in said entrance. 9th. The combination with a semi-circular door, having a pivoted radius bar, of a mullion, and means carried by said mullion to effect the locking or coupling of said radius bars to said mullion, whereby the mullion may be moved in unison with the door. 10th. A vault presenting a circular entrance and provided with two semi-circular hinged doors to close said entrance, and a mullion connected to and swinging with one of said doors, said door and connected mullion being closed first, the other door being subsequently closed into the semi-circular entrance left after closing one door and overlapping at its edge, the mullion carried by the other door. 11th. A vault having a circular entrance, a mullion extending diametrically across said entrance and having its ends curved in an arc corresponding to said entrance, and doors co-operating with said entrance and said mullion for closing the entrance, said doors and mullion fitting said entrance by a ground joint, substantially as described. 12th. A vault having opposed doors closing toward each other, a mullion fitting between said doors and co-operating therewith to close the entrance of the vault, and means to lock the mullion to one of said doors, whereby the mullion is carried by said door as the latter is being opened to thus remove the mullion completely from the entrance of the vault, substantially as described. 13th. A vault having an entrance, a vault door partially closing said entrance, and a mullion, combined with end locking mechanism to lock the ends of said mullion in said entrance when the latter is closed, and means to lock said mullion to said door to move with it when being opened, the end locking means being at such time retracted to release the ends of the mullion. 14th. A vault having a circular entrance presenting a series of circular shoulders, one of which is provided with a groove, combined with two semi-circular doors to close said entrance, said doors having semi-circular shoulders, one of which is grooved, the grooved shoulders of the doors and the entrance fitting one on the other and making a liquid or air tight joint. 15th. A vault having a circular entrance and two semi-circular doors to close said entrance, each of said doors having at their meeting edges a series of shoulders, one of which is provided with a groove, combined with a mullion adapted to be connected with and be removed wholly from the entrance of the vault by the last door of the pair to be opened, said mullion having a series of vertical shoulders, one of which is grooved, substantially as described.

No. 65,754. Spike Puller. (*Arrache-cheville.*)



Frank Newham, Los Angeles, California, U.S.A., 11th January, 1900; 6 years. (Filed 4th August, 1899.)

Claim.—1st. The combination of a bar, two jaw levers pivoted to the bar at a distance apart and converging toward the jaws, a toggle block located between the converging levers, toggle arms pivotally connecting the block with the levers respectively below the bar, and means for operating the toggle block. 2nd. The combination of a bar, two jaw levers pivoted to the bar at a distance apart and converging toward the jaws, said jaws being provided with edges projecting toward each other, a toggle block located between the converging levers, toggle arms pivotally connecting the block with the levers respectively below the bar, and means for operating the toggle block. 3rd. The combination of a bar, two jaw levers pivoted to the bar at a distance apart and converging toward the jaws, said jaws being provided with edges projecting toward each other, a toggle block located between the converging levers, toggle arms pivotally connecting the block with the levers respectively, a flexible connection connected with the toggle block, and a lever to which the flexible connection is attached, said lever being provided with a fulcrum and also with a curved face over which the flexible connection is led. 4th. The combination of a bar, two jaw levers pivoted to the bar at a distance apart and converging toward the jaws, said jaws being provided with edges projecting toward each other, a toggle block located between the converging levers, toggle arms pivotally connecting the block with the levers respectively, a lever with flexible connection for operating the block, and a swivel connection connecting the flexible connection with said block. 5th. A clutch comprising a bar, two jaw levers pivoted to the bar at a distance apart and converging toward the jaws, said jaws being provided with edges projecting toward each other, a toggle block located between the converging levers, toggle arms pivotally connecting the block with the levers respectively, means for operating the toggle block, and a handle attached to the bar for handling the clutch.

No. 65,755. Coin Operated Machine.

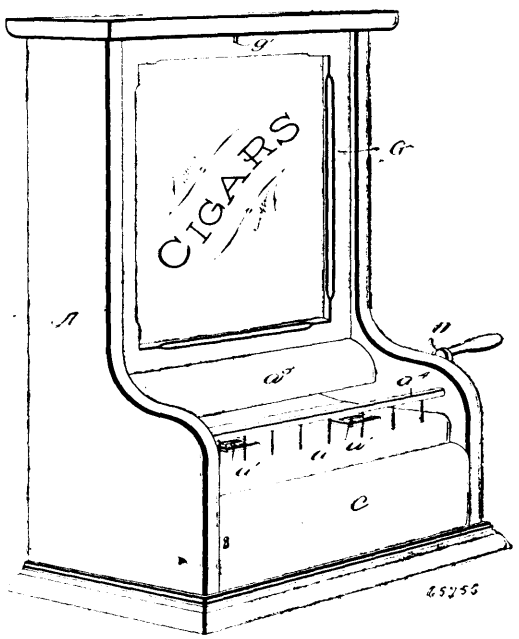
(*Machine actionnée par un pièce de monnaie.*)

Pierre Alphonse Trotier, St. Henri de Mascouche, Quebec, Canada, 11th January, 1900; 6 years. (Filed 16th June, 1899.)

Claim.—1st. A coin operated machine, comprising a casing having a plurality of channels therein, a receiving plate leading to outlets formed in the lower portion of said channels, a plurality of slots arranged in said plate, a rotatable coin receiver located beneath each

of said slots, and provided with recesses for receiving the coin, normally in alignment with said slot, a handle for rotating said coin

Fig 1.



receivers, a lever adapted to be operated by the coin in said receivers and a rod secured to said levers for ejecting the contents of the channels, substantially as described. 2nd. A coin operated machine, comprising a casing having a plurality of channels therein, a receiving plate leading to outlets formed in the lower portion of said channels, and a plurality of slots arranged in said plate, a tripping mechanism located beneath said slots and adapted to be operated by a coin, to eject the contents of the said channels, substantially as described. 3rd. A coin operated machine, comprising a casing having a plurality of channels therein, a receiving plate leading to outlets formed in the lower portion of said channels, and a plurality of slots arranged in said plate, a tripping mechanism located beneath said slots and adapted to be operated by a coin, to eject the contents of said channels, a shield secured to the casing and projecting over said plate a removable frame for closing the front of said casing, adapted to be detachably connected with said shield, and a suitable lock on the edge of said frame for securing the same in its closed position, substantially as described. 4th. A coin operated machine, comprising a casing having a plurality of channels therein, a receiving plate leading to outlets formed in the lower portion of said channels, and a plurality of slots arranged in said plate, a rotatable coin receiver located beneath each of said slots and provided with recesses for receiving the coin, which recesses are normally in alignment with said slots, a handle for rotating aid coin receivers, a plurality of levers pivoted in said casing, the outer end of which is adapted to be struck and depressed by the coin in said coin receivers, a vertical rod fixed to said levers and adapted to be passed through the slotted end of said channels to eject the contents thereof, a retracting spring for the rod, a protecting cover hinged to the lower portion of said channels to prevent the accidental removal of the contents thereof, a shield secured to the said casing and extending over said plate, a removable frame adapted to engage said shield, and a lock for securing the frame its closed position, substantially as described.

No. 65,756. Water Wheel. (*Roue d'eau.*)

Almerlin Hubbell Lighthall, New York City, New York, U.S.A., 11th Januuary, 1900; 6 years. (Filed 2nd May, 1899.)

Claim.—1st. A water wheel having on its periphery two or more series of buckets or vanes oppositely arranged, substantially as described. 2nd. A water wheel having on its periphery two series of buckets or vanes oppositely arranged, there being a space on each side of each bucket allowing the free discharge of water therefrom, substantially as described. 3rd. A water wheel having its periphery formed by two ribs, each rib being provided with a series of buckets, the buckets of the respective series being oppositely arranged, substantially as described. 4th. A water wheel having a bifurcated periphery, each portion being provided with a series of buckets or vanes, substantially as described. 5th. A water wheel having its hub provided with one or more chambers, a shaft having indentations corresponding to the chambers in the hub, a key arranged in each chamber and indentation, and screws for adjusting the key and retaining it in position, substantially as described. 6th. A water wheel having a hub formed separate therefrom and in two halves, bolts for fastening the two parts of the hub to the wheel on

Fig 2

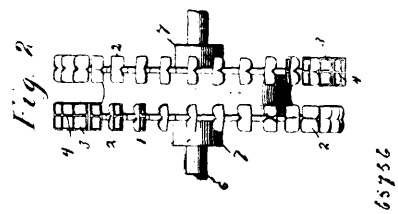
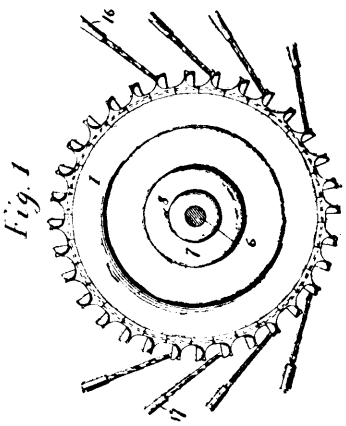
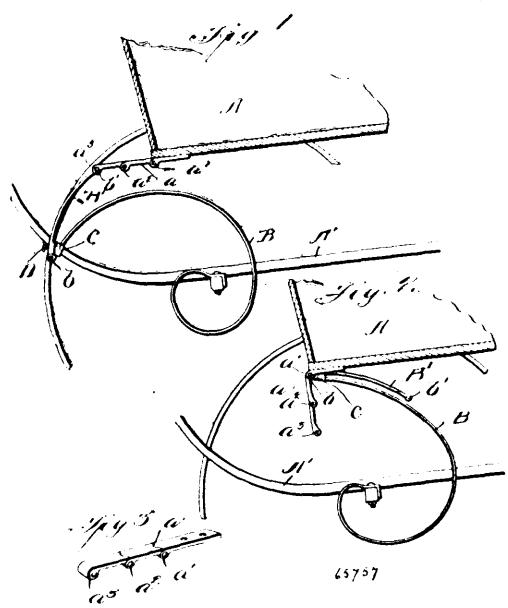


Fig. 1



each side thereof, the hub having one or more chambers, a shaft having indentations corresponding to the chambers in the hub, and a key arranged in each chamber and indentation.

No. 65,757. Baby Jumper. (*Escarpolette.*)

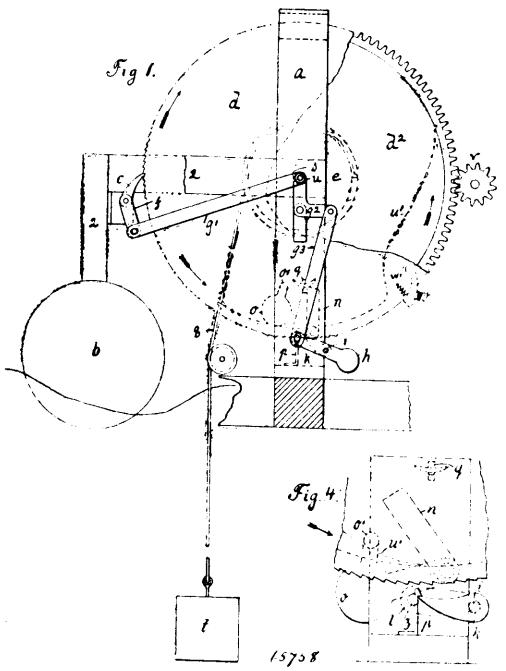


George A. Smith, Alberni, British Columbia, Canada, 11th January, 1900; 6 years. (Filed 3rd May, 1899.)

Claim.—1st. A convertible spring and baby jumper, comprising two springs hinged together, and means for attaching an end of either spring to its operative position, substantially as described. 2nd. A convertible spring and baby jumper, comprising two springs hinged together, and means for detachably securing an end of either spring to its operative position, substantially as described. 3rd. A convertible spring and baby jumper, comprising an inner and an outer spring hinged together, and means for attaching an end of either spring to its operative position, the outer spring being adapted to be swung back over the inner spring, substantially as described. 4th. A convertible spring and baby jumper, comprising an inner and an outer spring, a hinged connection between said springs, means for attaching the outer end of either spring to its operative position, the outer spring being adapted to be swung back over the

inner spring and a spring buffer interposed between said inner and outer spring, substantially as described. 5th. The combination with a perambulator, having a hinge upon its underside, of a convertible spring and jumper, comprising an inner and an outer spring, a hinge connection between said spring, means for securing the inner end of the inner spring to the frame of the perambulator, means for detachably securing the outer end of the inner spring and the outer end of the outer spring to said hinge, and a spring buffer interposed between the inner and the outer springs, substantially as described. 6th. The combination with a perambulator, having a hinge upon its underside, of a convertible spring and jumper adapted to be removably connected with said hinge and a spring operated button secured to said perambulator adjacent to said hinge whereby the accidental displacement of the said spring and jumper is prevented, substantially as described.

No. 65,758. Wave Motor. (*Moteur actionné par les vagues.*)



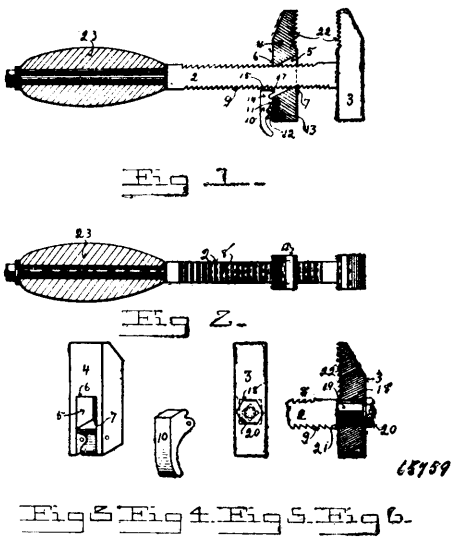
Max Gehre, Rath, Dusseldorf, German Empire, 11th January, 1900; 6 years. (Filed 19th April, 1899.)

Claim.—1st. In a motor for utilizing the power of sea waves, the combination with a supporting frame adapted to float, and provided with an axle or shaft carrying an arm to which is attached a float, of a ratchet wheel and drum mounted on said axle or shaft, a cord or chain attached to said drum and connected to a gravitating weight, said ratchet wheel engaged by a push pawl on said arm, a cam wheel mounted on said shaft, and locking and releasing pawls operated by said cam wheel and connected to the push pawl by levers and links to operate at predetermined times, substantially as set forth. 2nd. In a motor for utilizing the power of sea waves, the combination with a supporting frame adapted to float, and provided with a shaft or axle carrying an elbow arm to which a float or buoy is connected, of a ratchet wheel and drum mounted on said shaft, and a cord or chain winding on and unwinding from said drum and a weight attached to said cord or rope, a push pawl pivoted to said arm and engaging said ratchet wheel, and locking and releasing pawls connected to said push pawl by levers and links, as set forth. 3rd. In a motor for utilizing the power of sea waves, consisting of a supporting frame adapted to float, and carrying a shaft *s*, elbow arm 2, drum *e*, provided with a winding rope 8 and attached weight *t*, a ratchet wheel *d*, and cam wheel d^1, mounted on said shaft, a push pawl *c*, pivoted to said elbow arm 2, and engaging said ratchet wheel an arm *f*, link E^1 connecting said push pawl to a stop pawl *k*, engaging a catch *p*, releasing arms *n*, *o* and *l*, and a pawl *q*, engaged by the cam wheel to lock and release said pawls, in connection with the push pawl *c*, substantially as and for the purposes set forth.

No. 65,759. Wrench. (*Clé à écrou.*)

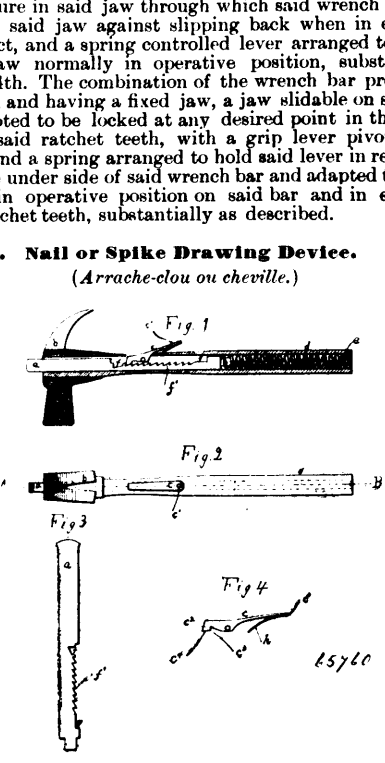
John J. A. Miller, Denver, Colorado, U.S.A., 11th January, 1900; 6 years. (Filed 30th November, 1899.)

Claim.—1st. The combination in a wrench, of a wrench bar having a fixed jaw on one end and a handle at its opposite end, and a toothed rack on its top and bottom edges, with a sliding jaw mounted on said bar and having two oppositely arranged pawl points adapted to engage said toothed racks and a spring controlled lever arranged to resiliently bear against the wrench bar and hold the said pawl



points in normal engagement with said toothed rack and said jaw in a vertical position, substantially as described. 2nd. The combination in a wrench, of a wrench bar having a fixed jaw and a handle and ratchet teeth in its top and and bottom edges and a sliding jaw arranged to grip the ratchet teeth of the top and bottom edges of said wrench bar when in operative position and a spring controlled lever bar arranged to hold said sliding jaw in operative vertical position on said bar, substantially as described. 3rd. The combination of the wrench bar having ratchet teeth on its opposite edges with a fixed jaw removably secured to the end of said wrench bar and a movable jaw slidably mounted on said wrench bar and arranged to engage said ratchet teeth at diagonally opposite points of the aperture in said jaw through which said wrench bar passes, and to hold said jaw against slipping back when in engagement with an object, and a spring controlled lever arranged to resiliently hold said jaw normally in operative position, substantially as described. 4th. The combination of the wrench bar provided with ratchet teeth and having a fixed jaw, a jaw slidable on said wrench bar and adapted to be locked at any desired point in the length of said bar to said ratchet teeth, with a grip lever pivoted to said sliding jaw and a spring arranged to hold said lever in resilient contact with the under side of said wrench bar and adapted to hold said sliding jaw in operative position on said bar and in engagement with said ratchet teeth, substantially as described.

No. 65,760. Nail or Spike Drawing Device.
(*Arrache-clou ou cheville.*)

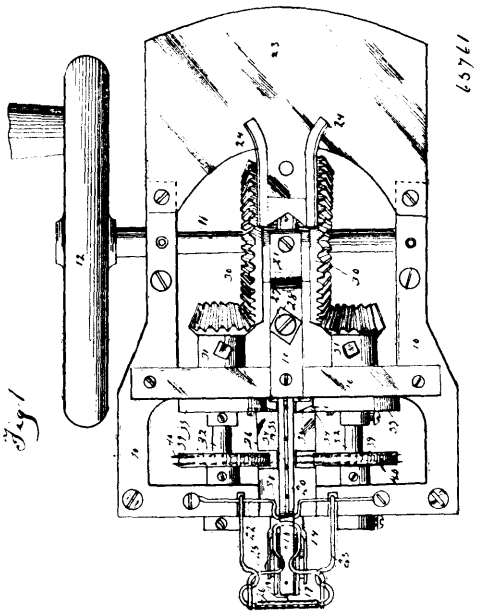


Orland E. Martin, Wakefield, Nebraska, U.S.A., 11th January, 1900; 6 years. (Filed 5th December, 1899.)

Claim.—1st. In a hammer, the combination with a claw, a handle, and a spring dog, of a spring actuated bar having sliding relation with the handle, said bar having rack and ratchet teeth with the dog is adapted to engage, the rack being at an end of the ratchet teeth so that when it passes the dog the tension of the spring which

actuates the bar is given freedom to force the bar continuously outward without further manipulation of the dog until the nail or spike is entirely withdrawn. 2nd. In a hammer, the combination with a claw and hollow handle, of a slide bar having a shoulder on its inner end and a dog pivoted in position to lock the bar, and in the path of the shoulder thereon, whereby to serve the additional function of preventing the entire withdrawal of the bar from the hammer.

No. 65,761. Ribbon Fraying Machine.
(*Machine à franger le ruban.*)



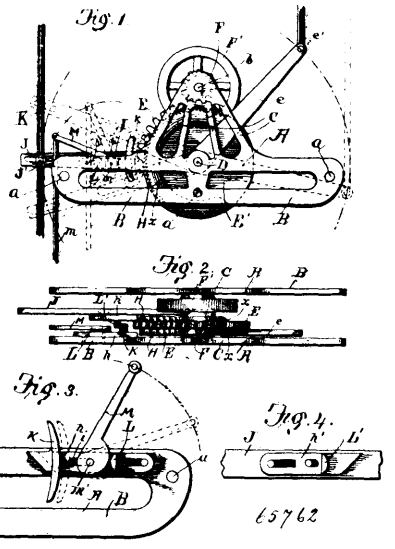
Leonidas E. King, Marshalltown, Iowa, U.S.A., 11th January, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. In a machine for fraying strips of woven fabric, an endless belt or conveyer, a platform at one end of the conveyer, a guide on the platform to direct material from the platform to the endless carrier, a spring for holding the material in contact with the carrier, cutters for severing the warp of the material, and means for directing the material as it becomes disengaged from the endless carrier, all arranged and combined as shown and described. 2nd. In a machine for fraying the edges of ribbons or strips of woven fabric, the combination of an endless conveyer having sharp points for engaging the fabric, an adjustable spring for keeping the fabric in contact with the said conveyer, two rotatable shafts extending parallel with said conveyer and spring and on opposite sides thereof, means for rotating the shafts, a knife on each shaft, a stationary straight edge to co-act with each knife, and a wheel fixed to each shaft adjacent to the cutter and having sharpened projections therein, substantially as and for the purposes stated. 3rd. A machine for fraying the edges of a ribbon or strip of fabric comprising a belt or conveyer having sharpened projections, means or conveying and advancing the belt or conveyer, a leaf spring above the belt or conveyer, to hold the ribbon or strip tightly against the belt or conveyer, a set screw designed to limit the upward movement of said spring, a guiding device for connecting the ribbon or strip from the belt or conveyer, a device for cutting the warp at the edges of the ribbon or strip into short sections and means for removing said severed sections of warp, substantially as and for the purposes stated.

No. 65,762. Windmill Regulator.
(*Régulateur de moulin à vent.*)

Henry F. A. Bruns and Francis E. Eldridge, Waverly, Iowa, U.S.A., 12th January, 1900; 6 years. (Filed 16th November, 1899.

Claim.—1st. In a windmill regulator, the combination with suitable brackets, regulating mechanism mounted therein connected with the wind wheel and adapted to throw the latter out of the wind, comprising a pivoted member, means for rotating the same, and a balance or fly wheel in engagement with the pivoted member for preventing a sudden or jarring movement thereof, substantially as described. 2nd. In a windmill regulator, the combination with suitable brackets, regulating mechanism mounted in said brackets connected with the wind wheel and adapted to throw the latter out of the wind, comprising a movable toothed plate, means for operating the same, and a balance or fly wheel geared to the toothed plate, for the purpose described. 3rd. In a windmill regulator, the



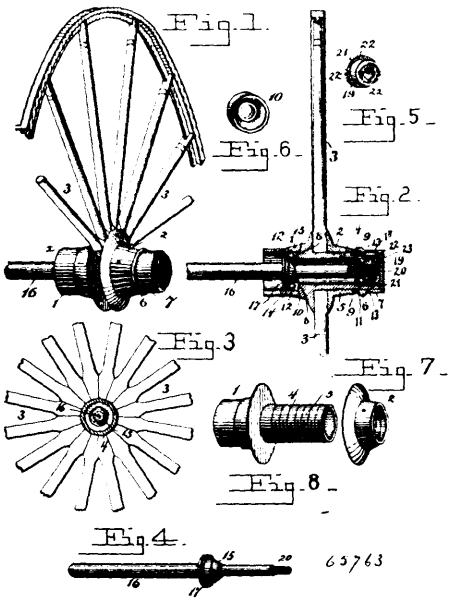
combination with suitable brackets, regulating mechanism mounted in said brackets, connected with the wind wheel and adapted to throw the latter out of the wind, comprising a pivoted plate, a toothed segment on said plate, pawls and ratchets for rotating said plate, and a balance or fly wheel in engagement with the toothed segment, substantially as described. 4th. In a windmill regulator, the combination with suitable brackets, regulating mechanism mounted in said brackets, connected to the windmill and adapted to throw the same out of the wind comprising a plate pivoted in said brackets, a toothed segment on the periphery of said plate, a balance or fly wheel meshing with said toothed segment, ratchet segment formed on the respective surfaces of the pivoted plate and retained and actuating pawls for rotating the plate, substantially as described. 5th. In a wind mill regulator, the combination with suitable brackets, regulating mechanism in said brackets connected to the wind wheel and adapted to throw the same out of the wind, ratchets pivoted in said brackets, mechanism operating said ratchets comprising spring pressed pawls one retaining and the other actuating, and a cam lever for withdrawing the pawls from engagement with the ratchets and a balance wheel connected to the regulating mechanism, substantially as described. 6th. In a wind mill regulator, the combination with suitable brackets, regulating mechanism in said brackets connected to the wind mill and adapted to throw the same out of the wind, ratchets pivoted in said brackets, and mechanism operating said ratchets comprising a spring pressed retaining pawl, a spring pressed actuating pawl, a cam lever engaging one of the pawls, and a sliding engagement between the two pawls whereby when one is operated the other will be correspondingly operated, substantially as described. 7th. In a windmill regulator, the combination with suitable brackets, regulating mechanism in said brackets connected to the wind wheel and adapted to throw the same out of the wind, ratchets pivotally secured in said brackets, and mechanism operating said ratchets, comprising an actuating spring pressed pawl, a lug on the said pawl, a spring pressed thereon upon which the lug on the actuating pawl is adapted to ride, and a cam lever adapted to engage a lug on the side of the retaining pawl to simultaneously manipulate the pawls, substantially as described.

No. 65,763. Vehicle Wheel. (*Roue de voiture.*)

Robert L. Breth, New Washington, Pennsylvania, U.S.A., 12th January, 1900; 6 years. (Filed 17th November, 1899.)

Claim.—1st. A device of the class described, comprising a hub provided with inner and outer interior shoulders, inner and outer ball cups seated against said shoulders, balls arranged within the cups, retaining rings fitting within the hub and against the cups, an axle provided with an inner fixed bearing cone extending through the inner retaining ring and receiving the inner balls, and an outer cone bearing interiorly threaded to engage the axle and extending through the outer retaining ring, said bearing cones being provided with annular flanges engaging the outer faces of the retaining rings and holding the same in position, substantially as described. 2nd. In a device of the class described, the combination with a hub, and an axle, of a ball cup arranged within the hub, a series of balls therein, a retainipg ring fitting against the cup, and a removable

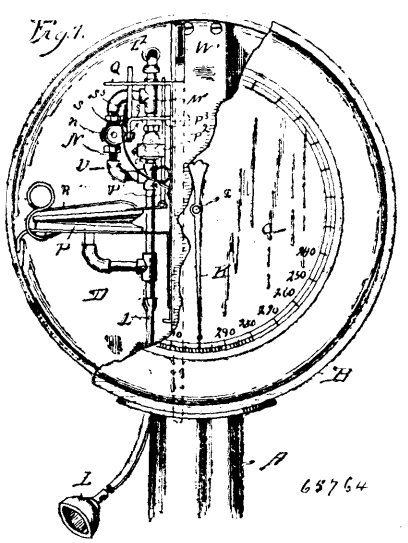
bearing cone interiorly threaded to engage the axle and extending through the retaining ring, said bearing cone being provided with a



flange fitting against the retaining ring and holding the same in position, substantially as described.

No. 65,764. Lung Testing Machine.

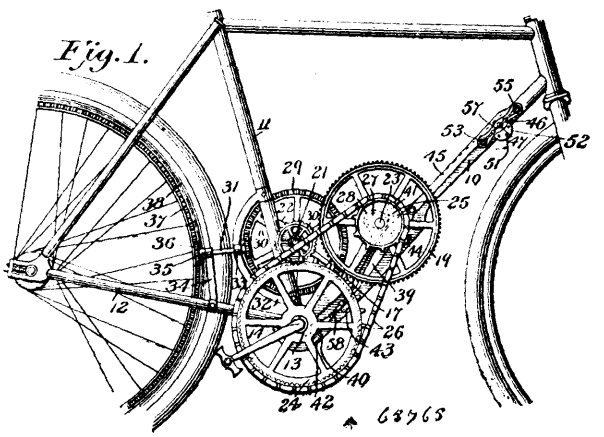
(*Machine à sonder les poumons.*)



William E. Sanders, Watertown, New York, U.S.A., 12th January, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. In a lung tester, the casing, the bellows carried therein, inflating pipe and coin controlled valve, the hollow cylinder secured thereto, lugs on the inner wall of said cylinder, the spirally grooved shaft working in said cylinder with the said lugs engaging in the grooves, the indicating pointer shell telescoping over the cylinder and the coiled spring about the same, combined as set forth. 2nd. In a lung testing machine, the bellows and indicating attachment, the air passageway leading to the said bellows, the valve in said passageway, the branching air passageway communicating with the main air passageway on opposite sides of the said valve, an escape valve, an auxiliary bellow communicating with the main air passageway through a pipe, a spring for closing the said auxiliary bellows, a rod connecting the bellows with the valve in the main air passageway, combined with a spring actuated angle lever connected to the escape valve and adapted to be actuated by said rod, and a coin controlled lever for closing the escape valve, as set forth. 3rd. In combination with the bellows, air passageways, valves and connections, the notch rod, the spring actuated angle lever, the tilting coin actuated lever, the lower end of which extends into the coin chute, and the upper end resting normally against the arm of the angle lever, and designed to release the notched rod from the arm of the angle lever as a coin is dropped in the chute, as shown and described. 4th. In a lung tester, the auxiliary bellows P, the vertically movable rod actuated thereby, the upright casing with a notched aperture therein, the lever S^2 designed to engage in said notch, the bellows, the inflating pipe and valves and coin controlled mechanism for releasing said lever and operating the valves, as set forth. 5th. In a lung testing machine, the rod P^1 and means for raising the same, the member Y thereon with bevelled lug, the upright portion of the support Q, with the aperture having a notched edge, the lever S^2 against which the bevelled lug engages to throw it into said notch, as and for the purpose set forth.

No. 65,765. Bicycle. (*Bicycle.*)



Joseph Cressman, Washington, New Jersey, U.S.A., 12th January, 1900; 6 years. (Filed 23rd November, 1899.)

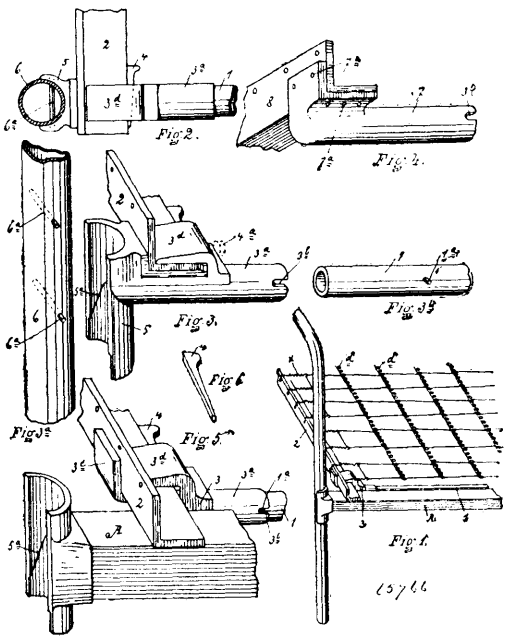
Claim.—1st. In a bicycle, the combination with a frame and a driving wheel, of a double faced, open toothed rack or driving gear on the driving wheel, a pinion journaled on a transverse axis and operatively geared to said rack, a rocker fulcrumed at an intermediate point, main and auxiliary driving gears mounted upon the arms of the rocker for alternate engagement with the pinion, chain gearing for communicating motion from the main to the auxiliary driving gear, a rocker shifting mechanism consisting of a cam slide extending lengthwise of the rocker and provided with relatively reversed cam faced end portions adapted for alternately engaging the opposite ends of the rocker and actuating the same, and means for holding the slide in an adjusted position, substantially as described. 2nd. In a driving mechanism for bicycles, the combination with a frame and pinion, of a rocker fulcrumed at an intermediate point for tilting movement, main and auxiliary driving gears mounted respectively upon the arms of said rocker for alternate engagement with said pinion, chain gearing for communicating motion from the main driving gear to the auxiliary driving gear and rocker, shifting mechanism consisting of a cam slide extending lengthwise of the rocker, and provided with relatively reversed cam faced end portions adapted for alternately engaging the opposite ends of the rocker and actuating the same, and means for holding the slide in an adjusted position, substantially as specified. 3rd. In a driving mechanism for bicycles, the combination with a frame and a pinion, of a rocker fulcrumed at an intermediate point for tilting movement, main and auxiliary driving gears mounted respectively upon the arms of said rocker for alternate engagement with said pinion, chain gearing for communicating motion from the main driving gear to the auxiliary driving gear, and rocker shifting mechanism consisting of a slide extending lengthwise of the rocker and having oppositely disposed cam faces at its extremities and concaved terminal seats for alternate engagement with the opposite ends of said rocker, and means for holding the slide in an adjusted position, substantially as specified. 4th. In a driving mechanism for bicycles, the combination with a frame and a pinion, of a rocker fulcrumed at an intermediate point for tilting movement, main and auxiliary driving gears mounted respectively upon the arms of said rocker for alternate engagement with said pinion, chain gearing for communicating motion from the main driving gear to the auxiliary driving gear, and rocker shifting mechanism consisting of a cam slide extending lengthwise by the side of the rocker and provided with the relatively reversed cam faced portions at its opposite ends adapted for alternately engaging the opposite ends of the rocker, a shifting lever mounted upon the frame and provided with locking devices, and connections between said shifting lever and the slide, substantially as specified. 5th. In a driving mechanism for bicycles, the combination with a frame and a pinion, of a rocker fulcrumed at an intermediate point for tilting movement, main and auxiliary driving gears mounted respectively upon the arms of said rocker for alternate engagement with said pinion, chain gearing for communicating motion from the main driving gear to the auxiliary driving gear,

and rocker shifting mechanism consisting of a cam slide extending lengthwise of the rocker and provided with relatively reversed cam faced portions at its opposite ends adapted for alternately engaging the opposite ends of the rocker and actuating the same, a shifting lever mounted upon the frame and having a link connection with the slide, and a latch mounted upon said shifting lever for engagement with the frame to secure the lever in its adjusted positions, substantially as specified. 6th. In a driving mechanism for bicycles, the combination with a frame and a pinion, of a rocker fulcrumed at an intermediate point for tilting movement, main and auxiliary driving gears mounted respectively upon the arms of said rocker for alternate engagement with said pinion, chain gearing for communicating motion from the main driving gear to the auxiliary driving gear, and rocker shifting mechanism consisting of a cam slide mounted upon the frame and provided with relatively reversed cam faced portions adapted for alternately actuating the rocker, a shifting lever mounted upon the frame and having a link connection with the slide, and a latch consisting of a tilting lever provided with a lug or projection for engaging a socket in the frame and provided with a pressure button, substantially as specified. 7th. In a driving mechanism for bicycles, the combination with a frame and a pinion, of a rocker fulcrumed at an intermediate point for tilting movement, main and auxiliary driving gears mounted respectively upon the arms of said rocker for alternate engagement with said pinion, chain gearing for communicating motion from the main driving gear to the auxiliary driving gear, and rocker shifting mechanism consisting of a cam slide mounted upon the frame, and provided with relatively reversed cam faced portions adapted for alternately actuating the rocker, a shifting lever mounted upon the frame and having a link connection with the slide, and a latch for securing the shifting lever in its adjusted position, the same consisting of an intermediately fulcrumed lever having an arm carrying a lug or projection for engagement with a socket in the frame, a pressure button, and a return spring housed within the button for holding the latch lever in its normal position, substantially as specified. 8th. In a driving mechanism for bicycles, the combination with a frame and a pinion, a rocker, gears carried by the rocker and adapted for alternate engagement with said pinion, means for communicating motion to the gears, and a shifting slide for the rocker, of a shifting lever, a socket plate traversed by the shifting lever, a spring actuated latch for engagement with said sockets and provided with a pressure button, and a second pressure button mounted for movement in a common direction with the first named pressure button, and operatively connected with the latch, substantially as specified. 9th. In a driving mechanism for bicycles, the combination with a frame and a pinion, a rocker, gears carried by the rocker and adapted for alternate engagement with said pinion, means for communicating motion to the gears, and a shifting slide for the rocker, of a shifting lever, a socket plate traversed by the lever, a spring actuated latch mounted upon the shifting lever for alternate engagement with the sockets of the plate and provided with a pressure button, a second or auxiliary pressure button pivotally mounted upon said shifting lever and having an actuating or return spring, and a tilting lever for communicating motion from the second named or auxiliary button to the latch, substantially as specified. 10th. In a driving mechanism for bicycles, the combination with a frame and a pinion, a rocker, gears carried by the rocker and adapted for alternate engagement with said pinion, and means for communicating motion to the gears, of a shifting slide arranged in operative relation with the rocker and provided with spaced oppositely disposed cam faces for engagement with said rocker, said slide being of sectional construction, with the sections connected by a sliding joint, means for securing the sections with the cam faces of the slide at the desired interval, and means for operating the slide, substantially as specified.

No. 65,766. Bed. (*Lit.*)

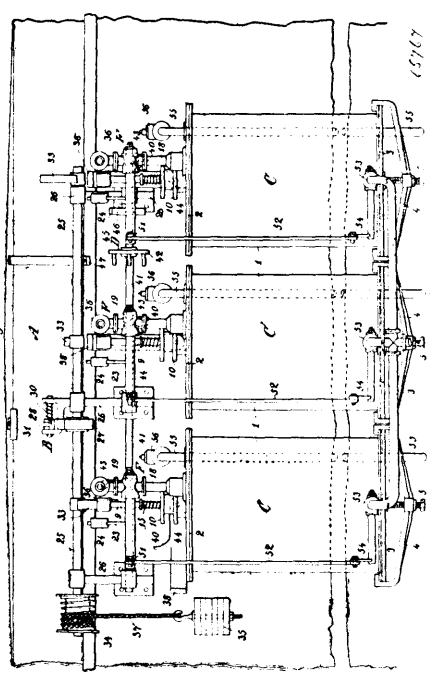
Oscar S. Foster and William S. Foster, both of Utica, New York, U.S.A., 12th January, 1900; 6 years. (Filed 6th December, 1899.)

Claim.—1st. The combination in a bed, of posts, bed bottom and laterally adjustable means for connecting the bed bottom to the posts, substantially as set forth. 2nd. The combination in a bed bottom of side rails, cross bars and a fastener between the side rails and cross bar, constructed and arranged to slide along the cross bars, substantially as set forth. 3rd. The combination in a bed bottom of side rails, cross bars, a laterally adjustable fastener between the side rail and cross bar, and a fabric attached to the cross bar above the top of the fastener, substantially as set forth. 4th. The combination in a bed of a side rail, a cross bar, a fastener which receives the cross bar adjustably therein a wedge, substantially as set forth. 5th. The combination in a bed of a side rail, a leg and a common fastener having a socket for receiving the end of the side rail, an adjustable clamp for securing the cross bar and a a half-sleeve for engaging on the leg with hooks for supporting the frame combined, substantially as set forth. 6th. In a bed, the combination with head and foot frames of a bed bottom consisting of side or longitudinal bars and cross or end bars, one or both of the said longitudinal bars being laterally adjustable on the cross or end bars and means to attach the longitudinal bars directly to the said head and foot frames. 7th. In a bed, the combination with head and foot frames of a bed bottom consisting of side or longitudinal bars and cross or end bars, one or both of the said longitudinal bars being laterally adjustable on the cross or end bars, means for securing the cross and end bars when adjusted and means to attach the longitudinal bars directly to said head and foot frames. 8th. The combination in a bed frame of side rails, corner fasteners secured on the side rails, cross bars engaging in and adjustable in the corner fasteners and wedges engaging between the cross bars and corner fasteners, substantially as set forth. 9th. A bed fabric consisting of longitudinal courses arranged at intervals of links consisting of parallel side arms hooked at one end having an integral cross bar between their other ends and a spiral cross stays extending between and forming the sole connection between the courses of links and coiled around the cross bars of the links in passing the courses, substantially as set forth.



No. 65,767. Acetylene Gas Generator.

(*Générateur de gaz acétylène.*)



George Gregory Smith, Villa Bel Riposo, Florence, Italy, 12th January, 1900; 6 years. (Filed 9th December, 1899.)

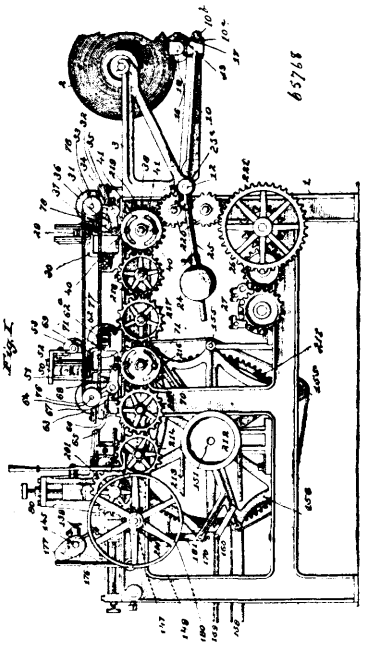
Claim.—1st. In an acetylene gas generator, the combination of a gasometer and bell, a series of separate carbide holders, each containing sufficient air tightly inclosed carbide, when generated, to fill the bell, and means actuated by the bell for supplying water to the said chambers consecutively one at the time and once at each descent of the bell, substantially as described. 2nd. In an acetylene gas generator, the combination of a gasometer and bell, a series of separate carbide holders, a hermetically sealed carbide containing case within said holder, means for puncturing the same, when the holder is to be developed, and means operated by the gasometer bell for operating the puncturing device of each holder consecutively and for feeding water to the said holder each time the gasometer bell sinks below a certain level, substantially as described. 3rd. In an acetylene gas generator, the combination of a gasometer an l bell, a series of separate carbide holders containing hermetically sealed up carbide means in connection with each holder for puncturing the carbide case within the same and feeding water to the said holder, the said puncturing and water feed being effected at and by each fall of the gasometer bell, in each carbide chamber consecutively, and means for actuating the first chamber of the series, if refilled, after the last has been exhausted without interrupting the gas making process, substantially as described. 4th. In an acetylene gas generator, the combination of a gasometer and bell, a series of separate carbide holders to contain hermetically sealed carbide and means for puncturing the same, a separate water tank to each holder to contain the proper quantity of water to develop said holder and means actuated by each fall of the gasometer bell below a certain point, to puncture the carbide case in and supply water to the next consecutive carbide holder, substantially as described. 5th. In an acetylene gas generator, the combination of a gasometer and bell, and a series of separate carbide holders, each to contain sufficient hermetically sealed carbide to fill the bell, when generated, a removable bottom plate having inward upwardly turned spike therein, a spring to normally hold the carbide case just above said spike, a spring retained upper spike, and, a stuffing box to guide the same through the holder cover, a flange supported on said upper spike just above the carbide case and means operated at each fall of the gasometer bell below a certain level to impart a downward movement to the upper end of said spike and to supply water to the said holder, substantially as described. 6th. In an acetylene gas generator, the combination of a gasometer and bell, a row of separate carbide chambers mounted in proximity thereto, a rotary shaft mounted along the row of holders, a puncturing device as specified to each holder, a series of striker arms on said shaft, one for each holder, mounted radially equi-distant from each other on the shaft, and means for rotating said shaft a part of the turn at each descent of the bell and imparting a blow to the next consecutive puncturing device, said striker shaft being actuated by the bell, and means in connection with the puncturing rod for opening the water supply to the said carbide holder, substantially as described. 7th. In combination with a gasometer and bell, a series of separate carbide holders and sealed carbide cases therein, means, actuated by the gasometer bell for puncturing said cases in each holder consecutively as specified, a protecting cap to cover each puncturing device, and means for removing the said cap immediately before the puncturing mechanism is operated, substantially as described. 8th. In an acetylene gas generator, the combination of gasometer and bell, a series of carbide holders having sealed carbide, puncturing device, and each a separate water tank as specified, means for consecutively operating each holder at each fall of the bell beyond a certain point, a pet cock at the bottom of each holder normally open, and means in connection with the puncturing device for closing said pet cock as soon as the puncturing device is operated, substantially as described. 9th. In an acetylene gas generator having a gasometer and bell, a series of separate carbide holders with separate water tanks and puncturing devices and means, actuated by the gasometer bell top operate the said holders consecutively, as specified, the combination of a sealed carbide case having therein a collapsible perforated tube extending approximately down and around the central axis thereof, substantially as described. 10th. In an acetylene gas generator of the class specified having a series of separate carbide chambers and water tanks, puncturing apparatuses and means, actuated by the gasometer bell, for operating said holder consecutively as specified, the combination of a layer of oil on the water within the gasometer bell, substantially as described.

No. 65,768. Envelope Making Machine.

(*Machine à faire des enveloppes.*

Samuel Cupples, assignee of James West, both of St. Louis, Missouri, U.S.A., 12th January, 1900; 6 years. (Filed 13th October, 1899.)

Claim.—1st. In an envelope machine, the combination of means for supporting a roll of paper, adjustable in width, and means having heads for engaging the ends of the roll to direct the web of paper accurately to the machine and adapted to be swung horizontally, and adjustable bodily transverse of the machine, so that the central point between the heads may be kept in the centre of the machine, substantially as described. 2nd. In an envelope machine the combination of means for supporting a roll of paper, adjustable in width, means having heads for engaging the ends of the roll to direct the web of paper accurately to the machine, and adapted to be swung horizontally and adjustable bodily transverse of the machine, so that the central point between the heads may be kept on the centre of the machine, and means for engaging the periphery



of the roll, substantially as described. 3rd. In an envelope machine, the combination and means for supporting a roll of paper, and means for directing the web of paper accurately to the machine, consisting of a rod adapted to be swung horizontally and adjustable transverse of the machine, having a head engaging one end of the roll, and a disc disengaging the other end of the roll, substantially as set forth. 4th. In an envelope machine, the combination of means for supporting a roll of paper, and means for directing the web of paper accurately to the machine consisting of a rod adapted to be swung horizontally and adjustable transverse of the machine, having a head engaging one end of the roll, and a loose spring actuated disc engaging the other end of the roll, substantially as set forth. 5th. In an envelope machine, the combination of means for supporting a roll of paper, and means for directing the web of paper accurately to the machine, consisting of a rod adapted to be swung horizontally and adjustable transverse of the machine, having a head engaging one end of the roll, and a disc engaging the other end of the roll, said rod being carried by a pivoted support provided with a counter balance, whereby the rod with the head and disc are caused to move toward the centre of the roll as the roll diminishes in size, substantially as set forth. 6th. In an envelope machine, the combination of means for supporting a roll of paper, and means for directing the web of paper accurately to the machine, consisting of a head engaging one end of the roll, a loose spring actuated disc engaging the other end of the roll, and a rod carrying said head and disc, adapted to be swung horizontally and adjustable transverse of the machine, substantially as set forth. 7th. In an envelope machine, the combination of means for supporting a roll of paper, and means for directing the web of paper accurately to the machine, consisting of a head engaging one end of the roll, a disc engaging the other end of the roll, a rod to which said head is secured and which passes through said disc, a nut on the disc end of said rod, and a spring located between said nut and said disc, the rod being adjustable transverse of the machine, and adapted to be swung horizontally, substantially as set forth. 8th. In an envelope machine, the combination of means for supporting a roll of paper, and means for guiding the web of paper accurately to the machine and preventing the overrunning of the roll, consisting of a pivoted arm provided with a counterbalance weight, a rod adjustable transverse of the machine and adapted to be swung horizontally, mounted on said arms, a head on one end of said rod adapted to engage one end of the roll of paper, a disc on the other end of said rod adapted to engage the other end of the roll of paper, and a roller mounted on said rod and adapted to bear against the periphery of the roll of paper, substantially as set forth. 9th. In an envelope machine, the combination of means for supporting a roll of paper, adjustable in width, and means having heads for engaging the ends of the roll to direct the web of paper accurately to the machine and adjustable horizontally on a supporting pivot, substantially as set forth. 10th. The paper guide comprising a spindle, a counterbalance secured to the spindle, the arm having bearings at its inner end, secured to the spindle, and a clamp at its outer end, the block mounted in the clamp, the rod adjustably secured to the block, the loose roller mounted on the rod and adapted to bear on

the roll, the fixed head secured to the rod, the loose disc mounted on the rod, and a spring whereby the loose disc is pushed forward, substantially as described. 11th. The paper guide comprising a spindle, a counterbalance secured to the spindle, the arm having bearings at its inner end secured to the spindle and a clamp at its outer end, the block mounted in the clamp, the rod secured to the block, the loose roller mounted on the rod, the fixed head secured to the rod, the loose disc mounted on the rod, the loose sleeves mounted behind the disc, the nut tapped onto the rod, and a spring located between the nut and the sleeve, substantially as described. 12th. In an envelope machine, means for folding the edges of the web of paper, consisting of blocks having verticle faces, formed with grooves and adjustably held with relation to each other, a plate arranged horizontally for holding the edges of the paper in the grooves of the blocks, a bar to which the blocks and plate are adjustably connected and adjustable brackets to which said bar is adjustably connected, substantially as set forth. 13th. In an envelope machine means for folding the edges of the web of paper, consisting of blocks, having vertical faces formed with grooves, a horizontally arranged plate acting to held the web of paper in the grooves of the blocks, a roller over which the web of paper passes from said blocks, and fingers located between said blocks and roller and which bear against the folds of the paper, substantially as set forth. 14th. In an envelope machine, means for folding the edges of the web of paper, consisting of blocks, having vertical faces formed with grooves, a horizontally arranged plate for holding the paper in the grooves of the blocks, a roller over which the paper passes from the blocks, and adjustable fingers located between said blocks and roller, and which are adapted to bear against the folds of the paper, substantially as set forth. 15th. In an envelope machine, the combination of two pairs of pasting discs, means for folding the edges of the paper located between said pasting discs, cams for holding the pasting discs out of contact with the paper, and means for drawing the pasting discs into contact with the paper when released by the cams, consisting of flexible belts by which the discs are also turned, substantially as set forth. 16th. In an envelope machine, means for forming the bottom fold of the envelope, consisting of a grooved roller provided with a spring actuated clamping blade, and a roller provided with a spring actuated pivoted blade for folding the paper into the groove of the first mentioned roller, substantially as set forth. 17th. In an envelope machine, means for forming the fold at the bottom of the envelope, consisting of a grooved roller having a spring actuated blade provided with an arm adapted to contact with a cam for moving the blade in opposition to the spring, and a roller provided with a spring actuated pivoted blade for folding the paper into the groove of the first mentioned roller, substantially as set forth. 18th. In an envelope machine, the combination of a roller provided with a clamping blade, a roller provided with a folding blade and a cutter, a stationary plate and means for directing the paper onto the plate, after it has been servered by the cutter, consisting of levers pivoted to the ends of the clamping roller, said levers being provided with pins fitting in grooves formed in the periphery of the roller, and means for engaging said levers to lift said pins and direct the paper onto the plate, substantially as set forth. 19th. In a envelope machine, the combination of a roller provided with a clamping blade and a roller provided with a folding blade and a cutter, said first mentioned roller being provided with a steel plate forming a bed in its cylindrical surface against which said cutter acts in severing the paper, substantially as set forth. 20th. In an envelope machine, the combined folding and pasting roller having a pair of pasting dies separated by a radially moving folding blade, substantially as set forth. 21st. In an envelope machine, a roller provided with a pair of dies adapted to apply the sealing paste to the flap of the envelope and also to the back of the envelope at the point against which the flap contacts when the envelope is sealed, substantially as set forth. 22nd. In an envelope machine, a roller provided with a pair of dies adapted to apply the sealing paste either to the back or the flap of the envelope, and means for moving and holding either one of said dies out of active position, substantially as set forth. 23rd. In an envelope machine, a roller provided with a pair of dies for applying the sealing paste either to the back or the flap of the envelope, springs located behind said dies, screws for limiting the outward movement of the dies, screws for adjusting the dies so that either one may be moved and held out of operative position, substantially as set forth. 24th. In an envelope machine, a roller provided with a pair of dies ior applying the sealing paste either to the back or flap of the envelope, means for forcing the dies outwardly, and means for holding the dies to their inner position, so that either die may be brought and held to operative position, while the other die is held in in-operative position, substantially as set forth. 25th. In an envelope machine, the combination of a die roller for applying the sealing paste to the envelope, a paste roller, a paste pan against the edge of which the paste roller revolves, and adjustable boxes carrying both the paste roller and the paste pan together, substantially as set forth. 26th. In an envelope machine, means for cutting off the corners of a web of paper, consisting of a pair of blades, a fixed bar to which the inner ends of said blades are pivoted, pins fitting in the outer ends of said blades and the inner ends of which fit in grooves formed in said bar, springs for holding said blades at an inclination, and a pair of rotating blades set at an inclination, substantially as set forth. 27th. In an envelope machine, the combination of a clamp roller, a folding roller, a stationary inclined plate onto which the web passes as it merges from between said rollers, and rotating cutters located at the far side of said plate from said rollers for clipping off the corners of the web of paper, substantially as set forth. 28th. In an envelope machine, the combination of a clamp roller, a folding roller, a stationary plate on which the web passes as it merges from between said rollers, cutting blades located at the far side of said plate, from said rollers, for clipping off the corners of the web, and means for directing the web onto said plate, substantially as set forth. 29th. In an envelope machine, the combination of a clamp roller, a folding roller located above the clamp roller, a stationary plate onto which the web of paper passes as it merges from between said rollers, cutting blades located at the far side of said plate from said roller for clipping off the corners of the web of paper, and means carried by said clamp roller for directing the web of paper onto said plate, substantially as set forth. 30th. In an envelope machine, the combination of forming mechanism, a delivery mechanism, and means for transferring the envelopes from the former to the latter, consisting of a plate provided with a stop to receive the envelopes, a rod to which the plate is secured, slotted arms in which said rod fits, a rock shaft to which the arms are secured, springs for moving said arms in one direction, a cam for moving the arms in the other direction, a stop against which an extension of said plate bears, and springs for tilting said plate when released by the raising of said arms, substantially as set forth. 31st. In an envelope machine, the combination of forming mechanism, a delivery mechanism, and means for transferring the envelopes from the former to the latter, consisting of a swinging plate, having a projection to arrest the downward movement of the envelope, and means for moving the plate after it has received an envelope, substantially as set forth. 32nd. In an envelope machine, the combination of forming mechanism, a pair of wheels for delivering the envelopes after they are formed, and means for transferring the envelopes from the forming mechanism to said wheels, consisting of a plate supported in slotted arms and having an extension bearing against a stop, and a spring for drawing said plate against said wheels when said arms have been raised, substantially as set forth. 33rd. In an envelope machine, the combination of a pair of delivery wheels, and means for conveying the envelopes from the wheels, consisting of a belt, a pair of discs delivering the envelopes from the wheels, and a pair of cords beneath which the envelopes are carried, substantially as set forth. 34th. In an envelope machine, the combination of a delivery belt, a pair of cords beneath which the envelopes are carried on the belt, and a perforated pipe arranged in line with the belt, for directing a current of hot air through the envelopes between the belt and cords, as they are carried by the belt, substantially as set forth. 35th. In an envelope machine, the combination of a delivery belt, means whereby the envelopes are conducted edgewise from the machine and a perforated pipe arranged in line with the belt, for directing a current of hot air through the envelopes as they are carried by the belt, substantially as set forth.

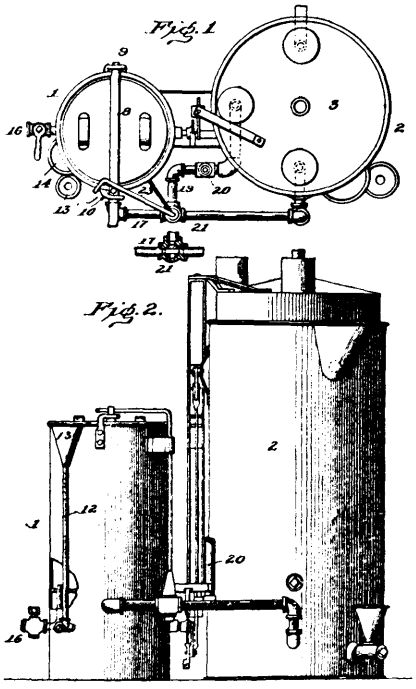
No. 65,769. Acetylene Gas Generator.

(*Générateur de gaz acétylène.*)

The Kinnear Manufacturing Company, assignee of Edward Stephen Martindale, Warren, Pennsylvania, both in the U.S.A., 12th January, 1900; 6 years. (Filed 23rd October, 1899.)

Claim.—1st. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a series of buckets, means for suspending said buckets above the water line in the generating chamber, and means operated by the movement of the bell of the gasometer to successively release said buckets and permit them to fall, substantially as described. 2nd. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a series of buckets, means for suspending said buckets above the water line in the generating chamber, means operated by the movement of the bell of the gasometer to successively release said buckets and permit them to fall, and means for limiting the fall of and for raising said buckets, substantially as described. 3rd. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a series of buckets, a series of trip levers for suspending said buckets above the water line in the generating chamber, and means operated by the movement of the bell of the gasometer to successively release said trip levers from engagement with the buckets and permit the latter to fall, substantially as described. 4th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a series of plates supported in the upper part of the generating chamber, said plates having each an opening, a series of buckets having each a staple designed to be inserted through the openings in the respective plates, a series of levers, one of which is pivoted on each of said plates and has a hook adapted to engage in the staple inserted through the opening of its plate, and means operated by the movement of the bell of the gasometer to successively trip said levers and to release them from engagement with the staples and permit the buckets to fall, substantially as described. 5th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a head adapted to be inserted and supported in the upper part of the generating chamber and provided with a series of tubes, a series of rectangular bails one of which is slidably mounted in each of said tubes, a series of buckets, means for suspending said buckets from the bails and within said tubes, and means operated by the movement of the bell of the gasometer to release said buckets and permit them to fall, substan-

tially as described. 6th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a



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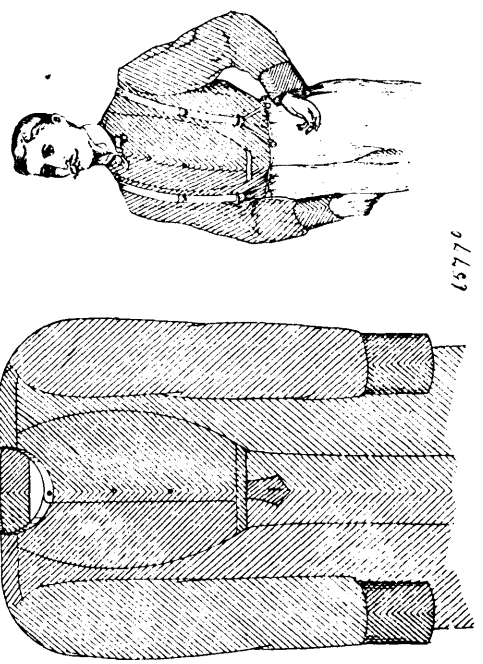
head adapted to be inserted and supported in the upper part of the generating chamber and provided with a series of tubes, a series of rectangular bails, one of which is slidably mounted in each of said tubes and has its side bars connected at their upper ends by an apertured plate which is of a length to adapt it to rest upon the upper edge of its tube, a trip lever pivotally mounted on each of said plates and having a hooked end, a series of buckets adapted to be inserted in said tubes and each of said buckets having a staple which may be passed through the aperture in any one of said plates and be engaged by the hooked end of a trip lever, and means operated by the movement of the bell of the gasometer to successively release said levers from engagement with said staples and permit the buckets to fall, substantially as described. 7th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a head adapted to be inserted and supported in the upper part of the generating chamber and provided with a series of tubes having longitudinal guide grooves, a series of rectangular bails, one of which is slidably mounted in the grooves of each of said tubes, a series of buckets adapted to be inserted in said tubes, means carried by said bails for suspending said buckets above the water line of the generating chamber, and operated by the movement of the bell of the gasometer to successively release said buckets and permit them to fall, substantially as described. 8th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a head adapted to be inserted and supported in the upper part of the generating chamber, and of a depth to extend downward to the water line in said chamber, whereby to fill up the air space therein, said head having secured therein a series of depending tubes, a series of buckets, means for suspending said buckets within said tubes, and means operated by the movement of the bell of the gasometer to release said buckets and permit them to fall, substantially as described. 9th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a head adapted to be inserted and supported in the upper part of the generating chamber and provided with a series of tubes, a series of rectangular bails, one of which is slidably mounted in each of said tubes and projects below the bottom thereof, a series of buckets, means for suspending said buckets from the tops of said bails and within said tubes, and means operated by the movement of the bell of the gasometer to release said buckets and permit them to fall, substantially as described. 10th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a head adapted to be inserted and supported in the upper part of the generating chamber and provided with a series of depending tubes, said tubes being provided with two encircling parallel rows of apertures, a series of buckets, each of which is provided with an encircling row of apertures, means for suspending said buckets within said tubes, means operated by the movement of the bell of the gasometer to release said buckets and permit them to fall into the water of the generating chamber, and means for limiting the fall of said buckets, whereby the row of apertures therein shall occupy a position intermediate the two rows of apertures in the tubes, substantially as and for the purpose described. 11th. In an acetylene gas generator, the combination with the generating chamber and with the gasometer, of a pipe affording communication beeween the two and having a vertical extension within the generating chamber, a carbide container comprising a head having a tube, a hood secured within, and to one side of, said tube and adapted to cover the upper end of said pipe, and filtering material supported in said tube above the lower end of said hood, substantially as described. 12th. In an acetylene gas generator, the combination with the generating chamber having a carbide container, of means operated by the movement of the gasometer bell to successively supply a quantity of carbide to the generating chamber from said container, said means including a pivoted lever, a pin carried by the bell to engage said lever when the bell descends, and means carried by the bell to support said lever when the rise of the bell has carried the pin out of engagement therewith and to lock said lever against turning until the bell again descends, substantially as described. 13th. In an acetylene gas generator of the class described, a bucket for carbide having a cover provided with a staple and means for locking said cover in a closed position, substantially as described. 14th. In an acetylene gas generator of the class described, a bucket for carbide having a rod journalled longitudinally along one side, said rod having its opposite ends bent at right angles to form arms, a cover for said bucket firmly secured to one of said arms, a staple on said arm, and a spring catch on the bottom of the bucket for engaging the other of said arms when the cover has been turned to a closed position, substantially as described.

No. 65,770. Shirt. (*Chemise.*)



(5770)

Edmund Potter & Co., assignee of William Henry Astington, Manchester, Lancaster, England, 12th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—A shirt having a herring bone pattern down the front and preferably also on the cuffs produced from a fabric printed or woven with herring bone lines, substantially as described and illustrated.

No. 65,771. Engine. (*Machine à gaz.*)

The Vanduzen Gasoline Engine Co., Cincinnati, assignee of Benjamin Cadwell Vanduzen, Winton Place, both of Ohio, 14th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. In a gas engine, a carbureter, having a removable top T^{20} and a conduit and vavle connected therewith, and the cylindrical body, forming chamber T^{14}, and a removable bottom T^{17}, and a central air chamber T^{15}, and a lift valve thereon, this central chamber being in one with the bottom T^{17}, this bottom, central chamber and lift valve being removable together, substantially as and for the purposes specified. 2nd. In a gas engine, the combination of a carbureter provided with a central air inlet and a removable top, a tube for supplying oil passing through this top, an oil valve located in said tube and extending through the end thereof into the top of the carbureter, and a hollow air valve surrounding

said oil valve and the end of said tube and guided thereby, said valve being provided with lateral openings and seated on the upper

Fig. 1

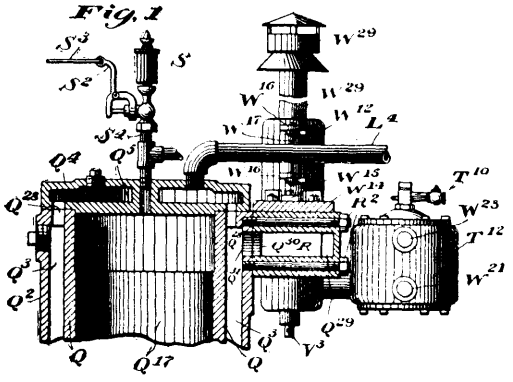
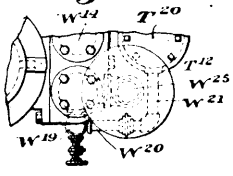
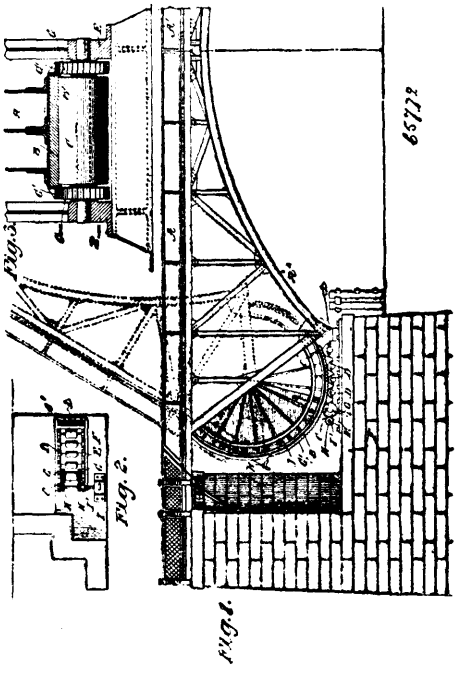


Fig. 4 65771



end of the central air inlet of the carbureter, substantially as described. 3rd. In a gas engine, the combination of a carbureter composed of a triple cylindrical casing, forming three passages, the central one for the air inlet, the middle one acting as a carbureter chamber, and the outer one as a heating chamber, said middle chamber being provided with wire gauze to thoroughly mix the air and oil, a removable top for said carbureter, an oil supply tube passing through said top, an oil valve located in said tube and extending through the end thereof into the carbureter, and an air valve, circular in form and seated on the upper end of the central air inlet of the carbureter, said valve being provided with lateral openings and with a central upwardly extending tubular extension adapted to fit around the oil supply tube and be guided thereby, substantially as described.

No. 65,772. Bascule Bridge. (*Pont à bascule.*)



John Philo Cowing, Cleveland, Ohio, U.S.A., 17th January, 1900; 6 years. (Filed 10th November, 1899.)

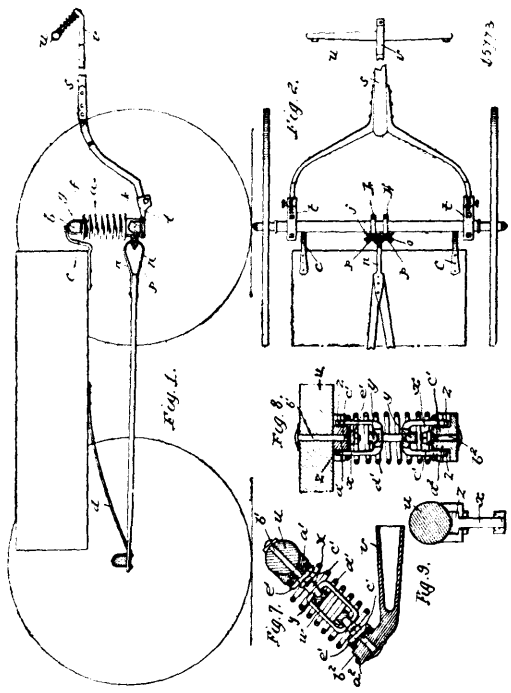
Claim.—1st. A revolving bascule bridge, provided with a span having a segmental bearing surface engaging a rolling surface, and supports for the ends of the span when the later is closed, the supports being independent of the rolling surface, so that the latter is relived of the strain from the live or moving load, and said strain is transmitted by said supports to the abutments or piers, substantially as shown and described. 2nd. A revolving bascule bridge, provided with two spans each provided at its fulcrum end with a segmental bearing surface engaging a rolling surface, the free ends of the spans being adapted to abut one on the other when the bridge is closed, and a support for the fulcrum end of the span when the latter is closed, the support being indepenent of said rolling surface, substantially as shown and described. 3rd. A revolving bascule bridge, provided with two spans each having at its fulcrum end a segmental bearing surface engaging a rolling surface, the free ends of the spans being adapted to abut one on the other, the spans forming an arch when the bridge is closed, and skewbacks for the shore ends of the bottom chords or arch of the span, substantially as shown and described. 4th. A revolving bascule bridge, provided with two spans each having at its fulcrum end a segmental bearing surface engaging a rolling surface, the free ends of the spans being adapted to abut one on the other, the spans forming an arch when the bridge is closed, and skewbacks for the shore ends of the bottom chords or arch of the span, said skewbacks forming a stop of the span, to prevent the latter from assuming a position below the proper level when the bridge is closed, substantially as shown and described. 5th. A revolving bascule bridge provided with a span having a segmental bearing surface in engagement with a rolling surface, a skewback for the end of the bottom chord of the span to rest on when the bridge is closed, and a foundation supporting both the skewback and the said rolling surface and receiving the load of the bridge as well as the weight of the span, substantially as shown and described. 6th. A revolving bascule bridge having a movable span provided at its fulcrum end with a segmental bearing surface adapted to rest and roll on a rolling surface formed by a series of rollers, and a stop on the said segmental bearing surface and adapted to abut against a fixed part in its path at the time the span is open, substantially as shown and described. 7th. A revolving bascule bridge having a movable span provided at its fulcrum end with a segmental bearing surface adapted to rest and roll on a rolling surface formed by a series of rollers, and a curved stop on said segmental bearing surface and adapted to engage the peripheral surface of one of said rollers at the time the bridge is open, substantially as shown and described. 8th. A revolving bascule bridge, provided with a span having a segmental bearing surface, a series of rollers simultaneously engaged at their peripheral surfaces by the said segmental bearing surface, a bearing carrying the said rollers, and a shoe or skewback adjacent to the said bearing and adapted to be engaged by a part of the span when the bridge is closed, substantially as shown and described. 9th. A revolving bascule bridge having a movable span provided at its fulcrum end with a segmental bearing surface, adapted to rest and roll on a rolling surface formed by a series of rollers, and a rack or racks on the periphery of said segmental bearing surface geared to a pinion on the axle of said rollers, and imparting a swinging motion to said span, substantially as shown and described. 10th. A revolving bascule bridge, provided with a span having a segmental bearing surface adapted to rest and roll on a rolling surface, and having a trunnion through its centre of gravity resting on a frame which relieves the said rollers from any strain or pounding which may be caused by the live or moving load, whereby said strain is transmitted by said frame to the abutments or piers, substantially as shown and described. 11th. A revolving bascule bridge, provided with a span having a segmental bearing surface, a series of rollers simultaneously engaged at their peripheral surfaces by the said segmental bearing surface, a bearing carrying the said rollers, a shoe or skewback adjacent to the said bearing and adapted to be engaged by a part of the span when the bridge is closed, and a motor on said pier and geared to one of the said rollers, substantially as shown and described. 12th. A revolving bascule bridge, provided with a span having a segmental bearing surface in engagement with a rolling surface, formed by a series of rollers journalled in fixed bearings, a skewback for the end of the bottom cord of the span to rest on when the bridge is closed, and a foundation supporting both the said skewback and the said rolling surface and receiving the load of the bridge as well as the weight of the span, substantially as shown and described. 13th. A revolving bascule bridge, provided with two spans each having at its fulcrum end a segmental bearing surface engaging a rolling surface formed by a series of rollers journalled in fixed bearings, the free ends of the spans being adapted to abut one on the other, the spans forming an arch when the bridge is closed, and skewbacks for the shore ends of the bottom chords or arch of the span, substantially as shown and described. 14th. A revolving bascule bridge having a span with a counterweight, the centre of gravity of which is equidistant from any point of the periphery of a segmental bearing surface, adapted to rest and roll on a rolling surface formed by a series of rollers, and a curved stop on said segmental bearing surface, and adapted to engage the said peripheral surface of one of the said rollers at the time the bridge is open, substantially as shown and described. 15th. A revolving bascule bridge, provided with a span having a segmental bearing surface, and a counterweight equally disposed above and below the line of the centre of gravity of the span and extending beyond the segmental bearing surface, a series of rollers simultaneously engaged at their peripheral surfaces by the said segmental bearing surface, a

bearing carrying the said rollers, and a skewback adjacent to the said bearing and adapted to be engaged by part of the span when the bridge is closed, substantially as shown and described. 16th. A revolving bascule bridge, provided with a span having a segmental bearing surface in engagement with a rolling surface, and having its fulcrum end provided with a counterweight to counterbalance the span at any angle of its throw, a skewback for the end of the bottom chord of the span to rest on when the bridge is closed, and a foundation supporting both the said skewback and the said rolling surface and receiving the load of the bridge as well as the weight of the span, substantially as shown and described. 17th. A revolving bascule bridge, provided with a span having a segmental bearing surface, a series of rollers simultaneously engaged at their peripheral surfaces by the said segmental bearing surface, a bearing carrying the said rollers, and a shoe or skewback adjacent to the bearing, said bearing being provided with a rack which is engaged by a pinion geared to a motor which imparts a swinging motion to the said span, substantially as shown and described. 18th. A revolving bascule bridge having a movable span provided at its fulcrum end with a segmental bearing surface adapted to rest and roll on a rolling surface formed by a series of rollers journalled in fixed bearings, and a rack on said segmental bearing surface engaged by a gear wheel running loosely on the axle of the said rollers, and said gear wheel engaging a pinion which is rotated by a motor imparting a swinging motion to said span, substantially as shown and described. 19th. A revolving bascule bridge having a span with a counterweight on the fulcrum end of the span and having the centre of gravity equidistant from any point on the periphery of the segmental bearing surface, adapted to rest and roll on a rolling surface, formed by a series of rollers journalled in fixed bearings, and a curved stop on said segmental bearing surface and adapted to engage the peripheral surface of one of the rollers at the time when the bridge is open, substantially as shown and described. 20th. A revolving bascule bridge, provided with a span having a segmental bearing surface adapted to rest and roll on a rolling surface, having a counterweight equally disposed above and below the line of the centre of gravity of the span and extending beyond the segmental bearing surface, to counterblance the span at any angle of its throw, and having a pin through the centre of gravity resting on a frame which relieves the said rollers from any strain or pounding which may be caused by the live or moving load, whereby said strain is transmitted to the abutments or piers, substantially as shown and described. 21st. A revolving bascule bridge provided with a span having a segmental bearing surface provided with an axle or trunnion, a skewback for the end of the bottom chord of the span to rest on when the bridge is closed, and a foundation supporting both the said skewback and a rolling surface conforming to and in engagement with the said segmental bearing surface, so that when the span is revolved it turns about a fixed point which is the centre of the segmental bearing and rolling surfaces, substantially as shown and described. 22nd. A revolving bascule bridge, provided with a span having a segmental bearing surface, a rolling surface engaged by said segmental bearing surface, a skewback for the end of the bottom chord of the span to rest on when the bridge is closed, a pier for supporting said skewback and rolling surface, and a motive power located on said pier, for imparting a swinging motion to said span, substantially as shown and described. 23rd. A revolving bascule bridge having a span provided with a segmental bearing surface, a counterweight equally disposed above and below the line of the centre of gravity and having a pin through the said centre of gravity, said pin resting in a frame which holds the span firmly to the masonry and at the same time allowing the entire span to revolve about said centre of gravity, a skewback for the end of the bottom chord of the said span to rest upon when the bridge is closed, and a foundation supporting both the said skewback and the said rolling surface and receiving the load of the bridge as well as the weight of the span, substantially as shown and described. 24th. A revolving bascule bridge having a span provided with a segmental bearing surface adjusted to rest and roll on a rolling surface, having a counterweight equally disposed above and below the line of the centre of gravity of the span and extending beyond the segmental bearing surface and having a skewback for the end of the bottom chord of the span to rest on when the bridge is closed and a foundation supporting both the said skewback and the said rolling surface and receiving the load of the bridge as well as the weight of the span, substantially as shown and described.

No. 65,773. Buggy. (*Voiture.*)

Nathaniel Weston, Redmonds, Virginia, U.S.A., 12th January, 1900; 6 years. (Filed 26th June, 1899.)

Claim.—1st. In a vehicle, the combination of a pole, a neck yoke, a flexible connection there between, a coil spring adapted to keep said connection taut, means for preventing any elongation of said spring but permitting a torsional or twisting strain thereon. 2nd. The combination of a vehicle, pole, a neck yoke, a coil spring, and a non-extensible swing connection between the pole and the neck yoke and maintaining the spring in a compressed condition, the spring holding the connection taut. 3rd. In a vehicle, the combination of the axles, and wheels and body, suitable means for supporting the body on the rear axle, and a coil spring supporting the front end of the body on the front axle, said spring being connected at its respective ends to the axle and to the body whereby the spring may yield vertically and torsionally, as and for the purpose set forth. 4th. In a vehicle, the combination of the axles and wheels



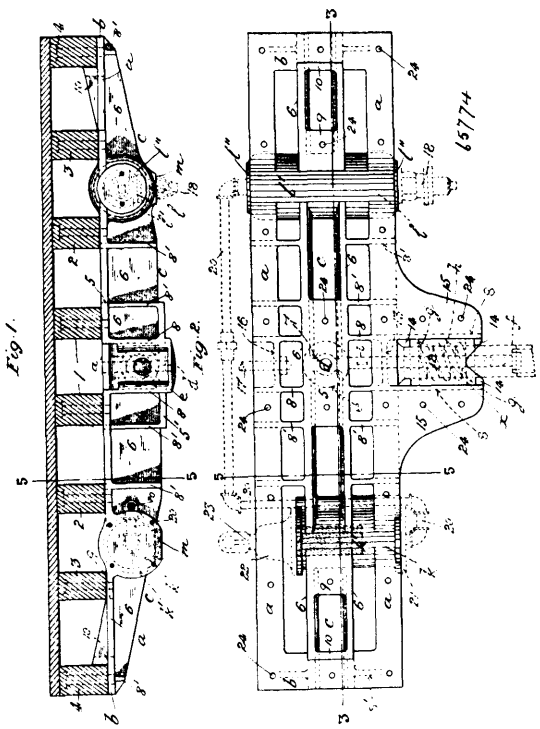
and body, suitable means for supporting the body on the rear axle, and a coil spring supporting the front end of the body on the front axle, said spring being connected rigidly at its upper end to the body approximately at its centre and at its lower end rigidly to the axle about midway the length of the same. 5th. The combination of a pair of axles and supporting wheels a vehicle body, means for supporting the body on the rear axle, and a resilient support directly connecting the body to the front axle, about midway the length of the latter, said support being yieldable torsionally. 6th. In a vehicle, the combination of a body, axles, wheels, a reach connecting the axles and having a universal joint between its front end and the front axle, a spring supporting the body on the rear axle, and a coil spring supporting the front end of the body on the front axle, said spring being adapted to yield vertically and torsionally. 7th. In a vehicle, the combination of a body, axles, wheels, a reach connecting the axles, the connection with the forward axle consisting of a ball *m*, supported by a pair of bent arms projecting forward from the same, one above the other, and a two part socket embracing said ball and carried by the front axle, and springs supporting the body. 8th. In a vehicle, the combination of axles, wheels, a body, means for supporting it upon the wheels, a reach connecting the axles, the front connection consisting of a pair of arms *n*, extending from the front end of the reach and supporting a ball between them, a two part socket attached to the front axle, the inner plate being attached directly to the axle, and the outer plate, which passes between said arms *n*, being supported by a pair of bolts carried by said inner plate. 9th. In combination with a pair of axles, wheels thereon, a body, a reach pivotally connecting the axles, means for resiliently supporting the rear end of the body, and a vertical spring for supporting the forward end of the body upon the front axle, said spring having its respective end coils formed substantially elliptical, plates carried respectively by the front axle and a part of the body, each of said plates being provided with an elliptical boss resting in one of the end coils, and fastening devices. 10th Tee combination of a body, axles and wheels, a reach connecting the axles, the connection with the front axle consisting of a ball and socket, one being carried by the reach and the other by the axle, forming a universal joint, and a resilient support directly connecting the body to the body to the front axle and being yieldable tersionally.

No. 65,774. Car Body Bolster. (*Coussinet pour chars.*)

Morse B. Schaffer, St. Louis, Missouri, U.S.A., 12th January, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. A car body bolster, composed of side and end top plates united to each other and arranged together in the same horizontal plane, a beam or girder intermediate to the said plates and united at its ends to the end top plates, the said girder consisting of two parallel vertical sides or webs united to each other and aligned at the top to the top of the said plates, and having their undersides below the plane of the said plates, and the said girder having a central hole, and having the centre plate and the side

bearings on its underside, and ribs uniting the said sides or webs respectively to the corresponding side top plate, all the said parts

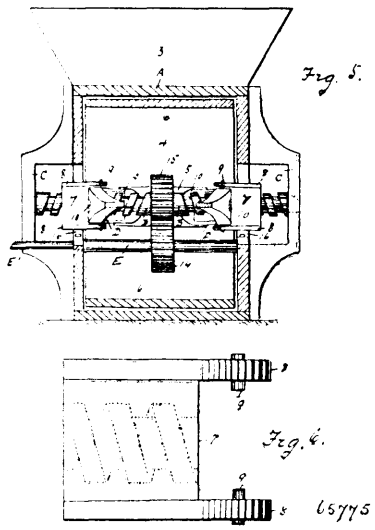


being integral throughout, substantially as described. 2nd. A car body bolster, composed of side and end top plates united to each other and arranged together in the same horizontal plane, a beam or girder intermediate to the said plates and united at its ends to the end top plates, and having its underside below the plane of the said plates, the said girder having a central hole, and having the centre plate and the side bearings on its underside, and ribs uniting the girder to the side top plates, two opposite and parallel vertical webs or walls projecting from one side of the girder and extending beyond the corresponding side top plate, the extended portions of the said webs or walls having opposite vertical lugs, and forming therewith a draw-bar spring pocket, all the said parts being integral throughout, substantially as described. 3rd. A car body bolster, composed of side and end top plates united to each other and arranged together in the same horizontal plane, a beam or girder intermediate of the said plates and united at its ends to the end top plates, and having its underside below the plane of the said plates, the said girder having a central hole, and having the centre plate and the side bearings on its underside, the ribs uniting the girder to the side top plates, two opposite and parallel vertical webs or walls projecting from one side of the girder and extending beyond the corresponding side top plate, the extended portions of the said webs or walls having opposite vertical lugs and forming therewith a draw-bar spring pocket, and the said webs or walls having external top flanges united to the said top plate, the top and undersides of the said flanges being aligned to the corresponding sides of the said plate, all the said parts being integral throughout, substantially as described. 4th. A car body bolster, having a central hole and having the centre plate and the side bearings on its underside, and having the two opposite and parallel vertical webs or walls projecting from one side thereof, the said webs or walls having opposite vertical lugs, and forming therewith a draw-bar spring pocket, all the said parts being integral throughout, substantially as described. 5th. In a car body bolster, the combination of a cylindrical tube and a closed chamber having their enclosing walls, respectively integral with the body bolster, substantially as described. 6th. A car body bolster having a central hole, and having the centre plate and the side bearings on its underside, and having a cylindrical tube and a closed chamber, the said parts with the enclosing walls of the said tube and chamber being integral throughout, substantially as described.

No. 65,775. Bailing Press. (*Presse à ballot.*)

Samuel Hurt, Coin, Iowa, U.S.A., 12th January, 1900; 6 years. (Filed 6th March, 1899.)

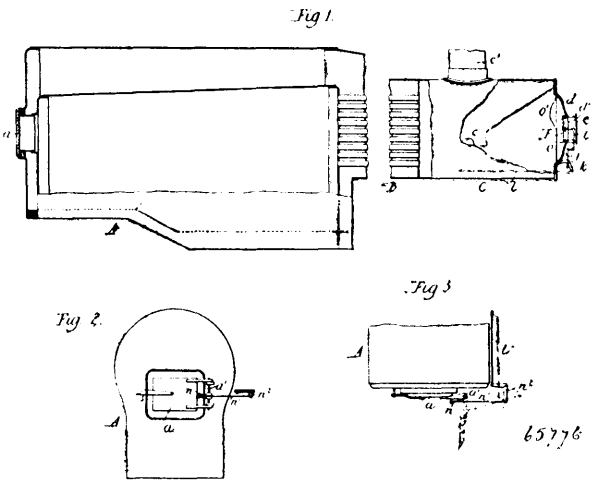
Claim.—In a bailing press the combination of the following instrumentalities to wit.—the housing A, provided with an open rear end, the main driving shaft E, extending transversely through and beyond said housing, the gear 14 mounted upon said shaft E, the right and left handed screw shaft B, the gear 15, upon said screw shaft to measure with said gear 14, the threaded boxings 7, 7, working upon said screw-shaft upon opposite sides to said pinion 15, the top plate



8, 8 secured to said threaded boxings, the downwardly extending pins 9, secured to each of said plates 8, the plunger head 4, working within said housing, and having the rearwardly extending guides 6, 6, the slotted bars 10, 16, pivotally secured to said plunger head said screw shaft B passing through the slots of said bars, the toggle bars D, D, pivotally secured to said bars 10, in combination with power mechanism adapted to alternately rotate the shaft E in opposite directions as and for the purposes set forth.

No. 65,776. Steam Boiler Furnace.

(*Fournaise de chaudière à vapeur.*)

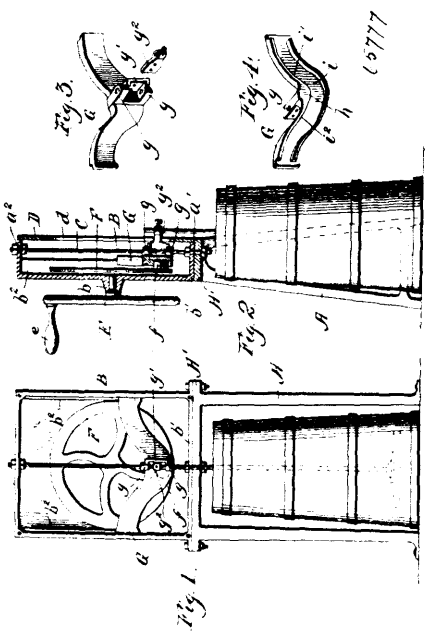


John Milton, Washington, D.C., 12th January, 1900; 6 years. (Filed 20th December, 1899.)

Claim.—1st. In a steam boiler furnace of the character described, an air inlet adjacent to the furnace stack and exhaust outlet, a self closing valve at said inlet openable under the action of excessive exhausts, and means independent of the action of the exhaust for opening said valve coincidently with the manipulation of the stocking door. 2nd. In a steam boiler furnace of the character described, an air inlet adjacent to the furnace stack and exhaust outlet, a spring controlled at said inlet openable under the action of excessive exhaust, and means independent of the action of the exhaust for opening said valve coincidently with the manipulation of the stoking door. 3rd. In a steam boiler furnace of the character described, a chamber between the boiler flues and stack, a door closing said chamber having an opening providing an air inlet, a spring controlled valve at said opening carried by the door and openable under the action of excessive exhausts, and means independent of the action of the exhaust for opening said valve coincidently with the manipulation of the stoking door. 4th. In a steam boiler furnace of the character described, a chamber between the boiler flues and stack, a door closing said chamber having an opening providing an air inlet, a

spring controlled valve hinged to the door and controlling said inlet and openable under the action of excessive exhausts, and means located without the chamber operating independently of the action of the exhaust to open the valve coincidently with the manipulation of the stoking door. 5th. In a steam boiler furnace of the character described, a chamber between the boiler flues and stack, a door closing said chamber having an opening providing an air inlet, a valve for said inlet hinged to the door and openable against the action of a spring by excessive exhausts, a lever operatively connected with the door and provided with a projection, and an arm operatively connected with the stoking door and adapted when moved in one direction coincidently with the movement of the latter to engage the projection on the lever and open the valve. 6th. In a steam boiler furnace of the character described, a chamber between the boiler flues and stack, a door closing said chamber having an outer wall provided with an opening affording an inlet for air, and an inner wall perforated at its upper portion, a spring controlled valve hinged to the front wall and normally closing said opening, said valve being openable under the action of excessive exhausts. 7th. In a steam boiler furnace having a chamber between the flues and stack, an air inlet at said chamber, an inlet controlling device operated under the action of excessive exhausts, and means for controlling the inlet coincidently with the manipulation of the stoking door.

No. 65,777. Churn. (*Baratte.*)



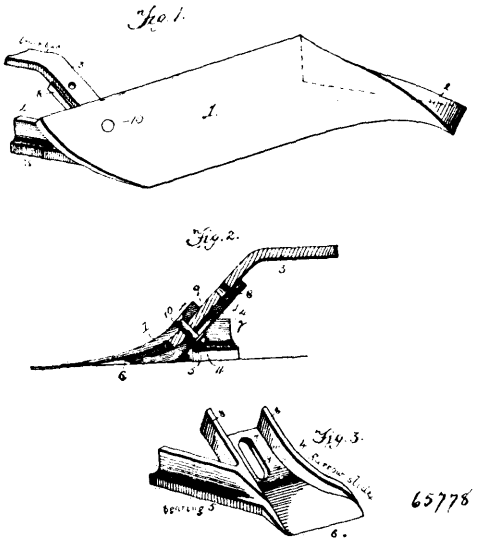
James M. Dorsey, Toronto, Ontario, Canada, 12th January, 1900; 6 years. (Filed 21st December, 1899.)

Claim.—1st. In combination with the dasher rod, a reciprocating cross head and operating disc with roller which engages with the cross head, said cross head having to one side of the centre a curved depending portion and adjacent thereto on opposite sides a convex portion and a concave portion so as to impart to the dasher rod a quick, rapid and double reciprocating movement at or near the limit of its downward movement, substantially as set forth. 2nd In a churn operating mechanism, the combination with an operating disc having a roller, a vertical guide rod, a reciprocal cross head mounted thereon so as to provide end portions positioned above the horizontal plane of the central portion said cross head having a convex projecting portion to one side of its centre and adjacent thereto, and on the same side of the centre a concave portion the convex portion on the opposite side from the concave portion joining a curved portion of the same configuration at the end curved portion on the opposite side of the cross head, substantially as shown, whereby a reciprocating motion is imparted to the dasher rod and a short reciprocating motion at or near the limit of its downward movement, substantially as set forth.

No. 65,778. Plough. (*Charrue.*)

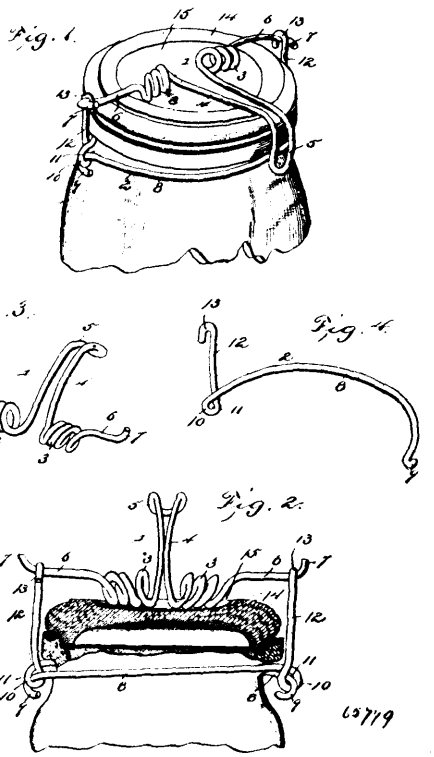
William F. Hartig, Evansville, Indiana, U.S.A., 12th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. As a new article of manufacture, in connection with the shares or mould boards of ploughs, the furrow slide comprising an extended bearing plate, the front of which is secured to the under side of the mould board or share, a fastening device disposed at an angle to the furrow slide and having means for adjustably and rigidly locking the same to the plough share or mould board. 2nd The combination of a plough share or mould board, a furrow slid



secured to the under side thereof and forming an extended bottom bearing plate, and means for adjustably and rigidly securing the furrow slide thereto. 3rd. The combination of a plough share or mould board, a furrow slide secured thereto, a brace secured to the share or mould board and a fastening device adapted to secure the furrow slide, the brace and the plough share or mould board adjustably together.

No. 65,779. Jar Fastener. (*Attache de jarre.*)



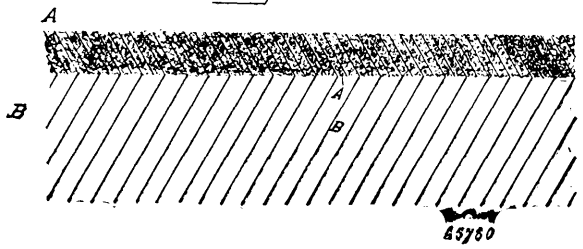
Rimmon H. Hansee, Monticello, New York, U.S.A., 12th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. In a jar fastener, the combination of resistance and supporting members including upward projections with bent terminals reversely arranged at diametrically opposite points, and a locking element comprising opposite arms adapted to be removably connected to said projections and having self adjustable yielding coils between them. 2nd. In a jar fastener, the combination of

resistance and supporting elements, including upward projections with bent terminals reversely arranged at diametrically opposite points, and a locking element comprising oppositely extending arms adapted to be removably connected to said projections and having self adjustable yielding coils between them, connected by an operating pressure receiving device. 3rd. In a jar fastener, the combination of resistance and supporting elements including projections with bent terminals reversely arranged, directed at diametrically opposite points, and a locking element comprising automatically adjustable rotatable coils having outwardly extending arms to removably connect with the said projections. 4th. In a jar fastener, the combination of resistance and supporting elements comprising counterpart members reversely arranged and connected to provide diametrically disposed projections, and a locking element comprising automatically adjustable rotatable coils having outwardly extended and normal upwardly directed arms to removably connect with said projections. 5th. In a jar fastener, the combination of resistance and supporting elements including projections at diametrically opposite points, and a locking element comprising automatically adjustable rotatable coils having outstanding upwardly extending arms to removably connect with the said projections and an intermediate yoke, the yoke and arm being on opposite sides of a central longitudinal line through the coils. 6th. In a jar fastener, the combination of resistance and supporting elements comprising counterpart members, each having an upwardly extending projection at one end and a locking element at the opposite end, the said members being reversely arranged to dispose the projections at diametrically opposite points, the latter having terminal bends also in reverse position when the parts are assembled, and a locking element having members adapted to engage the said projections. 7th. In a jar fastener, the combination of a supporting element composed of two parts having projections with upper hooked terminals, and a locking element comprising coils with outwardly projecting arms terminating in partial hooks to engage the said hooked terminals and also provided with an intermediate pressure receiving yoke having an outer deflected extremity.

No. 65,780. Dustless Road, Railway Road-bed, and Race Courses. (*Lit de chemin de fer, de course, etc., sans poussière.*)

Fig. 1.



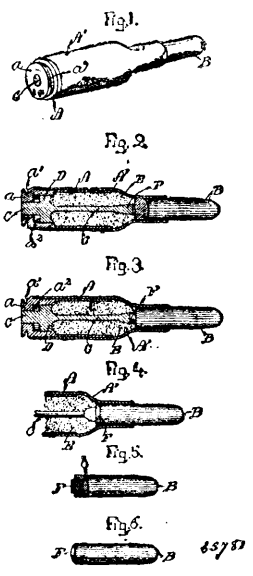
Frederick W. Mattern, Los Angeles, California, U.S.A., 12th January, 1900; 6 years. (Filed 18th March, 1899.)

Claim.—1st. A road having a covering consisting of fine earthy or mineral matter and heavy oil incorporated therewith, substantially as set forth. 2nd. A road having a covering consisting of fine earthy or mineral matter and heavy oil and maltha incorporated therewith, substantially as described. 3rd. A railway road-bed of fine material, such as gravel, sand, or cinder, having its surface treated with heavy oil, as and for the purpose set forth.

No. 65,781. Cartridge. (*Cartouche.*)

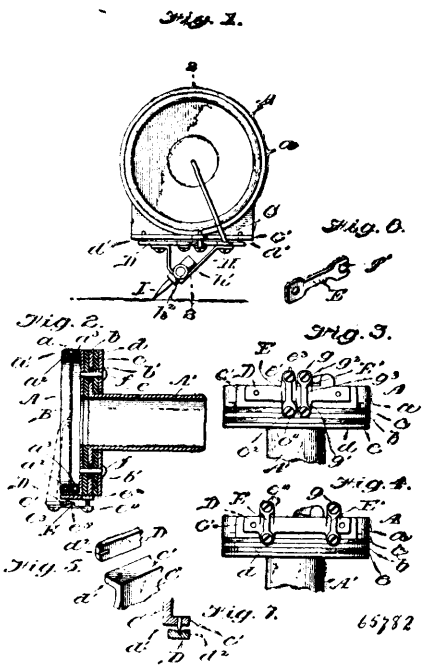
Franklin K. Young, Boston, Massachusetts, U.S.A., 12th January, 1900; 6 years. (Filed 30th March, 1899.)

Claim.—1st. A cartridge having a passage in its rear part, and an interior plunger having a head made movable in such passage, and exposed directly on the forward or inner side to the rearward pressure of the gases of explosion within the cartridge, substantially as and for the purpose described. 2nd. A cartridge having a base with an opening therethrough, and an enlarged interior passage connected with such opening, and a movable plunger adapted to be engaged by the firing pin of a gun in which the cartridge is used, and having a portion fitting in and closing the enlarged passage, with its forward or inner side exposed to pressure of gases of explosion within the cartridge, so that such pressure will move the plunger rearward or outward when the cartridge is fired, substantially as and for the purpose described. 3rd. A cartridge having a base with an opening with both ends enclosed, and an interior passage connecting with such passage, but made larger than the same, and a plunger having a part movable in the opening in the base, and having a head movable in the passage, substantially as and for the purpose described. 4th. In a cartridge, in combination with a shell having a base with an opening through it, and an enlarged passage at the inner end of the opening, an igniting plunger having a part to move in the opening and a head fitting in the passage, a projectile held in the shell, and an igniter or primer between the end of the igniting plunger and the projectile, adapted



to be exploded against the base of the projectile by forward movement of the igniting plunger, substantially as and for the purpose described.

No. 65,282. Sound Recording and Reproducing Machine. (*Machine à enregistrer et reproduire le son.*)



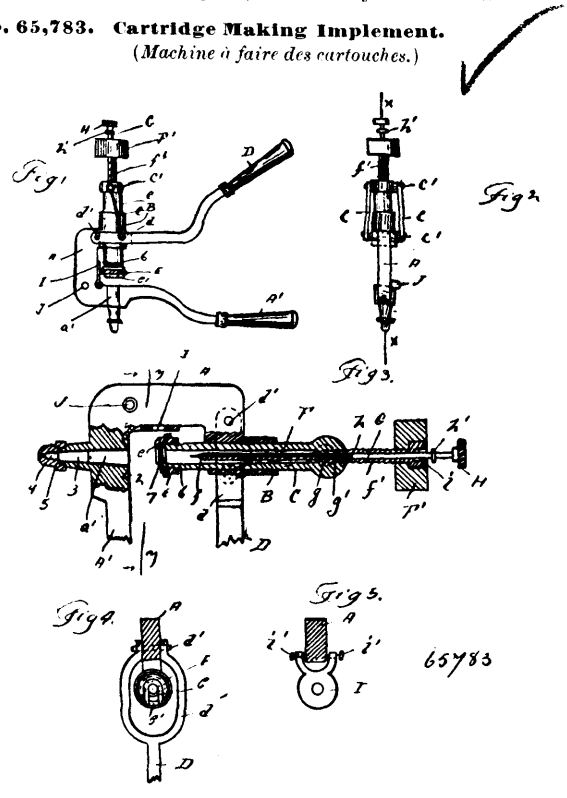
Henry Jones, Philadelphia, Pennsylvania, U.S.A., 12th January, 1900; 6 years. (Filed 30th August, 1899.)

Claim.—1st. In a sound recording and reproducing machine, a sound box open at its front end, a diaphragm adapted to said sound box, and a flexible spring ring adapted to fit snugly in the sound box for retaining the diaphragm in position, substantially as described. 2nd. In a sound recording and reproducing machine, a sound box having a diaphragm located therein, flexible rings located on each side of said diaphragm, and an overlapping rim formed on the sound box adapted to partly embrace the outer ring and hold the same in position. 3rd. In a sound recording and reproducing machine, *a* sound box comprising a section *a*, a diaphragm located therein insulated from the sound box, a stylus bar carried by the section *a*, a section *b*, having a tubular extension for attachment of the trumpet, a layer of sound non-conducting material *c*, located between the sections *a* and *b*, a ring section *d*, and a layer of sound non-conducting material *e*, located between the sections *b* and *d*,

substantially as described. 4th. In a sound recording and reproducing machine, a sound box comprising a section *a*, a diaphragm located therein and insulated therefrom, a stylus bar carried by said section *a*, a section *b*, having a tabular extension A^1, apertures formed in said section for the reception of bolts, sleeves of insulating material provided in said apertures, a section *c*, of sound non-conducting material located between sections *a* and *b*, a ring *d*, a layer of sound non-conducting material between the sections *b* and *d* and bolts f^1, for connecting the said sections together, substantially as described. 5th. In a sound recording and reproducing machine, the combination with the sound box and diaphragm, of an extension formed on the lower lower edge of said sound box, knife edges formed in said extension, a stylus bar having grooves adapted to receive the knife edges, and springs connected at one end to the stylus bar and at the other end to the sound box, substantially as described. 6th. In a sound recording and reproducing machine, the combination of a sound box and diaphragm, a stylus bar pivotally connected to an extension on the sound box, knife edge bearings for said stylus bar, and a pair of flat spring E, E^1, one of said springs being rigidly connected at one end to the stylus bar and loosely connected at its end to the sound box, while the other spring is rigidly connected at one end to the opposite side of the stylus bar and loosely connected at its other end to the opposite side of the sound box, substantially as described. 7th. In a sound recording and reproducing machine, the combination of a sound box, a diaphragm carried thereby, a stylus bar, knife edge bearings between the stylus bar and sound box, a pair of flat springs E, E^1, each rigidly connected to the stylus bar, but on opposite sides, having their other ends loosely connected to the sound box frame on opposite sides, recesses c^5 and g^3, provided in the stylus bar under the respective springs, and a bracket H, secured to the stylus bar for supporting the stylus point, substantially as described.

No. 65,783. Cartridge Making Implement.

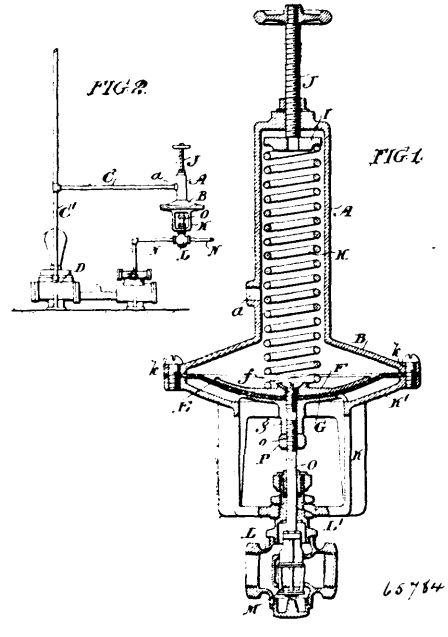
(*Machine à faire des cartouches.*)



Clarence V. Burch, Terre Haute, Indiana, U.S.A., 12th January, 1900; 6 years. (Filed 19th July, 1899.)

Claim.- 1st. In a cartridge implement, the combination, with a frame provided with a conical contracting chamber, and a guide arranged in line with the said chamber, of a non-revoluble plunger slidable longitudinally in the said guide and provided with a clamp for engaging with the head of a shell, and lever mechanism for reciprocating the said plunger and forcing the open end portion of the said shell into said chamber, substantially as set forth. 2nd. In a cartridge implement, the combination with a frame provided with a conical contracting chamber, and a guide arranged in line with the said chamber, of a plunger slidable longitudinally in the said guide and provided with a clamp for engaging with the head of a shell, an operating lever provided with a forked end portion which straddles the said guide and is pivoted to the plunger and to the forked end portion of the said lever, substantially as set forth. 3rd. In a cartridge implement, the combination with a frame provided with a conical contracting chamber, and a removable chamber for the ball screwed to the smaller end portion of the said chamber, of a reciprocatory non-revoluble plunger carried bo the said frame and provided with a clamp for engaging with the head of a cartridge, substantially as set forth. 4th. In a cartridge implement, the combination with a frame provided with a socket for the shell, a conical contracting chamber below the said socket, and an annular recess around the top of the said socket, of a slidable plunger provided with a cap for clamping the head of the shell, said cap entering the said recess when the shell is pressed to its lowest position in the said socket, substantially as forth. 5th. In a cartridge implement, the combination with a frame provided with a socket for the shell, of a bridge-plate pivoted to the frame and provided with an opening for the shell, and a slidable capping device operating to secure the percussion cap when the shell is supported by the said bridge plate, substantially as set forth. 6th. In a cartridge implement, the combination with a frame, and a hollow plunger for receiving the shell, said plunger being slidable in the said frame, of a decapper supported in the said plunger and operating to remove the percussion cap, substantially as set forth. 7th. In a cartridge implement, the combination with a frame, provided with a socket for the shell, of a slidable plunger having a circular recess in its lower end, said recess fitting closely around the head of the shell, and a cap engaging with the said plunger and operating to press the head of the shell into the said recess and to centre the shell and hold it in alignment with the socket, substantially as set forth. 8th. In a cartridge implement, the combination with a stationary guides and a non-revolvble plunger slidable in the said guide and having a circular recess in one end portion which fits closely around the head of the shell, of a cap screwed onto the said end portion and provided with a flange which presses the head of the shell into the said recess and thereby centres the shell, said flange having an opening on one side which permits the head of the shell to be inserted when the cap is partly unscrewed from the plunger, substantially as set forth. 9th. In a cartridge implement, the combination with a frame, and a plunger slidable therein, of a capping device screwed into the said plunger, a decapping device slidable in the said capping device, and means for locking the two said devices together, substantially as set forth. 10th. In a cartridge implement, the combination with a plunger, of a capping device screwed into the said plunger and provided with a locking pin, a decapping device sldable in the said capping device and provided with a notched collar for engaging with the said pin, and a spring pressing back the decapping device when unlocked from the said pin, substantially as set forth. 11th. A cartridge implement, comprising a frame provided with a contracting chamber and a mouth expanding cone, a plunger slidable in the frame and provided with means for clamping the shell, and a bridge piece pivoted to the frame, and capping and decapping devices longitudinally adjustable in the said plunger, substantially as set forth.

No. 65,784. Vacuum Pump. (*Pompe à vacuum.*)

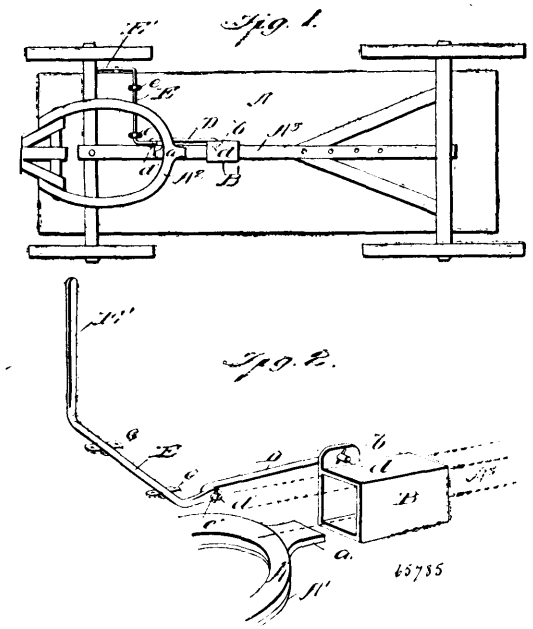


Warren Webster & Company, Camden, New Jersey, assignee of Lewis Wehner, Philadelphia, U.S.A., 13th January, 1900; 6 years. (Filed 23rd May, 1899.)

Claim.—1st. In a pump governor, the combination with the pump, and the supply pipe thereto, of a valve located in said supply pipe for controlling the speed of said pump, a governor consisting of a closed chamber communicating with the suction side of said pump,

a flexible diaphragm forming the bottom of said chamber and located below the suction connection with the pump, and a connection between said diaphragm and the valve for controlling the steam supply to said pump. 2nd. In apparatus for controlling the operation of a vacuum pump, the combination of a closed chamber A, a flexible diaphragm forming the bottom of said chamber, a depending frame K, located below said chamber, vacuum pump having its suction side connected with said closed chamber, a steam supply pipe to said pump, a valve device in said steam supply pipe carrying said depending frame, a valve in said valve device for controlling the passage of steam to the pump, and a connection between said valve and flexible diaphragm. 3rd. In apparatus for controlling the operation of a vacuum pump, the pump governor consisting of the closed chamber A, having the flexible diaphragm E, the spring H acting on the diaphragm, the frame K carrying the chamber A, the valve casing L carrying the frame A, the valve M in the casing L, for controlling the passage of steam to the pump, a connection between the diaphragm and the valve M, and a connection between the suction side of the pump and the chamber A. 4th. In apparatus for controlling the operation of a vacuum pump, the pump governor consisting of the closed chamber A, having the flexible diaphragm E, the spring H acting in the diaphragm, means, such as I, J, for adjusting the tension of the spring H, the frame K carrying the chamber A, the valve casing L, carrying the frame A, the valve M in the casing L, for controlling the passage of steam to the pump, a connection between the diaphragm and the valve M, and a connection between the suction side of the pump and the chamber A. 5th. The combination of the casing A, forming a chamber having a connection a, with the suction side of a pump, the flexible diaphragm E, forming the base of the chamber A, the depending frame K, carried by the casing A, the valve body L connected with the depending frame K, a valve in the valve body L, for controlling the supply of steam to the pump, and a connection between the valve and the flexible diaphragm. 6th. The combination of the casing A, forming a chamber having a connection a with the suction side of a pump, the flexible diaphragm E, forming the base of the chamber A, a spring within the casing A acting in the diaphragm E, the depending frame K, carried by the casing A, the valve body L, connected with the depending frame K, a valve in the valve body L, for controlling the supply of steam to the pump, and a connection between the valve and the flexible diaphragm.

No. 65,785. Wagon. (*Wagon.*)

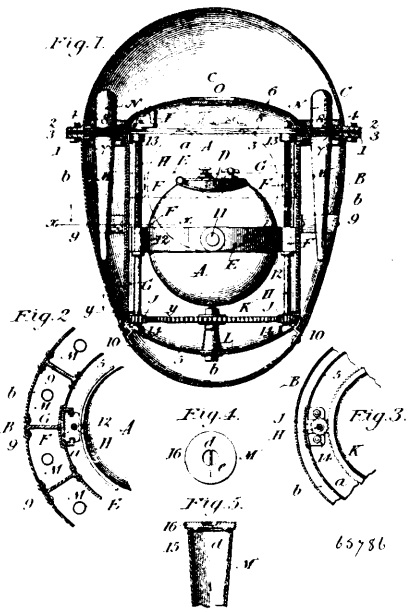


Henry G. Smith, Chemainus, and Samuel W. Bodley, Victoria, both in British Columbia Canada, 13th January, 1900; 6 years. (Filed 16th June, 1899.)

Claim.—1st. An attachment for wagon gear, comprising a plate fixed upon the front gear, a movable frame mounted upon the reach and adapted to engage said plate, and a lever for moving said frame into and out of engagement with said plate, substantially as described. 2nd. An attachment for wagon gear, comprising a plate fixed upon the front gear having an extension rigidly attached thereto, a movable frame mounted upon the reach and adapted to engage said extension, an operating lever, and a link connecting said frame to said lever, whereby the said frame may be moved into and out of engagement with said extension, substantially as described.

No. 65,786. Marine Buoy Safe.

(*Appareil de surête pour bouées marines.*)



Thomas Greenman Hall and David Lewis Harris, both of New York City, New York, U.S.A., 13th January, 1900; 6 years. (Filed 9th December, 1899.)

Claim.—1st. A marine buoy safe, comprising a buoyant outer shell, composed of a body portion and a cap with their parting joint near the top of the structure and provided with a central chamber, an inner receptacle normally located within the lower part of said chamber, and means for elevating said receptacle to facilitate access to its interior. 2nd. A marine buoy safe, comprising a buoyant outer shell, a vertically movable inner receptacle, and means for raising and lowering said receptacle, comprising parallel vertical screws, screw nuts connected with said inner receptacle, and means for turning said screws. 3rd. A marine buoy safe, comprising a buoyant outer shell, a vertically movable inner receptacle, and means for raising and lowering said receptacle, comprising parallel vertical screws, nuts co-acting with said screws, connections between said nuts and receptacle, means for turning said screws, and connecting mechanism causing said screws to turn in unison. 4th. A marine buoy safe, comprising a buoyant outer shell an inner receptacle, and supports for said receptacle, including a gimbal ring with horizontal pivots at right angles to each other. 5th. A marine buoy safe, comprising a buoyant outer shell, a spheroidal inner receptacle, and supports for said receptacle, including a gimbal ring with horizontal pivots at right angles to each other. 6th. In a marine buoy safe, the combination with a plate ring forming an air space boundary and provided with screw threaded holes of lockers or capsules, each comprising a body portion having an internal screw ring and a cap which screws into said screw ring and also into one of said holes in said plate ring. 7th, In a marine buoy safe, a buoyant outer shell composed of a body portion and a cap with a substantially cylindrical inner chamber surrounded on all sides by air chambers, the top wall of said inner chamber forming part of said cap, and provided with a normally closed hand hole, substantially as hereinbefore specified.

No. 65,787. Process of Imparting Drying Properties to Varnish. (*Procédé pour faire sécher le vernes.*)

August Philip Bjerregaard, Brooklyn, New York, U.S.A., 13th January, 1900; 6 years. (Filed 2nd August, 1899.)

Claim.—1st. The process of treating a varnish made of copal, fatty drying oil and thinning agent, so as to add drying properties thereto, consisting in mixing with the said varnish, at a temperature not above the boiling point of the thinning agent, driers consisting of an oxide of a suitable metal and a suitable manganese salt, said driers being substantially in the relative proportions set forth, the total weight of driers remaining in solution being less than one-third of one per cent. 2nd. The process of treating a varnish made of copal, fatty drying oil and thinning agent, so as to add drying properties thereto, consisting in mixing with the said varnish, at a temperature not above the boiling point of the thinning agent, driers consisting of oxide of lead, an a suitable manganese salt, said driers being substantially in the relative proportions set forth, the total weight of driers remaining in solution being less than one-third of one per cent.

No. 65,788. Varnish Manufacture. (*Fabrication de vernes.*)

August Philip Bjerregaard, Brooklyn, New York, U.S.A., 13th January, 1900 ; 6 years. (Filed 2nd August, 1899.)

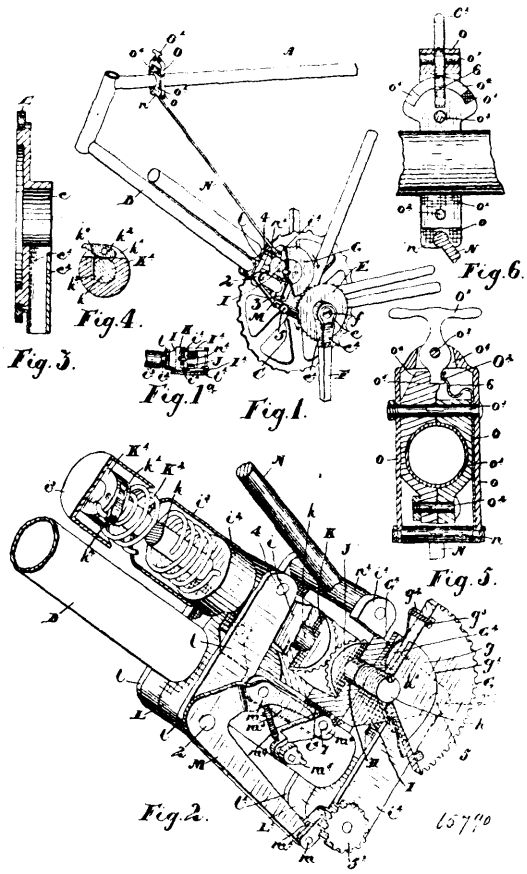
Claim.—The process of making varnish or copal gum and fatty oil, said process consisting in mixing a raw copal gum in a suitable fatty oil, next applying heat until the gum in the oil becomes fused, and next applying an increased degree of temperature until the mixture becomes varnish.

No. 65,789. Varnish Drying Process.
(*Procédé pour faire sécher le vernis.*)

August Philip Bjerregaard, Brooklyn, New York, U.S.A., 13th January, 1900 ; 6 years. (Filed 2nd August, 1899.)

Claim.—1st. The process of treating a varnish made of copal non-drying fatty oil, and thinning agent, so as to add drying properties thereto, consisting in mixing with the said varnish, at a temperature not above the boiling point of the thinning agent, driers consisting of an oxide of a suitable metal and a suitable manganese salt, the said driers being substantially in the relative proportions set forth. 2nd. The process of treating a varnish made of copal, fatty non-drying oil, and thinning agent, so as to add drying properties thereto, consisting in mixing with the said varnish, at a temperature not above the boiling point of the the thinning agent, driers consisting of oxide of lead, and a suitable manganese salt, the said driers being substantially in the relative proportions set forth. 3rd. A drying varnish made of copal gum, non-drying fatty oil, a suitable thinning agent, and driers consisting of an oxide of a suitable metal and a suitable manganese salt, the driers being in substantially the relative proportion set forth. 4th. A drying varnish made of copal gum, non-drying fatty oil, a suitable thinning agent, and driers consisting of oxide of lead, and a suitable manganese salt, the driers being in substantially the relative proportions set forth.

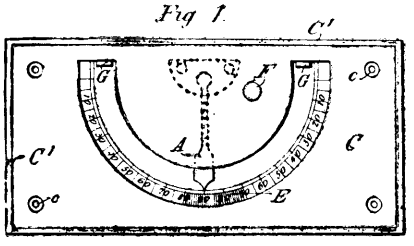
No. 65,790. Bicycle Brake. (*Frein de bicycle.*)

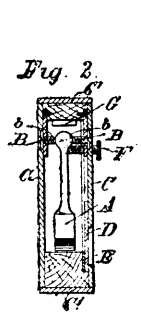


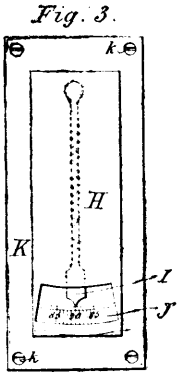
Archibald H. Brintnell, Toronto, Ontario, Canada, 13th January, 1900 ; 6 years. (Filed 8th May, 1899.)

Claim.—1st. In a brake and power accumulating device for vehicles, the combination with the driven rotating part, of a gear wheel secured on same, a suitable gear wheel supported on an adjustable frame, a pinion carried by said adjustable frame, a power accumulator connected to the frame and stored by the rotation of the wheel on the frame and means for adjusting the frame, so as to throw the pinion into mesh with both wheels, as and for the purpose specified. 2nd. In a brake and power accumulating device for vehicles, the combination with the driven rotating part, of a gear wheel secured on same, a suitable gear wheel supported on an adjustable frame, a pinion carried by said adjustable frame, a power accumulator connected to the frame and stored by the rotation of the wheel on the frame, means for adjusting the frame, so as to throw the pinion into mesh with both wheels and means for adjusting the frame so as to throw both wheels into mesh with each other and the pinion out, as and for the purpose specified. 3rd. In a brake and power accumulating device for vehicles, the combination with the driven rotating part, of a gear wheel secured on same, a suitable gear wheel supported on an adjustable frame, a pinion carried by said adjustable frame, a power accumulator connected to the frame and stored by the rotation of the wheel on the frame, means for adjusting the frame, so as to throw the pinion into mesh with both wheels, a dog suitably connected to the frame and means for throwing such dog into connection with the wheel on the frame when the pinion is thrown into mesh with both wheels, as and for the purpose specified. 4th. The combination with the pedal axle and pedals and the gear wheel secured on the axle, of a frame suitably supported on the lower reach, a stud suitably pivoted in the frame, discs secured on the end of the stud, a gear wheel mounted on one of the discs, and a frictional brake connection between the gear wheel and the inner disc, a pinion on the inner end of the stud, and a suitable spindle and pinion supported on the frame and meshing with the aforesaid pinion, a spring connected at one end to the spindle of the pinion, and at the other end to the frame, a pinion suitably connected to the frame and designed to be brought into engagement with both gear wheels whereby power is stored in the spring, as and for the purpose specified. 5th. The combination with the pedal axle and pedals and the gear wheel secured on the axle, of a frame, clips on the lower reach, links pivotally connecting the frame the clips, a stud suitably pivoted in the frame, discs secured on the end of the stud, a gear wheel mounted on one of the discs, a circular spring plate secured to the wheel and designed to have a face engagement with the inner disc, a bevel pinion on the inner end of the stud, a spindle extending through the frame longitudinally and provided with a bevel pinion meshing with the aforesaid pinion, a collar secured on the end of the spindle provided with a spring catch extending outside the periphery of the collar, a spiral spring encircling the spindle and held at one end in the frame and at the other projecting over the top of the collar and engaged by the catch, a pinion designed to be brought into mesh with both wheels simultaneously and means for adjusting the frame so as to bring the pinion into engagement, as and for the purpose specified. 6th. The combination with the pedal axle and pedals and the gear wheel secured on the axle, of a frame, clips on the lower reach, links pivotally connecting the frame to the clips, a stud suitably pivoted in the frame, discs secured on the end of the stud, a gear wheel mounted on one of the discs, a circular spring plate secured to the wheel and designed to have a face engagement with the inner disc, a bevel pinion on the inner of the stud, a spindle extending through the frame longitudinally and provided with a bevel pinion meshing with the aforesaid pinion, a collar secured on the end of the spindle provided with a spring catch extending outside the periphery of the collar, a spiral spring encircling the spindle and held at one end in the frame and at the other projecting over the top of the collar and engaged by the catch, a bell crank suitably pivoted and provided with an end arm, a pinion journalled on a pin on said end arm, a finger attached to or forming part of the opposite end of said bell crank, a link connecting the bell crank to the lug at the bottom of the frame and an arm and toothed dog or catch, and spring connecting the arm to the bell crank, and means for adjusting the frame, as and for the purpose specified. 7th. The combination with the driven rotating axle and the gear wheel secured on the same, the adjustable frame suitably supported on the frame of the vehicle, the stud journalled in same, the discs on the end of the stud, the gear wheel suitably journalled on one disc and frictionally connected to the inner disc on the stud, the pinion on the inner end of the stud and power accumulating device stored thereby, the pinion having an adjustable bearing in the frame, and designed to be brought into mesh with both wheels, the rod connected to the frame and extending up to the top reach of its bicycle and means for imparting a longitudinal movement to such rod, so as to adjust the position of the frame upon the lower reach, as and for the purpose specified. 8th. The combination with the driven rotating axle and the gear wheel secured on the same, the adjustable frame suitably supported on the frame of the vehicle, the stud journalled in same, the discs on the end of the stud, the gear wheel suitably journalled on one disc and frictionally connected to the inner disc on the stud, the pinion on the inner end of the stud and power accumulating device stored thereby, the pinion having an adjustable bearing on the frame, and designated to be brought into mesh with both wheels, the rod connected to the frame and extending up to the top reach of the bicycle, the clip on the reach having one half provided with a notched quadrant, the double arm frame pivoted on a bolt on the clip, the connection between the double arm and the rod, the adjusting handle suitably pivoted in the top of the frame on the reach and the spring for holding it in engagement with one of the recesses or notches of the quadrant formed on the clip, as and for the purpose specified.

No. 65,791. Plumb, Level and Angle Indicator.
(*Fils à plomb, niveau et indicateur d'angles.*)







65791

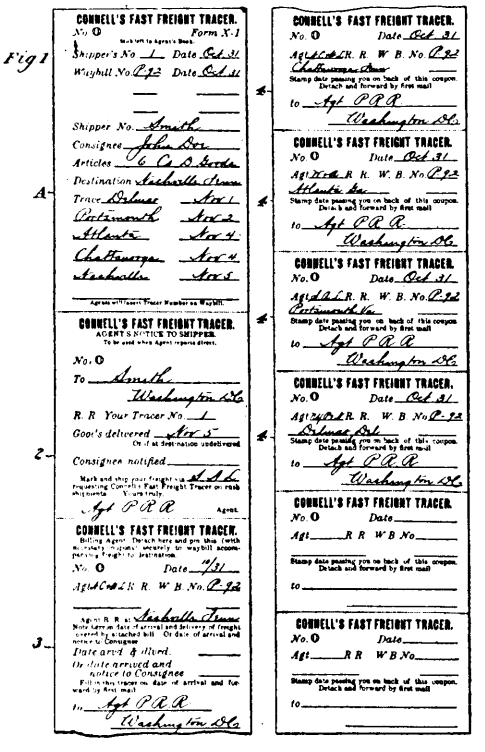
Silas T. Fall, Sunnyside, Mannead, and Thomas W. Box, 11 Northeravan avenue, Plymouth, England, 13th January, 1900; 6 years. (Filed 17th July, 1899.)

Claim.—1st. An improved combination plumb, level and angle indicator comprising a pivoted and weighted pendulum, a graduated scale over which the pendulum moved arranged in a comparatively air tight casing as described. 2nd. An improved combination plumb, level and angle indicator, comprising the weighted pendulum A supported on the points *bb*, of the pins BB, a comparatively air tight casing C, provided with a glass front D, and graduated scale F, together with screw pin F, rubber pads GG, and countersunk holes *cc*, substantially as and for the purposes set forth. 3rd. An improved plumb indicator comprising pivoted and weighted pendulum I, a comparatively air tight casing H, scale J, and flange E, having screw holes *k*, for attaching to a rule, substantially as and for the purposes set forth.

No. 65,792. Freight Tracer. (*Appareil à tracer le fret.*)

John W. Connel, Portsmouth, Virginia, U.S.A., 13th January, 1900; 6 years. (Filed 22nd March, 1899.)

Claim.—1st. The means herein described for tracing or keeping track of freight shipments, comprising a stub or record containing the way bill number, the number of shippers request for tracer, and the points of transfer or passage of the goods en route, and a series of tracer coupons, one for each point of transfer or junction attached to and forwarded with the way bill, the proper coupon to be detached at each junction and returned to the tracing agent, said stubb and coupons being identified by the use of consecutive numbers, letters or other arbitrary marks, substantially as and for the purpose described. 2nd. In a freight tracer, the combination of a stub or record to be retained by the tracing agent, said record containing matter identifying the goods shipped, the way bill and the designating number or mark of the tracer coupons and also the points of junction or transfer of the goods en route, with a series of tracer coupons adapted to be attached to and forwarded with the way bill, each coupon designating the way bill and containing the tracer number or designating mark, one coupon being provided for each point of junction and for the terminal of the route, said coupons to be respectively detached at the junction named thereon, dated and returned to the tracing agent, all substantially as described. 3rd. The herein described means for tracing freight, &c., comprising the stub or record A, the notice coupon 2, the terminal tracer coupon 3, and the junction tracer coupon 4, all substantially as described, the record A to be retained by the tracing agent and identifying the tracer coupons by a like number or other mark on each of said coupons and on the record A, the said record or stub also identifying the shipper, consignee, goods, destination or places of junction or transfer, en route, the notice coupon bearing the same identifying number or mark as the record and tracer coupons, and the tracer coupons 3 and 4 also identifying the way bill by the number or mark thereon and to be attached thereto and forwarded therewith and detached therefrom and returned to the tracing agent when the goods arrive at the junction named thereon, whereby the tracing agent is kept advised of the progress and whereabouts of the goods en route, all substantially as described. 4th. As a means for trac-



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ing goods en route, the combination of the shipper's or consigner's book, containing the stub B, and the coupon 1*a*, substantially as shown and described, and the carrier's book containing the stub A, the notice coupon 2 and tracer coupon 3 and 4, substantially as shown as described, the stubs referring to the coupons by an arbitrary mark, and the coupons bearing the same arbitrary mark, the tracer coupons 3 and 4 being adapted to be detached from the carrier's book and transmitted with the goods, a tracer coupon to be detached at each point of junction or transfer of the goods and returned to the tracing agent, and the notice coupon 2 adapted to be used to notify the shipper of the final delivery and notice to consignee, of the goods, all substantially as and for the purpose described. 5th. As a means of tracing freight, the combination of the shipper's book, containing stub B, and coupons 1^a and 1^b, to be sent to the carrier with the goods, with the carrier's book containing the stub A, notice coupons 2, and tracer coupons 3 and 4, the stubs and coupons identifying the tracer by a like arbitrary number and said stub A, also identifying the shipper, the way bill, the consignee, articles, destination and intermediate points of junction and transfer, the tracer coupons 3 and 4, to be detached from the carrier's book, and attached to the way bill, said tracer coupons 3 and 4, identifying the way bill and adapted to be severally detached therefrom at the junctions named thereon and returned to the carrier or tracing agent, and the notice coupon 2, to be detached from the carrier's book and returned to the shipper or his agent when the carrier is notified of the arrival and delivery of the goods, or the arrival and notice of consignee of the goods, all substantially as and for the purpose described. 6th. As a means of tracing freight, the shipper's book, containing stub B, and detachable coupons 1^a and 1^b, to be sent to the carrier with the goods, and the carrier's book containing the stub A, and tracer coupons 3 and 4, the coupons 3 and 4, to be detached from the carrier's book and attached to the way bill, and adapted to be severally detached from the way bill at the junctions and returned to the carrier or tracing agent combined with the agent's book, containing the stub C, and notice coupon 5, the stub C, identifying the way bill or tracer, the articles, the shipper, the consignee, the destination of the goods and the points of junction of transfer of the goods en route, and the notice 5 to be detached and forwarded to the shipper when the agent receives notice of the final arrival of the goods, all substantially as described. 7th. The means of tracing freight, hereinbefore described, comprising the shipper's book, containing stub B, and coupons 1^a and 1^b, to be sent to the carrier with the goods, and the carrier's book containing the stub A, notice coupons 2, and tracer coupons 3 and 4, the stubs and coupons identifying the tracer by a like arbitrary number, and said stub also identifying the shipper, the way bill, the consignee, articles, destination and intermediate points of junction and transfer, and the

coupons 3 and 4, to be detached from the carrier's book and attached to the way bill, said tracer coupons 3 and 4, identifying the way bill and adapted to be severally attached therefrom at the junctions and returned to the carrier or tracing agent, and the notice coupons 2, to be detached from the carrier's book and returned to the shipper or his agent when the carrier is notified of the arrival of the goods, combined with the exception book to be used by junction agents, containing the stub D, and the coupon 6, said stub and coupon identifying the tracer or number of the original way bill and the original carrier, and adapted to be used to notify the carrier of shortage of goods, of rebilling the same, and the agent's book containing the stub C, and notice coupon 5, substantially as shown and described, the stub C, identifying the way bill or tracer, the articles, the shipper, consignee, the destination of the goods and the points of junction or transfer of the goods en route, and the notice 5, to be detached and forwarded to the shipper when the agent receives notice of the final arrival of the goods, all substantially as described.

No. 65,793. Saleman's Check Book. *(Carnet de cheques.)*

Fig 1.

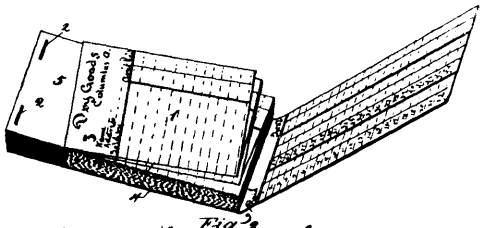
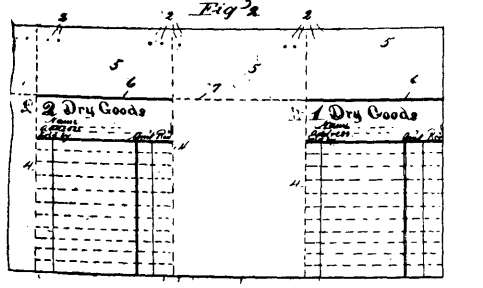


Fig 2

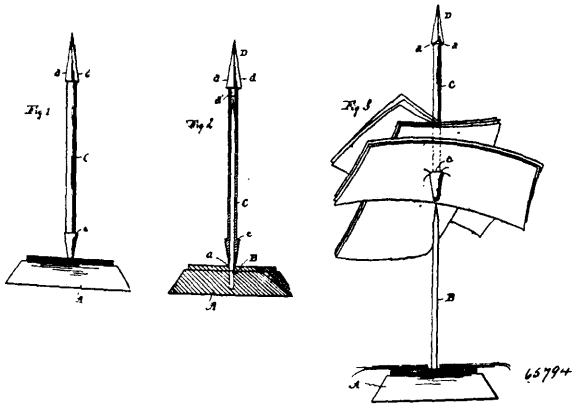


65793

Jay F. Laning, Norwalk, Ohio, U.S.A., 13th January, 1900; 6 years. (Filed 16th September, 1899.)

Claim.—A strip folded transversely in zig-zag, each section comprising an original and a duplicate check, and each check having at the side a corresponding stub by which the parts are bound, alternate stubs being completely separated from the corresponding checks, and the remaining stubs having a line of perforations along which the may be separated from their checks, substantially as described.

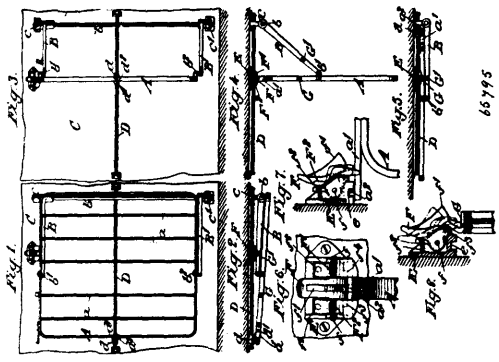
No. 65,794. Bill File. *(Serre-papier.)*



William G. Morgan and John W. Morgan, Both of Hopechurch, Pennsylvania, U.S.A., 13th January, 1900; 6 years. (Filed 22nd May, 1899.)

Claim.—1st. A bill file, comprising a base block, a hollow pin, a pin fitting within said hollow pin, one of the pins being secured to the base block and the other removable, and a point at the outer end of the removable pin, substantially as shown and for the purpose set forth. 2nd. A bill file, comprising a base block, a stationary pin extending upward therefrom, a hollow pin fitting over the stationary pin, said hollow pin being enlarged at or near its lower end, and a spear point at the upper end of the hollow pin, substantially as shown and for the purpose set forth. 3rd. A bill file, comprising a base block, a stationary pin extending upward therefrom, the base block having a recess surrounding said pin, a hollow pin fitting over the stationary pin, said hollow pin being enlarged near its lower end forming a shoulder from which it tapers downward, and a spear head having a shank fitting in the upper end of the hollow pin, as herein shown and described.

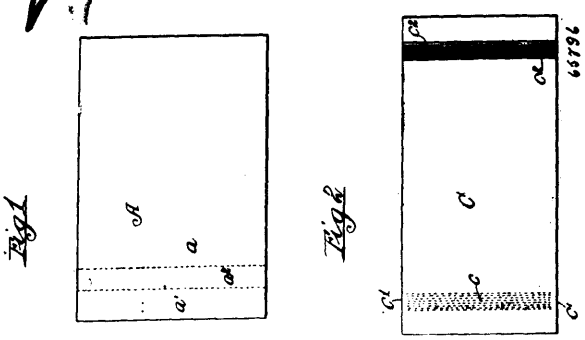
No. 65,795. Gate. *(Barrière,)*



William Rafford Pitt, New Rochelle, New York, U.S.A., 13th January, 1900; 6 years. (Filed 26th May, 1899.)

Claim.—1st. A gate, swinging arms forming a support for the gate and having a pivotal connection with the gate and a fixed guide extending transversely to the plane of the gate when the latter is in its closed position, one edge of the gate having a travelling connection with the guide, the several connections being so arranged that the supporting arms assume positions oblige to the plane of the gate when the latter is in its closed position, substantially as set forth. 2nd. A gate, swinging arms forming a support for the gate, being pivoted to the supporting arms to swing into a folded position upon opposite sides of the supporting arms and means for causing one edge of the gate to follow a predetermined path during its swinging movements, substantially as set forth. 3rd. In combination, swinging supporting arms, a gate pivotally secured to said arms and a fixed bracket in position to engage the inner edge of the gate when the latter is closed to prevent the gate from sagging, substantially as set forth. 4th. The combination with a swinging gate and its support, of a gate fastener, the gate and its support being arranged to engage the fastener, the one when the gate is opened in one direction and the other when the gate is opened in the opposite direction, substantially as set forth. 5th. The combination with a swinging gate and its support, of a triple latch, two parts of the latch being arranged to hold the gate closed, and the other to hold the gate open, substantially as set forth. 6th. The combination with a swinging gate and its support, of a triple latch, two parts of the latch being arranged to hold the gate closed and the other to hold the gate open, the said two latch parts being under the control of the said one part to be released simultaneously with the release of the one part, substantially as set forth.

No. 65,796. Book Leaf. *(Feuille de livre.)*

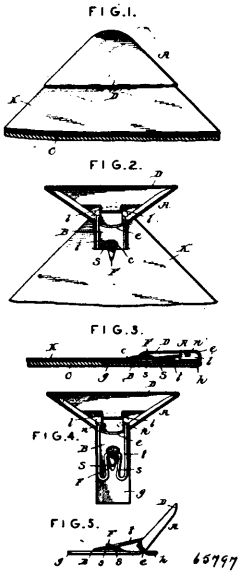


William Arthur Vawter, Chicago, Illinois, U.S.A., 13th January, 1900; 6 years. (Filed 12th April, 1899.)

Claim.—1st. A leaf for a book having an integral transverse portion or band more flexible than the remainder of the leaf, the

entire leaf presenting a substantially smooth surface. 2nd. A leaf for a book having an integral transverse portion, comprising a plurality of substantially flat accordion pleats.

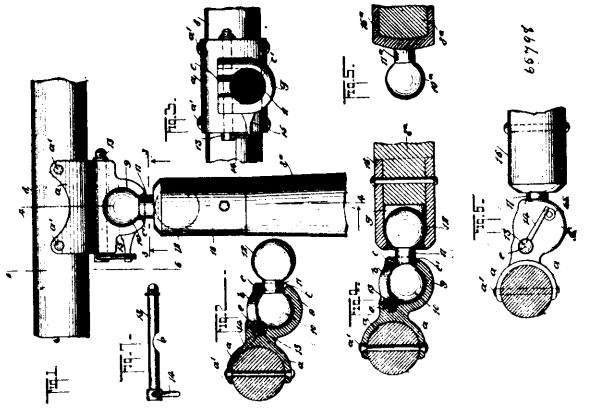
No. 65,797. Desk Pad Clip. (*Griffe pour buvards de pupitre.*)



Joshua Walter Winget, Huntington, West Virginia, U.S.A., 13th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. The combination with a desk pad board, of a pad corner piece hinged to each corner portion of the said board, substantially as specified. 2nd. The combination with a desk pad board, of pad clasps and corner pieces connected to the corner portions of said board, and consisting each of a base member secured to the said board, a triangular corner piece, and a hinged connection between said base member and corner piece, substantially as specified. 3rd. A pad corner, comprising a base piece, a corner piece having downwardly turned outer edges adapted to cover the corner of the pad, and a hinge connection between said base and corner pieces, substantially as specified. 4th. A pad corner clasp, consisting of a rearwardly extended base plate, its spring or spring arms having journal ends or offsets, and a corner clasp plate having a rounded corner and lugs or bearings removed from said corner and engaging said journal ends, and suitable fastening lugs, substantially as specified. 5th. The combination with a desk pad, of an automatically adjustable or expansible corner clasp, substantially as specified. 6th. The combination with a desk pad, of a corner base plate, having an outward bearing extension, its attached spring having journals, and a clasp plate having a rounded corner, and lugs or bearings engaging the journals of the spring, substantially as specified.

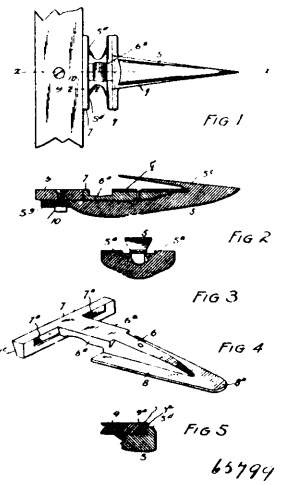
No. 65,798. Neck Yoke and Tongue Connection.
(*Joug et joint de timon.*)



Arthur L. Gruggen, Moosomin, Assiniboia, North-west Territories, Canada, 13th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. The combination with a neck yoke, of a releasable tongue connection, comprising a body piece secured on the neck yoke, and having a socket chamber therein, a coupling bar, a ball on the end of said coupling bar loosely seated in the socket chamber, said coupling bar extending through an open slot in the body piece, and a locking device for the ball operative by a rockable lever and adapted by adjustment to lock the ball loosely in the socket chamber or release it for removal therefrom. 2nd. The combination with a vehicle tongue, and a neck yoke, of a releasable connection therefor, comprising a body piece held upon the neck yoke and having a socket chamber therein, a coupling bar extended from the tongue and having a ball thereon loosely seated in the socket chamber, and a cross shaft revoluble in the body piece and adapted by adjustment to lock or release the ball in or from the socket chamber. 3rd. The combination with a vehicle tongue, and a neck yoke, of a ferrule on the tongue, a coupling bar extended from the ferrule, a ball on said bar, a body piece secured upon the neck yoke and having a socket chamber therein, the ball on the coupling bar loosely seated in the socket chamber and said bar occupying a slot in an end wall of the body piece, and a transverse keeper shaft journaled in the body piece so as to cross above the ball near its periphery, said shaft having a notch therein which when disposed above the ball will release it from the socket chamber. 4th. The combination with a tongue, and a neck yoke, of a ferrule on the tongue having an apertured chamber at its end, a coupling bar, a ball at each end of said bar, one of greater diameter than the other, the larger ball occupying the chamber of the ferrule, a body piece secured upon the neck yoke and having a socket chamber therein, the projecting ball on the coupling bar loosely occupying said socket chamber and the coupling bar passing through a slot in the end wall thereof, and a rockable shaft journaled in the body piece and provided with a notch, the shaft by adjustment of the notch from or toward the ball respectively locking the ball loosely in place or releasing it.

No. 65,799. Guard Finger. (*Garde doigt.*)



Jacob C. Shanks. Denver, Colorado, U.S.A., 13th January, 1900; 6 years. (Filed 26th December, 1899.)

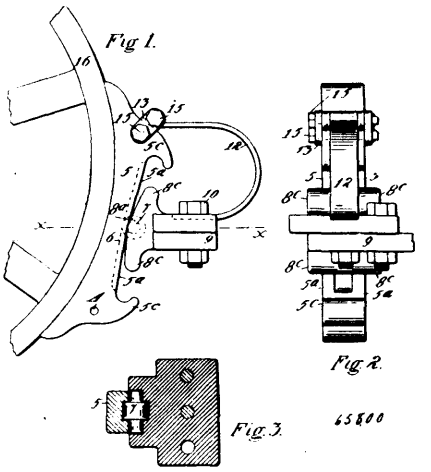
Claim.—The combination with the guard plate and the guard finger attached thereto, the guard finger being centrally grooved longitudinally, of the combined friction bar 7, and leger plate 8, connected by the clip 6, which extends at right angles to the friction bar and engages the central groove of the guard finger, the clip being under cut or dove tailed on its opposite edges adjacent the friction bar to engage counterpart grooves formed in the guard finger, the friction bar being provided with recesses 7^a, formed on each side of the clip and adapted to engage counterpart lugs 5^d, formed on the guard finger, the rear edge of the friction bar engaging the forward edge of the guard plate.

No. 65,800. Brake. (*Frein.*)

Henry Newton Wood, Denver, Colorado, U.S.A., 13th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. The combination with a suitable support arranged to move back and forth in a horizontal plane, according as the brake is to be applied or released, of a shoe having two rearwardly inclined faces, a head mounted on said support, the shoe being movable on the head, while the latter is relatively stationary and arranged to set the brake when the wheel is turning in either direction, and suitable means for maintaining the shoe in operative relation with the head. 2nd. The combination with a suitable support arranged to move back and forth in a horizontal plane, according as the brake is to be applied or released, of a shoe having two rearwardly inclined faces, a head mounted on said support, an anti-friction device mounted on one part, that is, the shoe or the head, and engaging a groove or way formed in the other part, the shoe being movable on the head, while the latter is relatively stationary and arranged to set the brake when the wheel is turned in either direction, and

suitable means for maintaining the shoe in operative relation with the head. 3rd. The combination with a suitable support arranged

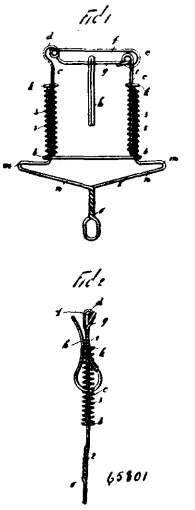


to move back and forth in a horizontal plane of a shoe having two rearwardly inclined faces, a head mounted on the said support and a roller journalled in one part, that is to say, the shoe or the head, and engaging a groove formed in the other part, the shoe being movable on the head, while the latter is relatively stationary. 4th. The combination with a suitable brake beam, of a shoe having two rearwardly inclined faces, a head mounted on the brake beam, and a roller journalled in open bearings formed in the head and engaging a groove formed in the wedge, the shoe being movable on the wedge, while the latter is relatively stationary. 5th. The combination with a movable brake beam, of a head made fast thereon, a shoe engaging the head and movable thereon, the shoe having two rearwardly inclined faces diverging from a central point, one of the said parts, that is to say the shoe or the head, being provided with a roller engaging a guide or groove formed in the other part, and suitable means for returning the shoe to its normal position after each braking action. 6th. The combination with a movable brake beam, of a head made fast thereon, the shoe having two rearwardly inclined faces, one of the said parts being provided with a roller engaging a guide groove formed in the other part, and suitable means for returning the shoe to its normal position after each braking action, comprising a spring attached to the shoe at one extremity, and to the head at the opposite extremity. 7th. In an automatic brake, the combination with a suitable support, of a shoe having an inclined face engaging said support, and a lug adapted to catch on the support, whereby the shoe is held in operative relation when not in use. 8th. In an automatic brake the combination of a brake head having on upward projection, a brake shoe mounted thereon having an inclined face, and a hook or projection on the head, whereby the shoe is supported in the operative position when not in use. 9th. In a brake, the combination with a brake beam of a head secured thereon, and a shoe mounted on the head and provided with a rearwardly inclined face and having a hook at each extremity. 10th. The combination of a brake shoe, having an inclined groove and a supporting hook or projection, a support upon which the shoe is mounted, and a roller carried by said support and arranged to engage the groove in the brake shoe. 11th. The combination with a suitable support, of a brake shoe having a hook or projection adapted to engage said support when the shoe is at rest, or in its normal position, the shoe being provided with an inclined face extending rearwardly and downwardly below the supporting hook or projection. 12th. The combination with a suitable support, of a brake shoe having an inclined face engaging said support, and a hook or projection located on opposite sides of said support and adapted to limit the movement of the shoe in both directions. 13th. The combination with a suitable support and a roller mounted thereon, of a brake block or shoe mounted on said support and having an inclined face which the roller engages, said shoe being provided with a projection adapted to engage said support when the shoe is at rest. 14th. The combination with a suitable support, of a wedge shaped block or shoe mounted on said support, the shoe having a hook or projection adapted to engage the support from above, and suitable means for holding the shoe in operative relation with its support. 15th. A brake shoe having an inclined rear face, and a rearwardly projecting lug located both above and below said face.

No. 65,801. Device for Holding Keys, Handkerchiefs, etc. (*Appareil pour tenir des clefs, mouchoirs, etc.*)

Jane H. Polhemers, Dobb's Ferry, New York, U.S.A., 13th January, 1900; 6 years. (Filed 23rd December, 1899.)

Claim.—1st. A suspension device of the class described, comprising an upper and lower member, said upper member being provided with means for attachment to the dress of the user and provided with parallel side bars, the lower member being provided with side bars slidably connected with the side bars of the upper member, a



spring element interposed between the lower ends the side bars of the upper chamber, and the upper ends of the side bars of the lower chamber, said side bars of said upper member being connected at their lower ends by a cross bar, in connection with which said lower member operates to clamp a handkerchief, substantially as shown and described. 2nd. A suspension device of the class described comprising an upper and a lower member each of which consists of a single length of wire, said member being provided with tensional means for normally retaining them in a position to clamp a handkerchief between them, said tensional means normally forming said lower member upward of which said upper member is composed, being formed into a pin bar and into adepending hook from which an article may be suspended, and the wire of which the lower member is composed being formed into a downwardly directed looped portion, which serves as an operating member, substantially as shown and described. 3rd. A device of the class described, comprising two members, each of which is composed of a single length of wire, the wire forming the upper member being bent to form a bottom cross bar *a*, having eyes or loops at *i*, ends which terminate in upwardly directed side bars *cc*, one of which is provided at its upper end with a retaining loop *d*, the upper end of the other side bar *c*, being provided with a loop from *e*, which is projected by a pin bar *f*, arranged to engage the loop *d*, said wire of said upper member being projected from the loop *d* transversely to engage with the loop *e*, forming a cross bar *g*, and a hook member *h*, said lower frame member consisting of a wire bent to produce side bars *ii*, having eyes or loops *k*, at their upper ends which embrace and slide upon the side bars *e*, said side bars *i*, also passing through the bottom loops *b*, and bent outwardly and convergently inwardly at their lower ends as at *m n*, and looped at the bottom of the lower frame as at *o*.

No. 65,802. Brake for Street Cars.

(*Frein pour chars de rue.*)

Bayard Livingston Kilgour, Cincinnati, Ohio, U.S.A., 13th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. In a safety brake, the combination with a car body, of a supporting casing B, attached to the botton thereof, a box C provided with a screw-threaded bore mounted therein, a forked rod D provided with a vertical screw-threaded shank adapted to pass through the bore of said box, and means for revolving said box to raise and lower the brake, substantially as described. 2nd. The combination with a car body, of a supporting casing carried thereby, a box or nut provided with a threaded bore mounted thereon, a longitudinally movable brake provided with a threaded shank which passes through the threaded bore of said box or nut, and means for revolving the nut to raise or lower the brake, substantially as described. 3rd. In a safety brake, the combination with a car body, of a supporting casing attached to the bottom thereof, a box or hub provided with a screw-threaded bore mounted in said casing, a brake rod provided with a vertical screw-threaded shank adapted to pass through the bore of said box and having a shoe on its lower end adapted to fit over and come into frictional contact with the rail, and means for revolving said box or hub to raise and lower the brake, substantially as described. 4th. The combination with a supporting casing connected to the body of the car, a brake consisting of a forked rod adapted to straddle the rail, the upper end of which is provided with a screw-threaded shank, a box provided with a screw-threaded opening through which said shank passes, and means for revolving said box to raise or lower the brake, substantially as described. 5th. In a safety brake, the combination

with a car body, of a supporting casing connected thereto, a box or nut provided with a screw-threaded bore mounted therein, a forked

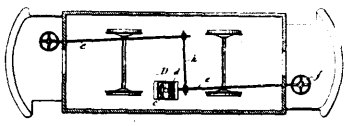


Fig. 1.

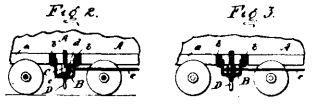


Fig. 2. Fig. 3.

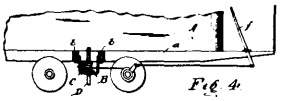


Fig. 4.

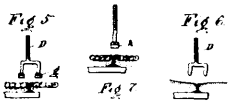


Fig. 5 Fig. 7 Fig. 6.

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rod provided with a vertical screw-threaded shank adapted to pass through the bore of said box or nut, shoes provided on the ends of said fork, and means for revolving the said box or nut to raise and lower the brake, substantially as described. 6th. In a safety brake, the combination with a car body, of a supporting casing secured thereto, a box or nut journalled in said casing provided with a screw-threaded bore, a brake consisting of a forked rod provided with a screw-threaded shank adapted to pass through the bore in said box or nut, a gear connected with said box, and a an intermeshing gear mounted on a shaft geared to the brake handle rod, substantially as described.

No. 65,803. Stopping Device for Engines.

(*Appareil d'arrêt pour machines.*)

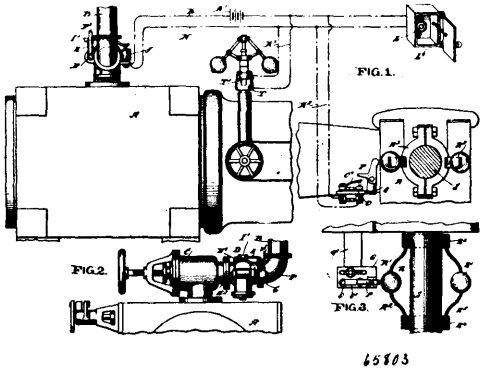


FIG. 1.

FIG. 2.

FIG. 3.

65803

John James Kaye, Newburg, Orange County, New York, U.S.A., 13th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. A stopping device for engines, comprising a gate valve in the steam supply, a shaft mounted to turn, and connected with said valve, a spring connected with the said shaft and serving to close the said valve, an arm connected with the said shaft, a locking device for engaging the said arm to hold the valve normally in an open position against the tension of the spring, and an electric releasing device for releasing the said arm to allow the valve to automatically close. 2nd. A stopping device for engines, comprising a gate valve in the steam supply, a shaft mounted to turn and connected with said valve, a spring connected with said shaft and serving to close the said valve, an arm connected with the said shaft, a locking device for engaging the said arm to hold the valve normally in an open position against the tension of the spring, an electric releasing device for releasing the said arm to allow the valve to automatically close, an automatic circuit closer for the said electric releasing device, and means for controlling said automatic circuit closer. 3rd. A stopping device for engines, comprising a gate valve in the steam supply, a shaft mounted to turn and connected with said valve, a spring connected with said shaft and serving to close the said valve, an arm connected with the said shaft, a locking device for engaging the said arm to hold the valve normally in an open position against the tension of the spring, an electric releasing device for releasing the said arm to allow the valve to automatically close, an automatic circuit closer for the said electric releasing device, and a speed limit device controlling said circuit closer. 4th. A stopping device for engines, comprising a gate valve in the steam supply pipe, and comprising a gate consisting of discs, an arm on which said discs are hung, a shaft to which the said arm is secured, the said shaft being mounted to turn in suitable bearings in the casing of the valve gate, a spring connected with said shaft to hold the said valve closed, a locking device for holding the valve in an open position against the tension of its spring, an electric releasing device for the said valve, and an automatic circuit closer for the said electric releasing device and controlled by a speed limit device. 5th. A stopping device for engines, comprising a shelf closing valve normally locked in an open position, an electric releasing device for unlocking the said valve to allow it to automatically close, a speed limit device, comprising springs secured at one end to a support fixed to the engine shaft, the other end of said springs being connected with a support movable on the engine shaft, balls held on said springs, and a circuit closer for the said releasing device controlled by the said balls. 6th. A stopping device for engines, comprising a self closing valve normally locked in an open position, an electric releasing device for unlocking the said valve to allow it to automatically close, an automatic circuit closer for the said electric releasing device, the said circuit closer comprising contact plates normally out of contact with each other, a bell crank lever for engaging one of said plates to move it into contact with the other plate, and a speed limit device for engaging said bell crank lever, the free ends of the said bell crank lever being normally out of contact with the contact plates and the speed limit device. 7th. In a stopping device for engines, a valve for shutting off the steam from the engine, shaft mounted to turn in suitable bearings, a spring connected with said shaft, an arm connected with the said shaft, an electric circuit including an electro-magnet having its armature lever provided with a hook and adapted to engage the said arm and hold it against the tension of the spring, and means for closing the said electric circuit to release the said arm, the movement of said arm under the tension of the spring causing a cut off of the steam from the engine, substantially as described. 8th. A stopping device for engines, comprising a valve for shutting off the steam from the engine, and a controlling means for said valve to cause a cut off of the steam from the engine, the said means comprising an electric circuit having a branch circuit provided with an automatic circuit closer controlled by the governor of the engine, and a second branch circuit having an automatic circuit closer controlled by a speed limit device, substantially as set forth. 9th. A stopping device for engines, comprising a valve for shutting off the steam from the engine, mechanism for operating said valve, and means for controlling said mechanism to cause a cut off of the steam from the engine, the said means comprising an electric circuit having a branch circuit provided with an automatic circuit closer controlled by the governor of the engine, and a second branch circuit having an automatic circuit closer controlled by a speed limit device, substantially as set forth.

No. 65,804. Projectile. (*Projectile.*)

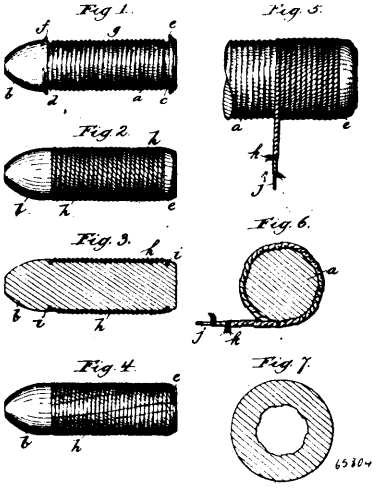


Fig. 1. Fig. 5. Fig. 2. Fig. 3. Fig. 6. Fig. 4. Fig. 7.

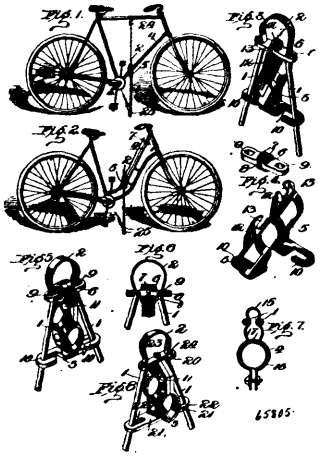
65804

Myron Clark Lisle and Frank Arth Simonds, both of Grand Rapids, Michigan, U.S.A., 15th January, 1900; 6 years. (Filed 27th March, 1899.)

Claim—1st. A projectile, consisting of a cylindrical body having annular grooves near its ends and radial flanges adjacent to said grooves and a spirally wound cord tightly embracing said body and preventing lateral expansion or distortion thereof, the ends of said cord being inserted in said grooves and held by the swaging of said flanges down upon the same, as specified. 2nd. The combination with a projectile having a soft metal body, of a jacket therefor, consisting of a cord wound spirally, tightly and closely about the

main part of the projectile body so as to tightly embrace the whole of said main part and be inexpansible and immovable thereon, and having its ends securely attached to said body, substantially as described, whereby said jacket prevents lateral expansion or distortion of the soft metal body, as specified. 3rd. In combination with a projectile composed of soft metal, a wire wound round the body of the same and secured thereto and a covering of suitable fibre on said wire, substantially as described. 4th. In combination with a projectile, a wire wound round the same and secured thereto, a covering of cotton or other suitable thread wound around said wire and securely held thereby, substantially as described. 5th. In combination with a projectile having a soft metal body, a thread wound wire around said body and having its end secured thereto, and a lubricant applied to the thread covering of said wire, substantially as described. 6th. In combination with a projectile having a spirally grooved soft metal body, a wire laid in said grooves and having its ends secured to said body, a series of threads wound around said wire and extending lengthwise of said projectile and a lubricant applied to said threads, substantially as described.

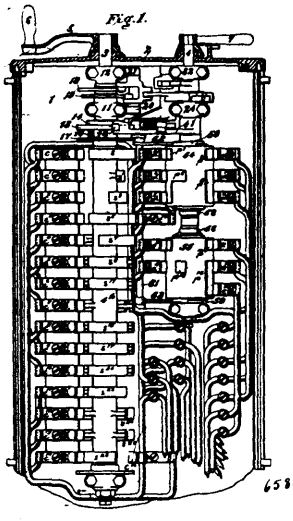
No. 65,805. Bicycle Support. (*Support de bicycles.*)



Edward J. Tierney, August P. Wietz and Charles Englert, all of Rochester, New York, U.S.A., 15th January, 1900; 6 years. (Filed 9th May, 1899.)

Claim.—1st. In a support for bicycles, the combination with the clip adapted to be secured to the bicycle frame and having the guide eyes, of the supporting legs vertically movable through the guide eyes connected at their upper ends, having locking shoulders, and spring devices for moving the legs laterally relatively, and for causing the co-operation of the shoulders with the eyes. 2nd. In a support for bicycles, the combination of a clip adapted to be secured to the frame of a bicycle, and guide eyes thereon, of the supporting legs passing through the eyes and having a spring connection between their upper ends and the locking shoulders formed upon the supports at the ends of the spring, adapted to engage with the guide eyes. 3rd. In a support for bicycles, the combination with the clip adapted to be secured to a bicycle frame and having upper and lower guide eyes for each support, of the supporting legs vertically movable through the eyes and formed of a single piece of spring metal with the loop at the upper portion, and shoulders at the ends of the loop adapted when the supports are in an operative position to engage with the upper guide eyes on each support. 4th. In a support for bicyles, the combination with the clip adapted to be secured to a bicycle frame and having pivoted guides thereon, and the stationary hooks, of the laterally extensible supporting legs connected at their upper ends and provided with shoulders adapted to engage with the eyes and hold the supports extended when in operative position. 5th. In support for bicycles, the combination with the clip adapted to be secured to a bicycle frame and having the pivoted guides thereon, and the stationary hooks, of the latterly extensible supporting legs connected at their upper ends and movable longitudinally through said guides and hooks and adapted to be swung into and out of engagement with the hooks. 6th. In a support for bicycles, the combination with the clip adapted to be secured to a bicycle frame, and having the upper and lower guide eyes thereon, of the supporting legs connected at the upper end by the spring loop and having the locking shoulders formed at the end of the loop, said legs passing vertically through the guide eyes, and the shoulders being adapted to engage therewith when the legs are extended. 7th. In a support for bicycles, the combination with the two-part clip adapted to be clamped to a bicycle frame, having the hooks thereon, and the bolt swivelled to said clip having the eyes in its ends, of the laterally movable supporting legs connected at their upper ends and extending through said eyes and adapted to be swung into and out of engagement with the hooks. 8th. In a support for bicycles, the combination with the two-part clip adapted to be attached to a bicycle frame, and the rotatable bolt having the eyes at the end, and the central collar arranged between the parts of the clip, of the supporting legs connected at their upper ends and vertically movable through the guide eyes on the bolt. 9th. In a support for bicycles, the combination with the two-part clip adapted to be attached to a bicycle frame, each part having the open slot arranged at an angle when the parts are together, the rotatable pin having the central recess engaging the clip and the eyes at the ends, of the supporting legs connected at their upper ends and vertically movable through the eyes of the bolt. 10th. In a support for bicycles, consisting of a clip adapted to be attached to the frame of a bicycle, the longitudinally and laterally movable supporting legs operating through the clip, of a securing device adapted to hold the legs when out of operative position, consisting of a band 16 adapted to be secured to the frame, having the aperture 17, the loop 15 projecting through the aperture and secured by the engagement of its ends between the band and the frame.

No. 65,806. Controller for Electric Motors.
(*Controleur pour moteurs électriques.*)

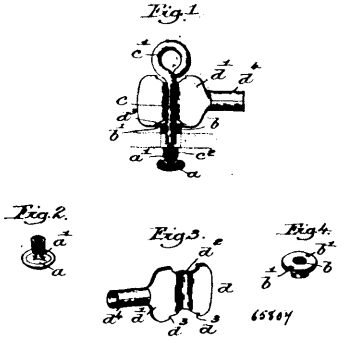


The Westinghouse Electric and Manufacturing Co., assignee of Harry P. Davis, both of Pittsburg, Pennsylvania, U.S.A., 15th January, 1900; 6 years. (Filed 6th September, 1899.)

Claim.—1st. In a combined power and brake controller, the combination with a main drum and co-operating contact fingers, of a reversing switch, mechanism intermediate its movable member and the main drum shaft whereby said member is moved as the main drum moves into the first braking position, and adjusting means for setting said mechanism to throw the movable member of the reversing switch in either direction as said braking position is reached, said adjusting means being both structurally and operatively independent of the reversing switch. 2nd. In a combined power and brake controller, the combination with a main drum and co-operating contact fingers, of a reversing switch comprising a drum and co-operating contact fingers, mechanism intermediate said drums, means moving with the main drum handle and serving to actuate said intermediate mechanism to turn the reversing switch drum as the main drum passes to and from the first braking position and then only, and structurally and operatively independent means for setting the intermediate mechanism so as to effect the movement of the reversing switch drum in either direction. 3rd. In a controller for electric motors, the combination with the main controlling drum and co-operating contact fingers, comprising means for varying the circuit connections of the motors and the resistance in said circuits, and means for connecting the motors in parallel in a closed local circuit having equalizing connections and for varying the resistance in said local circuit, of a switch for reversing the motors, and actuating mechanism therefor operated in one direction by the normal movement of the main controller handle simultaneously with making of the local circuit and in the other direction simultaneously with the breaking of said circuit, a guide for said actuating mechanism and means for adjusting said guide laterally to insure a reversal of the movements of the reversing switch with reference to those of the main drum. 4th. A reversing switch for two electric motors comprising two movable members, an actuating device therefor, means for locking either or both of said members to said actuating device and for detaching the same therefrom at will and stationary contacts co-operating with said movable members. 5th. In a controller for two electric motors, a combined reversing and cut-out switch comprising two rotatable members, an actuating shaft therefor, means for connecting either on both of said members to said shaft and for disconnecting the same at will, stationary reversing

contacts, and stationary cut-out contacts co-operating with said rotatable members. 6th. In a series parallel controller for railway motors, a rotatable contact drum and co-operating stationary contacts, in combination with a reversing and cut-out switch comprising two drums, an actuating shaft therefor, means for connecting each of said drums to and disconnecting it from said shaft, stationary contacts co-operating with said drums and a device actuated by said disconnecting means to prevent the rotation of the controller drum beyond the series contacts. 7th. A reversing and cut-out switch for either or both of two electric motors comprising stationary contacts, a shaft, two contact bearing drums journalled upon said shaft and normally locked thereto and means for unlocking either of said drums and moving it to the cut-out position independently of the other. 8th. In a controller for electric motors, the combination with a contact bearing drum and co-operating stationary contacts, of a pair of reversing and cut-out drums and co-operating stationary contacts, an actuating shaft to which either or both of said drums may be locked and means for locking the controller drum against rotation when the said actuating shaft is in an intermediate position.

No. 65,807. Device for Inserting Plugs into Pneumatic Tires. (*Appareil pour insérer des bouchons dans les bandages pneumatiques.*)



George Freemont Glidden and Hiram Hutchins, both of Watertown, U.S.A., 15th Jannary, 1900; 6 years. (Filed 16th October, 1899.)

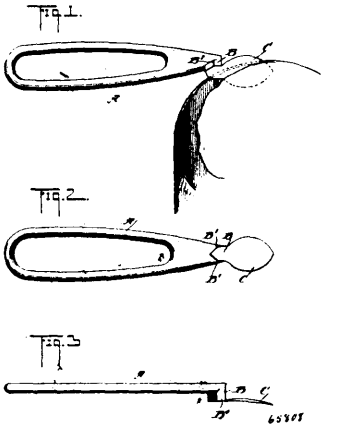
Claim.—1st. A puncture closer, comprising a separate head and cap or button, the latter having a shank provided with internal and external threads extending in opposite directions, and the head having internal threads to co-operate with the external threads of said shank, substantially as described. 2nd. A puncture closer, comprising a separate head and cap or button, the latter having a shank provided with internal and external threads extending in opposite directions, and the head having internal threads to co-operate with the external threads of said shank, in combination with a holder for said cap or button, said holder having a body fitted to receive loosely thereon said head, and having a threaded end with threads extending in a direction to co-operate with the internal threads of said shank, substantially as described. 3rd. A puncture closer, comprising a separate head and cap or button, the latter having a shank provided with internal and external threads extending in opposite directions, and the head having internal threads to co-operate with the external threads of said shank, in combination with a holder for said cap or button, said holder having a body fitted to receive loosely thereon said head, and having a threaded end with the threads extending in a direction to co-operate with the internal threads of said shank, a holder for said head, said holder having a flat holding portion provided with a transverse bend for partially encompassing the body of said cap holder, said head holder being provided with means for engaging and holding the head, substantially as described. 4th. The herein described special tool, consisting of a thumb piece or flat holding portion having a transverse semi-cylindrical bend, and cut away at its edges to provide engaging corners, and having a cylindrical portion sharpened at its end to constitute a punch, substantially as described.

No. 65,808. Can Opener.

(*Machine à ouvrir les boîtes métalliques.*)

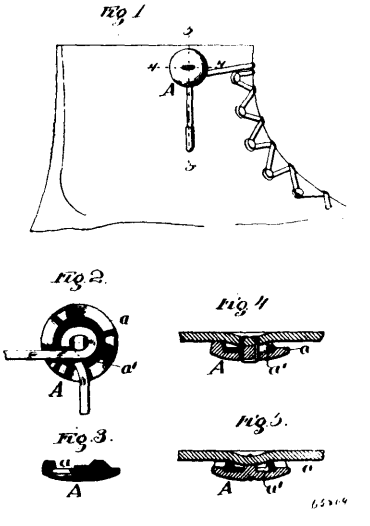
John Alfred Plint and William Henry Nichols, both of Butte City, Montana, U.S.A., 15th January, 1900; 6 years. (Filed 20th December, 1899.)

Claim.—1st. A can opener, comprising a handle, a depending shank, and a blade, the shank having on its side a fulcrum edge for the can opener to swing on, substantially as shown and described. 2nd. A can opener, comprising a handle, a depending shank, and a



blade curved forward and downward, substantially as shown and described.

No. 65,809. Cord Fastener. (*Attache de corde.*)



Levi Devore, Freeport, and Adolphus C. Bartlett and Charles H. Conover, both of Chicago, Illinois, U.S.A., 15th January, 1900; 6 years. (Filed 21st December, 1899.)

Claim.—1st. A fastener for cords and the like, comprising a plate having a marginal flange adapted to project toward the article to which the fastener is attached, and made up of alternate projections and depressions, an annular depression being thereby formed between said flange and the centre of the fastener. 2nd. A fastener for cords and the like, comprising a plate formed with a central projection, a marginal flange on the same face as central projection, and an annular depression between said central projection and said marginal flange, the flange being made up of alternate projections and depressions, substantially as and for the purpose set forth.

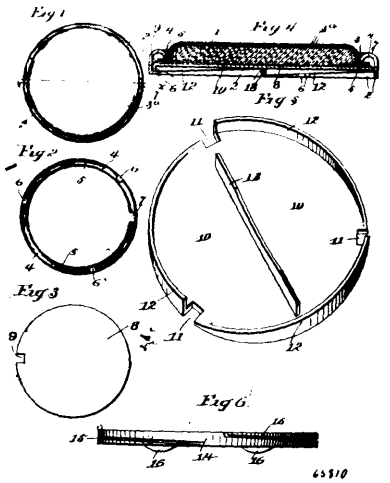
No. 65,810. Inking Pad and Pad Holder.

(*Buvard et porte-buvard.*)

Herman Baumgarten, Washington, District of Columbia, U.S.A., 15th January, 1900; 6 years. (Filed 16th March, 1899.)

Claim.—1st. A holder for inking pads and pad covers, comprising a ring having a finger notch through which the covers may be grasped for removal, lugs or projections on the ring, and a locking plate fitting the ring and engaging the said lugs to adjustably hold the pad and covers in the ring. 2nd. A pad cover halder comprising a ring having lug, and a plate in the ring having cams to engage the said lugs, and lock covers of various number in the ring. 3rd. A pad and pad cover holder comprising a notched ring having inward projections, and a notched plate in the ring provided with cams adapted to be turned on said projections to lock with the ring. 4th. A pad and pad cover holder comprising a ring having a finger

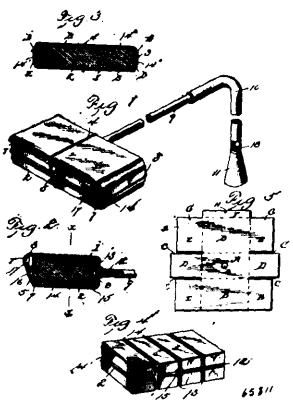
notch upon one edge, a locking plate having notches, and cam flanges at the periphery of the plate adapted to be turned on said projec-



tions, for the purpose set forth. 5th. In a pad and pad cover holder for hand stamps, the combination with a ring having a curved top rim forming an interior cavity and a nipping lip, a finger notch in the rim, and lugs on the bottom of the ring, of a locking plate having cams separated by notches in the periphery of the plate, a hand piece on the plate, and a washer held against the pad and the covers, and the latter against said lip by the said cams engaging the said lugs substantially as set forth. 6th. A pad and a pad cover holder comprising a ring having lugs, and a locking plate in the ring having cams terminating in notches and engaging the lugs to hold pads of varying thickness and covers of various number in the ring, as set forth. 7th. The combination of a holder, an inking pad carried in the holder, a cover for said pad comprising two or more separate layers, and means carried in and by said holder to hold the layers on the pad and to permit the outermost layer to be removed intact without removing the pad or the remaining layer or layers, and without disconnecting or removing the said means from the holder.

No. 65,811. Insect Destroyer.

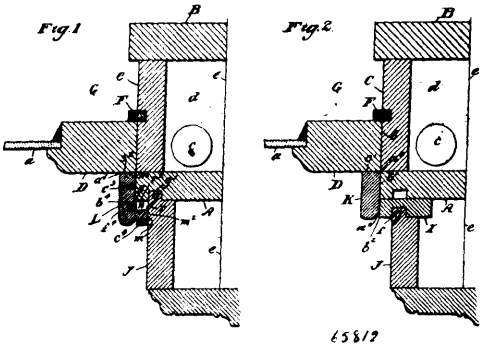
(*Appareil à détruire les insectes.*)



John Galloway, Palmyra, Illinois, U.S.A., 15th January, 1900; 6 years. (Filed 23rd December, 1899.)

Claim.—1st. In an insect destroyer of the class described, the combination with a casing or housing having an operating handle, and an overhanging flange, of an absorbent material inclosed in the walling or housing, and a wick fitted to the absorbent material and located adjacent to the overhanging flange of the casing, whereby said flange is adapted to deflect and spread the flame of the wick, substantially as shown and described. 2nd. In an insect destroyer of the class described, the combination with a substantially U-shaped casing or housing formed from a single blank of metal bent intermediate of its ends and provided with an overhanging inturned flange at the open end of the casing, and a handle of an absorbent material fitted in the casing or housing and provided in the exposed edge thereof with a wick located adjacent to the flange of the casing or housing, substantially as and for the purpose set forth. 3rd. In an insect destroyer of the class described, the combination with a casing or housing having a pipe communicating with the interior thereof, of an absorbent material inclosed within the casing or housing and a pipe and a wick carried by the absorbent, the pipe and the grooves being adapted to convey a current of air to the flame of the wick, substantially as shown and described. 4th. In an insect destroyer of the class described, the combination with a substantially U-shaped casing or housing having a pipe fitted to the back and communicating with the interior thereof, of an absorbent material fitted in the casing or housing and provided in one edge with a longitudinal groove, transverse grooves intersecting the longitudinal groove, and in opposite faces with grooves communicating with the opposite ends of the intersecting transverse grooves and opening out through the opposite edge of the absorbent, and a wick carried by the absorbent and located between the open discharge ends of the grooves, substantially as shown and described.

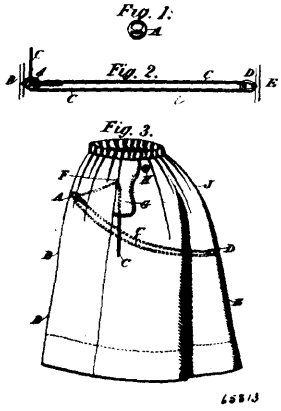
No. 65,812. Window Frame. (*Cadre de fenêtre.*)



Archibald Nelson McBean, West Hoboken, New Jersey, U.S.A. 15th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. The combination with the inside hanging stile and jamb of a window frame, of a rabbeted window stop affixed to the stile adjacent to the sash to hold and guide the same and with its crown extended along the stile with its edge abutting upon the jamb, substantially as herein set forth. 2nd. The combination with the inside hanging stile and jamb of a window frame, of a rabbeted window stop affixed to the stile adjacent to the sash to hold and guide the same, and with its crown extended along the stile and abutting upon the jamb, with a cavity between the crown and the adjacent surface of the inside hanging stile, whereby said window stop may be adjusted to the sash, substantially as herein set forth. 3rd. In a window frame, the combination with a grooved inside hanging stile and a tongued jamb fitted thereto, of a rabbeted window stop placed on the stile adjacent to the sash to hold and guide the latter and with its crown extended along the stile and abutting upon the jamb, substantially as herein set forth. 4th. In a window frame, the combination with a grooved inside hanging stile and a tongued jamb fitted thereto of a rabbeted window stop placed on the stile adjacent to the sash to hold and guide the latter and with its crown extended along the stile and abutting upon the jamb with a space or cavity between the crown and the surface of the stile, substantially as herein set forth.

No. 65,813. Ladies Cycling Skirt. (*Jupe de cyclisme.*)



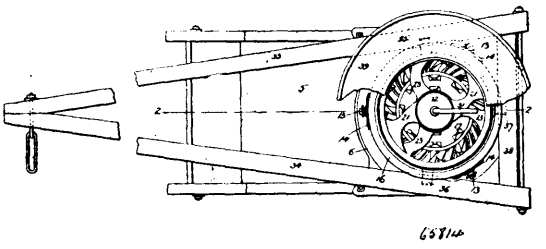
Robert Skelton, Dublin, Ireland, 15th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—A cycling and walking dress skirt having the cord guide ring D, secured at the rear directly below the bustle portion, the cord guide ring A, having two eyes or holes and secured to the centre of the front, the cord hole F, at one side near the waist band and the continuous single cord C, secured at one end in one of the eyes or holes of the front ring, thence passing forward through the other eye or hole of the front ring and thence ascending to and

through said cord hole, all as shown whereby the central rear part of the skirt above the knees is drawn forward and a central front part below the abdomen is drawn rearward by pulling said cord.

No. 65,814. Grinding Mill. (*Moulin à broyer.*)

Fig 1



65814

Joseph Dain, jr., Carrollton, Missouri, U.S.A., 15th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a grinding mill, the combination of co-acting burrs, a rotatable annular rack connected with one of said burrs, a pinion meshing with said rack, and a stationary annular rack with which said pinion meshes, substantially as described. 2nd. In a grinding mill, the combination of a stationary frame having an annular rack, a stationary burr, a driving ring mounted on said frame, a rotary grinding frame, an annular rack carried thereby, a rotatable burr connected with the latter rack and arranged to co-operate with said stationary burr, and one or more pinions carried by said ring and meshing with said annular racks, substantially as described. 3rd. In a grinding mill, the combination of co-acting inner and outer burrs, said inner burr being rotatable, an externally arranged annular frame connected with said inner burr, travelling rollers supporting said annular frame, and a track for said rollers, substantially as described. 4th. In a grinding mill, the combination of co-acting burrs, one of said burrs being rotatable, an externally arranged annular frame connected with said rotatable burr, travelling rollers supporting said annular frame, a track for said rollers, one or more pinions in juxtaposition to one or more of said rollers, an annular rack carried by said annular frame and meshing with said pinion or pinions, and a stationary annular rack below and in mesh with said pinion or pinions, substantially as described. 5th. In a grinding mill, the combination of co-acting burrs, an external annular frame connected with one of said burrs for rotating it, travelling pinions upon the peripheries of which said frame rotates, said pinions being arranged to revolve about said burrs, and a hopper which travels with said pinions, substantially as described. 6th. In a grinding mill, the combination of a stationary frame having an annular rack, and a track concentric with and adjacent to said rack, a stationary burr, a driving ring mounted on said frame, a rotary frame, a burr connected with said rotary frame and arranged to co-act with said stationary burr, an annular rack and a track carried by said rotary frame and arranged opposite, respectively, to the rack and track of said stationary frame, and one or more pinions and a plurality of rollers carried by said ring and running respectively upon said racks and tracks, substantially as described. 7th. In a grinding mill, the combination of lower and upper frames, upper and lower co-acting burrs connected with said frames, the lower burr being connected with the upper frame, driving mechanism arranged between said frames, and means for relieving said driving mechanism from grinding pressure, substantially as described. 8th. In a grinding mill, the combination of a stationary frame, having an annular rack, a burr, a driving ring mounted on said frame, a rotary grinding frame above said ring, a rotary burr connected therewith, an annular rack carriedby said rotary frame, one or more pinions carried by said ring and meshing with said racks, and a hopper mounted on and rotating said ring, substantially as described. 9th. In a grinding mill, the combination of a stationary frame having a hub, a rotary frame having a hub adapted to rest above said stationary hub, said rotary hub having a sleeve which fits into said stationary hub, a burr carried by said rotary frame, and a cap fitted over the lower end of said sleeve and the stationary hub, substantially as described. 10th. In a grinding mill, the combination of a stationary frame having a hub, a rotary frame having a hub adapted to rest above said stationary hub, said rotary hub having a sleeve which fits into said stationary hub, a burr carried by said rotary frame, and a cap fitted over the lower end of said sleeve and the stationary hub and secured to said rotary hub, substantially as described. 11th. In a grinding mill, the combination with a stationary frame, having an annular rack, of a driving ring mounted upon said frame, said ring and frame having a tongue and groove connection, one or more pinions carried by said ring, a rotary grinding frame, an annular rack carried thereby and meshing with said pinions, and a burr carried by said rotary frame, substantially as described. 12th. In a grinding mill, the combination of grinding devices, two annular racks spaced apart, one of said racks being connected with a movable member of the grinding devices, a pinion between and meshing with said racks, and a rotatable ring supporting said pinion, substantially as described.

No. 65,815. Food Chopper. (*Hache-nourriture.*)

Fig 1

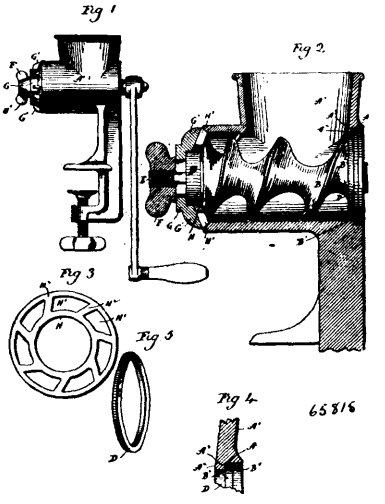


Fig 2.

Fig 3

Fig 5

Fig 4.

65815

Levi Tracy Snow, New Haven, Connecticut, U.S.A., 15th January, 1900; 6 years. (Filed 27th November, 1899.)

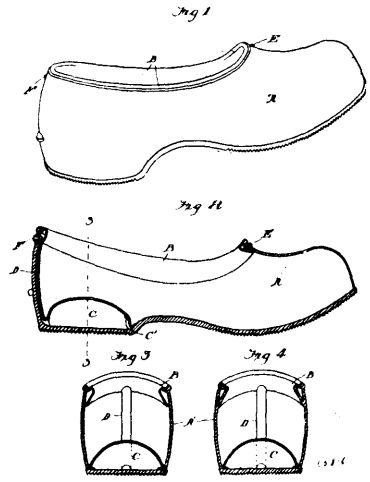
Claim.—1st. In a food chopper, the combination with a case having an open in its rear end, of a forcing screw adapted to be entered into and removed from the case through the said opening, one of the said parts being formed with an annular bearing shoulder for receiving the forward thrust upon the screw when the same is at work, a cutter coupled with the outer end of the screw and having bearing upon the outer face of the outer end of the case, and an adjusting instrumentality applied to the outer end of the screw for drawing the same forward in the case and forcing the cutter rearward to a bearing, whereby the end-thrust bearings of the screw are located at the opposite ends of the case. 2nd. In a food chopper, the combination with a case having the outer face of its inner end formed with an annular recess larger in diameter than, and concentric with, the annular forcing screw opening formed in the said end of the case, the bottom of the said recess forming a bearing seat, of a forcing screw provided at its inner end with an annular shoulder to co-act with the said seat and take the forward endwise thrust of the screw, a cutter connected with the outer end of the screw and bearing upon the outer face of the outer end of the case, and an adjusting instrumentality applied to the outer end of the screw for maintaining the shoulder at the inner end thereof upon the said seat, and for forcing the cutter rearward and maintaining it in engagement with the outer end of the case. 3rd. In a food chopper, the combination with a case having an opening in its rear end and a recess concentric with and larger than the said opening entering the case from the outer face thereof and forming a bearing seat located in a vertical plane, of a forcing screw adapted to be entered into and removed from the case through the said opening, and provided at its rear end with a shoulder entering the said recess, a washer located upon the strew in position to co-act with the said seat against which it is held by the said shoulder, a cutter coupled with the outer end of the forcing screw and having a bearing upon the outer face of the outer end of the case with which it co-acts for cutting the food, and an adjusting intrumentality connected with the outer end of the screw, and bearing upon the cutter for forcing the same rearward against the case, and for drawing the screw forward to seat of the said washer upon the said bearing seat, whereby the end-thrust bearings of the screw are located at the opposite ends of the case.

No. 65,816. Overshoe. (*Galoches.*)

William T. Miller, McKeesport, Pennsylvania, U.S.A., 15th January, 1900; 6 years. (Filed 26th December, 1899.)

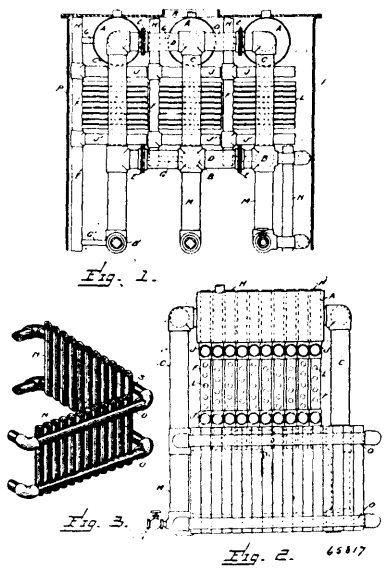
Claim.—1st. An overshoe having an inflatable tube surrounding the upper end of the opening, substantially as shown and described. 2nd. An overshoe having an inflatable tube in the upper edge of its opening, the means contained within the overshoe for inflating the said tube, substantially as shown and described. 3rd. An overshoe having an inflatable tube surrounding the inner edge of the opening, and the bulb arranged within the heel portion of the overshoe, and connected within the inflatable tube, for the purpose of inflating the same, substantially as shown and described. 4th. An overshoe having an inflatable tube surrounding the inner edge of the opening, said tube being essentially wedge shaped in cross section, whereby the overshoe is held against slipping in the shoe proper, substantially as shown and described. 5th. An overshoe having an inflatable tube surrounding the inner edge of the opening, an inflating bulb arranged within the heel portion of the overshoe and connected with

the tube, and the outlet valve arranged at the forward end of the tube for the purpose of releasing the air from the tube when it is



desired to remove the overshoe, substantially as shown and described.

No. 65,817. Pipe Boiler. (*Chaudière.*)

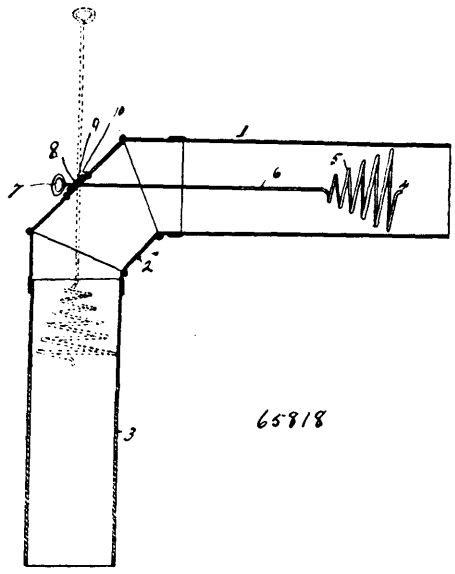


Walter MacFarlane, Seattle, Washington, U.S.A., 15th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a pipe boiler, the combination with steam drums, downflow pipes, and longitudinal connections between said downflow pipes, of partitions formed of vertically disposed pipes in communicative conjunction with the said steam drums and said longitudinal connections and having sealed ends projecting beyond said junctions, partitions formed of horizontally disposed pipes projecting at right angles from and connected to each of the several pipes forming the said vertical partitions and having their projecting ends sealed, and a plurality of quill pipes with sealed ends projecting from the several said vertical partition pipes, substantially as described. 2nd. The combination with a steam drum, a water drum, a downflow pipe at each end of said steam drum and said water drum and making communicative connection therebetween, of a system of vertical pipes making communicative connection with said steam drum and said water drum, horizontal pipes in communicative connection with the said system of vertical pipes, and side outlets in said downflow pipes to provide means for connecting said downflow pipes to other downflow pipes in like combination to form a complete boiler or to increase the size of the one already constructed, substantially as described. 3rd. The combination with a steam drum, a water drum, downflow pipes making communicative connection there-between, of a system of vertical pipes making communicative connection with said steam drum and said water drum, horizontal pipes in communicative connection with the said system of vertical pipes, and side outlets in said downflow pipes to provide means for connecting said downflow pipes to other downflow pipes in like combination to form a complete boiler or to increase the size of one already constructed, substantially as described.

No. 65,818. Stovepipe Cleaner.

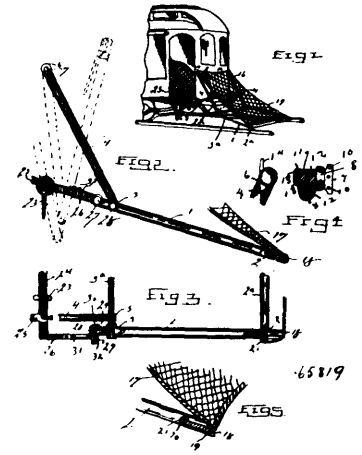
(*Nettoyeur de tuyau de poêle.*)



Eugene H. Kingsbury, Cloverport, Kentucky, U.S.A., 15th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a stovepipe, the combination with an elbow provided with a small hole in the outer part of its middle section, located substantially at the point of intersection of the axes of the legs of the elbow and provided with an asbestos packing and clips for holding the packing in place, of a cleaning implement provided with a rod for holding the same adapted to pass through said hole in the elbow and to be closely embraced by the packing around the same, the cleaning implement having such proportions that it may be turned in the elbow without being removed therefrom, so as to clean both adjacent legs of the pipe to remove accumulated soot from the same, substantially as described. 2nd. In a stovepipe, the combination with the elbow, provided with a hole in the outer part of its middle portion, and provided with a suitable packing, and means for holding the same in position, of a stovepipe cleaner provided with a rod adapted to be projected through said hole and of a length commensurate with the length of the adjacent pipe, the said hole being located substantially at the point of the intersection of the axes of the legs of the elbow, so as to permit the cleaning implement being turned in the elbow, whereby the said cleaner may be projected into both adjacent legs of the pipe to remove accumulated soot from the same, substantially as described.

No. 65,819. Car Fender. (*Defense de chars.*)

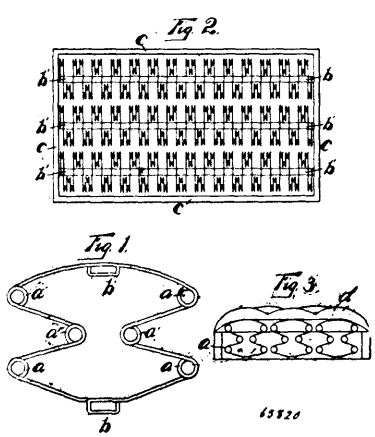


John Megown, Youngstown, Ohio, U.S.A., 15th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a car fender, the tubular apron frame, the tubular bars pivoted to the car, the rocking shaft pivoted to the car, the

hand lever thereof, the crank arms thereof pivoted to the apron frame to the rear of the tubular bars, and adapted to raise and lower the apron frame, substantially as described. 2nd. In a car fender, an apron frame comprising side bars and transverse bars intermediate their ends, bars pivoted to one of said transverse bars and to the car, the rocking shaft with the hand lever, the crank arms of the said rocking shaft pivoted to the rear ends of the side bars, and an apron secured to the apron frame and to the front of the car, substantially as described. 3rd. In a car fender, the combination of an apron and apron frame, the bars pivoted to the apron frame and to the car, the hooks of the said bars supporting the apron, and the rocking shaft pivoted to the car, the hand lever thereof, the crank arms thereof, and means for removably pivoting said crank arms to the apron frame for the purpose of tilting the same, substantially as described. 4th. In a car fender, the apron frame and apron, the bars pivoted to said frame and removably pivoted to the car, combined with the rocking shaft pivoted to the car, crank-arms thereof removably pivoted to the apron frame, and means for actuating the rocking shaft, substantially as described. 5th. In a car fender, the apron and apron frame, bars pivoted thereto, the bearings at the ends of the said bars, the brackets secured to the car, the studs of said brackets engaging said bearings, the spring dogs of said studs, and slotted seats therefor, combined with a rocking shaft pivoted to the car, the hand lever, and the crank arms removably pivoted to the apron frame, as and for the purpose described. 6th. In a car fender, an apron and apron frame, the bars pivoted thereto and to the car, the bearings of the apron frame, the annular slotted pins therein, the rocking shaft, the crank arms thereof, the eyes of the crank arms engaging said pins, means for removably retaining said pins in place comprising the spring key engaging the annular slot, combined with means for actuating the rocking shaft, substantially as described. 7th. In a car fender, a tubular apron frame comprising side bars and transverse bars, vertical tubular bars pivoted to said apron frame and to the car, the rocking shaft, the crank arms thereof pivoted to the rear ends of the side bars means for actuating the rocking shaft the hooks of the vertical tubular bars, the apron, the top rod thereof held by said hooks, the edge ropes of the apron and means for securing said edge ropes to the apron frame comprising the notches in the ends of the side bars in which said ropes are rove, the openings in the said bars and the wedges securing the ropes therein, as and for the purpose described. 8th. In a car fender, a tilting mechanism therefor, comprising a rocking shaft, crank arms thereof, removable pivots pivoting said crank arms to the rear end of the fender, and bars pivoted to the fender forward of the removable pivots and removably pivoted to the car, combined with an apron for the said frame, substantially as described.

No. 65,820. Spring for Carriage Cushions, Beds, etc., (*Ressort de coussin et lit etc. de chars.*)



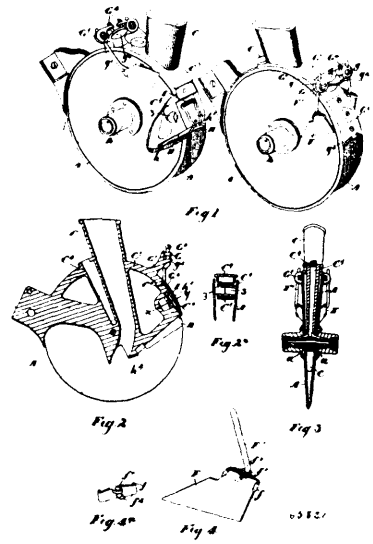
Ira Teeter, and George Albert Turner, assignees of Byron Emery Sly, all of Watertown, New York, U.S.A., 16th January, 1900; 6 years. (Filed 23rd of December, 1899.)

Claim.—A spring for cushions, etc., consisting of a wire bent to form upper and lower cross bars, with central eyes, helices at the extremities of said cross bars, a re-entering angle between said helices and other helices at the apices of said angles, said eyes being in parallel, vertical and horizontal planes, and said helices being arranged in sets of three alternately on opposite sides of said eyes, and being in parallel vertical and horizontal planes, and parallel bars through said eyes.

No. 65,821. Seeding Machine Shoe. (*Sabot pour semoirs.*)

The Cockshutt Plough Company, assignee of James Morphy, all of Brantford, Ontario, Canada, 16th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. The combination with the converging discs suitably journalled and the boot upon which such journal is supported or forms part of, of the external scrapers each provided with a spring holding rod and a clamping socket arm through which such rod extends, suitably secured to the rear of the boot, as and for the



purpose specified. 2nd. The combination with the converging discs suitably journalled and the boot upon which such journal is supported or forms part, of the external scrapers each provided with a spring holding rod, a bracket secured to the boot, clamping arms pivoted on the bracket and provided with sockets through which the rod extends, as and for the purpose specified. 3rd. The combination with the converging discs suitably journalled and the boot upon which such journal is supported or forms part of, of the external scrapers each provided with a spring holding rod, a bracket secured to the boot, clamping arms pivoted on the bracket and provided with sockets through which the rod extends, and set screws extending through the ends of the arms and designed to abutt an offset in the bracket, as and for the purpose specified. 4th. The combination with the converging discs suitably journalled and the boot upon which such journal is supported or forms part of, of the scrapers, the holding plates secured to the same and provided with a socket and stop underneath the same, the spring rods having bent ends extending into the socket and abutting the stop and means attached to the boot for holding such spring rods firmly in position, as and for the purpose specified. 5th. In a seeding machine, in which discs shoes are arranged in zig-zag fashion, a set of scrapers secured to the forward shoe and located substantially above the hub thereof whereby the soil is thrown forward of the rear shoe in which the scrapers are located to the rear of the hub, as and for the purpose specified. 6th. The combination with the grain tube castings and rear extensions thereof, of the inner scrapers comprising the blades pivoted in the bottom of the extension and having their inner edges abutting each other and the upper crank shaped pins and the plate secured to the grain tube casting or boot under which the crank pins extend and the spiral spring connecting the outer ends of the crank pins together, as and for the purpose specified. 7th. The combination with the grain tube casting or boot and rear extension thereof, of the inner scrapers suitably journalled to the rear of the boot on the inside of the discs and provided at the bottom with a cutaway portion to permit of the dirt escaping, as and for the purpose specified. 8th The combination with the grain tube casing or boot and rear extension thereof, of the friction rollers abutting each other and the discs and suitably journalled in the casting, as and for the purpose specified.

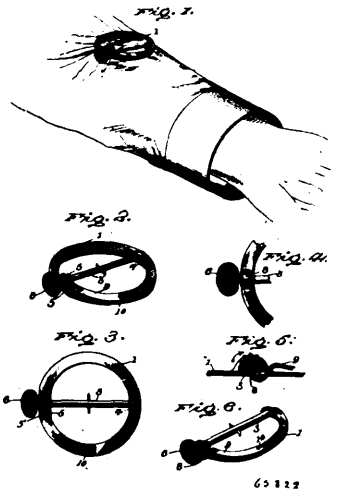
No. 65,822. Shirt Sleeve Holding Machine.

(*Attache de manche de chemise.*)

Herman C. Ford, Alexander M. Lindsay, both of Rochester, assignees of Arthur J. Barber, Sodus, New York, U.S.A., 16th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. In a sleeve holders, a frame, a shaft mounted in the frame and capable of free revolution in one direction, and means on the shaft to engage the sleeve and hold it while being wound about the shaft in the revolution of the latter. 2nd. A sleeve holder comprising a frame, a shaft mounted thereon and capable of free revolution in one direction, means for securing the shaft against revolution in the opposite direction, and means on the shaft to engage the sleeve and hold it while being wound about the shaft. 3rd. In a device for gathering and holding a fabric, a frame, a shaft mounted thereon and capable of free revolution in one direction, pins projecting from the shaft, and means for locking the shaft against movement in a reverse direction, said means being adapted to be rendered inoperative when desired, whereby the device when in use may be detached by a simple pull. 4th. In a device for gathering and holding a fabric, the frame having integral flanges

provided with bearings, the shaft supported to turn in said bearings and provided with a ratchet, and a spring retaining pawl, said



spring being adapted to be compressed by the finger to release the pawl and permit the shaft to be rotated by lifting the device from the fabric. 5th. A sleeve holder comprising a frame, a shaft mounted thereon, means on the shaft to engage and hold the sleeve, a ratchet an the shaft, and a spring pressed pawl to engage the ratchet and prevent movement of the shaft in one direction. 6th. A sleeve holder comprising a frame, a shaft mounted thereon, means on the shaft to engage and hold the sleeve, a ratchet on the shaft, and a spring pawl to engage the ratchet and normally prevent movement of the shaft in one direction, said spring being adapted to be compressed to release the pawl, whereby the holder may be disengaged from the fabric by a pull. 7th. A sleeve holder comprising a circular frame, a shaft mounted in the frame and above its plane, pins oppositely projecting from the shaft intermediate its bearings, a ratchet secured to the shaft, and a spring member secured to the frame at one end, its free end passing through the frame and engaging the ratchet from below to prevent the movement of the shaft in one direction, said spring member lying normally above the frame for a portion of its length whereby pressing the spring member down on to the frame will release the ratchet, as and for the purposes stated.

No. 65,823. Mantle for Incandescent Gas Lighting.
(*Manteau pour lumière à gaz incandescent.*)

Carl Killing, Dusseldorf, Germany, 16th January, 1900; 6 years. (Filed 3rd December, 1897.)

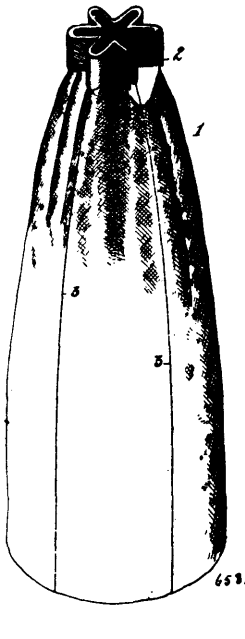
Claim.—1st. As a new article of manufacture, a mantle for incandescent gas lighting, consisting of a thorium oxide and a metal of the platinum group, the metal being present in substantially the exceedingly small proportion stated. 2nd. A mantle for incandescent lighting, consisting of a body of thorium oxide coated with a solution containing a metal of the platinum group in the exceedingly minute quantity specified, substantially as and for the purpose set forth. 3rd. A mantle for incandescent lighting, consisting of thorium oxide and a metal of the platinum group, said metal being present in substantially the proportion of four hundreth of one per cent relatively to the thorium, whereby a catalytic action is secured.

No. 65,824. Mantle for Incandescent Gas Lighting.
(*Manteau pour lumières à gaz incandescent.*)

Carl Killing, Dusseldorf, Germany, 16th January, 1900; 6 years. (Filed 3rd December, 1897.)

Claim.—1st. As a new article of manufacture, a mantle for incandescent gas lighting, consisting of zirconium oxide with or without the oxide of magnesium or of calcium, and a metal of platinum group, said metal being present in substantially the minute portion stated. 2nd. A mantle for incandescent lighting, consisting of a body of oxide of an earth or earths of relatively low light giving capacity in itself, combined with a metal of the platinum group, the latter being present in substantially the exceeding minute quantity stated. 3rd. A mantle for incandescent lighting, consisting of a body of zirconium oxide with or without oxide of magnesium or of calcium, and a metal of the platinum group distributed in minute and invisible quantity over the surface of the oxide. 4th. A mantle for incandescent gas lighting, consisting of a ske'eton or body of oxide of an earth or earths, said body being of relatively low light giving capacity in itself, and a metal of the platinum group combined with the oxide in substantially the proportion of four one hundreths of one per cent, whereby a catalytic action is secured.

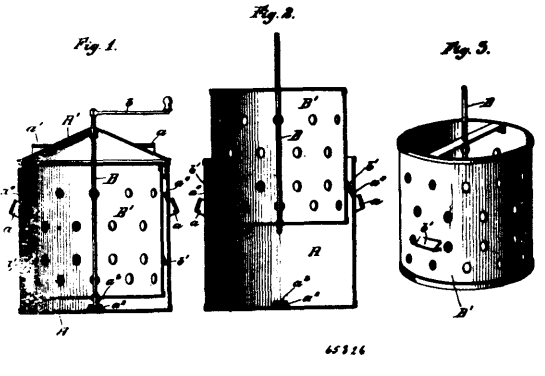
No. 65,825. Gas Lighting Device. (*Appareil à allumer le gaz.*)



Carl Killing, Dusseldorf, Germany, 16th January, 1900; 6 years (Filed 3rd December, 1899.)

Claim.—1st. A self lighting attachment for burners consisting of a basket or body formed of a thread spun from vegetable and metal filaments, the metal being of the platinum group, said basket or body being impregnated with a mixture of rare earth, such as thorium, and a metal of the platinum group, in a state of high division, substantially as set forth. 2nd. The herein described composition for self lighting attachments to burners, consisting of an oxid of a rare earth, such as thorium, and a metal of the platinum group in a state of high division, said earth and metal being combined in substantially the proportions stated. 3rd. A self lighting attachment comprising a supporting body or skeleton woven or knitted of thread composed of vegetable filaments and a wire or wires of metal of the platinum group spun or twisted together, said body or skeleton being impregnated with a lighting material, substantially as described.

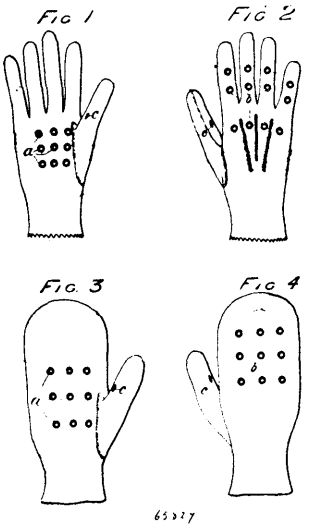
No. 65,826. Dish Washer. (*Laveuse de vaisselle.*)



Jacob N. Forler, Melita, Manitoba, Canada, 16th January, 1900; 6 years. (Filed 27th December, 1899.)

Claim.—1st. A dish washer, comprising a tank, a removable dish receptacle rotatably mounted therein and having perforations in its side and bottom, and means whereby said receptacle may be raised in the tank and held in its raised position, substantially as described. 2nd. A dish washer, comprising a tank, a cover therefor, lugs formed upon the inner side of the tank near the top thereof, a removable shaft journaled in said tank and cover, a dish receptacle fixed to said shaft and having perforations in its sides and bottom, lugs formed upon the outside of said receptacle and adapted to engage the lugs upon the said tank, whereby said receptacle is adapted to be sustained in its raised position, substantially as described.

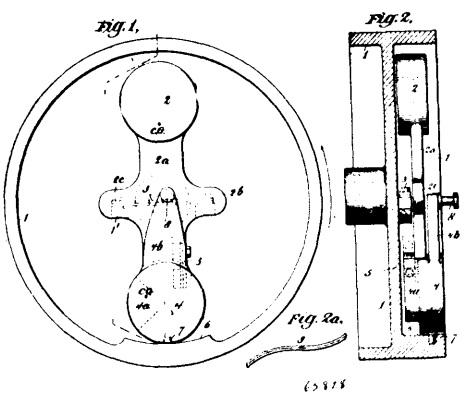
No. 65,827. Glove. (*Gant.*)



Joseph Charles Beaumont, Shopland, British Columbia, Canada, 27th January, 1900; 6 years. (Filed 27th December, 1899.)

Claim.—A glove or mitten of the class described, having a number of ventilating apertures *a* on the palm, apertures *c* on the inner opposite sides of the thumb, and apertures *b* on the back of the portion occupied by the fingers, and eyelets in such apertures, substantially for the purposes set forth.

No. 65,828. Governor. (*Gouverneur.*)

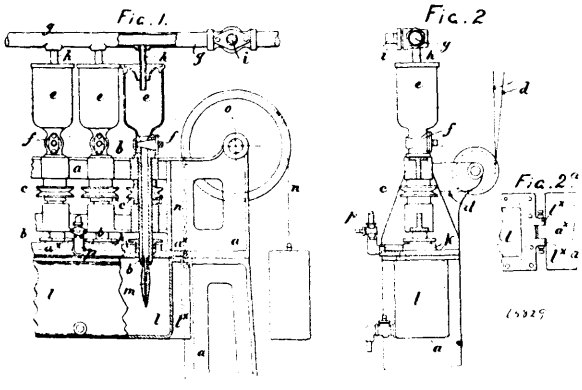


Francis Marion Rites, Ithaca, New York, U.S.A., 16th January, 1900; 6 years. (Filed 28th December, 1899.)

Claim.—1st. In a governor, the combination, with a revoluble of spring connected weights mounted upon said carrier and movable with respect thereto and to each other, and having in common means for supporting them from the carrier and for opposing movement of said weights due to revolution of the carrier, and an actuating device adjusted by the movement of said weights, substantially as described. 2nd. In a governor, the combination, with a revoluble carrier, of spring connected and spring supporting weights mounted upon said carrier in substantial gravity balance with one another, and movable with respect thereto and to each other, and an actuating device adjusted by the movement of said weights, substantially as described. 3rd. In a governor, the combination, with a revoluble carrier, of two spring connected weights, one supported from the other and movable with respect thereto, means for supporting said weights and for opposing movement thereof, due to revolution of the carrier, and an actuating device adjusted by the movement of said weights, substantially as described. 4th. In a governor, the combination, with a revoluble carrier, of swinging and rolling weights the latter adapted to roll upon a suitable guide, means for securing them to the carrier, and for opposing movement thereof, due to revolution of the carrier, and an actuating device adjusted by the movement of the weights, substantially as described. 5th. In a governor, the combination, with a revoluble carrier, of two weights, one arranged to swing about a suitable support and the other to roll upon a suitable guide, means for securing said weights to the carrier and for opposing movement thereof due to revolution of the carrier, and an actuating device adjusted by the movement of the weights, substantially as described. 6th. In a governor, the combination, with a revoluble carrier, of two weights, one arranged to swing about a suitable support and the other to roll upon the rim of the carrier, means for securing said weights to the carrier and for opposing movement thereof due to revolution of the carrier, and an actuating device adjusted by the movement of the weights, substantially as described. 7th. In a governor, the combination, with a revoluble carrier, of a weight structure containing spring connected weights, having a common support, which move with respect to each other and the carrier when the speed of the carrier changes, inducing spring action tending to return the weight structure and the parts thereof to their normal positions, and an actuating device adjusted by the movement of said weights, substantially as described. 8th. In a governor, the combidation, with a revoluble carrier, of a weight structure containing connected weights which are not pivotally connected to the carrier, but have a common spring support, said springs being arranged to move with respect to each other and the carrier when the speed of the carrier changes, inducing spring action tending to return the weight structure and the parts thereof to their normal positions, and an actuating device adjusted by the movement of said weights, substantially as described. 9th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement thereof due to revolution of the carrier, a secondary weight connected by a spring to the primary weight and movable with respect thereto and the carrier, and an actuating device adjusted by the movement of said weights, substantially as described. 10th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement thereof due to the revolution of the carrier, a rolling secondary weight connected to the primary weight, and adapted to roll upon a suitable guide, and an actuating device adjusted by the movement of said weights, substantially as described. 11th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement the eof due to the revolution of the carrier, a rolling secondary weight having a rolling contact with the carrier and connected by a spring to the primary weight, and an actuating device adjusted by the movement of said weights, substantially as described. 12th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement thereof due to the revolution of the carrier, and a secondary weight having a rolling contact with the carrier and connected by a spring to the primary weight, and having an inwardly extending arm carrying an actuating device which is adjusted by the movement of said weights, substantially as described. 13th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement thereof due to revolution of the carrier, and a secondary weight supported from the primary weight and movable with respect thereto and to the carrier, but having also a connection with the carrier, but having also a connection with the carrier, and having an inwardly extending arm carrying an actuating device which is adjusted by the movement of said weights, the point of connection of said weights to each other being between the said actuating device and the point of connection of the secondary weight to the carrier, substantially as described. 14th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement thereof due to revolution of the carrier, a secondary weight in gravity balance with the primary weight and supported therefrom, but movable with respect thereto, said secondary weights being loaded upon one side to make it effective as a centrifugal weight, and an actuating device adjusted by the movement of said weights, substantially as described. 15th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement thereof due to revolution of the carrier, a secondary weight in gravity balance with the primary weight and connected thereto by a spring, said secondary weight being loaded upon one side to make it effective as a centrifugal weight, and an actuating device adjusted by the movement of said weights, substantially as described. 16th. In a governor, the combination, with a revoluble carrier, of a primary weight and means for supporting the same and resisting movement thereof due to revolution of the carrier, a secondary weight in gravity balauce with the primary weight, and movably connected thereto, and having a rolling contact with the carrier, and an actuating device adjusted by the movement of said weights, substantially as described. 17th. In a governor, the combination, with a revoluble carrier, of a swinging and a rolling weight, the latter adapted to roll upon a suitable guide, means for securing the same to the carrier and for opposing movement thereof due to revolution of the carrier, means for preventing the rolling weight from slipping, and an actuating device adjusted by the movement of said weights, substantially as described. 18th. In a governor, the combination, with a revoluble carrier, of a primary weight which is spring supported but not pivotally connected to the carrier, a secondary weight connected to said primary weight, and an actuating device adjusted by the movement of said weights, substantially as described. 19th. In a governor, the combination, with a revoluble carrier, of a primary weight which is spring supported but not pivotally connected to the carrier, a secondary weight in gravity balance with the primary weight and connected thereto by a spring, and an actuating device adjusted by

the movent of said weights, substantially as described. 20th. In a governor, the combination, with a revoluble carrier, of a primary weight which is spring supported but not pivotally connected to the carrier, a secondary weight in gravity balance with the primary weight and connected thereto by a spring, and an actuating device carried by the secondary weight and adjusted by the movement thereof, substantially as described. 21st. In a governor, the combination, with a revoluble carrier, of a spring supported primary weight, a secondary weight in gravity balance therewith, connected thereto by a spring, and having a rolling contact with the carrier, and an actuating device adjusted by the movement of said weights, substantially as described. 22nd. In a governor, the combination, with a revoluble carrier, having a guide for a rolling governor weight,of a governor weight which rolls upon said guide when the speed of the carrier changes, and it is confined to motion in a definite path, a retractile device for said weight, and an actuating device adjusted by the movement of the weight, substantially as described. 23rd. In a governor, the combination, with a revoluble carrier, having a guide for a rolling governor weight, of a governor weight which rolls upon said guide in a plane at right angles to the axis of the revolution of the carrier, when the speed of the carrier changes, a retractile device for said weight, and an actuating device adjusted by the movement of the weight, substantially as described. 24th. In a governor, the combination, with a revoluble carrier having a guide for a rolling governor weight, of a governor weight having a curved face in proximity to said guide, and having its mass so disposed that it roll upon said guide under the influence of centrifugal action and inertia, when the speed of the carrier changes, said weight being restricted to motion in a definite path, a retractile device opposing the motion of the weight due to centrifugal action, and an actuating device adjusted by the movement of said weight, substantially as described. 25th. In a governor, the combination, with a revoluble carrier having a guide for a rolling governor weight, of a governor weight having a curved face in proximity to said guide, the centre of gravity of said weight not being in line with the centre of rotation of the carrier and the point of contact of the weight with the guide, whereby when the speed of the carrier changes the weight rolls upon said guide under the influence of centrifugal action and inertia, said weight being restricted to motion in a definite path, a retractile device opposing the motion of the weight due to centrifugal action, and an actuating device adjusted by the movement of said weights, substantially as described. 26th. In a governor, the combination, with a wheel revolubly mounted, of a governor weight having a curved face in proximity with the inner rim of said wheel and free to roll upon said rim, the centre of gravity of said weight not being in line with the centre of rotation of the carrier and the point of contact of the weight with the rim, whereby when the speed of the wheel changes the weight rolls upon said rim under the influence of centrifugal action and inertia, said weight being restricted to motion in a definite path, a retractile device opposing the motion of the weight due to centrifugal action, and an actuating device adjusted by the movement of said weight, substantially as described.

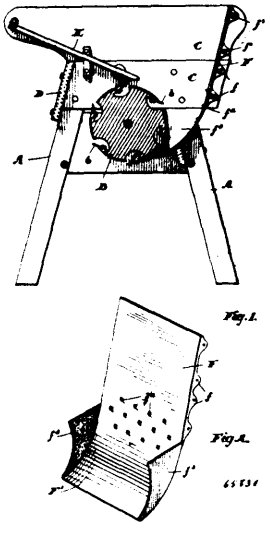
No. 65,829. Dyeing and Bleaching Process.
(*Procédé pour blanchir et teindre.*)



James Major, Eccles, Lancaster, England, 16th January, 1900; 6 years. (Filed 16th March, 1899.)

Claim.—1st. In apparatus for dyeing and bleaching or otherwise treating with liquids, cop of yarn, or the like, each cop, spool or the like mounted separately upon a vertical spindle capable of being revolved and provided at its lower end with a perforated or open cop carrier through which the dye or liquor is admitted to the interior thereof and is driven by the centrifugal force developed by its revolution entirely through each individual cop or spool whereby it opens out and thorough and evenly pentrates all the fibres there, substantially as hereinbefore described. 2nd. In apparatus for dyeing and bleaching or otherwise treating with liquids, cops of yarns, or the like, the combination of a series of hollow revolving spindles each provided with a separate enlargement or dye chamber at the top and a cop carrier at the bottom, means for revolving the same, and pipes for supplying the same with dye or other liquor, with an air tight cop chamber or tank into which the lower ends of the hollow spindles pass through stuffing boxes, and means for exhausting the air from the said chamber, substantially as hereinbefore described and shown. 3rd. In apparatus for dyeing and bleaching or otherwise treating with liquids, cops of yarn, or the like, the combination of a series of hollow revolving spindles arranged in a circle, and each provided with a cop carrier at the bottom, a circular trough or feed pipe, a main supply pipe, a spur pinion on each spindle or tube, a centr l shaft and spur wheel mounted thereon to mesh with and drive said pinions with means for operating said shaft, substantially as hereinbefore described and shown. 4th. In apparatus for dyeing and bleaching or otherwise treating with liquids, cops of yard, or the like, the combination of a series of revolving spindles, each provided with a cop carrier, a vertically adjustable carrier for said spindles, means for raising and lowering said carrier, means for rotating said spindles, and a horizontally as hereinbefore described and shown. 5th. In apparatus for dyeing and bleaching or otherwise treating with liquids, cops of yard, or the like, the combination with each revoving centrifugal spindle fitted with a cop carrier, of a centripetal fan for introducing the dye or liquid into the interior of the cop carrier whereby it is possible to use the same tank as a dyeing or bleaching tank and an exhausting chamber, substantially as hereinbefore described and illustrated.

No. 65,830. Pulper. (*Machine à pulpe.*)



Frank Kitchen Bell, St. George, Ontario, Canada, 16th January, 1900; 6 years. (Filed 27th December, 1899.)

Claim.—1st. In a pulper, the combination with the cylindrical knife wheel, frame, and side boards, of a front grate inclining at the top forwardly from the perpendicular and away from the wheel and having the bottom of the grate curved, so as to extend to a point below the axis of rotation of the wheel, as and for the purpose specified. 2nd. In a pulper, the combination with the cylindrical knife wheel, frame, and side boards, of a front grate inclining at the top forwardly from the perpendicular and away from the wheel and having the bottom of the grate curved, so as to extend to a point below the axis of rotation of the wheel and suitable confining sides attached to or forming part of the curved portion of the front and shaped so as to fit the wheel and abut the bottom of the side boards and thereby confine the roots, as and for the purpose specified. 3rd. In a pulper, the combination with the cylindrical knife wheel, frame, and side boards, of a front grate inclining at the top forwardly from the perpendicular and away from the wheel and having the bottom of the grate curved, so as to extend to a point below the axis of rotation of the wheel and substantially on a level with the bottom of the wheel but in the front of the path of rotation of the knives, as and for the purpose specified.

No. 65,831. Hay Press. (*Presse à foin.*)

Hermas Larose, Verchers, Quebec, Canada, 16th January, 1900; 6 years. (Filed 29th December, 1899)

Claim.—1st. In a hay press, the combination with the plunger rod having one end pivoted to the plunger the other end being connected by links to the sills of the press, of a double slotted lever pivoted on a pin passing between said slot, the said pin being journalled in flanges of plates secured to the sills, a pin having a

friction roller passing through the upper slot of the lever, the said pin also acting as a pivot for the before mentioned links and plunger

Fig. 1.

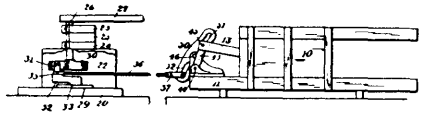


Fig. 2.

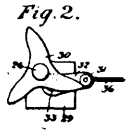


Fig. 4.

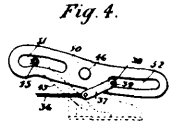


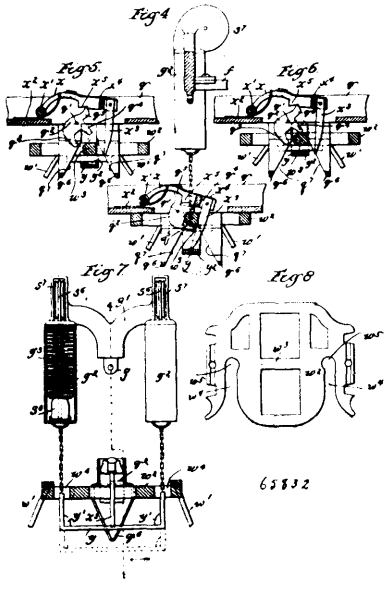
Fig. 3.

65331

rod and a cable or rod connected to the said lever by a pin and roller passing through the lower slot, substantially as set forth. 2nd. In a hay press, the combination with a pivoted lever having a slot on each side of the pivotal point, the plunger rod of the press engaging one of said slots, a cable or rod engaging the other slot, of a crank journalled in a suitable frame, a crank pin on said crank, to which is secured the end of the cable or rod, a friction roller on said crank pin, a three armed cam journalled eccentrically to the said crank and adapted to engage the friction roller on the said crank pin at a certain portion of its revolution, substantially as set forth. 3rd. In a hay press, the combination with a vertical shaft journalled in a suitable frame, an arm to which horses may be attached secured to the upper end of said shaft, and a three armed cam secured to the lower end of said shaft, of a crank journalled so as to revolve eccentrically to said cam, and a crank pin carried by the said crank adapted to be engaged by the said cam for a certain portion of the revolution, substantially as set forth.

No. 65,832. Cash and Package Carrier.

(*Chien de magasin.*)

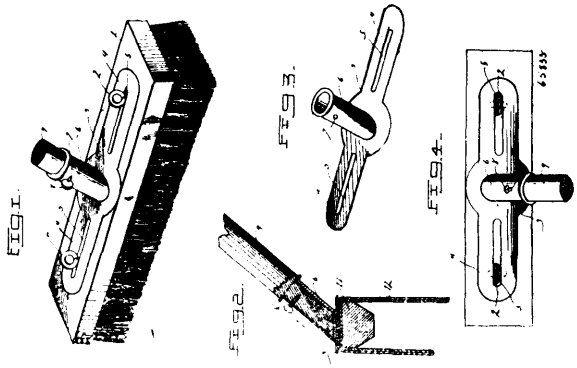


Emanuel C. Gipe, Chicago, Illinois, U.S.A., 16th January, 1900; 6 years. (Filed 26th April, 1899.)

Claim.—1st. In a package carrying mechanism, the combination with a car and a detachable basket, and a suspending locking bar attached to the basket of said locking mechanism, consisting of an oscillatory toothed knuckle adapted to be engaged by a suspending locking bar, a dog for holding said knuckle in either of two extreme positions, a stirrup for raising and lowering said basket in a path to bring said locking bar into contact with the knuckle, and a releasing trigger constructed to lie in the path of movement of the stirrup when the the parts are in locked positions and out of said path when they are reversed, whereby the same movement may serve to alternately release the basket from or lock the same to the car, substantially as described. 2nd. In a package carrying mechanism, the combination of a car, a detachable basket and a locking mechanism, consisting of an oscillatory pivoted knuckle having a series of detents thereon, a pivoted dog for maintaining said knuckle in one of two extreme positions, a trigger for lifting said dog when in a locked position, a cross bar attached to the basket for engaging said knuckle and a stirrup adapted to engage said trigger when the parts are in locked positions respectively, substantially as described. 3rd. In a package carrying mechanism, the combination with a car and a detachable basket and a suspending locking bar attached to the basket of said locking mechanism, consisting of an oscillatory toothed knuckle adapted to be engaged by a suspending locking bar, a dog for holding said knuckle in either of two extreme positions, a stirrup for raising and lowering said basket in a path to bring the locking bar into operative contact with the knuckle, means, such as the springs g^3 and bulbs s^8, for normally holding said stirrup out of contact with the car, and a releasing trigger constructed to lie in the path of movement of the stirrup when the parts are in locked positions and out of said path when they are reversed, substantially as described. 4th. The combination with a car and a detachable basket, of an automatic locking mechanism in which is combined a suspending locking bar upon the basket, an oscillatory toothed knuckle adapted to engage said bar, a dog for holding said knuckle in one of two extreme positions, a yielding trigger provided with means for holding the same in a normal relation with respect to the dog, but to permit the same to yield when force is applied thereto, and a stirrup in operative connection with the basket suspending cords, said stirrup being arranged to engage said trigger only when the latter is in one of two extreme positions, substantially as described. 5th. The combination with a car and a detachable basket, of the plate w^2 having notches w^4, a stirrup adapted to be suspended from the operating cords, in alignment respectively with said notches, said stirrup being provided with the parts g^1 adapted to engage the notches in said plate when the basket is suspended therefrom, suitable locking mechanism and means for releasing the same through the operation of said stirrup, substantially as described. 6th. The combination in a mechanism of the class described, of a movable car, a detachable basket, cords for raising and lowering said basket to and from the car and a depending rod having horizontal arms extending therefrom at predetermined distances, whereby the suspending cord may be hooked thereto and the basket suspended at different heights without locking the same to the car, substantially as described. 7th. In a mechanism of the class described, the combination with a car and a detachable basket, of propulsion cords trained over pulleys in operative connection with the car, a secondary wire, a snatch block and a rod pivoted to the snatch block and to said secondary wire at a point above the track wire and forward of the normal position of the car, substantially as described. 8th. In a machine of the class described, the combination with a car and a detachable basket, of propulsion cords trained over pulleys and in operative connection with the car, of a secondary wire, a snatch block, a rod pivoted to the snatch block and to a point upon said secondary wire above the track wire, said pivotal point being between the two stations, and guides for preventing the lateral movement of said rod when the propulsion mechanism is operated, substantially as described.

No. 65,833. Mop and Brush Holder.

(*Balai à laver et porte brosse.*))



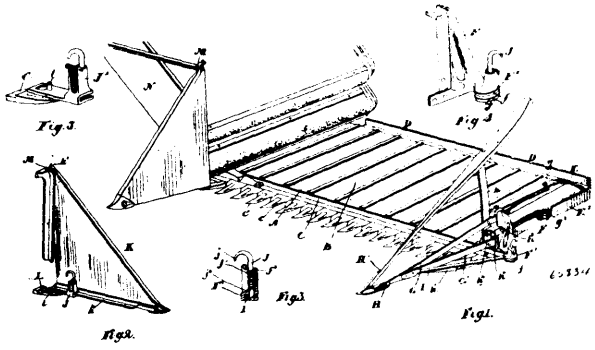
Henry C. Woodworth, Cheboygan, Michigan, U.S.A., 17th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. A brush and mop holder, comprising a base 4 having a hollow cylindrical sleeve extending from its central portion adapted to receive a handle, an opening in said sleeve to receive a set screw and opening in said base at either side of said sleeve adapted to receive and retain eyelets secured to a brush or block, substantially as shown and described. 2nd. A mop and brush holder, having an oblong metallic base integral with a hollow sleeve at its central portion, said sleeve extending upwardly and inclined slightly to one side, openings or slots at the ends of said base, and a

block or wooden base having screw eyes in its upper part, adapted to correspond with said openings, and to operate in same, substantially as shown and described.

No. 65,834. Harvester and Binder.

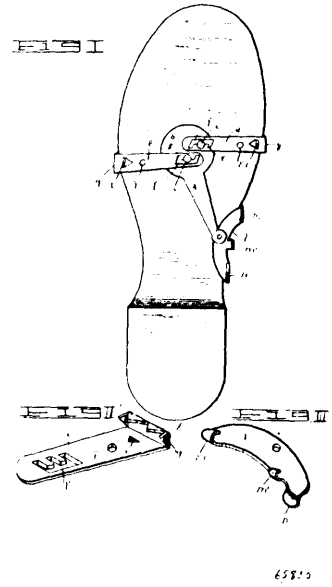
(*Moissonneuse et lieuse.*)



The Massey-Harris Company, assignee of Lyman Melvin Jones, Charles McLeod and Frederick Duncan Mercer, all of Toronto, Ontario, Canada, 17th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a self binding harvester, an outside divider hinged at a point intermediate of the length between the cutter bar and back sill of the grain table or platform, as and for the purpose specified. 2nd. In a self binding harvester, an outside divider hinged at a point intermediate of the length between the cutter bar and back sill of the grain table or platform, and a holding brace secured to the divider, and means for securing the free end of the brace in position, as and for the purpose specified. 3rd. In a self binding harvester, an outside divider hinged at a point intermediate of the length between the cutter bar and back sill of the grain table or platform, a holding brace secured to the divider, and a latch bolt for holding the free end of the holding brace in position, as and for the purpose specified. 4th. The combination with the lower side bar of the grain table and the upper side bar attached to or forming part of same and suitably secured thereto at the front and the rear, of the divider comprising the board, the upright, and the converging bars secured to the upright and at the apex of the divider to the board, and hinged at the rear to the upper and lower side bar of the grain table behind the cutter bar, as and for the purpose specified. 5th. The combination with th lower side bar of the grain table and the upper side bar attached to or forming part of same and suitably secured thereto at the front and the rear, of the divider comprising the board, the upright, and the converging bar secured to the upright and at the apex of the divider to the board, and hinged at the rear to the upper and lower side bar of the grain table behind the cutter bar, the upper hinge or pivot being located to the rear of the lower hinge or pivot, as and for the purpose specified. 6th. The combination with the side bars of the grain table and the divider hinged at a point between the cutter bar and sill and the forward bracket or standard connecting the side bars of the grain table together, of a catch connected to the divider and designed to engage with the bracket, as and for the purpose specified. 7th. The combination with the bracket secured at the front of the side of the grain table and the divider hinged at a point behind the bracket, of the holding brace, the latch bolt socket attached to or forming part of the bracket and provided with a recess to receive the free end of the holding brace, and the latch bolt having a spring encircling the same and designed to engage with the hole in the end of the holding brace, as and for the purpose specified. 8th. The combination with the side bars of the grain table converging at the rear and the bracket securing the same together at the front and suitably connected to the cutter bar, of the divider provided with converging lower bars extending parallelly at the rear between the side bars of the grain table and suitably hinged to the side bars between the cutter bar and back sill, and means for holding the divider in its normal position, as and for the purpose specified. 9th. In a harvesting machine, an inside divider hinged at a point behind the front of the side board of the elevator frame and designed to be swung backwardly over the table, as and for the purpose specified. 10th. In a harvesting machine, an inside divider hinged at a point behind the front of the side board of the elevator frame and designed to be swung backwardly over the table, and a suitable catch for holding it in position on the shoe, as and for the purpose specified. 11th. In a self binding harvester, an inside divider hinged at the bottom at a point behind the front board and having the back edge inclined and the top hinged at a point still farther behind the front board, and the bottom having an upward incline forward from a point in proximity to the cutter bar, as and for the purpose specified. 12th. The combination with the side board, the bracket secured to the same and the inside shoe of the cutter bar, of the inside divider suitably pivoted at the top on the bracket and at the bottom on the shoe and means for holding such divider rigidly in its normal forward position, as and for the purpose specified. 13th. The combination with the side board, the bracket secured to the same and the inside shoe of the cutter bar, of the inside divider suitably pivoted at the top on the bracket and at the bottom on the shoe, and the latch bolt such as described designed to extend through a hole in the bottom bar of the divider so as to hold it in its normal position, as and for the purpose specified. 14th. In a self binding harvester, an outside divider hinged at a point intermediate of the length between the cutter bar and back sill of the grain table or platform, and means for holding such outside divider in its normal forwardly extending position, as and for the purpose specified.

No. 65,835. Ice Creeper. (*Grapin.*)



George W. Rush, Altoona Pensylvania, U.S.A., 17th January, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—1st. An ice creeper, comprising an operating lever, clamping jaws slidably and adjustably connected adjacent one end, a locking lever pivoted to the operating lever, hooks formed upon one edge of the locking lever at each side of the pivot, and a thumb piece adjacent one of said hooks to operate the lever. 2nd. An ice creeper, comprising an operating lever, lugs formed upon said lever at one of its ends, clamping jaws adjustably secured upon the lugs, a locking lever pivoted to the operating lever, at a point intermediate the ends of the former, an upwardly inwardly turned hook formed upon one end of the locking lever, the opposite end of said lever being turned downwardly to form a thumb piece and an upwardly and inwardly turned hook formed upon the locking lever between the thumb piece and the pivot. 3rd. An ice creeper, comprising an operating lever, lugs mounted upon one end of the lever at the end thereof, jaws slidably secured upon the lugs, longitudinal slots in the jaws forming guideways for the lugs, recesses in the slots for retaining the jaws in an adjusted position, projections at the outermost ends of the jaws and turned inwardly to lie parallel with the jaws, points upon a face of the jaws, perforations adjacent the points adapted to receive and retain supplemental points, a locking lever pivoted to the operating lever at a point intermediate the ends of the former, a hook formed upon the end of the locking lever, a thumb piece formed upon the opposite end of the locking lever, and a second hook formed upon said lever between the thumb piece and the pivot.

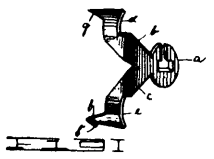
No. 65,836 Shade and Curtain Fixture.

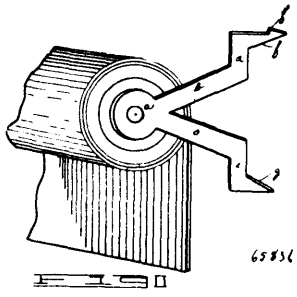
(*Appariel de persiennes et rideaux.*)

George W. Rush, Altoona, Pennsylvania, 17th January, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—1st. A shade bracket, comprising a circular head portion, members protruding from the said head portion at angles to the horizontal axis thereof, upwardly and downwardly turned portions formed integral with the first named portion and driving points formed integral with the last named portion and turned at right angles thereto. 2nd. A shade bracket, comprising a circular head portion, members projecting from the said head portion at an angle to the horizontal axis thereof, said members being turned at right

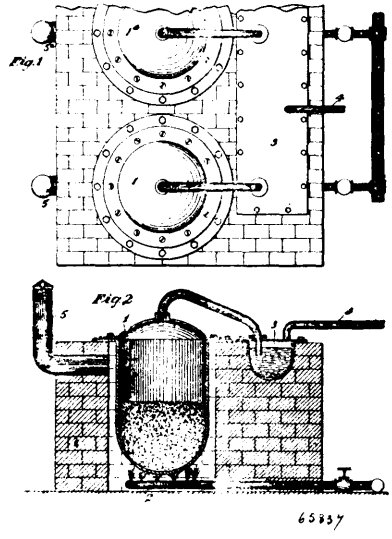
angles to themselves and to the face of the head portion, upwardly and downwardly turned members formed integral with the first





named members, driving points at the extremities of the last named members, formed integral therewith, turned at right angles thereto and provided with barbs.

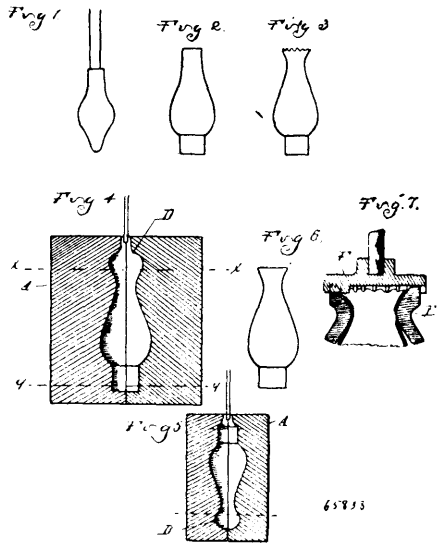
No. 60,837. Process of Manufacturing Benzine, Anthracene and other Polmerized Products of Acetylene togeher with other Metallic Oxides. (*Procédé et appareil pour la fabrication de benzine, etc.*)



The Ampere Electro-Chemical Co., assignee of Charles Borrows Jacobs, East Orange, New Jersey, U.S.A., 17th January, 1900; 6 years. (Filed 7th December, 1899.)

Claim.—1st. The process which consists in melting together molecular equivalent weights of finely ground metallic hydrate, whereby hydro-carbons and metallic oxides are produced, substantially as described. 2nd. The process of producing hydro-carbons consisting in mixing together a metallic carbide and a fusible metallic hydrate of molecular equivalent weights and subjecting the mass to a sufficient heat to fuse the hydrate. 3rd. The process of producing benzine and its homologues consisting in subjecting in a closed retort a mixture of a pulverulent metallic carbide and a hydrate of molecular equivalent weights to a temperature sufficient to fuse the hydrate, and then condensing the hydo-carbons evolved in the reaction.

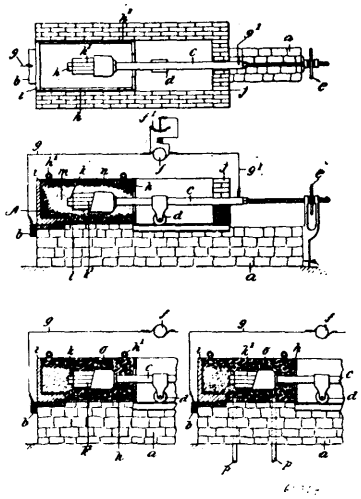
No. 65,838. Lamp Chimney Manufacture. (*Fabrication de cheminée de lampe.*)



The Toledo Glass Co., assignee of Michael J. Owens and Harry C. Wood, all of Toledo, Ohio, U.S.A., 17th January, 1900; 6 years. (Filed 5th April, 1899.)

Claim.—1st. The hereindescribed method of making flaring mouth chimneys, consisting in blowing a blank shaped like the chimney, with a bulb or enlargement at the mouth, and then in severing the blank across base section and across the bulb. 2nd. The hereindescribed method of making chimneys with a flaring mouth, which consists in blowing a blank shaped like the completed chimney having a bulb or enlargement at the chimney mouth, cutting the blank across the base, and cutting the blank across the bulb to form the flaring mouth, then reheating the edge thereof, and shaping the same, without affecting the glaze in the flaring portion.

No. 65,839. Carbide of Calcium Manufacture. (*Fabrication de carbure de calcium.*)

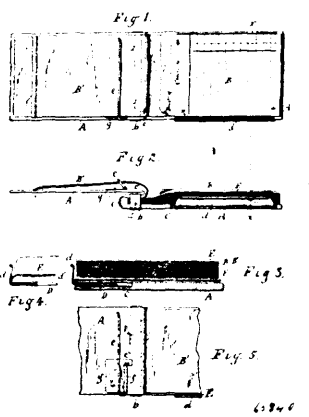


James E. Hughes, Baltimore, Maryland, U.S.A., 17th August, 1900; 6 years. (Filed 3rd July, 1899.)

Claim.—1st. The herein described process which consists in forming a core or conducting path of calcium carbide and molten lime ready to take up carbon in the presence of free carbon by means of a current of electricity passing between electrodes and then increasing the working cross section of one of said electrodes and maintaining said core or conducting path incandescent by a regulated increase of current to cause it to take up carbon and to form carbide concentrically around it, substantially as described. 2nd. The herein described process which consists in forming a core or conducting path of calcium carbide and molten lime ready to take up

carbon in the presence of free carbon by means of a current of electricity passing between electrodes, and then increasing the working cross section of one of said electrodes ahd maintaining said core or conducting path incandescent by a regulated increase of current to cause it to take up carbon and to form carbide concentrically around it, substantially as described. 3rd. The herein described process which consists in forming a core or conducting path of calcium carbide and molten lime ready to take up carbon in the presence of free carbon by means of a current of electricity passing between electrodes, and then maintaining said core or conducting path incandescent by a regulated increase of current to cause it take up carbon and to form carbide concentrically around it, substantially as described. 4th. In combination, an electric furnace having a plate like electrode, pencils or carbons of which some protrude beyond the others and all of which make up the electrode, means for shifting one of said electrodes to close circuit through the protruding pencils and subsequently through all the pencils, and circuit connections and their controlling devices, substantially as described. 5th. In combination, a furnace having its terminal plate, as *b*, connected in circuit, a detachable hopper having one of its conducting walls adapted to rest on and form electrical contact with said plate, a horizontally adjustable electrode having circuit connections, and means for shifting the last mentioned electrode, substantially as described. 6th. The process which consists in making cakes, pastiles or briquettes of carbide producing materials, subjecting the same to a current of electricity passing between electrodes to effect chemical combination and generate combustible gas, and supplying gaseous material to and through the mass whereby combustion of gas is effected, substantially as described. 7th. The process which consists in mixing a carbonaceous binder and carbide producing ingredients or substances and forming the mass into cakes, briquettes or pastiles, and then subjecting such cakes or briquettes to the action of heat of an electric current passing between electrodes, substantially as described.

No. 65,840. Copying Book. (*Livre de vente à copie multiple.*)

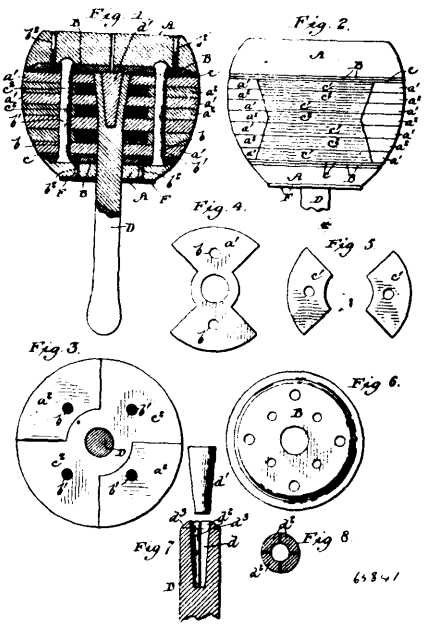


The Carter-Crume Company, Niagara Falls, New York, U.S.A., assignee of Edward Carmen, Toronto, Ontario, Canada ; 17th January, 1900; 6 years. (Filed 12th May, 1899.)

Claim.—1st. In a copying book, the combination of a cover or back, a pile of memorandum leaves as described secured to the cover, a pocket in one edge of the cover, one or more carbon leaves, and a clamp to retain one edge of the said carbon leaf or leaves and adapted to enter said pocket, as and for the purpose described. 2nd. In a copying book, the combination of a cover or back, a pile of memorandum leaves as described secured to the cover, a metallic pocket in one side edge of the cover, one or more carbon leaves, and a metallic clamp to retain one edge of the said carbon leaf or leaves and adapted to enter said pocket, substantially as and for the purpose described. 3rd. In a copying book, the combination of a cover or back, a pile of memorandum leaves, each folded upon itself and bound together at one edge, spurs projecting from the cover into the bound edge, an elastic band passing around the said cover and bound edge, a pocket in the side of the cover, one or more carbon leaves having side edges confined by a clamp, and the said clamp adapted to enter the pocket and compress the edges of the carbon leaves, as set forth. 4th. In a copying book, the combination of a cover or back, a pile of memorandum leaves, each folded upon itself and bound together at one edge, means to secure the said bound edge to the cover, a metallic pocket in the side edge of the cover extending longitudinally therewith, one or more carbon leaves, and a clamp formed of sheet metal and provided with a flange, and provided also with the bent over edge adapted to enter the said pocket and be compressed by the latter, one of the side edges of each of the carbon sheets being held in said clamp, substantially as described and shown. 5th. In a copying book, the combination of a stiff cover having a pair of hinges. memorandum leaves, each folded upon itself and bound together at one edge, spurs projecting from the inner side of the cover and entering the bound edge of the leaves, and a rubber band passing around the cover and said bound edge and lying with one of its sides between the pair of hinges, substantially as shown and described. 6th. In a copying book, the combination of a cover having a pair of leaves, a pile of memorandum leaves composed of originals and duplicates secured to the cover, the carbon sheet or sheets, and a swinging bar having one of its ends bent over and hinged to the cover near its centre, and the free end of the bar extending across the cover parallel with the same, and adapted to move the duplicate when the cover is turned and to lie flat when the cover is closed, substantially as described and shown. 7th. In a copying book, the combination of a cover having a pair of leaves, a pile of memorandum leaves comprising originals and duplicates folded upon themselves and secured to the cover, a pocket in the side edge of one of the leaves of the cover, carbon leaves between the cover and the pile, a carbon leaf on the top of the pile between an original and duplicate, a metallic clamp secured to the edges of the carbon leaves and contained in said pocket, and a swinging bar hinged to the inner side of the opposite leaf of the cover near the hinge of the latter and adapted to confine the duplicates to said leaf of the cover and lie close to the latter when the book is closed, substantially as described and shown.

No. 65,841. Stonecutter's Mauls.

(*Maillet pour tailleurs de pierre.*)



John A. Tulloch, and James G. Harris, Duluth, Minnesota, U.S.A., 17th January, 1900 ; 6 years. (Filed 14th April, 1899.)

Claim.—1st. A maul for stonecutters use, comprising in its construction a single cylindrical body portion having two or more striking surfaces, formed of different kinds of material which adjoin each other and are of entirely different compositions, one of the striking surfaces being composed of wood, wood fiber or other analagous material and giving a vibrant blow, and the other striking surface being composed of leather, rubber or other analagous material and giving a non-vibrant blow, and a suitable handle which enters the body portion from the end, the whole being properly secured together, substantially as described. 2nd. A maul for stonecutters use, comprising in its construction a body portion proper having two or more striking surfaces one of which gives a vibrant blow, and the other a non-vibrant blow, the vibrant striking surface being formed of courses composed of wood or wood fiber or other analagous material arranged alternately to extend continuously from opposite sides of the implement and in segments, and the non-vibrant striking surfaces being farmed of courses composed of leather, rubber, rawhide or other analagous material, arranged alternately to extend continuously from opposite sides of the implement and in segments, the courses being glued or cemented together and further held in place by bolts or rivets, substantially as described. 3rd. A maul for stonecutters' use, comprising in its construction a body portion proper having two or more striking surfaces, one of which gives a vibrant blow and the other, a non-vibrant blow, the vibrant striking surface being formed of courses composed of wood or wood fiber or other analagous material arranged alternately to extend continuously from opposite sides of the implement and in segments, the segments resting within the continuously extending portions, and the non-vibrant striking surfaces being formed of courses composed of leather, rubber, rawhide or other analagous

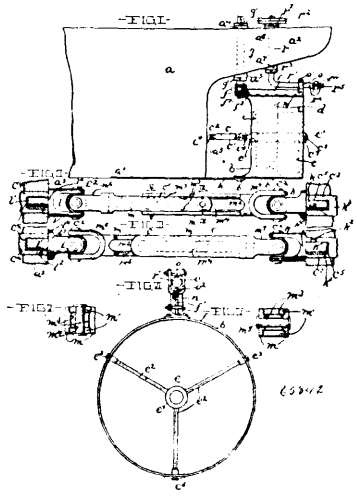
material arranged alternately to extend continuously from opposite sides of the implement and in segments, the segments resting within the continuously extending portions, and the courses being glued or cemented together and further held in place by bolts or rivets, substantially as described. 4th. A maul for stonecutters' use, comprising in its construction a body portion proper having two or more striking surfaces, one of which gives a vibrant blow, the vibrant striking surface being formed of courses composed alternately of wood or wood fiber or other analagous material arranged to extend continuously from opposite sides of the implement, and in segments, and the non-vibrant striking surface being formed of courses composed of leather, rubber, rawhide or other analagous material arranged alternately to extend continuously from opposite sides of the implement and in segments, the courses being glued or cemented together on their upper and lower faces and on their contacting edges, which edges are vertically beveled to form tight joints, and further held in place by suitable bolts or rivets, substantially as described. 5t A maul for stonecutters' use, comprising in its construction a body portion constituting a striking surface composed of courses of suitable material each course being formed of segmental pieces, the courses being cemented together on their upper and lower faces and the segmental pieces constituting a course, being cemented on their contacting edges said edges being beveled vertically to form tight joints, metal circular plates arranged at the top and bottom of the courses, rivet bolts passed through the said courses, and caps composed of wood or other analagous material applied on the circular metal plates and secured in position by screws or rivets, substantially as described. 6th. A maul for stonecutters' use, comprising in its construction a body portion proper constituting a striking surface composed of courses of suitable material, each course being formed of segmental pieces, the courses being cemented together on their upper and lower faces and the segmental pieces on their contacting edges, said edges being beveled vertically to form tight joints, metal circular plates arranged at the top and bottom of the courses, rivet bolts passed through the said courses, caps composed of wood or other analagous material applied on the circular metal plates and secured in position by screws or rivets, the upper cap being provided with an air vent, a handle secured in said body portion, said handle being quartered at its inner end and provided with a socket, and a wedge inserted in said socket, substantially as described. 7th. A maul for stonecutters' use, comprising in its construction a body portion proper, constituting a striking surface composed of courses of suitable material each course being formed of segmental pieces, the courses being cemented together on their upper and lower faces and the segmental pieces on their contacting edges, said edges being beveled vertically to form tight joints, metal circular plates arranged at the top and bottom of the courses, rivet bolts passed through the said courses, caps composed of wood or other analagous material applied on the circular metal plates and secured in position by screws or rivets and a cushion applied on the lower cap for protecting the hand of the operator, substantially as described. 8th. A maul for stonecutters' use comprising in its construction a body portion proper having two or more striking surfaces of different kinds, one of which gives a vibrant blow, and the other a dead or non-vibrant blow, the vibrant striking surface being formed of courses composed of flat pieces of wood, wood fiber or other analagous material arranged with their flat faces adjoining each other and the non-vibrant striking surfaces being formed of courses composed of leather, rubber, rawhide or other analagous material and with their flat surfaces adjoining each other, and a suitable handle, the whole being properly secured together, substantially as described. 9th. A maul for stonecutters' use comprising in its construction a body portion proper having two or more striking surfaces of different kinds one of which gives a vibrant blow and the other, a dead or non-vibrant blow, the vibrant surfaces being formed of segmental courses composed of flat pieces of wood, wood fiber or other analagous material, arranged with their flat faces adjoining each other, and the non-vibrant striking surfaces being composed of flat pieces of leather, rubber, rawhide or other analagous material and with their flat surfaces adjoining each other, and a suitable handle, the whole being properly secured together, substantially as described.

No. 65842. Steering and Propelling Apparatus.

(Appareil à gouverner et de propulsion.)

Isador Lehman, Cleveland, Ohio, U.S.A., 17th January, 1900; 6 years. (Filed 2nd December, 1899.)

Claim—1st. In apparatus of the character indicated, the combination of the propeller wheel or wheels, the propeller shaft having a section bearing the said wheel or wheels, another section entering the boat's stern, and an extensible section between the wheel bearing section and the stern entering section, and universal joints between the extensible section and the remaining aforesaid sections, a fork formed upon the inner end of the wheel bearing section, which fork participates in the support of the universal joint between the said shaft section, and the extensible shaft section, an open ended casing surrounding the propeller wheel or wheels, and supported as required to render it capable of being swung in a horizontal plane, spiders bracing the said casing internally and arranged at opposite ends, respectively, of the propeller wheel bearing portion of the wheel bearing shaft sections, a shoulder formed upon the aforesaid fork at the outer end of the hub of the inner spider, and a collar fixed upon the wheel bearing shaft section at the outer end of the hub of the outer spider, substantially as and for the purpose set forth. 2nd.

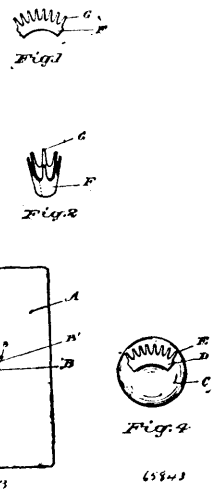


In apparatus of the character indicated, the combination of the propeller wheel bearing section c^3, having its inner end provided with the fork k, the stern entering shaft section c^4, terminating, at its outer end, in the fork l, the extensible shaft section m, arranged between the two aforesaid shaft sections and having each end terminating in a fork arranged at right angles to the adjacent fork of the adjacent shaft section, universal joints formed between adjacent forks, the propeller wheel or wheels carried by the wheel bearing section of the shaft, an open ended casing surrounding the wheel bearing portion of the wheel bearing shaft section and having its inner end supported as required to render it capable of swinging in a horizontal plane, and means for swinging in a horizontal plane, and means for swinging the said casing, substantially as set forth. 3rd. In apparatus of the character indicated, the combination of the propeller wheel bearing shaft section c^3, having the bore c^5, the fork k, having the shank k^1, and the shoulder k^4, an operative connection between the fork's shank and the surrounding wall of the aforesaid bore, the casing b, suitably supported at its inner end to render it capable of swinging in a horizontal plane, the spiders c, having the hubs c^1, and the radial arms c^2, the collar c^7, the stern entering shaft section c^4, having the bore c^6, and the fork l, provided with the shank l^1, an operative connection between the last mentioned shank and the surrounding wall of the last mentioned bore, and an extensible section interposed between and connected to the aforesaid forks by universal joints, substantially as set forth. 4th. In apparatus of the character indicated, the combination of the propeller wheel bearing shaft section, an open ended casing surrounding the wheel bearing portion of the said shaft section, and having its inner end supported as required to render it capable of being swung in a horizontal plane, means for swinging the said casing upon its axis, a stern entering shaft section, an extensible shaft section interposed between the stern entering shaft section and the wheel bearing shaft section, universal joints between the extensible shaft section an the remaining aforesaid shaft sections, and the said extensible shaft section comprising the following:- the part m^1, slotted longitudinally, the part m slotted longitudinally and having the side walls of its slot overlapping the adjacent edges of the side walls of the first-mentioned part and enlarged inwardly between the said side walls of the first-mentioned part, and the rollers m^4 and m^5, all arranged substantially as shown for the purpose specified. 5th. In apparatus of the character indicated, the combination with a boat or vessel, of the propeller shaft having a stern entering section, a propeller wheel bearing section, an extensible section interposed between the stern entering section and the wheel bearing section, and two universal joints between the wheel bearing section and stern entering section and opposite ends, respectively, of the extensible section, a casing surrounding the wheel bearing portion of the wheel bearing shaft section and having its inner end supported from the boat or vessel in such a manner as to render the casing capable of being swung in a horizontal plane, means for swinging the casing, and the location of the joint between the extensible shaft and the wheel bearing shaft section being such, relative to the axial line of the casing, that when the casing is in line with the boat or vessel, the joint between the wheel bearing shaft section and the extensible shaft section shall be rearward of the casing's axial line, substantially as and for the purpose set forth. 6th. In apparatus of the character indicated, the combination with a boat or vessel, of the propeller shaft having a stern entering section, a propeller wheel bearing section, an extensible section interposed between the stern entering section and the wheel bearing section, and two universal joints between the wheel bearing section and stern entering section and opposite ends,

respectively, of the extensible section, an open ended casing surrounding the wheel bearing portion of the wheel bearing shaft section, and pivotally supported, at its inner end, top and bottom, from the boat or vessel, with the two pivotal centres arranged in line vertically, means for swinging the casing upon the said pivotal centres, and the arrangement of parts being such that the joint between the wheel bearing shaft section and the extensible shaft section shall, when the casing is in line with the boat or vessel, be located rearwardly of the casing's pivotal centres, substantially as and for the purpose set forth. 7th. In apparatus of the character indicated, the combination with the stern of a boat or vessel, of the propeller shaft having a stern entering section, a propeller wheel bearing section, an extensible section interposed between the stern entering section and the wheel bearing section, and two universal joints between the wheel bearing section and stern entering section and opposite ends, respectively, of the extensible section, an open ended casing surrounding the wheel bearing portion of the wheel bearing section of the shaft, a vertically arranged eye or boss formed upon the top and inner end of the said casing, a ver tically arranged shaft supported from the stern's overhang and extending through the said eye or boss and provided with a member overlapping the lower end of the eye or boss, a bar rigid with the boat or vessel and arranged to support the aforesaid casing at the latter's bottom, and a vertically arranged pivot securing the said casing to the casing's last-mentioned support, and the said pivot and the aforesaid vertically arranged shaft being arranged in line vertically, substantially as and for the purpose set forth. 8th. In apparatus of the character indicated, the combination with the stern of a boat or vessel, and the propeller wheel containing casing having its inner end supported from the stern's overhang as required to render it capable of being swung in a horizontal plane, of an upright shaft arranged above and between the ends of the said casing, which shaft is supported from the stern's overhang and is provided at its lower end with a laterally projecting arm operatively connected with the aforesaid casing, and means for turning the shaft, substantially as and for the purpose set forth. 9th. In apparatus of the character indicated, the combination with the stern of a boat or vessel, and the propeller wheel containng casing having its inner end supported from the stern's overhang as required to render it capable of being swung in a horizontal plane, of an upright shaft arranged above and between the ends of the said casing, which shaft is supported from the stern's overhang and is provided at the lower end with a laterally projecting arm operatively connected with the aforesaid casing, means for turning the shaft, and a stop for limiting the lateral swinging of the casing in either direction. 10th. In apparatus of the character ind cated, the combination with the stern of a boat or vessel, and the propeller wheel containing casing having its inner end supported from the stern's overhang as required to render it capable of being swung in a horizontal plane, of an upright shaft arranged above and between the ends of the said casing, which shaft is supported from the stern's overhang and is provided, at its lower end with a laterally projecting arm, means for turning the shaft, a device swivelled to the top of the casing and embracing the shaft arm, substantially as and for the purpose set forth. 11th. In apparatus of the character indicated, the combination with the stern of a boat or vessel, and the propeller wheel containing casing having its inner end supported from the stern's overhang as required to render it capable of being swung in a horizontal plane, of an upright shaft arranged above and between the ends of the said casing, which shaft is supported from the stern's overhang and is provided at its lower end with a laterally projecting arm, means for turning the shaft, a device swivelled to the top of the casing and embracing the aforesaid shaft arm, and a collar adjustably mounted upon the said arm at the outer side of the aforesaid arm embracing device, substantially as and for the purpose setforth. 12th. In apparatus of the character indicated, the combination with the stern of a boat or vessel, and the propeller wheel containing casing having its inner end supported from the stern's overhang as required to render it capable of being swung in a horizontal plane, of an upright shaft arranged above and between the ends of the said casing, which shaft is supported from the stern's overhang and is provided at its lower end with a laterally projecting arm, means for turning the shaft, and a device swivelled to the top of the casing and embracing the aforesaid shaft arm, and comprising an anti-friction roller resting upon the shaft arm. 13th. In apparatus of the character indicated, the combination with the stern of a boat or vessel, and the propeller wheel containing casing having its inner end supported from the stern's overhang as required to render it capable of being swung in a horizontal plane, of an upright shaft arranged above and between the ends of the said casing, which shaft is supported from the stern's overhang and is provided, at its lower end, with a laterally projecting arm, means, for turning the shaft, a T-beam secured to the top and arranged longitudinally of the casing, an inverted U-shaped plate or block straddling and secured to the outer end of the said beam, a U-shaped plate or block having its central member pivoted vertically, or swivelled, to the central member of the inverted U-shaped member, and having its upright end members arranged at opposite sides, respectively, of the aforesaid shaft arm, and an anti-friction roller supported from and arranged between the said end members and resting upon the said shaft arm, substantially as shown, for the purpose specified. 14th. In apparatus of the character indicated, the combination with the stern of a boat or vessel, of the propeller shaft having a stern entering section, a propeller wheel bearing section, an extensible section interposed between the stern entering section and the wheel bearing section, and two universal joints between the wheel bearing section and stern entering section and opposite ends, respectively, of the extensible section, an open ended casing surrounding the wheel bearing portion of the wheel bearing section of the shaft, a vertically arranged eye or boss formed upon the top and inner end of the said casing, a vertically arranged shaft supported from the stern's overhang and extending through the said eye or boss, which shaft is operatively connected with the casing and provided with a member overlapping the lower end of the said boss or eye, an upright shaft supported from the stern's overhang, and arranged between the ends of the aforesaid casing, a laterally extending arm formed upon the lower end of the said shaft and operatively connected with the outer end of the casing, substantially as set forth.

No. 65,843. Jewellers' Settings.

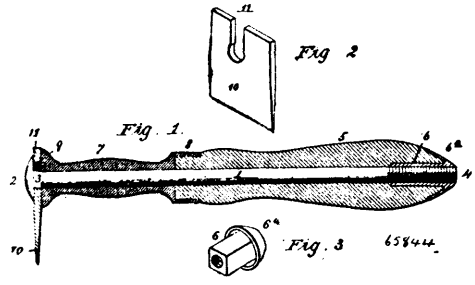
(*Enchâssement de pierre précieuse.*)



Alfred E. Burgess, Toronto, Ontario, Canada, 17th January, 1900; 6 years. (Filed 7th March, 1899.)

Claim.—1st. A blank for a jewellers' setting, consisting of a curvulated base adapted to be bent to form an annular band, and a series of radial cramps projecting outwardly from the base, substantially as specified. 2nd. In the manufacture of blanks for jewellers' settings, a former or intaglio die having a culvulated opening to form a culvulated base for the blank, and a series of radial openings projecting outwardly from the culvulated base to form the cramps, and a punch or cameo die consisting of a culvulated base, corresponding to the culvulated opening of the intaglio die, and a series of radial cramps projecting outwardly from the base, corresponding to the radial opening, substantially as specified.

No. 65,844. Paint Scraper. (*Gratte pour peinture.*)

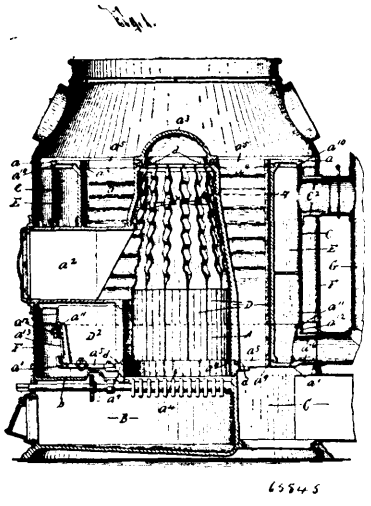


Francis H. Crocker, Kansas City, Missouri, U.S.A., 17th January, 1900; 6 years. (Filed 30th October, 1899.)

Claim.—1st. A paint and varnish scraper, comprising a rod having a thread at one end and a head at its opposite end, a sleeve mounted on said rod, a scraper blade fitting between the head of said rod and said sleeve, said blade having an open slot or notch in one edge fitting on said rod, and a handle rotatably mounted on said rod and engaging the threaded portion of the same at one end and at the other bearing against said sleeve, all arranged so that a slight

turn of said handle in one direction or the other shall clamp or release the scraper blade. 2nd. A paint and varnish scraper, comprising a sleeve, having a socket at its rear end and a head at its front end, a rod extending through said sleeve, and having its rear end threaded and its front end provided with a head and squared neck, a scraper blade, fitting between the head of the sleeve and the head of the rod, and provided with an open slot or notch embracing the neck of the rod, a handle journalled on the rod and in the socket of the sleeve, and a nut secured rigidly in the rear end of the handle and engaging the threaded end of the rod, all arranged so that a slight turn of the handle in one direction or the other shall clamp or release the scraper blade, substantially as described.

No. 65,845. Furnace. (*Fournaise.*)

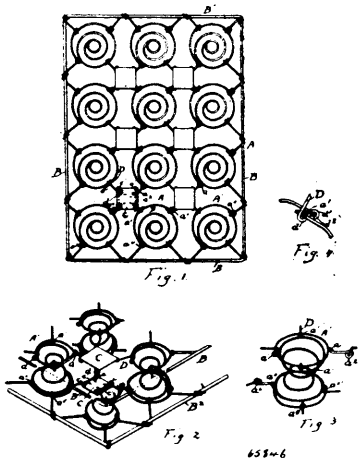


Elzier Orlando Rickard, Syracuse, New York, U.S.A., 17th January, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. In a furnace, the combination of upper and lower separable walls provided with openings extending vertically therethrough and having their adjacent faces formed with substantially vertical flanges, the flange of the upper wall being of less diameter than said upper wall, and the flange of the lower wall being provided with a peripheral shoulder, a tubular shell surrounding the flange of the upper wall and the upper portion of the flange of the lower wall, and having its end edges engaged with the upper wall and the peripheral shoulder of the flanges of the lower wall, and upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, substantially as and for the purpose described. 2nd. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough and aligned with each other, the lower wall being provided with an upwardly extending flange having outwardly projecting tubular branches or extensions, a closure for one of the branches or extensions, a smoke conduit connected to another of said branches or extensions, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall above the tubular branches or extensions, and upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, substantially as and for the purpose specified. 3rd. In a furnace, the combination of upper and lower separable walls provided with openings extending vertically therethrough and having their adjacent faces formed with substantially vertical flanges, the flange of the upper wall being of less diameter than said upper wall, and the flange of the lower wall being provided with a peripheral shoulder and with outwardly projecting tubular branches or extensions arranged beneath said peripheral shoulder, a closure for one of the branches or extensions, a smoke conduit connected to another of said branches or extensions, a tubular shell surrounding the flange of the upper wall and the upper portion of the flange ot the lower wall, and having its end edges engaged with the upper wall and the peripheral shoulder of the flange of the lower wall, and upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, substantially as and for the purpose set forth. 4th. In a furnace, the combination of upper and lower separable walls provided with openings extending vertically therethrough and having their adjacent faces formed with substantially vertical flanges, the flange of the upper wall being of less diameter than said upper wall, and the flange of the lower wall being provided with a peripheral shoulder, a tublar shell surrounding the flange of the upper wall and the upper portion of the flange of the lower wall, and having its end edges engaged with the upper wall and the peripheral shoulder of the flange of tue lower wall, upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, and bolts passed through the air heating conduits and engaged with the upper and lower walls, substantially as and for the purpose described. 5th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, a tubular shell interposed between the upper and lower walls, and upright air heating conduits arranged between the upper and lower walls within the tubular shell and communicating with the openings in the upper and lower walls, said conduits having the lower portions of their contiguous walls formed substantially flat and engaged with each other and the upper portions of said walls separated and corrugated for forming corrugated passages for the products of combustion, substantially as and for the purpose specified. 6th. In a furnace, the combination of upper and lower separable walls provided with openings extending vertically therethrough and having their adjacent faces formed with substantially vertical flanges, the flange of the upper wall being of less diameter than said upper wall, and the flange of the lower wall being provided with a peripheral shoulder, a tubular shell surrounding the flange of the upper wall and the upper portion of the flange of the lower wall, and having its end edges engaged with the upper wall and the peripheral shoulder of the flange of the lower wall, upright air heating conduits arranged between the upper and lower walls within the tubular shell and communicating with the openings in the upper and lower walls, said conduits having the lower portions of their contiguous walls formed substantially flat and engaged with each other and the upper portions of said walls separated and corrugated for forming corrugated passages for the products of combustion, and bolts passed through the air heating conduits and engaged with the upper and lower walls, substantially as and for the purpose set forth. 7th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, the upper wall being provided with a detachable central portion encircled by the openings therein and the lower wall being provided with an upwardly extending flange having outwardly projecting tubular branches or extensions, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall above the tubular branches or extensions, upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, and bolts passed through the air heating conduits and engaged with the detachable central portion of the upper wall and with the lower wall, substantially as and for the purpose set forth. 8th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough and being each provided with a detachable central portion encircled by the openings therein, the lower wall being also provided with an upwardly extending flange having outwardly projecting tubular branches or extensions, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall above the tubular branches or extensions, upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, an outer series of bolts passed through the air heating conduits and engaged with the outer portions of the upper and lower walls, and an inner series of bolts engaged with the detachable central portions of the upper and lower walls, substantially as and for purpose described. 9th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, the lower wall being provided with an uuwardly extending flange having outwardly projecting tubular branches or extensions, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall above the tubular branches or extensions, upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, an outer shell surrounding the tubular shell and separated therefrom, and a nipple fixed to the tubular shell and passed through the outer shell, substantially as and for the purpose specified. 10th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, the lower wall being provided with an upwardly extending flange having outwardly projecting tubular branches or extensions, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall above the tubular branches or extensions, upright air heating conduits arranged between the upper and lower walls within the tubular shell and communicating with the openings in the upper and lower walls, two of the conduits having contiguous sides separated and the other conduits having the lower portions of their contiguous walls engaged with each other and the upper portions of said walls separated and corrugated for forming corrugated passages for the products of combustion, and an air heating chamber arranged between said separated conduits and formed with upper and lower openings for the air, substantially as and for the purpose set forth. 11th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, the lower wall being provided with an upwardly extending flange formed with an opening extending horizontally therethrough, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall, upright air heating conduits arranged between the upper and lower walls within the tubular shell and communicating with corresponding openings in said walls, two of the conduits having contiguous sides separated, and the other conduits having the lower portions of their contiguous walls engaged with each other and the upper portions of said walls separated and corrugated for forming corrugated

passages for the products of combustion, and an air heating chamber arranged between said separated conduits and formed with upper and lower openings communicating with one of the openings extending vertically through the lower wall and the opening extending horizontally through the upwardly extending flange of said lower wall, substantially as and for the purpose described.

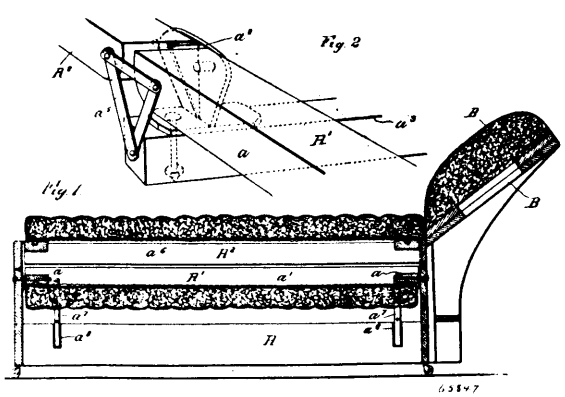
No. 65,846. Spring Bed Bottom. (*Somnier élastique.*)



Ernest Jacob Antoni, Kansas City, Missouri, U.S.A., 17th January, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. In a spring bed bottom having a series of helical springs, an intermediate support for the end coils of adjacent springs in the plane of the bed bottom comprising a plate and extensions from said end coils extending in opposite directions and bent into spirals and connected with the said plate. 2nd. In a spring bed bottom the combination with the helical springs composing said bed bottom of a link uniting separate springs in contiguity comprising a plate having lugs upon the inner side portion and at each end and separate pintles in said lugs and separate coiled wire springs upon said pintles having one end of one end coil bearing upon said plate and the other end of the wire composing said coil extending to and through a suitable loop in the end coils of each helical spring. 3rd. In a spring bed bottom the combination with the helical springs composing said bed bottom having downwardly extended eves, of a link uniting separate springs in contiguity comprising a plate having separate lugs upon the inner side portion, separate pintles in said lugs and separate coiled wire springs upon each pintle, one end of which coiled wire bears upon said plate and the other end extended within said eye on the end coil of the helical spring and bent in a single curved line to form a bearing as specified.

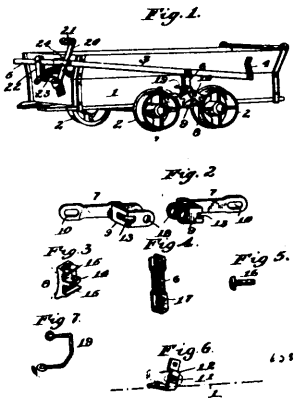
No. 65,847. Sofa. (*Canapé.*)



Ovila Corbeil, Montreal, Quebec, Canada, 17th January, 1900; 6 years. (Filed 29th December, 1899.)

Claim.—1st. A folding sofa, comprising a casing open at its front side, a frame pivoted in said casing, a second frame pivoted to the first frame, said frame being adapted to be unfolded to form a bed, and a folding head rest secured to the head of the sofa, substantially as described. 2nd. A folding sofa, comprising a casing open at its front side, a frame comprisidg a side beam and two end beams, pivoted in said casing, a bracket, to which said end beams are pivoted, a second frame, comprising a side beam and two end beams, said end beams being pivoted to said bracket, links connecting the adjacent ends of said end beams, and a supporting beam connecting said brackets, substantially as described..

No. 65,848. Car Brake. (*Frein de chars.*)



Lavalette Lasea Logan, Scranton, Pennsylvania, U.S.A., 17th January, 1900; 6 years. (Filed 23rd December, 1899.)

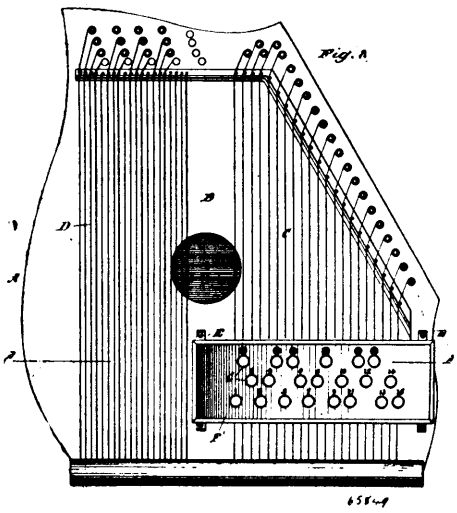
Claim.—1st. In a car brake, the combination of a pair of toggle levers or pivotally connected brake arms suspended through their jointed ends between the forward and rear car wheels and having their outer ends shiftably supported eccentrically to the wheel axles and brake surfaces carried by said toggle levers intermediate the ends of said levers, and operating mechanism for said toggle levers, substantially as described. 2nd. In a car brake, the combination of a pair of toggle levers or brake arms pivotally suspended between the forward and rear car wheels, means for shiftable supporting the outer ends of said toggle levers or brake arms from the car and eccentrically to the axle wheels, brake shoes carried by said arms or levers intermediate the ends of said levers, and operating mechanism, substantially as described. 3rd. In a car brake, the combination of main brake operating levers fulcrumed at opposite sides of the car and connected with each other, links suspended from said main levers, jointed brake arms or toggle levers pivotally suspended through their jointed ends from said links between the car wheels, means for shiftably supporting the outer ends of said toggle levers or brake arms eccentrically to the wheel axles, brake shoes carried by said arms or toggle levers intermediate the ends of said levers, and means for preventing torsional stress of said arms or pressing of the same against the car wheels, substantially as described. 4th. In a car brake, the combination of brake arms or toggle levers provided with laterally widened and pivotally connected ends suspended between the forward and rear car wheels and having their outer ends shiftably supported eccentrically to the wheel axles, said arms or levers being provided with brake surfaces intermediate their ends, and mechanism for operating said arms or levers, substantially as described. 5th. In a car brake, the combination of a pair of toggle levers or pivotally connected brake arms suspended at their jointed ends between the forward and rear car wheels and having their outer ends slotted, fulcrumed pins on which the said sloted ends of said levers or brake arms are supported, brake shoes carried by said toggle levers intermediate the ends of said levers, and operating mechanism for said toggle levers or brake arms, substantially as described. 6th. In a car brake, the combination of main brake operating levers fulcrumed at opposite sides of the car and connected with each other, links suspended from said main levers, jointed brake arms or toggle levers pivotally suspended from said links between the car wheels and having their outer ends slotted, fulcrumed pins on which the said slotted ends of said brake arms or toggle levers are supported, brake shoes carried by said arms or toggle levers, and means for preventing torsional stress of said brake arms or pressing of the same against the car wheels, substantially as described. 7th. In a car brake, the combination of brake arms or toggle levers provided with laterally widened and pivotally connected ends suspended between the forward and rear car wheels and having their outer ends slotted, fulcrum pins for the said slotted ends of said brake arms or toggle levers, brake surfaces carried by said arms or toggle levers intermediate the ends of said levers, and mechanism for operating said arms or levers.

No. 65,849. Stringed Musical Instrument.
(*Instrument de musique à cordes.*)

Frederick Menzenhauer, Jersey City, New Jersey, U.S.A., 18th January, 1900; 6 years. (Filed 29th May, 1899.)

Claim.—1st. A stringed musical instrument, provided with a pick board having a limited movement across the strings of the instrument, and a plurality of picks, one for each string, and mounted in

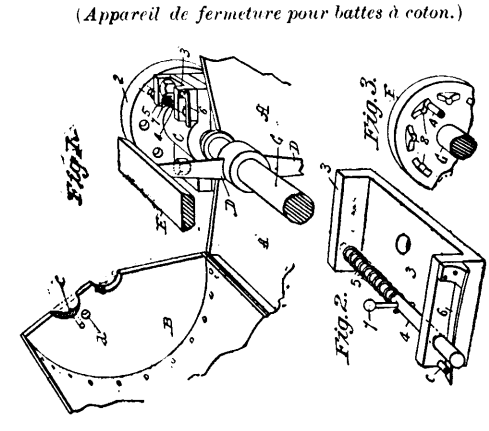
the pick board to move with the same and standing normally above the strings, each pick being mounted to move at an angle to the



movement of the pick board, so that when the pick is pressed and the pick board is moved, the pick picks its string, substantially as shown and described. 2nd. A stringed musical instrument, provided with a plurality of picks, one for each string and standing normally above the same, a pick board in which the picks are mounted to move independently of each other, said pick board being mounted to move across the strings, and means to limit the movement of the pick board and cause a pressed pick to pick its particular string only, when the board is moved, substantially as shown and described. 3rd. A stringed musical instrument, provided with a plurality of picks, one for each string and standing normally above the same, a pick board in which the picks are mounted to move independently of each other, said pick board being mounted to move across the strings, and means to limit the movement of the pick board and cause a pressed pick to pick its particular string only, when the board is moved, the points of the picks being out of alignment with the vertical plane of the strings, substantially as shown described. 4th. A stringed musical instrument, provided with a plurality of picks, one for each string and standing normally above the same, a pick board in which the picks are mounted to move independently of each other, said pick board being mounted to move across the strings, and means to limit the movement of the pick board and cause a pressed pick to pick its particular string only, when the board is moved a full strike to either one side or the other, the points of the picks standing out of vertical alignment with the strings, so that when a pick is pressed at the time the pick board is at the end of its stroke, the pick point passes between its string and the next adjacent one, substantially as shown and described. 5th. A stringed musical instrument, provided with a pick board, a plurality of picks mounted independently of each other in said pick board and adapted to be pressed by the performer, to bring the pick point down in position for picking a string sidewise when the pick board in subsequently moved in this direction, and rollers on which the pick board is mound to travel, substantially as shown and described. 6th. A stringed musical instrument, provided with a pick board, a plurality of picks mounted independently of each other in said pick board and adapted to be pressed by the performer, to bring the pick point down in position for picking a string sidewise when the pick board is subsequently moved in this direction, rollers on which the pick board is mounted to travel, and stops for limiting the rolling movement of said rollers, substantially as shown and described. 7th. A stringed musical instrument, provided with a pick board, a plurality of picks mounted independently of each other in said pick board and adapted to be pressed by the performer, to bring the pick point down in position for picking a string when the pick board issubsequently moved in this direction, rollers on which the pick board is mounted to travel, and a track for the rollers to travel to travel on and having limiting stops at the ends, substantially as shown and described. 8th. A stringed musical instrument, provided with a pick board, a plurality of picks mounted independently of each other in said pick board and adapted to be pressed by the performer, to bring the pick point down in position for picking a string when the pick board is subsequently moved in this direction, rollers on which the pick board is mounted to travel, and a track for the rollers to travel on and having limiting stops at the ends, said track forming an integral part of the soun ding board of the instrument, substantially as shown and described. 9th. A stringed musical instrument, provided with a plurality of picks, one for each string and standing normally above the same, a pick board in which the picks are mounted to move independently of each other, said pick board being mounted to move across the strings, means to limit the movement of the pick board, and cause a pressed pick to pick its particular string only, when the board is moved, and a return spring for the said pick board and adapted to be compressed when the board is manually shifted to one side by the performer, to return the board to its former position when released by the performer, substantially as shown and described. 10th. A stringed musical instrument, provided with a plurality of picks, one for each string and standing normally above the same, a pick board in which the picks are mounted to move independently of each other, said pick board being mounted to move across the strings, means to limit the movement of the pick board and cause a pressed pick to pick its particular string only, when the board is moved, and a spring for each pick to hold the same normally in an uppermost position and to return the picker to this position after being pressed and then released by the performer substantially as shown and described. 11th. A stringed musical instrument, provided with a plurality of picks, one for each string and standing normally above the same, a pick board in which the picks are mounted to move independently of each other, said pick board being mounted to move across the strings, means to limit the movement of the pick board and cause a pressed pick to pick its particular string only, when the board is moved, a return spring for said pick board and adapted to be compressed when the board is manually shifted to one side by the former, to return the board to its former position when released by the performer, and a bridge fixed to the sounding board and extending over the strings of the instrument and in which the pick board is confined to move, substantially as shown and described. 12th. A stringed musical instrument, provided with a pick board having seats and guideways, a pick slidable in a seat, and consisting of a body and a flexible staff secured in the body, guide lugs on the body and engaging said guideways, to guide the picks in their sliding movement and to hold the same against rotation, and a spring for holding the pick normally in an uppermost position, substantially as shown and described. 13th. A stringed musical instrument, provided with a pick board having seats and guideways, a pick slidable in a seat, and consisting of a body and a flexible staff secured in the body, guide lugs on the body and engaging said guideways, to guide the picks in their sliding movement and to hold the same against rotation, a spring for holding the pick normally in an uppermost position, and adjusting screws on the underside of the said body to move in contact with the bottom of the seat when the pick is pressed to limit the sliding movement of the pick staff in proper relation to the string to be picked, substantially as shown and described. 14th. A pick for a stringed musical instrument, comprising a body, a flexible pick staff inserted therein, and adjusting screws on said body for limiting the sliding movement of the pick when in use, substantially as shown and described. 15th. A pick for a stringed musical instrument, comprising a body, a flexible pick staff inserted therein, adjusting screws on said body for limiting the sliding movement of the pick when in use, and a pin extending sidewise through the pick body and said staff, to secure the latter to the body, the ends of the pin projecting from the sides of the body to form guideways for the pick, substantially as shown and described. 16th. A stringed musical instrument, provided with a pick board having seats and guideways, a pick slidable in a seat, and consisting of a body and a flexible staff secured in the seat, guide lugs on the body and engaging said guideways, to guide the picks in their sliding movement and to hold the same against rotation, a spring for holding the pick normally in an uppermost position, and a cover for the said board and through which project the upper ends of said body, to be within convenient reach of the performer, the underside of the cover forming a stop for the said guide lugs, to limit the upward movement of the pick pressed on by the spring, substantially as shown and described.

No. 65,850. Locking Device for Cotton Beaters.

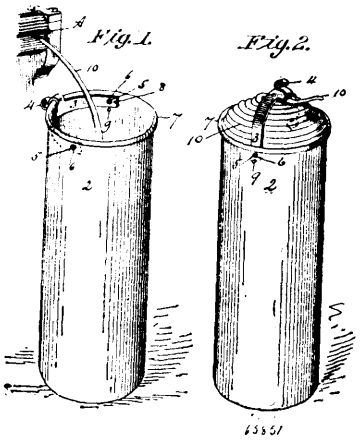
(*Appareil de fermeture pour battes à coton.*)



Joseph T. Ward and John B. Curtis, both of Chicopee, Massachusetts, U.S.A., 18th January, 1900; 6 years. (Filed 31st July, 1899.)

Claim.—1st. In a cotton beater or analogous machine, the combination with the main shaft and the cap of the machine, of mechanism holding said shaft non-rotatably when said cap shall be opened, and which is actuated by the movement of said cap in closing the same to simultaneously release said shaft and to lock said cap in a closed position, substantially as described. 2nd. In a cotton beater or analogous machine, the combination with the driving mechanism of the machine, of a rotatable element thereon with which a stop bolt may engage, of a bolt engaging said element and holding the same non-rotatably, mechanism retaining said bolt so engaged, a retracting spring acting on said bolt, and a device carried on the cap of the machine acting to release said bolt from said engagement upon closing said cap, substantially as described. 3rd. In a cotton beater or analogous machine, the combination with the cap and the main shaft thereof, of an element rotating with said shaft having openings in the side thereof into which a stop bolt may enter, of a bolt entering said opening, a bolt retaining spring, and a retracting spring on said bolt, and a device on said cap acting to free said retaining spring from said bolt upon swinging said cap to close the same, substantially as described. 4th. The combination with the rotating mechanism of a cotton beater or analogous machine, and the cap or cover thereof, of a locking device common to said cap or cover and said rotating mechanism, and means whereby the locking of said cap in a closed position effects the unlocking of said mechanism, and the unlocking of said cap or cover effects the locking of said mechanism against rotation, substantially as described.

No. 65,851. Sliver Receiving Can for Cotton and Other Machines. (*Receptacle pour ruban de coton, etc.*)



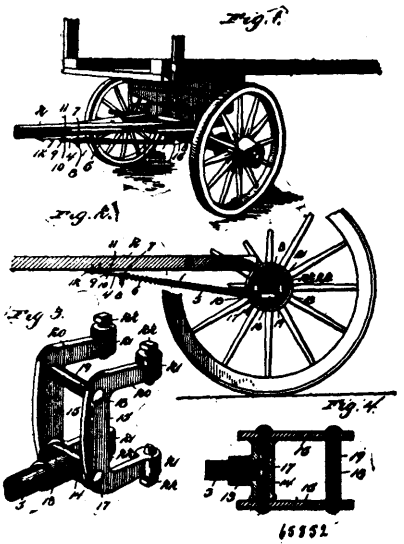
Joseph T. Ward and John B. Curtis, both of Chicopee Falls, Massachusetts, U.S.A., 18th January, 1900; 6 years. (Filed 2nd November, 1899.)

Claim.—1st. Sliver retaining devices for sliver cans comprising a semi-circular sliver guard pivotally connected to the border of the open end of the can, and held normally below said border, means for retaining said guard in said last named position and for temporarily retaining the guard in an upturned position above the sliver contained in the can, substantially as described. 2nd. Sliver retaining devices for sliver cans comprising a sliver guard, as described, pivotally connected to the inner wall of the can near the upper end thereof, a spring hook on said guard engaging the border of the can and holding the guard temporarily within the can, and providing means for manually turning said guard upwardly across the contents thereof, substantially as described. 3rd. A sliver receiving can comprising the body in which the sliver from a drawing machine is received for transmission to a machine for subsequent treatment, and a sliver retaining bail pivotally connected to the border of the open end of the can, having thereon a spring engaging said border and holding the bail in turned down position substantially in a plane with said border, and means for supporting the bail in an upward position transversely across the top of the can, substantially as described.

No. 65,852. Pole Support. (*Support de timon.*)

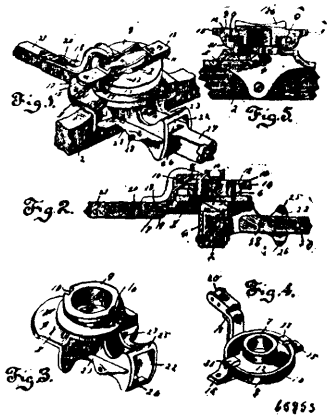
Martin Schichtt, North Yakima, Washington, U.S.A., 18th January, 1900; 6 years. (Filed 28th November, 1899.)

Claim.—1st. In a device of the class described, the combination with a running gear, of a clamp detachably engaging the front and rear faces of the front axle, an extensible telescoping section hinged to the clamp, means for hinging the connection to a pole or tongue, and a spring cushioning the extensible connection, substantially as described. 2nd. In a device of the class described, the combination with a running gear, of a substantially U-shaped clamp receiving the front axle and detachably engaging the front and rear faces of the same, an extensible connection hinged to the clamp and to the tongue, and a spring cushioning the connection, substantially as described. 3rd. A device of the class described, comprising a clamp



composed of two substantially U-shaped sides provided at their terminals with clamping screws for engaging the front and rear faces of the front axle and connected by transverse fastening devices, and an extensible cushioned connection designed to be hinged to a tongue and provided with a sleeve receiving one of said transverse fastening devices, substantially as described.

No. 65,853. Fifth Wheel. (*Roue d'avant train.*)

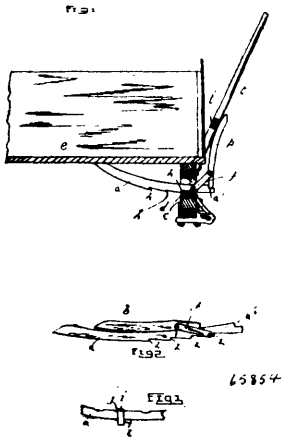


James H. Gressom, Hudson, Wisconsin, U.S.A., 18th January, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—1st. In a device of the class described, the combination of the lower section designed to be mounted on the front axle and having a rearwardly extending segmental flange, and provided with an upwardly extending bearing socket-socket provided at its top with an outwardly extending annular flange recessed at opposite points, the upper section having a depending bearing portion fitting in the socket of the lower section, said upper section being provided with a circular plate or flange and having a rim depending from the same and fitting over the annular flange of the lower section, lugs extending inward from the rim and interlocking with the annular flange, and an arm extending rearward from the upper section and interlocking with the segmental flange, substantially as described. 2nd. In a device of the class described, the combination of the lower section designed to be mounted on a front axle and provided with a rearwardly extending segmental flange, bearing socket extending upward from the lower section and provided with an outwardly annular flange recessed at opposite points, the upper section having a depending tubular bearing portion to fit the said socket and provided with a depending rim to receive the annular flange and having lugs adapted to pass through the recesses thereof and engage beneath the annular flange, an arm extending rearward from the upper section, interlocked with the segmental flange and provided with a reach socket, and a tongue receiving socket extending forward from the front of the lower section, substantially as described. 3rd. In

a device of the class described, the combination of a lower section designed to be mounted on a front axle and provided at its front with a forwardly extending socket adapted to receive a tongue, and an upper section interlocked with the lower section and provided with a rearwardly extending arm having a socket for the reception of a reach, substantially as described. 4th. In a device of the class described, the combination of a lower section, an upper section interlocked with the lower section, a substantially L-shaped arm extending rearward from the upper section, supported by the lower section and provided at its rear end with a socket or bifurcation adapted to receive a reach, and a lug extending forward from the socket or bifurcation and engaging under the adjacent portion of the lower section, substantially as described.

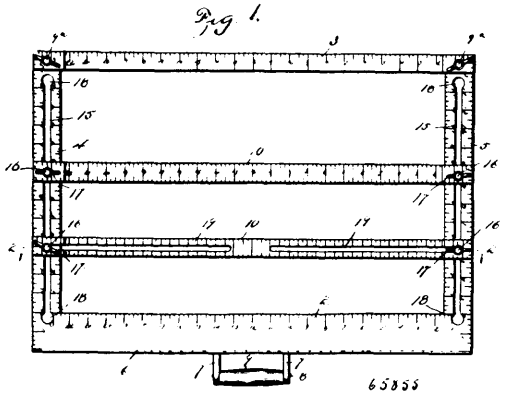
No. 65,854. Thill Support. (*Support de limonière.*)



Brenton E. Holly, Fulton, New York, U.S.A., 18th January, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—The improved thill supporter of the arm *a*, curved upward at its rear end and having notches *h*, cut in its under side and the notches a^1, in its front end, the brace *b*, seated in said notch, and the straps *f f*, pivoted at one end to the aforesaid arm and at the opposite end to the brace, substantially as shown and described.

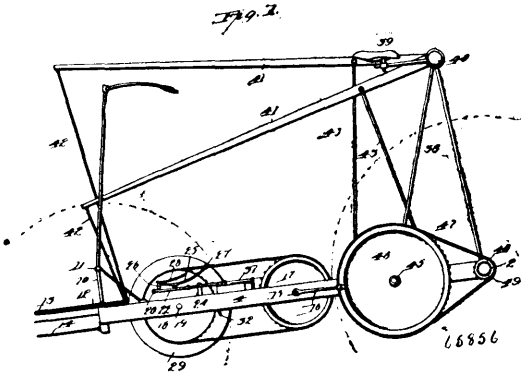
No. 65,855. Carpenter's Square. (*Equerre.*)



William H. Crawford and Douglas B. Crawford, Graydon, West Virginia, U.S.A., 18th January, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—In a framing square, the combination, with a main frame comprising a base member and two end members projecting in the same plane at right angles therefrom, the base member being provided on its outer edge with a rest flange extending at right angles therefrom, said flange being provided substantially midway of its length with an upwardly projecting bail shaped handle and each end member being slotted longitudinally, of a member detachably secured to the outer ends of the ends of the end pieces beyond the slots and parallel with the base, and guide rules detachably and adjustably secured to the end pieces, one of which is slotted longitudinally at each end, said rules lying in the same plane with the main frame.

No. 65,856. Vehicle Propelling Mechanism.
(*Mecanisme de propulsion pour vehicules.*)

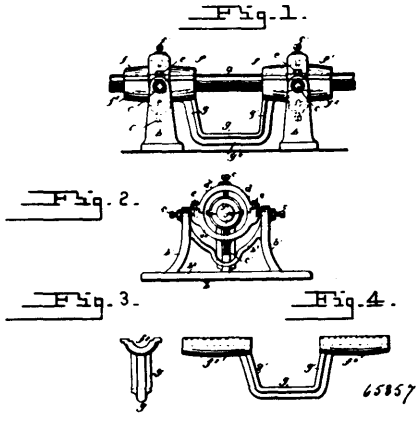


Edmond Speer, Boissevain, Manitoba, Canada, 18th January, 1900; 6 years. (Filed 2nd May, 1899.)

Claim.—1st. A vehicle, comprising a frame, supporting wheels connected to said frame, a series of oscillating levers operatively connected to the rear supporting wheels, treadle mechanism mounted on said frame, and connections between said mechanism and said levers for imparting an oscillating movement to said levers. 2nd. A vehicle, comprising a frame, supporting wheels connected to said frame, a series of oscillating levers operatively connected to the rear supporting wheels, treadle mechanism mounted on said frame, connections between said mechanism and said levers for imparting an oscillating movement to said levers, and brake mechanism connected to said treadle mechanism and to the drive wheel connections for retarding the movement of said connections. 3rd. A vehicle comprising a frame, supporting wheels connected thereto, a crank axle operatively connected to the rear supporting wheels, oscillating levers operatively connected to said crank axle, a treadle mechanism mounted on said frame, and connections between the treadle mechanism and said levers, for imparting an oscillating movement to said levers, said levers moving in opposite directions. 4th. A vehicle comprising a frame, supporting wheels connected thereto, a crank axle operatively connected to the rear supporting wheels, oscillating levers operatively connected to said crank axle, treadle mechanism mounted on said frame, connections between the treadle mechanism and said levers, for imparting an oscillating movement to said levers, said levers moving in opposite directions, and brake mechanism connected to said mechanism and to said crank axle, for retarding the movement of said axle. 5th. A vehicle, comprising a frame, supporting wheels connected thereto, treadle mechanism mounted in said frame, a series of wheels pivotally mounted in said frame, said wheels having an intermittent operative connection with said treadle mechanism, a series of oscillating levers operatively connected to said wheels, and connections between said levers and the rear supporting wheels, for imparting a rotary motion thereto. 6th. A vehicle, comprising a frame, supporting wheels connected thereto, treadle mechanism mounted in said frame, a series of wheels pivotally mounted in said frame, said whee s having an alternate intermittent operative connection with said treadle mechanism, a series of levers operatively connected to said wheels, and connections between said levers and the rear supporting wheels, for imparting rotary motion thereto in one direction. 7th. In a vehicle comprising a frame, supporting wheels connected thereto, treadle mechanism mounted in said frame, a series of wheels mounted in said frame, said wheels being operatively connected to said treadle mechanism and becoming operative alternately, means for placing said wheels in operative connection with said treadle mechanism, a series of oscillating levers operatively connected to said wheels, and connections between said levers and the rear supporting wheels, whereby the latter will be given a rotary movement. 8th. A vehicle comprising a frame, supporting wheels connected thereto, treadle mechanism mounted in said frame, a series of wheels mounted in said frame, said wheels being operatively connected to said treadle mechanism and becoming operative alternately, means, automatically operated, for placing said wheels in operative connection with the treadle mechanism, a series of oscillating levers, operatively connected to said wheels, and connections between said levers and the rear supporting wheels, whereby the latter will be given a rotary movement. 9th. A vehicle comprising a frame, supporting wheels connected thereto, treadle mechanism mounted in said frame, a series of wheels mounted in said frame, said wheels being operatively connected to said treadle mechanism, and becoming operative alternately, means operated by the movement of one of said wheels for placing said wheels in operative connection with said treadle mechanism, a series of oscillating levers operatively connected to said wheels, and connections between said levers and the rear supporting wheels, whereby the latter will be given a rotary movement. 10th. A vehicle comprising a frame, supporting wheels connected thereto, treadle mechanism mouted in said frame, a series

of wheels mounted in said frame, said wheels being operatively connected to said treadle mechanism intermittently, said wheels becoming operative alternately, means for placing said wheels in operative connection with said treadle mechanism, a series of oscillating levers operatively connected to said wheels, and connections between said levers and the rear supporting wheels, whereby the latter will be given a rotary movement. 11th. A vehicle, comprising a frame, supporting wheels connected thereto, treadle mechanism mounted in said frame, a series of sprocket wheels mounted in said frame, said sprocket wheels being operatively connected to said treadle mechanism, a series of wheels mounted in juxtaposition to said sprocket wheel, means connected to said sprocket wheels, for imparting an intermittent movement to said wheels, and connections between said series of wheels and the rear supporting wheels, whereby the latter will be given a rotary movement by the movement of the former. 12th. A vehicle, comprising a frame, supporting wheels connected thereto, treadle mechanism mounted on said frame, a series of sprocket wheels mounted in said frame, said sprocket wheels being operatively connected to said treadle mechanism, a series of wheels mounted in juxtaposition to said sprocket wheels, means, connected to said sprocket wheels, for imparting a movement to said wheels alternately, and connections between said series of wheels and the rear supporting wheels, whereby the latter will be given a rotary movement by the movement of the former. 13th. A vehicle, comprising a frame, supporting wheels connected thereto, treadle mechanism mounted on said frame, a series of sprocket wheels mounted in said frame, said sprocket wheels being operatively connected to said treadle mechanism, a series of wheels mounted in juxtaposition to said sprocket wheels, means connected to said sprocket wheels for imparting a movement to said wheels alternately, oscillating levers mounted in said frame, having connection with said wheels, and connections between said levers and the rear supporting wheels, whereby the latter will be given a rotary movement by the movement of said levers. 14th. A vehicle, comprising a frame, supporting wheels connected thereto, treadle mechanism mounted in said frame, a series of sprocket wheels mounted in said frame, said sprocket wheels being operatively connected to said treadle mechanism, a series of wheels mounted in juxtaposition to said sprocket wheels, means, connected to said sprocket wheels, for imparting an intermittent movement to said wheels, oscilating levers pivotally mounted within said frame, said levers having an operative connection with said wheels, and connections between said series of wheels and the rear supporting wheels, whereby the latter will be given a rotary movement by the movement of the levers. 15th. The combination with a shaft, of a series of sprocket wheels loosely mounted thereon, means for imparting a rotary movement to said sprocket wheels, a series of wheels loosely mounted on said shaft, means for alternately passing said wheels into and out of engagement with said sprocket wheels, oscilating levers operatively connected to said wheels, and connections between the levers, and the point of power application. 16th. A wheeled vehicle, comprising a frame, a series of drive wheels mounted therein, a means for imparting a rotary movement to said drive wheels, wheels pivotally mounted in juxtaposition to said drive wheels, means for forming an intermittent operative contact between said drive wheels and said wheels, and connections between said wheels and the supporting wheels of the vehicle, whereby the latter will be given a rotary movement of the former. 17th. A vehicle, comprising a frame, supported on wheels, a series of drive wheels pivotally mounted in said frame, means for imparting a rotary movement to said drive wheels, wheels mounted in juxtaposition to said drive wheels, means for automatically imparting an intermittent movement to said wheels alternately, and connections between said wheels and rear supporting wheels of said frame, whereby the latter will be given a rotary movement by a movement of the former. 18th. A vehicle, comprising a frame, mounted on wheels, drive wheels pivotally mounted within said frame, wheels mounted in said frame, in juxtaposition to said drive wheels, means operated by the movement of said drive wheels, for imparting an intermittent movement to said wheels, and connections between said wheels and the rear supporting wheels of said frame, whereby the latter will be given a movement by the movement of the former. 19th. A vehicle, comprising a frame, supported on wheels, a series of drive wheels pivotally mounted in said frame, means for imparting a rotary movement to said drive wheels, wheels mounted in said frame, in juxtaposition to said drive wheels, means connected to said drive wheels and operated by the movement thereof, for automatically imparting an intermittent movement to said wheels, and connections between said wheels and the rear supporting wheels, whereby the latter will be given a movement by the movement of the former. 20th. A vehicle, comprising a frame mounted on wheels, a series of drive wheels mounted therein, means for imparting a rotary movement to said drive wheels, wheels pivotally mounted in juxtaposition to said drive wheels, levers mounted on said drive wheels, for forming an operative contact with said wheels, means for moving said levers into operative position intermittently, and connections between said wheels and the rear supporting wheels, whereby the latter will be given a movement by the movement of the former. 21st. A vehicle, comprising a frame mounted on wheels, a series of drive wheels mounted therein, wheels mounted in said frame in juxtaposition to said drive wheels, levers mounted on said drive wheels, adapted to form an operative contact with said wheels, means for automatically placing said levers into operative contact with said wheels alternately, and connections between said wheels and the rear supporting wheels of said frame, whereby the latter will be given a movement by the movement of the former. 22nd. A vehicle, comprising a frame mounted on wheels, a series of drive wheels mounted within said frame, means for imparting a rotary movement to said drive wheels, wheels pivotally mounted in juxtaposition to said drive wheels, levers mounted on said drive wheels, said levers being adapted to form an operative contact with said wheels, means operated by the movement of said drive wheels and said wheels, for automatically moving said levers into operative contact with said wheels alternately, and connections between said wheels and the point of power application, whereby the latter will be given a rotary movement by the movement of the former.

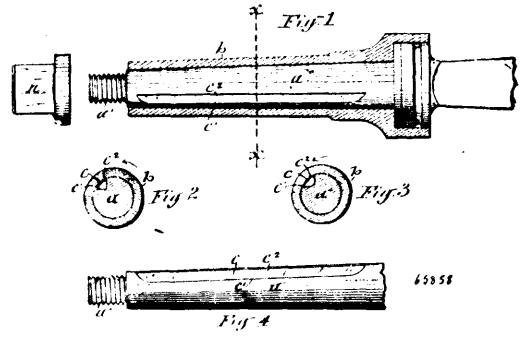
No. 65,857. Shaft Bearing. (*Coussinet d'essieux.*)



George E. Sovereign, Pottersville, New Jersey, U.S.A., 18th January, 1900; 6 years. (Filed 5th December, 1899.)

Claim.—In a shaft bearing, the combination of collars *d d*, each independently pivoted upon diametrically opposite screws *c c*, whereby the collar is adjustable in opposite directions, boxes *f f*, similarly pivoted in said collars upon screws c^1 c^1, and adjustable in a line at right angles to the line in which said collars are adjustable, means for supporting said parts, and an arch *g*, connecting the adjacent ends of said adjustable boxes *f f*, and being freely movable therewith independently of the said supporting means, substantially as set forth.

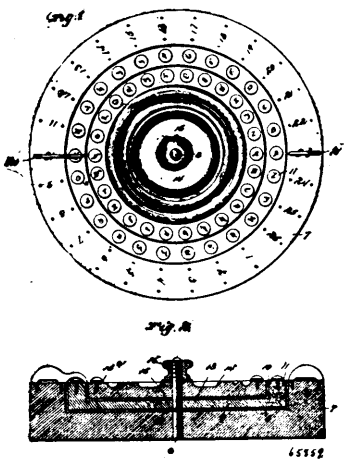
No. 65,858. Vehicle Axle. (*Essieu de voiture.*)



Harvey Allen Moyer, Syracuse, New York, U.S.A., 18th January, 1900; 6 years. (Filed 9th December, 1899.)

Claim.—A vehicle axle having its spindle provided with a lubricating groove extending lengthwise thereof above the horizontal centre and in front of the vertical centre of the spindle, said groove having its lower wall formed approximately horizontal transversely to the front of the spindle and longitudinally throughout the main portion of the length of the groove to shed the lubricant uniformly from the entire length of said wall, and the other wall of said groove extending to the top portion of the spindle to receive the lubricant from the rear of the spindle and restore it to the aforesaid shedding wall, as set forth.

No. 65,859. Instrument for use in Writing and Translating Secret Communications. (*Instrument pour l'usage ds la traduction des communications secrètes.*)



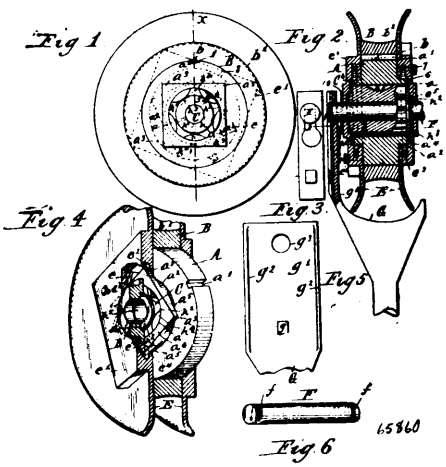
John Follansbee, Terre Haute, Indiana, U.S.A., 18th January, 1900; 6 years. (Filed 9th December, 1899.)

Claim.—1st. A device of the class described, comprising a base provided with characters, a rotatable body mounted upon the base and having also characters, a second rotatable body provided with characters, a pointer fixed to the base and adapted to indicate the characters of the first named rotatable body, and a second pointer fixed to the base and extending over the first named rotatable body to indicate the characters of the second rotatable body. 2nd. A device of the class described, comprising a base having a recess and a resultant flange, numerals upon the flange, a disc within the recess and having a flange upon its upper face marked with the alphabet, a second disc mounted within the enclosure of the flange and of the first disc and having the letters of the alphabet upon its upper face, and pointers fixed to the base and adapted to indicate the letters of the discs respectively. 3rd. A device of the class described, comprising a base having a circular recess and a resultant flange, numerals upon the flange, a disc within the recess and having a flange upon its upper face marked with the alphabet, a second disc mounted within the enclosure of the first disc and having the letters of the alphabet upon its upper face, and a pointer for each of the discs, said pointers being adapted to indicate the letters successively. 4th. A device of the class described, comprising a base having a recess and a resultant flange, numerals upon the flange, a disc within the recess and having a flange upon its upper face marked with the alphabet, a second disc mounted within the enclosure of the flange of the first disc and having the letters of the alphabet upon its upper face, a pointer fixed upon the flange of the base and adapted to indicate the letters of the first disc, and a second pointer fixed upon the flange of the base and extending over the flange of the first disc and adapted to indicate the letters of the second disc.

No. 65,860. Trolley. (*Trollé.*)

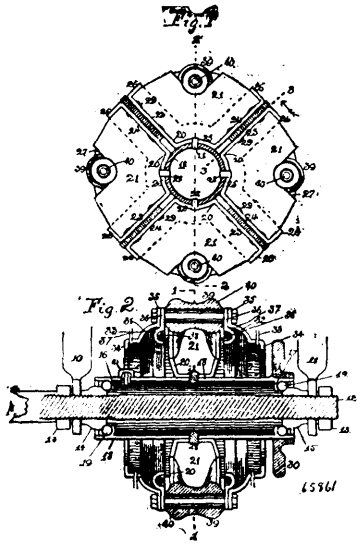
Olof W. Swanson, Tacoma, Washington, U.S.A., 18th January, 1900; 6 years. (Filed 20th September, 1899.)

Claim.—1st. In a device of the class described, a centre member carrying opposite hubs, and wedge faced lugs on said hubs projecting beyond the periphery thereof, combination with apertured side flanges adapted to engage the said lugs and to be secured between the wedge faces thereof and the sides of said centre member, substantially as specified. 2nd. In a device of the class described, a centre member with opposite hubs formed integral therewith, and lugs on said hubs projecting over the sides of said member, said lugs having inclined or wedge faces at their inner sides, substantially as and for the purpose specified. 3rd. In a device of the class described, a centre member provided with opposite hubs, squared at the outer extremities and provided with an annular recess between said member and extremity, substantially as and for the purpose specified. 4th. In a device of the class described, a centre member, provided with opposite annular hubs, mounting a rectangular plate at the outer extremities thereof, the corners of said plates projecting beyond said hubs and having an under surface diverging from the upper, substantially as and for the purpose specified. 5th. In a device of the class described, a centre member carrying opposite hubs, with lugs thereon projecting beyond the face thereof, the under surface of said lugs diverging from the upper, substantially as and for the purpose specified. 6th. In a device of the class described, a centre member with opposite hubs having lugs opposed to the sides of said member, the under surface thereof diverging from the upper, a removable tire surrounding said centre member, and side flanges adapted to engage said lugs and bind upon said tire and member, substantially as described. 7th. In a device of the class described, a centre member having opposite hubs, squared at the outer extremities, each provided with an annular recess between said member and extremity, the projecting corners of said extremities having the under surface diverging from the upper, a removable tire about said member, and side flanges adapted to engage between said diverging surfaces and member, and secure said tire, substantially as described. 8th. In a device of the class described, the combination, with the locking centre carrying lugs mounted on opposite hubs thereof, and a removable tire thereon, of side flanges apertured to pass said lugs and receive said hub and to be turned to lock between said lugs and centre, and secure said tire, substantially as described. 9th. In a device of the class described, the combination with a centre member having opposite hubs, and lugs projecting from said hubs over the adjacent sider of the member, said lugs on the respective hubs having oppositely diverging or wedge faces, of side members or flanges adapted to engage between said diverging faces and member and to be secured respectively by a right and left hand turn thereof, substantially as specified. 10th. In a device of the class described, a trolley, an axle, a yoke for the support thereof having lugs on the furcations thereof, locking plates adapted to receive opposite ends of said axle and to drop and engage therewith and to receive said lugs when dropped, and lock said axle from rotation and end movement, substantially as described. 11th. In a device of the class described, a trolley, an axle having opposite grooves at each end, a yoke supporting said parts and having lugs thereon below the ends of said axle, locking plate apertured to receive said ends and slotted to drop and engage said grooves, and a second aperture therein to engage said lugs when said plates are lowered, substantially as described. 12th. In a device of the class described, the combination with a locking centre of a centre core having longitudinal ribs thereon fitting a central aperture in said locking centre with transverse depression thereof communicating with channels between said ribs, and oilways from said channels to the bore of said centre, and means engaging said locking centre to secure said parts together and close the ends of said channels and form a chamber between said core and locking centre, substantially as described. 13th. In a device of the class described, the combination with a locking centre, mounting lugs on opposite hubs thereof and having a central aperture, a removable tire about said centre, a centre core with longitudinal ribs fitting said aperture, centreing hubs thereon and a centre bore, separable hubs with a similar bore and recessed to receive said centreing hubs and flanged to form a closure at the ends of said ribs to provide an oil chamcer about said centre core, of side flanges apertured to pass said lugs and housings thereon recessed to receive the flanges of said separable hubs and apertured for the protection thereof, said flanges adapted for simultaneous but opposing rotation to engage said lugs and lock and bind said parts together, substantially as described. 14th. A device of the class described, comprising a centre member provided with locking lugs, a removable tire thereon, a centre core therein, separable hubs at the ends of said core, and side flanges with housings thereon, and adapted to engage said locking lugs and interlock therewith and bind all of said parts together, substantially as shown and described. 15th. A device of the class described, comprising a centre member provided with opposite hubs, and lugs on said hubs, a removable tire thereon, a centre core with longitudinal ribs fitting a central aperture in said member, separable hubs at the ends of said core and ribs and side flanges apertured to receive said lugs and adapted to be turned and engage therewith, and a housing thereon to engage said separable hubs, and a centre bore through said core and separable hubs, substantiallly as shown and described. 16th. In a device of the class described, the combination of an axle, means for locking the same against rotation, an annular centre member carrying opposite hubs provided with wedge faced lugs projecting beyond the periphery



thereof, a tire detachably secured upon said member, a core detachably secured therein, and detachable side plates engaging the lugs of said centre member and adapted to be secured between the wedge faces thereof and the sides of said centre member by a right and left turning movement of the respective plates, substantially as specified. 17th. In a device of the character described, the combination of an axle, means for carrying the same, and for securing it against rotation, an annular centre member carrying opposite hubs provided with wedge faced lugs projecting beyond the periphery thereof, a central core constructed to form a lubricant chamber within the centre member, a tire surrounding the centre member, and side flanges engaging the said lugs and adapted to be secured between the wedge faces thereof and the sides of said centre member, substantially as specified.

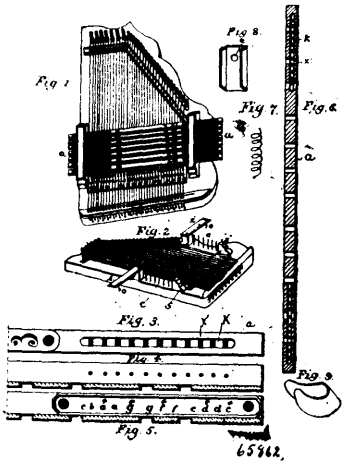
No. 65,861. Vehicle Hub. (*Moyeu de vehicules.*)



Samuel B. McHenry, Chicago, Illinois, U.S.A., 18th January, 1900; 6 years. (Filed 11th December 1899.)

Claim.—1st. In a vehicle wheel hub, the combination with a box thereof, of set of right angled rubber cushions secured thereto with their angles pointing inward forming V-shaped seats on their outer surfaces, hub casings suspended by the spokes and surrounding the hub and cushions, and rollers resting in the cushion seats and carried by the hub casings, substantially as described. 2nd. In a vehicle wheel hub, the combination with the box thereof, of right angled cups secured thereto with their angles inward and their bottoms extending radially outward, and correspondingly shaped yielding cushions secured in said cups, substantially as described. 3rd. In a vehicle wheel hub, the combination with the box thereof, of right angled cups secured thereto with their angles inward and their bottoms extending radially outward correspondingly shaped yielding cushions secured in said cups, radially placed metal partitions between the adjacent cups, and bolts securing the partition between the cups, substantially as described 4th. In a vehicle wheel hub, the combination with the hub box, provided with right angled yielding cushions, with V-shaped outer bearings, of hub casings inclosing the yielding cushions and carried by the spokes, bolts connecting the hub casings together, and rollers on said bolts engaging the cushions, substantially as described. 5th. In a vehicle wheel hub, the combination with the hub and its right angled metal cushion carrying cups, of the hub casings carried by the spokes, the annular flanges on the inner sides of the casings, and the metal partitions between the cups projecting into contact with the annular flanges substantially as described. 6th. In a vehicle wheel hub, the combination with the hub, right angled metal cup and the cushions carried thereby, of the hub casings, the inner annular flanges, the metal partitions between the cups projecting into contact with said annular flanges, the bolts passing through the casings and annular flanges, and the rollers on said bolts engaging the cushion, substantially as described. 7th. In a vehicle wheel hub, the combination with the box, its right angled cushion carrying cups and the metal, radially placed partitions secured between and projecting beyond the sides of the cups, of the casings carried by the spokes, the annular flat and semi-circular grooved flanges secured to the inner sides of said casings in contact with the partitions, and the lubricating wick or cords in the grooves of the annular flanges, in contact with the partitions, substantially as described. 8th. The herein described vehicle wheel hub, comprising the box, the right angled cushions in said cups, the partitions secured between and projecting beyond the sides of said cups, the casings carried by the spokes, the inner annular and grooved flanges, lubricating wick or cord in the grooves contacting with the partitions, the bolts securing the casings and annular flanges together, and the rollers journalled on said bolts and resting upon the cushions, substantially as described.

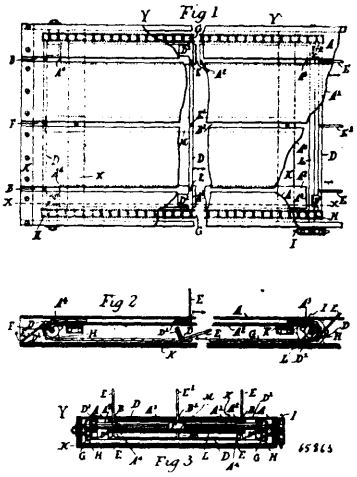
No. 65,862. Harp. (*Harpe.*)



Henry Heyman, Rochester, Pennsylvania, U.S.A., 18th January, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—A damper bar for an autoharp having a longitudinal slot at each end and provided with a series af rods or wires passed transversely through said slot to form a series of recesses as means for transposition on the pins of the autoharp.

No. 65,863. Conveyers and Elevators for Reaping and Binding Machines. (*Transport et ascenseur pour moissonneuses et lieuse.*)



Thomas Hanrahan, Bungaree, Victoria, Australia, 18th January, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. In an apparatus of the class indicated, the combination with a platform having an upper surface composed of strips A A^1, with slots B B^1, and guide plates A^2, beneath strips A, of endless chains G, connected by transverse rakes D, having slide blocks, D^1, and teeth E E^1, adapted to project vertically through the slots B B^1, and set at (or approximately at) right angles to the slide blocks which are adapted to fit the channels between strips A and guide plates A^2, all substantially as and for the purposes set forth. 2nd. In an apparatus of the class indicated, the combination with a platform A A^1, having slots B B^1, of rakes D (having teeth E E^1, and blocks D^1), carried by endless chains G, over sprocket wheels H, also plates A^2, having ends A^3, located as described to enable the blocks D^1, to be carried downward from the channels beneath strips A, and guide plates A^2, said plates also having ends A^4, and the platform having a plate F, located and projecting beyond ends A^4, as described to enable the said blocks to be carried upward into the said channels, substantially as set forth. 3rd. The combination of the parts A to A^4, B B^1, D D^1, E E^1, and F to H and M, substantially as and for the purposes set forth.

No. 65,864. Sugar Beet Root Cutting Machine.
(*Coupe-racines.*)

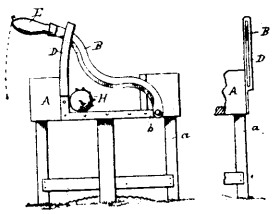


Fig 1

Fig 2

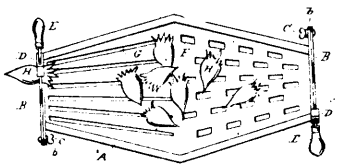


Fig 3.

Tjeck J. Pope, Saugnoit, New York, U.S.A., 18th January, 1900; 6 years. (Filed 28th December, 1899.)

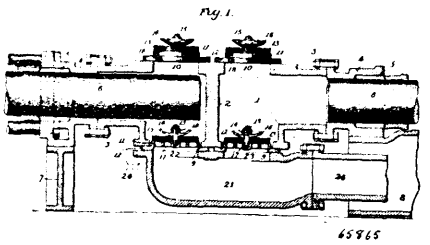
Claim.—1st. The combination with a box provided with an open mouth, of a knife support located in the plane of said mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a curved knife blade, and also of an operating handle therefor. 2nd. The combination with a box provided with an open mouth, of a knife support located in the plane of said mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a concavo-convex or yoke shaped knife blade, the lowest or convex portion of the knife being located near the centre thereof, and also of an operating handle therefor. 3rd. The combination with a box provided with a plurality of open mouths, of a knife support located in the plane of each mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a plurality of curved knife blades, and also of operating handles therefor. 4th. The combination with a box provided with a plurality of open mouths, of a knife support located in the plane of each mouth or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and a plurality of concavo-convex or yoke shaped knife blades, the lowest or convex portions of the knives being located near the centres thereof, and also of operating handles therefor. 5th. The combination with the box made wider at the central portions thereof and provided with a plurality of open mouths, of a knife support located in the plane of each mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a plurality of curved knife blades, and also of operating handles therefor. 6th. The combination with a box made wider at the central portion thereof and provided with a number of perforations or orifices, and also provided with a plurality of open mouths, of a knife support located in the plane of each mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a plurality of curved knife blades, and also of operating handles therefor. 7th. The combination with a box made wider at the central portion thereof and provided with a number of perforation sor orifices increasing in size the nearer they lie to the mouths of the box, and also provided with a plurality of open mouths, of a knife support located in the plane of each mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a plurality of curved knife blades, and also of operating handles therefor. 8th. The combination with a box provided with a plurality of open mouths and also provided with a number of perforations or orifices, of a knife located in the plane of each mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and a plurality of curved knife blades, and also of operating handles therefor. 9th. The combination with a box provided with a plurality of open mouths and also provided with a number of perforations or orifices increasing in size the nearer they lie to the mouths of the box, of a knife support located in the plane of each mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a plurality of curved knife blades, and also of operating handles therefor. 10th. The combination, with a box provided with an open mouth, and made wider at the central portion thereof, of a knife support located in the plane of said mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a curved knife blade, and also of an operating handle therefor. 11th. The combination, with a box provided with an open mouth and made wider at the central portion thereof, and also provided with a number of perforations or orifices, of a knife support located in the plane of said mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a curved knife blade, and also of an operating handle therefor. 12th. The combination, with a box provided with an open mouth, and made wider at the central portion thereof, and also provided with a number of perforations or orifices increasing in size the nearer they lie to the mouth of the box, of a knife support located in the plane of said mouth, or in a plane parallel with the same, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a curved knife blade, and also of an operating handle therefor. 13th. The combination, with a box provided with an open mouth, and also provided with a number of perforations or orifices, of a knife support constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a concavo-convex or yoke shaped knife blade, the lowest or convex portion of the knife being located at or near the centre thereof, and also of an operating handle therefor. 14th. The combination, with a box provided with an open mouth, a knife support constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a concavo-convex or yoke shaped knife blade, the lowest or convex portion of the knife being located at or near the centre thereof, and also of an operating handle therefor. 15th. The combination, with a box provided with an open mouth, of a knife support constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a concavo-convex or yoke shaped knife blade, and also of an operating handle therefor. 16th. The combination, with a box provided with a plurality of open mouths, and also provided with a number of perforations or orifices, of a knife support located adjacent to each of said mouths and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a plurality of concavo-convex or yoke shaped knife blades, the lowest or convex portion of the knives being located at or near the centre thereof, and also of operating handles therefor. 17th. The combination, with a box provided with a plurality of open mouths, and also provided with a number of perforations or orifices increasing in size the nearer they lie to the mouth of the box, of a knife support located adjacent to each of said mouths and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and of a plurality of concavo-convex or yoke shaped knife blades, the lowest or convex portion of the knives being located at or near the centre thereof, and also of operating handles therefor. 18th. The combination, with a box provided with an open mouth, of a knife support longer than the mouth of said opening, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and also of a curved knife blade, and of an operating handle therefor. 19th. The combination, with a box provided with a plurality of open mouths, and also provided with a number of perforations or orifices, of a knife support located adjacent to each of said mouths, and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and also of a plurality of knife blades and of operating handles therefor. 20th. The combination, with a box provided with a plurality of open mouths, of a knife support located adjacent to each of said mouths and constructed and arranged to support a knife in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and also of a plurality of knife blades and of operating handles therefor. 21st. The combination, with a box provided with a plurality of open mouths, of a knife support longer than the mouth of an opening and located adjacent to each of said mouths, and constructed and arranged to support a knife blade in a pivoted relation at one end, and to provide a guide therefor at the other extremity, and also of a plurality of knife blades and of operating handles therefor.

No. 65,865. Steam Pump. (*Pompe à vapeur.*)

John Bentley Poore, Scranton, Pennsylvania, U.S.A., 18th January, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. In a pump, the combination with the water barrel having an inlet opening in its lower side and a suction chamber beneath said barrel and removably secured thereto, of a valve within the opening end having a seat adapted to be clamped between said barrel and chamber, and supports for holding said valve in place when the chamber is removed. 2nd. In a pump, the combination with a horizontally arranged water barrel having two chambers, end

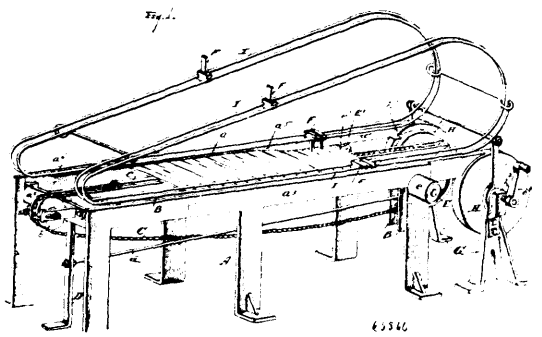
pistons adapted to operate through the opposite ends of said barrel, of an inlet opening in the lower side of each chamber, a suction



chamber beneath said opening and removably secured to said barrel, a valve in each opening having a flanged seat adapted to be clamped between the suction chamber and the barrel, and supports for holding the valves within the openings when the chamber is removed. 3rd. In a pump, the combination of two stuffing boxes, a support for each of said boxes, a water barrel arranged between and supported by the stuffing boxes, and two pistons, one arranged in each of the stuffing boxes and adapted to operate in the water barrel between said boxes, substantially as set forth. 4th. In a pump, the combination of a water barrel having its interior divided into two compartments and having in the lower side of each compartment an inlet opening, a suction chamber arranged beneath said inlet openings, and detachably connected to the water barrel, two stuffing boxes secured to and communicating with the water barrel, and a support for each of said boxes, said supports being arranged on opposite sides of the suction chamber. 5th. In a pump, the combination of a water barrel having an inlet opening in its lower side, a suction chamber arranged beneath said inlet opening and detachably connected to the water barrel, supports for the pump arranged on opposite sides of the suction chamber, and a suction pipe connected with the suction chamber and extending through one of said supports.

No. 65,866. Barrel Making Machine.

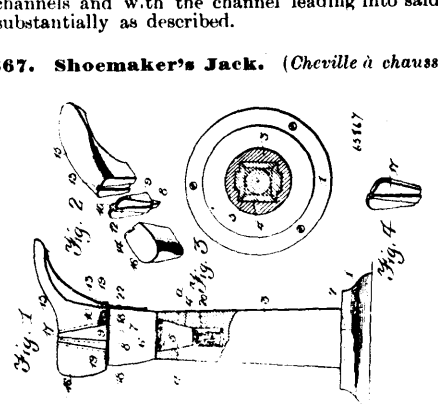
(*Machine à faire les barils.*)



Charles A. Rafter, Jasper, Michigan, U.S.A., 18th January, 1900 6 years. (Filed 30th December, 1899.)

Claim.—1st. In a barrel machine, the combination of means on which to assemble the staves for a barrel in line, means for setting down the ends of the staves to form the bilge, former means to receive the staves in the form of a barrel, and means for forcing the staves into the former, substantially as described. 2nd. In a barrel machine, means for assembling and supporting the staves for a barrel in line, means for bending the staves while in line to form the bilge, and means for cutting the chamber and croze while the staves are in line, substantially as described. 3rd. In a barrel machine, means for assembling and supporting the staves for a barrel in line, and means for cutting the chamber and croze while the staves are in line, substantially as described. 4th. The combination of means for assembling and supporting the staves for a barrel, means for forcing the series of staves forward, and means for setting down the ends to form the bilge as the staves are moved forward, substantially as described. 5th. The combination of means for assembling and supporting the staves for a barrel in line, means for moving said staves forward, means for setting down the ends of the staves to form the bilge as the staves are moved forward, and chamfering and crozing mechanism arranged to operate on the staves as they are moved forward, substantially as described. 6th. The combination of means for assembling and supporting the staves for a barrel, means for moving the staves forward, means for setting down the ends to form the bilge as the staves are moved forward, means for cutting the chamfer and croze as the staves are being moved, and means for receiving the staves in the form of a barrel, having been operated upon by the chamfering and closing devices, ubstantially as described. 7th. The combination of the frames, each provided with an overhanging flange, means for supporting the staves underneath the flange, means for moving the staves forward on the support and under the flanges, and a cam guide for setting down the ends of the staves to form the bilge, substantially as described. 8th. The combination with the frame provided with overhanging flanges, means for supporting the staves underneath the flanges, means for carrying the staves forward, and means for chamfering and crozing the staves, substantially as described. 9th. The combination of the frame, the overhanging flanges, means for supporting the staves under the flanges, a travelling chain arranged to move the staves forward, and means for setting down the ends of the staves to form the bilge, substantially as described. 10th. The combination of means for supporting the staves in line, and an inclined way arranged to bend the staves while in line to form the bilge, substantially as described. 11th. The combination of means for supporting the staves in line and means arranged to bend the staves while in line to form the bilge, substantially as described. 12th. The combination of means for supporting the staves, means for setting down the ends of the staves to form the bilge as they are moved forward, the travelling chain and the dog carried forward by the chain arranged to engage with the staves, substantially as described. 13th. In a barrel machine, the combination of means for assembling and supporting the staves for a barrel in line, means for setting down the ends of the staves as they are moved forward, and means for raising or lowering the centre support to vary the bilge substantially as described. 14th. The combination of means for supporting two staves in line and the stops for limiting their forward movement, whereby the staves for a barrel are measured, substantially as described. 15th. The combination of means for assembling the staves and formers provided with channels in which to form the staves into the form of a barrel, and means for reducing the friction due to the end thrust of the staves on the walls of the channels, substantially as described. 16th. The combination of means for assembling the staves, a former provided with annular channels in which to assemble the staves, and a support for receiving the staves arranged to travel forward with the staves as they enter the former to reduce friction of the movement, substantially as described. 17th. The combination of the formers, consisting of oppositely disposed discs or frames and the rotary discs adapted to receive the end thrust of the staves as they enter the former, substantially as described. 18th. The combination of means for reducing the staves in the form of a barrel in combination with a rotary disc arranged to receive the end thrust of the staves, substantially as described. 19th. The combination of means for supporting the staves, a means for setting down the ends of the staves as they are moved forward, a former receiving the staves, the travelling chain, the dog engaged with the chain, and means for automatically disengaging the dog from the staves after they are delivered to the former, substantially as described. 20th. The combination ot means for supporting a series of staves for a barrel, means for moving forward the staves, and the separating blocks carried forward with the staves, substantially as described. 21st. The combination of means for supporting a series of staves, means for moving the staves forward for the purpose described, the separating blocks and means for automatically lifting the blocks from the staves, substantially as described. 22nd. The combination of means for supporting a series of staves, means for moving the staves forward, the separating blocks and means for automatically lifting the blocks from between the staves and for returning them, sustantially as described. 23rd. The combination of means for supporting the staves, means for moving them forward, the separating blocks, and a way for lifting and returning the blocks, substantially as described. 24th. In a barrel former, the discs provided with annular channels to receive and assemble the staves in the form of a barrel, and means for separating the discs for releasing the barrel, substantially as described. 25th. In a barrel former, the oppositely disposed discs, provided with the annular channels and with the channel leading into said annular channel, substantially as described.

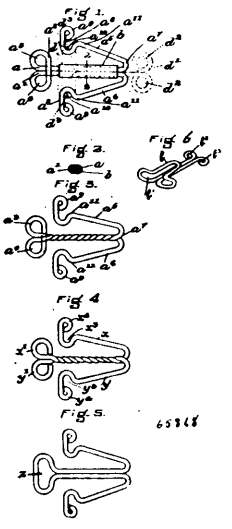
No. 65,867. Shoemaker's Jack. (*Cheville à chaussures.*)



Henry Waters, Bisbee, Arizona, U.S.A., 18th January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. In a shoe repairing jack the combination with the last bracket 6 and the sole block 15, of the instep spring 21, having its outer end fixed to said last bracket, substantially as shown and described. 2nd. In a shoe repairing jack, the base plate 1, the standard 3, rotatably mounted thereon and formed with funnel shaped pocket 4, the last bracket 6 removably seated in said pocket and formed on its upper end with the V shaped recess 7, the block 9 seated in said recess and having its converging faces formed with the integral dove tailed tongues 10 and 12, the sole block 15, and heel block 16, formed with corresponding grooves 13 and 14 to receive said tongues, and the instep spring 21, having its outer end fixed to said last bracket, substantially as and for the purpose set forth.

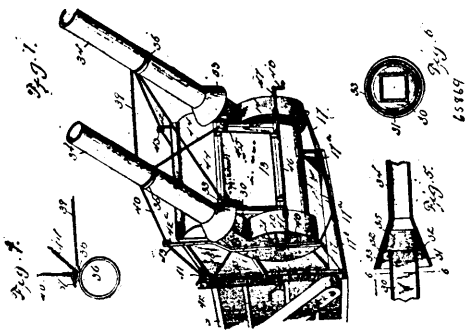
No. 65,868. Hook and Eye. (*Crochet et oeillet.*)



Jacob Everett Pearson, Boston, Massachusetts, U.S.A., 18th January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. As a new article of manufacture, the herein described hook of, hooks and eyes, said hook comprising a shank having a plurality of members locked together, and the shank being formed at its butt end with a hook fastening eye and having a pair of spring arms which extend rearwardly from its front end, on its opposite sides, said spring arms each having an eye receiving socket and an outward extension, the hook fastening eye projecting laterally in the plane of the shank, and spring arms from each side of the shank. 2nd. As a new article of manufacture, a hook receiving eye for, hooks and eyes, said receiving eye being formed with a thread eye at its butt end and with a hook receiving loop at its front end, said loop being formed into a rearwardly extending tongue which is opposite the shank of the hook receiving eye and is adapted to contact with the shank of the hook when the h ok and eye are assembled, to keep the hook and eye in alignment.

No. 65,869. Pneumatic Straw Stacker.
(*Machine pneumatique à mettre la paille en meule.*)



William J. Randolph, Jennings, Louisana, and Albert C. Randolph, Newton, Iowa, U.S.A., 18th January, 1900; 6 years. (Filed 2nd January, 1900.)

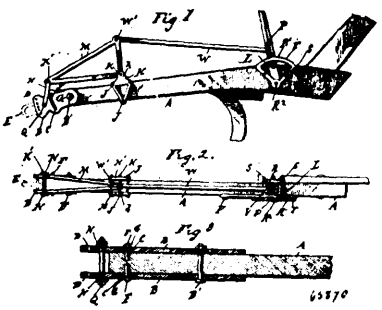
Claim.—1st. In a pneumatic straw stacker, a plurality of fan casings having communication with the interior of the threshing machine casing, rotary fans arranged within said fan casings, and a plurality of duplicate stacking tubes connected together for simultaneous movement and each connected with a separate fan casing, substantially as set forth. 2nd. In a pneumatic straw stacker, the combination of the thresher casing provided at its rear end with a transverse straw chamber inclosed at its lower side by a circular curbing or wall, oppositely located fan casings having their inner sides, inlet eyes communicating with such straw chamber and having their peripheries flush with the ends of said curbing or wall, said fan casings also having tangential discharge spouts, rotary fans arranged to work in the fan casings and a pair of duplicates connected simultaneously, adjustable stacking tubes connected respectively with the separate discharge spouts, substantially as set forth. 3rd. In a pneumatic straw stacker, a thresher casing provided at its rear end with a transverse straw chamber, oppositely located fan casings arranged at opposite sides of the thresher casing and communicating at their inner sides with said straw chamber, said fan casings having tangential discharge spouts, the rotary fans, supporting bars or straps secured to the opposite sides of the thresher casing and having fans bolted thereto, the outer sides of the fan casings, brace connections between the thresher casing and the fan casing, and the supporting bars or straps therefor, and a pair of duplicate, connected simultaneously adjustable stacking tubes connected respectively with the separate discharge spouts, substantially as set forth. 4th. In a pneumatic straw stacker, the thresher casing having an inclosed transverse straw chamber at its rear end, oppositely located fan casings having discharge spouts and provided at their inner sides with inlet eyes communicating with the ends of the straw chamber, the rotary fans working in said casings, and a flat rotary diamond-shaped distributor arranged longitudinally within the straw chamber, substantially as set forth. 5th. In a pneumatic straw stacker, the thresher casing provided at its rear end with an inclosed straw chamber, fan casings arranged at the ends of the said chamber and having discharge spouts, and at their inner sides provided inlet eyes, a single transverse fan shaft extending longitudinally through the straw chamber, rotary fans arranged within the fan casings mounted on said shaft, and a flat rotary diamond-shaped distributor fastened on said fan shaft and having its contracted or narrowed ends projected into the fan casings, substantially as set forth. 6th. In a pneumatic straw stacker, the thresher casing having an inclosed straw chamber at its rear end, oppositely located fan casings having in their inner sides inlet eyes communicating with said chamber, a single fan shaft extending longitudinally of the straw chamber, rotary fans mounted on said shaft within the fan casings and having their blades provided with inner inclined edges, and a flat rotatable diamond-shaped distributor fastened on the fan shaft and having a central wide angular portion working with the straw chamber, the narrow ends of said distributor projecting into the fan casings and abutting against the hubs of the fans, substantially as set forth. 7th. In a pneumatic straw stacker, the thresher casing, a pair of fan casings arranged at opposite sides of the thresher casing and provided at their inner sides with inlet eyes and with tangential discharge spouts, the rotary fans arranged within said fan casings, a pair of duplicate stacking tubes having a movable connection respectively with the separate spouts, and means for adjusting said stacking tubes in unison, substantially as set forth. 8th. In a pneumatic straw stacker, a pair of oppositely located fan casings having communications with the interior of the thresher machine casing and provided with offstanding discharge spouts, rotary fans arranged within said fan casings, a pair of duplicate stacking tubes connected respectively with the separate discharge spouts, and means for adjusting said tubes in unison, substantially as set forth. 7th. In a pneumatic straw stacker, the thresher casing, a pair of oppositely located casings having communication with the interior of the thresher casing and provided with offstanding discharge spouts, the rotary fans arranged within the fan casings, a pair of duplicate stacking tubes having a movable connection at their inner ends respectively with the separate discharge spouts, a detachable tie-rod connection between the two stacking tubes, adjusting mechanism for adjusting said tubes in a vertical direction, an adjusting shaft mounted in a fixed position below the plane of the stacking tubes, and a pair of adjusting cables crossing each other between the tubes and connected at one end respectively with the separate tubes, said adjusting cables being guided around suitable pulleys and winding in reverse directions on the adjusting shaft, substantially as set forth. 10th. In a pneumatic straw stacker, a blast fan casing provided with a discharge spout, a joint ring fitted on the outer end of said discharge spout, a stacking tube having a flared inner end loosely fitting over said joint ring, and a flexible closure piece fitted to the joint ring and projected within the flared end of the stacking tube in the direction of the blast, substantially as set forth.

No. 65,870. Plough. (*Charrue.*)

Herbert H. Allen, Brooksville, Florida, U.S.A., 18th January, 1900; 6 years. (Filed 3rd January 1900.)

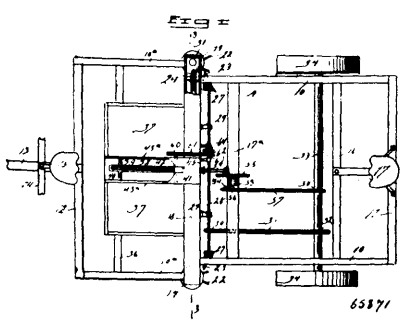
Claim—1st. An attachment to plough beams for regulating the depth at which it is desired to cut a furrow, consisting of two plates pivoted to the opposite faces of the plough beam, transverse slots in said plates, anti-friction rollers carried by the beam and guided in said slots, clamping devices held to the beam, and levers carried by said clamping devices, and having connection with said plates, and a hand operating lever, whereby the plates may be raised or lowered, as shown and described. 2nd. An attachment to plough beams to

regulate the depth at which it is desired to cut a furrow, consisting in combination with the beam, of the two pivoted plates carried



thereby, transverse slots therein, anti-friction rollers carried by the beam and guided in said slots, the clamping devices secured to said beam, one of which clamping devices has a pivoted hand lever, angle levers pivoted to an extension on the second of said clamping members, links connecting the forward ends of said angle levers, and the swinging plates and a connection between the angle levers and the operating levers, whereby said plates may be raised or lowered, and held in an adjusted position, as shown and described.

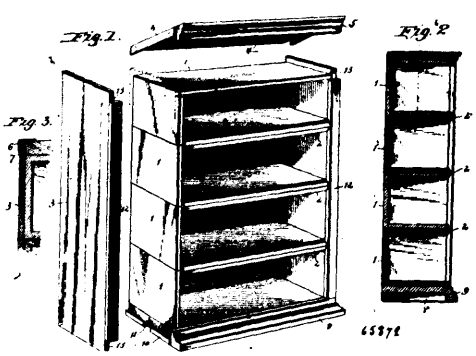
No. 65,871. Planter. (*Semoir.*)



Chiever C. Caves and Lemuel S. Caves, both of Freemont, Iowa, U.S.A., 18th January, 1900; 6 years. (Filed 3rd January, 1900.)

Claim.—1st. In a potato planter, the combination with a frame having wheels at the rear thereof for supporting it, and having runners at the front for supporting the front of the frame and also for opening furrows, of a horizontally disposed carrier located on the front of the frame and running longidudinally therewith to carry the seed rearward, a vertically elongated box into which the seed is delivered by the carrier, a stationary knife located in the lower portion of the box, two spring arms secured respectively to the sides of the box and having their free portions located above the stationary knife, to hold the seed in position to engage the same, a vertically sliding plunger mounted in the upper portion of the box and capable of moving downward to force the seed upon the stationary knife, a movable knife attached to the plunger and serving to engage the seed as the plunger descends, a box casing running transversely of the frame below the box, two carriers mounted in the box casing and respectively carryiug the seed to the sides of the machine so as to drop the seed adjacent to the runners thereof, gearing for driving the carriers of the box casing from the rear wheels of the frame, a shaft also geared with the rear wheels of the machine and caused to revolve thereby, and a link having cranked connection with the said shaft and having connection with the plunger to impart reciprocal movement thereto. 2nd. In a potato planter, the combination with a frame, of a box mounted thereon, means for delivering the seed into the box, a plunger vertically movable in the box and designed to push the seed downward therein, a stationary knife mounted in the lower portion of the box to cut the seed as the plunger moves downward, a movable knife attached to the plunger and serving also to cut the seed as the plunger moves downward, two spring arms mounted on the box and having their free portions located above the stationary knife so as to hold the seed preparatory to the descent of the plunger, and means for carrying the seed to the runners. 3rd. In a potato planter, the combination with a frame having wheels at the rear thereof and having runners at the front thereof, of an endless carrier mounted in the front portion of the frame and running longitudinally thereof to carry the seed rearward, a vertically elongated box mounted at the rear of said carrier and receiving the seed therefrom at a point intermediate the ends of the box, a stationary knife mounted in the box below the said carrier, a plunger mounted in the box above said carrier and serving to force the seed downward on the stationary knife, a movable knife carried by the plunger and acting as the same descends, spring arms attached to the box and having their free portions arranged above the stationary knife therein, so as to hold the seed preparatory to the descent of the plunger, and means for carrying the seed transversely to each side of the machine, to drop the same adjacent to the runners. 4th. In a potato planting machine, the combination with a frame, of a vertically elongated box mounted thereon and adapted to have the potatoes fed thereto at a point intermediate the ends thereof, a stationary knife mounted in the lower portion of the casing, a plunger mounted in the upper portion of the casing and adapted to descend upon the stationary knife, a movable knife carried by the plunger and acting upon the descent thereof, spring arms attached to the box and serving to hold the seed preparatory to the descent of the plunger, and means for carrying the seed transversely toward each side of the machine, to drop the same. 5th. In a potato planting device, the combination with a frame having wheels at the rear thereof and runners at the front thereof, of a carrier located at the front of the frame and serving to carry the potatoes rearwardly, a vertically elongated box mounted at the rear end of the carrier and receiving the potatoes therefrom at a point intermediate the ends of the box, a stationary knife mounted at the lower portion of the box, a plunger mounted in the upper portion of the box and serving to move the potatoes downward upon the knife spring arms mounted upon the outer portions of the box and projected into the same, the free ends of the arms being located above the stationary knife so as to hold the potato preparatory to a descent of the plunger, a movable knife carried on the plunger and acting upon the descent thereof, a box casing running transversely of the frame below the box, two carriers mounted in the box casing and leading respectively toward the runners, and serving to carry the seed toward each side of the frame and drop the same adjacent to the runner's gearing for driving the said carriers from the wheels, a shaft mounted revolubly on the frame, a link having cranked connection with the shaft and connected with the plunger so as to drive the plunger from the shaft, and gearing driving the said shaft from the wheels. 6th. In a potato planting apparatus, the combination with the frame, of a vertically elongated box, means for feeding the potatoes thereto at a point intermediate the ends of the box, a stationary knife mounted in the lower portion of the box, spring arms attached to the outside of the box and projected through openings in the walls thereof, the free ends of the arms being located above the stationary knife to temporarily hold the potatoes, a plunger mounted in the upper portion of the box and adapted to descend upon the potatoes, to push the same into engagement with the knife, and means for driving the plunger.

No. 65,872. Book Case. (*Bois de bibliothèque.*)

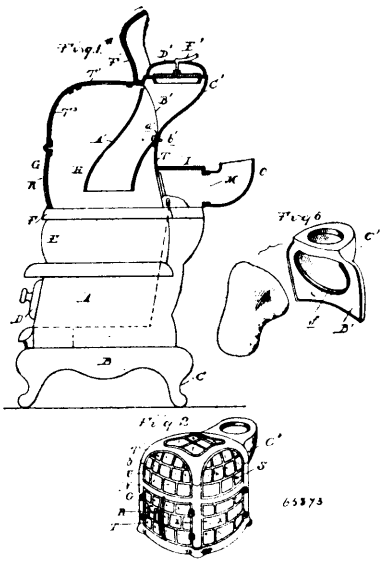


Wallace Sumner Grange, Malta, Illinois, U.S.A., 18th January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. A book case composed of independent separable box like compartments each having closed ends, back and open front and placed one upon the other so that the lower part of one will rest upon the upper part of the adjoining box with a horizontal portion between to form a shelf, separable side members having flanges adapted to lap over and conceal the joints between the side members and the ends of the compartments, a cover or top formed with grooves to receive tube upper ends of the side members, and a base formed with grooves to receive the lower ends of said side members, substantially as described. 2nd. A book case composed of independent separable box like compartments each having closed ends, top, bottom and back and open front and placed one upon the other so that with the front meeting edges of the top and bottom flush with each other, a flange to the front edge of the horizontal side of each compartment adapted to fit over the front edge of the horizontal side of the adjoining compartment and conceal the joint between the compartments, separable side members formed with inwardly projecting flanges along their front edges to conceal the joints between the side members and the ends of the compartments, a cover or top formed with grooves to receive the upper ends of the side members, and a base formed with grooves to receive the lower ends of the side members, substantially as described. 3rd. A book

case composed of independent separable box like compartments each having closed ends, top, bottom and back and open front, and placed one upon the other, a flange to the front edge of the horizontal side of each compartment adapted to fit over the front edge of the horizontal side of the adjoining compartment and conceal the joint between the compartments, separable side members formed with inwardly projecting flanges along their front edges to conceal the joints between the side members and the ends of the compartments and with recesses at their upper and lower front edges, a cover or top formed with grooves to receive the upper ends of the side members and along its front edge with a depending flange to extend over the front top edge of the compartment below and into the recesses in the edge of the side members, and a base formed with grooves to receive the lower ends of the side members, and with an upwardly projecting flange to extend over the front edge of the compartment next above and into the recesses in the lower edge of the side members, substantially as described.

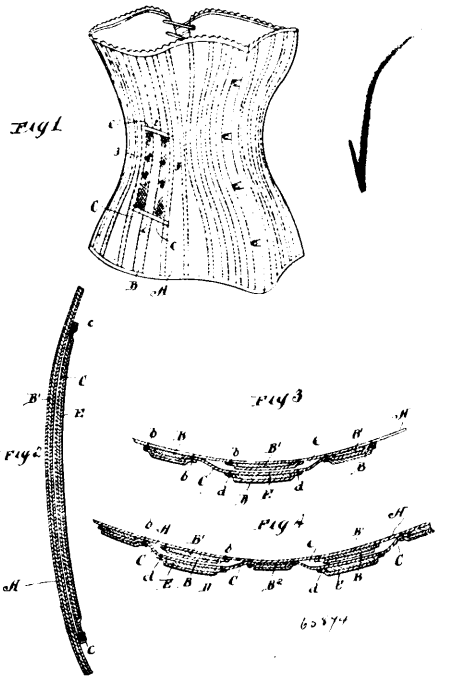
No. 65,873. Stove. (*Poêle.*)



The Peninsular Stove Company, assignee of James Dwyer, nnd John H. Lane, all of Detroit, Michigan, U.S.A., 19th January. 1900; 6 years. (Filed 29th December, 1899.)

Claim.—1st. In a magazine stove, the combination of the fire pot section, a closed casing above said section forming within the combustion chamber, a magazine extending at an incline downward into the combustion chamber and out through the rear wall of the casing, and the smoke pipe extending out of said casing wall below the inclined portion of the magazine. 2nd. In a magazine stove, the combination of the fire pot section, a closed casing above said section, forming within the combustion chamber, a magazine extending at an inclination through the rear wall of the combustion chamber casing into the combustion chamber and having its fuel opening outside at the rear of the stove, a smoke flue below the magazine, and a reflector plate around the rear top portion of the combustion chamber casing in front of the magazine opening. 3rd. In a magazine stove, the combination of the fire pot section, a closed casing above the section forming within the combustion chamber, said casing comprising a front, sides and a rear wall, the latter consisting of an apertured back plate and a magazine projecting through said plate extending upwardly from one side and downwardly from the opposite side thereof around said aperture, and a smoke flue leading out from the casing at the base of the combustion chamber. 4th. In a magazine stove, the combination of the fire pot section, a closed casing above said section forming within the combustion chamber, said casing comprising a front, sides and a rear wall, the latter in the form of an apertured back plate, and a magazine extending through said plate, said magazine comprising a hopper section outside the stove extending upwardly and outwardly from said plate around the aperture, and a discharge section secured to the inner wall of the plate and extending inwardly and downwardly therefrom, and a smoke flue at the base of the combustion chamber. 5th. In a magazine stove, the combination of a fire pot section, a closed casing above said section, forming within the combustion chamber, said casing comprising a front, sides and a rear wall, the latter in the form of an apertured back plate, and a magazine formed in two sections extending through said plate, the mouth or hopper of the magazine formed on and constituting a part of the back plate and the discharge or interior section secured to and projecting downwardly at an angle from the inner face of said plate, and a smoke flue at the base of the combustion chamber. 6th. In a magazine stove, the combination of the fire pot section, a closed casing above the section forming with the combustion chamber, said casing comprising a front, sides and a rear wall, the latter in the form of a back plate, the smoke pipe connection above the fire pot section at the base of the combustion chamber, a magazine projecting through the back plate on both sides thereof and at an angle thereto, the upper end being above the smoke pipe connection and the lower end extending within the fire pot section, and a cover for the magazine. 7th. In a magazine stove, the combination of the fire pot section, a closed casing above said section forming within the combustion chamber, said casing comprising a front and side frames, said frames having vertical post members, and connecting bars therefor, a rear wall in the form of a back plate and a dome provided with complementary feet adapted to rest upon and be secured to the post members, and a magazine at the rear of the closed casing, said magazine extending downwardly at an angle through the back plate and discharging over the fire pot section, substantially as described. 8th. In a stove, the combination with the fire pot section, of a superimposed combustion chamber, comprising a back wall, sides, front and top, said side and top wall of the chamber being each formed with mica sections and extending unbroken to the back wall, a smoke flue at the base of the combustion chamber in the rear, and an inclined magazine entering through the back. 9th. In a stove, the combination with the fire pot section, of a superimposed combustion chamber, comprising a back wall, sides, front and top, said front, top and side walls of the chamber being each formed with mica sections, and the side and top walls extending unbroken to the back wall, a smoke flue at the base of the combustion chamber in the rear, and an inclined magazine entering through the back. 10th. In a stove, the combination with the fire pot section, of a superimposed combustion chamber, comprising a back plate, sides, front and top walls, each wall formed with mica sections and the side and top walls of the chamber extending unbroken to the back plate, and a reflector plate in the plane of the back wall at the edges of the top and side walls, and a smoke flue at the base of the combustion chamber in the rear.

No. 65,874. Corset. (*Corset.*)

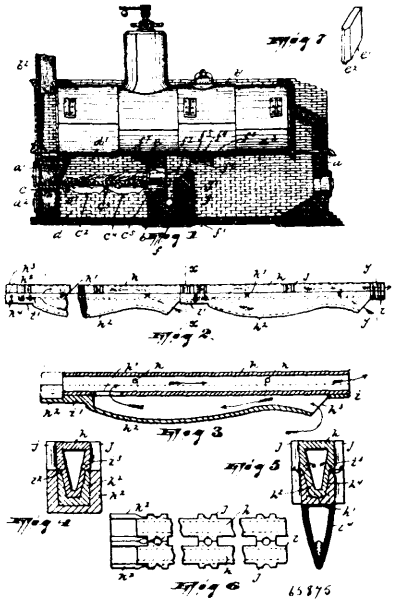


Milton T. Dodds and James O. Mason, both of Aurora, Illinois, U.S.A., 19th January, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. A corset having the usual bone pockets on its exterior surface, and an auxiliary pocket located over one of the principal pockets, and having therein an auxiliary bone or rib, said auxiliary pocket being unattached to the corset at one or both of its ends but secured throughout its length at its edges to the corset by the same stitches which attach the adjacent principal pocket. 2nd. A corset having the usual bone pocket on its exterior surface, and an auxiliary pocket located over one of the principal pockets, and having therein an auxiliary bone or rib, said auxiliary pocket being unsecured to the corset at one or both of its ends and attached throughout its length at its edges to the corset by the same stitches which attach the adjacent principal pocket, the auxiliary pocket being

made of less length than the principal pocket. 3rd. A corset having the usual bone pockets on its exterior surface, bones or ribs in said pockets, and a strip of cloth which overlies one of said pockets, and having its opposite margins inserted between the next adjacent pockets, and the bones or ribs therein, and secured to the body of the corset by the same line of stitches which secure said adjacent pockets to the corset, said strip being provided centrally thereof over the pocket intermediate to said last mentioned pockets with a longitudinal auxiliary pocket and a bone or rib inserted in said auxiliary pocket. 4th. A corset having the usual bone pockets on its exterior surface, bones or ribs in said pockets, and a strip of cloth which overlies one of said pockets and having its opposite margins inserted between the next adjacent pocket and the bones or ribs therein, and secured to the body of the corset by the same line of stitches which secure the said adjacent pockets the corset, said strip being provided centrally thereof over the pocket intermediate to said last mentioned pockets with a longitudinal auxiliary pocket, and a bone or rib inserted in said auxiliary socket, said pocket being closed at its upper and lower ends and unattached to the body of the corset at such places.

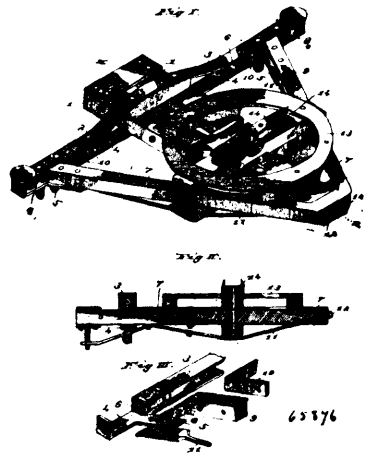
No. 65,875. Combustion Apparatus.
(*Appareil à combustion.*)



Fred. W. Wentworth, Paterson, assignee of George Sanford Lee, Hawthorne, both in New Jersey, U.S.A., 19th January, 1900; 6 years. (Filed 29th August, 1899.)

Claim.—1st. In a combustion apparatus, the combination, with two compartment and a bridge wall separating, and having an opening affording communication between, said compartments, of a suitable fuel support disposed in one of said compartments in a plane beneath the top of said opening, air conduc ing means discharging into the other compartment beneath said opening and connecting said compartments, and a deflector arranged in the other compartment in effective proximity to said opening and the discharge end of said air conducting means, substantially as described. 2nd, In a combustion apparatus, the combination, with two compartments and a bridge wall separating, and having an opening affording communication between said compartments, of a suitable fuel support disposed in one of said com artments in a plane beneath said opening, air conducting means discharging into the other compartment beneath said opening and connecting said compartments, a deflector arranged in the other compartment in effective proximity to said opening and the discharge end of said air conducting means, and dispersing devices arranged in said opening, substantially as described. 3rd. In a combustion apparatus, the combination, with two compartments and a bridge wall separating, and having openings arranged the one above the other and affording communication between said compartments, of a series of tubular grate bars arranged in one of said compartments and communicating with the the subjacent openings, and a deflecting wall arranged in the other compartment in effective proximity to said openings, substantially as described. 4th. In a furnace, the combination, with two compartments and a bridge wall separating, and having openings arranged the one above the other and affording communication between, said compartments, of a series of tubular grate bars arranged in one of said compartments and communicating with the subjacent openings, and a deflecting wall arranged in the other compartment in effective proximity to said openings, substantially as described. 5th. In a furnace, the combination, with two compartments, and a bridge wall separating, and having openings arranged the one above the other and affording communication between, said compartments, of a series of tubular grate bars arranged in one of said compartments and affording communication between the same and the subjacent openings, bevelled and spaced blocks arranged in the upper opening, a deflecting wall arranged in the other compartment in effective proximity to said opening, the top of said wall being inclined, and another wall disposed above said deflecting wall and forming therewith a confined space or passage, substantially as described. 6th. A grate bar consisting of two members or sections, one of said members being substantially tubular and the other of said members receiving said first named member, said member having communication with each other and each having exterior communication at one of its ends, substantially as described. 7th. A grate bar consisting of two members, one of said members being substantially tubular and the other of said members having a longitudinal groove receiving said first named member, said members having communication with each other and each having exterior communication at one of its ends, substantially as described. 8th. A grate bar consisting of two members, one of said members being substantially tubular and the other of said members being substantially trough shaped, said first named member being disposed against the open side of the other member and having communication therewith and both of said members being open at the same end of the grate bar, substantially as described.

No. 65,876. Vehicle Gear. (*Roue d'avant train.*)



Paul Henry Bierman and Johanna McCabe, assignees of James Henry McCabe, all of St. Louis, Missouri, U.S.A., 19th January, 1900; 6 years. (Filed 29th November, 1899.)

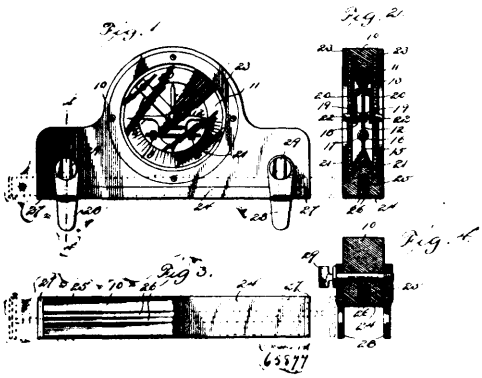
Claim.—1st. In a running gear, the combination of a crotch piece, a V-shaped frame constructed of angle bar fitted to said crotch piece, and a splinter beam across which the crotch bar extends and to which the arms of said frame are connected, substantially as described. 2nd. In a running gear, the combination of a crotch piece, a frame constructed of angle bar fitted to said crotch piece, a splinter beam to which the arms of said frame are connected, and truss rods connecting the rear ends of the said crotch piece and frame and said splinter beam, substantially as described.

No. 65,877. Clinometer. (*Clinomètre.*)

Ransome B. Young, and Edward Littleton, Hazelton, U.S.A., 19th January, 1900; 6 years. (Filed 28th November, 1899.)

Claim.—1st. In an instrument of the class described, the combination of a stock, a scale ring secured to the stock, a pendulum indicator arranged in the plane of the scale ring and having a spindle extended in opposite directions from the plane of the indicator and provided at its extremities with tapering centre points, oppositely disposed inwardly yielding bracket arms provided with registering conical centre sockets for the reception of the extremities of said spindle, and exposed grips carried by said bracket arms and adapted to be approximated to swing the bracket arms inward and clamp the spindle of the indicator at the desired adjustment, substantially as specified. 2nd. In an instrument of the class described, the combination of a stock having an opening accessible from opposite sides of the stock, a double bevelled scale ring arranged in said opening, a pendulum indicator mounted within the space encircled by the scale ring, transparent guards arranged at opposite sides of the plane of the indicator, inwardly yielding bracket arms provided at their free ends with registering bearings for the reception of the extremities of the indicator spindle, and grips carried by the free ends of the bracket arms, and extending through central openings in the

guards, whereby their outer extremities are exposed for pressure to flex the bracket arms inwardly and clamp the spindle of the indica-

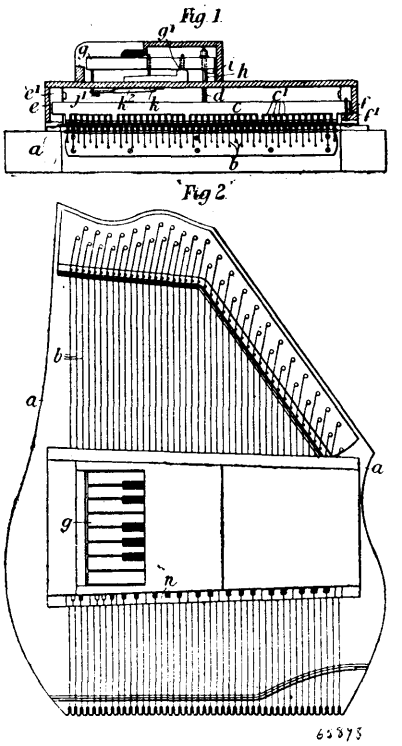


tor to secure the latter at the desired adjustment, substantially as specified. 3rd. In an instrument of the class described, the combination of a stock having a central latterally accessible opening, a scale ring arranged in said opening, a pendulum indicator mounted within the space encircled by the scale ring and provided perpendicular to the verticular plane of its spindle with oppositely extended threaded pins, poises threaded upon said pins, inwardly bracket arms provided with registering bearings for the reception of the extremities of the indicator spindle, crystals arranged at opposite sides of the plane of the indicator, and outside of said bracket arms, and grips carried by the free ends of the bracket arms and extending through central openings in the crystals, with their outer extremities projecting beyond the planes of the outer surfaces of the crystals, substantially as specified. 4th. In an instrument of the class described, the combination with the angle indicating device, of a stock provided with a longitudinal channel, a face plate closing the outer side of said channel, parallel slides fitted side by side in the channel and held in place by said face plate, and cross heads at the opposite outer extremities of the slides, substantially as specified. 5th. In an instrument of the class described, the combination with a stock and indicating devices carried thereby, of spaced pairs of clamp members, the members of each pair being arranged in transversely opposite positions in contact with the side surfaces of the stock, and set screws, each of which extends loosely through the stock and one of each pair of clamp members, and is threaded into the opposite clamp member, said clamp members being both adapted to project at their free ends beyond the plane of the straight edge of the stock, or to be turned up entirely above said plane, substantially as specified.

No. 65,878. Stringed Musical Instrument.
(*Instrument de musique à cordes.*)

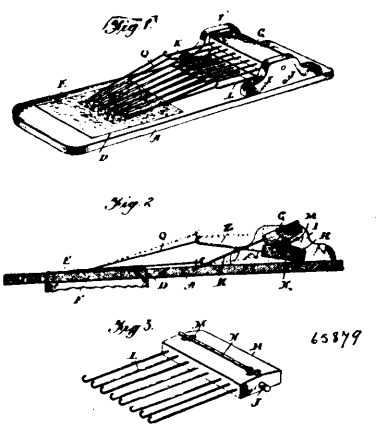
Harry Mackwood Millington, assignee of John Sutherland Young, London, England, 19th January, 1900; 6 years. (Filed 14th October, 1899.)

Claim.—1st. In a musical instrument, the combination with the body provided with a series of strings, of a series of damper bars provided with dampers, a series of keys corresponding to the notes of the scale, operatively connected with said dampers and a dummy key operatively connected with the damper bar of one of said series of keys, for operating the same, substantially as described. 2nd. In a musical instrument, the combination with the body provided with a series of strings, of a series of damper bars, each provided with dampers for engaging the strings corresponding to a note in the scale and the octave thereof, a series of keys arranged to correspond with the several notes in an octave operatively connected with said damper bars, and a dummy key located in the position of the octave of one of said series of keys and operatively connected with the damper bar, substantially as described. 3rd. In a musical instrument, the combination with the body provided with a series of strings, of a series of longitudinally movable damper bars provided with dampers for engaging laterally the strings corresponding to a note and the octave thereof, a series of keys corresponding to the notes of an octave, operative connections between each of said keys and one of said longitudinally movable bars, a dummy key located in a position corresponding to that of an octave of one of said series of keys and connections between the damper bar thereof and said dummy key, substantially as described. 4th. In a musical instrument, the combination with the body provided with a series of strings, of a series of longitudinally movable damper bars provided with dampers for laterally engaging the strings corresponding to a note and the octave thereof, springs engaging said bars for holding said dampers normally in contact with said strings, a series of keys corresponding to the notes of an octave, operative connections between each key and one of said bars for moving the same longitudinally against the pressure of its spring, a dummy key located in



the position corresponding to that of the octave of the first key of said series, of a lever disposed transversely of said dummy key, operatively connecting it with the damper bar of said first key, substantially as described.

No. 65,879. Darning Machine. (*Machine à raccommoder.*)



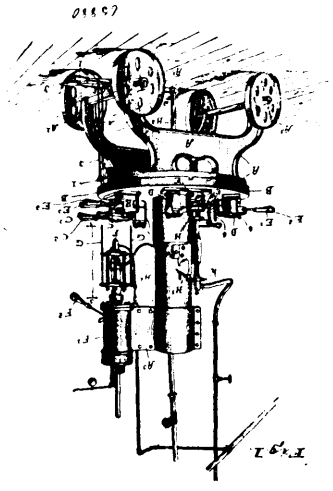
Isaac Jansen, Sheboygan, Wisconsin, U.S.A., 19th January, 1900; 6 years. (Filed 15th December, 1899.)

Claim.—1st A darning apparatus, comprising a base, a fabric holder at one end of the base, two blocks independently pivoted to said base and at the opposite end thereof, each block provided with hooks projecting inwardly approximately parallel with the base, and a hinged connection between the said blocks at the inner side of and independent of their pivotal point, whereby when one of said blocks is ocillated in one direction the other block is oscillated in the opposition directions, substantially as described. 2nd. A darning appratus comprising a base having at one end a fabric holder, two blocks, each block independently pivoted to said base and at the opposite end thereof, one block situated above the other, and a hinged connection uniting the said blocks at points between independent of and eccentric to their pivotal points, each of said blocks provided with hooks projecting approximately parallel the base, whereby when one block oscillates in one direction the

other is oscillated in the opposite direction, substantially as and for the purpose described. 3rd. A darning apparatus comprising a base having at one end a fabric clamp, at its opposite end projections, two blocks pivoted between the projections one above the other, hooks projecting in the same direction from the said blocks, and the adjacent faces of the blocks pivotally connected, the parts adapted to co-operate, as and for the purpose described.

No. 65,880. Glass Blowing Machine.

(*Machine à souffler le verre.*)

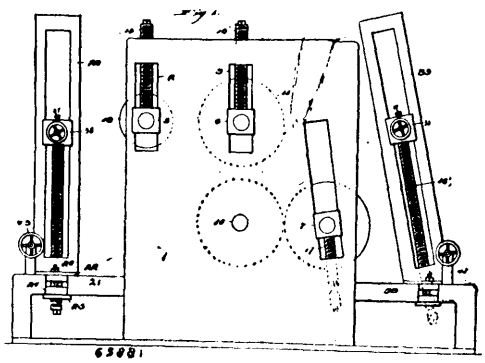


Frank C. Ball, Muncie, Indiana, U.S.A., 19th January, 1900; 6 years. (Filed 22nd August, 1899.)

The combination, in a glass blowing apparatus, of neck moulds, a blowing head, and a pressing head or plunger, suitably arranged in relation to each other, hooks adapted to engage with the neck moulds and lift the same from the pressing moulds, and means for operating said hooks. 2nd. The combination, in a glass blowing machine, of neck moulds, pressing moulds and blowing moulds arranged in sets on a suitable table, a vertically movable plunger arranged above the pressing moulds and adapted to press the glass therein, and hooks carried by the plunger head and adapted to engage with a neck mould and lift the same from the corresponding pressing mould as said plunger ascends, from whence said neck mould is adapted to be transferred to a blowing mould by hand. 3rd. The combination, in a glass blowing apparatus, of neck moulds, pressing moulds, blowing moulds, a plunger arranged above the pressing moulds and adapted to press the glass therein, hooks adapted to engage with a neck mould and lift the same from the pressing mold, and means actuated from the plunger for operating said hooks. 4th. The combination, in a glass blowing machine, of a neck mould, a plunger, hooks G, carried by the plunger head and adapted to engage with and lift said neck forming mould, and springs by which said hooks are normally held to a predetermined position, while adapted to be moved therefrom by contact with the part to be lifted thereby. 5th. The combination, in a glass blowing machine, of a pressing mould, a blowing mould, and a neck mould adapted to be transferred from the pressing mould to the blowing mould, said blowing mould and said neck mould being each composed of parts hinged togethers, and a suitable stop or guide whereby said neck mould is enabled to be easily positioned accurately upon said blowing mould. 6th. The combination, in a glass blowing machine, of a blowing mould composed of parts united by a vertical hinge pivot, a neck mould also composed of parts united by a vertical hinge pivot and adapted to be placed upon said blowing mould, the contacting surfaces of said moulds having a ring and groove formation whereby they are brought into proper vertical relation with each other, and a stud or stop on said blowing mould with which one side of said neck mould is adapted to be brought into contact, whereby the hinge pivots are caused to assume a position in line with each other. 7th. The combination, in a glass blowing machine, of a suitable frame work, a rotating table thereon, a series of sets of moulds each composed of a pressing mould and a blowing mould arranged alongside each other and attached to the table and a neck mould transferable from one to the other, a pressing head or plunger, a blowing head, carried by a standard of the frame, means for transferring the neck mould from a pressing mould to a blowing mould, and means for rotating the table and for stopping the same in predetermined positions, said stops, pressing heads and ploughing heads being so arranged, relatively to each other, that when a pressing mould is below the pressing head or plunger, a blowing mould is below the blowing head. 8th. The combination, in a glass blowing machine, of a suitable frame work having a central standard, a rotating table mounted thereon, a series of pressing, blowing and neck forming moulds carried by said table, a pressing head or plunger and a blowing head carried by the standard, means for operating said pressing head, and means, consisting of a treadle I, a lever H^1, and suitable connecting rods, for operating said blowing head. 9th. The combination, in a glass blowing machine, of a suitable frame work having a central standard a rotating table mounted thereon, a series of pressing, blowing and neck forming moulds carried by said table, a pressing head or plunger and blowing head carried by said standard, a suitable detent for locking said table at various points, and a lever and treadle for operating said detent, a treadle for operating said blowing head, said two treadles being operated alongside each other, whereby they may be conveniently operated from a single point. 10th. The combination, in a glass blowing apparatus, of neck moulds, pressing moulds, blowing moulds, a blowing head, and a pressing head or plunger, suitable arranged in relation to each other, means adapted to engage with the neck moulds and lift the same from the pressing moulds, and mechanism for operating said lifting means.

No. 65,881. Roll for Bending Iron.

(*Rouleau à plier le fer.*)

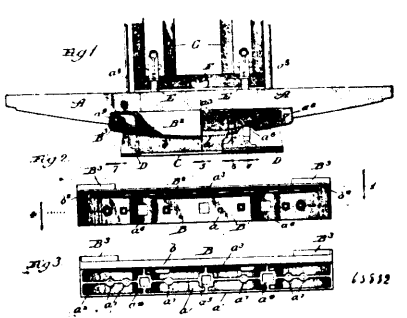


Charles Weber, Pittsburg, Pennsylvania, U.S.A., 19th January, 1900; 6 years. (Filed 1st February, 1899.)

Claim.—1st. In an apparatus of the class described, a set of screw threaded rolls secured in a housing in vertical alignment, adjustable collars mounted thereon, auxiliary collars formed in sections and secured to the sides of the said adjustable collars, and suitable guides arranged in pairs operating horizontally of the rolls at the front and rear thereof, substantially as herein shown and described. 2nd. In an apparatus of the class described, the combination of an upper screw threaded roll suitably secured in a housing, a lower screw threaded roll secured in said housing in vertical alignment with said upper roll, adjustable and auxiliary collars mounted upon the said rolls, a hold down or straightening shaft secured in the said housing at the front of the upper roll, and adjustable guides arranged in pairs at the front and rear of the said rolls, substantially as shown and described. 3rd. In an apparatus for bending structural iron and the like, the combination of a housing having a bed plate secured thereto, a series of screw threaded rolls suitably mounted in said housing, adjustable collars mounted upon the said rolls, auxiliary collars mounted upon said rolls and removably secured to the adjustable collars, a housing secured to the said bed plate at the front and at the rear of the said rolls, and adjustable guides arranged in pairs carried thereby, substantially as shown and described. 4th. In an apparatus for bending structural iron and the like, a central housing having a pair of screw threaded rolls mounted therein in vertical alignment, a bed plate secured to said housing and extending outwardly on each side thereof, a vertical housing secured to said bed plate at the front of said central housing, a pair of adjustable guides carried by said vertical housing, an inclined housing secured to said bed plate at the rear of said central housing, and a pair of adjustable guides carried by said inclined housing, substantially as herein shown and described. 5th. In an apparatus for bending structural iron and the like, the combination of an upper and lower screw threaded roll, adjustable and auxiliary collars mounted on said rolls, an adjustable hold down or straightening shaft and an adjustable housing carrying a pair of guides mounted at the front and rear of the said screw threaded rolls, substantially as herein shown and described. 6th. In an apparatus for bending structural iron and the like, the combination of a housing having a bed plate secured thereto and extending outwardly on both sides thereof, a set of screw threaded rolls suitably secured in said housing, adjustable collars having auxiliary collars removable secured to the sides thereof mounted upon the said rolls, and an adjustable housing carrying a pair of guides secured to the bed plate at the front and rear of the said rolls, substantially as shown and described. 7th. In rolls for bending structural iron and the like, the combination of an upper and lower screw threaded roll, adjustable and auxiliary collars mounted on said rolls, said auxiliary collars being removably secured to the sides of the said

adjustable collars, and adjustable guides arranged in pairs at the front and at the rear of the said rolls, substantially as shown and described. 8th. In rolls for bending structural iron and the like, the combination of the screw threaded rolls, adjustable collars mounted thereon, auxiliary collars formed in sections and secured to said adjustable collars, and means for securing said adjustable and auxiliary collars in the desired position upon the screw threaded rolls, substantially as herein shown and described. 9th. In rolls for bending structural iron and the like, the combination of the screw threaded rolls, adjustable collars mounted thereon, auxiliary collars formed in sections and secured to said adjustable collars, means for securing said adjustable and auxiliary collars in the desired position upon the screw threaded rolls, and adjustable guides arranged at the front of the said rolls, substantially as herein shown and described. 20th. In rolls for bending structural iron and the like, the combination of the screw threaded rolls, adjustable collars mounted thereon, auxiliary collars formed in sections and secured to said adjustable collars, means for securing said adjustable and auxiliary collars in the desired position upon the screw threaded rolls, and adjustable guides arranged at the rear of said rolls, substantially as herein shown and described. 11th. In rolls for bending structural iron and the like, the combination of the screw threaded rolls, adjustable collars mounted thereon, auxiliary collars formed in sections and secured to said adjustable collars, means for securing said adjustable and auxiliary collars in the desired position upon the screw threaded rolls, and adjustable guides arranged at the front and rear of the said rolls, substantially as herein shown and described. 12th. In combination, a set of screw thread rolls having adjustable collars mounted thereon, interchangeable auxiliary collars formed in section of less diameter than the adjustable collars adapted to be secured to the sides of the adjustable collars, and means for adjusting one or more of the said rolls, substantially as herein shown and described.

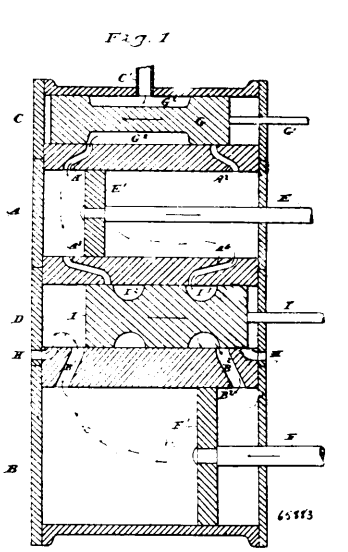
No. 65,882. Buffer Beam. (*Traverse frontale.*)



The Standard Coupler Company, New Jersey, assignee of Henry Howard Sessions, Chicago, Illinois, U.S.A., 19th January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. As a new article of manufacture, a malleable cast metal dead block for buffer beams having a curved face plate and provided on its inner side with projecting buffer stem thimbles formed integrally therewith and adapted to fit into sockets in the buffer beam, substantially as and for the purpose set forth. 2nd. As a new article of manufacture, a malleable cast metal dead block for buffer beams provided with a name and foot plate formed integrally therewith, substantially as and for the purpose set forth. 3rd. As a new article of manufacture, a metallic dead block for buffer beams provided with buffer stem thimbles and a name and foot plate formed integrally with said block, substantially as and for the purpose set forth. 4th. As a new article of manufacture, a metallic dead block for buffer beams provided at its upper portion with a rearward extension formed integrally therewith, and which, in turn, is provided with a forwardly projecting foot plate, substantially as and for the purpose set forth. 5th. A metallic dead block for buffer beams provided with vestibule post foot sockets formed integrally therewith, substantially as and for the purpose set forth. 6th. A metallic dead block for buffer beams provided with a foot plate and on the under side of said foot plate with a recess for co-acting foot plate of a spring held buffer head and on the upper side with vestibule post foot sockets formed integrally with said plate, substantially as and for the purposes set forth. 7th. A metallic dead block for buffer beams, comprising a curved face plate, ribs integral therewith on the inner side thereof, buffer stem thimbles on the inner face of said plate and integral therewith, an extension at the upper part, a web carried thereby, and a foot plate supported by and projecting forwardly from said web, substantially as and for the purpose set forth. 8th. A malleable iron dead block provided with buffer stem thimbles and foot plate formed integrally therewith said block being recessed to receive the co-acting plate of the movable buffer head, substantially as and for the purpose set forth. 9th. A metallic name and foot plate provided with vestibule post foot sockets formed integrally therewith, substantially as and for the purpose set forth.

No. 65,883. Steam Engine. (*Machine à vapeur.*)



Clifton Reeves and Andrew Crozer Reeves, both of Trenton, New Jersey, U.S.A., 19th Jannary, 1900; 6 years. (Filed 2nd January, 1900.)

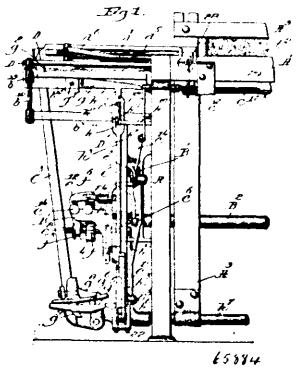
Claim.—1st. A compound steam engine, comprising a high pressure cylinder having a piston, a low pressure cylinder having a piston, a steam chest having admission ports connecting it with the high pressure cylinder, and an admission valve in said steam chest adapted to alternately open and close said ports, a controlling chest having exhaust ports and ports connecting it with the high pressure cylinder and the low pressure cylinder and a valve in said controlling chest adapted to alternately open and close the ports between the high pressure cylinder and the low pressure cylinder at one end, and to simultaneously open the port at the opposite end of the low pressure cylinder and the exhaust port at the opposite end of the controlling cylinder, substantially as described. 2nd. A compound steam engine, comprising a high pressure cylinder, having a piston, a steam chest having ports connecting it with the high pressure cylinder and a valve in said steam chest having a circumferential groove, said valve adapted to alternately open and close said ports, a controlling chest having exhaust ports connecting it with the high presssure cylinder and the low pressure cylinder and a valve in said controlling chest having circumferential grooves adapted to alternately open and close the ports between the high pressure cylinder and the low pressure cylinder at one end, and to simultaneously open the port at the opposite end, of the low pressure cylinder and the exhaust port at the opposite end of the controlling chest substantially as described. 3rd. In a compound steam engine, a high pressure cylinder A^{11}, having a piston rod E, and a piston head E^1, a low pressure cylinder B, having piston rod F, and piston head F^1, a steam chest C, having ports A^1, and A^2, connecting it with the high pressure cylinder and a slide valve in said steam chest having a valve rod G^1, and a groove G^2, said groove so arranged that when the port A^1, is covered port A^2, will be uncovered and vice versa, and a controlling chest having exhaust ports H, and H, and ports A^3 and A^4, connecting it with the high pressure cylinder and ports $B,^1$ an B^2, connecting it with the high cylinder and a valve I, in said controlling chest having a valve rod I^1, and grooves I^2, and I^3, said grooves so arranged that when port A^3, is covered ports A^4, and B^2, and the forward exhaust port will be uncovered and when port A^4, is covered ports A^3, and B^1, and the rear exhaust port will be uncovered, substantially as described.

No. 65,884. Loom. (*Métier.*)

The Compton and Knowles Loom Works, assignee of Randolph Crompton and Horace Wyman, all of Worcester, Massachusetts, U.S.A., 19th January, 1900; 6 years. (Filed 4th March, 1899.)

Claim.—1st. In a loom the following instrumentalities, viz:—a lay, a running shuttle box carried thereby and capable of movement thereon temporarily from its operative position in line with the race of the lay into its inoperative position out of line with the race of the lay, an independent spare shuttle feeder normally disconnected from said running shuttle box and held stationary with relation to said moving lay during the regular running of the loom, and means on the failure of the filling in the shuttle being thrown from the running box, to move said shuttle feeder from its stationary inoperative position into its operative position at the lay, the position occupied by the running shuttle box when the filling failed, substantially as described. 2nd. In a loom, the following instrument alities, viz:—a lay, a running shuttle box carried permanently

thereby and capable of movement thereon from its operative position in line with the race of the lay into its inoperative position out of



line with the race of the lay, a spare shuttle feeder containing a spare shuttle and held normally station at or near the breast beam in its inoperative position during the regular operations of the loom, and means on the absence filling from the shuttle in the running shuttle box to move said shuttle feeder from its inoperative position at the breast beam toward the advancing lay through a path at an angle to the movement of the running shuttle box on the lay, said shuttle feeder coming into its operative position at the level of the race of the lay, the position previously occupied by the running shuttle box, and means to thereafter ensure the movement of the shuttle feeder into its inoperative position with relation to the lay at a forward stroke thereof, substantially as described. 3rd. In a loom, the following instrumentalities, viz:—a lay, a running shuttle box carried thereby and having a movement thereon from its operative into its inoperative position, a spare shuttle feeder normally held in its inoperative position at rest while the lay is moving in the regular working of the loom, and pivotally mounted below the level of the race of the lay, means on the failure of the filling in the running shuttle box to move the said shuttle feeder from its inoperative position toward and to meet the advancing lay, said shuttle presenter coming into its operative position at the race of the lay in place of the running shuttle box, and means to insure the movement of said spare shuttle feeder in unison with the lay until the spare shuttle has been thrown from the said feeder onto the race of the lay, substantially as described. 4th. In a loom, the following instrumentalities, viz:—a lay, a running shuttle box carried thereby and having a movement thereon from its operative into its inoperative position, a spare shuttle feeder normally held into its inoperative position at rest while the lay is moving in the regular working of the loom and pivotally mounted below the level of the race of the lay, means on the failure of the filling in the running shuttle box to move the said spare shuttle feeder from its inoperative position into its operative position at the race of the lay, in place of the running shuttle box, and means to ensure the movement of the said spare shuttle feeder in unison with the lay until the spare shuttle has been thrown from the said presenter onto the race of the lay, and means to again return the said spare shuttle feeder to its inoperative stationary position, as the lay, having been supplied with a spare shuttle from said shuttle feeder comes forward toward the breast beam, substantially as described. 5th. In a loom, the following instrumentalities, viz:—a lay, a running shuttle box carried permanently thereby and capable of movement thereon temporarily from its operative position in line with the race of the lay into its inoperative position out of line with the race of the lay, and having a binder, an independent spare shuttle feeder normally disconnected from said running shuttle box and held stationary with relation to said moving lay during the regular running of the loom, and means on the failure of the filling in the shuttle of the running box to move said shuttle feeder from its stationary inoperative position toward the advancing lay into its operative position, the position occupied by the running shuttle box when the filling failed, substantially as described. 6th. In a loom, the following instrumentalities, viz:—a lay, a running shuttle box carried permanently thereby and capable of movement thereon temporarily from its operative position in line with the race of the lay into its inoperative position out of line with the race of the lay, an independent spare shuttle feeder normally disconnected from said running shuttle box and held stationary with relation to said moving lay during the regular running of the loom, a filling fork, and means set in motion by the movement of said fork due to absence of filling in the running shuttle box to start and move said shuttle feeder from its inoperative stationary position into its operative position at the level of the race of the lay, said shuttle feeder moving with the lay while the spare shuttle thereon is thrown onto the race of the lay, and devices to return said spare shuttle feeder into its stationary inoperative position as the lay comes forward with said shuttle presenter after the spare shuttle has been thrown from it onto the lay, substantially as described. 7th. In a loom, the following instrumentalities, viz: a lay, a running shuttle box carried thereby and having a vertical movement thereon from its normally operative into its inoperative position with relation to the race of the lay on the failure of the filling, a spare shuttle feeder detached from said running shuttle box and not partaking of the movements of the lay during the regular operation of the loom and normally occupying its inoperative position near the breast beam, an operating lever to move said shuttle feeder, said lever having a fulcrum independent of and stationary with relation to the lay, and devices on the failure of the filling to actuate said lever and place the said feeder in its operative position at the level of the race of the lay, the running shuttle at such time having been removed from the race of the lay, substantially as described. 8th. In a loom, the following instrumentalities, viz: a lay, operating means therefor, a running shuttle box movable with the lay, a spare shuttle feeder containing a spare shuttle and normally occupying a position stationary out of line with the level of the race of the lay, means to hold said shuttle feeder stationary while the filling in the shuttle being thrown from the running box is unbroken, means when the filling is to be changed to move said shuttle feeder toward and to meet the running lay to put the spare shuttle contained in it at the level of the race of the lay, means to throw the spare shuttle from said spare shuttle feeder across the lay, and to then move said shuttle feeder out of line with the race of the lay and place the same again in its stationary position, to be again supplied with a spare shuttle, substantially as described. 9th. In a loom, the following instrumentalities, viz: a lay, a running shuttle box carried permanently thereby and capable of movement thereon temporarily from its operative position in line with the race of the lay into its inoperative position out of line with the race of the lay, an independent spare shuttle feeder normally disconnected from said running shuttle box and stationary with relation to said moving lay during the regular running of the loom, means to move said feeder to meet the moving lay, and to put the said feeder into its operative position at the level of the race of the lay until the shuttle carried by said feeder is thrown onto the lay, substantially as described. 10th. In a loom, the following instrumentalities, viz: a lay, a running shuttle box mounted on and movable with said lay from its operative position into its inoperative position and vice versa, a spare shuttle feeder having its pivotal point betweeen the race of the lay and the fulcrum of the lay, means to maintain said feeder in its stationary inoperative position during the regular running of the loom, and means on the failure of the filling in said running box to place said feeder with its spare shuttle in its operative position at the level of the race of the lay instead of the said running shuttle box, substantially as set forth. 11th. In a loom, the following instrumentalities, viz: a lay, a running shuttle box carried permanently thereby and capable of movement thereon temporarily from its operative position in line with the race of the lay into its inoperative position out of line with the race of the lay, an independent spare shuttle feeder normally disconnected from said running shuttle box and held stationary with relation to said moving lay during the regular running of the loom, and means when the shuttle in said running box is to be changed to put said auxiliary shuttle feeder with its shuttle at the level of the race of the lay in place of the running shuttle, substantially as described. 12th. A lay provided with a reed and carrying a vertical aligning surface to align not only a shuttle as it is being put onto the lay as a spare shuttle but after it has been thrown once through the shed and becomes a running shuttle, combined with two separate binders or plates, one acting to force the spare shuttle for one pick against said aligning surface, the other thereafter coming into operation to press said shuttle, as it is thereafter used as the running shuttle, against said aligning surface, and means to change the positions of said binders or plates with relation to the said aligning surface in order that a spare shuttle may be supplied to the race of the lay in place of a runnig shuttle to be discharged from the race of the lay because of a fault in the filling contained therein, substantially as described. 13th. In a loom, the following instrumentalities, viz: a lay, a running shuttle box guided vertically and movable therewith from its operative into its inoperative position and vice versa, a spare shuttle feeder normally held stationary in its inoperative position during the regular movements of the lay in weaving, box shifting mechanism, and connections between said shifting mechanism and said running shuttle box and spare shuttle feeder to automatically and simultaneously raise and lower said running shuttle box and actuate said spare shuttle feeder, substantially as described. 14th. In a loom, the following instrumentalities, viz:—a lay, a running shuttle box vertically movable thereon from its operative into its inoperative position and vice versâ, a spare shuttle feeder normally held stationary in its inoperative position during the regular movements of the lay in weaving, box shifting mechanism, and connections between said shifting mechanism and said running shuttle box and spare shuttle feeder, to automatically and simultaneously raise and lower said running shuttle box and spare shuttle feeder, and means to effect the locking of said spare shuttle feeder to the lay when said feeder is in its operative position, substantially as described. 15th. In a loom, the following instrumentalities, viz:—a lay, an aligning wall carried thereby, a running shuttle box movable in said lay and open at one side for the passage laterally therethrough of a failed shuttle, a failed shuttle receiver, a spare shuttle feeder normally held in

inoperative position, box shifting mechanism, and connections between said shifting mechanism and said running shuttle box and spare shuttle feeder, to automatically and simultaneously raise and lower said running shuttle box and spare shuttle feeder, and means to keep together said running shuttle box and spare shuttle feeder when in their elevated position, substantially as described. 16th. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box mounted therein, a box rod operatively connected with said running shuttle box, a spare shuttle feeder pivoted on or with relation to said box rod and normally held in its inoperative position, and means to lift said running shuttle box and spare shuttle feeder in unison after failure of the filling in the shuttle of the running shuttle box, substantially as described. 17th. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box vertically movable with relation to said lay from its operative into its inoperative position, and vice versâ, said shuttle box having one side open for the discharge therethrough laterally of its shuttle, a box rod connected with said running shuttle box, a spare shuttle feeder pivoted on or with relation to said box rod and normally held in its inoperative position stationary with relation to the lay, means to move said running shuttle box and spare shuttle feeder in unison for the discharge of the shuttle from the running shuttle box, substantially as described. 18th. A spare shuttle feeder composed of a pivoted lever having at its top a shelf or carrier and provided at one edge with a binder, combined with an inclined surface or cam to cause the movement of said lever and shuttle feeder toward the lay, substantially as described. 19th. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box mounted therein, a box rod operatively connected with said running shuttle box, a spare shuttle feeder consisting of a lever pivoted on or with relation to said box rod, and having a shelf or carrier, said spare shuttle feeder being normally held in its inoperative position, combined with means to lift said running shuttle box and with it said spare shuttle feeder, and means to move said spare shuttle feeder toward the lay as the box rod rises, substantially as described. 20th. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box mounted therein, a box rod operatively connected with said running shuttle box, a lever pivoted on or with relation to said box rod, and having a spare shuttle feeder normally held in its inoperative position, combined with means to lift said running shuttle box and move said feeder toward said advancing lay as the box rod rises, and means to lock said feeder to said lay and retain it there while the spare shuttle carried by it is put onto the lay, substantially as described. 21st. A vibrating lay, a spare shuttle feeder made as a lever provided at one edge with a binder, said lever being pivoted at or near the axis of motion of the lay, and means on the failure of the filling in the shed to put said feeder into its operative position at the lever of the race of the lay instead of the failed shuttle removed from said race, and means to hold firmly together said lay and shuttle feeder while in the movement of the lay, the spare shuttle is being thrown from the end of the lay across the same, and through the shed the spare shuttle feeder being thereafter put into its inoperative position, substantially as described. 22nd. In a loom, the following instrumentalities, viz :—a lay, an aligning wall carried by the lay, a running shuttle box vertically movable with relation to said lay from its operative into its inoperative position, and vice versa, said running shuttle box being open at one side for the passage therethrough laterally of its shuttle, a binder pivoted on and carried by said running shuttle box, a box rod connected with said running shuttle box, a spare shuttle feeder pivoted on or with relation to said box rod and normally held in its inoperative position stationary with relation to the lay, means to lift said running shuttle box and spare shuttle feeder in unison after failure of the filling to effect the changing of the shuttle in the running shuttle box, substantially as described. 23rd. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box carried thereby, a box rod connected to said running shuttle box, a shuttle feeding device carried by a lever, means to hold said shuttle feeding device stationary in its inoperative position while the running shuttle box in its operative position moves with the lay, a box lever located at the loom side, means to move it intermittingly to raise said box rod and the shuttle feeding device together, and means to lock the shuttle feeder to said lay when said feeder is in its operative position, substantially as described. 24th. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box, a box rod and two studs movable with it, a spare shuttle feeding device pivoted on one of said studs, a link connected to the other of said studs, a box lever connected with said link, and means to operate said box lever to raise and lower said box rod, substantially as described. 25th. In a loom the following instrumentalities :—a lay, a running shuttle box carried thereby an normally in its operative position at the level of the race of the lay, a spare shuttle feeder normally held stationary in its inoperative position during the regular operations of the loom, shuttle box shifting mechanism, devices actuated thereby to put the running shuttle box in its inoperative position and the spare shuttle feeder into its operative position at the level of the race of the lay, means to automatically start said shuttle box shifting mechanism on the failure of the filling in the shed to move said running shuttle box into its inoperative position, said spare shuttle feeder being moved in unison with the lay while the spare shuttle carried by it is put onto the race of the lay, substantially as described. 26th. In a loom the following instrumentalities, viz :—a shuttle box, its rod shuttle box shifting mechanism, a spare shuttle feeding device pivoted at or near the centre of motion of the lay and normally held in its inoperative position, combined with a filling fork, and means between it and said shuttle box shifting mechanism to start the same automatically on the failure of the filling in the shed, to lift said box rod and put the spare shuttle feeder at the level of the race of the lay and leave the spare shuttle on the lay, substantially as described. 27th. The guide for the filling fork slide, a filling fork slide therein carrying a filling fork, a filling fork slide operating device having a heel to co-operate with and be guided by the guide for said filling fork slide, and having a projection to engage the heel of the filling fork, combined with means to actuate said operating device, substantially as described. 28th. A filling fork operating device consisting of a sliding bar having an adjustable end piece, and means to actuate said bar, combined with a filling fork having a tail piece, and a slide or carrier on which said fork is pivoted, the adjustment of said end piece on said bar determining the position of said end piece with relation to the tail piece of the filling fork when not tipped, substantially as described. 29th. A filling fork operating device having its free end shaped to engage the tail of a filling fork and having two projections, said projections acting to prevent sideways and up and down movement of said operating device combined with a filling fork, the slidebar or carrier on which it is mounted, and a cam to move said operating device, substantially as described. 30th. A filling fork guideway, a filling fork slide or carrier therein provided with a filling fork, a lay, a running shuttle box, shifting shuttle box mechanism normally at rest while the filling is unbroken, connections between said filling fork slide or carrier and said shifting shuttle box mechanism to start the same to lift the running shuttle box, combined with a shaft, a cam thereon, and suitable means actuated thereby to engage said filling fork, move it and its slide or carrier on the failure of the filling in the said running shuttle box, said cam being shaped to cause the said filling fork to be held pressed back during the next succeeding forward movement of the lay while the running shuttle box is being lifted, and permitting the said filling fork to come forward again into its normal position at the second back stroke of the lay following that forward stroke at which the said filling fork was first moved, the return of said filling fork into its normal position preventing the movement of the shifting shuttle box mechanism for more than one complete rotation and leaving the running shuttle box in its inoperative position, substantially as described. 31st. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box, a spare shuttle feeder, shuttle box shifting mechanism, means to move it to raise said running shuttle box and actuate said spare shuttle feeder, a filling fork, means between it and said shuttle box shifting mechanism to actuate it and move the said shuttle box and shuttle feeder, putting the former into its inoperative position and the latter into its operative position, combined with means to engage said filling fork, move it and its slide on the failure of the filling in the running shuttle box, said means holding said filling fork pressed back during the next succeeding forward movement of the lay while said running shuttle box is being lifted and the spare shuttle feeder is being put into its operative position, said means permitting said filling fork to come forward again into its normal position at the second back stroke of the lay following the forward stroke at which the said filling work was first moved on the failure of the filling, the return of said filling fork into normal position, preventing the movement of the shifting shuttle box mechanism for more than one complete rotation, the final semi-rotation of said shifting shuttle box mechanism leaving the running shuttle box in its operative and the spare shuttle feeder in its inoperative position, substantially as described. 32nd. In a loom, a continuously rotating gear having a plurality of series of teeth, a shuttle box shifting lever, a shaft having a crank to operate said lever, a bearing for said shaft, a mutilated toothed gear fixed to said shaft, a co-operating sliding fork or gear having a tooth to stand in or to be withdrawn from a space in said mutilated gear, a filling fork, and means between it and said sliding fork or gear to move its tooth into the space of said mutilated gear when said gear is to be rotated, and means to effect the reverse movement of said sliding fork or gear to remove its tooth from said space when said mutilated gear is to be left at rest, substantially as described. 33rd. The lay having an attached finger, and a spare shuttle feeder, combined with means to actuate said feeder and cause it it to be locked temporarily by said finger to the lay, substantially as described. 34th. In a loom, the following instrumentalities, viz :—a lay, a running shuttle box normally occupying its operative position at one end of the lay to receive a running shuttle in the ordinary operation of the loom, a filling fork and its carrier, a spare shuttle feeder, it normally occupying an inoperative position, and means controlled as to its time of operation by the filling fork carrier to place the running shuttle box in its inoperative position to have its shuttle discharged therefrom, and means to place the spare shuttle feeder with its shuttle in operative position to supply said shuttle to the lay, substantially as described. 35th. A lay, means to move it, a running shuttle box carried by and movable on said lay from its operative into its inoperative position and vice versâ, a spare shuttle feeder normally stationary apart from the lay in inoperative position a connecting shifting lever and operating devices therefor, combined with means to lock said spare shuttle feeded to the lay in its operative position and keep it locked in place with the moving lay while the suitable in said shuttle feeder is thrown therefrom onto the lay, substantially as described.

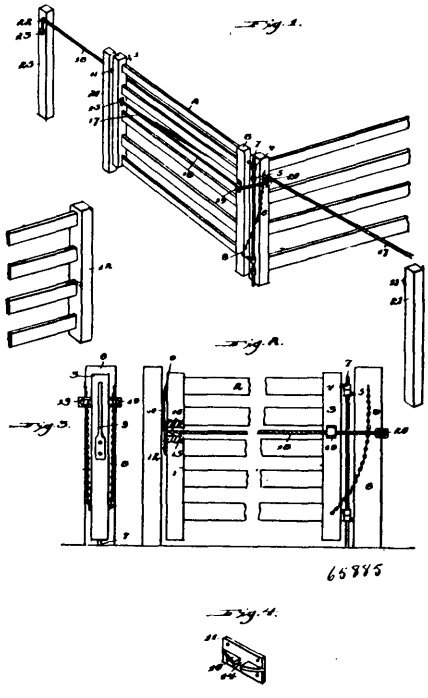
36th. In a loom, a continuously rotating gear having a plurality of series of teeth, a shuttle box shifting lever, a shaft having a crank, a bearing for said shaft, a mutilated gear fixed to said shaft, a co-operating sliding fork or gear having a tooth to stand in or be withdrawn from a space in said mutilated gear, a filling fork, and means between it and said sliding fork or gear to move its tooth into the space of said mutilated gear when said gear is to be rotated, substantially as described. 37th. A lay, means to move it, a shuttle feeder normally stationary in its inoperative position apart from the lay and free to be swung about a pivot below the raceway of the lay near its fulcrum and means to put said shuttle feeder in its operative position with the moving lay, and locking means to lock said shuttle feeder temporarily with and to move with the lay, substantially as described. 38th In a loom, the following instrumentalities, viz: a lay having a reed, and a shuttle aligning surface occupying a position substantially parallel with the vertical plane occupied by the faces of the dents of the reed, a running shuttle box open at its rear side next the said aligning surface to enable one side of the shuttle being thrown from said box to be borne against said aligning surface, means to throw the shuttle from said shuttle box, means to move said shuttle box vertically with relation to the raceway of said lay, and with it, its shuttle from contact with said aligning surface, to thereby enable said shuttle to escape laterally from said running shuttle box, substantially as described. 39th. In a loom, the following instrumentalities, viz: a lay having a reed and a shuttle aligning surface occupying a position substantially parallel with the vertical plane occupied by the faces of the dents of the reed, a running shuttle box having at one side a binder and having its other side open to enable one side of the shuttle being thrown from said box to be borne against said aligning surface, means to throw the shuttle from said shuttle box, means to move said shuttle box vertically with relation to the raceway of said lay to remove its shuttle from contact with said aligning surface, to thereby enable said shuttle to escape laterally from said running shuttle box, substantially as described. 40th. In a loom, the following instrumentalities, viz: a lay having a reed, and a shuttle aligning surface occupying a position substantially parallel with the vertical plane occupied by the faces of the dents of the reed, a running shuttle box open at its rear side next the said aligning surface to enable one side of the shuttle being thrown from said box to be borne against said aligning surface, means to throw the shuttle from said shuttle box, means to move said shuttle box vertically with relation to the raceway of said lay and with it the failed shuttle from its contact with said aligning surface to thereby enable said failed shuttle to escape laterally from said running shuttle box, a spare shuttle feeder detached from the running shuttle box and normally held in a stationary inoperative position while the loom is running regularly and weaving is being done by the shuttle in the running shuttle box, and means on the failure of the filling in the shuttle of the running shuttle box to put said spare shuttle feeder at the level of the race of the lay and against said aligning surface, that its spare shuttle may be put onto the race of the lay in place of the failed shuttle then to be discharged. 41st. In a loom, the combination with a lay, of a running shuttle box open at its rear side next said guideway, to enable the free passage of the shuttle through said open side, combined with means to move said running shuttle box on said lay vertically, to expose its open rear side for the discharge from said shuttle box of the shuttle therein at the next backward movement of the lay, substantially as described. 42nd. In a loom, the lay, an aligning face carried thereby, and a running shuttle box having attached to it at one side a binder, and open at its opposite side for the free discharge therefrom of a failed shuttle when said running shuttle box is put into its inoperative position, combined with means to move said running shuttle box into its inoperative position after the failure of the filling in the shuttle controlled by said box, substantially as described. 43rd. In a loom, shuttle box shifting mechanism, a spare shuttle feeder provided with a spare shuttle and normally occupying its inoperative position at or near the breast beam, a lay, a running shuttle box carried thereby and movable thereon vertically, it normally occupying its operative position at the level of the race of the lay, means to automatically operate said shuttle feeder on the failure of the filling in the shuttle of the running shuttle box, and means to insure the movement in unison of said shuttle feeder and said running shuttle box, while the running shuttle box is being put into its inoperative position and is being again returned into its operative position, substantially as described. 44th. A lay provided with a reed and having a vertical aligning surface to align a spare shuttle as the same is applied to the shuttle box end of the lay, combined with a spare shuttle feeder normally occupying a stationary inoperative position at the loom side, means to move said spare shuttle feeder into its operative position at the level of the race of the lay and press the spare shuttle against said aligning surface, and means to actuate said spare shuttle to throw it through the shed, and to then return said spare shuttle feeder into its inoperative position, substantially as described. 45th. In a loom, a lay, running shuttle box, its rod, and means to move it in the lay, combined with the lay rock shaft, and the rocker iron having a seat for the picker shoe and provided between the said seat and the loom side with a guide extended below said seat to receive and guide the end of the rod carrying the said running shuttle box, substantially as described. 46th. In a loom, a lay, a running shuttle box, its rod, and means to move it in the lay, a spare shuttle feeder carried by a lever jointed to said shuttle box rod, combined with the lay rock shaft, the rocker connected thereto having a seat for the picker shoe and provided with a groove extended below said seat to receive and guide the lower end of said box rod, substantially as described. 47th. The lay provided with an inclined guide or finger extended toward the lay, a running shuttle box, its rod, a spare shuttle feeder presenting a lever having a notch or opening which is normally engaged by the inclined guide or finger connected with the loom side, means to move said running shuttle box and with it said shuttle feeder vertically in unison, and during such movement force the lever carrying the shuttle feeder from one onto the other of said fingers, the finger extended from the lay serving temporarily as a locking device to retain the shuttle feeder in its operative position at the lay, substantially as described. 48th. A lay having a vertidal slot in its raceway for the reception of a picker stick, and an aligning surface carried by said lay, a vertical picker stick movable in said slot, a running shuttle box, and a spare shuttle feeder, each having a plate or binder to press a shuttle against said aligning surface, said picker stick working freely in said slot to throw through the shed the shuttle acted upon by either of said plates or walls, substantially as described. 49th. A lay having an attached aligning plate and slotted vertically for the passage of a picker stick, a vertical picker stick, a plate or binder co-operating with one side of a shuttle to press it against said aligning wall, a rod operatively joined with said plate or wall, means to lift said rod and plate or wall to effect an open space opposite said aligning surface for an incoming spare shuttle, and a spare shuttle feeder to press a spare shuttle against said aligning wall, substantially as described. 50th. A running shuttle box composed of a slotted bottom plate, a front side wall having a top lip or flange, rods attached to said plate, and a lay having a plate to align the rear side of the shuttle in the said running shuttle box, combined with a shuttle box rod, and means to move it vertically from its operative into its inoperative position, the shuttle in said running box being permitted to escape from the open rear side of said running shuttle box when the latter is in its inoperative position, substantially as described. 51st. A lay, a picker stick to throw a running shuttle through the shed, a spare shuttle feeder pivoted below the race of the lay and containing a spare shuttle, and held normally stationary at or near the breast beam in its inoperative position during the regular operations of the loom, and means on the failure of filling in the running shuttle then on the lay to move said shuttle feeder from its inoperative into its operative position at the breast beam, and to then return said feeder into operative position, substantially as described. 52nd. A lay having an aligned surface carried by it, and located outside the reed at one end of the lay, a spare shuttle feeder pivoted below the level of the race of the lay and normally held in its stationary inoperative position at the loom side, means on the failure of the filling to cause said shuttle feeder to be moved to meet the lay, put the spare shuttle on the lay, press it against the aligning wall of the lay and cause said shuttle feeder to move backwardly about its pivot with the moving lay, while the spare shuttle is thrown therefrom onto the race of the lay, the lay thereafter acting to move the spare shuttle feeder forward and leave it in its stationary position, substantially as described. 53rd. A lay having an aligning surface carried by it and located outside the reed at one end of the lay, a spare shuttle feeder pivoted below the level of the race of the lay and normally held in its stationary inoperative position at the loom side, means on the failure of the filling to cause said shuttle feeder to be moved to meet the lay, put the spare shuttle on the lay, press it against the aligning wall of the lay and cause said shuttle feeder to move backwardly about its pivot with the moving lay, and means to lock the moving lay and spare shuttle feeder together while the spare shuttle is thrown therefrom onto the race of the lay, the lay thereafter acting to move the spare shuttle feeder forward and leave it in its stationary position, substantially as described.

No. 65,885. Gate. (*Barrière.*)

Stephen J. Klein, Pittsburg, Pennsylvania, U.S.A., 19th January, 1900; 6 years. (Filed 14th August, 1899.)

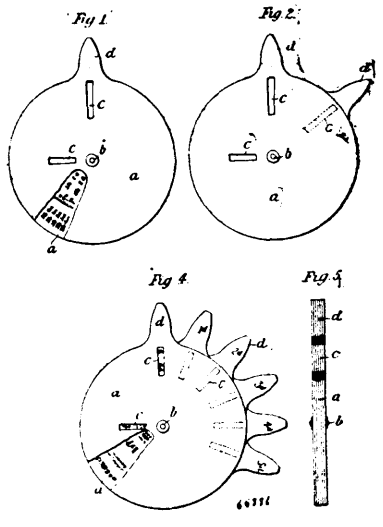
Claim.—In a gate of the class described, consisting of a gate proper hinged to a suitable supporting post, a spring catch secured to the front edge of the head post, a catch secured to a post and adapted to engage the spring catch, stay chains secured to each side of the gate and to the supporting post, keepers secured to each side of the post 3, pulleys secured to each side of the supporting post,

said head post being provided with an opening 15 into which projects an eyelet carried by the spring catch, operating cords secured



to said eyelet and passing through the pulleys secured to the supporting post, the operating cords passing through pulleys or keepers carried by posts arranged at right angles to the gate when closed, substantially as described.

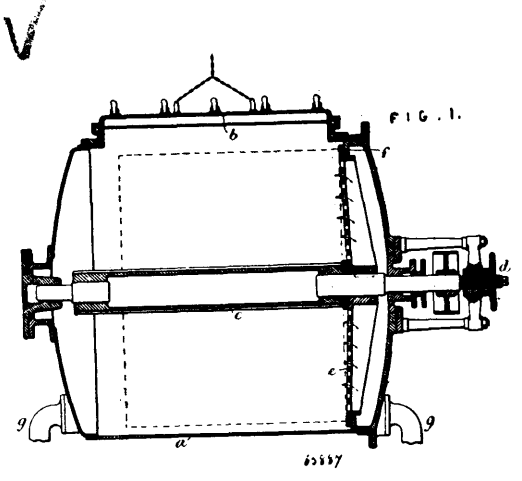
No. 65,886. Ready Reckoner. (*Carte de tarif.*)



Albert Edward Horlick Payne, London, England, 19th January, 1900; 6 years. (Filed 21st September, 1899.)

Claim.—1st. In a ready reckoner or kindred device, the combination of two superposed discs revoluble upon one another about a central connecting pivot, tabulated matter arranged in a circle around the inner face of each disc, and a view aperture in each disc whereby any portion of the tabulated matter of the other may be sighted and read off from either side of the device on relatively rotating the discs, substantially as set forth. 2nd. In a ready reckoner or kindred device, the combination of a series of superposed discs revolvable about and connected by a central pivot, tabulated matter arranged in a circle about the face or faces of the discs, view apertures in the discs adapted to coincide so that any portion of the tabulated matter of any disc may be sighted or read off through the coincident view apertures of the discs above, and peripheral indicating and manipulating tabs or projections on the discs, said tabs lying over one another when the view apertures coincide and thereby facilitating the placing and maintaining in coincidence of the view apertures through which any disc has to be sighted, substantially as set forth. 3rd. In a ready reckoner or kindred device, the combination of the series of superposed discs rotatable about a central pivot, the tables carried by the discs and a catch on the periphery of each disc engaging the adjacent disc, the sight apertures of interlocked discs being coincident, substantially as set forth. 4th. In a ready reckoner or kindred device the combination of the series of superposed discs rotatable about a central connecting pivot and provided with view apertures, the tables carried by the discs and the catches on the peripheries of the latter, said catches being adapted to interlock with one another and thus hold any adjacent discs against relative movement, the view apertures of interlocked discs being coincident, substantially as set forth. 5th. In a ready reckoner or kindred device, the combination of the table bearing discs connected by a central pivot, the view apertures therein and a catch carried on the periphery of each disc all of said catches engaging a common disc whereby each disc is independently locked against relative movement, the sight apertures of the different discs being coincident when the latter are locked by the catches aforesaid, so that when any disc is rotated for reference the necessary coincidence of the view aperatures of the discs above is assured, substantially as set forth.

No. 65,887. Treatment With Fluids of Textile Material. (*Traitement de matière textile avec des fluides.*)



William Mather, Manchester, England, 19th January, 1900; 6 years. (Filed 29th August, 1899.)

Claim.—1st. The herein described method of treating with fluids textile fabrics in open condition by rolling them on a suitable core, pressing one end of the roll against a perforated partition which separates the chamber containing the roll into two compartments, and forcing fluid from the one compartment to the other, thus causing it to pass through and between the convolutions of the roll in streams, substantially paralled to the axis of the roll. 2nd. For treating fabrics in open condition with fluids, apparatus comprising a vessel divided by a perforated partition into two compartments, a mandrel carrying a roll of fabric mounted to revolve and slide longitudinally in this vessel, an opening on the upper part of the vessel provided with a tightly closing door and pipes commicating with the two compartments, constructed and operating, substantially as shown and described. 3rd. For treating fabrics on trucks in a closed chamber or keir, the construction of the truck with double floor so as to form a compartment having on its upper side perforations in circular spaces on which are placed on their ends rolls of the fabric and communicating with the body of the keir through pump pipes and suitable valves for operating in the manner set forth, substantially as shown and described. 4th. For treading fabrics carried on trucks in a closed chamber or keir, the construction of truck with bearings for a horizontal mandrel, an end chamber covered by a perforated plate and communicating by a lateral opening with the circulating pipes, substantially as shown and described.

No. 65,888. Life Saving Device. (*Appareil à sauvetage.*)

Henry Aylmer, Richmond, Quebec, Canada, 19th January, 1900; 6 years. (Filed 24th July, 1899.)

Claim.—A marine life saving appliance, comprising a hollow belt forming a continuous air chamber, an engaging part secured

to one end of said belt and a compressed air receptacle secured to the opposite end thereof, having inlet passages leading into

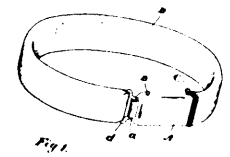
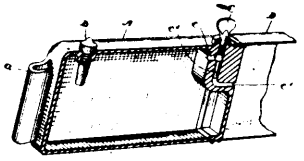


Fig 1.



65111

Fig 2.

the chamber, a valve for controlling the same and an engaging part secured to the end of the receptacle, as and for the purpose specified.

No. 65,889. Method of Heating Liquids by Electricity.
(Méthode de chauffer l'eau par l'électricité.)

Fig 1

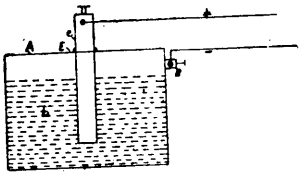
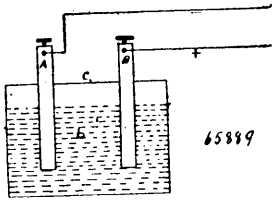


Fig II



65889

Joseph A. G. Trudeau, Ottawa, Ontario, Canada, 20th January, 1900; 6 years. (Filed 13th December, 1899.)

Claim.—The herein described method of heating a liquid in a containing vessel which consists in first mixing or chemically combining with the liquid a salt or salts of the character de cribed in order to decrease the electrical resistance of the liquid and afterwards passing a current of electricity between two electrodes in the containing vessel, one of which electrodes may be connected directly to the containing vessel, and through the liquid containing the salt or salts, substantially as and for the purposes set forth.

No. 65,890. Temporary Accounts Book.
(Livre de compte temporaire.)

Robert W. Hamilton, San Diego, California, U.S.A., 20th January, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. A temporary accounts book, comprising covers, a flexible accordion back connecting said covers, main leaves spaced apart, a flexible strip connecting adjacent main leaves at the rear edge to each other and to the flexible back, auxiliary leaves arranged between adjacent main leaves, a strip of flexible material connecting the rear edges of the auxiliary leaves and having a width substantially equal to that of the first named strip, so that the auxiliary leaves may spread apart as the space between them is filled, the two strips being connected together at convenient points along the centre, substantially as specified. 2nd. A temporary accounts book, comprising main leaves, spaced apart and connected at their back edges by flexible expanding connections, auxiliary leaves narrower than the main leaves and arranged between adjacent main leaves, the said auxiliary leaves being connected at the back edges with each other and with the flexible connections, for the main leaves, and index tabs on the main leaves, substantially as specified.

3rd. A temporary accounts book, comprising covers, a flexible accordion back connecting said covers, main leaves spaced apart,

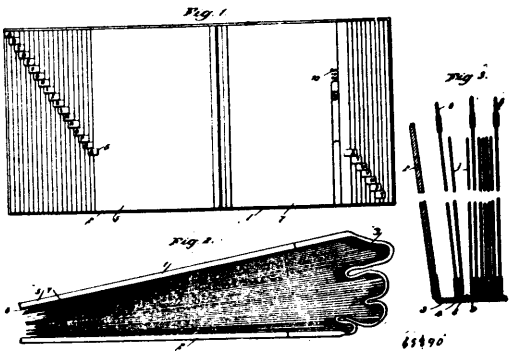


Fig 1. Fig 3. Fig 2. 65890

wide flexible strips connecting adjacent main leaves to each other and to the back, auxiliary leaves arranged between adjacent main leaves and narrower than the main leaves, flexible strips connecting together the back edges of the auxiliary leaves, the said strips being nearly as wide as the strip connecting the main leaves, so that the auxiliary leaves may spread apart as the space between them is filled, and means for fastening the strips connecting the auxiliary leaves to the strips connecting the main leaves at points along the centre, the said main leaves and auxiliary leaves being suitably indexed, substantially as specified.

No. 65,891. Voltaic Cell. (*Pile voltaïque.*)

Wilhelm Müller, Berlin, Prussia, 20th January, 1900; 6 years. (Filed 26th May, 1899.)

Claim.—In voltaic cells having dry plates which may be regenerated, the application of a coating of water glass to the surface of said plates, for the purpose of protecting them against the influence of the moisture of the air, substantially as hereinbefore set forth.

No. 65,892. Voltaic Cell. (*Pile voltaïque.*)

William Müller, Berlin, Prussia, 20th January, 1900; 6 years. (Filed 26th May, 1899.)

Claim.—The process of making a permanent electrical contact at the cover of voltaic cells, consisting in treating both the terminals on the cover, and the upper ends of the plates, with a solution of mercury, so that on putting on the cover, the two layers of mercury run together, effecting a permanent electrical connection, substantially as hereinbefore set forth.

No. 65,893. Storage Battery. (*Batterie secondaire.*)

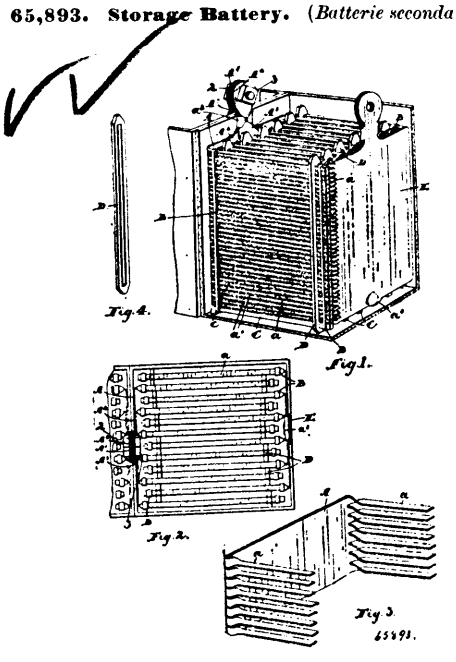
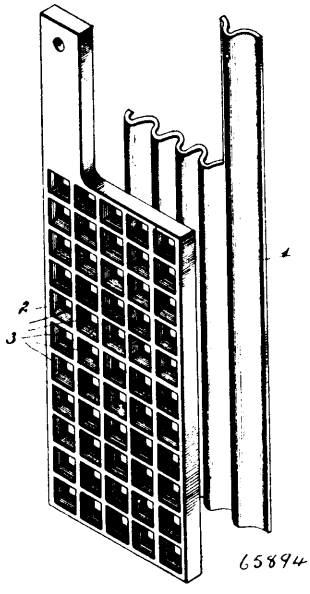


Fig 4. Fig 1. Fig 2. Fig 3. 65891.

William Joseph Still, Toronto, Ontario, Canada, 20th January, 1900; 6 years. (Filed 13th June, 1899.)

Claim.—1st. An electrode comprising a plate having a series of projections forming a comb and oxide located between such projections, as and for the purpose specified. 2nd. An electrode comprising a plate having a solid central portion and a series of comb-like fingers projecting therefrom and twisted so as to be at right angles to the plane of the plate and interposed oxide between the turned fingers, as and for the purpose specified. 3rd. An electrode comprising a plate having a central plane portion and side comb-like fingers bent so as to be at right angles to the main body of the plate and twisted at the connection to the plane portion, so that the planes of the fingers are horizontal, as and for the purpose specified. 4th. In a storage battery, a series of electrodes U-shaped in cross sectional form and fitting one within the other and comprising the side comb-like fingers or projections at right angles to the main portion of the plate and having the plane of the fingers or projections horizontal and interposed oxide between them, terminals at the top of the plane portion of the plate suitably connected together and a lip at the bottom of the plane portion of the outer plate, which straddles and embraces the bottom of the adjacent plates connected thereto as specified. 5th. The combination with the plates comprising the plane portion and comb-like portions having the fingers or teeth thereof twisted so as to be at right angles to the plane portion and the interposed oxide in the spaces between the fingers, of the slotted insulating bars, as and for the purpose specified. 6th. The combination with the plates comprising the plane portion, and comb-like portion having the fingers or teeth thereof twisted so as to be at right angles to the plane portion, the interposed oxide in the space between the fingers, of the slotted insulating bars and the elastic bands as specified. 7th. The combination with the plates comprising the plane portion, and the comb-like portion having the fingers or teeth thereof twisted so as to be at right angles to the plane portion, and the interposed oxide in the spaces between the fingers, of the slotted insulating bars and the bottom insulating bar forming a support for the fingers and provided with a bent end next the plane portion of the plate, as and for the purpose specified.

No. 65,894. Electrode. (*Electrode.*)



Gustavos Heidel, St. Louis, Missouri, U.S.A., 20th January, 1900; 6 years. (Filed 29th May, 1899.)

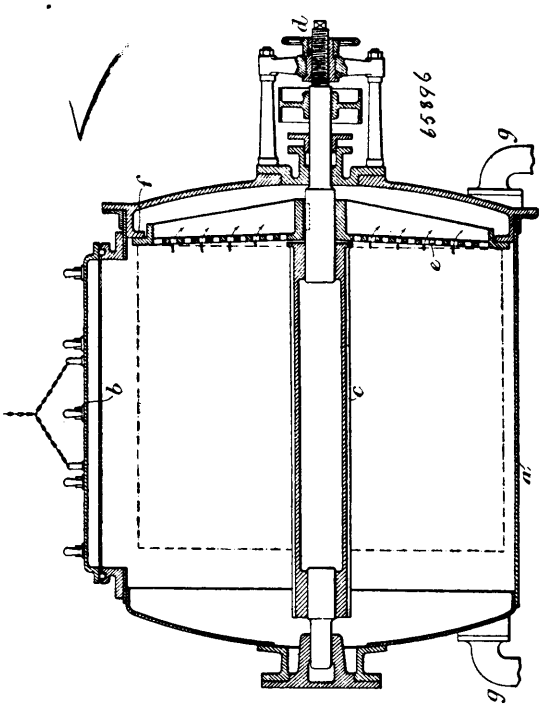
Claim.—1st. An electrode negative of grate form for storage batteries composed of aluminum. 2nd. An electrode negative of grate form composed of aluminum, used in conjunction with an electrode positive of corrugated form in a storage battery.

No. 65,895. Pneumatic Tire Repairing Composition.
(*Composition pour reparer les bandages pneumatiques.*)

Martin B. Grout, North Yakima, Washington, U.S.A., 20th January, 1900; 6 years. (Filed 2nd August, 1899.)

Claim.—1st. A composition of matter for use in repairing rubber goods, which consists of unvulcanized rubber, benzine, turpentine and collodion. 2nd. A composition of matter for use in repairing rubber goods, comprising stamp rubber 2½ pounds, benzine ½ gallon, turpentine ½ pint, collodion ½ pint, compounded in or about the proportions stated, and substantially as described

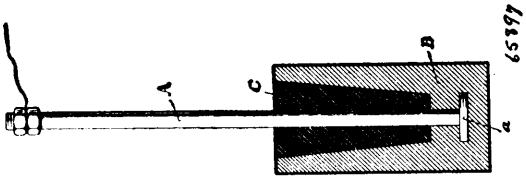
No. 65,896. Bleaching Process and Apparatus.
(*Procédé et appareil pour blanchir.*)



William Mather, Manchester, England, 20th January, 1900; 6 years. (Filed 29th August, 1899.)

Claim.—1st. The herein described process for continuously bleaching fabrics in open condition by rolling them in their full width on suitable cores, placing each roll in a closed vessel with its end against a perforated partition and forcing bleaching liquid lengthwise through the roll, then unrolling the fabric, souring it if necessary, and finally washing and drying it. 2nd. For treating a roll of fabric with bleaching liquid forced lengthwise through the roll, apparatus comprising a vessel divided by a perforated partition into two compartments, a mandrel carrying the roll of fabric mounted to revolve and slide longitudinally in the vessel, an opening at the upper part of the vessel provided with a tightly closed door, or two such openings and doors, and pipes putting the two compartments in communication through suitable pump and valves, substantially as described, with reference to Figs. 1, 2, 3, and 4. 3rd. Apparatus for souring or otherwise treating with liquid a continuous web of fabric in open condition, comprising guide and pressing rollers arranged in a tank of souring liquid, oscillating rolls for laying the fabric in zig-zag folds, a pair of inclined walls relatively adjustable, down which the folds descend, a stationary cylinder discharging liquid in jets upon the folds and a continuously travelling apron between which and the cylinder the folds are carried, substantially as described. 4th. Apparatus for washing a continuous web of fabric in open condition, comprising guide and pressing rollers by which the fabric is led in zig-zag course receiving on each side jets of water, substantially as described. 5th. The combined apparatus for continuously bleaching fabrics in open condition, comprising a number of vessels in which rolls of the fabric have bleaching liquid forced through them lengthwise, souring apparatus by which the fabric is saturated with acidulated water and allowed to soak in slowly moving zig-zag folds, washing apparatus and drying apparatus, substantially as described.

No. 65,897. Electrode. (*Electrode.*)

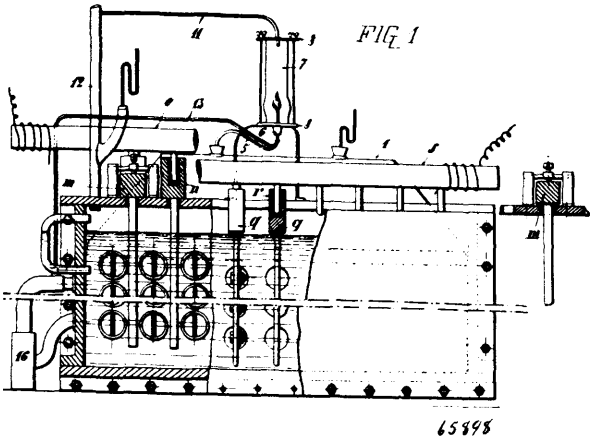


James D. Darling, Philadelphia, Pennsylvania, U.S.A., 20th January, 1900; 6 years. (Filed 17th April, 1899.)

Claim.—1st. The combination of a cup shaped zinc electrode, with a mass of solid zinc amalgam contained therein, substantially as

described. 2nd. In an electrode, the combination of a conducting rod, a zinc cup supported thereby, and a mass of solid zinc amalgam contained within the cup, substantially as described.

No. 65,898. Electrolysis of Salts in Solution.
(*Electrolyse de sel en solution.*)



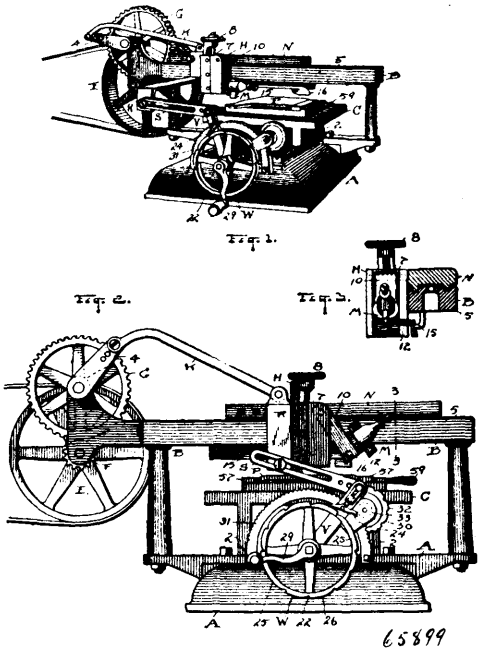
Antoine J. O. Chalandre, Louis J. B. A. Colas and Charles J. Gerard, all of Paris, France, 20th January, 1900; 6 years. (Filed 11th April, 1899.)

Claim.—1st. An electrolysing apparatus consisting of an internal compartment, hermetically closed except for the necessay connections, and traversed upon two oppositie faces by series of porous tubues of earthenware or other suitable material inclined to the horizontal, the extremities of which open into two compartments adjoining the first, these tubes forming upon the faces of the internal vessel, joints which are made tight by the method of fixing the cathodes within the tubes, the said fixing being effected by means of a stirrup traversed by a bolt fixed to the extremity of the cathode, which is rendered immovable by means of a stop arranged at its other extremity, the tightening of the nut of the bolt producing, by bearing upon the stirrup, the requisite compression for causing tightness between the substances forming the joints at the two extremities of the tube the anodes being suspended between the diaphragms in the inner compartment. 2nd. In combination with the electrolyser described above, and for the purpose of abviating secondrry reactions within the electrolyser, the combination of the different gases which are liberated in the anode and cathode compartments and their re-introduction thus combined into the electrolyser, and in particular in the case of the application for the electrolysis of chloride sodium, an apparatus capable of being combined with one or more electrolysers, consisting essentially of a dome or other suitable part for the reception of the hydrogen produced which then passes to a burner closed upon all sides which a portion of the chloride produced enters, the hydrochloric acid resulting from the combustion being introduced into the electroylser by any suitable means, the introduction of the hydrochloric acid being effected in a continuous manner which is capable of regulation automatically by the operation of the apparatus itself.

No. 65,899. Means of Producing Electrodes.
(*Moyen de produire les electrodes.*)

Theodore Arthur Willard, Cleveland, Ohio, U.S.A., 20th January' 1900. 6 years. (Filed 17th March, 1899.)

Claim.—1st. In a machine to develop leaves from the surface of metal plates, the table and means on the table to support and lock a flat plate, in combination with a sharp edged cutter having its cutting edge at an angle to the plane of the plate and gradually deepening from front to rear, and means to cause said cutter to operate on the plate at varying distances apart at fixed intervals, substantially as described. 2nd. A cutter for producing leafed battery plates having a cutting edge inclined downward from front to rear and a bearing surface on its bottom inclined laterally and an inclined top surface, substantially as described. 3rd. A cutter for producing battery electrodes from metallic plates, having a cutting edge at an inclination to a vertical plane and gradually sloping from its highest to its lowest cutting point and having a flat bottom bearing surface inclined laterally to ride on the plate and an inclined top surface at a different inclination from said bottom surface to turn the leaf, substantially as described. 4th. A leaf cutting tool for battery plates, having a flat bottom and an inclined top surface at an inclination to said bottom, in combination with a tool to even the edges of the leaves located within said recess, substantially as described. 5th. The combination of a leaf cutting tool having an inclined cutting edge and an inclined top surface, in combination with a leaf evening tool supported by the side of the said cutting tool and having its engaging portion above the said



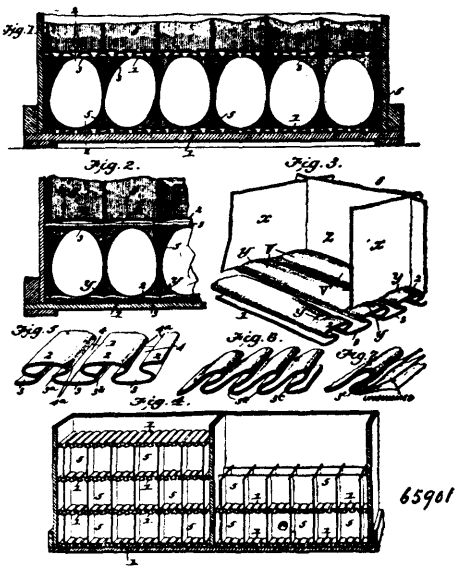
inclined top surface in position to even the edges of the leaves as they are cut, substantially as described. 6th. In a machine for making battery plates, a tool to shave the plate into thin leaves, in combination with a tool to even the edges of the leaves as they are cut, substantially as described.

No. 65,900. Storage Battery Plate.
(*Plaque de pile secondaire.*)

Carl F. P. Stendebach, Leipzig, Saxony, Germany, 20th January, 1900; 6 years. (Filed 23rd October, 1899.)

Claim.—1st. In a process for producing the active mass for storage batteries, the step which consists in adding saccharine substances to the mass before the same is pasted into the frame or pressed to a plate, substantially as described. 2nd. In a process for producing the active mass for storage batteries, the step which consists in adding to the mass before it is pasted in or pressed to form a plate, and after drying the plates in the air dipping the same in linseed oil in the manner and for the purpose, substantially as described.

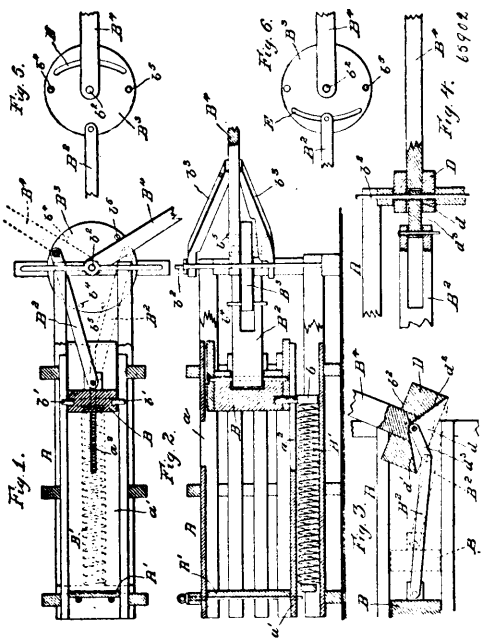
No. 65,901. Crate. (*Caisse à claire-voie.*)



Robert Isaac Stewart, Xenia, Ohio, U.S.A., 20th January, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. An improved shipping crate for eggs, comprising an external box, a series of horizontally disposed division members, each consisting of a cushioning body of stiff elastic material composed of independent flutes, ungummed layers held together without the use of glue or the like, said body having flutes or corrugations alternately arranged on opposite faces, said flutes or corrugations having the opposite edges bent inward toward each other, whereby to provide a contracted space on one face of the division member and a widening cushioning bearing surface on the opposite face of the said member, said division members being so arranged above the boxes that the bearing surfaces on one division member will oppose the contracted space of the next division member, and filler frames having division members relatively so disposed that one side of the divisional members will have their lower edges seat in the contracted portions of the cushioning members and their upper edges seated against the flat bearing surfaces of the other cushioning member, all being arranged substantially as shown and described, whereby the cushioning body or member will not injuriously affect the eggs. 2nd. A compartment crate for eggs, comprising a case and a cushioning division or partition therein composed of a plurality of thicknesses or layers of paper plaited to form cushioning corrugations, the several layers being held together without the use of glue or the like, whereby the crate will not injuriously affect the eggs shipped therein, substantially as set forth.

No. 65,902. Hay Press. *(Presse à foin.)*



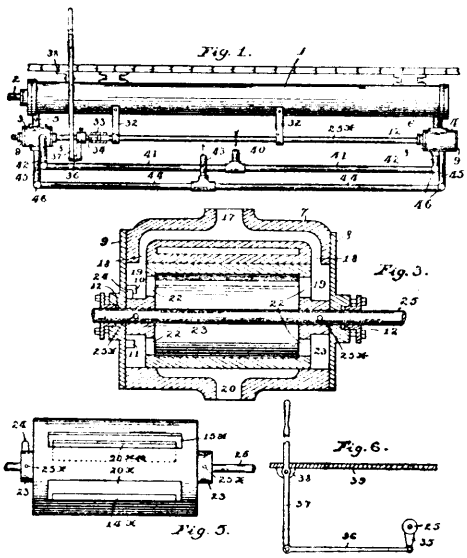
Arthemi Le Blanc, Little Cascapedia, Quebec, Canada, 20th January, 1900; 6 years. (Filed 2nd June, 1899.)

Claim.—1st. A hay press, comprising a suitable frame having an opening therein for the insertion of the hay, a presser block slidably mounted therein, a retracting spring operatively connected therewith, a presser bar pivotally connected to said presser block, an operating lever pivoted to said frame, and intermediate connections between said lever and said presser bar, substantially as described. 2nd. In a hay press, the combination with a suitable frame, of a presser block slidably mounted therein, a retracting spring connected with said presser block and said frame, a presser bar pivotally connected with said presser block, a disc rotatably mounted in said frame by means of a rod, a lever loosely mounted upon said rod and adapted to engage pins secured to said disc, and a pivotal connection between said presser bar and said disc, substantially as described.

No. 55,903. Valve. *(Soupape.)*

Randolph Gillette, Little Falls, Minnesota, U.S.A., 20th January, 1900; 6 years. (Filed 5th January, 1900.)

Claim.—1st. A rotary steam feed valve, comprising a casing having a cylindrical plug chamber with covered ends and a cylindrical rotary plug fitted therein with steam spaces between the ends of it, and the covers of the casing, said casing having at one side a steam inlet port with branches off through the walls of the casing and entering the plug chamber at two substantially opposite points, in another side a steam port adapted to connect with a steam cylinder and branching off through the walls of the casing into the steam spaces at both ends of the plug, and on still another side an exhaust port extending from the valve chamber to the exhaust pipe, the said plug being of a tubular or cylinder like construction, with steam passages in both ends and with two opposite



65903

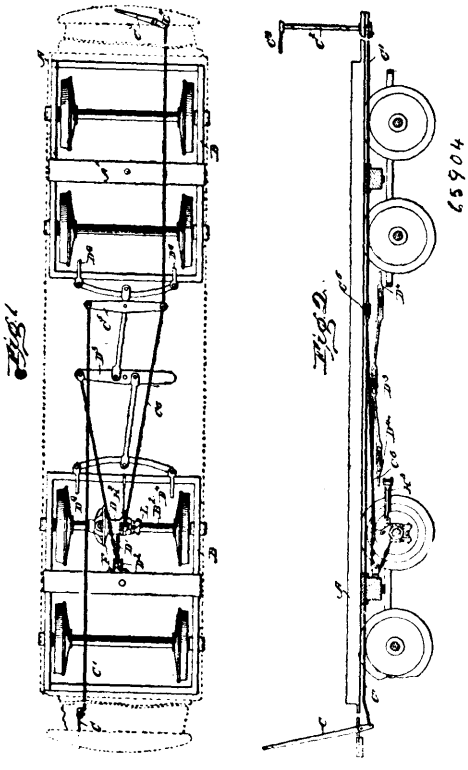
side apertures registering simultaneously with the two branches of the steam inlet, and having two opposite and larger side apertures, one of which is adapted to meet the exhaust port, and the other to relieve the plug from pressure opposite to the first named aperture, and a stem extending from said valve plug and suitable means for rotating or rocking the plug by the stem, substantially as and for the purpose set forth. 2nd. A rotary steam feed valve, comprising a casing having a cylindrical plug chamber with covered ends and a cylindrical rotary plug fitted therein with steam spaces between the ends of it, and the covers of the casing, said casing having at one side a steam inlet port which branches off through the walls of the casing and enters the plug chamber at two substantially opposite points, in another side a steam port adapted to connect with a steam cylinder and branching off through the walls of the casing into the steam spaces at both ends of the plug, and on still another side an exhaust port extending from the valve chamber to the exhaust pipe, the said plug being of a tubular or cylinder like construction, with steam passages in both ends and with two opposite side apertures registering simultaneously with the two branches of the steam inlet and having two opposite and larger side apertures, one of which is adapted to meet the exhaust port, and the other to relieve the plug from pressure opposite to the first named aperture, and a stem extending from said valve plug, and suitable means for rotating or rocking the plug by the stem, the various ports being so arranged relatively to each other that when the plug is in its ordinary shut-off position, or idle, the exhaust will be slightly open, substantially as and for the purpose set forth. 3rd. The combination with a steam feed cylinder, of two rotary feed valves communicating one with each end thereof, each of the valves comprising a casing having end covers, one of which is provided with two stops and a rotating or rocking plug having an arm plying between the stops on the cover, said plug and casing being provided with suitable ports and ducts arranged to conduct the steam into a cylinder when the plug is turned in one direction, and to conduct it from the cylinder when turned in the other direction, and to shut off all live steam from the valve when the plug is set at half stroke, and also to shut off both live steam and exhaust steam when turned in either direction beyond its active points, which are reached when the arm of the plug stops against either one of the stops, the stems of said valves being suitably connected with a hand lever turning the two valve plugs simultaneously, and having no other means of absolutely limiting its motion than the said stops and arms on the covers and plugs of the valves, substantially as and for the purposes set forth.

No. 65,904. Car Brake. *(Frein de chars.)*

Frederick Theilengerdes, Memphis, Tennessee, U.S.A., 20th January, 1900; 6 years. (Filed 5th January, 1900.)

Claim.—1st. The combination with a car axle, of a sleeve mounted to slide and revolve upon the axle, an encircling friction ring borne by said sleeve, a co-acting friction ring rigidly connected to the axle itself, an annular shield or flange interposed between the shaft and said rings to protect the latter from oil, and means for forcing one ring against the other. 2nd. The combination with a car axle, of a revoluble sliding drum sleeve upon the axle, an encircling friction ring borne by the sleeve in a plane between its ends, a co-acting friction ring rigidly connected to the shaft by arms extending over

the adjacent portion of the sleeve at some distance without the latter, an annular flange projecting outward from that portion of



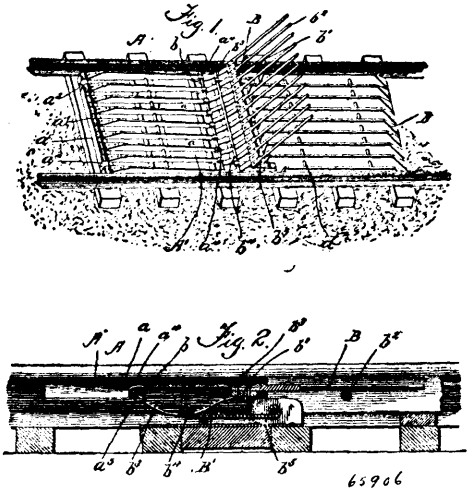
the sleeve within the arms, and means for forcibly sliding the sleeve upon the axle. 3rd. The combination with a car axle, of a sliding, revoluble drum sleeve upon the axle, an encircling friction ring borne by the sleeve in a plane between its ends and provided with annular flanges projecting, parallel to the axle, at the margins, respectively, of the ring, a second friction ring fitting between said flanges and supported from the axle itself by rigid arms projecting from the axle over the adjacent end portion of the sleeve, an annular flange upon said end portion and means for forcibly sliding the sleeve upon the axle. 4th. The combination with an axle, of a drum sleeve mounted to slide and rotate upon the same and having a circumferential flange in a plane between its ends, a friction ring supported from the sleeve at some distance from said end, a second ring rigidly supported, alongside the first, from a part of the axle beyond said end of the drum sleeve, and means for forcing the drum sleeve and its ring toward the rigidly supported ring. 5th. The combination with a car axle, of a friction clutch mounted upon the axle and having a sliding drum sleeve member, a collar upon the axle, a saddle interposed between said member and collar, a lever pivoted upon the saddle to swing parallel to the axle and force said member toward its companion, a second lever swinging transversely with reference to the axle and having a lateral cam face working against the saddle to move the lever bodily parallel to the axle, and a bolt or link connecting the second lever to the free end of the first. 6th. The combination with the axle, the friction clutch thereon and the sleeve fixed to the axle at a short distance from the clutch, of the forked saddle between the clutch and sleeve, the forked lever passing over the saddle, a removable oil reservoir between the branches of the saddle, a wick raising oil therefrom to the axle, and a removable fulcrum rod passing through the branches of both saddle and lever and supporting said reservoir. 7th. The combination with the axle, of the friction clutch having one member sliding thereon, the saddle held against lateral movement by connection with the truck frame and resting upon the axle at the end of said member, the forked lever pivoted to the saddle and acting to slide said member, the bolt sliding in the upper portion of the saddle and engaging the free end of said lever, and a second lever revolubly mounted on said bolt and provided with cam faces acting against the saddle and by reaction moving the bolt longitudinally and thus actuating the forked lever. 8th. The combination with a car axle, of a friction ring of larger internal diameter encircling the axle and rigidly supported therefrom by arms at one side of its own plane, a drum sleeve mounted to slide and rotate upon the axle and provided with an annular, internal recess forming an oil reservoir through which the axle passes, a second friction ring co-acting with the first supported in an analogous manner from said drum sleeve, and an external, annular flange projecting from said drum sleeve between the planes of the supports for the two friction rings.

No. 65,905. Chemical Electrical Excitants.
(Excitant chimique électrique.)

John Post, New York City, New York, U.S.A., 20th January, 1900; 6 years. (Filed 2nd November, 1899.)

Claim.—1st. An electrical excitant composed of charcoal, glucose, hydrochloric acid, sucrose and water, as herein specified. 2nd. An electrical excitant composed of pulverized charcoal, glucose, hydrochloric acid and sucrose, in approximately equal parts, and water, 98 per cent, substantially as specified.

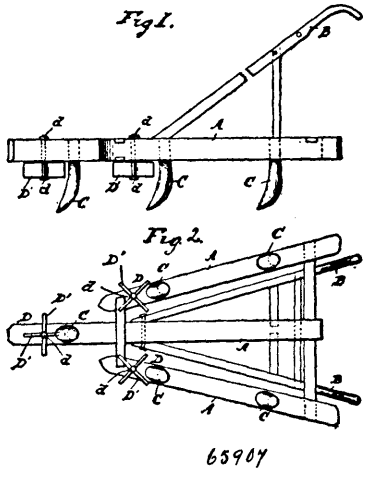
No. 65,906. Cattle Guard. *(Garde-bétail.)*



William Evans and Neil McArthur, both of Sturgeon Falls, Ontario, Canada, 20th January, 1900; 6 years. (Filed 4th January, 1900.)

Claim.—1st. A cattle guard, comprising a pivoted platform, a guard adapted to be elevated by the movement of the platform, and straps loosely pivoted to a suitable support and pivotally connected with said guard, substantially as described. 2nd. A cattle guard, comprising a platform pivoted at its rear end to a suitable support and having at its forward end curved fingers, a guard having a curved rock plate at its rear end adapted to be operatively engaged by said curved fingers, a rod secured to the lower portion of said rock plate, straps loosely secured to a suitable support and pivotally connected to said rod, substantially as described.

No. 65,907. Cultivator. *(Cultivateur.)*

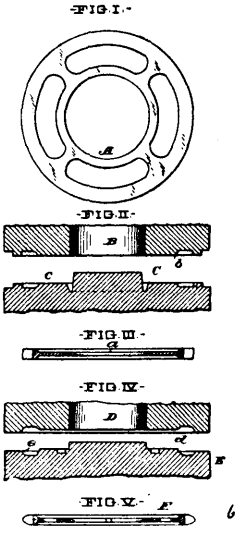


Albert Henry Shippee, Killingly, Connecticut, U.S.A., 20th January, 1900; 6 years. (Filed 3rd January, 1900.)

Claim.—1st. The combination with a cultivator comprising a frame having the downwardly projecting vertical spindles, and the teeth C, just in rear of said spindles, the rotary scrapers D, loosely mounted upon said spindles in front of the respective cultivator teeth and adapted to revolve automatically by contact with clods of sod while the cultivator is being operated, said scrapers respectively comprising a plurality of radially projecting blades extending on a

horizontal plane, substantially as shown and described. 2nd. The combination with a cultivator, comprising a frame having the downwardly projecting vertical spindles *d*, and the teeth C just in rear of said spindles, of the rotary scrapers D, loosely mounted upon said spindles, said scrapers respectively comprising a plurality of radially projecting blades extending on a horizontal plane, and the relative arrangement and construction being such that the outer ends of said horizontal blades swing within the front face of the top portion of the teeth, substantially as shown and described.

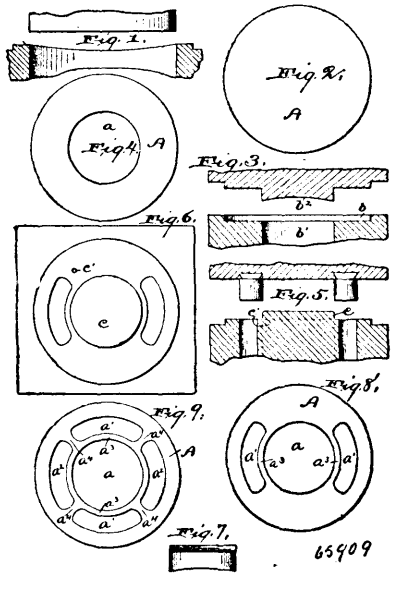
No. 65,908. Sprocket Wheel. *(Roue à alluchon.)*



The Parish and Bingham Company, assignee of Neff Edwin Parish, all of Cleveland, Ohio, U.S.A., 22nd January, 1900; 6 years (Filed 18th December, 1899.)

Claim.—1st. A steel sprocket wheel, having its teeth surface hardened, the interior of said teeth being of tough metal and having the carbon in the web portion mainly in the hardening condition, substantially as set forth. 2nd. A steel sprocket wheel having the opposite side faces of its teeth surface hardened and having the metal of the peripheral faces of the teeth less hard than said face, substantially as set forth.

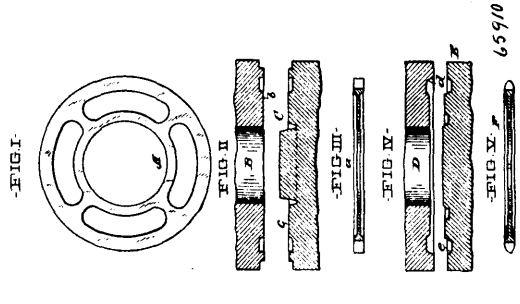
No. 65,909. Sprocket Wheel Making Apparatus.
(Appareil à faire les roues à alluchons.)



The Parish and Bingham Company, assignee of Neff Edwin Parish, all of Cleveland, Ohio, U.S.A., 22nd January, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. A pair of co-operating dies for making metal wheels, one of which dies has a plain annular surface, and a groove depressed within such surface, the other of which dies has a complementary plain annular surface, and means for directing said dies into proper presentation to each other, whereby said complementary annular surfaces are adapted to compress between them a wheel blank, substantially as set forth. 2nd. A pair of co-operating dies for making metal wheels, one of said dies having a plain annular surface, and a groove depressed between said surface, the other of said dies having a similar plain annular surface, one of said dies having a pilot, and the other a co-operating hole, substantially as set forth. 3rd. A pair of co-operating dies for making sheet metal wheels, one of said dies having a plain annular surface, and a groove cut within the inner periphery of said surface, said die also having a raised pilot, the other die having a complementary plain annular surface and an opening in which said pilot may enter, substantially as set forth. 4th. A pair of co-operating dies for making metal wheels, one of said dies having a plain annular surface, a bevelled surface slantingly depressed outwardly from said plain annular surface, a second plain surface surrounding said bevelled surface and depressed below the level of said first plain surface, and having a raised annular flange lying outside of said second plain surface, the other die having a complimentary plain surface, a complementary bevelled surface, a second complementary plain surface and a complementary outer annular flange, substantially as set forth. 5th. A pair of co-operating dies for making metal wheels, one of said dies having an inner annular groove, a raised plain annular surface without said groove, a raised annular flange without said annular surface, a depressed annular surface and a bevelled annular surface connecting said flange and said plain annular surface, said second die having an inner plain annular surface, and raised flange depressed plain annular, and annular bevelled surfaces complementary to the like respective surfaces of said first die, substantially as set forth. 6th. A pair of co-operating dies for use in manufacture of sprocket wheels which have web and rim portions, one of said dies, having an annular surface adapted to fit snugly within the web of a sprocket wheel, and having blocks adapted to fit the space between the web and rim of the sprocket, and having an outer curved wall, substantially as set forth. 7th. A pair of co-operating dies for use in the manufacture of sprocket wheels which have web and rim portions, one of said dies, having an inner cylindrical surface, segmental blocks, and an outer curved wall, the other of said dies having an inner plain annular surface and an outer curved wall, substantially as set forth. 8th. A pair of co-operating dies for use in the manufacture of sprocket wheels which have web and rim portions, one of said dies having a central pilot, an inner cylindrical plain surface intermediate block surface and an outer curved wall, the other of said dies having an inner pilot opening an outer curved wall and an intermediate plain surface, substantially as set forth. 9th. A pair of co-operating dies for use in the manufacture of sprocket wheels which have web and rim portions, one of said dies having an inner annular plain surface adapted to block the centre of the web, having block surfaces adapted to fit the space between web and rim, having a depressed bevelled surface outside of said block surface, having a depressed plain surface outside of said bevelled surface, and having a curved surface outside of said last-mentioned plain surface, the other of said dies having surfaces similar to the three last-mentioned surfaces, and having an inner plain surface, substantially as set forth. 10th. A pair of co-operating dies for the use in the manufacture of sprocket wheels which have web and rim portions, one of said dies having a raised pilot, an outer curved surface, a cylindrical surface adjacent to said pilot block surfaces outside of said cylindrical surface and bevelled and plain surfaces intermediate of said block surface and curved surface, the other of said dies provided with a central pilot opening, the inner plain surface, a bevelled surface ouside the said plain surface, a depressed plain surface outside of said bevelled surface and an outer curved surface, substantially as set forth.

No. 65,910. Sprocket Wheel Manufacture.
(Fabrication de roues à alluchons.)



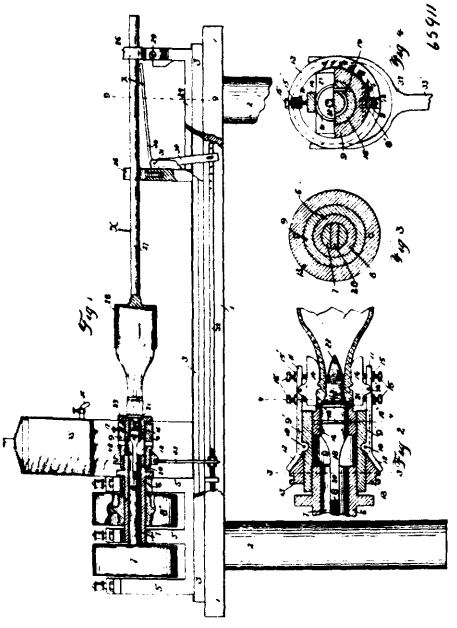
The Parish and Bingham Company, asssignee of Neff Edwin Parish, all of Cleveland, Ohio, U.S.A., 22nd January, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—Steps in a process for making steel sprocket wheels, consisting in cold pressing the rim portion whereby oxidation of the metal is prevented, and cold pressing the web portion to a greater

degree than the rim portion whereby hardening carbon is proportionally increased in said web portion above the amount of hardening carbon in the rim portion, substantially as set forth.

No. 65,911. Glassware Finishing Machine.

(Machine à finnir la verrerie.)



Charles Leng and Christian F. Leng, both of Pittsburg, Pennsylvania, U.S.A., 22nd January, 1900; 6 years. (Filed 5th September, 1899.)

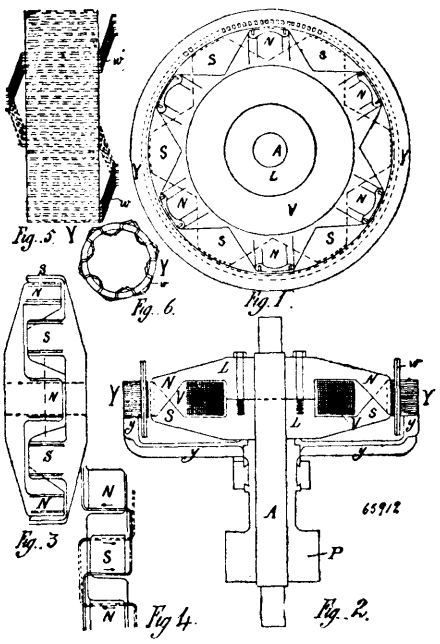
Claim.—1st. An improved machine for finishing hollow glassware, comprising in and outer dies or formers, adjustable longitudinally with relation to each other, and actuating mechanism for the dies, substantially as shown and described. 2nd. An improved machine for finishing hollow glassware, comprising inner and outer dies or formers, the inner die or former being adjustable longitudinally with relation to the outer dies or formers, and actuating mechanism substantially as shown and described. 3rd. An improved machine for finishing hollow glassware, comprising a chuck, outer finishing dies carried thereby, an interior finishing die or former, a holder for the latter in which it rotates and is held against longitudinal movement, said holder being adjustable longitudinally with relation to the chuck and rotatable therewith, and mechanism for independently actuating the chuck and interior die, substantially as shown and described. 4th. An improved machine for finishing hollow glass articles, comprising a chuck, exterior finishing dies carried by the chuck, a bushing adjustable longitudinally in the chuck and rotatable therewith, a shaft rotatable in the bushing but secured therein against longitudinal movement, an interior die or former carried by the shaft, and actuating mechanism, substantially as shown and described. 5th. An improved machine for finishing glass articles, comprising a chuck, dies carried thereby for exterior finishing, an interior die or former rotatable in the chuck, an end finishing plate at the inner ends of the dies, said plate being rigid with the chuck, and actuating means, substantially as shown and described. 6th. An improved machine for finishing hollow glass articles, comprising a chuck, exterior finishing dies carried thereby having opposite position, a bushing adjustable longitudinally between the dies and in the chuck, and secured in the latter, the outer end of the bushing being formed with an end facing plate having substantially the same width as the space between the dies, the length of the plate being greater than its width and extending at right angles to the dies, an interior die or former rotatably secured in the bushing and projecting beyond the end finishing plate, and actuating mechanism, substantially as shown and described. 7th. An improved machine for finishing hollow glass articles, comprising two shafts, one within the other, means for actuating the shafts exterior finishing dies operatively carried by the outer shaft, a longitudinally adjustable shaft carrying an interior die or former, said shaft having elongated slidable union with the first mentioned inner shaft, and means for securing said movable shaft in desired longitudinal adjustment, substantially as shown and described. 7th. An improved machine for finishing hollow glass articles comprising outer shaft 6 and inner shaft 7, the latter slotted at 8, actuating mechanism for the shafts, exterior forming dies operatively carried by the outer shaft, a shaft carrying an interior former or die, said shaft being flattened at one end to enter slot 8 of shaft 7, and means for securing said flattened shaft in desired longitudinal adjustment, substantially as shown and described. 9th. The combination of a chuck, arms pivoted between their ends to the exterior of the chuck, inwardly facing dies carried by the outer ends of the arms, the inner ends of the arms being outwardly deflected, and a ring movable behind said deflected arm ends to force them outward and the dies inward, substantially as shown and described. 10th. The combination of the die supports, dies pivoted thereto, and set screws adapted to adjust the dies on their pivots and hold them rigid with their supports, substantially as shown and described. 11th. An improved machine for finishing hollow glass articles, comprising a longitudinally divided interior die or former, means for spreading apart the die members to impart desired shape to the interior of the article, and die rotation mechanism, substantially as shown and described. 12th. An improved machine for finishing hollow glass articles, comprising a longitudinally divided interior die or former, means for spreading apart the die members to shape the interior of the article, dies or formers for the exterior of the article, and actuating mechanism for the dies, substantially as shown and described. 13th. An improved machine for finishing hollow glass articles, comprising a chuck, a longitudinally slotted shaft rotatable within and independently of the chuck, a longitudinally divided former within the shaft and protruding from the chuck, the former members being pivoted between their ends to the shaft, and mechanism operative on the rear ends of the members for separating and contracting their forward ends, substantially as shown and described. 14th. An improved machine for finishing hollow glass articles, comprising a chuck, a longitudinally slotted shaft rotatably secured to the chuck, a longitudinally divided former pivoted between its ends in the shaft slot, with its operative end projecting beyond the chuck, the rear ends of the former members being inclined in opposite directions and crossing each other, a collar movable within the chuck and operatively engaging said inclined former ends to open and close their operative forward ends, exterior formers or dies carried by the chuck, and actuating means, substantially as shown and described. 15th. An improved machine for finishing hollow glass articles, comprising a chuck, exterior dies having opposite position thereon, a bushing secured in the chuck, a longitudinally slotted shaft rotatably secured in the bushing, a longitudinally divided interior die or former having its members pivotally secured together and to the shaft in the slot thereof, mechanism common to all the dies for moving them to operative position and actuating mechanism, substantially as shown and described. 16th. An improved machine for finishing hollow glass articles, comprising a bed frame, bottle finishing mechanism at one end of the frame, and a bottle holder rack slidable on the frame toward and away from the finishing m chanism, substantially as shown and described. 17th. An improved machine for finishing hollow glass articles, comprising finishing mechanism, a rack for supporting the bottle holder, and mechanism within reach of the operator without releasing the bottle holder for throwing the finisning mechanism in and out of operation, substantially as shown and described. 18th. An improved machine for finishing hollow glass articles, comprising finishing mechanism, a bottle holder rack having an elongated way for sustaining the handle of the bottle holder, a lever having position adjacent the rack way and mechanism operated by said lever for throwing the finishing mechanism in and out of operation, substantially as shown and described. 19th. An improved machine for finishing hollow glass articles, comprising bottle finishing mechanism, a rack for sustaining the bottles, and an angular lever having one end lying close to and substantially parallel with the holder when the latter is in the rack, the opposite end of the lever being operatively connected to the finishing mechanism, whereby without releasing the bottle holder the lever may be grasped and the finishing mechanism put in operation, substantially as shown and described. 20th. An improved machine for finishing hollow glassware, comprising interior and exterior formers or dies, and means for rotating the dies in opposite directions, substantially as shown and described. 21st. In a machine for finishing hollow glassware, two shafts arranged concentrically one within the other, an interior former or die carried by the inner shaft, exterior formers or dies corried by the outer shaft, and mechanism for rotating the shafts, substantially as shown and described. 22nd. In a machine for finishing hollow glassware, interior and exterior formers or dies, an end facing plate rotatable with one of the formers or dies, and actuating means, substantially as shown and described.

No. 65,912. Electric Motor. *(Moteur électrique.)*

Henry Francis Joel, London, England, 22nd January, 1900; 6 years. (Filed 6th March, 1899.)

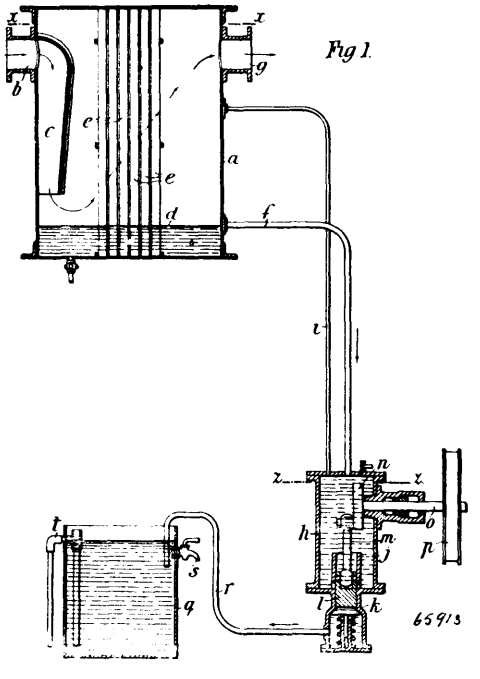
Claim.—1st. In an electric motor adapted to operate with continuous current and having interspaced multiple poles of alternate diverse polarity, an armature core pierced with apertures parallel to axis of revolution, there being one more aperture than a multiple of the number of poles, cut sectional wires in such apertures, connected at sides of armature to form a zig-zag winding, crossing the armature as many times in one complete coil as there are poles, the spacing of the apertures causing each transverse part of such winding to approach poles, step by step, thus diminishing usual sparking from short circuit at the commutator under the brushes. 2nd. In an electric motor for continuous currents, a chord step winding, consisting of cut sections of conducting wires, all of uniform length,

iron surrounded holes piercing the armature core at a distance slightly less than any common measure of the distance between



axes of poles and parallel to the axis of rotation, for receiving two or more of such cut lengths of wire, shortest chord connections formed by obliquely bent and joined ends of such wires as one at a distance from one another fractionally less than the distance between axes of poles, and lateral projecting annular flanges on either side of the armature, formed by the symmetrical interlacing of such bent and joined ends of the transverse and indeoendent operative wires.

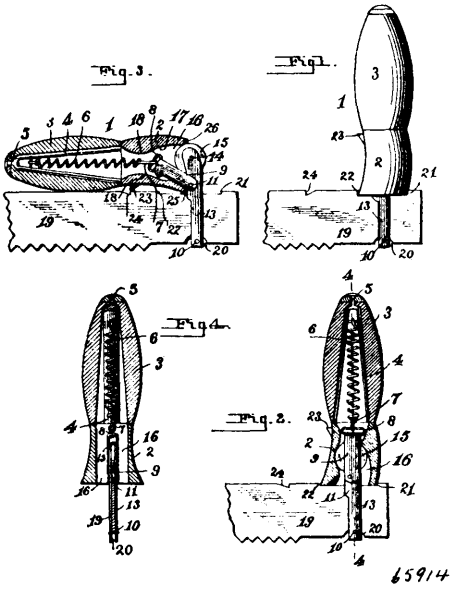
No. 65,913. Apparatus for Separating Oil or Grease from Steam. *(Appareil pour séparer l'huile ou la graisse de la vapeur.)*



William James Baker, Scarborough, England, 22nd January, 1900; 6 years. (Filed 29th August, 1899,)

Claim.—1st. In apparatus for separating oil and grease from steam, the combination of a casing or shell having a steam inlet and a water well, of means for deflecting the entering steam upon the surface of the water and of baffles against which the steam, reflected from the surface of the water, impinges, substantially as hereinbefore described. 2nd. An oil separator of the kind described in claim 1, consisting of an outer shell which may be either cylindrical or rectangular and is provided with an internal expansion chamber from which pipes lead downward to the surface of the water, and of parallel plates combined with baffles fixed at an angle to the said plates, all constructed, arranged and operating in the manner described and as represented in Figs. 4 and 5. 3rd. The grease pump as represented and described, as part of Fig. 1 and at Fig. 3. 4th. Apparatus for the separation of oil from steam and the recovery of the said oil, comprising the combination of the oil separator, the pump working in a receiver or without receiver, and the settling tank for greasy water, all as described for the purposes named and as represented in the Fig. 1 of the drawings. 5th. The combination of either the oil separator shown at Figs. 1 and 2, or that shown at Figs. 4 and 5, with the closed receiver shown in Fig. 6 and the pipes in connection therewith, all arranged and operating in the manner described and represented.

No. 65,914. Saw Handle. *(Manche de scie.)*

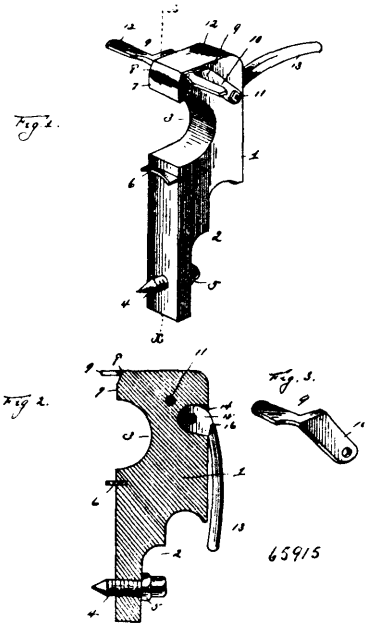


John O'Connor, Ely, Minnesota, U.S.A., 22nd January, 1900; 6 years. (Filed 25th August, 1899.)

Claim.—1st. A device of the class described, comprising a hollow saw handle provided with interior shoulders, a coiled spring arranged within the handle, and a saw blade engaging frame connected between its ends with the spring and adapted to engage a saw blade at its outer end, and provided at its inner end with an anti-friction wheel adapted to ride on the interior of the handle, said friction wheel being also capable of engaging the shoulders of the same, substantially as and for the purpose described. 2nd. A device of the class described, comprising a hollow handle, a spring housed within the same, and a saw engaging frame composed of a pair of levers connected between their ends with the spring and adapted to engage a saw blade at their outer ends, said levers being capable of adjustment to arrange them longitudinally of the handle and at an angle to the same, substantially as described. 3rd. A device of the class described, comprising a handle, a coiled spring mounted within the same, a saw blade engaging frame, a connecting piece pivoted to the said frame at a point between the ends thereof and connected with the spring, and an anti-friction wheel mounted on the frame at the inner end thereof, substantially as described. 4th. A device of the class described, comprising a handle provided at its inner end with an angularly disposed bore contracted to form shoulders, a coiled spring mounted within the handle, a connecting piece composed of two sides and attached to the spring, a saw blade engaging frame composed of a pair of levers connected at their outer ends and fulcrumed between their terminals on the sides of the connecting piece, and an anti-friction device arranged at the inner ends of the levers and adapted to engage the shoulders of the handles, substantially as described. 5th. In a device of the class described, the combination of a saw blade provided at one edge with a notch and provided at its other edge with shoulders 21, 22 and 24, a frame engaging the notch, and a handle yieldingly and pivotally connected with the frame and engaging the shoulders 21 and 22 when in operative position and adapted to fold downward or inward into engagement with the shoulder 24, substantially as described. 6th. In a device of the class described, the combination

with a saw blade, of a frame engaging the same at one side thereof, and a folding handle connected with the frame and yieldingly engaging the other edge of the saw blade, said handle being arranged either at right angles to or parallel with the saw blade, substantially as described.

No. 65,915. Saw Set. *(Fer à contourner.)*



James S. Henderson, Durham, California, U.S.A., 22nd January 1900; 6 years. (Filed 11th March, 1899.)

Claim.—1st. A saw set comprising a body having a gauge bolt projecting from one side thereof and extending inwardly through the same and provided with a pointed engaging end, the said body being formed with a throat intermediate of the ends but nearer one end than the other and opening out through the edge from which the end of the gauge bolt projects, a centre rest adjacent to one termination of the throat and in line with the gauge bolt, an outer anvil with a bevel on the opposite side of the throat, top rests on opposite sides of the said anvil, and an adjustable handle movable attached to the edge of the body opposite to that in which the throat is formed. 2nd. A saw set comprising a body having a curved throat, opening out at one side thereof, and an adjustable handle on the opposite side, an anvil being located beyond one terminatoin of the throat, an intermediate centre rest adjacent to the opposite termination of the throat and having a concave exposed edge, the said centre rest extending entirely over the transverse width of the side of the body to which it is applied, a gauge bolt with a pointed end extending outwardly from the body on the same side on which the centre rest and anvil are located, and top rests adjustably secured to the body adjacent to the anvil and comprising obliquely arranged shanks engaged by a transverse bolt and having arms extending outwardly therefrom with inner cut-away portions.

No. 65,916. Actuating Mechanism for Key-Operated Machines. *(Machine de reproduction de machines à imprimer, à clavier.)*

Donald Murray, Sydney, New South Wales, Australia, 22nd January, 1900; 6 years. (Filed 18th May, 1899.)

Claim.—1st. The combination, with the actuating mechanism of a typewriting, typesetting, typecasting or other machine for the dissemination of intelligence, of a tape representing a message and having perforated and non-perforated portions, and a machine connected with the said actuating mechanism for transmitting its motion to the said mechanism of the type machine, the said machine being positively actuated by the non-perforated portions of the said tape. 2nd. The combination, with a tape having lengthwise and sidewise movement and having perforated and non-perforated portions representing a message, of a machine connected with the actuating mechanism of a typewriting, typesetting, typecasting or other machine for the dissemination of intelligence, the said machine having assembling devices adapted to be engaged by the said non-perforated portions of the tape to bodily shift the assembling devices to be actuated for a particular letter, character, sign and the like of the message, the remaining assembling devices remaining dormant by being accommoted by the perforated portions. 3rd. The combination, with a tape having lengthwise and sidewise movement and having perforated and non-perforated portions representing a message, of a machine connected with the actuating mechanism of a typewriting, typesetting, typecasting or other machine for the

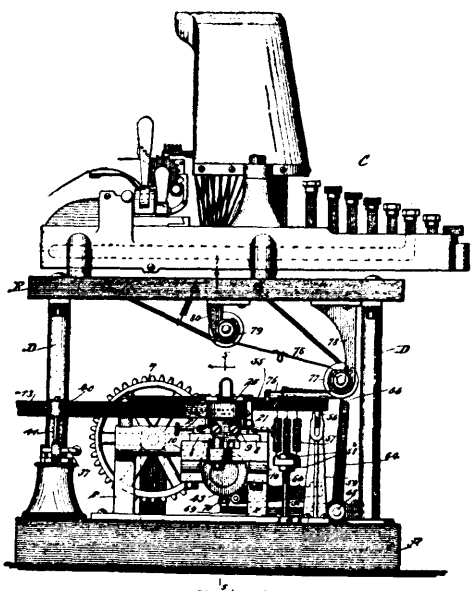


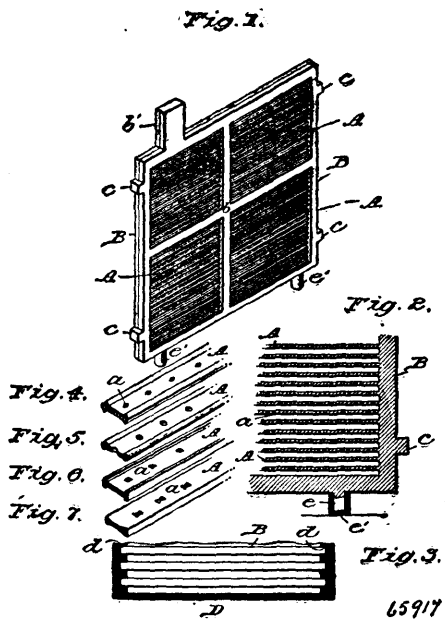
Fig 1

dissemination of intelligence, the said machine having assembling devices to be engaged by the said non-perforated portions of the tape to bodily shift the assembling devices to be actuated for a particular letter, character, sign and the like of the message, the remaining assembling devices remaining dormant by being accommodated by the perforated portions, and means for first moving the said web lengthwise to position for a particular letter, character, sign and the like of the message, and then moving it sidewise for actuating the assembling devices. 4th. In combination, a machine for governing the actuating mechanism of a typewriting, typesetting, typecasting or similar contrivance, and an actuating and controlling device for said machine, the machine having a plurality of governing members movable relatively to each other to effect various operative assemblages of said members, the actuating and controlling device consisting of a tape having perforated and non-perforated portions, the non-perforated portions engaging sundry of the members and serving directly to effect an operative assemblage of the moved and unmoved members. 5th. The combination, with a machine for the dissemination of intelligence, of a tape of web containing element representing alphabetic or other characters, and a machine positively actuated and controlled by said tape according to said elements and arranged to translate the elements of the tape into unitary parts representing letters of the alphabet and other characters, said unitary parts being directly connected with the corresponding unitary parts of the type machine, substantially as shown and described. 6th. The combination with a linotype or other machine for the dissemination of intelligence, of a tape or web having groups of elements, the elements in a group representing an alphabetic or other character, and said groups being arranged one alongside the other, an intermittent feed mechanism for said tape or web, to feed the latter successively the distance of a group of elements, means for moving the tape sidewise, and mechanism controlled by said tape or web and having unitary parts connected with the corresponding parts of the said type machine, the unitary parts being controlled by said tape elements during the sidewise movements of the tape, substantially as described. 7th. The combination with a linotype or other machine for the dissemination of intelligence, of a tape or web having perforations arranged in a longitudinal line and each representing an element of an alphabetic or other character, the perforations being in groups, each group representing a letter or other character and the groups being located one alongside the other without intermediate spaces, a mechanism having an intermittent feed for the said tape and moving the latter sidewise and unitary parts connected with corresponding parts of the type machine, the means for actuating a corresponding unitary part from the tape, according to the corresponding group of perforations during the sidewise movement of the tape, substantially as shown and described. 8th. In a machine for use with a typesetting, typecasting or other machine for the dissemination of intelligence, the combination with a tape or web having groups of elements, each group representing a letter or other character, of a mechanism for moving the tape lengthwise, a series of combs in engagement with the tape and controlled by said elements, and a series of unitary devices each controlled by one or a plurality of said combs, substantially as described. 9th. The combination with the actuating mechanism, of a typesetting, typecasting or other

machine for the dissemination of intelligence, of a tape representing a message and having alternate lengthwise and sidewise movement and having perforated and non-perforated portions, and a machine connected with said actuating mechanism, for transmitting its motion to the said mechanism of the type machine, the said machine being positively actuated by the non-perforated portions of the said tape during the sidewise movement thereof. 10th. The combination with the actuating mechanism of a typewriting, typecasting or other machine for the dissemination of intelligence, of a tape representing a message having perforated and non-perforated portions, a mechanism for intermittently feeding the tape lengthwise and moving it sidewise during the period of rest after a lengthwise movement, and a machine connected with said actuating mechanism, for transmitting its motion to the said mechanism of the type machine, the said machine having assembling devices actuated by or during the sidewise movement of said tape, substantially as shown and described. 11th. In an actuating mechanism for key operated machines, a series of movable combs, devices controlled by said combs for controlling the action of a key operated machine, and a movable web for causing an assembling of the combs and having lengthwise and sidewise movement, substantially as shown and described. 12th. In an actuating mechanism for key operated machines, a series of combs, devices controlled by said combs for controlling the action of a key operated machine a perforated web for assembling the combs, means for moving said web lengthwise, and means for moving the web sidewise toward or from the combs, substantially as shown and described. 13th. In an actuating mechanism for key operated machines, a series of combs, devices controlled by said combs for controlling the action of a key operated machine, a perforated web, means for imparting an intermittent feeding motion to said web, and means for moving the web sidewise to assemble the combs, substantially as shown and described. 14th. In an actuating mechanism for key operated machines, a series combs mounted to slide, devices controlled by said combs for controlling the action of a key operated machine, a perforated comb controlling web, a feeding device for the web to feed the latter lengthwise, means for imparting intermittent motion to the feeding device, a carriage on which the feeding device is mounted to move the web sidewise, and means for imparting reciprocating motion to the carriage, substantially as shown and described. 15th. In an actuating mechanism for key operated machines, a series of combs mounted to slide, devices controlled by said combs for controlling the section of a key actuated machine, a carriage mounted to slide at one end of the combs, a feeding wheel mounted on said carriage and having projections on its periphery, a perforated web having holes to receive the projections on the feeding wheel, the latter feeding the web lengthwise, and the web moving sidewise with said carriage, means for operating the carriage to cause the web to adjust the combs, a ratchet wheel on the shaft of the feeding wheel, and a dog for engagaging with said ratchet wheel to rotate the feeding wheel, substantially as shown and described. 16th. In an actuating mechanism for key operated machines, a series of combs mounted to slide, levers extended across said combs and adapted to enter slots in the combs when the slots in the several combs are in alignment, tappets movable on said levers and adapted for connection with keys of a key actuated machine, a striker for moving the tappets in one direction, means for operating the striker, a perforated web for assembling the combs, and means for moving said web, substantially as shown and described. 17th. In a mechanism for operating key actuated machines, a series of combs mounted to slide, a perforated web for assembling said combs, means for operating the web, levers extended across the combs and adapted to enter aligned slots in the combs, a support bar for holding the levers normally out of engagement with the combs, means for moving said bar, tappet rods movable on the levers and having their forward ends extended beyond the ends of the lever, the said tappet bars being adapted for connection with the keys of a key operated machine, a striker bar for moving the tappet rods in one direction, and means for imparting a swinging motion to said striker bar, substantially as shown and described. 18th. In an actuating mechanism for key operated machines, a bed plate, a series of combs mounted to slide on said bed plate, certain of said combs having fingers or projections at one end, devices controlled by the combs for controlling the action of a key operated machine, a reciprocating carriage adapted to receive a web having perforations to receive certain of the fingers or projections and also being adapted to engage with certain other fingers or projections to move the combs thereof, and means carried by the carriage for returning all of the combs to a normal position upon a backward movement of the carriage, substantially as shown and described. 19th. In an actuating mechanism for key operated machines, a bed plate, a series of combs mounted to slide on said bed plate, means controlled by said combs for controlling the action of a key operated machine, certain of said combs having fingers or projections at one end, a carriage mounted to reciprocate at the end of the combs in the direction of the length of the combs, a feeding device on said carriage, a perforated web moved intermittently lengthwise by the said feeding device and sidewise by the said carriage for assembling the combs, lugs on the fingers or projections of the combs, and spring arms on the carriage adapted to engage with said lugs to adjust the combs to a normal position. 20th. In an actuating mechanism for key operated machines, a series of combs, devices controlled by said combs for controlling the action of a key operated machine, a reciprocating carriage arranged at one end of the combs, means for causing the movements of the carriage, a web carried by said carriage and adapted to adjust the combs, levers extending across the series of combs and each being adapted for connection with a key of a key actuated machine, means for drawing the levers into slots of the combs when said slots are in alignment, means for moving the several levers out of engagement with the combs, and perforated plates on the carriage between which the web or tape is designed to pass, substantially as shown and described. 21st. In an actuating mechanism for key operated machines, a series of combs mounted to slide, a carriage mounted on one end of the machine, a perforated web mounted to move across said carriage and to be carried by said carriage to assemble the combs, a driving shaft, a cam on said shaft and having engagement with the carriage to move the same in two directions, levers extended across the combs, tappet rods movable lodgitudinally on said levers, the said tappet rods being adapted for connection with the keys of a key actuated machine, a striker bar for engaging with and operating said tappet rods, a cam on the driving shaft for imparting a striking motion to said striker bar, and means controlled from the driving shaft for elevating the levers and also for permitting downward movement of the levers, substantially as shown and described. 22nd. In an actuating mechanism for key operated machines, a series of combs mounted to slide, means for causing adjustments of said combs, levers extended transversely of the combs, tappet rods movable upon the levers and adapted for connection with the keys of a key operated machine, a support bar common to all levers, means for raising and lowering said bar, a striker bar for engaging with the tappet rods, and means for operating said striker bar, substantially as shown and described. 23rd. In an actuating mechanism for key operated machines, a series of combs mounted to slide, devices controlled by said combs for controlling the action of a key operated machine, a carriage mounted to reciprocate, means for imparting motion to the carriage, a tape or web feeding wheel on the carriage, means for imparting motion to said wheel, guides forward of the wheel and adjustable transversely of the carriage, and perforated plates on the carriage forward of said guides, substantially as shown and described. 24th. In an actuating mechanism for key operated machines, a series of combs mounted to slide, devices controlled by said combs for controlling the action of a key operated machine, a carriage mounted to slide at one end of the combs, a web carrying wheel mounted on said carriage, means for imparting intermittent rotary motion to the wheel, guide rollers on the carriage forward of the wheel, the said guide rollers being mounted on a bar adjustable transversely of the carriage, a curved shield plate adjacent to one of the said rollers, and perforated plates on the carriage between which a perforated web for adjusting the combs is designed to pass, the said web being moved lengthwise by the feeding wheel, substantially as shown and described. 25th. In an actuating mechanism for key operated machines, a series of combs, devices controlled by said combs for controlling the action of a key operated machine, a carriage arranged to have reciprocating motion at one end of the combs, a star or feeder wheel mounted on the carriage, a ratchet wheel on the shaft of said star or feeder wheel, a pawl mounted on a fixed support and adapted for engagement with said ratchet wheel to rotate the star or feeder wheel, perforated plates on the carriage and between which a perforated web for assembling the combs is designed to pass and moved by the star or feeder wheel, rollers mounted on the ends of one of said plates, and guide rollers on the carriage between the first named rollers and the star or feeder wheel, substantially as shown and described. 26th. In an actuating mechanism for key operated machines, a series of combs mounted to slide, means controlled by said combs for controlling the action of a key operated machine, a carriage movable at one end of the combs a perforated web movable through said carriage lengthwise and moving sidewise with the carriage to adjust the combs, means for feed said web through the carriage, a tension device for the web, and devices controlled by the combs for controlling the action of a key operated machine, substantially as shown and described. 27th. In an actuating mechanism for key operated machines, a series of combs mounted to slide, devices controlled by said combs for controlling the action of a key operated machine, means for causing adjustments of the combs, a capital slide or comb at one side of the first named series of combs, a figure slide or comb at the other side of the said series of first named combs, a lever extended across the combs and having a cam for moving the capital comb in one direction, a lever extended across the combs and having a cam for engaging with and moving the figure comb in one direction, and another lever having cams for engaging with and moving the capital comb and figure comb to normal position, substantially as shown and described. 28th. An actuating mechanism for key operated machines provided with a series of combs, a tape for moving the said combs, a change comb, and means controlled by the said series of combs to actuate the said change comb for changing the combination from small letters to capitals or to numerals, substantially as shown and described. 29th. In an actuating mechanism for key operated machines, a series of combs mounted to slide, a carriage movable at one end and by said combs, a web feeding wheel mounted on said carriage and adapted to operate a web for causing adjustments of the combs, a ratchet wheel on the shaft of said feeding wheel, a pawl on a fixed support for engaging with said ratchet wheel, a spring pressed dog carried by the carriage and adapted for engagement with said

ratchet wheel, to prevent a backward movement of the feeding wheel while the carriage is moving forward, and a finger piece extended from said dog, substantially as shown and described. 30th. In a machine of the character described, a tension device for a web fed through the machine, said tension device comprising a roller, a stem on which said roller is mounted, a sleeve on the stem, a spring surrounding the stem and connected at one end with said sleeve and at the other with the roller, a tension device engaging with said sleeve, a presser roller, and means for holding said presser roller yieldingly toward the first named roller, substantially as shown and described. 31st. An actuating mechanism for key operated machines, provided with a series of combs, a tape for moving the said combs, a capital comb, a numeral comb, and means controlled by the said series of combs for actuating the said capital comb or the numeral comb, substantially as shown and described. 32nd. An actuating mechanism for key operated machines, provided with a series of combs, a tape for moving the said combs, a capital comb, a numeral comb, and a release lever controlled by the said series of combs, to return either or both the capital comb and the numeral comb back to a normal position to change the combination from capitals or numerals back to lower case, substantially as shown and described.

No. 65,917. Electrode. (*Electrode.*)



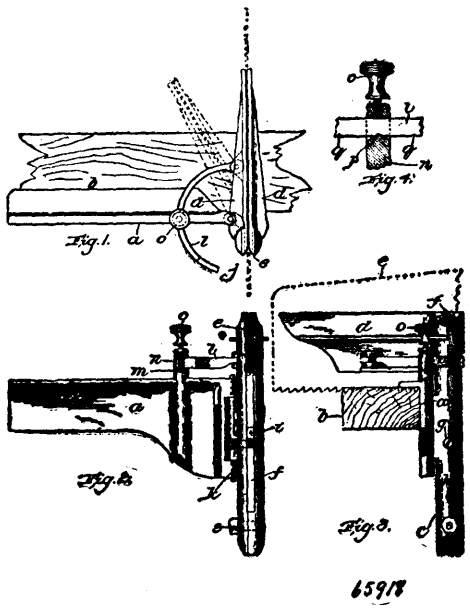
Herbert Samuel Lloyd, Philadelphia, Pennsylvania, U.S.A., 22nd January, 1900; 6 years. (Filed 18th October, 1899.)

Claim.—1st. An electrode comprising a frame of a practically non-active alloy, and thin parallel strips of metallic lead adapted to become in action the active material, and free from interposed paste, said strips being horizontally supported in said frame, electrically connected therewith and having thickened or reinforced outer edges to lengthen the life of the strips in process of peroxidation. 2nd. An electrode formed of a series of horizontally disposed strips of metallic lead forming in action the active material of the electrode and free from interposed paste, each strip being perforated and having thickened or reinforced edges in cross section, and united at its opposite ends by a supporting frame of a practically non-active alloy, being electrically connected therewith, the perforations in the respective horizontally disposed strips being staggered throughout the series, substantially as described.

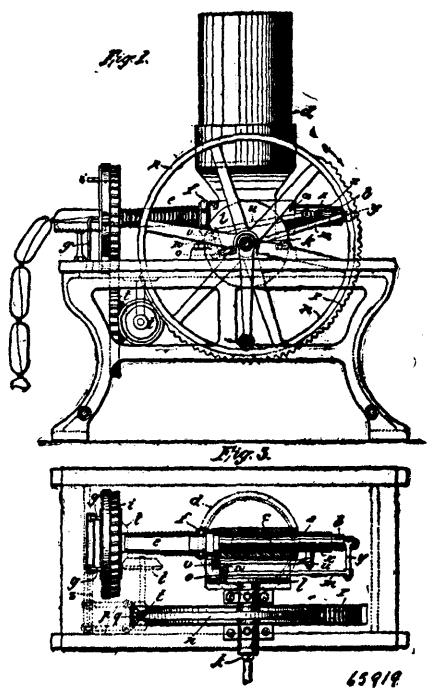
No. 65,918. Saw Guide. (*Guide scie.*)

Charles Oaks Seavey, South Framingham, Massachusetts, U.S.A., 22nd January, 1900; 6 years. (Filed 16th June, 1899.)

Claim.—In a saw guide for sawing material to form miter joints, the combination of a bed or frame adapted to fit the edge of the material to be sawed, a two-part slotted standard hinged to the bed outside of the line of the inner face of the bed, the parts of said standard being free above the lowest line of movement allowed to the saw and joined together below said line, each part being provided with a laterally extending plate or frame, said plates being wholly separated from each other throughout, substantially as described.



No. 65,919. Sausage Stuffing, Dividing and Tying Machine. (*Machine à remplir diviser et attacher les saucisson.*)

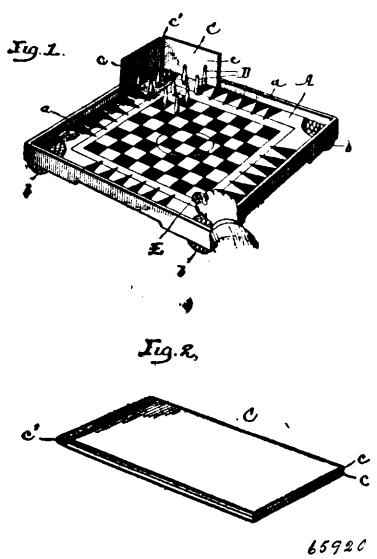


Wilhelm Paulitschke and Franz Barilitsch, both of Modling, Vienna, Austria, 22nd January, 1900; 6 years. (Filed 14th June, 1899.)

Claim.—1st. A new or improved machine for stuffing, dividing, and tying sausages, in which the stuffing is effected by means of a piston moveable within a tubular body *a*, and upon the sausage material having been pressed into the skin by an adjustable stroke of the piston and moved forward a certain predetermined distance, throttling forks *g*, *g*, are moved and forced against the stuffed skin so as to divide it into given lengths and firmly hold the throttled parts while they are being bound by twine or the like, the latter being conducted without being cut, from one tie to the next following, substantially as hereinbefore described and illustrated in the

accompanying drawing. 2nd. A new or improved machine for stuffing, dividing, and tying sausages, as claimed under 1, in which the piston *b* provided for stuffing thesa usage material into the skin, is actuated by crank disc or arm *l* through the intermediary of connecting rod *m*, the pivot pin *o* being displacable in a slot radiating from the driving shaft *k*, for the purpose of pressing variable quantities of material into the skin according to the adjustment of the length of stroke of stuffing piston *b*, thereby producing separate sausages of greater or lesser weight, said separate sausages being uniform as to weight as long as the pre-arranged length of stroke of the stuffing piston is left unaltered, substantially as hereinbefore described and illustrated in the accompanying drawings. 3rd. In a machine for stuffing, dividing, and tying sausages as claimed under 1, the arrangement of bars *p*, *p*, carrying the levers *z*, *z* and throttling forks *g*, *g*, being placed at both sides of felloe or rim of fly wheel *n*, the said felloe being for half the circumference of the wheel of greater width, the wider portion *r* of the felloe displacing, during one half revolution of the wheel, the bars *p*, *p* and therewith forks *g*, *g* in such manner that the latter are moved towards the stuffed skin and press into the latter, dividing it into equal lengths of uniform weight, substantially as set forth and illustrated in the accompanying drawings. 4th. In a machine for stuffing, dividing, and tying sausages as claimed under 1, the disposition of bobbins or reels *h* holding twine or other tying material, open ring *i* concentrically surrounding the stuffed skin in front of the mouth or nozzle of tube *e*, said ring being rotated by transmission gearing *t* which is operated by the widened portion *r* of the circumference of fly wheel *n*, whereby the twine or the like is firmly wound around the throttled or compressed portion of the stuffed skin, substantially as set forth and illustrated in the accompanying drawings. 5th. In machines for stuffing, lividing and tying sausages as claimed under 1, a contrivance for preventing the stuffing material from receding from tube *a* and re-entering supply hopper *d* upon the forward stroke of piston *b*, in which the said piston is surrounded by a thin cylinder *s* fitting into tube *a* or a flat or otherwise suitably sloped slide, as the case may be, is arranged and provided, which cylinder or slide is made to perform a forward movement previous to the stroke of the piston and preceding the latter, for the purpose of closing aperture *c* during the forward stroke of the pistion, substantially as set forth and illustrated in the accompanying drawings. 6th. In machines for stuffing, dividing and tying sausages as claimed under 1, the contrivance for admitting of adjustment of the length of stroke of cylinder *s* as claimed under 5, simultaneously with that of piston *b*, consisting of pivot pin *o* of piston connecting rod *m* being connected by arm *w* with pivot pin *v* of cylinder connecting rod *u*, so that upon displacement of the pin *o* the pivot pin *v* is displaced simultaneously, the pin *v* being preferably placed at a greater distance from the centre of the shaft *k* than pin *o*, for the purpose of obtaining a longer stroke of cylinder *s* independent of the normal preceding movement of the latter relative to that of stuffing piston *b*, substantially as described and illustrated in the accompanying drawings.

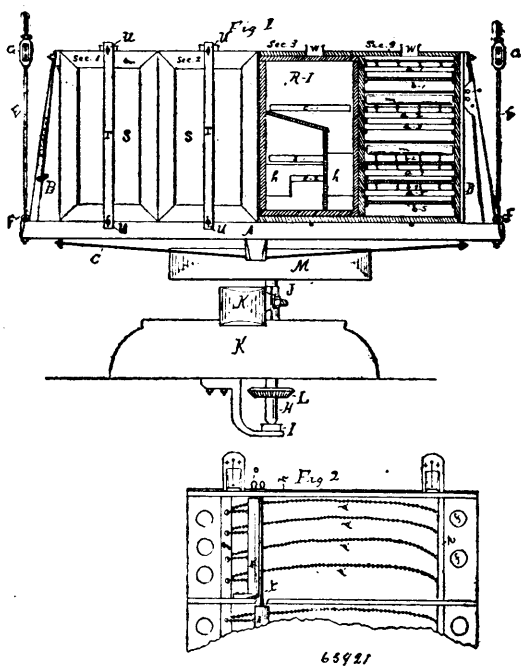
No. 65,920. Game. *(Jeu.)*



The Archarena Company, assignee of Edgar LeMar Williams, all of Peoria, Illinois, U.S.A., 23rd January, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—A portable game apparatus comprising a game board provided with a raised rim extending around its body in combination with a removable cushion back consisting of plural rigid sections united by a hinged joint and adapted to be located in one corner.

No. 65,921. Sieve Sifter. *(Tamis.)*



Daniel Raymond O'Neaill, Paris. Ontario, Canada, 23rd January, 1900; 6 years. (Filed 5th January, 1900.)

Claim.—1st. The combination in a sieve sifting machine having one or more sections, of a removable box in each end of each section, with a removable door, its inner side bearing firmly against the outer edges of said box, substantially as described. 2nd. The combination, in a sieve sifting machine having one or more sections, of a series of bolting sieves placed one above another in each section, each being moveable endwise, and a series of collecting trays one under each sieve, with a removable distributing box at each of said series of sieves and trays, said distributing boxes sliding freely into the ends of said sections, their backs bearing firmly against the ends of said sieves and trays, and having within them partitions, compartments and openings, all substantially as described and for the purposes specified. 3rd. In a sieve sifting machine of one or more sections, the combination with each end of each section, of a distributing box sliding into said section, said box having in its lower side circular openings coinciding with similar openings in the bottom of said section all as set forth. 4th. The boxes R^1 and R^2 in each section, open on their front sides and removable, and having within them partitions, compartments, and openings, substantially as described. 5th. The combination in a sieve sifting machine, with each sieve, of a series of light chains situate above said sieve, and running lengthwise of the same from end to end thereof, one end of said chains being secured at suitable distances from each other to a cross piece in the machine, or to the body of the machine if convenient, and their other ends being secured at suitable distances from each other across its length, to a roller by means of which the relation of said chains to said sieves may be altered at the will of the operator while the machine is in motion, all substantially as set forth. 6th. The combination in a sieve shifting machine, with a series of light chains above each sieve and running lengthwise of the same from end to end thereof, one end of said chains being secured to a cross piece in the machine, of a roller to which their other ends are secured, said roller being provided with a gudgeon at each end, one of said gudgeons resting in a socket prov.ded for it in the interior of the machine, and the other extending out through the side of the machine and having upon its outer end a knob by means of which it may be turned, all substantially as described and for the purposes stated. 7th. The combination of the rollers, with the springs secured to the interior of the machine in such a way as to rest upon the said rollers, acting as a brake to prevent them from turning except when rotated by means of the knobs provided, said rollers may be slightly flattened at different places in their circumference where the springs bear against them, to ensure their being firmly held at the point desired.

No. 65,922. Horse Collar. (*Collier à cheval.*)

Fig. 1.

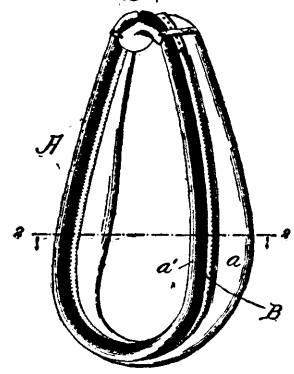
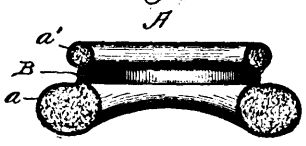


Fig. 2.



65922

Exselus Beauchamp and Remus Laurendeau, Montreal, Quebec, Canada, 23rd January, 1900; 6 years. (Filed 4th January, 1900.)

Claim.—A horse collar, comprising a padded back portion, and a connecting strip uniting said front and back portions, said strip being of a width sufficient to afford ample space for the reception of the hames, substantially as described.

No. 65,923. Vehicle Protecting Apparatus.
(*Appareil de protection pour vehicules.*)

Fig. 1

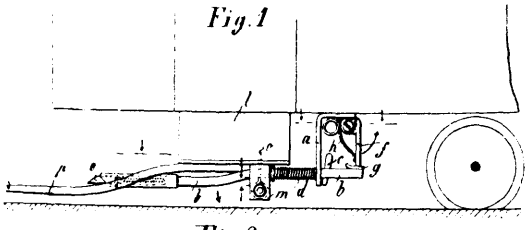
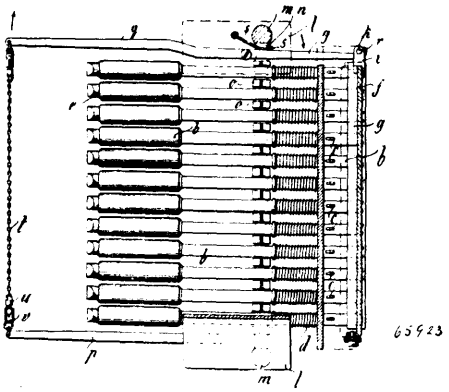


Fig. 2.



65923

Albert Thiels, Hamburg, Germany, 23rd January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st A protecting apparatus for tram cars and the like, which consists of several catching bars *b* lying side by side, adapted to be swung up or down and held in their normal position by a hinged plate *f*, the said bars being adapted to be liberated by a lever *q* through the medium of the body lying in the path of the tram car or other vehicle, substantially as described with reference to the drawings. 2nd. In a protecting apparatus for tram cars and the like of the kind referred to in the first claiming clause hereof, the catching bars *b*, carrier *a*, hinged plate *f*, locking lever *q*, arm *p* and chain *t*, the whole combined, arranged and operating, substantially as described with reference to the drawings. 3rd. In protecting apparatus for tram cars and the like, the catching bars *b*, the front ends of which are adapted to be pushed against the action of springs into the body of said bars to enable them to yield to inequalities of the track, substantially as described with reference to the drawings.

No. 65,924. Table. (*Table.*)

Fig. 1.

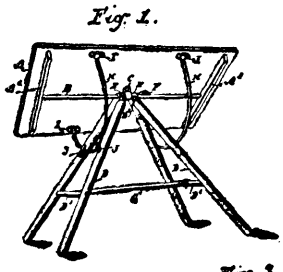


Fig. 3

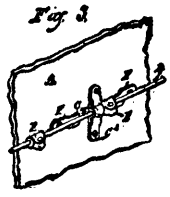


Fig. 2.

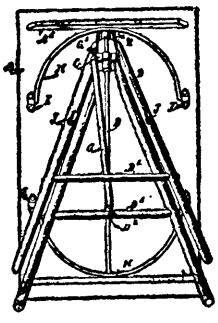
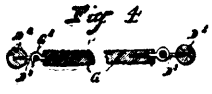


Fig. 4



65924

Charles Henry Sanford, Cedar Rapids, Iowa, U.S.A., 23rd January, 1900; 6 years. (Filed 2nd January, 1900.)

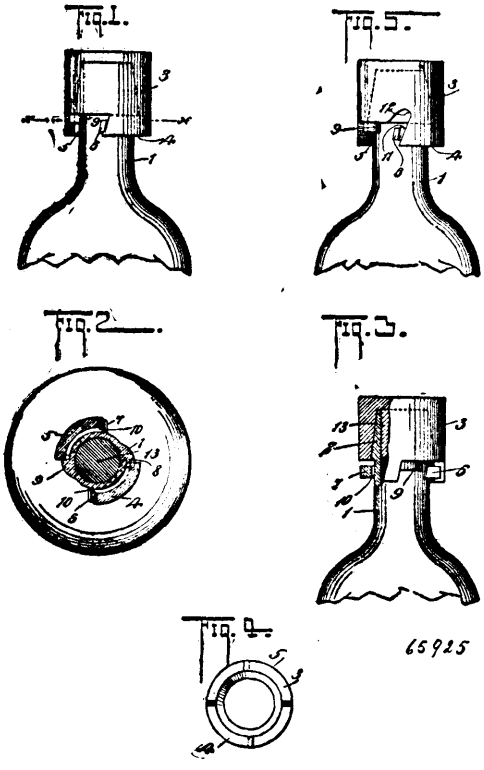
Claim.—1st. The combination of a table top, legs pivoted thereto and converging near the centre thereof, and provided with bail-engaging brackets, and semi-circular bails depending vertically from the under side of the table top and engaging frictionally the brackets on said legs, and means, substantially as described, adapted to force said brackets against the peripheries of said bails, whereby the table top is held in any desired position by the combined friction of the brackets and elasticity of the bails, substantially as described. 2nd. The combination of a table top, diagonal legs converging near the centre thereof and pivoted thereto, bails depending from the under side of the table top in vertical planes intersecting the diagonal planes of the legs, brackets on said legs to engage said bails, and a brace adapted to spread the feet of said legs apart to give forcible engagement of the bails with said legs, substantially as described. 3rd. The combination of a table top provided with a central, longitudinal rod on the under side, a middle bracket therefor, converging legs pivoted to the table top by knuckles adapted to run on said rod, a brace to hold the feet of said legs apart, and means, substantially as described, for adjusting and holding the table top in any desired position. 4th. The combination in a table top, a longitudinal rod on the under side thereof, a central bracket therefor, legs pivoted indirectly thereto, knuckles to which said legs are directly pivoted adapted to slide and turn on said rod, buttons to hold said knuckles close to the central bracket, a brace to spread the feet of said legs apart, and means, substantially as described, for holding the table top in any desired position. 5th. The combination of a table top, legs pivotally attached to the under side thereof and converging at the upper ends, semi-circular bails depending vertically from the table top and engaging said diagonal legs, and an extensible space adapted to spread and hold the feet of the legs apart and into forcible contact with said bails, substantially as described.

No. 65,925. Vessel Closure. (*Fermeture de jarre, etc.*)

Alfred Braverman, Fresno, California, U.S.A., 23rd January, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. A vessel closure, comprising sealing lugs and stop ugs on the vessel, the several lugs being substantially on the same orizontal plane, and a cap adapted to fit over the mouth portion of he vessel and having depending segmental portions, end walls of aid segmental portions being adapted for sealing to the sealing lugs

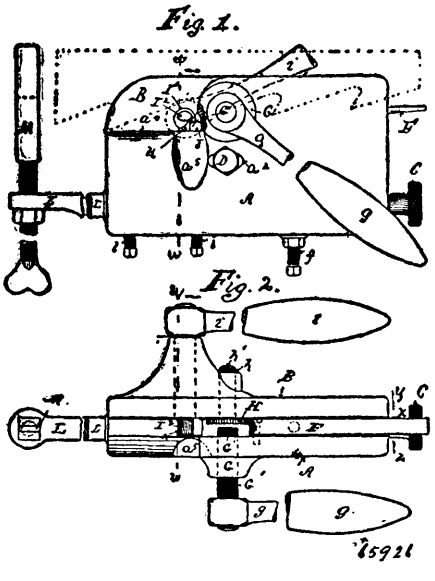
and the other end walls being adapted for engagement with the stop lugs, substantially as specified. 2nd. A vessel closure, com-



prising sealing lugs projected from the vessel, stop lugs projected from the vessel, and a cap having segmental depending portions, the end walls of which are inclined to engage with the similarly inclined surfaces of the lugs with which they engage, substantially as specified. 3rd. A bottle closure, comprising diametically opposite sealing lugs extended from the neck of the bottle, a cap having downwardly extended segmental portions, and wedges adapted to be inserted between the sealing lugs and the adjacent walls of the depending portions, the cap having upwardly extended openings to facilitate the entering of the wedges, substantially as specified.

No. 65,926. Saw Tooth Swaging Machine.

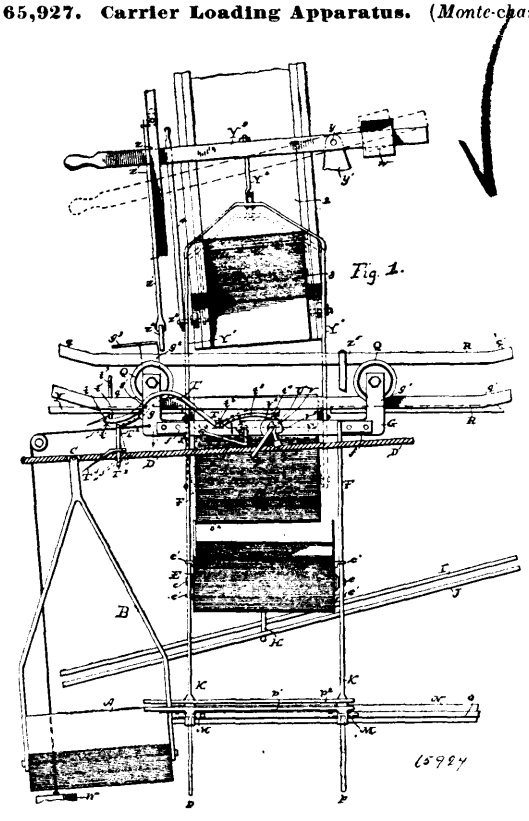
(*Fer à contourner.*)



Frank Elmer Butts and Gustave Andrew Dumbeck, both of Erie, Pennsylvania, U.S.A., 23rd January, 1900; 6 years. (Filed 31st October, 1899.)

Claim.—1st. The combination in a saw tooth swaging machine, of means for clamping the machine to a saw, a rotative swaging cam, an anvil upon which the swaging cam operates, and a stop in front of the anvil, adapted to contact with the point of the saw tooth during the entire swaging operation, substantially as and for purpose set forth. 2nd. The combination in a saw tooth swaging machine, of clamping devices thereon for securing a saw therein, a rotative swaging cam, an anvil under said cam, a depressible stop in front of the anvil against which the point of the saw tooth contacts during the entire swaging operation, and means for adjusting the cam and anvil with relation to each other, substanitially as and for the purpose set forth. 3rd. The combination in a saw tooth swaging machine, of a frame consisting of two sections, having a saw slot between the upper portions thereof, means for adjusting said sections upon each other, saw clamping mechanism in said sections, a vertically adjustable saw guide arm in the bottom of the saw slot between said sections, a rotative swaging cam in one of said sections, an anvil in the other section adapted to be operated upon by said cam, and a depressible stop in front of said anvil, and contacting with the point of the saw tooth during the entire swaging operation, substantially as and for the purpose set forth. 4th. The combination in a saw tooth swaging machine, of two sections, tongued and grooved together near their lower edges and having an open slot between their upper edges, screw mechanism for the longitudinal adjustment of the sections upon each other, a set screw for clamping them together, a vertically adjustable arm in the bottom of the slot between the sections, adjustable saw clamping mechanism adapted to clamp a saw in said slot, a rotatable swaging arm mounted in one section, a vertically adjustable anvil arranged so that the swaging cam will operate thereon, a depressible stop in front of said anvil, and a removable arm and adjustable saw guide thereon adapted to be secured to said swaging machine, substantially as and for the purpose set forth.

No. 65,927. Carrier Loading Apparatus. (*Monte-charge.*)



Arthur Painter, Nelson, British Columbia, Canada, 23rd January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. The combination of a travelling bucket, a loading bucket, a frame in which it is suspended, a carriage to which the frame is secured, an inclined rail on which the carriage rests, and down which it moves by gravity, a catch for normally holding the carrier stationary until the travelling bucket arrives, and devices operated by the travelling bucket to release the catch. 2nd. The combination of a travelling bucket, a loading bucket, a frame in which it is suspended, a carriage to which the frame is attached, an inclined rail on which the carriage is supported and down which it moves by gravity in its loading movement, a catch for holding the carriage stationary, and devices operated by the travelling bucket for releasing the catch. 3rd. The combination of a travelling bucket, a loading bucket, a frame in which it is suspended, a carriage to

which the frame is attached, an inclined rail on which the carriage is supported and down which it moves by gravity in its loading movement, a catch frame pivoted to the carriage, a stationary stop with which the catch engages, a cam engaging the catch frame, and an arm attached to the cam, arranged in the path of the suspending devices of the carrying bucket. 4th. The combination of a travelling bucket, a loading bucket, the frame in which it is suspended, a carriage to which the frame is attached, an inclined rail supporting the carriage and down which the latter descends by gravity while said loading bucket is delivering its load to said travelling bucket, a catch for holding the carriage stationary, devices operated by the travelling bucket for releasing the catch at the proper time, and a detent adapted to engage the suspending devices of the travelling bucket to prevent the carriage from running ahead of the travelling bucket. 5th. The combination of a travelling bucket, a pivoted loading bucket, a frame in which the loading bucket is pivoted, an arm projecting rearwardly from the bucket, and a rod I, for preventing the bucket from prematurely dumping. 6th. The combination of a travelling bucket, a loading bucket, a frame in which the loading bucket is pivoted, an arm extending rearwardly from the bucket and an upwardly inclined bar, J, for positively tilting and dumping the leading bucket. 7th. The combination of a travelling bucket, a loading bucket, a frame in which it is pivoted, an arm projecting rearwardly from the bucket, and upwardly inclined rails, I and J, between which the arm projects and which cause the loading bucket to dump at the proper time when moving forward, and to assume its upright position while moving backward. 8th. The combination of a leading bucket, a chute for supplying it, a door closing the chute, and having a front end and two side wings, pivoted levers arranged parallel with the wings, rollers on the wings resting on the levers, a frame to which the ends of the levers are attached, and an operating lever for raising the frame. 9th. The combination of a chute connected with a bin or source of supply, a curved door 3, arranged inside the chute and curved guides into which curved edges of the door extend and in which they move, and a lever for operating this door. 10th. The combination of a travelling bucket, a loading bucket, a frame in which the loading bucket is suspended, a carriage to which the frame is secured, an arm projecting from the frame adapted to be engaged by the suspending devices of the travelling bucket, and devices acting on the arm adapted to yield and allow the travelling bucket to pass without moving the loading bucket when subjected to extraordinary strain. 11th. The combination of a travelling bucket, a loading bucket, a frame in which the loading bucket is suspended, a carriage to which the frame is secured, a horizontally projecting arm secured to the carriage, a pivoted arm projecting downwardly therefrom, and spring controlled devices which normally hold the downwardly projecting arm in position to engage with the suspending devices of the travelling bucket, so that the travelling bucket and loading bucket may move forward together, but which yield to allow the travelling bucket to pass when subjected to extraordinary strain. 12 h. The combination of a travelling bucket, a loading bucket, means for releasing the loading bucket and allowing it to move before it is engaged by the travelling bucket, and means for then engaging the travelling bucket with the loading bucket so that they shall move together. 13th. The combination of a travelling bucket, a loading bucket, a carriage from which the loading bucket is suspended, a chute above the carriage provided with a door, a lever to which the door is connected, a catch for supporting the lever to hold the door closed, a pivoted arm carried on the lower end of the catch, and an arm carried by the carriage adapted to engage the arm carried by the catch, the organization being such that as the carriage moves in one direction it acts on the catch to open the door, and when travelling in the opposite direction passes by without operating the catch. 14th. The combination of a travelling bucket, a loading bucket, a carriage from which it is suspended, a catch frame, carried by the carriage, and a movable stop with which the catch frame engages. 15th. The combination of a travelling bucket, a loading bucket, a carriage from which it is suspended, an arm carried by the carriage with which the travelling bucket engages, a catch frame for holding this arm, a stop engaging the catch frame, and means for moving the stop so as to cause the catch frame to be disengaged from the arm with which the travelling bucket engages. 16th. The combination of a travelling bucket, a loading bucket, a carriage from which it is suspended, a catch frame carried by the carriage, and a pivoted spring controlled stop engaging with the catch frame.

No. 65,928. Sawmill. (*Scierie.*)

Freeman Thompson, Dover, New Hampshire, U.S.A., 23rd January, 1900; 6 years. (Filed 16th June, 1899.)

Claim.—1st. In a portable sawmill, the combination with a main frame, of a single saw arbor frame united rigidly to the main frame to extend beneath the path of the carriage and having a series of constantly aligned bearings, a travelling carriage sustained on the main frame in an elevated position to travel directly over the saw arbor frame, and a saw arbor journalled in the saw arbor frame, whereby the carriage and saw arbor frame are both supported by the main frame and the saw arbor is sustained at all times in parallel relation to the path of the carriage, substantially as described. 2nd. In a portable sawmill, the combination with a main supporting frame, of a single metallic saw arbor frame provided with a plurality of bearings which are disposed longitudinally of said frame and in constant alignment with each other and said metallic frame extending entirely across the main frame to lie below the path of a carriage,

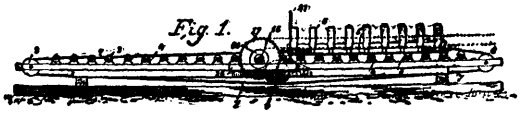


Fig. 1.

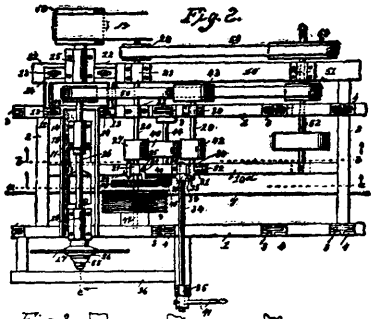


Fig. 2.

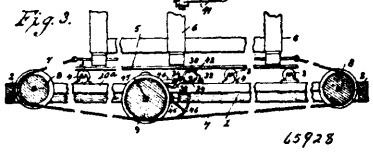


Fig. 3.

65928

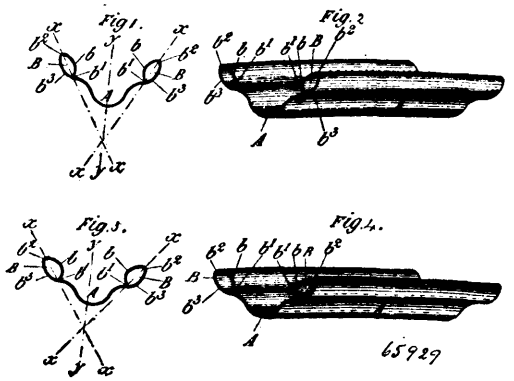
a saw arbor journalled in the bearings of said frame, a travelling carriage, and means for supporting the carriage in an elevated position above the main frame and enable it to travel directly over the saw arbor frame, whereby the carriage and saw arbor frame are supported by a common main frame and the saw arbor remains constantly parallel to the path of the carriage, substantially as described. 3rd. In a portable sawmill, the combination with a main frame and a feed mechanism, of a single saw arbor frame fixed to the main frame to extend entirely across the same and having a series of constantly aligned bearings, means for adjustably fastening the saw arbor frame to the main frame to secure a limited adjustment with relation to the feed mechanism, a saw arbor journalled in said saw arbor frame, and a travelling carriage mounted in an elevated position on the main frame to travel directly over the saw arbor and its frame, substantially as described. 4th. In a portable sawmill, the combination with a main frame, and a feed mechanism, of a single metallic frame extending entirely across the main frame and provided with a series of constantly aligned bearings and with transverse slots by which the metallic frame may be bolted to the main frame for adjustment in relation to the feed mechanism, a saw arbor journalled in the bearings of the metallic frame, and a travelling carriage supported in an elevated position on the main frame to travel directly over the saw arbor and its frame, substantially as described. 5th. In a portable sawmill, the combination with a main supporting frame, and a travelling carriage mounted thereon, of a shaft carrying a grooved pulley, a cable actuated by said grooved pulley and attached to the respective ends of said carriage, a driving pulley and gearing by which said grooved pulley is operated, friction pulleys on opposite sides of the driving pulley, a slidable bearing for the shaft of the friction pulley and having a projecting lug, a pivoted bearing for the shaft of the other friction pulley and likewise having a projecting lug, an adjusting shaft having oppositely extending arms, one of which is adapted to engage a lug on the pivoted bearing, and a rod connecting the other arm of the adjusting shaft with the sliding bearing, substantially as described. 6th. In a portable sawmill, the combination with a supporting frame, and a travelling carriage, of an actuating cable attached to said carriage, a grooved pulley around which said cable is coiled, a driving pulley and gearing by which said grooved pulley is operated, friction pulleys on opposite sides of the driving pulley, a pivoted bearing for the shaft of one pulley, a sliding bearing for the shaft of the other pulley, and adjusting devices operatively combined with the slidable and pivoted bearings to move one pulley into engagement with the driving pulley and the other pulley out of engagement therewith, substantially as described.

No. 65,929. Metallic Wheel-Rim. (*Jante de roue metallique.*)

Charles K. Welch, Coventry, England, 23rd January, 1900; 6 years. (Filed 14th September, 1898.)

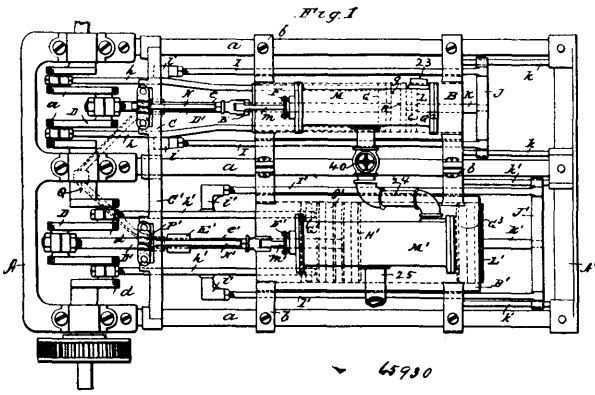
Claim.—1st. A wheel-rim for a pneumatic tire, such rim being formed with tubular flanges approximating in cross section to the form of an ellipse, substantially as and for the purposes specified. 2nd. A wheel-rim for a pneumatic tire, such rim being formed with tubular flanges of elliptical shape in cross section, the major axes of the ellipses being inclined outwardly so that the whole of one half or side of each elliptical flange forms a bearing or shoulder upon which

the side of the tire can rest, substantially as described. 3rd. A wheel-rim for a pneumatic tire, such rim being formed with tubular flanges,



the inner and upper sides of which are approximately vertical near the body of the rim and then incline outwardly, forming a rest for the sides of the tire, becoming gradually more horizontal until the edge or extreme width of the rim is reached, and the outer and under sides of which tubular flanges are approximately vertical at the outer portions and then incline inwardly becoming gradually more horizontal until they reach the body of the wheel-rim, substantially as specified.

No. 65,930. Steam Engine. (*Machine à vapeur.*)



Emmett McConville, Pittsburg, Pennsylvania, U.S.A., 23rd January, 1900; 6 years. (Filed 15th December, 1899.)

Claim.—1st. In a compound steam engine, having one high and one low pressure cylinder, three movable piston heads in each cylinder, the two extreme heads in each cylinder being skeleton or open heads, but integral with a solid piston, said pistons having differential valves co-operating with an opening in a solid piston, a distribution valve for each cylinder, a steam pipe connecting the steam chests of said cylinders for transmitting steam from the high to the low pressure cylinder, an exhaust pipe leading from the low pressure cylinder, and suitable operative mechanism connected to said cylinders, and valves for communicating motion therefrom, as specified. 2nd. In a compound steam engine, having one high and one low pressure cylinder, three movable piston heads with pistons integral therewith in each cylinder, each of the extreme pistons having differential valves, a distribution valve for each cylinder, a steam pipe connecting the steam chests of said cylinders for transmitting steam from the high to the low pressure cylinder, an exhaust pipe leading from the low pressure cylinder, and the means for operating said engine through the medium of its cylinders and valves in combination with a skeleton bed or frame as shown and specified for supporting said engine. 3rd. In a compound steam engine, having one low and one high pressure cylinder, three movable piston heads in each cylinder, the two extreme heads in each cylinder being skeleton or open heads, but integral with a solid piston, said pistons having differential valves co-operating with an opening in a solid piston, a distribution valve for each cylinder, a steam pipe provided with an adjustable check valve connecting the steam chests of said cylinders for transmitting steam from the high to the low pressure cylinder through their steam chests, an exhaust pipe leading from the valve chest of the low pressure cylinder, the means connected to said cylinder and valves for operating said engine, as specified. 4th. In a compound engine, having open ended cylinders, one high and one low pressure, three movable piston heads in each cylinder, the two extreme heads being open or skeleton in construction, but integral with a solid piston, said pistons having differential valves co-operating with an opening in a solid piston, a distribution valve for each cylinder, a steam pipe connecting the steam chests of said cylinders, an exhaust pipe leading from the steam chest of the low pressure cylinder, in combination with a skeleton bed or frame consisting of steel tubes secured at their free ends to castings for supporting said engine, as specified. 5th. In a compound steam engine, having one high and one low pressure cylinder, three movable piston heads in each cylinder, the two extreme heads in each cylinder being open or skeleton in construction, but integral with a solid piston, said pistons having differential valves co-operating with an opening in a solid piston, a distribution valve for each cylinder, a live steam pipe connecting the steam chests of said cylinders, an exhaust pipe leading from the steam chest of the low pressure cylinder, a double yoke supported upon a skeleton frame or bed, for supporting the valve operating mechanism of said engine, as specified. 6th. In a compound steam engine, having one high and one low pressure cylinder, three movable pistons with their accompanying head in each cylinder, a piston valve for each cylinder, a live steam pipe connecting the steam chests of said cylinders, an exhaust pipe leading from the steam chest of the low pressure cylinder, a double yoke secured to the skeleton frame or bed for supporting bifurcated levers pivotally secured to said yokes for carrying the valve mechanism attached to the movable connecting rods, as specified. 7th. In a compound steam engine, having one high and one low pressure cylinder, three movable pistons in each cylinder, steam chests and distribution valves for each cylinder, an exhaust steam pipe connecting the steam chests of said cylinders, an exhaust pipe leading from the steam chest of the low pressure cylinder to the atmosphere, a double yoke secured to the skeleton frame or bed for supporting bifurcated levers pivotally secured to said yokes for carrying rocking levers which operate said distribution valve and links, the latter being attached to the movable connecting rods at one end, the opposite ends pivotally secured to movable rods, as specified. 8th. In a compound steam engine, having one high and one low pressure cylinder, three movable pistons in each cylinder, steam chests and distribution valves for each cylinder, an exhaust pipe connecting the steam chests of said cylinders, an exhaust pipe leading from the steam chest of the low pressure cylinder to the atmosphere, a double yoke secured to the skeleton frame for supporting bisected bifurcated levers pivotally secured to said yokes for carrying rocking levers, which operate said distribution valves and links, said links being attached to movable connecting rods at one end, the opposite ends connected to pivoted stay rods which are hinged to the underside of the steam cylinder as shown. 9th. In a compound steam engine having one high and one low pressure cylinder, three movable pistons in each cylinder, steam chests and distribution valves for each cylinder, an exhaust pipe connecting the steam chests of said cylinders, exhaust pipe leading from the low pressure cylinder to the atmosphere, a double yoke secured to the skeleton frame for supporting bisected bifurcated levers which are pivotally secured to said yokes, the latter carrying rocking levers which operate said distribution valves which are pivoted to blocks operating in ways or guides formed in the legs of said bifurcated levers, of links pivoted to said rocking levers for operating piston valves through the medium of movable connecting rods as specified. 10th. In a compound steam engine having one high and one low pressure cylinder, three movable pistons in each cylinder, steam chests and distribution valves for each cylinder, an exhaust pipe connecting the steam chests of said cylinders, an exhaust pipe leading from the low pressure cylinder to the atmosphere, a double yoke secured to the engine bed for supporting bisected bifurcated levers, which are pivotally secured to said yokes, the latter carrying rocking levers which operate said distribution valves which are pivoted to blocks operated in ways formed in the legs of said bifurcated levers, links pivoted to said rocking levers, one end of said links being attached to movable connecting rods, the opposite ends connected to stay rods, said stay rods are hinged to the front end of the steam cylinder as specified. 11th. In a compound steam engine having one high and one low pressure cylinder, three movable pistons in each cylinder, steam chests and distribution valves for each cylinder, an exhaust pipe connecting said cylinders, and an exhaust pipe from the low pressure cylinder to the atmosphere, a yoke secured to the skeleton bed for supporting bisected bifurcated levers which carry rocking levers, the upper ends of said rocking levers pivotally secured to the connecting rods of the piston distribution valve stems the lower ends secured to links pivoted to the connecting rods of the steam cylinders, and also the stay rods which are attached to the steam cylinders as specified. 12th. In a compound steam engine having one high and one low pressure cylinder, three movable pistons in each cylinder, steam chests and distribution valves for each cylinder, an exhaust pipe and check valve connecting said steam cylinders, an exhaust pipe leading from the low pressure cylinder to the atmosphere, a yoke secured to the skeleton bed for supporting bifurcated levers which carry rocking arms, the latter operating the piston distribution valve stems through the medium of the cylinder connecting rods, and the means for adjusting said piston valves through the medium of said bifurcated levers as specified.

No. 65,931. Rotary Transformer. (*Transformeur rotatoire.*)

Fig. 1.

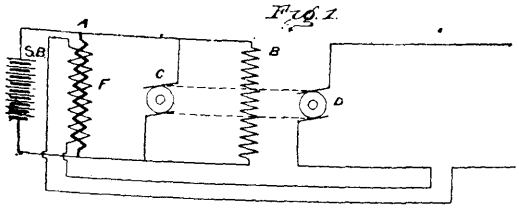


Fig. 2.

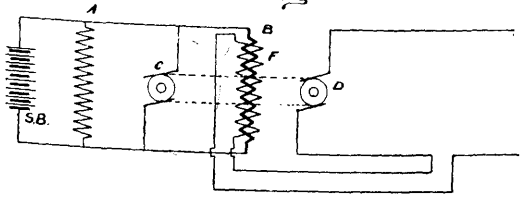
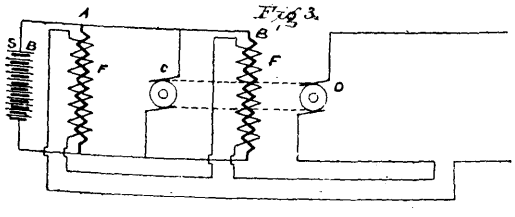


Fig. 3.



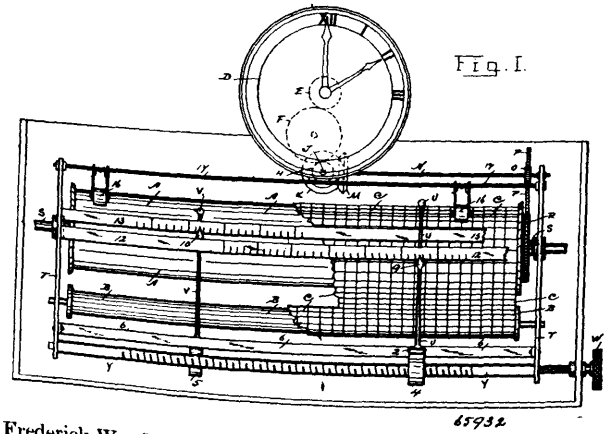
65931

The Safety Third Rail Electric Company, New York City, New York, assignee of John McL Murphy, Torrington, Connecticut, U.S.A., 23rd January, 1900; 6 years. (Filed 18th August, 1898.)

Claim.—1st. In improved rotary transformer of the character described having a low potential armature and field winding, and a high potential armature and field winding with means for effecting a sufficient change in the magnetizing force of a field winding or of the field windings under an applied electro motive force of high potential in an inverse direction, whereby to cause the low potential armature to generate a voltage greater than that supplied to it from the battery, substantially as described. 2nd. A rotary transformer comprising a low potential armature and field winding, and a high potential armature and field winding, a supplemental winding in circuit with the high potential armature for creating a change in the magnetizing force for the field of the two armatures when an applied electro motive force of higher voltage than the initial electro motive force for rotating the low potential armature is created in an inverse direction from the high potential armature, as specified.

No. 65,932. Register. (*Régistre d'electricité.*)

Fig. 1.

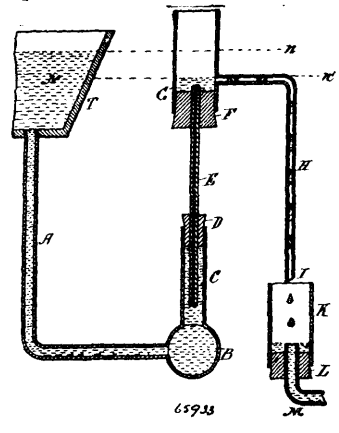


65932

Frederick W. Martin and Charles Colville, both of Hamilton, Ontario Canada, 23rd January, 1900; 6 years. (Filed 8th June, 1899.)

Claim.—1st. An automatic register for plotting load curves as the out-put of electric light and power, comprising a roller capable of revolving in a frame, once in a given period of time and continually, by means of clock connection to a wheel on the end of said roller, a ribbon feed roll capable of revolving with and supplying right angled line divisioned ribbon paper to said revolving roller, an ink regulating marking pen pivoted to a hub on a rigid guide bar, said hub capable of longitudinal movemrnt on a screw operated by an end and outer hand wheel, and said pen having a finger to indicate the amperes or volts on a numeral line divisional bar, substantially as set forth. 2nd. A register for plotting load curves of the character described, comprising a ribbon roller capable of making a revolution once in a given time and continuously in a frame by means of clock connection to said roller, a ribbon feed roller capable of revolving with and supplying said roller with right angled and parallel line divisioned ribbon paper, a series of different coloured ink regulating marking pens having fingers to indicate amperes and volts on numeral line divisional bars extending with and parallel to said ribbon roller, said pens pivoted to separate hubs on separate longitudinal screws revolved by outer hand wheels, and guide for said hubs to prevent the same from turning, as set forth. 3rd. A register of the character described, comprising a ribbon paper roller journalled in a frame, and capable of making a revolution once in a given time and continuously by means of clock connection to said roller, a ribbon feed roll to revolve with and to supply said roller with ribbon paper mark with longitudinal and transverse lines, parallel lines, a pen or pens each having an index finger to indicate amperes, or volts on a horizontal ampere, or volt numeral line divisioned bar, said pen or pens pivoted to a separate hub and capable of longitudinal movement on a screw, and guide by means of an outer connected hand wheel, as set forth. 4th. An automatic register of the character described, comprising a roller, connected to a clock by a series of which to revolve said roller once in a given period of time and continuously, a ribbon roll provided with a tension spring and capable of revolving with, and feeding said roller with right angled line divisioned ribbon, a different coloured ink regulating pen for said ribbon, and provided with an index finger, longitudinal line and number divisioned bar, under said finger, said pen capable of marking on the ribbon on said roller, and of longitudinal pivotal and guided movement on a screw, operated by outer hand wheel, tension rollers, on the ribbon roller, capable of longitudinal movement on the rigid stay bar of the frame, as set forth.

No. 65,933. Liquid and Feed Devices for Electrolytic Apparatus. (*Appareil alimentateur de liquide pour machines électrolytiques.*)



65933

S. D. Warren and Company, Boston, Massachusetts, assignees of Rauel Girouard, Westbrook, Maine, both in the U.S.A., 23rd January, 1900; 18 years. (Filed 1st September, 1899.)

Claim.—1st. The combination with a supply reservoir of a delivery vessel, a flow restraining tube connecting the supply reservoir with the delivery vessel and an outlet for the delivery vessel. 2nd. The combination with the supply reservoir of a delivery vessel, a capillary conduit connecting the supply reservoir with the delivery vessel, and an outlet from the delivery vessel. 3rd. The combination with a supply reservoir of a delivery vessel, a capillary conduit connecting the supply reservoir with the delivery vessel, the said capilliary conduit being vertically adjustable, and an outlet from the delivery vessel. 4th. The combination with a supply reservoir of a distributing main connected therewith, risers branching from the distributing main, delivery vessels connected with the said risers by flow restraining tubes, and outlets from the delivery vessels. 5th. The combination with a supply reservoir of a distributing main connected therewith, risers branching from the distributing main, delivery vessels connected with the said risers by vertically adjustable flow restraining tubes, and outlets from the delivery vessels. 6th. The combination with a supply reservoir of a delivery vessel, a capillary conduit connecting the supply reservoir with the delivery vessel, the same delivery vessel mounted on and carried by the capillary conduit and vertically adjustable therewith, and an outlet from the delivery vessel.

No. 65,934. Liquid Feed Device for Electrolytic Apparatus. (*Appareil alimentateur de liquide pour machines électrolytiques.*)

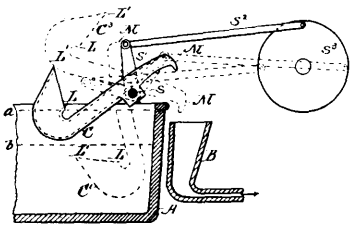


Fig. 1.

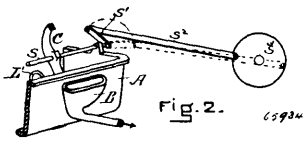


Fig. 2.

S. D. Warren and Company, Boston, Massachusetts, assignee of Henry Carmichael, Malden, Massachusetts, U.S.A., 23rd January, 1900; 18 years. (Filed 1st September, 1899.)

Claim.—1st. In a liquid feed apparatus, the combination of a reservoir, a pipe having an axis of rotative movement, a scoop end, a stem and a delivery opening, and so mounted with reference to the reservoir that the rotative movement of the pipe carries the scoop end below the level of liquid in the reservoir, the relative proportions of the scoop and stem parts of the pipe being such that the volume of contained liquid in the pipe at and after emerson from the liquid in the tank is at least equal to the volume of contained liquid in the pipe when the pipe is at that point in its rotative movement when the delivery opening begins to spill. 2nd. In a liquid feed apparatus, the combination of a reservoir, a pipe having an axis of rotative movement, a scoop end, a steam and a delivery opening, and so mounted with reference to the reservoir that the rotative movement os the pipe carries the scoop end below the level of the liquid in the reseservoir, the scoop end having its opening so placed with reference to the rotative movement of the pipe that, in the movement of emersion the part of the scoop opening farthest from the axis is in angular rotative adance of that part of the scoop opening which is nearest to the axis.

No. 65,935. Electrode and Connections.
(*Electrode et connexion.*)

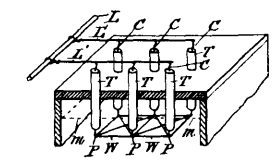


Fig. 1.

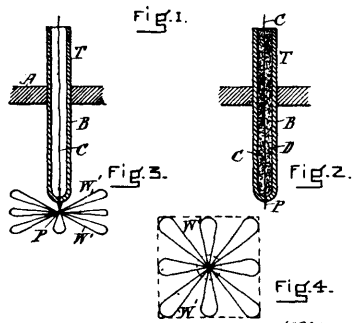
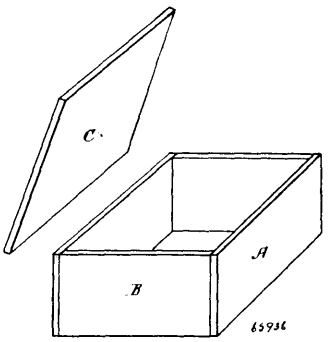


Fig. 3. Fig. 2. Fig. 4.

S. D. Warren and Company, Boston, Massachusetts, assignee of Henry Carmichael, Malden, Massachusetts, U.S.A., 23rd January, 1900; 18 years. (Filed 1st September, 1899.)

Claim—1st. The combination with the enclosing case of a cell for electrolytic or kindred purposes, of a plurality of introductory conduits for electrode connections, each of the said conduits consisting of a tube of insulating material closed at one end, passing through the enclosing case and having its open end outside and its closed end inside the case, a pin of non-corrodible conducting material passing through and sealed in the inner end of the insulating tube, and protruding from the wall of the tube both inside and outside, and having an electrical conductor in contact with the inner end of the pin and leading through the open end of the tube, and wires strung between the exposed ends of the several pins. 2nd. An introductory conduit for electrodes which consists of a tube of vitrified porcelain, closed at one end, a pin of platinum passing through and sealed in the closed end of the tube, a copper conductor within the tube, joined electrically to the intruding end of the platinum pin, and a filling of asphalt in the tube, enclosing the copper conductor. 3rd. An electrode and connections thereto which consist of a tube of insulating material, a pin of non-corrodible conducting material sealed in the end of the tube and protruding from and intruding within the tube, electrical connections from the pin inside the tube, and an active electrode consisting of filaments of non-corrodible conducting material radiating from and supported by the end of the pin protruding outside the tube.

No. 65,936. Enclosing Vessel for Electrolytic Apparatus. (*Boîte à contenir les appareils électrolytiques.*)



S. D. Warren and Company, Boston, Massachusetts, assignees of Henry Carmichael, Malden, Massachusetts, U.S.A., 23rd January, 1900; 18 years. (Filed 1st September, 1899.)

Claim.—1st. An inclosing vessel for electrolytic apparatus, of which Portland or analogus cement constitutes the effective ingredient of consistency. 2nd. An enclosing vessel for electrolytic apparatus, made of concrete compound of Portland or analogous cement, and a sand made of crushed quartz, mixed in such proportions that the cement constitutes the effective ingredient of consistency.

No. 65,937. Steam Engine. (*Machine à vapeur.*)

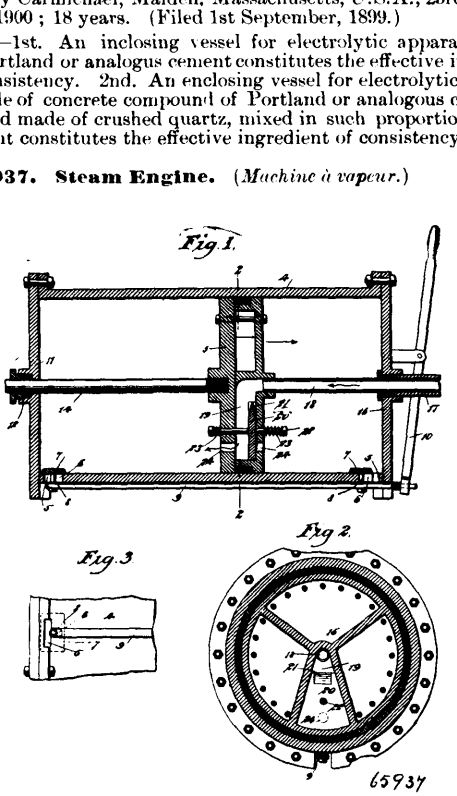


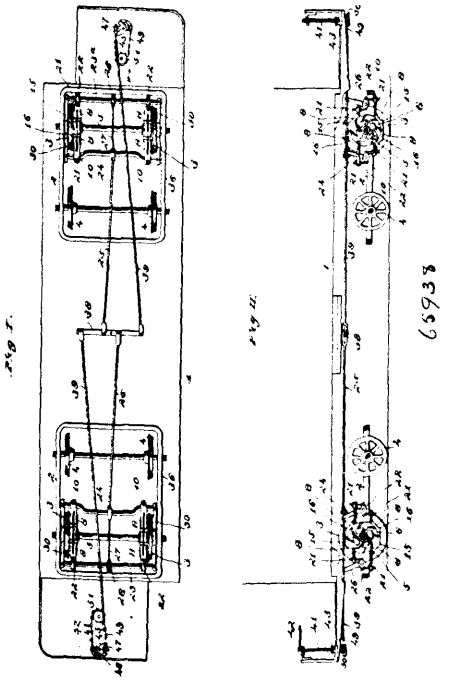
Fig. 1. Fig. 3. Fig. 2.

Moses Riley Robbins, and Arthur Ernest Mallett, both of Victoria, Province of British Columbia, Canada, 23rd January, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. In combination of a cylinder having an exhaust port in each end thereof, a slide valve commanding each exhaust port, a connection between the slide valves to operate the same in unison, a piston working in the cylinder and having a chamber therein, a pipe communicating with the chamber of the piston and sliding in one head of the cylinder, the piston having a port in each face, the ports communicating with the chamber, a cutoff valve movable in the chamber of the piston to command the ports thereof, a pin attached

to the valves and sliding in the face walls of the piston, and springs engaging the pin to balance the cut off valve. 2nd. The combination of a cylinder having an exhaust port adjacent to each end thereof, valves commanding each exhaust port, a connection between the valves to operate the same in unison, a piston working in the cylinder and having a chamber therein, an exhaust port in each wall of the piston, said ports communicating with the chamber, a steam pipe moving with the piston and leading the steam to the chamber thereof, and a cutoff valve working in the chamber and commanding the ports thereof. 3rd. The combination of a cylinder, having an exhaust port adjacent to each end thereof, valves controlling the exhaust port, a piston working in the cylinder and actuating the valves, the piston having a chamber therein, a pipe moving with the piston and feeding the steam to the chamber thereof, the piston also having ports in its face walls, the ports communicating with the chamber of the piston, and a cutoff valve working in the chamber and commanding the ports of the piston. 4th. The combination of a cylinder having exhaust ports, valves commanding the same, a piston working in the cylinder and actuating the valves, the piston having a steam chamber and ports communicating therewith, means for leading the steam to the steam chamber of the piston, and a cut off valve working in the said chamber and commanding the ports of the piston. 5th. The combination of a cylinder having an exhaust port adjacent to each end thereof, valves commanding the exhaust ports, a connection between the valves to work the same in unison, a piston working in the cylinder and having a chamber to which the steam is fed, the piston also having ports in each face thereof, the ports communicating with the chamber, and means commanding said ports to alternately open and close the same.

No. 65,938. Car Brake. (*Frein de chars.*)



The Kingsland Friction Car Brake Company, assignee of Philip Schuyler Kingsland, both of St. Louis, Missouri, U.S.A., 23rd January, 1900; 6 years. (Filed 8th January, 1900.)

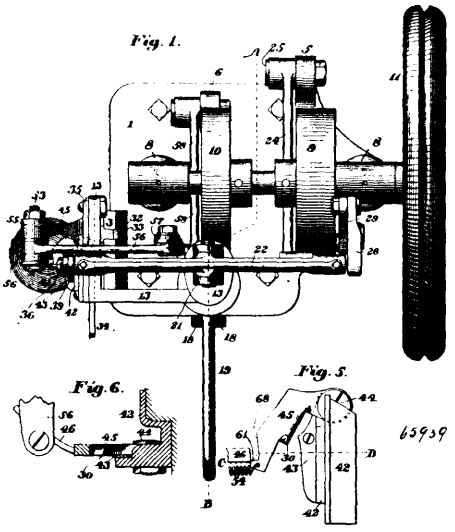
Claim.—1st. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, holders supporting the brake shoes, rock shafts to which each holder is connected at both ends, and means for simultaneously operating the rock shafts so that the brake shoes are moved bodily away from and towards the discs, substantially as set forth. 2nd. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, holders supporting the brake shoes, and rock shafts to which each holder is adjustably connected, at each end substantially as and for the purpose set forth. 3rd. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, holders supporting the brake shoes, rock shafts, blocks secured to the rock shafts, and bolts adjustably connecting each end of each holder with said blocks, substantially as set forth. 4th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, and holders supporting the brake shoes, said discs having V-shaped grooves with annular recesses at the bases of the grooves, substantially as and for purpose set forth. 5th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage said discs, and holders supporting said brake shoes, said discs having V-shaped grooves with annular recesses at the bases of the grooves, and said brake shoes being V-shaped and recessed at 9, substantially as set forth. 6th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to bear against the discs, and formed in sections, and holders carrying the brake shoes, said holders being provided with shoulders and ledges adapted to receive projections on the brake shoes whereby the brake shoe sections can be readily removed and replaced, substantially as set forth. 7th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to bear against discs and formed in sections, and holders supporting the discs, said holders being formed with shoulders 12, and ledges 13 and 13ª, and said brake shoe sections being formed with ears 14 and 19, and with projections 14 and 16, and a bolt 17, extending through the holder for securing the brake shoe sections, substantially as and for the purpose set forth. 8th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to bear against the discs, rock shafts with which the brake shoes are connected, and means for supporting said rock shafts consisting of frames provided with pedestals to receive the axle boxes of the car wheels inside of the truck frame, substantially as set forth. 9th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, rock shafts to which the brake shoes are connected, and means for supporting the rock shafts, consisting of frames having pedestals to receive the axle boxes of the car wheels, and having openings in which the journal boxes of said rock shafts are adjustably held, substantially as set forth. 10th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, rock shafts to which the brake shoes are connected, and vertically adjustable boxes in which said rock shafts are journalled, substantially as set forth. 11th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, holders supporting the brake shoes, rock shafts to which each holder is connected at each end, a crank on one of the rock shafts to which the other rock shaft is connected, brake rods secured to the rock shafts, and a brake staff to which said brake rods are joined by a positive connection, whereby the brake shoes are moved positively toward and away from said discs, substantially as set forth. 12th. In a car brake, the combination of brake shoes, brake rods for moving the brake shoes, a brake staff, and a positive connection between said rods and staff, consisting of a cam provided with a horn, a link pivoted to the cam and carrying a roller adapted to be engaged by said horn, and a connection between the brake rod and the free end of said link, and secured at one end to the cam, whereby when the brakes are applied the point of contact between said horn and roller approaches the brake staff, substantially as set forth. 13th. In a car brake, the combination of brake shoes, brake rods for moving the brake shoes, a brake staff, and a positive connection between said rods and staff, consisting of a cam secured to the staff and provided with a horn, a link pivoted to the cam and adapted to be engaged by said horn, and a connection between the brake rod and said link, and secured at one end to the cam, whereby when the brake staff is turned the point of contact between said horn and said link approaches the staff, substantially as set forth. 14th. In a car brake, the combination of brake shoes, brake rods for moving the brake shoes, a brake staff, a positive connection between said rod and staff, consisting of a cam provided with a horn, a link pivoted to said cam and adapted to be engaged by said horn, a chain secured by one end to said cam and by the other end to said link, and an idler over which said chain passes, said brake rod being connected to said chain, substantially as described. 15th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, rock shafts to which the brake shoes are connected, and one of which is formed with a crank portion, discs carried by the pony wheels of the truck, brake shoes adapted to engage the last mentioned discs, bars carrying the last mentioned shoes, and links connecting said bars to the crank of said rock shaft, substantially as set forth. 16th. In a car brake, the combination of discs carried by the car wheels, brake shoes adapted to engage the discs, rock shafts to which the brake shoes are connected, and one of which is formed with a crank portion, discs carried by the pony wheels of the truck, brake shoes adapted to engage the last mentioned discs, bars carrying the last mentioned shoes, and links connecting said bars to the crank of said shaft, said bars being made in two parts adjustably connected together, substantially as set forth.

No. 65,939. Machine for Re-inforcing Insoles.
(*Machine à renforcer les fausses semelles.*)

The Economy Machine Company, Portland Maine, assignee of Albert Edward Johnson, Brockton, Massachusetts, U.S.A., 23rd January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a machine for applying a reinforcing fabric to insoles, the combination of a work support, a gauge to locate the position of the sole upon said support, and guide it as it is being fed through the machine, a presser plate provided with an acute angled inwardly projecting lug constructed and arranged to fit the inclined bottom and acute angle of the sole channel, means for imparting to the acute angled end of said pressor plate a vertical reciprocation to clamp the work between it and said work support, means for imparting to said plate a laterally vibrating movement to feed the work and means for imparting to said presser plate an independent vibratory movement toward and from the gauge, the motion toward

the gauge being made while said plate is pressed into firm contact with the work, whereby the reinforcing material is firmly pressed



into contact with the inclined surface of the channel, and is forced into the acute angle of said channel, and into contact with the inner surface of the channel lip. 2nd. In a machine for applying a reinforcing textile fabric to a channeled insole, the combination of a work support, a gauge arranged above the upper surface of said work support, a vertically reciprocating and laterally vibrating presser plate provided at its lower end with an acute angled inwardly projecting lug constructed and arranged to fit the inclined bottom and acute angle of the sole channel, means for imparting to said presser plate a vertically reciprocating and a laterally vibrating movement in one direction to feed the work, means for vibrating said presser plate in a plane at right angles to the line of feed of the material to press the reinforcing material iuto the acute angle of the channel and cause it to adhere to the inner surface of the channel lip, a pivoted reciprocating cutter, a fixed cutter blade, means for moving for said cutter toward and from said fixed cutter blade, and means intervening between the cutter operating lever and said presser plate whereby said plate is compelled to move in the same direction as said cutter and in unison therewith. 3rd. In a sole reinforcing machine the combination with a work support, and a gauge to locate the work upon said support, of a vertically and laterally movable presser plate, provided with an acute angled inwardly projecting lug, constructed and arranged to fit the inclined bottom and acute angle of the channel, the elbow lever 56, the spring arm 62, carried by the pendent arm of said lever in position to bear against said presser plate, means for imparting to said lever a vibratory movement to move the lower end of said presser plate towards said gauge, and the spring 63, constructed and arranged to move said presser plate in the opposite direction. 4th. The combination in a sole reinforcing machine of a work support, a gauge to receive the edge of the sole and guide it while being fed, a vertically movable bracket, a swiveling support carried by said bracket, a two armed lever fulcrumed in said swiveling support, a presser plate mounted upon an adjustable fulcrum and provided at its lower end with an acute angled inwardly projecting lug or operating part and connected at its upper end to one end of said lever vertical and horizontal vibrations, and means for raising said bracket and the parts carried thereby to enable the work to be placed in position on the work support. 5th. In a sole reinforcing machine the combination with a work support and a suitable gauge for locating the work on said support, of a vertically reciprocating and laterally vibrating presser plate having an inclined lower end and an acute angled inwardly projecting lug, the bracket 13, the stand 55, secured to and movable vertically with said bracket, a lever fulcrumed upon said stand, a cutter connected to or operated by the movable end of the pendent arm of said lever, the disc 10, provided with the cam path 60, lever 58, and rod 57, for imparting motion to said lever, and means for imparting to the lower end of said presser plate a vertical reciprocation and a vibratory motion in two vertical planes at right angles to each other. 6th. In a machine for reinforcing insoles the combination of a work support, a gauge to locate the work upon said support, a vertically reciprocating and laterally vibrating feed and presser plate, means for operating said plate to press the reinforcing material into firm contact with the bottom of the channel and the inner face of the of the channel lip, a cutting device constructed and arranged to trim the surplus reinforcing material and said channel lip to a uniform height, and means for imparting to said cutter a succession of intermittent movements. 7th. In a machine for reinforcing insoles, the combination of a work support, a gauge to locate the sole upon said support, means for pressing the reinforcing material into firm contact with the bottom of the channel and the inner surface of the channel lip and into the acute angle of said channel, fixed cutting blade 43, the pivoted cutter blade 45, and means for imparting to said pivoted blade an intermittent vibratory motion with a period of rest after each vibration. 8th. In a machine for reinforcing insoles, the combination of a work support, a work locating gauge, a vertically reciprocating and laterally vibrating presser plate constructed and arranged to press the reinforcing material into firm contact with the bottom of the channel and with the inner surface of the channel lip, a fixed shear blade, a pivoted shear blade constructed and arranged to co-operate with said fixed blade to sever a section of the reinforcing material at each vibration of said pivoted blade, a cam, a lever operated by said cam, and means connecting said lever and pivoted blade whereby an intermittent vibration is imparted to said pivoted blade with a period of rest after each vibration. 9th. In a machine for applying a reinforcing textile fabric to a channeled insole, the combination of a work support, a gauge arranged above the upper surface of said work support, a vertically reciprocating and laterally vibrating presser plate provided at its lower end with an acute angled inwardly projecting lug constructed and arranged to fit the inclined bottom and acute angle of said channel, means for imparting to said presser plate a vertically reciprocating and laterally vibrating movement in one direction to feed the work, means for vibrating said presser plate in a plane at right angles to the line of feed of the material to press the reinforcing material into the acute angle of the channel and cause it to adhere to the inner surface of the channel lip, a fixed cutting blade, a pivoted and vibratory cutting blade constructed and arranged to co-oporate with said fixed cutter, the lever 56, the push bar 46 carried by said lever 56 and engaging said pivoted blade, the spring 47, the cam path 60, and means intervening between said cam and lever whereby an intermitted vibration is imparted to said pivoted cutter blade with a period of rest after each vibration. 10th. In a machine for applying a reinforcing material to a channeled insole, the combination of a work support, a vertically reciprocating and laterally vibrating presser feed plate, a fixed shear cutting blade, a pivoted vibrating shear blade co-operating with said fixed blade, means for imparting to said presser feed blade an intermittent vertical reciprocation with a period of rest after each downward movement, means for intermittently moving said pivoted shear blade, and the lower end of said presser feed plate inward, or toward said fixed blade, in two steps, with a stand still between said two steps, and means for laterally vibrating said presser plate to feed the work between the two steps of the inward movement of said pivoted blade and presser feed plate. 11th. In a machine for applying a reinforcing fabric to insoles, the combination of a work support, a vertically reciprocating and laterally vibrating presser feed plate, a fixed shear cutting blade, the pivoted shear blade 45 provided with the lug 61 and edge surface 68, the lever 56, the push bar 46 carried by said lever and arranged to act upon said shear blade 45, the spring rod 62 also carried by said lever 56 and arranged to act upon said presser feed plate, means for intermittently moving said lever 56 about its axis in one direction in two steps, with a stand still after each of said steps, and a movement in the opposite direction in a single step, and mechanism for imparting to said presser feed plate an intermittent vertical reciprocation, with a period of rest after each downward movement, and means for imparting to said feed plate a lateral movement to feed the work between the two steps of the first movement of said lever 56.

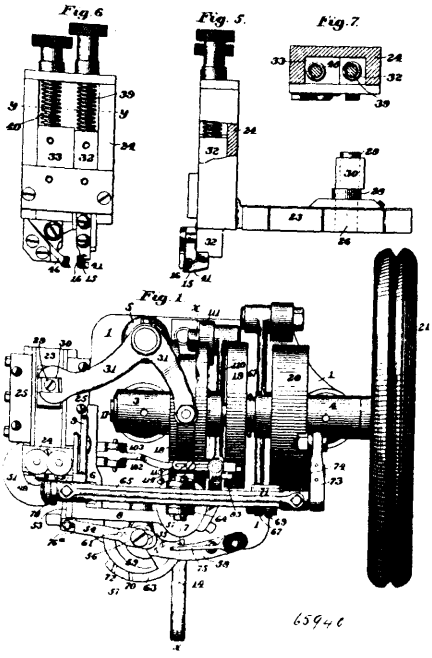
No. 65,940. Insole Channeling and Lip Setting Machine.

(*Machine à canneler et poser les fausse semelles.*)

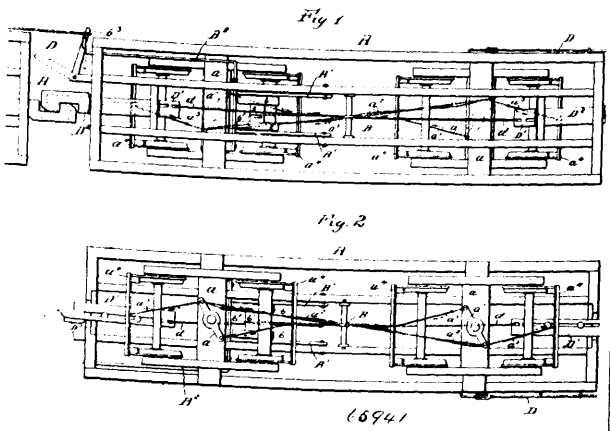
The Economy Machine Company, Portland, Maine, assignee of Albert Edward Johnson, Brockton, Mass., both in the U.S.A., 23rd January, 1900; 6 years. (Filed 26th January 1899.)

Claim.—1st. An insole channeling machine, comprising the following means for setting the channel lip, viz., a vertically vibrating and endwise reciprocating lever, a hammer head or setting tool formed upon or secured to one end of said lever, and provided with an operating lip constructed and arranged to strike a blow upon the inner face of the upturned channel lip in a horizontal direction, and means for imparting to said lever and hammer head a vertically vibrating and a horizontally reciprocating movement. 2nd. An insole channeling machine, comprising the following means for setting the channel lip, viz., the lever 102 provided with a slot 77 and the hammer lip 80, and mounted upon a fixed fulcrum pin, the truck 82 carried by said lever, the link 108 provided with the slot 107 in its upper end to receive the inner end of the lever 102, the cam plate 83 having the inclined slot 84 which receives and acts upon said truck 82 to move said lever 102 endwise, the spring 116 set in the slot 107 beneath said lever 102, and means for imparting to said link 108 a vertical reciprocation. 3rd. In an insole channeling machine, the combination of a work support, a feeding mechanism, a channel cutting tool constructed and arranged to cut a channel and turn the channel lip upward, the lever 53 pivotally connected at one end to a fixed part of the machine, a gauge carried by said lever, an oscillating cam connected to and arranged to act upon and vibrate said lever, and means for oscillating said cam and locking it, a plurality of adjusted positions. 4th. In an insole channeling machine, the combination of a work support, a work feeding mechanism, a channel cutting tool, constructed and arranged to cut a channel and turn the channel lip upward, the lever 53 pivotally

connected at one end to a fixed part of the machine, a gauge carried by said lever and projecting over the upper surface of the work support, an oscillating cam mounted upon a fixed axis, means connecting said cam with said lever 53, a hand lever connected to said cam for oscillating it, a fixed segmental lip partially surrounding said cam and provided with a plurality of detent notches, and a locking lever carried by said hand lever and constructed and arranged to engage said detent notches to lock said cam in its different adjusted positions.



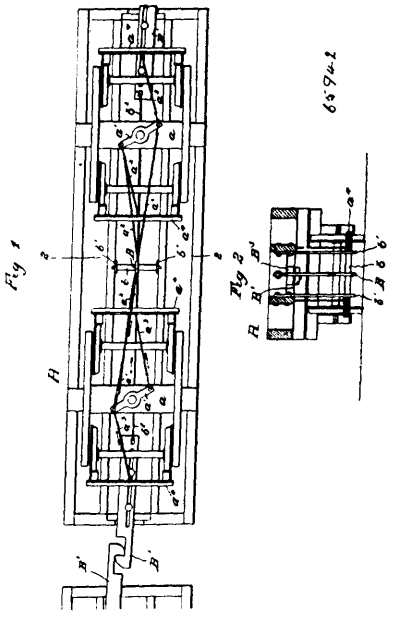
No. 65,941. Automatic Brake. (*Frein automatique.*)



James H. Greenwood, Thomas N. Morrison, William Long, Stewart Burrows, William Homley, Robert F. Morrison and John Morrow, all of Boissevain, Manitoba, Canada, 23rd January, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. An automatic brake mechanism, comprising a suitable brake operatively mounted upon the frame of a car, a lever pivotally mounted in said frame, flexible connections between said lever and said brake, a friction disc movably mounted in said frame and adapted to be automatically moved into contact with the axle of the truck, a drum fixed upon said friction disc, and a chain connected to said drum and the upper portion of said lever, substantially as described. 2nd. An automatic brake mechanism, comprising a suitable brake operatively mounted upon the frame of a car, a lever pivotally mounted in said frame, flexible connections between said levers and said brake, a bracket pivotally mounted in said frame, a friction disc journalled in said bracket and adapted to be automatically moved into engagement with the axle of the truck, a drum fixed upon said friction disc, a chain connected to said drum and the upper portion of said lever, substantially as described. 3rd. An automatic brake mechanism, comprising a suitable brake operatively mounted upon the frame of a car, a lever pivotally mounted in said frame, flexible connections between said lever and said brake, a friction disc movably mounted in said frame and adapted to engage the axle of the truck, a drum fixed upon said disc, a chain connected to said drum and to said lever, a tripping lever journalled in said frame and connected at one end with said friction disc, the other end of said lever being adapted to engage a tripping link, whereby the said disc is normally held in its raised position, and means for releasing said tripping link from engagement with said levers, whereby the said disc will be moved automatically into engagement with the truck axle, substantially as described. 4th. An automatic brake mechanism, comprising a suitable brake operatively mounted upon the frame of a car, a lever pivotally mounted in said frame, flexible connections between said lever and said brake, a friction disc movably mounted in said frame and adapted to be automatically moved into contact with the axle of the truck, a drum fixed upon said friction disc, a chain connected to said drum and the upper portion of said lever, a draw bar slidably mounted in said frame, and a suitable connection between said draw bar and said lever, substantially as described.

No. 65,942. Brake. (*Frein.*)



James H. Greenwood, Thomas N. Morrison, William Long, Stewart Burrows, William Hanley, Robert F. Morrison, and John Morrow, all of Boissevain, Manitoba, Canada, 23rd January, 1900; 6 years. (Filed 8th January, 1900.)

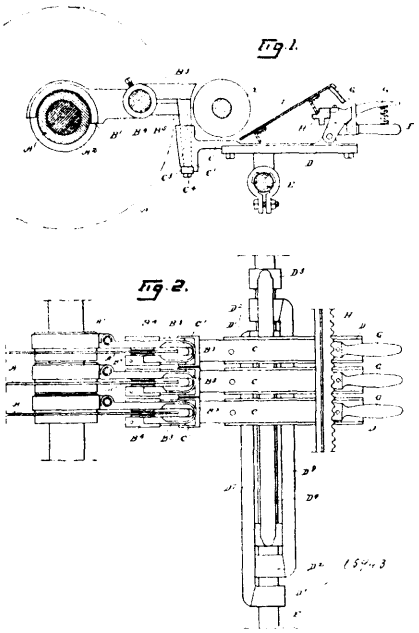
Claim.—1st. A brake mechanism, comprising a suitable brake operatively mounted upon the frame of a car, a lever pivotally mounted in said frame, flexible connections between said lever and said brake, a draw bar slidably mounted upon the car frame and adapted to be connected with the draw bar of the next car, and a connection between said draw bar and the upper portion of said lever, substantially as described. 2nd. A brake mechanism, comprising a suitable brake operatively mounted upon the frame of the car, a lever pivotally mounted in said frame, flexible connections between said lever and said brake, a draw bar slidably connected with the coupler bar and movable therewith and adapted to be connected with the draw bar of the next car, and a connection between said draw bar and the upper portion of said lever, substantially as described. 3rd. A brake mechanism, comprising a suitable break operatively mounted upon the frame of a car, a bar rotatably mounted on the truck beam, a lever pivotally mounted in the said frame, flexible connections between said rod and said lever, flexible connections between said rod and said brake beam, a draw bar slidably mounted upon the car frame and adapted to be connected with the draw bar of the next car, and a connection between said draw bar and the upper portion of said lever, substantially as described.

No. 65,943. Wood Gang Edger. (*Appareil à dresser le bois.*)

Stephen B. Kenfield and John D. Eby, both of San Francisco, California, U.S.A., 24th January, 1900; 6 years. (Filed 7th August, 1899.)

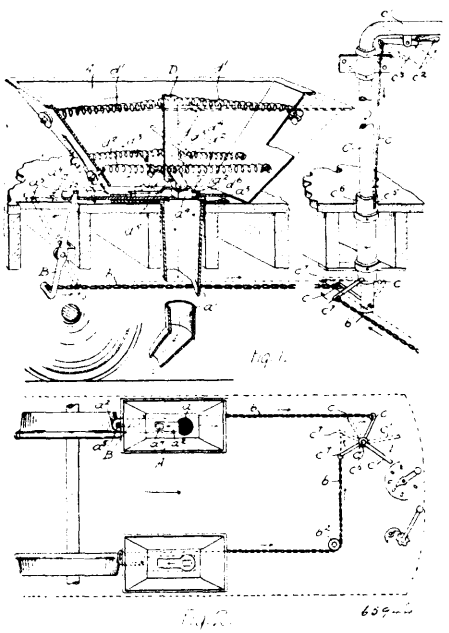
Claim.—In a gang edger, the combination with two and more suitable saw shifting mechanisms, of a guide rod E, extended across

the frame of the machine, two and more spreader rods D^7, D^8 and D^6, having bearings D^1, D^2 and D^3, at each end and in line to



engage the said guide rod and one bearing on each spreader rod extending between the bearings of the other spreader rod, and suitable connections between the said shifting mechanisms and spreader rods, substantially as described.

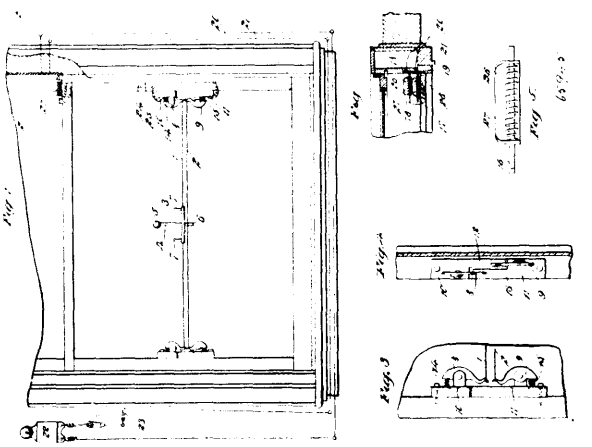
No. 65,944. Sander. (*Appareil pour sabler les rails.*)



Benjamin Barnard Jenkins, Toronto, and Benjamin Madill, Beaverton, both in Ontario, Canada, 24th January, 1900; 6 years. (Filed 17th July, 1899.)

Claim.—1st. A sander comprising a sand receptacle having an orifice at the bottom, normally closed by a slide valve, a lever located and pivoted within the receptacle and adapted to be moved by contact with the slide valve and springs located within the receptacle and adapted to be removed by contact with the lever, and means for opening and closing the valve, as and for the purpose specified. 2nd. The combination in a sander, with a sand receptacle having an orifice at the bottom, normally closed by a slide valve, of a lug on the slide valve, lever located and pivoted within the receptacle and adapted to be moved by contact with the lug on the slide valve, springs located near the bottom of the receptacle on each side of the lever and attached at the ends to the sides of the receptacle, cross bars joining the springs close to each side of the lever, and means for moving the slide valve, as and for the purpose specified. 3rd. The combination in a sander, with a sand receptacle, having an orifice at the bottom, normally closed by a slide valve, of the lug a^4, the slide valve a^2, the lever D, the dog d^4, the stop pin d^5, springs connecting the lever D, and the sides of the receptacle, and means for moving the slide valve, as and for the purpose specified. 4th. The combination with a sander of the class described, having an orifice at the bottom, of the slide valve a^2, spring a^4, lever B, chain b, crank shaft C, suitable journalled, crank arm c, and handle c^1, as and for the purpose specified. 5th. The combination with two sanders located in proximity to the wheels of a car, each having an orifice in the bottom, normally closed by a slide valve, the levers B, chains b and b^1, the crank shaft C, crank arm c, and crank handle c^1, adapted to operate the nearest slide valve, of the sleeve c^6, the arm c^7, the chain b^1, connecting said arm with the lever operating the valve of the further sander, the slide tooth c^4, adapted to engage with the notch c^5, in the sleeve c^6, the grip lever c^2, and spring c^3.

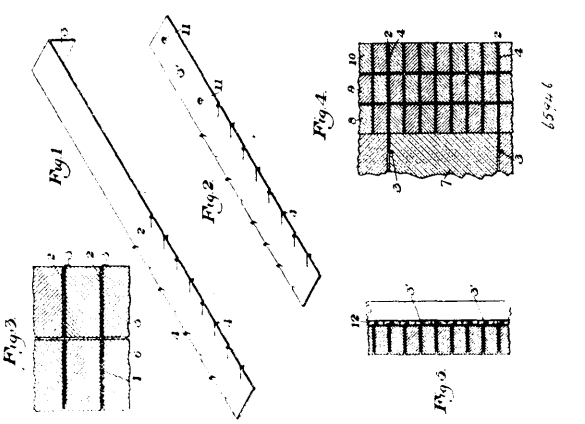
No. 65,945. Burglar Alarm. (*Avertisseur à sonnerie.*)



Daniel L. Wartzenluft, Kutztown, Pennsylvania, U.S.A., 24th January, 1900; 6 years. (Filed 2nd August, 1899.)

Claim.—1st. An electric circuit closer comprising two plates forming part of an electric circuit, insulated one from the other and having portions overlapped, a lever mounted to swing on each plate, the lever of one plate being adapted to engage with the other plate, circuit wires normally holding the levers in open position, and springs for moving the levers to circuit closing position, substantially as specified. 2nd. A burgular alarm, comprising an electric circuit, wires of which are adapted to extend across a window or the like, a circuit closer carried by one of said wires, auxiliary circuit closers having connection with said wires and consisting of spring pressed levers with which the wires are connected, plates on which the levers are mounted, said plates being insulated one from the other, and spring pressed contacts adapted to be carried by the window sash, and having electrical connection with said plates, substantially as specified.

No. 65,946. Wall Tie. (*Attache pour murs.*)



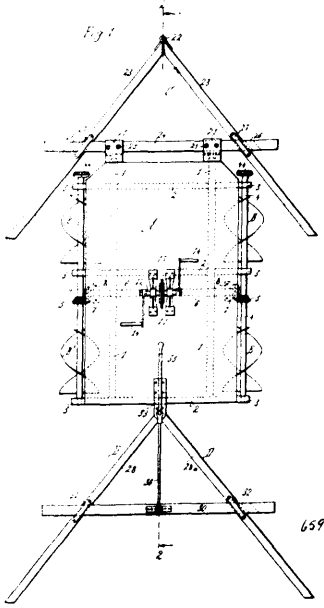
John Grant McDowell, Pittsburg, Pennsylvania, U.S.A., 24th January, 1900; 6 years. (Filed 8th January, 1900.)

Claim. 1st. A brick tie consisting of a metal strip, having upwardly and downwardly projecting teeth, struck from the same

portion thereof and provided at one end with a securing lug, substantially as described. 2nd. A brick tie having at one end a securing lug or similar device, and provided with upwardly and downwardly projecting teeth which are inclined toward said end, substantially as described. 3rd. A brick tie having a securing lug or similar device at one end and provided with upwardly and downwardly projecting teeth cut from its edges and inclined toward the said end, substantially as described.

No. 65,947. Machine for Clearing Ice Surfaces.

(Machine pour nettoyer la surface de la glace.)

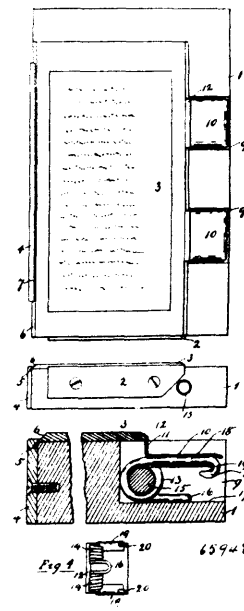


Professor Ernst Alfred Paul Hennig, 25 Nordstrasse, Dresden N., Saxony, Germany, 24th January, 1900; 6 years. (Filed 5th July, 1899.)

Claim.—1st. A machine for clearing ice surfaces, comprising a platform with a driving device arranged on it actuating a driving screw revolvable in bearings parallel to the direction of movement of the machine in combination with means for securing a clearing device to the forward part of the machine, substantially as described. 2nd. In a machine of the kind described, a driving screw having an annular hollow space between its supporting shaft and its screw surface, substantially as described. 3rd. In a machine of the kind described, a driving screw, comprising rings 15, consisting of nave and a rim carried on a shaft with a screw thread fixed to the rims of the said discs, which screw thread consists of a bent metal strip with a sharp edge on its outer side, substantially as described. 4th. In a machine of the kind described, a driving screw, comprising a single hollow cylinder carried on the shaft 4 by spokes and provided with a peripheral screw thread, consisting of a metallic strip with a sharp edge on its outer side, substantially as described. 5th. In a machine of the kind described, a driving screw, comprising a series of spokes fastened on a shaft, said spokes being provided with radial recesses at their free end, and a metallic strip wound round in the form of a screw thread and fitted into the said recesses and projecting outwardly with a sharp edge, substantially as described. 6th. In a machine of the kind described, a driving screw, consisting of two separate screws B B^1, arranged on a common shaft, with bearings 3 arranged between the two screws for supporting the screw shaft, and with a driving pinion on the shaft between the two screws, substantially as described. 7th. In a machine of the kind described, a screw shaft 4 prolonged beyond the front bearings 3, and provided with toothed gear wheels 44, substantially as described. 8th. In a machine of the kind described, a platform provided with longitudinal supports 1 extending beyond the front edge of the platform, with plates on the ends of the said longitudinal supports, with means for securing a clearing device thereto, substantially as described. 9th. In a machine of the kind described, two boards 23 hinged together at the front end, in combination with a cross bar with several recesses 26 arranged on the under side of the said bar for securing said boards at different angles to each other, and means for retaining said boards in the recesses of the cross bar, such device being capable of being employed either as a clearing device in front of the platform or as a steering rudder at the rear of the platform, substantially as described. 10th. In a machine of the kind described, a brush device, consisting of two bars provided with brush material, hinged together at the front end, in combination with a cross bar with several recesses for receiving the bars and adjusting their relative inclination, and means for securing the said brush bars in the recesses, the brush device being adapted to be fastened either in front of the platform as a sweeping device or at the rear of the platform for steering the machine, substantially as described. 11th. In a machine of the kind described, a steering device, comprising a guide frame 33, a rod rotatable and vertically adjustable in said frame and provided with a handle, a screw threaded socket at the joint of the steering or clearing device, engaging with the screw threaded end of the rod, and a bar 36 connecting a cross bar uniting the two boards to the steering rod, substantially as described. 12th. In a machine of the kind described, roller brushes arranged on shafts at an angle with each other and conveying fowardly towards the central axis of the machine, a three-armed frame support connected to the platform, the lateral arms of which frame are provided with the bearings for the shafts of the roller brushes, the front arm carrying a vertical plate provided with a shoe, which plate also carries the front bearings 41 for the shafts, toothed wheels on the shafts of the roller brushes gearing with the toothed wheels on the driving shafts, substantially as described. 13th. In a machine of the kind described, an angle plate with vertical slots secured to front vertical plate and carrying two brush devices adjustable vertically in said slots, substantially as described. 14th. In a machine of the kind described, an angle plate with vertical slots secured to front vertical plate and carrying two brush devices adjustable vertically in said slots in combination with boards arranged in front of the brushes for the purposes of easing the work of said brushes, substantially as described. 15th. In a machine of the kind described, roller brushes, consisting of two cylinder brushes arranged on a common shaft carried in bearings connected to the platform, substantially as described. 16th. In a machine of kind described, a a roller brush characterized by forked arms 46, carried by the central shaft, said arms being in two parts, connected by hinges and provided with holes 48 for adjustment of the holders, brush holders 47 with hollow spaces widening towards the centre for the purpose of clamping the brush material, substantially as described. 17th. In a machine of the kind described, brush material holders, consisting of two undulating plates connected by screws and forming, when clamped together, hollow spaces widening towards the centre for the reception of the ends of the brush material, substantially as described. 18th. In a machine of the kind described, a roller brush, comprising a central shaft with radial forked arms between the arms of which the brush material is clamped, and means for radially adjusting said bush material, substantially as described. 19th. In a machine of the kind described, a snow shovel, consisting of a bottom inclined downwards towards the front, sides and back, the latter being provided with flanges, by means of which the said shovel may be connected to the frame of the machine, substantially as described. 20th. In a machine of the kind described, a snow shovel provided with runners arranged underneath the bottom of the shovel and inclining towards the front, substantially as described.

No. 65,948. Instantaneous Printing Plate Holders.

(Porte-plaque d'imprimerie instantanée.)



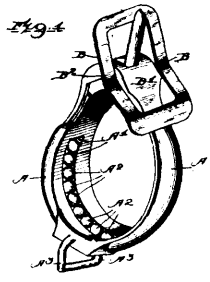
Stephen Maybell and Mary Maybell, both of San Francisco, California, U.S.A., 24th January, 1900; 6 years. (Filed 29th July, 1899.)

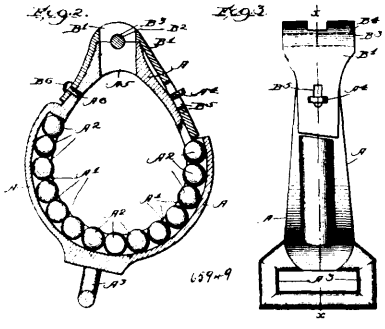
Claim.—1st. The combination of a block, a clamp plate secured on one side thereof having a longitudinal bevelled edge above the

surface of the block, a pivot rod longitudinally arranged on the opposite side of the block, said block having a recess intersected by said rod, a spring coiled around said rod, and having a stationarily supported arm, and a clamp supported by and movable with a free end of said spring, said clamp having on its inner side towards said block an oblique edge adapted to exert pressure upon the bevelled edge of a printing plate on said block, substantially as described. 2nd. The combination of a block, a clamp plate secured on one side thereof having a longitudinal bevelled edge above the surface of the block, a pivot rod longitudinally arranged in the opposite side of the block, said block having a recess intersected by said rod, a spring having its middle portion formed into a stationarily supported arm, said spring, on each side of said middle portion, being coiled around said rod, and its free ends extended outwardly from said rod and block, and a clamp formed of a piece of sheet metal having its edges bent around said free ends and its intermediate edge bent upwards and obliquely outwards from the clamp, substantially as described. 3rd. The combination of a block having a plurality of recesses on one side, a clamp plate secured on the other side thereof having a longitudinal bevelled edge above the surface of the block, a pivot rod passed longitudinally through said block intersecting said recesses, a spring coiled around said rod in each recess, the middle portion of said spring forming a stationarily supported arm, and clamp in each recess secured upon the free end of the spring therein, said clamps being formed of sheet metal plates bent upwards and then obliquely to bear upon the edge of a printing plate on said block, substantially as described.

No. 65,949. Ball Bearing Thill Holder.

(Porte limonière à coussinet à boules.))

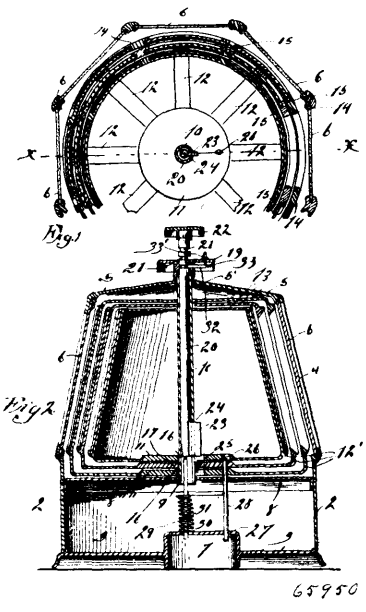




Jesse A. Henry, Toronto, Ontario, Canada, 24th January, 1900; 6 years. (Filed 3rd July, 1899.)

Claim.—1st. In a thill holder, in combination, a body portion having an inner peripheral ball race, and a series of balls for said race. 2nd. In a thill holder, in combination, a body portion in loop form having an inner peripheral ball race, and a girt loop near the lower end of said body portion, and a series of balls for said race. 3rd. In a thill holder, in combination, a body portion in loop form, having an inner peripheral ball race, also having an integral girt loop near the lower end of the body portion, means for securing a buckle to the upper part of the body portion, and a series of balls for the ball race. 4th. In a thill holder, in combination, a body portion in loop form, having on inner peripheral ball race, also having an integral girt loop near the lower part of the body portion, and an opening in its upper portion, a series of balls for the ball race, a strap for securing a buckle to the upper part of the body portion of the holder, and means for fixing the strap to said body portion. 5th. In a thill holder, in combination, a body portion in loop form, having an inner peripheral ball race, also having an integral girt loop near the lower part of the body portion, and an opening in the upper part of said body portion, a series of balls for the ball race, a strap for securing a buckle to the upper part of said body portion, which strap has a longitudinally elongated opening, a transverse T shape stud on the body portion, which stud is adapted to engage said elongated opening in said strap, and a screw for attaching one end of said strap to said body portion. 6th. In a thill holder, in combination, a body portion in loop form, having an inner peripheral ball race, also having an integral girt loop near the lower end of the body portion to one side of the centre line thereof, and an opening in the upper part of the body portion, a series of balls for the ball race, a strap for securing a buckle to the upper part of the body portion, which strap is provided with an opening for the reception of the tongue of the buckle, and with a longitudinally elongated opening, a transverse T shape stud on the body portion of the holder, adapted to engage said elongated opening, and a screw for securing one end of said strap to the body portion of the holder.

No. 65,950. Photograph Holder. *(Porte-photographie.)*



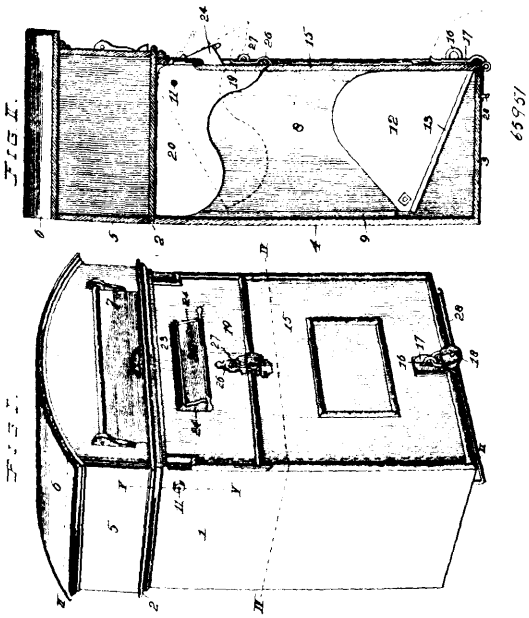
65950

John N. Goldborg, Hopkins, Minnesota, U.S.A., 24th January, 1900; 6 years. (Filed 19th December, 1899.)

Claim. 1st. In a photograph holder, the combination with a transparent case or cover, of a series of rotatable racks arranged therein, said racks being graduated in size and each fitting within a rack of next larger size, and independent means for engaging and rotating said racks simultaneously or the inner rack independently of the others, substantially as described. 2nd. The combination with a polygonal case or cover having transparent panels, of a series racks concentrically and rotatably arranged therein, said racks being graduated in size and each rack fitting within a rack of the next larger size and adapted to receive and hold photographs or other pictures, means independent of said racks for engaging and rotating the inner rack independently of the others, or rotating a series of concentric inner racks independently of the outer racks, substantially as described. 3rd. The combination with a case or cover, of a series of rotatable racks concentrically arranged therein, each rack fitting within a rack of the next larger size, and the outer racks having open or vacant panels through which the pictures upon the inner racks are visible, a vertically movable operating device for said racks, and means adapted to be disengaged from said racks by the downward movement of said operating device for locking said racks against rotation, substantially as described. 4th. In a photograph holder, the combination with a case or cover, of a series of rotatable racks therein, each rack fitting within a rack of the next larger size, a hollow shaft whereon said racks are concentrically supported, and the movable rod within said hollow shaft having a flange or rib projecting through an opening in the wall of said shaft to engage said racks, substantially as described. 5th. The combination with a case or cover, of a series of rotatable racks therein, a hollow shaft whereon said racks are concentrically arranged, a vertically movable rod adapted to engage said racks, and the locking mechanism normally locking said racks against rotation, and adapted to be depressed by the downward movement of said rod to unlock said racks substantially as described. 6th. The combination with a case or cover, of a series of rotatable racks therein, a hollow shaft whereon said racks are concentrically arranged, a rod movable within said shaft, means near the upper end of said rod for locking the same, said rod having a flange or rib near its lower end to engage said racks for rotating the same, and means for locking said racks. 7th. In a photograph holder, the combination with a series of rotatable racks therein, each rack fitting within the rack of the next larger size, discs 11 provided at the lower ends of said racks, said discs having holes or openings 25 and a locking rod arranged to project into said openings, said rod having a bevelled upper end, for the purpose set forth. 8th. In a photograph holder, the combination with a case or cover, of a series of concentric meeting racks therein, a hollow shaft whereon said

racks are supported, a movable rod 20 having a flange or rib to engage said racks, a locking rod 28 to enter openings in the lower end of said racks and the rod 29 connected with said rod 28 and in engagement with the lower end of said movable rod, substantially as described.

No. 65,951. Mail Box. (*Boite de malle.*)



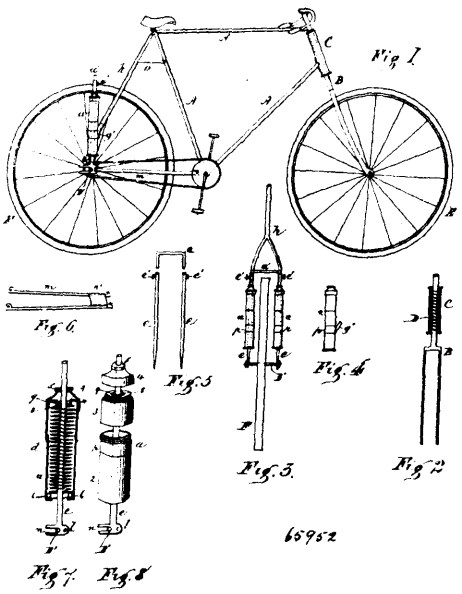
Benjamin F. Brockmeyer and Albert C. Brockmeyer, both of St. Louis, Missouri, U.S.A., 24th January, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. In a device of the class described, the combination of a housing, a swinging dump box in said housing, and a movable chute or door mounted in the lower end of the housing adapted to move outwardly on the outward movement of said dump box, substantially as described. 2nd In a device of the class described, the combination of a housing, a swinging dump box mounted in said housing, and a chute or door hinged to said dump box, substantially as described. 3rd. In a device of the class described, the combination of a housing, a dump box provided with walls forming the mail receptacle movably mounted in said housing to assume a dumping position and a door movably connected to said dump box, substantially as specified. 4th. In a device of the class described, a housing, a dump box hinged within said housing, and a chute hinged to the rear portion of the lower end of the dump box, substantially as specified. 5th. In a device of the class described, a housing, a dump box hinged therein, a front plate normally closing the front of the housing and the box, a hinged door mounted in said plate, and weighted wings extending rearwardly from the ends of the hinged door, substantially as specified. 6th. In a device of the class described, a housing, a dump box hinged therein, a plate normally closing the front of the housing and box, a hinged door mounted in said plate, weighted wings extending rearwardly from the ends of said hinged door, and a chute hinged to the rear lower ends of the dump box, substantially as specified. 7th. In a mail box, the combination with an open front housing, a dump box hinged in siad housing so that its lower end will swing outwardly therefrom, and a chute hinged at its rear end to the lower rear end of the dump box, substantially as specified. 8th. In a mail box, the combination with an open front housing, of a dump box hinged in said housing so that its lower end will swing outwardly therefrom, a plate fixed to the lower front edges of the sides of the dump box, a door plate hinged to the front upper corners of the dump box, and a chute hinged at its rear end to the lower rear end of the dump box, substantially as specified. 9th. In a mail box, the combination with an open front housing, of a dump box hinged in said housing, a plate fixed to the lower front edges of the sides of the dump box, a plate hinged to the upper portion of the front of the dump box, weighted wings extending rearwardly from the sides of the hinged plate, and a chute hinged at its rear end to the lower rear end of the dump box, substantially as specified.

No. 65,952. Bicycle. (*Bicycle.*)

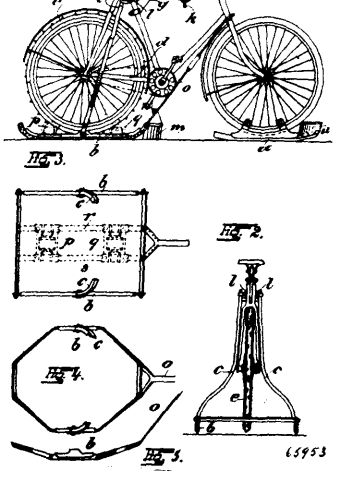
Edward Alexander Bolus, Hamilton, Ontario, Canada, 24th January, 1900; 6 years. (Filed 13th September, 1899.)

Claim.—1st. In combination with a bicycle, the fork of the rear wheel attached to two cylinders, each cylinder provided with a central spiral spring, two vertical bars attached to the axle of the rear wheel and made to pass through the cylinders, and two side brace bars, one end of each pivotally connected to the lower portion



of the said vertical rods, which pass through the cylinders, and the opposite end of said brace bars pivotally connected to the lower portion of the bicycle frame, all constructed substantially as and for the purpose specified. 2nd. The combination with the vertical rods *e e*, cylinders *a a*, springs *d d*, and brace rod *m m*, of the adjustable cross bar n^1, uniting the two vertical rods *e e*, to afford means for conveniently removing and replacing springs in the cylinders when necessary, substantially as specified. 3rd. The base of each of the vertical rods *e e*, formed with a projection *l*, and pivoting the side bars *m*, to the said projections and to the frame of the bicycle, substantially as specified. 4th. In a bicycle, the combination with the frame, of the rear fork connected with cylinders containing springs, vertical rods made to pass through the cylinders and be attached at their lower ends to the axle of the rear wheel, side bars connected pivotally to the said vertical rods and to the projections on the base of the frame and a cylinder containing a spring on the front fork, all constructed for obviating excessive jolting and shaking of the rider when the wheels meet obstructions, substantially as specified.

No. 65,953. Means of Transforming Cycles into Sleds.
(*Moyen de transformer les bicycles en traineaux.*)



Carl Dannehl, Neuhaüser, Prussia, Germany, 24th January, 1900; 6 years. (Filed 13th March, 1899.)

Claim.—1st. The new or improved sledge apparatus for cycles consisting of a shoe sledge runner *a*, for the front wheel a spiked sheathe *o*, for the back wheel, and a sledge framing *b*, with supporting bars *c*, combined with the bar *d* of the cycle frame so as to adjust

the wheel sheathes *e* and spikes in proper relative contact with the ice surface by means of the lever *g, h, l,* operated from the cycle seat all constructed combined and operating, as and for the purpose substantially as set forth. 2nd. In cycle sledge apparatus as set forth, the combination of the snow clearer *m,* with the sledge *b,* and the trailing connection *c,* consisting of the spring metal springs placed together side by side, as and for the purpose specified. 3rd. With a cycle sledge apparatus as set forth, the combination of a stationary training apparatus, consisting of the rollers *p, q* carried in side bearings, on the bars *r, s* which can be applied to the sledge frame *b,* and between which said rollers *p, q,* and the cycle driver wheel a varied resistance or pressure can be set up by the adjustable side frame *c,* combined with the cycle frame bar *d,* and the lever *h, l, g,* ssubstantially as and for the purpose set forth.

No. 65,954. Arc Lamp Suspending Device.
(*Appareil à suspendre les lampes à arc.*)

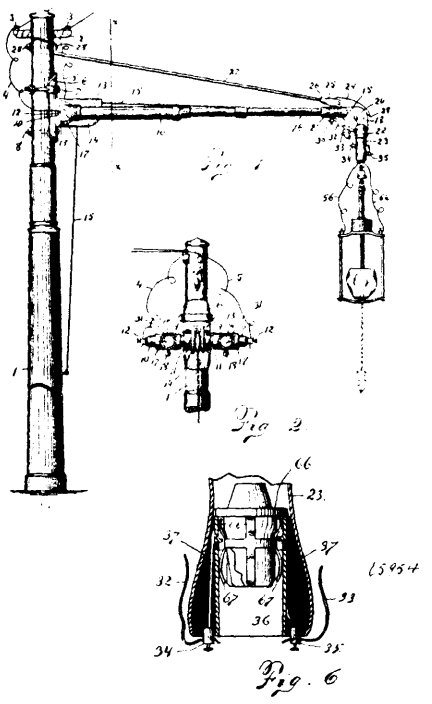


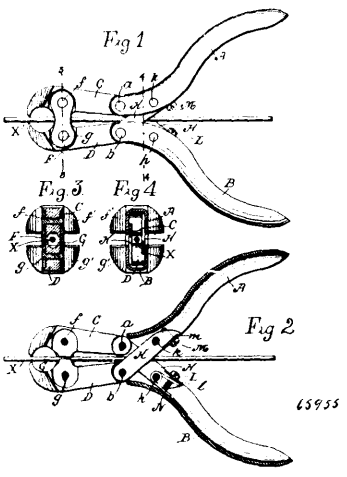
Fig. 3

Fig. 6

Joseph Borka, Buffalo, New York, U.S.A., 24th January, 1900; 6 years. (Filed 18th April, 1899.)

Claim.—1st. A device for suspending an electric lamp from a pole consisting of a plate removably secured to the pole, sockets integral with the plate, a cylindrical rod removably secured in such sockets, a pair of tubular supporting arms journalled upon the cylindrical rod outside of its sockets, a casing integral with the plate and between the sockets, a pulley journalled in such casing, a frame in which the outer ends of the tubular supporting arms are connected a pulley in such frame, a tie rod secured at one end to such frame and removably secured at its other end to the pole and a cord passing over both pulleys for operating the suspending lamp all combined and operating, substantially as stated. 2nd. In a device for suspending electric lamps from a pole, an apparatus for engaging and locking the lamp and for disengaging and cutting the lamp out of the circuit and restoring the broken circuit consisting of an outer metal shell attached to the suspending frame, two inner metal shells insulated from the outer shell and from each other and electrically connected to the wires of the circuit, a spring pressed plunger provided with means for restoring the broken circuit through the two inner shells, and two insulated metal conductors secured to the movable suspending cord of the lamp and electrically connected to the circuit wires of the lamp, one of these conductors having attached means for locking and electric contact with one of the inner shells, the other conductor being provided with means for electrically connecting it with the remaing inner shell when the parts are in locked position all combined and operating, substantially as stated. 3rd. In a device for suspending electric lamps from a pole, an apparatus for engaging and locking the lamp and for disengaging and cutting the lamp out of the circuit and restoring the broken circuit consisting of the following instrumentalities, viz: an outer metal cylindrical shell secured in a socket in the suspending frame, a long inner metal cylinder insulated from the outer shell and electricaliy connected with one of the wires of the circuit, a short inner metal cylinder provided with a lower annular flange and insulated from the outer shell and from the long inner metal cylinder and electrically connected with the other wire of the circuit, a spring pressed plunger within the outer shell carrying metal connectors for contact with the two inner metal cylinders for restoring the broken circuit, a metal rod secured to the suspending cord and to the lamp an insulating tube surrounding such rod and having upper and lower annular shoulders, a metal tube surrounding the insulating tube between its upper and lower shoulders and electrically connected to the lamp, a set of metal arms pivoted to such metal tube for locking engagement with the short flanged inner metal cylinder, springs secured to the metal tube for action against the locking arms a second insulating tube surrounding the lower half of metal tube, and provided with an upper annular shoulder, a second metal tube surrounding the second insulating tube between its upper flange and the lower flange of the first insulating tube, the second metal tube being electrically connected with the lamp and bent leaf springs secured to the second metal tube and having contact with the long inner metal cylinder, all combined and operating, substantially as stated.

No. 65,955. Nippers. (*Tenailles.*)



William Schollhorn Company, assignee of William A. Bernard, all of New Haven, Connecticut, U.S.A., 25th January, 1900; 6 years. (Filed 18th December, 1899.)

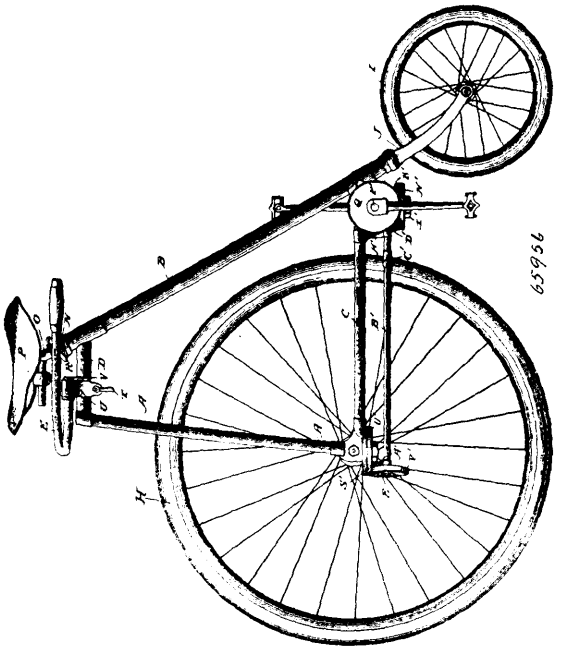
Claim.—1st. Nippers or pliers consisting of a pair of hollow handles, jaws pivoted at the rear ends within the forward ends of the handles and connected together at or near their forward ends, links connected to the rear end of one of the jaws and to and within the oppositely disposed handles, said jaws having an opening through their connection with each other and said links having a space between them, for the passage of a rod or wire through the tool, substantially as described. 2nd. Nippers or pliers consisting of a pair of hollow handles, jaws pivoted at the rear ends within the forward ends of the handles, plates pivoted to the outside of the forward ends of the jaws connecting the same, and independent links each pivoted to the outside of the rear end of one of the jaws, and also pivoted within the oppositely disposed handle, substantially as described. 3rd. In nippers or pliers, the combination with a pair of handles, of jaws pivoted to the forward ends of said handles, and connected together at or near their forward ends, links pivoted each to the rear end of one of said jaws, and to the oppositely disposed handle, one or both of said links being prolonged beyond the pivot with said handle, and a stop limiting the movement of said prolongation by said handle, substantially as described. 4th. In nippers or pliers, the combination with a pair of handles, of jaws pivoted to the forward ends of said handles, and connected together at or near their forward ends, links connected each to the rear end of said jaws, and to the oppositely disposed handle, and a spring bearing on one of said handles and link connected thereto, constantly tending to open the tool, substantially as described.

No. 65,956. Bicycle. (*Bicycle.*)

James Caldwell Anderson, Highland Park, Illinois, U.S.A., 25th January, 1900; 6 years. (Filed 28th August, 1899.)

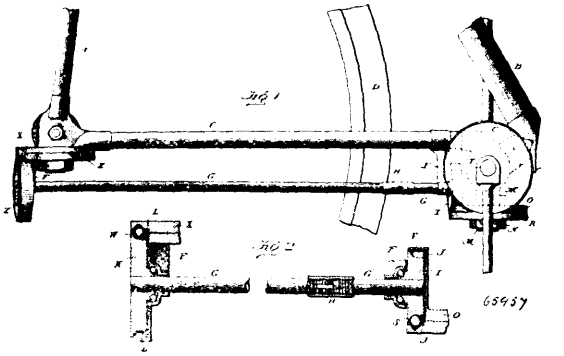
Claim.—1st. A bicycle embodying in its organization a frame composed of rigid tubes A, B, C, a driving wheel H mounted in the rigid frame, a steering wheel I mounted in a steering fork pivoted within one of the oblique tubes of the frame, and a saddle rigidly connected with the pivoted shank of the steering fork, the connection between the steering fork and the steering wheel being substantially coincident with the axis of motion of the steering fork, whereby the steering wheel may be swiveled upon a point or pivot in track with the main or driving wheel. 2nd. In a bicycle, the saddle post and steering fork rigidly and adjustably secured together and pivoted within one of the oblique tubes of the frame, the steering wheel connected with the steering fork in a plane substantially coincident with the axis of motion of said fork, and a driving wheel and rigid handle

bars secured in fixed relation with the frame of the machine, substantially as and for the purpose set forth. 3rd. In combination



with the frame tube B, seat post O, and steering fork shank K, constructed as described, the spring I confined within the lower end of the steering fork shank and provided diametric radial arms 2 2, bearing against the front surface of the fork bridge *a*, substantially as and for the purpose set forth. 4th. In combination with the frame tube B, saddle post O, steering fork and shank J, K, and spring L, connected as described, the spuds or shoulders 3, 3, on the ball race cup to hold the arms 2, 2, respectively when the bridge *a* of the steering fork J rotates away from either of said spring arms, substantially as hereinbefore described.

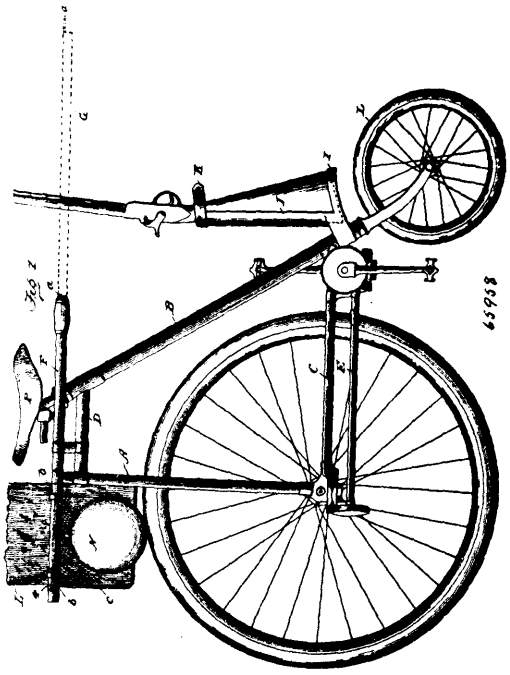
No. 65,957. Bicycle. (*Bicycle.*)



James Caldwell Anderson, Highland Park, Illinois, U.S.A., 25th January, 1900; 6 years. (Filed 28th August, 1899.)

Claim.—1st. As a means for transmitting power and motion from an initial point or locality to another at an angle thereto, the combination and arrangement of a ball disc having a circular race provided with a train of balls, two or more ball cup discs whose peripheries intersect the plane of the balls in the ball disc, suitable transmitting shaft connected with one or more of the ball cup discs, and means for driving the balls around their circular race, substantially as deseribed. 2nd. In a bicycle, the combination with the crank hanger provided with a ball disc Q, R, formed with a circular ball race and furnished with a train of balls S, the crank shaft T, provided with a fixed ball cup U, and a power transmitting shaft G, G^1, provided at its forward end with a ball cup disc I, the peripheries of the ball cup disc U, and I, intersecting the horizontal plane of the train of balls S, whereby the said balls are driven around their circular race and communicate power and motion to the shaft G, G, substantially as and for the purpose set forth.

No. 65,958. Bicycle for Military Purposes.
(*Bicycle à l'usage de la milice.*)



James Caldwell Anderson, Highland Park, Illinois, U.S.A., 25th January, 1900; 6 years. (Filed 28th August, 1899.)

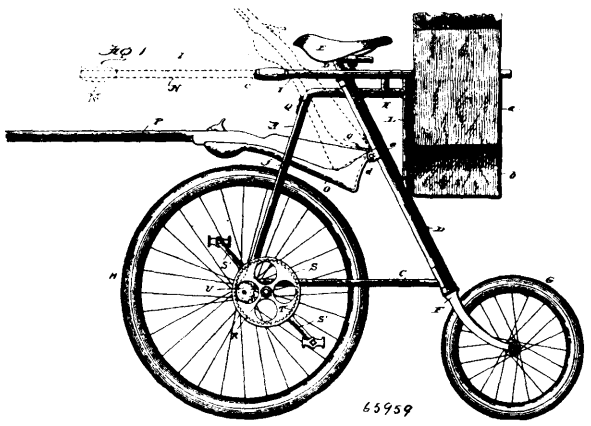
Claim.—1st. In a bicycle for military purposes, the combination with the frame, and with the handle bars secured to the frame in rear of the saddle post and extending forwardly, extensible devices connected with the handle bars and adapted to constitute shaft-like elongations of the same, whereby the bicycle may be trailed behind a dismounted rider, as hereinbefore set forth. 2nd. In a bicycle for military purposes, the combination with the frame A, B, C, D, mounted upon a large rear wheel and a comparatively small front steering wheel, a saddle mounted at the top of the front member of the frame, handle bars secured to the frame in rear of the saddle post and extending forwardly, a gun support secured to the front member of the frame and adapted to hold the gun in a vertical and removable position in advance of the rider, and also in advance of the handle bars, whereby the rider may dismount forwardly and at the same time remove the gun from its support, as hereinbefore set forth. 3rd. In combination with the tubular handle bars F, secured at their rear ends to the frame of the bicycle, sections G, housed within the handle bars and adapted to extend forwardly to constitute shafts by which the machine may be sustained in a vertical position and trailed, substantially as and for the purpose set forth. 4th. In a bicycle for military purposes, the combination with the frame, the handle bars secured to the frame in the rear of the saddle post and extending forwardly, and extensible devices connected with the handle bars and constituting shaft-like prolongations of said handle bars, means secured to the forward end of the shaft-like extensions and adapted to interlock with a belt worn by a dismounted rider, whereby the bicycle may be trailed, substantially as and for the purpose set forth. 5th. In combination with the frame A, B, C, D, and rigid handle bars F, the auxiliary baggage frame 1, 2, 3, 4, secured in a position upon the main frame and in the same horizontal plane with the handle bars, the side bars of the auxiliary frame constituting rearward elongations of the handle bars, substantially as and for the purposes set forth.

No. 65,959. Bicycle for Military Purposes.
(*Bicycle à l'usage de la milice.*)

James Caldwell Anderson, Highland Park, Illinois, U.S.A., 25th January, 1900; 6 years. (Filed 28th August, 1899.)

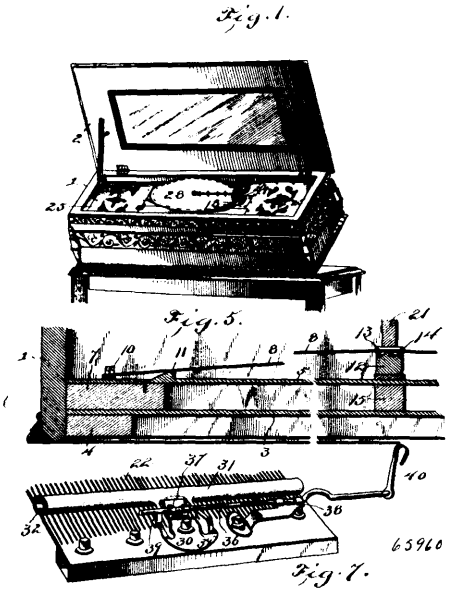
Claim.—1st. A military bicycle embodying in its organization, a short triangular frame, A, B, C, a front driving wheel H, a rear steering wheel G, an auxilliary baggage frame 1, 2, 3, 4, a pivotally gun support O, and means for holding the gun support in a horizontal or a vertical position as and for the purposes hereinbefore set forth. 2nd. In combination with the frame A, B, C, a gun support O, pivoted to the tube B of the frame, and a spring *g* for the holding of the gun F, within the support O, as hereinbefore set forth. 3rd. In combination with the frame A, B, C, and pivoted gun support O, the bridge pin F, and gate or strap Q, substantially as and for the purposes set forth. 4th. A bicycle embodying in its organi-

zation, a short, triangular or A shaped frame, A, B, C, a front driving wheel, a rear steering wheel, means for steering the wheel



located in a plane at an acute angle to the base line, and a saddle arranged over the upper end of the wheel steering device, to the rear end of and adjacent to a vertical line through the axis of the front wheel, substantially as and for the purposes set forth. 5th. A bicycle embodying in its organization, a short triangular frame A, B, C, a front driving wheel, journalled in said frame, a rear steering wheel, a saddle located to the rear of and adjacent to a vertical line through the axis of the front wheel, an internal driving gear having a central axis in the rear of the axis of the driving wheel and in substantially the same horizontal plane therewith, and a pinion fixed to the axis of the driving wheel and meeting with the internal driving gear, substantially as and for the purposes set forth.

No. 65,960. Music Box. *(Boite à musique.)*



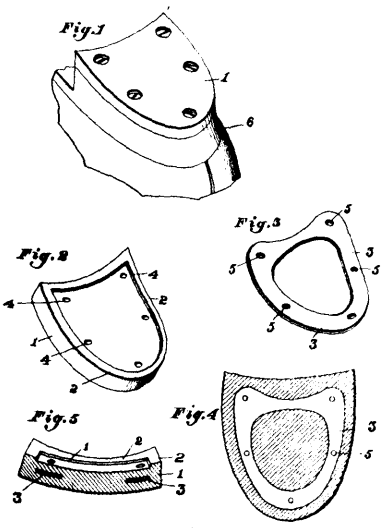
Levi D. Markle, Norwich, New York, U.S.A., 25th January, 1900; 6 years. (Filed 9th September, 1899.)

Claim.—1st. A music box casing having a sounding board, sound-producing mechanism spaced from the plane of the sounding board-sympathetic or sounding strings arranged between the sound producing mechanism and the plane of the sounding board and terminally attached to fixed portions of the casing beyond the edges of the sounding board, and a bridge supported by the sounding board at an intermeniate point and spanned by said strings which decline towards the plane of the sounding board as they recede from the plane of the bridge to exert upon the sounding board a perpendicular pressure in a direction outward or from the sound producing mechanism, substantially as specified. 2nd. A music box casing having a terminally supported sounding board forming one wall of the casing, sound producing mechanism spaced from the plane of the sounding board, a bridge spanning the sounding board at an intermediate point, and sounding or sympathetic strings arranged within the casing, between said sound producing mechanism and the sounding board, terminally attached to fixed portions of the casing beyond the edges of the sounding board, and spanning said bridge to exert an outward pressure upon the bridge in a direction perpendicular to the plane of the sounding board, and all of said strings being tuned in unison to exert a uniform pressure upon the bridge at all points of contact therewith, substantially as specified. 3rd. A music box casing having a trussed sounding board including adjustable sounding or sympathetic strings and a bridge bearing upon the sounding board at an intermediate point and spanned by said strings, whereby the strings exert upon the sounding board a pressure in a direction perpendicular to the plane thereof, and a sounding post terminally seated upon said bridge and bearing thereon in the same direction as the said sounding strings, substantially as specified. 4th. A music box casing having a sounding diaphragm, truss strings spanning the diaphragms and exerting pressure in one direction upon an intermediate portion thereof, and a tensile adjusting device connecting said diaphragm with a fixed object and straining the diaphragm in a direction opposite to said truss strings, substantially as specified. 5th. A music box casing having a sounding diaphragm carrying a bridge, truss strings spanning the diaphragm and bearing upon the said bridge to exert pressure upon the diaphragm in one direction perpendicular to its plane, a sounding post stepped upon the bridge, and a tensile brace connecting the diaphragm with a fixed object to strain said diaphragm in a direction opposite to said truss strings, substantially as specified. 6th. A music box casing having spaced parallel sounding diaphragms connected at an intermediate point for simultaneous vibration, and a tension device for straining said diaphragms in a common direction perpendicular to their planes, to vary the tension thereof, substantially as specified. 7th. A music box casing having spaced parallel sounding diaphragms connected at an intermediate point by an interposed sounding block, and a tension device for straining said diaphragms in a common direction perpendicular to their planes, to increase the tension thereof, substantially as specified. 8th. A music box casing having parallel spaced sounding diaphragms, supported at their edges and connected at intermediate points by an interposed sounding block, a sounding bar spanning the exterior surface of one of the diaphragms, and a tension device connected with the sounding bar for simultaneously straining the diaphragms in a direction perpendicular to their planes, to increase the tension thereof, substantially as specified. 9th. In a music box, the combination with a casing and a sound producing apparatus arranged therein, of parallel spaced sounding diaphragms connected at an intermediate point by an interposed sounding block, and a tension bolt connecting the base of the sound producing apparatus with intermediate points of said diaphrrgms, for straining the latter in a direction perpendicular to the planes thereof, to increase their tension, substantially as specified. 10th. In a music box, the combination with a casing, and a sound producing apparatus arranged therein and having a metallic base, of parallel spaced sounding diaphragms disposed parallel with said base and connected at intermediate points by an interposed sounding block, and a tension bolt connecting the base of the sounding apparatus with said diaphragms at a point contiguous to the sounding block, for straining the diaphragms in a direction perpendicular to the planes thereof, to increase their tension, substantially as specified. 11th. In a music box, the combination with a casing and a sound producing apparatus arranged therein, of parallel spaced sounding diaphragms, connected for simultaneous vibration, adjustable trussing devices spanning one of the diaphragms, and a tension bolt connecting the base of the sounding apparatus with the sounding diaphragms, for straining the latter in opposition to the pressure of the trussing devices, substantially as specified. 12th. In a music box, the combination with a casing and an inclosed sound producing apparatus, of parallel spaced sounding diaphragms connected at intermediate points for simultaneous vibration, sounding or sympathetic strings spanning one of the diaphragms and having a bearing upon a bridge as an intermediate point of said diaphragm, and connections between the sound producing apparatus and said diaphragms, including a tension bolt for straining the diaphragms in a direction perpendicular to their planes, and in opposition to the pressure of said strings, substantially as specified. 13th. In a music box, the combination with a casing and an inclosed sound producing apparatus, of parallel spaced diaphragms, connected at intermediate points for simultaneous vibration, a bridge spanning the upper diaphragm, sounding or sympathetic strings spanning one of the diaphragms and bearing upon said bridge, and a sounding post extending from the sound producing apparatus to and seated upon said bridge, substantially as specified. 14th. In a music box, the combination with a casing and an inclosed sound producing apparatus, of parallel spaced diaphragms connected at an intermediate point for simultaneous vibration, a bridge spanning the upper diaphragm, sounding or sympathetic strings spanning said upper diaphragm and seated at intermediate points upon said bridge, a sounding post extending from the sound producing apparatus to and seated upon said bridge, and tension devices including a bolt extending from the sound producing apparatus and connected with the lowermost diaphragm for straining the diaphragms in a direction perpendicular to their planes, substantially as specified. 15th. In a music box, the combination with a casing and an inclosed sound producing apparatus, of parallel spaced sounding diaphragms, one of which is provided with a bridge upon which is seated a sounding post extending from the sound producing apparatns, and sounding or sympathic strings spanning one of the diaphragms and seated upon said bridge, substantially as specified. 16th. A music box, having a casing of which one wall supports a sound producing device, and of which the other wall consists of a vibratory diaphragm,

tensile connections between said walls, and trussed sounding or sympathetic strings spanning said diaphragm to exert outward pressure thereon, substantially as specified. 17th. A music box casing, having diaphragmatic sounding devices, and resonance boxes spaced from the plane thereof and communicating with the space between the diaphragmatic sounding devices and the resonance boxes, substantially as specified. 18th. A music box casing, having one wall consisting of a sounding diaphragm, and sheet metal resonance boxes arranged within the casing and supported by one wall thereof out of contact with said diaphragm, and communicating with the space between said diaphragm and the opposite wall of the casing, substantially as specified. 19th. A music box casing, having a sounding diaphragm forming one wall thereof, and sheet metal resonance boxes arranged within the casing at an interval from, and out of contact with, said diaphragm, and having communication with the outside air and with the space between said diaphragm and the opposite wall of the casing, substantially as specified. 20th. A music box casing, having one wall consisting of a vibratory diaphragm, and resonance boxes having communication with the interior of the casing and with the outside air, substantially as specified. 21st. A music box casing, having one of its walls formed by a vibratory diaphragm, and stationary resonance boxes spaced from the plane of said diaphragm, arranged within the casing, and having communication by opposite openings with the interior of the casing and with the outside air, substantially as specified. 22nd. A music box casing, having its bottom closed by diaphragmatic sounding devices provided with openings, and resonance boxes suspended within the casing, and having their inner and outer walls provided with openings, substantially as specified. 23rd. In a music box, the combination with a casing and a sound producing apparatus seated therein, of a plurality of resonance boxes suspended within the casing approximately in the plane of said sound producing apparatus, and supported by means in common with said apparatus, and diaphragmatic sounding devices fitted in and co-extensive with the bottom of the casing, substantially as specified. 24th. In a music box, the combination with a casing provided with transverse supporting bars or brackets, and a sound producing apparatus having a base plate seated upon said supporting bars or brackets, of resonance boxes suspended within the casing approximately in the plane of the sound producing apparatus, and supported at their inner sides by the said supporting bars or brackets and the base plate of the sound producing apparatus, diaphragmatic sounding devices fitted in and approximately co-extensive with the bottom of the casing, sounding or sympathetic strings spanning said diaphragmatic sounding devices and seated at intermediate points upon the bridge, and a sounding post interposed between said bridge and the base of the sound producing apparatus, substantially as specified. 25th. The combination with a plurality of sounding combs having unision tongues, and means for simultaneously sounding the unison tongues of said combs, of a cithern attachment having a semi-tubular seat mounted for movement toward and from the plane of the tongues of one comb, and equal in length with the comb, means for moving said seat and a compressible contract tube fitted in said seat and comprising a plurality of layers of paper, and an exterior covering layer of textile fabric, substantially as specified.

No. 65,961. Rubber Heel Plate.

(*Plaque pour Talons de caoutchouc.*)

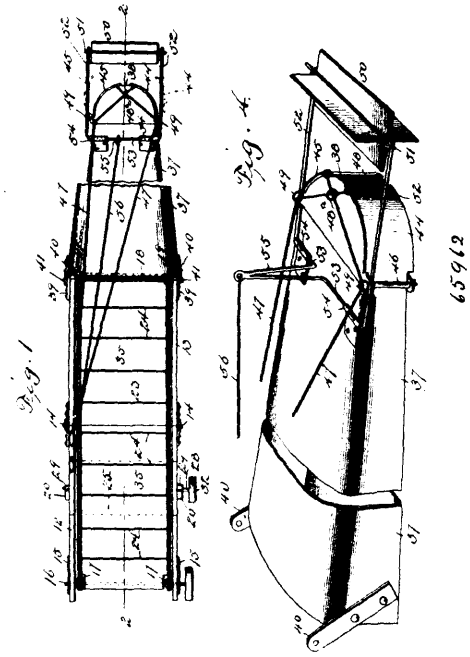


Cara Salsbury Ferguson, Columbia, Ohio, U.S.A., 25th January, 1900; 6 years. (Filed 17th November, 1899.)

Claim.—In a rubber heel attachment for boot and shoe heels, the combination with an elastic heel section 1 moulded to a concavo-convex form, of a correspondingly concaved spring metallic frame embedded within said heel section and provided with openings registering with those of said heel section, substantially as specified.

No. 65,962. Straw Stacker.

(*Appareil à mettre la paille en meule.*)

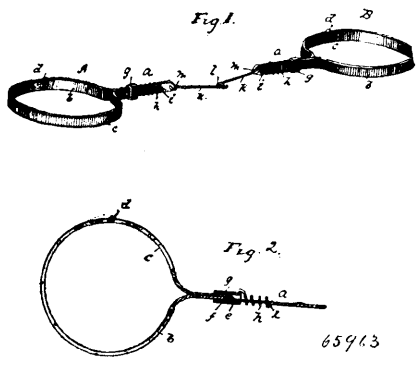


John Chial, Lake Park, Minnesota, U.S.A., 25th January, 1900; 6 years. (Filed 9th January, 1900.)

Claim.—1st. In a straw stacker, substantially such as described, the combination with an endless mechanically driven conveyer extending beyond the delivery end of a threshing machine or separator, and a frame for said conveyer, of a blast fan arranged to deliver a blast of air at the delivery point of said endless conveyer, and a pneumatic stacker tube supported on said conveyer frame substantially in alignment with the conveyer and having its receiving mouth embracing the delivery end of said conveyer and the point of discharge of the blast fan, substantially as and for the purposes set forth. 2nd. In a straw stacker, substantially such as described, the combination with the stacker frame extending beyond the delivery end of the threshing machine or separator, and an endless conveyer thereon, of a wind trunk supported by said conveyer frame and extending longitudinally thereof, a blast fan adapted to deliver an air blast to said wind trunk, and a stacker tube supported in alignment with the wind trunk and the endless conveyer for co-operation therewith and adapted to prolong the length of the stacker mechanism beyond the threshing machine, said stacker tube receiving the contents of ths endless conveyer and the blast from the wind trunk, substantially as and for the purposes set forth. 3rd. In a straw stacker, substantially such as described, the combination with a conveyer frame and an endless conveyer thereon, of a blast fan supported by said frame, a wind trunk supported by and extending longitudinally of the conveyer frame and communicating with said fan and terminating at the point of delivery of the conveyer, and a straight stacker tube arranged in alignment with the endless conveyer and the wind trunk to prolong the stacker mechanism beyond the threshing machine, said stacker tube being mounted on or carried by the stacker frame and receiving at a common point the blast from the wind trunk and the contents of the conveyer, as and for the purposes set forth. 4th. In a straw stacker, substantially such as described, the combination with a stacker frame and an endless conveyer supported thereby, of a blast fan, a wind trunk communicating with said fan and supported by the stacker formed to extend from said fan casing and terminating at the delivery point of the conveyer, and a tapering stacker tube mounted on the stacker frame substantially in alignment with the endless conveyer and the wind trunk, to receive the load of the conveyer and the blast from the wind trunk at a common point, substantially as set forth. 5th. In a straw stacker, the combination with a stacker frame and a conveyer thereon, of a blast fan, a wind trunk, a stacker tube turning on a horizontal axis afforded by a hinged connection with said stacker frame and adjustable thereon into alignment with the said conveyer and the wind trunk, and means for elevating the stacker tube irrespective of any movement of the stacker frame, substantially as described. 6th. In a straw stacker, the combination of a stacker frame, and an endless conveyer, of a blast fan, a wind trunk, a stacker tube, and hinge arms attached to the stacker frame and the stacker tube respectively, and said arms

pivoted together for elevating the stacker tube above the plane of discharge of the conveyer, substantially as described. 7th. In a straw stacker, the combination with a joined stacker frame, and an endless conveyer, of a fan supported on one member of the stacker frame, a divided wind trunk extending from the fan casing to the point of discharge of the conveyer, and said wind trunk foldable with the stacker frame, and an adbjustable stacker tube carried by said stacker frame, substantially as described. 8th. In In a straw stacker, the combination with a jointed stacker frame, and an endless conveyer of a blast fan supported on one member of said stacker frame' a divided wind trunk extending from the fan casing to the point of delivery of the conveyer, the division in the wind trunk being coincident with the joint in the stacker frame, and an adjustable stacker tube mounted on the stacker frame, substantially as described. 9th. In a straw straw stacker, the combination with a jointed stacker frame, and an endless conveyer thereon, of struts or bars fixed to the inner member of said stacker frame, a blast fan having its casing supported between the struts or bars and its shaft journalled in bearings thereon, a jointed wind trunk secured to the under side of the stacker frame to be foldable therewith, and a stacker tube having a hinged connection with the stacker frame and adjustable in alignment with the wind trunk and said endless conveyer, substantially as described. 10th. In a straw stacker, the combination with a jointed stacker frame and an endless conveyer, of a transversely divided fan casing supported by the inner member of the stacker frame and with the respective members of said casing provided with air inlets at each end thereof, a fan shaft extending through said divided casing fans of said shaft, a divided wind trunk supported on the under side of the stacker frame in communication with both members of the divided fan casing, and a stacker tube mounted on the stacker frame in alignment with the endless conveyer and the wind trunk, substantially as described. 11th. In a straw stacker, the combination with a jointed stacker frame, of depending struts fast therewith, a fan casing supported by said struts on the underside of the stacker frame, a jointed wind trunk secured to the stacker frame to be foldable therewith and communicating with said casing, a fan shaft journalled in the struts and carrying the fans, an idle shaft journalled on said struts below the fan casing, an endless conveyer transversing the frame and guided by the idle shaft below the fan casing, and a stacker tube mounted of the stacker frame substantially in alignment with the endless conveyer and the wind trunk, substantially as described. 12th. In a straw stacker, the combination of a pneumatic stacker tube, the gates hinged thereto, a revoluble baffle reel having the blades, and means for supporting said reel beyond the gates of the stacker tube and in the path of the blast therefrom, substantially as described. 13th. In a straw stacker, the combination of a stacker tube, the the gates hinged thereto, a rock shaft mounted on said tube and provided with an operating arm, 55, and with the pair of supporting arms, 52, the latter extending beyond the gates, a baffle reel revolubly mounted in the arms 52, for adjustment with the rock shaft and supported in advance of said gates, and means for rocking the shaft to shift the position of the baffle reel with relation to the tube, substantially as described. 14th. In a straw stacker, the combination with a pneumatic stacker tube, of the independently hung gates at the delivery mouth, thereof, and operating cables connected individually with said gates and arranged to close the gates separately against the action of the blast thereon, substantially as described. 15th. In a straw stacker, the combination with a mechanically driven stacker conveyer extending beyond the delivery end of a threshing machine or separator, of a blast fan arranged to deliver a blast at the point of discharge of said stacker conveyer, and a stacker tube supported substantially in alignment with the stacker conveyer and prolonging the total length of the combined elements of the stacker mechanism, said stacker tube arranged to receive the load from the stacker conveyor and the blast from the said fan at a common point, as and for the purposes described.

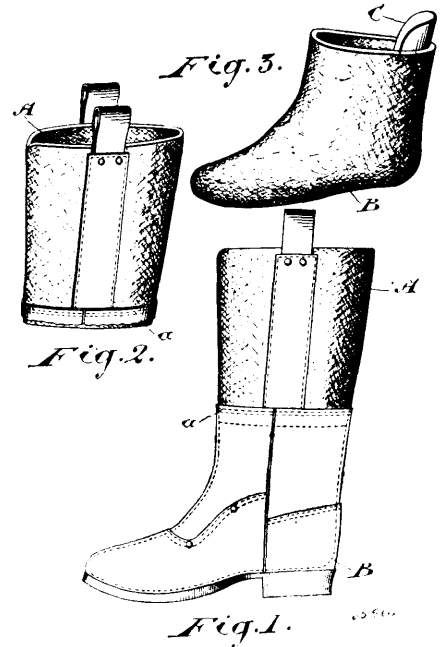
No. 65,963. Hopple. (*Entrave.*)



Paul W. Amlie, Cooperstown, North Dakota, U.S.A , 25th January, 1900 ; 6 years. (Filed 10th January, 1900.)

Claim.—A hopple for animals, consisting of two connected counterpart sections, each comprising a stem provided with a projecting lug, and a band or loop formed of two hinged sections, one of said sections being integral with the stem, while the other section is bent at its free end to form a catch adapted to engage the lug on the stem, in combination with a slide arranged on the stem and a coil spring surrounding the stem and secured at one end to the slide and at its opposite end to the stem, said spring being adapted to be compressed by the movement of the slide to release the sections and to automatically force the slide back to lock the sections when the slide is released

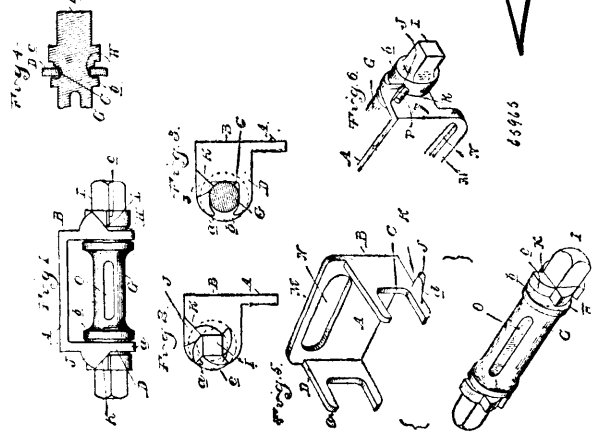
No. 65,964. Boot. (*Chaussure.*)



Samuel McKee Neill, Guelph, Ontario, Canada, 25th January, 1900; years. (Filed 10th January, 1900.)

Claim.—1st. In a boot, a felt lining or sock formed in two parts, the upper or leg part secured to the boot, and the lower or foot part free so that it may be removed, substantially as and for the purpose specified. 2nd. In a boot, a felt lining or sock formed in two parts, the upper or leg part secured to the boot, and the lower or foot part free so that it may be removed, in combination with a leather tongue secured to the inner side of the back part of the upper edge of the foot part so that it will overlap the leg part, substantially as and for the purpose specified.

No. 65,965. Wire Tightening Device.
(*Appareil à tendre le fil de fer.*)



George W. Terry and Elmer H. Stowell, both of Pontiac, Michigan, U.S.A., 25th January, 1900; 6 years. (Filed 8th March, 1899.)

Claim.—1st. In a wire tightener, the combination of a spool having journals thereon on opposite ends, of a bracket having a supporting plate and end plates extending therefrom, malleable fingers extending up from the edges of the ends and forming a journal bearing between, sufficiently long to permit a turning and sliding movement of the spool without binding, the integral inturned tips on the upper ends of the fingers acting as stops to prevent the journals of the spool from disengaging therefrom, and a ratchet and pawl engagement between the spool and bracket. 2nd. In a wire tightener, the combination of a spool having journals thereon on opposite ends, a bracket, comprising a supporting plate and end plates extending therefrom, malleable fingers extending up from the sides of the end plates and forming an elongated journal bearing between, in which the spool can turn and slide in or out, inturned integral tips on the post overhanging the journals of the spool, permitting the turning and sliding movements, but preventing disengagement of the spool, integral ratchet teeth upon the ends of the spool, and the lugs J against which said teeth bear and with which it is adapted to lock in its rotation.

No. 65,966. Stovepipe Thimble. (*Dé de tuyau de poêle.*)

Fig 1.

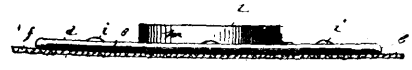
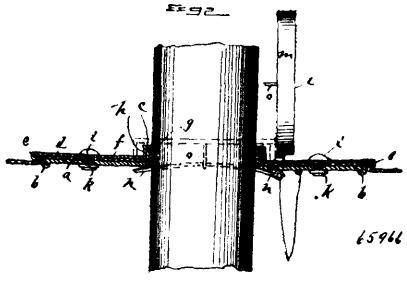


Fig 2.



Frank S. Linch, Paris, Texas, U.S.A., 25th January, 1900; 6 years. (Filed 10th January, 1900.)

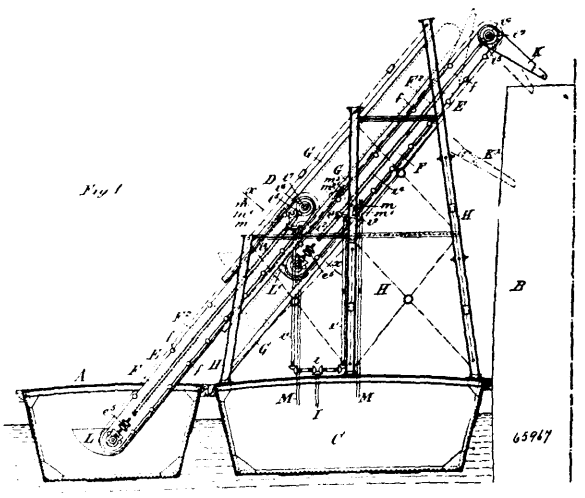
Claim.—1st. A stovepipe thimble, consisting of a disc having a central opening having its edges projecting at right angles to the face of the disc, a second disc having a central opening, the edge of the opening being projected at right angles to the face of the disc, and a peripheral bead on the second disc enclosing the first named disc. 2nd. A stovepipe thimble, comprising a disc having a central opening, the edge of the opening being projected at an angle to the disc, said disc having also a peripheral bead projecting at one side of the disc only, a second disc having a central opening, the edge of the opening being projected from the disc outwardly and then downwardly to enclose the edge of the opening in the first named disc, a bead on the second disc projecting at one side thereof to encircle the first named disc, and means for fastening the discs together.

No. 65,967. Coal Transferring Apparatus.
(*Appareil à transporter le charbon.*)

Michel John Paul, New York City, New York, U.S.A., 25th January, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—1st. A conveying apparatus, comprising a floating base, a sectional conveyer mounted on said base, the sections of said conveyer being mounted in inclined parallel guides, the said guides situated one set above the other, mechanism for driving the sections of the conveyer simultaneously, and mechanism for moving the said sections along their guides. 2nd. A conveying apparatus, comprising a floating base, a two-part or sectional conveyor mounted on said base in inclined, parallel guides, the said guides, one set situate l above the other, a feed hopper at the lower receiving end of the conveyer, a delivery chute at the upper delivery end of the conveyer, means for moving or shifting the sections of the conveyer along their inclined guides, and means for driving both sections of the conveyer simultaneously. 3rd. A conveying apparatus, comprising a floating base, a frame thereon to support the sectional conveyor, the said conveyor, inclined and extending transversely of the base and consisting of two overlapping parts mounted in guides and adapted to be extended out beyond the sides of the base, mechanism for driving both parts or sections of the conveyer simultaneously, and means for moving said sections along their guides. 4th. In a conveying apparatus for the purpose specified, the combination with the endless chain of plates and the drums, of the carrier, the inclined

Fig 1



guides, the shaft i^4, parallel with said guides, the gearing i^5, and i^6, the gear wheel i^3, collared and splined on the shaft i^4, mechanism for driving the gear wheel i^3, and mechanism for moving the carrier along said guides.

No. 65,968. Table Leg Fastener. (*Attache de pied de table.*)

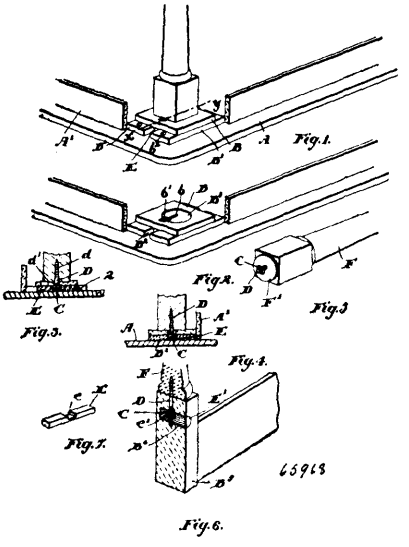


Fig.6.

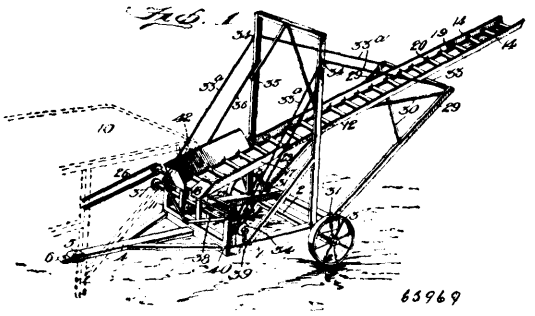
Samuel Malcolm Smyth, Strathroy, Ontario, Canada, 25th January, 1900; 6 years. (Filed 11th January, 1900.)

Claim.—1st. In a table leg fastener, the combination with the table top, of a base piece having a central opening, a cross slot extending underneath the base piece, a controlling piece fitting the slot provided with a recess, a nut designed to fit into such recess and a table leg having a threaded stem or spindle extending through a central hole in the base piece into and through the nut in the recess in the controlling piece, as and for the purpose specified. 2nd. In a table leg fastener, the combination with the table top, of a base piece having a central opening, a cross slot extending underneath the base piece and opening, and a nut designed to fit into the cross slot and be prevented from turning thereby, and a table leg having a threaded stem or spindle extending through a central hole in the base piece into and through the nut in the cross slot, as and for the purpose specified. 3rd. In a table leg fastener, the combination with the table top, of a base piece having a key slot form of opening with a wide end and a narrow end, a cross slot extending underneath the base piece and opening, and a nut designed to fit into the cross slot and be prevented from turning thereby, and a table leg having a threaded stem or spindle extending through a central hole in the base piece into and through the nut in the cross

slot, as and for the purpose specified. 4th. In a table leg fastener, the combination with the table top, of a base piece having a key slot form of opening with a wide end and a narrow end, a cross slot extending underneath the base piece and opening, and a nut designed to fit into the cross slot and be prevented from turning thereby, and a table leg having a threaded stem or spindle extending through a central hole in the base piece into and through the nut in the cross slot and a circular projection in the top of the leg designed to fit into a corresponding recess in the bottom of the base piece, as and for the purposes specified.

No. 65,969. Straw Stacker.

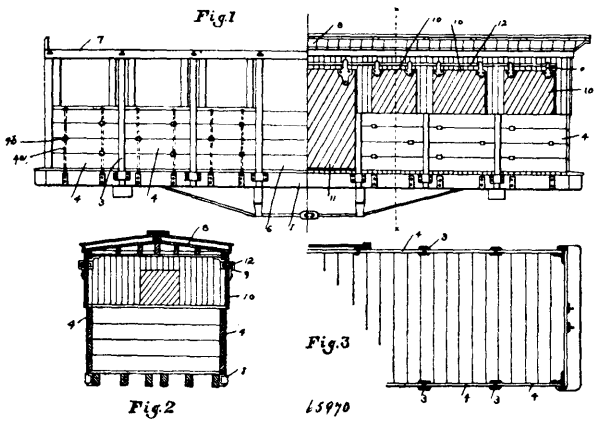
(*Appareil à ameulonner la paille.*)



Walter W. Richardson, Mayview, Washington, D.C., U.S.A., 25th January, 1900; 6 years. (Filed 11th January, 1900.)

Claim.—In a straw stacker, the combination of a truck frame, an elevator trough pivotally supported at one end on the truck frame and having a flat bottom, said trough being further provided at its inner end with a receiving hopper having upwardly divergent side walls formed at their lower ends with inturned end pieces, an endless straw carrier working within the trough and the receiving hopper thereof, a delivery or feed chute suspended from the thresher casing, and over hanging said receiving hopper, and an adjustable support for the unpivoted portion of the elevator trough, substantially as set forth.

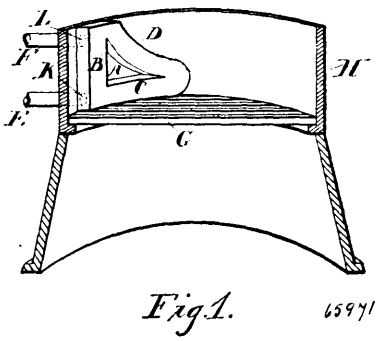
No. 65,970. Car Construction. (*Construction de chars.*)



Samuel Prescott Bush, Columbus, Ohio, U.S.A., 25th January, 1900; 6 years. (Filed 11th January, 1900.)

Claim.—1st. In a car construction, the combination with a lower section having the general form of a gondola car, of an upper housing provided with a roof and sides and ends which form an upper extension of said lower section and central doorways formed partially in said lower and upper sections, substantially as specified. 2nd. In a car construction, the combination with a lower gondola like section, of a housing or box like section rising therefrom, central doorways extending into both sections and additional doorways formed in said upper section on opposite sides of said central doorway, substantially as specified. In a car construction, the combination with a lower gondola section, of a housing or upper section rising from said lower section, a central doorway formed partially in both of said sections and additional doorways on opposite sides thereof in the upper section, a door supporting rail projecting from said upper section, said rail having inwardly yokes or offsets, doors for said doorways having hangers adapted to slide on said rail or rest in said offsets, substantially as specified. 4th. In a car construction, the combination with a gondola section consisting of a bottom frame, vertical side and end standards and intervening side sections to form a substantially integral body, of an upper roofed and sided section or housing rising from said lower section and provided at intervals with doorways and means permitting the closing and opening the same, substantially as specified. 5th. In a car construction, the combination with a lower gondola like section consisting of a bottom framework, standards rising at intervals from the side and end sills and extending above the usual gondola car height, of horizontal side and end boards extending and fitting between said standards to form the sides and ends of the gondola, said side and end boards being substantially flush with the faces of said standards, of an upper roofed and sided car section rising from said lower section, substantially as specified. 6th. In car construction, the combination with a lower box or gondola like section and standards rising at intervals from the sills thereof, a housing or superstructure supported by said lower gondola section and standards, the side sections of said lower box or gondola being so connected with the standards and united with substructure as to result in the formation of a rigid siding, the section of which braces the side standards in the direction of the length of the car, substantially as specified. 7th. In a car construction, the combination with a bottom frame work and standards rising at intervals therefrom, of the car body sides and ends formed in sections which extend between said standards in line therewith and abutting the same, substantially as specified.

No. 65,971. Furnace Fitting. (*Garniture de fournaises.*)



Elia Lavoie, Montreal, Quebec, Canada, 25th January, 1900; 6 years. (Filed 12th January, 1900.)

Claim.—1st. In a furnace water heating apparatus, a heater consisting of a hollow casting having a vertical portion, a horizontal portion and an oblique portion, as and for the purposes described. 2nd. A hot water heater, adapted to fit the wall of the fire pot of a furnace, comprising a vertical portion, a horizontal portion and an oblique portion, as described. 3rd. In a furnace water heating apparatus, a heater adapted to fit the wall of the fire pot, having a horizontal portion in proximity to the grate, as described. 4th. In a furnace water heating apparatus, a heater adapted to fit close to a portion of the wall of the fire box and to extend from the top of the fire pot downwards to the proximity of the grate. 5th. In a furnace water heating apparatus, a heater consisting of the vertical portion B, the horizontal portion C, the connecting portion D with the inlet K and outlet L, as described.

No. 65,972. Igniting Compound for Matches.

(*Composé pour les allumettes, etc.*)

Eugene Francois Trachsel, Reval, Russia, 25th January, 1900; 6 years. (Filed 2nd May, 1899.)

Claim.—1st. A base for igniting compounds, consisting mainly of lead hyposulphite mixed with an alkali bichromate, substantially in the proportions and as hereinbefore described. 2nd. The process for the production of a base for igniting compounds consisting in mixing together suitable quantities of lead hyposulphite, potassium bichromate, and water, with or without the addition of sulphur, antimony sulphide, manganese peroxide, and the like, the said mixture being allowed to stand until it will no longer coaguiate glue after which suitable quantities of potassium chlorate and a binding material such as glue, gelatine, or gum arabic, are added, substantially in the proportions and as hereinbefore described. 3rd. In the manufacture of matches, the use of the base for igniting compounds consisting mainly of lead hyposulphite or other lead salts, mixed with an alkali bichromate substantially in the proportions and as hereinbefore described.

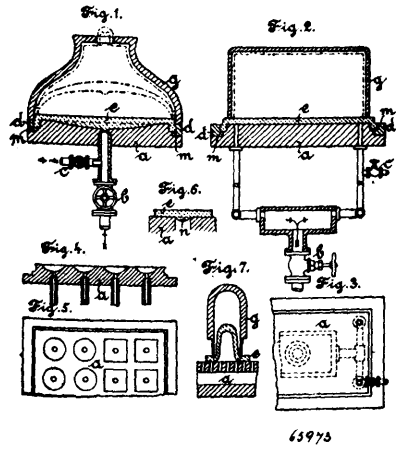
No. 65,973. Apparatus for Making Glass Articles.

(*Appareil pour la confection d'objects en verre.*)

Paul Theodor Sievert, Dresden, Germany, 25th January, 1900; 6 years. (Filed 5th July, 1899.)

Claim.—1st. In the manufacture of glass articles according to the process described in what is termed above the master patent, a solid

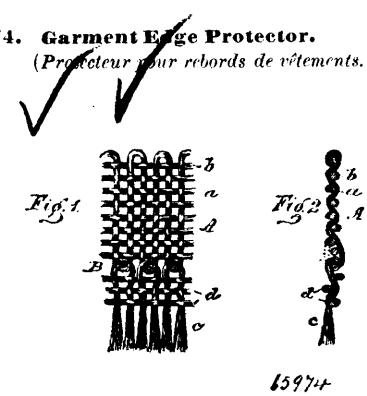
or hollow bed plate, a flat or provided with dished recesses on its upper surface to receive the plastic glass layer, and having one or



only a small number of perforations for the admission of the elastic pressure medium beneath the glass layer, the plate being surrounded by a frame *d* made to open out for the purpose of forming a channel or groove *m*, which serves to receive molten glass and hold and render air tight the glass layer. 2nd. In apparatus for the production of glass articles, the arrangement for holding and rendering air tight the plastic glass sheet by an annular groove or channel *m*, the arrangement of pattern frames, or the hollow mould, a short distance from the glass layer for the purpose of turning the plate *a* with the blown up glass mass independently of the pattern frame or the hollow mould to prevent the formation of mould seams. 3rd. In apparatus for the production of glass articles, suspending the bed plate *a* on trunnions for the purpose of turning over the plate, with the spread out glass layer held in the channel or groove *m*.

No. 65,974. Garment Edge Protector.

(Protecteur pour rebords de vêtements.)



Aaron Moses Weber, Oshkosh, Wisconsin, U.S.A., 25th January, 1900; 6 years. (Filed 18th December, 1899.)

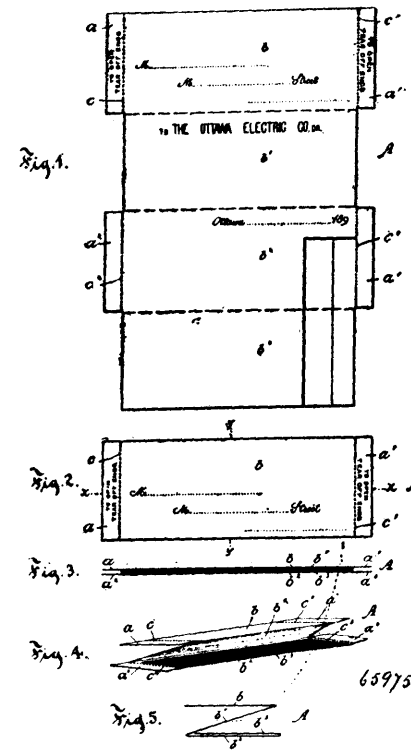
Claim.—1st. An edge protector for garments, consisting of a head and brush, said head being formed of weft and warp threads, and said brush being formed of tufts secured to the weft by binding warp threads to form a projecting ridge or cord on the protector. 2nd. An edge protector consisting of a head and brush, said head being formed of weft and warp threads, said brush being formed of U-shaped pieces looped through the bends of the weft at one selvage and connected by separate binding threads adjacent the bends of the weft.

No. 65,975. Mailing Folder.

(Pli pour la mise à la poste et la distribution de comptes, etc.)

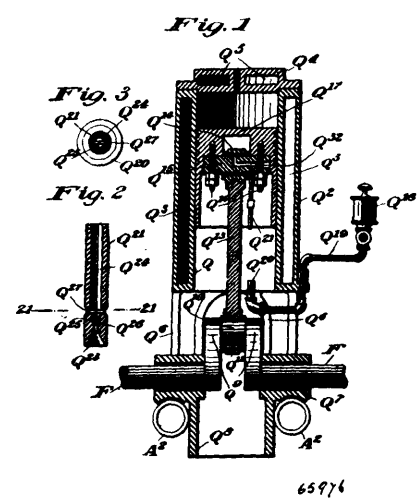
Alfred A. Dion and Douglas R. Street, both of Ottawa, Ontario, Canada, 25th January, 1900; 6 years. (Filed 4th April, 1899.)

Claim.—A folder for mailing, etc., intended to preserve the secrecy of the contents, and providing a place for the outside address or superscription without a separate envelope, consisting of four equal transverse sections folded one over the other, two alternate sections having projections or flaps at each end, with deeply printed lines or



perforations running across such alternate sections at each end, and in line with the edges of the other two alternate sections, substantially as and for the purpose hereinbefore set forth.

No. 65,976. Engine Lubricator. *(Graisseur de machine.)*



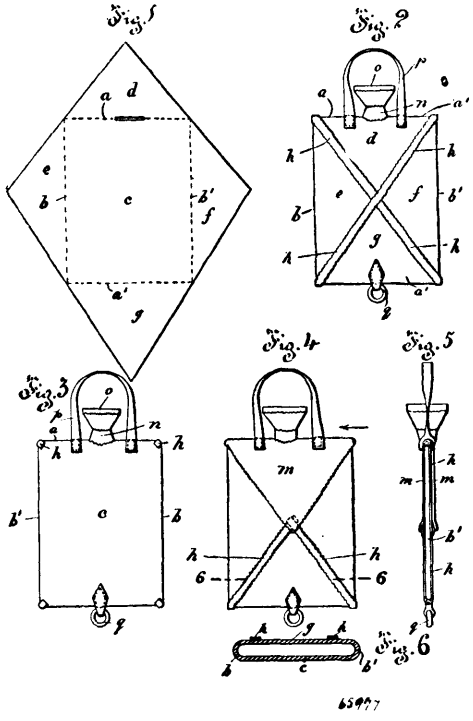
The Vanduzen Gasolene Engine Company, Cincinnati, assignee of Benjamin C. Vanduzen, Winton Place, Ohio, U.S.A., 26th January, 1900: 6 years. (Filed 21st August, 1899.)

Claim.—1st. In a lubricating apparatus, the combination of a piston, a valved dip tube rigidly connected to said piston, and an oil cup into which said tube is adapted to dip, substantially as described. 2nd. In a lubricating apparatus, the combination of a cylinder open at one end, an oil cup in the open end thereof, a piston in said cylinder, and a dip tube, provided with a ball valve, rigidly fastened to said piston, substantially as described. 3rd. In a lubricating apparatus, the combination of a cylinder, an oil cup near one end of said cylinder, a piston, and a dip tube rigidly attached to said piston, said tube being provided with an outwardly flaring mouth, a ball valve and a stop for said valve, substantially as described. 4th. In a lubricating apparatus, the combination of a cylinder open at one end, an oil cup located in said open end, an oil

reservoir, pipes connecting said cup and reservoir, a piston, and a dip tube rigidly attached to said piston, said tube being provided with a ball valve and an outwardly flaring mouth, substantially as described.

No. 65,977. India Rubber Water Bag.

(*Sac à eau en caoutchouc.*)

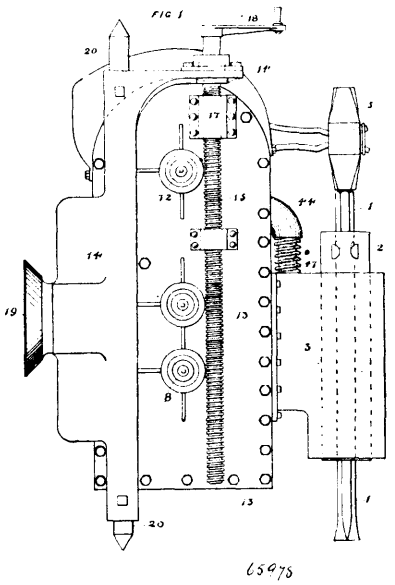


John Parette and William Sutherland, both of Montreal, Quebec, Canada, 26th January, 1900; 6 years. (Filed 23rd May, 1899.)

Claim.—1st. A water bag having its body formed of a single sheet of rubber of diamond or rhomboidal-shape with straight edges folded upon itself from opposite sides, and having its straight meeting edges abutting one another and joined so as to form a water tight bag with all its edges free of seams or joints as set forth. 2nd. A water bag having its body formed of a sheet of rubber having straight edges and folded upon itself and four lines at right angles to each other, the apices of said angles bisecting the sides of said sheet, so that when folded its straight meeting edges will abut and not overlap each other, means for joining said abutting edges to form a water tight bag without seam or joint along its folded side top and bottom edges and having a slit in one of the folded edges to form an opening to the neck of the bag, as set forth. 3rd. A water bag having its body formed of a sheet of rubber of diamond or rhomboidal-shape with straight edges and folded upon itself from opposite sides upon lines at right angles to one another, the apices of said angles bisecting the sides of the diamond-shaped sheet so that when folded its straight meeting edges will abut and not overlap each other, seam strips overlapping and joining such abutting edges, so as to render the bag water tight, with seam or joint along its folded side edges but having a slit in one of the folded edges to form an opening to the neck of the bag, as shown and described. 4th. A water bag formed of a sheet of rubber of diamond or rhomboidal-shape with straight edges and folded upon itself to present a central rectangular portion and four triangular sections, the straight edges of each of which latter are in line with the straight edges of each adjoining section and the apices of the angles of the central rectangular portion bisecting the sides of the diamond so that when the sheet is folded upon the lines of the rectangular portion the straight edges will abut and not overlap each other, seam strips overlapping and joining the meeting and abutting edges of the triangular sections together so as to render the bag water tight, and a neck with mouthpiece and handle, as shown and described. 5th. A water bag formed of a sheet of rubber of diamond shape with straight edges and folded upon itself to present a central rectangular portion and four triangular sections the straight free edges of each of which latter are in line with the straight free edges of each adjoining section and the apices of the angles of the central rectangular portion bisecting the sides of the diamond so that when the sheet is folded upon the lines of the, rectangular portion, the straight edges will abut and not overlap each other, seam strips overlapping and joining the meeting and abutting of the triangular sections together so as to render the bag water tight, a reinforcing yoke for strengthening the upper end of the body, and a neck with mouthpiece and handle, as shown and described. 6th. A body blank for a rubber water bag of diamond shape with straight edges and adapted to be folded upon the lines of a rectangle to form the two flat sides or front and back and four seamless edges of the water bag, as shown and described. 7th. As a new article of manufacture, a rubber water bag, all the edges whereof are free from seams or joints and having all its seams upon one side thereof, as shown and described. 8th. As a new article of manufacture, a rubber water bag having seams upon one side only of the bag and extending diagonally thereof, from corner to corner, as shown and described.

No. 65,978. Electric Rock Drill.

(*Foret électrique pour la roche.*)

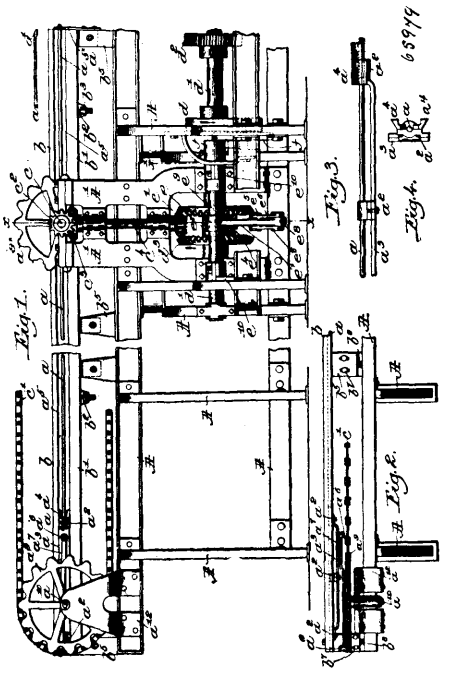


Samuel Lesem, assignee of George Westley Pickett, both of Denver, Colorado, U.S.A., 26th January, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. In a rock drilling apparatus, the combination of drilling mechanism having a reciprocating movement of its rock cutting parts, an electric motor having a rotary movement of its armature in one direction, and gearing connecting the armature shaft of the motor with the drilling mechanism and provided with a friction clutch adjusted so as to transmit the power of the motor to the drilling mechanism, but to slip or yield at or about the times when the movement of the reciprocating parts is reversed, substantially as described. 2nd. In a rock drilling apparatus, the combination of a drill supported in a holder and having longitudinal movement therein, a reciprocating hammer arranged to strike the head of the drill, mechanism for reciprocating the hammer, an electric motor, and connecting gearing between the motor and the hammer operating mechanism provided with a friction clutch adjusted so as to transmit the power of the motor to the hammer operating mechanism, but to slip or yield at or about the time when the movement of the reciprocating hammer is reversed, substantially as described. 3rd. In a rock drilling apparatus, the combination of a drill supported by a holder in which it is capable of longtudinal movement, a reciprocating hammer arranged to strike the head of the drill, mechanism for reciprocating the hammer consisting essentially of two eccentrics set at right angles to each other on the same shaft and having their straps pivoted to an actuating lever which imparts a reciprocating movement to a pivoted arm carrying the hammer, an electric motor, and gearing connecting the armature shaft of the motor with the shaft carrying the eccentrics, substantially as described. 4th. In a rock drilling apparatus, the combination of a drill supported in a holder in which it is capable of longitudinal movement, a reciprocating hammer arranged to strike the head of the drill, mechanism for reciprocating the hammer consisting essentially of two pairs of eccentrics set at right angles to each other on the same shaft with two actuating levers, each pivoted to the straps of the two eccentrics, one of each pair, and carrying rollers or bars between their outer ends which actuate a pivoted arm carrying the hammer, an electric motor and gearing connecting the armature shaft of the motor with eccentric shaft, substantially as described. 5th. In a rock drilling apparatus, a drill supported in a holder so as to be capable of longitudinal movement therein, a reciprocating manner for striking the head of the drill, a shaft driven by power-two eccentrics mounted on the shaft at an angle to each other, an arm pivoted at one end to the strap of one of the eccentrics and

carrying the hammer at its other end, and a lever actuating the hammer arm and pivoted to the straps of both eccentrics so as to receive an oscillating movement from their conjoint action, substantially as described. 6th. In a rock drilling apparatus of the type described, in which the drill is operated by blows of a hammer, the combination of a shaft, two pairs of eccentrics mounted on the shaft with those of each pair parallel to such other but at an angle to the other pair, two actuating levers each of which is pivoted to the straps of two eccentrics, one of each pair, a pivoted arm carrying the hammer, and rollers engaging with the hammer arm and carried by the outer ends of the two actuating levers, substantially as described. 7th. In a rock drilling apparatus of the type described, in which the drill is operated by blows of a hammer, the combination of a shaft, two pairs of eccentrics mounted on the shaft with those of each pair parallel to each other pair, two actuating levers each of which is pivoted to the straps of two eccentrics, one of each pair, an arm carrying the hammer and pivoted to the straps of one pair of eccentrics, and rollers or bars engaging with the hammer arm and carried by the outer ends of the two actuating levers, substantially as described. 8th. The combination of the eccentrics 21 and 22 mounted at an angle to each other on the shaft 12, the actuating lever 25, pivoted to the straps of the eccentrics, the hammer arm 23, having the curve 54, and the rollers 30 and 31, carried by the lever 25, and engaging with the hammer arm, substantially as described.

No. 65,979. Loom. (*Métier.*)



The Crompton and Knowles Loom Works, assignee of John Allison Clark and Joseph Trefley Cyr, both of Worcester, Massachusetts, U.S.A., 26th January, 1900; 6 years. (Filed 29th September, 1899.)

Claim.—1st. In a loom, a raceway, a carriage fitted to slide to and fro on said raceway, a shaft, means to rotate said shaft at a variable speed, combined with an endless actuator deriving its movement in but one direction from said shaft through suitable intermediate devices, and means connecting said carriage and actuator loosely, whereby by movement of said actuator in one direction only the carriage is moved to and fro, substantially as described. 2nd. The carriage, means to sustain and guide it, an endless actuator, an actuator shaft, means intermediate it and said actuator to move the same, combined with a loose gear in mesh with a pinion on the end of said actuator shaft, a shaft provided with a cam and a face gear, an intermediate pinion engaging said two gears, and means actuated by said cam to move said intermediate pinion to and fro between said gears, the gear engaging the pinion on the actuator shaft being held at rest while the said intermediate pinion moves in one direction, and being moved very rapidly when said intermediate pinion is moved in the opposite direction, substantially as described. 3rd. The carriage, means to sustain and guide it, a needle secured to said carriage, an endless actuator, an actuator shaft, means intermediate it and said actuator to move the same, combined with a loose gear in mesh with a pinion on the end of said actuator shaft, a shaft provided with a cam and a fast gear, an intermediate pinion engaging said two gears, and means actuated by said cam to move said intermediate pinion to and fro between said gears, the gear engaging the pinion on the actuator shaft being held substantially at rest while the said intermediate pinion moves in one direction, and being moved very rapidly when said intermediate pinion is moved in the opposite direction, substantially as described. 4th. A cam shaft having an attached irregular cam and a gear, a loose gear mounted on said shaft, an actuator shaft occupying a position at right angles to the shaft having said cam, a hub interposed between said fast and loose gear and surrounding the shaft having the cam, said hub having an intermediate pinion, combined with means to turn said cam in one or the other direction according to the shape of said cam to thereby change the direction of movement of the said intermediate pinion, causing it, when moved in one direction, to ensure rapid rotation of said actuator shaft, and when moved in the other direction to cause said shaft to remain substantially idle, substantially as described. 5th. In a loom, a raceway, a carriage mounted in said raceway, an endless actuator, and means to move said actuator substantially continuously in one direction but at varying speeds, combined with a link joining together said carriage and actuator, substantially as described. 6th. In a loom, a raceway, a carriage guided thereby, an endless actuator, connections between said carriage and actuator, a rotatable shaft, and means intermediate said shaft and actuator to impart to the latter a motion substantially continuous in the same direction, a cam shaft, and gearing under its control to actuate said rotatable shaft at a variable speed depending as to its character and time upon the cam on said shaft, substantially as described. 7th. The shaft d^1, its cam and gear d^3 fast thereon, a gear loose on said shaft, and a hub surrounding said shaft loosely between said gears, said hub having an intermediate pinion, combined with a rock shaft having an arm provided with a roller stud bearing on said cam, a second arm connected to said rock shaft, and a link connecting it with said hub to move the said hub, and intermediate pinion as demanded by said cam, substantially as described. 8th. In a loom a raceway, a carriage mounted thereon, wheels having their axis of motion at right angles to the length of said raceway, an endless actuator extended about said wheels, a link connecting said actuator with said carriage, and means to move said wheels and actuator always in the same direction at a variable speed, substantially as described. 9th. A shaft provided with a cam and a fast gear, a loose gear on said shaft, an actuator shaft having a pinion in engagement with said loose gear, combined with an intermediate pinion engaging said gear and under the control of said cam to move said intermediate pinion to and fro between said gears, the loose gear engaged by the pinion being held at rest while the said pinion moves in one direction and being moved very rapidly when said pinion is moved in the opposite direction, substantially as described. 10th. In a loom, a raceway, a carriage mounted thereon and adapted to be reciprocated transversely with relation to the warp, a link connected with said carriage, a shaft, and means intermediate it and said link to move it and said carriage, combined with a cam, means to actuate it and gearing under the control of said cam to rotate actuating shaft and impart to it a variable speed and periods of rest in its rotation, substantially as described. 11th. In a loom, a shaft having an attached toothed gear, a toothed gear loose on said shaft, the teeth of the gears facing each other, an actuator shaft occupying a position at right angle to the shaft carrying said fast and loose gears, a hub interposed between said shaft and loose gear and surrounding loosely the shaft carrying said gears, and an arm extended from said hub, said arm having a stud carrying an intermediate pinion, combined with a cam, and means actuated by it to turn said arm in one or the other direction about said shaft to thereby change the direction of movement of said intermediate pinion, causing it when moved in one direction to ensure motion of said actuator shaft, and in the other direction to enable said shaft to stand substantially still or without motion, substantially as described.

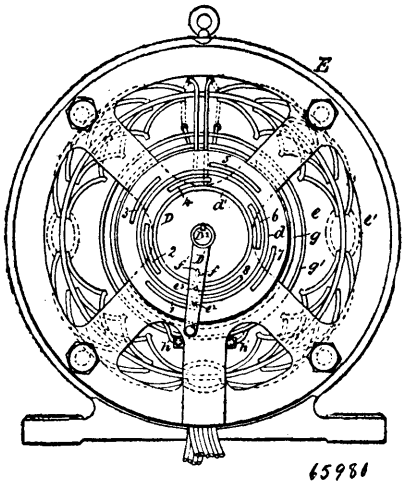
No. 65,980. Electromotive Force Regulation.
(*Régulation de force électro dynamique.*)

The Westinghouse Electric and Manufacturing Co., Pittsburg, assignee of Norman Rowe, Wilkinsburg, both in Pennsylvania, U.S.A., 26th January, 1900; 6 years. (Filed 8th November, 1899.)

Claim.—1st. The method of raising or lowering the electromotive force supplied by a transformer having a winding, the active length of which is variable, which consists in first inductively adjusting the electromotive force corresponding to one length of winding to that corresponding to a different length, and then changing the circuit connections to correspond to the adjusted electromotive force. 3rd. The method of varying the electromotive force supplied by a transformer having a winding, the active length of which is variable, which consists in first inductively varying the electromotive force within limits corresponding to a division of the winding, then cutting such division either into or out of circuit and repeating such operations until the desired change in the electromotive force is secured. 3rd. The combination with a stationary transformer having a divided winding, of a switch or switches for cutting the divisions of the winding into or out of circuit successively, and means for inductively varying the electromotive force between operations of the switch which effect changes in the length of the winding. 4th. In a system of electrical distribution, a stationary transformer in combination with a switch or switches for varying the active length of one of the transformer windings by successive steps and an inductive regulator for varying the electromotive force between

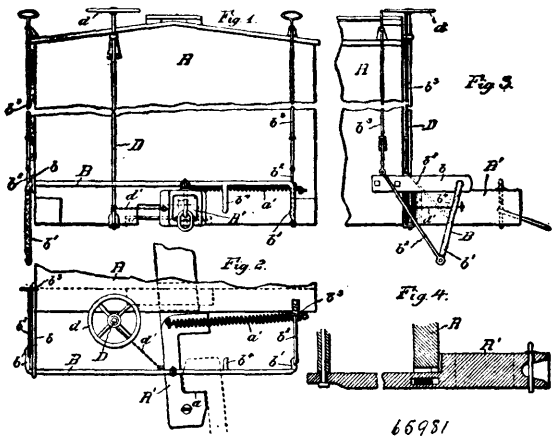
certain of said steps, whereby the working electromotive force is gradually varied between maximum and minimum limits. 5th. In

Fig. 1.



a system of electrical distribution, a stationary transformer having leads extending from several points in one of its windings, in combination with a switch for connecting said leads successively with one of the line conductors, and an inductive regulator for either raising or lowering the electromotive force to a value corresponding substantially to the next lead in the series prior to connecting such lead with the line conductor.

No. 65,981. Car Coupler. (*Attelage de chars.*)



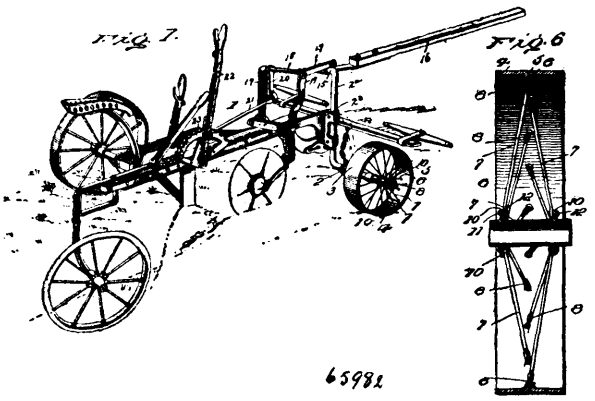
James H. Greenwood, Thomas N. Morrison, William Long, Stewart Burrows, William Hanley, Robert F. Morrison, and John Morrow, all of Boissevain, Manitoba, Canada, 26th January, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. A car coupling mechanism, comprising a laterally movable car coupler bar pivotally secured to the car, a lock bar rotatably mounted on said car and connected to said coupler bar, and a downwardly extending locking lug fixed to said lock bar and adapted to be turned into engagement with the coupler bar, substantially as described. 2nd. A car coupling mechanism, comprising a laterally movable coupler bar pivotally secured to the car, a lock bar rotatably mounted on said car and connected to said coupler bar, a crank arm formed on each end of said lock bar, a vertically movable operating rod connected to said crank arm by means of a suitable link, a downwardly extending locking lug fixed to said lock bar and adapted to be turned into engagement with the coupler bar, substantially as described.

No. 65,982. Wheeled Plough or Cultivator.
(*Charrue à roue ou cultivateur.*)

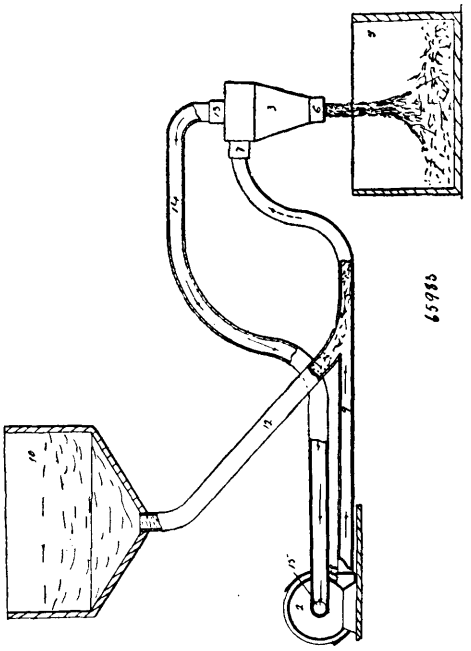
John C. Fullerton, Horace Fullerton, and John W. Fullerton, all of Moore, Texas, U.S.A., 26th January, 1900; 6 years. (Filed 11th January, 1900.)

Claim.—In a wheeled plough or cultivator, the combination with a beam having a bracket, of a standard having an extended axle and journaled and slidably mounted in said bracket, a pole or tongue connected to the upper end of the standard, a breaking roller



mounted on the axle, supporting standards rising from the beam, a rock shaft mounted in the standards, a link connecting the rock shaft and tongue, an adjusting lever, an arm connected to the rock shaft, and a rod connecting the lever and arm, substantially as described.

No. 65,983. Carrier. (*Transport.*)



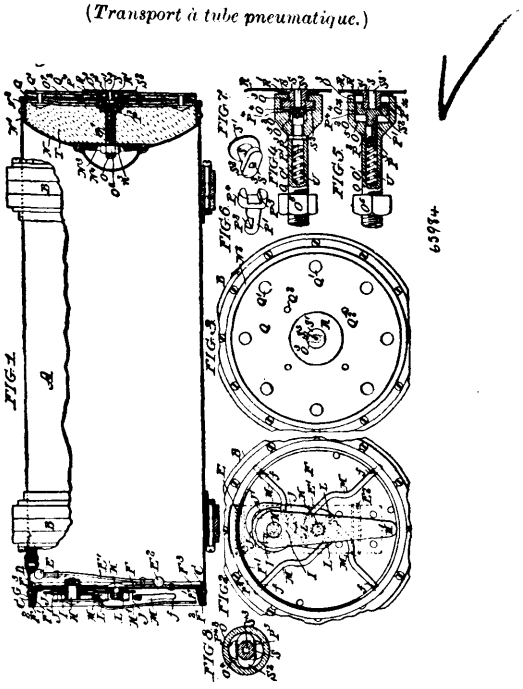
James Alexander Jamieson, Montreal, Quebec, Canada, 26th January, 1900; 6 years. (Filed 21st September, 1897.)

Claim.—1st. A pneumatic carrier for grain or similar substance, having a blower and separator with a conductor for conducting the grain to the separator under air pressure from the blower, and a return conductor for air from the separator to the blower, as set forth. 2nd. A pneumatic carrier, consisting of a blower having an air receiving port and an air discharge port, a separator having an air and substance receiving port, an air discharge port and a substance discharge port, a communicating passage between and connected to the receiving port of the separator and the discharge port of the blower, a branch communicating passage between and connected to said first mentioned passage and the substance to be carried, and a communicating passage between and connected to the air discharge port of the separator and the air receiving port of the blower, for the purpose set forth. 3rd. A pneumatic carrier, consisting of a blower having an air receiving port, and an air discharge port, a separator having an air and substance receiving port, an air discharge port and a substance discharge port, a tubular section between and connected to the receiving port of the separator and the discharge port of the blower, a branch tubular section between and connected to an opening in the body of said first mentioned tubular section and the bin in which the substance to be carried is contained and a tubular sec-

tion between and connected to the air discharge port of the separator and the air receiving port of the blower, substantially as and for the purpose set forth.

No. 65,984. Pneumatic Tube Carrier.

(*Transport à tube pneumatique.*)

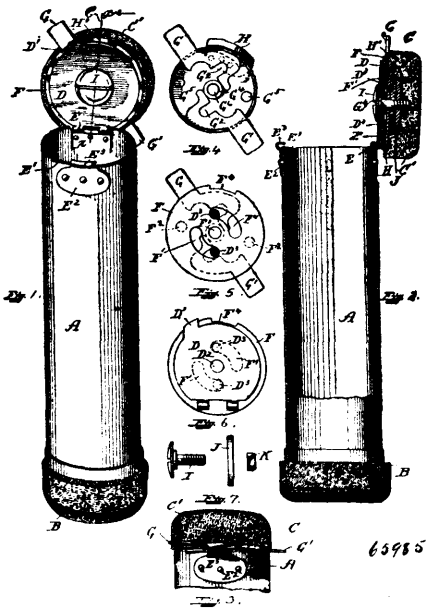


Birney Clark Batcheller, Philadelphia, Pennsylvania, U.S.A., 26th January, 1900; 6 years. (Filed 2nd May, 1899.)

Claim.—1st. A carrier for pneumatic tubes, having at its front end a spring actuated latching device, in combination with a contact plate adapted to be engaged and locked on the front end of the carrier by said latching device. 2nd. A carrier for pneumatic tubes, having at its front end a spring actuated latching device, in combination with a contact plate adapted to be engaged and locked on the front end of the carrier by said latching device, and a key hole leading to the latching device whereby a key can be inserted to unlock it. 3rd. A carrier for pneumatic tubes, having at its front end an opening for the insertion of the shank of a contact plate and a spring actuated latch adapted to engage said shank, in combination with a contact plate having a shank adapted to enter said opening and engage said latch, and a key hole formed through it whereby a key can be inserted to disengage the latch. 4th. A carrier for pneumatic tubes, having at its front end a socket, as O, O^2, having an elongated opening O^3, circular space O^4 and spring chamber O^1, in combination with a latch P^1 having a head P^4 lying in space O^4 and slot P^4 formed in said head to lie transversely to the opening O^3, and a spring arranged to press said latch outward, substantially as described and whereby a contract plate can be engaged, as specified. 5th. A carrier for pneumatic tubes, having at its front end a fixed plate N forming a tight joint with the sides of the carrier and formed with a perforation n^3, in combination with a socket O, O^2, extending through said perforation and secured to the inside of the plate N as by nut O^6, and end pad Q secured to the outer end of the socket, an elastic padding T between the end pad and the plate N, and a tight cap N^4 secured on the inside of the plate N, as and for the purpose specified. 6th. A carrier for pneumatic tubes, having a conical lid seat in combination with a lid having a conical flange as F^1 with outwardly extending packing retaining flanges F^2, F^3, and an elastic packing ring situated on flange F^1 between flanges F^2, F^3, a hinge bar E^1 and hinges E, E^2, connecting said bar with the side of the carrier and with the lid respectively. 7th. A lid for pneumatic carriers, having a substantially central pivot, as K, in combination with a plate J pivoted thereon a tone end and having a series of bolts M, M, etc., pivotally connected thereto and a slot as J^1 formed in the other end of plate J, a pin H secured eccentrically of the lid so as to turn therein, an eccentric I secured on said pin so as to lie in and engage slot J^1, and a handle H^1 secured to said pin H as described and so as to lie within the periphery of the carrier only when turned to a position in which the boles M, M, etc., are shot. 8th. A lid for pneumatic carriers, having outwardly extending walls F and a substantially central pivot, as K, in combination with a plate J pivoted thereon at one end and having a series of bolts M, M, etc., pivotally connected thereto and a slot as J^1 formed in the other end of said plate J, a pin H secured eccentrically to the lid so as to turn therein, an eccentric I secured on said pin so as to lie in and engage slot J^1, and a spring handle H^1 secured to said pin H as described and so as to lie within and below the periphery of the walls F^1 only when turned to a position to shoot the bolts M, M, etc.

No. 65,985. Pneumatic Despatch Tube Carrier.

(*Transport à tube pneumatique de dépêches.*)



James T. Cowley, Lowell, Massachusetts, U.S.A., 26th January, 1900; 6 years. (Filed 20th October, 1899.)

Claim.—1st. In a pneumatic despatch tube carrier, a cover locking mechanism for securing said cover to the shell of the carrier, means for operating said locking mechanism, means on said carrier co-operating with said locking mechanism and arranged to project beyond the shell of the carrier and thereby prevent the insertion of the carr er iuto the despatch tube until the cover is locked to the carrier, means arranged to engage with said locking mechanism and normally hold said locking mechanism and projecting means against movement, and means with which said holding means engages for releasing said locking mechanism upon the movement of the cover into locking position whereby said locking mechanism may be operated to lock the cover to the carrier and said preventing means may be withdrawn from beyond the shell of the carrier to permit the insertion of the carrier into the despatch tube. 2nd. In a pneumatic despatch tube carrier, a cover hinged to said carrier, locking mechanism for securing said cover to the shell of the carrier, means for operating said locking mechanism, means on said carrier co-operating with said locking mechanism and arranged to project beyond the shell of the carrier and thereby prevent the insertion of the carrier into the despatch tube until the cover is locked to the carrier, means arranged to engage with said locking mechanism and normally hold said locking mechanism and projecting means against movement, and means with which said holding means engages for releasing said locking mechanism upon the movement of the cover into locking position whereby said locking mechanism may be operated to lock the cover to the carrier and said projecting means may be withdrawn from beyond the shell of the carrier to permit the insertion of the carrier into the despatching tube. 3rd. In a pneumatic despatch tube carrier, a cover, a plate hinged to the shell of the carrier and forming a part of the cover, a cap mounted on said plate so as to turn thereon, locking mechanism for securing said cap to the shell of the carrier, means on said carrier co-operating with said locking mechanism and arranged to project beyond he shell of the carrier and thereby prevent the insertion of the carrier into the despatch tube until the cover is locked to the carrier, means arranged to engage with said locking mechanism and normally hold said locking mechanism and projecting means against movement, and means with which said holding means engages for releasing said locking mechanism upon the movement of the cover into locking position whereby said locking mechanism may be operated to lock the cover to the carrier and said projecting means may be withdrawn from beyond the shell of the carrier to permit the insertion of the carrier into the despatching tube. 4th. In a pneumatic despatch tube carrier, a cover a plate hinged to the shell of the carrier and forming part of the cover, a cap mounted on said plate so as turn thereon, pins projecting from the rear side of the hinged plate, a plate connected to said cap and provided with slots into and through which said pins project, a plate in contact with the cap of the cover and connected thereto, fingers located between the plates and connected to said cap having pockets into which the said pins of the hinged

plate extend, the said pins being adapted in the turning of said cap to project said fingers or to withdraw the same within the cap, and means for locking the cover to the body of the carrier. 5th. In a pneumatic despatch tube carrier, a plate hinged to the shell of the carrier, a cover carried by said plate and adapted to turn thereon, one or more pins projecting from the rear side of the hinged plate, a plate forming part of said cover and provided with one or more slots into which said pin or pins project, the said pin or pins limiting in the turning of said cover the movement of said cover on said plate, and means for locking the cover to the carrier. 6th. In a pneumatic despatch tube carrier, a cover, locking mechanism for securing the cover to the shell of the carrier, means located on the exterior of the carrier for operating said locking mechanism to lock and unlock the cover, means arranged to engage with said locking mechanism and normally hold said locking mechanism against movement, and means with which said holding means engages for releasing said locking mechanism upon the movement of said cover into locking position whereby said locking mechanism may be operated to lock the cover to the carrier. 7th. In a pneumatic despatch tube carrier, a cover, locking mechanism for securing the cover to the shell of the carrier, means located on the exterior of the carrier for operating said locking mechanism to lock and unlock the cover, a catch arranged to engage with said locking mechanism and normally hold said locking mechanism against movement, and means with which said catch engages for releasing said locking mechanism upon the movement of said cover into locking position whereby said locking mechanism may be operated to lock the cover to the carrier. 8th In a pneumatic despatch tube carrier, a cover, locking mechanism for securing said cover to the shell of the carrier, a single operating means for said locking mechanism, means on said carrier co-operating with said locking mechanism and arranged to project beyond the shell of the carrier and thereby prevent the insertion of the carrier into the despatch tube until the cover is locked to the carrier, a catch arranged to engage with said locking mechanism and normally hold said locking mechanism and projecting means against movement, and means on the shell of the carrier with which said catch engages upon the movement of the cover into locking position to release said locking mechanism from said catch whereby said locking mechanism may be operated and said projecting means may be withdrawn beyond the shell of the carrier to permit the insertion of the carrier into the despatch tube. 9th. In a pneumatic despatch tube carrier, a cover, locking mechanism for securing the cover to the shell of the carrier, reciprocating means located on the exterior of the carrier for operating said locking mechanism to lock and unlock the cover, a catch arranged to engage with said locking mechanism and normally hold said locking mechanism against movement, and means with which said catch engages for releasing said locking mechanism upon the movement of said cover into locking position whereby said locking mechanism may be operated to lock the cover to the carrier. 10th. In a pneumatic despatch tube carrier, a cover, a plate hinged to the shell of the carrier and forming a part of the cover, a cap mounted on said plate so as to turn thereon, a plate secured to said cap to move therewith and forming the locking mechanism by which the cover is secured to the shell of the carrier, a catch arranged to engage with said plate of said locking mechanism and normally hold said locking mechanism against movement, and means on the shell of the carrier with which said catch engages upon the movement of said cover into locking position to release said locking mechanism from said catch whereby said locking mechanism may be operated to move the plate thereof into locking engagement with said means and thereby lock the cover to the carrier.

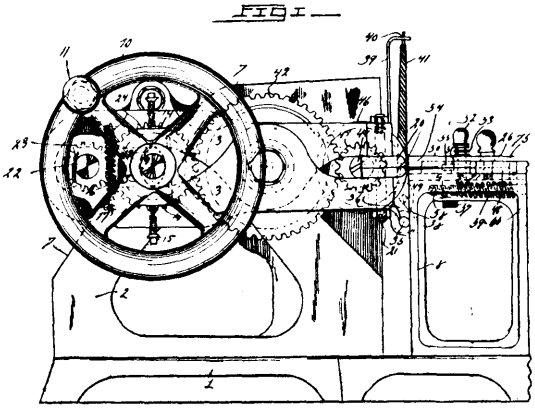
No. 56,986. Saw Filing and Setting Machine.

(*Machine à aiguiser et countourner les scies.*)

Rosalie Keppeler, administratrix of the estate of Anton Keppeler, Butte, Montana, U.S.A., 26th January, 1900; 6 years. (Filed 6th December, 1899.)

Claim.—1st. In a saw sharpening machine, the lever pivoted to the frame of the machine, the shaft carrying a crank and wristpin, which latter travels in a slot in said lever, the reciprocating cross head to which the lever is pivoted and the file carried by the cross head, combined as set forth. 2nd. In a saw sharpening machine, the lever pivoted to the frame of the machine, the shaft, crank and wrist pin, which latter travels in an elongated slot in said lever, the vertically reciprocating cross head having a sliding pivotal connection with one end of said lever, combined with a horizontally adjustable file carrying bracket, as set forth. 3rd. In a saw sharpening machine, the combination with the vertically reciprocable cross head, the lever having a sliding pivotal connection with the said cross head, the shaft carrying the wrist pin, the latter having a pivotal connection with the opposite end of the said lever in an elongated slot, a horizontally adjustable bracket secured to the cross head, and jaws on the bracket to receive a file socket piece, as set forth. 4th. In a saw sharpening machine, the combination with the cross head and lever having sliding pivotal connection therewith, and with an operating crank to which power is conveyed, of the bracket, hortizontally adjustable on the cross head and having clamping jaws, of the file carrying socket piece held therein, and the file carried by the socket piece, as set forth. 5th. In combination with the reciprocating cross head and means as described for operating same, the horizontally adjustable bracket mounted on the said cross head, clamping jaws on the bracket, file carrying socket

FIG I.



65986

piece held by the jaws, the file fastened in the socket and the spring arm carried by the bracket, and connected to the upper end of the file, as set forth. 6th. In a saw sharpening machine, the concentric disc having a portion of its periphery obliquely offset, a segment provided with a plurality of obliquely arranged thread-like ribs, corresponding in obliquity and position to the offset portion of said disc, a shaft upon which said disc and segment are mounted, and means for rotating said shaft, combined with a longitudinal guide and means for adjusting the same to cause the thread of the disc to lie in and engage the throat of a saw tooth, to intermittently feed and hold stationary the saw blade, substantially as described. 7th. In a table for a saw filling machine, the horizontally sliding saw carrying top and screw threaded shaft, spring mounted thereon, and hand wheel for operating the shaft, combined with the spring actuate dplate pivoted to the horizontally movable portion of the table as shown and described. 8th. In a table for saw sharpening and filing machines, the combination with the horizontally movable top and plate pivoted thereto, the block, with antifriction wheels mounted therein, which block rests freely on the horizontally movable portion of the table, means for holding the block in a fixed position, and a wedge for adjusting the said block as set forth. 9th. In combination with the horizontally movable table top, the plate pivoted thereto, the loosely mounted block with antifriction wheels mounted therein, the threaded adjusting thumb screw passing through a transversely disposed aperture in the said block, a spring interposed between the upper surface of the said pivoted plate and the shouldered head of the adjusting screw, and the slotted wedge and tightening thumb screw held in the slot therein, as set forth.

No. 65,987. Manual Propelling Mechanism for Boats.

(*Mécanisme de propulsion pour bateaux.*)

Fig.1

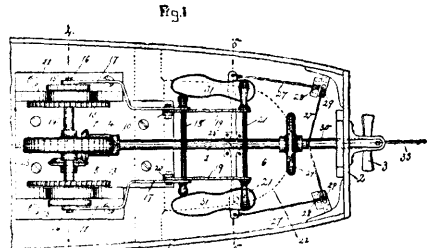
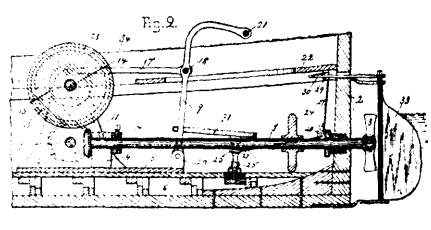


Fig.2.



65987

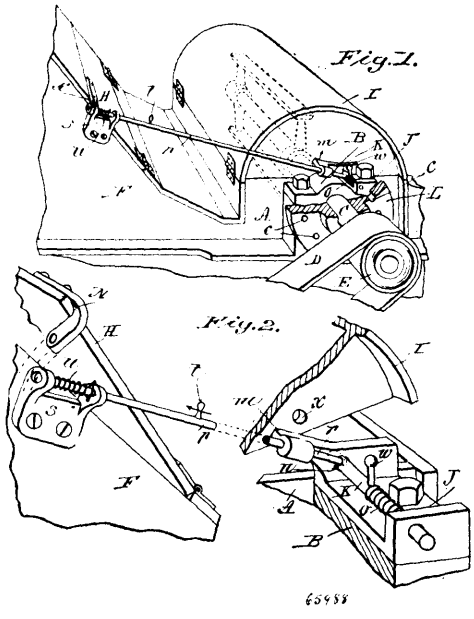
Clarence R. Willis, Manfield, Massachusetts, U.S.A., 26th January, 1900; 6 years. (Filed 5th January, 1900.)

Claim.—A propelling apparatus for boats, having in combination a propeller wheel, a propeller shaft, a countershaft crosswise of the

boat mounted in suitable supports and having a gear which engages with a gear on the propeller shaft, a drive shaft supported crosswise of the boat above the said counter shaft, a balance wheel on said drive shaft, pinion wheels on said counter shaft and gear wheels on said drive shaft which engage with said pinions, crank discs on said drive shaft, connecting rods attached to said crank discs, upright levers pivoted at their lower ends to a fixed support and pivoted above to said connecting rods and having operating handles, substantially as described.

No. 65,988. Cotton Beater Cover Locking Device.

(*Appareil de battage du coton.*)



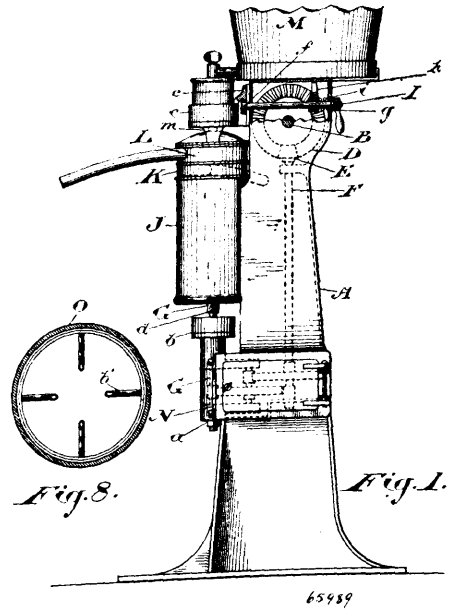
Joseph Tibbetts and John Blaisdell Curtis, both of Chicopee Massachusetts, U.S.A., 26th January, 1900; 6 years. (Filed 9th January, 1900.)

Claim.—1st. In a cotton beater or analogous machine, the combination with a disc fixed on the shaft of the machine having bolt holes therein, and with the beater cylinder and conduit covers of the case of the machine, of two bolts, both simultaneously locking said covers in closed positions while the machine may be running, and one of said bolts when slid out of locking engagement with its cover, engaging said disc and holding the same against rotation, and permitting the actuation of said conduit cover bolt to disengage the same from said last named cover, substantially as described. 2nd. In a cotton beater or analogous machine, the combination with a disc fixed on the shaft of the machine having bolt holes therein, and with the beater cylinder and conduit covers of the case of the machine, of two bolts, each movable in one direction by hand, and oppositely by a spring, and simultaneously locking said covers in closed positions while the machine may be running, one of said bolts having a recess in its side and when slid out of locking engagement with its cover engaging said disc and holding the same against rotation, and presenting said recess opposite the end of the second bolt and permitting the spring thereon to so actuate this last named bolt as to disengage the same from its conduit cover, and lock the first named bolt in engagement with said disc, substantially as described.

No. 65,989. Cream Separator. (*Separateur pour la crème.*)

Thomas C. Robertson, James A. Taylor, William W. Price and George B. Howes, all of Galt, Ontario, Canada, 26th January, 1900; 6 years. (Filed 10th January, 1900.)

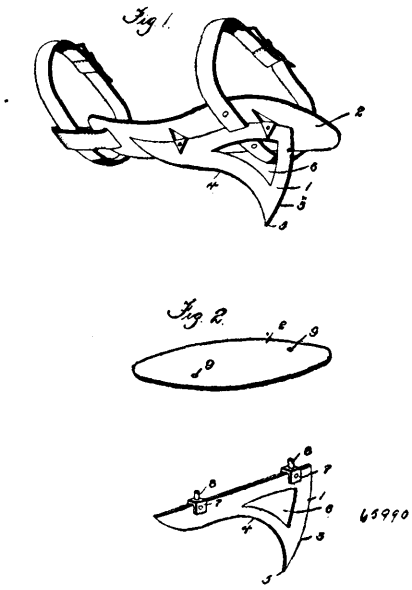
Claim—1st. In a cream separator, a bowl provided with a spindle having one or more openings therein communicating with the interior of the bowl at or near one end, in combination with a skimmer comprising two or more wings dividing the milk space and extending from the spindle to the interior surface of the wall of the bowl, and helically arranged segmental plates connected to the wings so as to divide the said milk spaces into pockets and extending from the interior surface of the wall of the bowl to within a short distance of the spindle, openings being formed in the wings between the pockets to permit the milk to flow in a helical direction from pocket to pocket from one end of the bowl towards the other, substantially as and for the purpose specified. 2nd. In a cream separator, a bowl provided with a spindle having one or more openings therein communicating with the interior of the bowl at or near one end, in combination with a skimmer comprising two or more backwardly curved wings dividing the milk space and extending from the spindle to the interior surface of the wall of the bowl, and helically arranged segmental plates connected to the wings so



as to divide the said milk spaces into pockets and extending from the interior surface of the wall of the bowl to within a short distance of the spindle, openings being formed in the wings between the pockets to permit the milk to flow in a helical direction from pocket to pocket from one end of the bowl towards the other, substantially as and for the purpose specified. 3rd. In a cream separator, a bowl provided with a hollow spindle, in combination with a skimmer comprising two or more wings dividing the milk space and extending from the spindle to the interior surface of the wall of the bowl and a segmental plates connected to the wings and extending from the interior surface of the wall of the bowl to within a short distance of the spindle, suitable openings being provided in the wings and spindle end, the plates so arranged that the milk may travel from pocket to pocket from one end of the bowl to the other, substantially as and for the purpose specified. 4th. In a cream separator, a bowl in combination with a skimmer shaped to form with the bowl one or more helical passageways for milk extending from end to end of the bowl, the inner side of a passageway communicating with a central cream channel, substantially as and for the purpose specified. 5th. In a cream separator, a bowl in combination with a skimmer shaped to form the bowl one or more helical passageways for milk extending from end to end of the bowl, the inner side of a passageway communicating with a central cream channel and one or more wings dividing said passageways but provided with openings to permit the milk to follow the helix, substantially as and for the purpose specified. 6th. In a cream separator, a bowl in combination with a skimmer shaped to form with the bowl one or helical passageways for milk extending from end to end of the bowl, the inner side of a passageway communicating with a central cream channel and one or more backwardly curved wings dividing said passageways but provided with openings to permit the milk to follow the helix, substantially as and for the purpose specified. 7th. In a cream separator, a bowl provided with a hollow spindle having two opposite openings therein communicating with the interior of the bowl at or near the bottom in combination with a skinner comprising four wings dividing the milk space and extending from the spindle to the interior surface of the wall of the bowl, and helically arranged segmental plates connected to the wings so as to divide the said milk spaces into two series of helically arranged pockets and extending at about an angle of 56° from the interior surface of the bowl to within a short distance of the spindle, openings being formed in the wings between the pockets to permit the milk to flow in an helical direction from the openings in the spindle through the two series of pockets to the other end of the bowl, substantially as and for the purpose specified. 8th. In a cream separator, a bowl formed in two detachable parts and a spindle rigidly connected to one of the parts and extending through the bowl in combination with a skimmer comprising wings and segmental plates connecting the wings, the inner edges of the wings resting against the spindle so that the skimmer may be removed from the spindle when the bowl is opened, substantially as and for the purpose specified. 9th. In a cream separator, a bowl formed in two detachable parts and a spindle rigidly connected to one of the parts and extending through the bowl in combination with a skimmer comprising a disc adapted to

rest on the base of the bowl and suitably secured to revolve therewith, wings secured to the disc and segmental plates connecting the wings, the inner edges of the wings resting against the spindle so that the skimmer may be removed from the spindle when the bowl is opened, substantially as and for the purpose specified. 10th. In a cream separator, a bowl comprising a flanged base and an upper portion, the lower edge of which is adapted to fit within the flange, in combination with a skimmer comprising a disc adapted to rest on the base of the bowl and suitably secured to revolve therewith, wings secured to the disc and segmental plates connecting the wings, the inner edges of the wings resting against the spindle so that the skimmer may be removed from the spindle when the bowl is opened, and a packing ring located between the lower edge of the upper portion of the bowl and the spindle, substantially as and for the purpose specified. 11th. In a cream separator, a bowl formed in two portions the edges of which are rabbeted to fit together in combination with a spindle rigidly secured to one of the parts and extending through the end of the other part, and a nut screwed upon the spindle and adapted to bear against the bowl to clamp the parts together, substantially as and for the purpose specified. 12th. In a cream separator, a bowl formed in two parts suitably secured together in combination with a hollow spindle passing out through each end of the bowl and rigidly secured to one of them, a hole being provided in the spindle forming a communication between its interior hollow and the interior of the bowl, substantially as and for the purpose specified. 13th. In a cream separator, a bowl and a vertical separable spindle to which the bowl is connected in combination with a step bearing for the lower end of the spindle, a spring bearing for the spindle above the bowl, and a spring bearing for the spindle below the point of connection of the two parts of the spindle, substantially as and for the purpose specified. 14th. In a cream separator, a bowl comprising a flanged recessed base and an upper portion, the lower edge of which is adapted to fit within the flange, in combination with a skimmer comprising a disc adapted to rest on the base of the bowl over the recess and suitably secured to revolve therewith, wings secured to the disc and segmental plates connecting the wings, the inner edges of the wings resting against the spindle so that the skimmer may be removed from the spindle when the bowl is opened, and a packing ring located between the lower edge of the upper portion of the bowl and the spindle, substantially as and for the purpose specified. 15th. In a cream separator an upper bearing for the bowl spindle having a slotted flange connected thereto by a suitable neck or bridge in combination with the frame provided with a rib adapted to enter the slot, a spindle passing through the rib and slot, a head on the spindle adapted to engage the flange and means for moving and holding the spindle so as to cause the head to securely clamp the flange of the bearing, substantially as and for the purpose specified. 16th. In a cream separator an upper baring for the bowl spindle having a slotted flange connected thereto by a suitable neck or bridge in combination with the frame provided with a rib adapted to enter the slot, a spindle passing through the rib and slot, a head on the spindle adapted to engage the flange and means for moving and holding the spindle so as to cause the head to securely clamp the flange of the bearing, the neck or bridge being so shaped as to rest on the said head to limit the downward motion of the bearing, substantially as and for the purpose specified. 17th. In a cream separator, a spring bearing provided with two plates with central apertures, a ring capable of sliding between the said plates, springs connecting the said ring with a stationary part of the bearing so as to tend to maintain the said ring in a central position, and a ball journaled in suitable cups provided at opposite sides of the ring and suitably bored to receive a spindle, substantially as and for the purpose specified. 18th. In a cream separator a spring bearing provided with two plates with central apertures, a ring capable of sliding between the said plates, and tension springs connecting the said ring with a stationary part of the bearing so as to tend to maintain the said ring in a central position suitable bearings for a spindle being provided in the ring, substantially as and for the purpose specified. 19th. In a cream separator a spring bearing provided with two plates with central apertures, a ring capable of sliding between the said plates, springs connecting the said ring with a stationary part of the bearing so as to tend to maintain the said ring in a central position, a cup formed on an inward projection at one side of the ring, a cup formed on a screw threaded through the opposite side of the ring, and a ball journaled in the said cups and suitably bored to receive a spindle, substantially as and for the purpose specified. 20th. In a cream separator a bowl having one or more holes for the exit of skim milk bored therein from its interior through the upper surface of its top, and a channel or groove cut in the upper surface of the top from each hole to the outer surface of the top, in combination with a spindle connected to the bowl and projecting through the top and a nut screwed upon the spindle and adapted to close the top of the channel, substantially as and for the purpose specified. 21st. In a cream separator a bowl provided with two or more skim milk tubes having their lower ends opening in line with the interior surface of the bowl and having its interior diameter slightly enlarged just behind the lower ends of the said tubes, substantially as and for the purpose specified. 22nd. In a cream separator a plate detachably secured to the frame and provided with bearings for the lower part of the bowl spindle and bearings for the spindle of intermediate gear, substantially as and for the purpose specified.

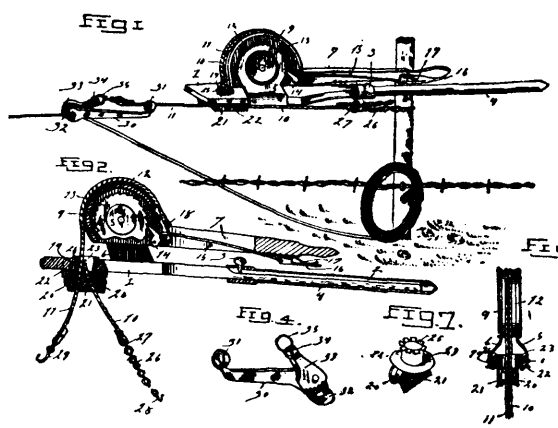
No. 65,990. Band Cutter. (*Coupe-hart.*)



William Pawley Rundle and James Edward Mason, both of Portage La Prairie, Manitoba, Canada, 26th January, 1900; 6 years. (Filed 12th January, 1900.)

Claim.—1st. A band cutter, comprising a supporting plate and a cutting blade, said cutting blade having a plurality of cutting surfaces, substantially as described. 2nd. A band cutter, having a supporting plate removably secured to the hand of the operator, and a blade secured to said plate, said blade having its front face curved and sharpened, and having its rear face curved and sharpened, said curved faces or edges terminating in a rearwardly extending point, substantially as described. 3rd. A band cutter, comprising a plate, a blade secured thereto, said blade having its front edge curved and having its lower edge provided with a concavo convex curve, the rear and front curved portions terminating in a rearwardly extending point, said curved portions being sharpened, substantially as described.

No. 65,991. Wire Stretcher. (*Tendeur de fil de fer.*)

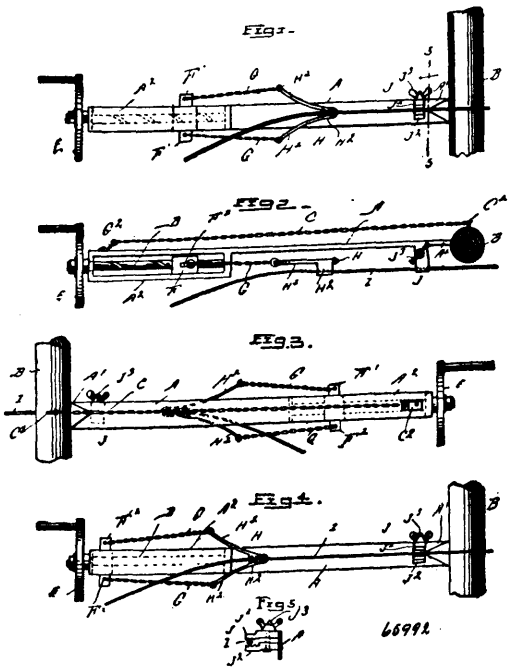


William F. Tramm, Beecher, Illinois, U.S.A., 26th January, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. A device of the class described, comprising a bar, an operating lever fulcrumed thereon, a pair of flexible connections attached to the operating lever and provided with means for engaging a fence wire or a shock, and a pulley block swivelled to the bar and provided with a pair of sheaves or pulleys and adapted to rotate on the bar, substantially as and for the purpose described. 2nd. A device of the class described, comprising a bar, an operating lever fulcrumed thereon, a pair of flexible connections attached to the lever and extending through the bar, and guide pulleys mounted on the bar, substantially as described. 3rd. A device of the class described, comprising a bar having an opening, an operating lever, a swivelled pulley block having guide pulleys and provided with a tubular shank mounted in the opening of the bar, and flexible con-

nections attached to the operating lever and extending through the tubular shank and arranged on the pulleys, substantially as described. 4th. A device of the class described, comprising a bar provided at opposite sides with ears or brackets, one of the ears or brackets being enlarged and having ratchet teeth, an operating lever fulcrumed between the ears or brackets and provided with a head having a peripheral groove, flexible connections arranged in the groove and attached to the lever, a pawl or dog mounted on the lever and engaging the ratchet teeth, and mechanism carried by the lever for operating the pawl or dog, substantially as described. 5th. In a device of the class described, the combination with a flexible connection, a clamp comprising a bar provided at its inner end with an eye loosely receiving the flexible connection, a fixed jaw mounted on the bar, a cam or lever co-operating with the fixed jaw and having its outer end attached to the flexible connection, substantially as described. 6th. In a device of the class described, the combination of a flexible connection provided with a hook, and a clamp comprising a bar provided at its inner end with an eye loosely receiving the flexible connection, a fixed jaw mounted on the bar, and a cam or lever pivoted to the bar and co-operating with the fixed jaw, said cam or lever being provided with an eye to receive the hook of the flexible connection, substantially as described. 7th. In a device of the class described, the combination of a bar, an operating lever, flexible connections attached to the operating lever, a swivelled pulley block mounted on the bar, provided with pulleys and adapted to be arranged either longitudinally or transversely of the bar, and an extensible section or slide mounted on the bar, and adjustably connected with the same, substantially as described. 8th. In a device of the class described, the combination of a bar having a groove, a tubular slide mounted on the bar and provided with a clamping device engaging the groove, a lever fulcrumed on the bar, flexible connections attached to the lever and a swivelled pulley block, substantially as described.

No. 65,992. Wire Stretcher. (*Tendeur de fil de fer.*)



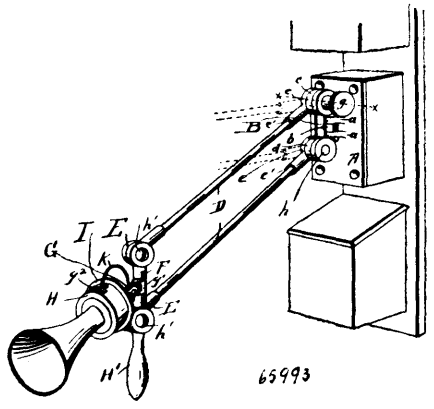
Spencer S. Sanders, Henlock, Ohio, U.S.A., 26th January, 1900; 6 years. (Filed 3rd January, 1900.)

Claim.—1st. A wire stretcher, comprising a frame, a nut movable in guides in said frame, a screw engaging the nut, tongs for gripping the wire, and connections between the nut and the two arms of the tongs, whereby when the nut is moved in one direction the tongs will be tightened on the wire, and when the nut is moved in the opposite direction the tongs will be released from the wire, substantially as specified. 2nd. A wire stretcher, provided with a frame adapted to be set against one side of a fence post and extend in a a horizontal direction therefrom, and a pair of jaws arranged transversely on said frame, and adapted to temporarily clamp the wire in place and then reset the stretcher for a second stretching of the wire, substantially as shown and described.

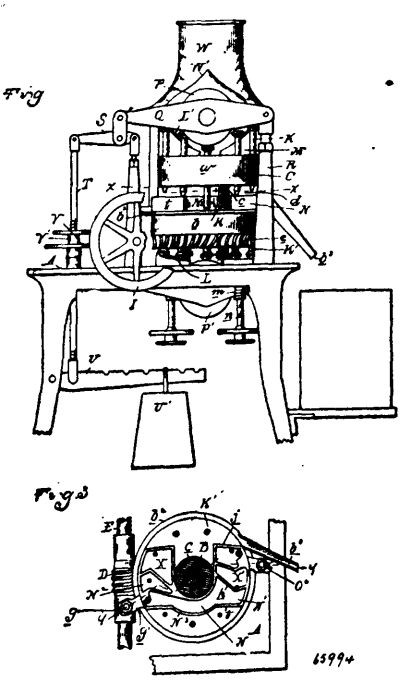
No. 65,993. Transmitter Bracket.
(*Console pour transmetteurs.*)

Andrew Y. Gordon, Massillon, Ohio, U.S.A., 26th January, 1900; 6 years. (Filed 9th October, 1897.)

Claim.—1st. The combination of a plate having hinged thereto a bar provided with discs, heads pivotally connected to the bar, parallel bars connected to heads at their inner and outer ends, and the bar F, carrying the transmitter H, substantially as and for the purpose specified. 2nd. A plate having pivotally attached thereto a bar, said bar provided with discs, parallel bars connected to heads, and said heads pivotally connected to the bars B, and F, the arm G, provided with the eye g^1, the clamping bolt g^2, passed through the members of the arm G, and the transmitter plate I, substantially as and for the purpose specified. 3rd. The pivoted bar B, provided with the discs *d*, and *c*, the disc *c*, being concaved upon one of its faces, the spring C, located in the concavity of the disc *c*, the nut *g*, the parallel bars D, the bar F, carrying a transmitter and provided with an operating handle, substantially as and for the purpose specified.



No. 65,994. Powder Compressor. (*Compresseur de poudre.*)

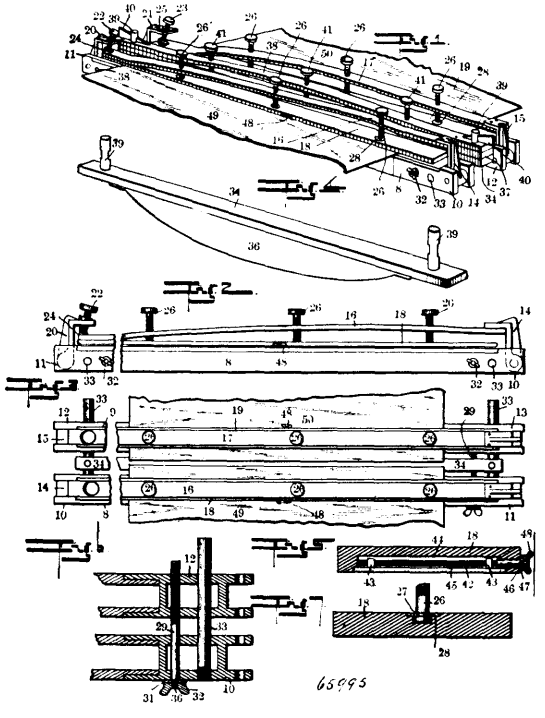


Ernest C. Clark, Detroit, Michigan, U.S.A., 26th January, 1900; 6 years. (Filed 21st August, 1899.)

Claim.—1st. In a compressor for powders, the combination of a frame, a stationary vertical spindle, a rotary head journaled thereon consisting of two sections connected by a neck, the two sections having aligned apertures, a feed frame secured to bear on the lower section for directing the material into the apertures in said section, the plungers in the apertures in both sections and actuating means for the plungers to compress the material at two points in their travel. 2nd. In a compressor for powders, the combination with the rotary head comprising upper and lower sections having aligned apertures, plungers therein within, with actuating devices at two points, and a neck connecting the two sections,, of a feed frame secured to rest on the lower section, comprising two sets of gathering devices located between the points of actuation of the plungers,

and a connecting frame at one side only of the neck for the purpose described. 3rd. In a compressor for powders, the yoke shaped feed frame, comprising two sets of gathering wings, and a connection between the two at one end only. 4th. In a compressor for powders, the combination with the two part rotary head connected by a neck, of a feed frame having a yoke shaped opening adapted to embrace the neck, a series of gathering wings thereon and a stationary support for the frame. 5th. In a compressor for powders, the combination of a feed frame, a series of wings converging to a common concentric line, an opening being formed in the wings on this line, and the rotary head having a series of apertures adapted to travel beneath these openings. 6th. In a compresser for powders, the combination of the rotary apertured head carrying plungers which are adapted to form tablets during rotation, a stationary feed frame on a portion only of the head leaving a portion or portions free, means at the free portion for forming tablets in the apertures and means for pushing them out of the apertures, and a wall at the begining of the gathering frame adapted to arrest the tablets, but permitting the powder to pass thereunder into the gathering frame. 7th. In a compressor for powders, the combination of the rotating head, carrying the plungers, means for gathering the material into the apertures in which the plungers work, of a cam track for the upper die, a depression thereon at the point of operation, a wheel or roller above the depressed portion of the track and beneath which the upper plunger passes, and a lever in which said roller is journaled, substantially as described. 8th. In a powder compressor, the combination of a multiple of powder compressing dies, a single actuating device there for, and means for bringing the dies continuously and successively into operative relation to such actuating device. 9th. The combination with a rotary apertured carrying plungers which are adapted to form tablets during the retation of the head, a stationary feed or gathering frame on a portion of said head leaving portions uncovered or free, means at said free portions for forming the tablets in the apertures, means for pushing them out of said apertures, inclined walls for pushing the formed tablets off from the head, and an annular shelf surrounding said head on which said tablets will lodge adapted to carry them to a common point of dischage.

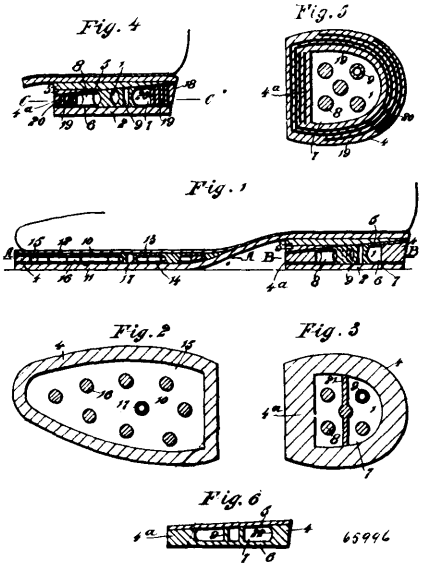
No. 65,995. Jointing Clamp. (*Mordache.*)



John N. Roberts, Indianapolis, Indiana, U.S.A., 26th January, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. In a jointing clamp, the combination with a pair of clamping means arranged to hold a pair of strips of material and present them edge to edge, of means for supporting the adjacent edges of said strips, and means for independently moving the ends of said clamping means toward each other and thereby forcing the edges of said material together. 2nd. In a jointing clamp, the combination with a pair of clamping means arranged to hold a pair of strips of material and present them edge to edge, of means for supporting the adjacent edges of said strips, and means for moving said clamping means towards each other and thereby forcing the edges of the material together. 3rd. In a jointing clamp, the combination with a pair of clamping means arranged to hold a pair of strips of material and present them edge to edge, of means for supporting the adjacent edges of said material, means for moving the ends of said clamping means toward each other and thereby forcing the edges of said material together, and an auxiliary clamping means for engaging the adjacent edges of said material. 4th. In a jointing clamp, the combination with a pair of clamping means arranged to hold a pair of strips of material and present them edge to edge, of means for moving the ends of said clamping means toward each other and thereby force the edges of said material together, and means carried by one or both of said clamping means for forcing a portion only of said material transversely through the clamping means, substantially as and for the purpose set forth. 5th. In a jointing clamp, the combination with a pair of clamp bases, of an intermediate supporting base between the two clamping bases, means for moving said bases toward each other, and a pair of clamping strips each pivoted at one end to one end of one of said bases, and means for forcing each of said strips down upon its base. 6th. In a jointing clamp, the combination with a pair of clamp bases, of means for moving the said bases toward each other, a pair of clamping strips each pivoted at one end to one end of one of said bases, means for forcing each of said strips down upon its base, and an auxiliary clamping means mounted between the clamp bases and separable therefrom, the said auxiliary clamping means clamping the adjacent of any material held by the main clamps. 7th. In a jointing clamp, the combination with a pair of clamp bases, of an intermediate supporting base between the two clamp bases, means for moving said bases toward each other, a pair of spring bridges each provided, at one end to one of one of said bases, means for detachably securing the opposite end of said bridge to its base, a clamping strip mounted beneath each bridge, and means carried by each bridge for forcing the clamping strip upon its base.

No. 65,996. Boot and Shoe. (*Chaussure.*)



William Lingard, Wellington, New Zealand, 26th January, 1900; 6 years. (Filed 12th January, 1900.)

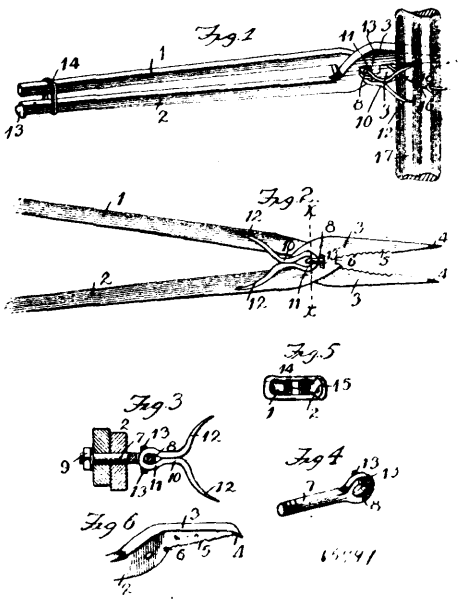
Claim.—1st. In boots and shoes, in combination, a cushion comprising an elastic rim, and a top and bottom joined to the rim and forming an air space which is airtight, substantially as set forth. 2nd. In boots and shoes, in combination, a cushion comprising an elastic rim, a top and bottom joined to the rim and forming an air space which is airtight, and elastic pillars extending from the top to the bottom of the cushion, substantially as set forth herein. 3rd. In boots and shoes, in combination, a cushion comprising a rim made of soft rubber and thicknesses of cork placed on edge, and a top and bottom joined to the rim and forming an air space which is airtight, substantially as set forth herein. 4th. The improvements in boots and shoes, consisting of parts constructed, arranged and operating, substantially as set forth herein.

No. 65,997. Wire Stretcher. (*Tendeur de fil de fer.*)

William Campbell, Sandyville, West Virginia, U.S.A., 26th January, 1900; 6 years. (Filed 2nd January, 1900.)

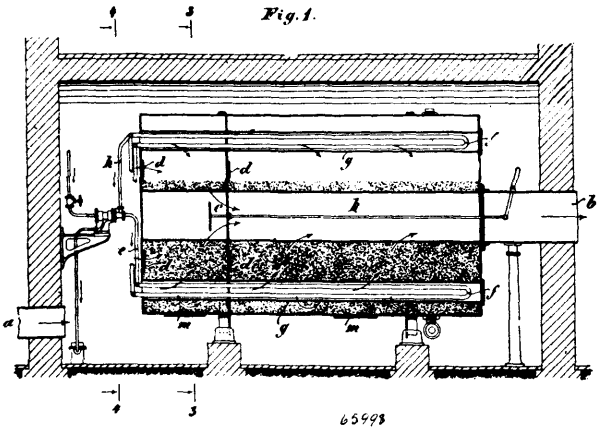
Claim.—1st. A wire stretching implement, comprising co-operating clamping jaws for gripping the wire, handles or levers for operating the jaws, and a yoke shaped brace loosely connected to one side of the implement, the shank of the brace extending at substantially right angles to the plane of the jaws, and the opposite sides of the yoke being located in a plane substantially parallel to that of the jaws, and straddling the wire, in the operation of the

implement, substantially as shown and described. 2nd. In a wire stretching implement, the combination with opposite members, each



member comprising a jaw and an operating handle or lever, of a pivot bolt connecting the members, and provided at one end with an enlarged eye or ring, and integral lugs projecting in opposite directions from one edge of the ring, and a yoke shaped brace, having a loop loosely received within the eye or ring of the pivot bolt, substantially as and for the purpose set forth. 3rd. In a wire stretching implement, the combination with opposite members, each member comprising a jaw and an operating handle or lever, of a pivot bolt for the members, and having an eye or ring at one end, and a yoke shaped brace formed from a single length of metal bent intermediate of its ends into a loop, and oppositely extending pointed arms, the loop of the brace being loosely received within the eye or ring of the pivot bolt, substantially as shown and described.

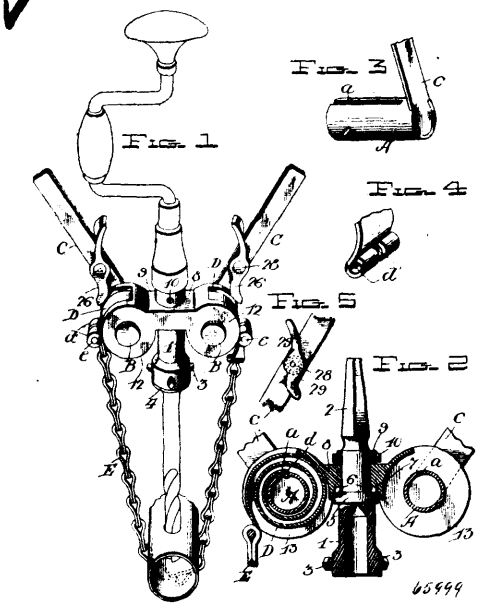
No. 65,998. Malt Drum. (*Tambour à malt.*)



Frederich Knüttel, Charlottenberg, near Berlin, Prussia, German Empire, 26th January, 1900; 6 years. (Filed 26th April, 1899.)

Claim.—1st. The combination of a drum for malting grain and for drying and curing the malt of the kind as described in the foregoing specification, with a closed kiln, and means for supplying the same with hot and moist air, essentially as and for the purpose described. 2nd. The combination of a drum for malting grain and for drying and curing the malt, with a system of heaters disposed in the ventilating tubes of the drum, and means for conducting a heating agent through said heaters, essentially as and for the purpose described. 3rd. The combination of a drum for malting grain and for drying and curing the malt, with a system of heaters disposed in the ventilating tube, and partitions dividing the drum in two or more compartments, essentially as and for the purpose described.

No. 65,999. Brace or Bit Stock.
(*Fût de vilebréquin ou mèche.*)



William L. Baumgardner, Watsonville, California, U.S.A., 26th January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. In a chuck spindle, a bracket mounted thereon, spring actuated feed shafts journalled in said bracket, and a chain operatively connected to said shafts, substantially as and for the purpose set forth. 2nd. In a drill attachment, the combination with the bracket formed with the serrated flanges, the spring actuated shafts journalled therein, levers fixed to said shafts, and spring actuated pawls fulcrumed on the levers and adapted to co-act with the serrated flanges to take up the tension of the springs, substantially as and for the purpose set forth. 3rd. The combination with the bracket, of the tubular shaft formed with a longitudinal slot, a hand lever fixed to the closed end of said tubular shaft, a spiral spring formed with the aligned eyes d^1, d^1 and the radial lip d, and a removable cap having a threaded engagement with the open end of said tubular shaft, substantially as and for the purpose set forth.

No. 66,000. Cellulose Manufacture.
(*Fabrication de cellulose.*)

The American Viscose Company, New York City, New York, U.S.A., assignee of Charles F. Cross, Edward J. Beaven and Clayton Beaven, all of London, England, 29th January, 1900; 6 years. (Filed 20th March, 1899.)

Claim.—1st. The structural insoluble modification of cellulose recovered through the decomposition of the soluble plastic compound hereinbefore described. 2nd. The process herein described, consisting in first treating cellulose to form the soluble plastic compound described hereinbefore, and then decomposing the plastic compound thus obtained, substantially as set forth. 3rd. The process herein described, consisting in first treating cellulose with caustic alkali and carbon disulphide and then decomposing the soluble plastic compound thus obtained, substantially as set forth. 4th. A structureless insoluble modified cellulose obtained by first treating cellulose with caustic alkali and carbon-disulphide, and decomposing the soluble mass thus obtained to obtain the modified cellulose.

No. 66,001. Production of Silicides of Iron.
(*Production de silicique de fer.*)

The Willson Aluminum Company, New York City, New York, assignee of Guillaume de Chalmot, Holcomb's Rock, Virginia, U.S.A., 29th January, 1900; 6 years. (Filed 10th April, 1899.)

Claim.—1st The described process of producing ferro-silicides, which consists in subjecting a silicon compound with iron and carbonaceous matter to the heat of an electric furnace for a sufficient time to eliminate the carbonaceous matter, reduce the silicon compound and form a substantially pure compound of silicon and iron, containing 25 per cent or upwards of silicon. 2nd. The described process of producing ferro-silicides of 25 to 50 per cent or more of silicon, which consists in subjecting a silicon compound with iron and carbonaceous matter, the silicon compound being in excess, to the heat of an electric furnace until the carbonaceous matter is eliminated and the silicon compound is reduced, leaving a sub

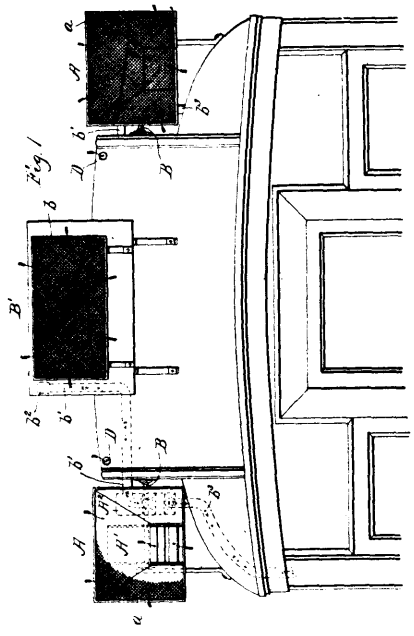
stantially pure compound of silicon with iron. 3rd. The described process of producing ferro silicides, which consists in subjecting oxides of silicon and iron, with carbonaceous matter and flux, to the heat of an electric furnace, until the carbonaceous matter is eliminated and said oxides are reduced, leaving a substantially pure compound of silicon and iron. 4th. The described process of producing ferro-silicides, which consist in subjecting silica and an iron containing silicon, with carbonaceous matter, to electric smelting until the carbonaceous matter is eliminated by reducing the silica, and the reduced silicon is alloyed with the iron to form a higher silicide. 5th. The described new product, being ferro-silicide, containing approximately 50 per cent of silicon, and having the formula Si^3 Fe.

No. 66,002. Siccative Oil Manufacture.
(*Fabrication d'huile siccative.*)

Thd Weygang's Oil Products Company, Cornhill, London, England, assignee of William Louis Sluterman Van Loo, Tilbury Docks, Tilbury, Essex, England, 29th January, 1900; 6 years. (Filed 16th May, 1899.)

Claim.—1st. The herein described manufacture of siccative oil, which consists in combining resin, petroleum, lime and water, substantially as described. 2nd. The manufacture of a more rapidly drying siccative oil, as described by substituting oxide of another metal such as zinc for the whole or part of the lime or calcium oxide. 3rd. A siccative oil, comprising resin, petroleum, lime and water. 4th. A siccative oil, comprising resin, petroleum, lime, an oxide of a metal such as zinc and water.

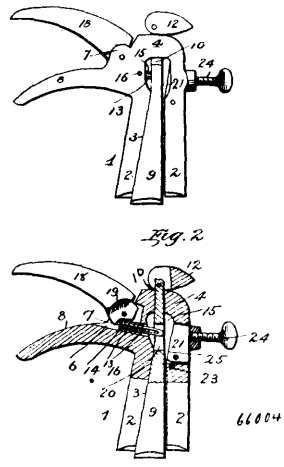
No. 66,003. Ventilator. (*Ventilateur.*)



Alexander Ross and Alexander Walker, both of Montreal, Quebec, Canada, 29th January, 1900; 6 years. (Filed 9th January, 1900.)

Claim.—1st. A ventilating apparatus for cars, comprising a fan casing, a power fan and a ventilating fan rotatably mounted in said casing, an air chamber, an inlet pipe leading from said air chamber to said ventilating fan, and an outlet pipe leading from said ventilating fan to the interior of the car, substantially as described. 2nd. A ventilating apparatus for cars, comprising a fan casing, a power fan and a ventilating fan rotatable mounted in said casing, an air chamber containing water, a funnel secured in said casing having its inner end submerged in the water of said casing, an inlet pipe leading from the upper portion of said chamber above the water to said ventilating fan, and an outlet pipe leading from said ventilating fan to the interior of the car, substantially as described. 3rd. A ventilating apparatus for cars, comprising a fan casing having an air inlet and an air outlet, a shaft journalled in said casing, a power fan fixed upon said shaft in the path of said air passages, an air chamber containing water, a funnel secured in said air chamber having its inner end submerged in the water of said casing, an inlet pipe leading from the upper portion of said chamber above the water to the fan casing, an outlet pipe leading from said fan casing to the interior of the car, and a ventilating fan fixed upon the shaft of the power fan and arranged in the path of said inlet and outlet pipes, substantially as described. 4th. A ventilating apparatus for cars, comprising an outlet pipe extending along the upper portion of the interior of the car and projecting outside of the car at the rear portion thereof, and a funnel shaped casing secured to the rear portion of the car, the end of said outlet pipe entering said casing and extending along the interior thereof towards the rear end, substantially as described.

No. 66,004. Saw Set. (*Fer à contourner.*)



John H. Stuke, Beardstown, Illinois, U.S.A., 29th January, 1900; 6 years. (Filed 8th January, 1900.)

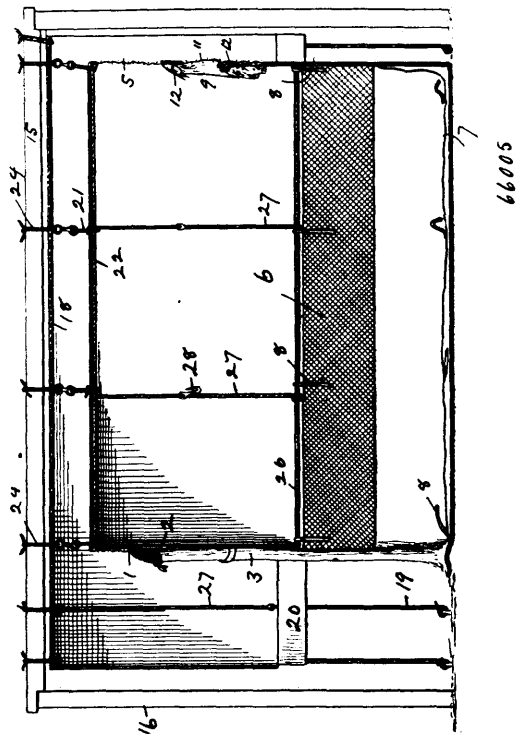
Claim.—1st. In a saw set, the combination with the block having a slot therein, and the movable wedge located in said slot, of the plunger, the lever, the spring actuated beveled plate and the set screw for adjusting the same, substantially as described. 2nd. In a saw set, the combination with the block formed with a slot, the wedge located in said slot, the shank of said wedge passing through said block, and the pivoted cam, of the plunger, the lever for operating the same, the spring actuated bevelled plate, and the set screw, substantially as described. 3rd. In a saw set, the combination with the block, comprising the two connected arms with a space therebetween, the wedge located in said space formed with a hole or aperture, the shank passing through said block and provided with a pivoted cam, the headed plunger, the coiled spring and the pivoted lever provided with a shoulder engaging with said plunger, of the pivoted spring actuated bevelled plate and the set screw for adjusting the same, substantially as described.

No. 65,005. Tent. (*Tente.*)

Theodore William Hickson, New York City, New York, U.S.A., 29th January, 1900; 6 years. (Filed 26th November, 1897.)

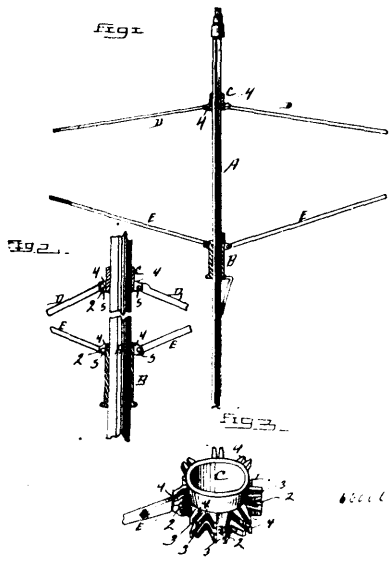
Claim.—1st. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, and a flexible sealing closure having closed sides and open ends, one of said open ends being secured to the wall at and entirely surrounding said opening, and means for sealing the other or free open end of said closure. 2nd. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, and a tubular flexible sealing closure having closed sides and open ends, one of said open ends being secured to the wall at and entirely surrounding said opening, and means for sealing the other or free open end of said closure. 3rd. In a tent having its sides, roof and floor, closed and sealed, an opening in one of the walls, a flexible closure having one end secured around said opening, and a gathering cord extending around the other or free end of said closure and slidingly connected therewith, whereby said free end can be drawn together to contract and closure or seal the same. 4th. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, and a flexible sealing closure having closed sides and open ends, one of said open ends being secured to the wall at and entirely surrounding said opening, means for sealing the other or free open end of said closure, and means for securing said free open end of the closure to the said wall and entirely surrounding said opening when it is unsealed. 5th. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, and a flexible sealing closure having closed sides and open ends, one of said open ends being secured to the wall at and entirely surrounding said opening, means for sealing the other or free open end of said closure, and tapes or cords secured to the wall of the tent outside of and around said opening, whereby the closure can be folded and secured around said opening when it is unsealed. 6th. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, and a flexible sealing closure having closed sides and open ends, one of said open ends being secured to the wall at and entirely surrounding said opening, means for sealing the other or free open end of said closure, and tapes or

cords situated around said opening and at the inner or secured end of said closure, and corresponding tapes or cords secured to the wall



of the tent outside of and around said opening, whereby the closure can be folded and secured around said opening when it is unsealed. 7th. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, and a plurality of separate and independent sealing closures around said opening, each of which is adapted to independently close and seal the same. 8th. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, and a plurality of flexible, sealing closures around said opening, one of said closures being of netting, and each of said closures adapted to independently close and seal said opening. 9th. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, a plurality of flexible, sealing closures around said opening, one of said closures being of netting, and tapes or cords around said opening and on opposite sides of the other closure, and each of said closures adapted to independently close and seal said opening. 10th. In a tent having its sides, roof and floor closed and sealed, an opening in one of the walls, netting covering said opening, and a flexible sealing closure around said opening. 11th. In a tent, the sole supporting means for the roof and walls thereof, comprising a longitudinal main support, and a plurality of depending supports connected therewith and with the ridge of the tent. 12th. In a tent, the sole supporting means for the fly and for the roof and walls of the tent, comprising a longitudinal main support, a fly supported thereby, and a plurality of depending supports connected with the main support and with the ridge of the tent. 13th. In a tent, the combination with a main support, of depending supports connected therewith and with the ridge of the tent, and a fly secured to said depending supports below the main support. 14th. A tent having a plurality of outwardly extending pieces secured to the ridge thereof to form upwardly extending ridge supports. 15th. A tent having a plurality of outwardly extending pieces secured to the ridge thereof to form upwardly extending ridge supports, the ridge of the tent being provided with a plurality of openings through which the lower ends of the pieces project, and securing means situated on the inside of the tent interlocking with and fastening the inner ends of said piecee. 16th. In a tent, the combination with a main support of depending supports connected therewith and with the ridge of the tent, projections of shoulders between the ends of said supports, and a fly having a plurality of openings at its ridge through which said depending supports extend, said fly being sustained upon said projections or shoulders. 17th. A tent provided with upwardly extending ridge supports, consisting of separable sections, the upper sections having projections at their lower ends, and a fly having openings at its ridge to receive the upper sections of said ridge supports. 18th. A tent provided with upwardly extending ridge supports, consisting of separable sections, a hook and a ring upon the adjacent ends of said sections, the part upon the upper section forming a projection, and a fly having openings at its ridge to receive the said upper sections. 19th. In a tent, the combination with the main support, of depending supports connected therewith and with the ridge of the tent, said supports consisting of separable sections, projections upon the upper sections, and a fly having a plurality of openings at its ridge to receive said depending supports and resting upon said projections. 20th. A tent fly provided with a plurality of guy ropes, said guy ropes being connected at intervals with the lower side edges of said fly, and depending flaps along the lower side edges of said fly extending below the point of connection of said guy ropes.

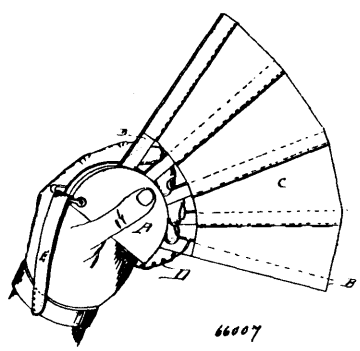
No. 66,006. Umbrella. *(Parapluie.)*



Erwin M. Harley, Tiffin, Ohio, U.S.A., 29th January, 1900; years. (Filed 12th January, 1900.)

Claim.—In an umbrella, a notch ring having two series of approximately radial projections of malleable metal with comparatively wide bases and narrow points, each of said series lying in a plane at a right angle to the longitudinal axle of the umbrella stick and the proximate projections of the series arranged in complemental pairs said pairs being arranged in groups of pins separated more widely than the pins in each group, in combination with a series of ribs having their heads provided with studs, each rib having its head between the members of a pair and each pair compressed upon a stud, whereby the parts may be freely assembled, and each rib independently fastened to the notch in a removable manner, and access for repair provided, all substantially as set forth.

No. 66,007. Swimming Apparatus. *(Appareil pour nager.*

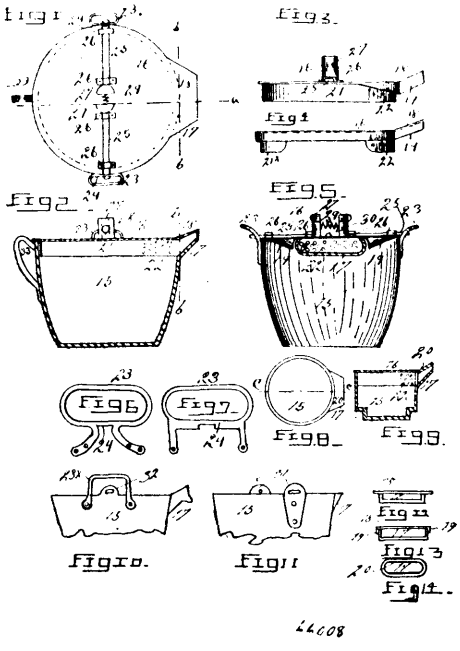


Frederick H. B. Babbe, Sanger, California, U.S.A., 29th January, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. A swimming device consisting of a palm piece having a straight inner edge, and a semicircular outer periphery, a channel formed in said outer periphery, radial bars pivoted in said channel, a flexible covering fixed to said bars and leaving a space between the palm piece and the inner edge for the insertion of the hand. 2nd. A swimming device consisting of a palm piece having a straight inner edge, a semicircular outer periphery, a channel or groove formed in said outer periphery, bars extending radially outward from the outer periphery, with interspaces sufficient to allow the insertion of the fingers between said bars, the innermost of said bars being fixed, and the others turnable about their pivot pins, and a flexible covering uniting said bars. 3rd. A swimming device consisting of a palm piece having a straight inner edge, a convexly

curved outer periphery, a groove or channel made in said outer periphery, a radial bar fixed in said outer groove, a bar adjacant to the thumb extending approximately parallel with the side of the palm piece and the bar upon the opposite side extending approximately at right angles with the opposite edge of the palm piece, a flexible covering uniting said bar and a spring attachment to the outermost bar by which the device is held extended when in use.

No. 66,008. Cooking Vessel. *(Ustensile de cuisine.)*



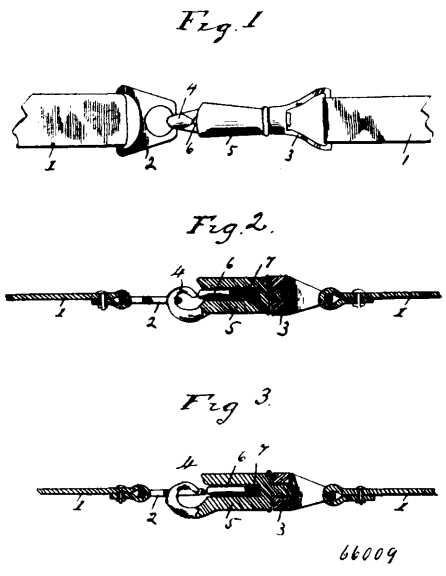
Sohia Schwartz, Champion, Michigan, U.S.A., 29th January, 1900; 6 years. (Filed 12th January, 1900.)

Claim.—1st. The combination with a cooking vessel having a spout, of a covering having a dependent rim covering the inner opening of the spout, a portion of said rim being perforated and another portion being imperforate, said spout being open at the top, and said cover having a projection covering the open top of the spout when the perforated portion meets the spout, substantially as described. 2nd. The combination with a cooking vessel, having a spout, of a couver having a rim depending from it and covering the inner opening of the spout, a portion of said rim being perforated and another portion imperforate, said spout being open at its upper side and said cover having a projection covering the open top of the spout when the perforations in the rim register with the spout, and the steam guard 19, coming down at the sides of the spout and extending back therefrom outside the vessel, substantially as and for the purpose set forth. 3rd. The combination with a cooking vessel, having a spout open at its upper side, of a cover for the vessel, the same having a dependent rim covering the inner opening of the spout, and a projection covering the open top side of the spout, said rim having a perforated portion directly below the said portion on the cover, and means for securing the cover to the vessel when the said projection of the cover is over the spout and the perforations in the rim register with the sprout, substantially as set forth. 4th. The combination with a cooking vessel, of a pair of handles secured at the sides thereof and having the cross bars 24, the cover 16, having the opposite, sliding catches 25, adapted to engage under the said cross bars, the buttons 27, at the adjacent ends of the slides, the spring 29, interposed between said buttons, and means for limiting the retraction of the slides, substantially as shown and described.

No. 66,009. Reins Fastening Hook.
(Crochet de reines.)

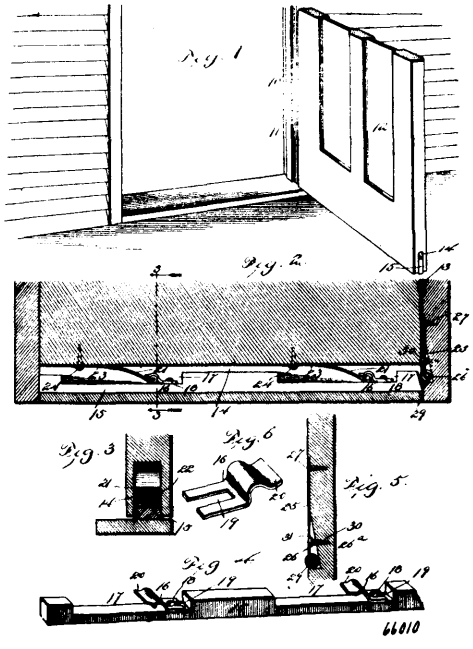
Elmer A. Lynne, Westbrook, Connecticut, U.S.A., 29th January, 1900; 6 years. (Filed 12th January, 1900.)

Claim.—A snap hook having an enlarged tubular shank, a concaved and curved throat or passage leading past the end of the hook,



and a spring bolt or keeper arranged in the tubular shank centrally of the concaved curved passage and in line with the end of the hook, substantially as described.

No. 66,010. Weather Strip. *(Bourrelet de porte.)*

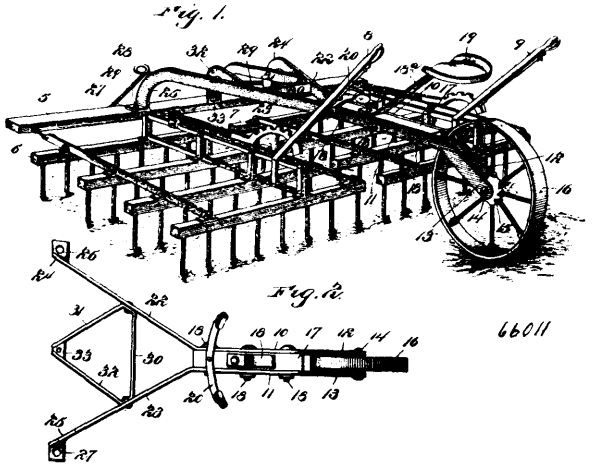


George L. Scoville, West Superior, Wisconsin, U.S.A., 29th January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. The combination with a door, of inclined springs secured to the same, a slidable weather strip, and means for adjustably connecting the ends of the springs to the weather strip, whereby the latter may be tilted in either direction, substantially as and for the purpose described. 2nd. The combination with a door, of inclined springs secured to the same, a slidable weather strip, and adjustable bearings mounted on the weather strip strips, and reciving the lower ends of the springs and adapted to permit the weather strip to be tilted in either direction, substantially as described. 3rd. The combination of a door, provided at its bottom with a longitudinal recess, a slidable weather strip arranged within the recess, inclined springs secured to one of the parts, and means carried by the other part for detachably engaging the adjacent ends of the springs, whereby the weather strip may be removed from the door by a slight longitudinal pressure and without taking the door off the hinges, substantially as

described. 4th. The combination with a door, of inclined springs mounted thereon, a slidable weather strip, and bearings adjustably mounted on the weather strip and provided with projecting portions arranged to hook over the ends of the springs and detachably engaging the same, substantially as described. 5th. The combination with a door, of inclined springs secured to the door and provided at their lower ends with rounded portions or journals, a slidable weather strip, the slotted longitudinally adjustable bearings secured to the weather strip and having curved portions engaging the adjacent end of springs and provided with projecting lips, substantially as and for the purpose described. 6th. The combination with a door, a recessed jamb, an endwise movable strip confined slidably on said door and springs connecting the strip to the door, of a slotted bumper spring attached to said jamb and having its free end extended into the recess thereof, a roller mounted in said free end of said movable strip on closure of the door, and an adjusting screw fixed to the jamb and bearing against the bumper spring to adjust the friction roller relative to the path of the movable strip, said screw being accessible for adjustment thereof, through the slot in the bumper spring, as set forth.

No. 66,011. Harrow. (*Herse.*)



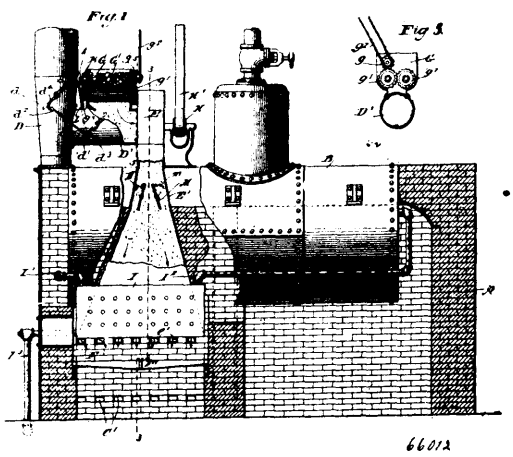
Jephthah P. Duvall, Waverly, Iowa, U.S.A., 29th January, 1900; 6 years. (Filed 13th January, 1900.)

Claim.—1st. The combination with a drag bar, of two rigid bars having their forward portions diverging and curved downwardly, the extremities of said curved portions being turned laterally and attached to the drag bar, said rigid bars having their rear portions parallel and their rear extremities turned downwardly, a supporting wheel mounted in the last named downturned portions, a body held between the bars, and a seat supported upon the body. 2nd. A harrow attachment, comprising two bars having their rear portions parallel and provided with a supporting wheel, the forward ends of said bars being divergent, a brace connected with the divergent portion of said bars, and supplemental bars extending from said brace and in transverse alignment with the first named bar. 3rd. A harrow attachment, comprising two members having their rear portions parallel and provided with a supporting wheel, the forward portions of said bars being divergent and having their extremities turned downwardly, a brace connecting the divergent portions of the bars, and supplemental bars formed integral with and leading from the ends of said brace and lying in transverse alignment with the first named bar.

No. 66,012. Furnace Feeding Devices.
(*Appareil alimentateur de fournaise.*)

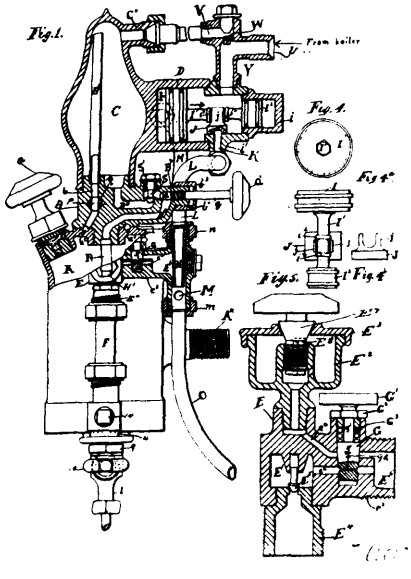
Robert M. Campbell and Albert H. Schofield, Port Huron, St. Clair County, Michigan, U.S.A., 29th January, 1900; 6 years. (Filed 12th January, 1900.)

Claim.—1st. A furnace feeding mechanism, comprising a fan having suction connection with the flue carrying the exhaust gases from the furnace, a fuel supply discharging into the said connection, dampers in the flue leading from the furnace and in the connection from said flue to the fan, connections between said dampers, whereby they are held in opposite positions, and means for automatically and periodically shifting the dampers, substantially as described. 2nd. A furnace feeding mechanism, comprising a fan having suction connection with the flue carrying the exhaust gases from the furnace, a fuel crushing and feeding device discharging into said connection, dampers in the flues leading from the furnace and in the connection from said flue to the fan, connections between said dampers, whereby they are held in opposite positions, means for automatically and periodically shifting the dampers, and a flue leading from the fan discharge to the furnace and discharging therein above the grates, substantially as described. 3rd. A furnace feeding mechanism, comprising a fan having suction connection



with the flue carrying the exhaust gases from the furnace, fuel crushing rolls and means for turning them, connections between the discharge from said rolls and the fan suction, flues leading from the fan discharge to the flues above the grates, dampers in the flue leading from the furnace and in the connection from said flue to the fan, connections between said dampers, holding them in opposite position, a crank geared to turn with one of the rolls, a lever vibrated by engaging with said crank, and connections from said lever to the dampers, whereby they are periodically opened and shut, substantially as described. 4th. A furnace feeding device for use with a comminuted fuel, comprising a draft connection of flue leading from the flue carrying the exhaust gases from the furnace back to the furnace above the grate, a fuel feeding mechanism discharging into said draft connection, adjustable deflecting or guide plates in the flue between the point of receiving the fuel and the furnace, and a draft forcing mechanism connected with said draft connection, substantially as described. 5th. A furnace feeding device for use with comminuted fuel, comprising a forcing mechanism for hot gas, a fuel feed discharging into the hot gas supply, a flue for conducting the hot gases and fuel to the furnace, said flue expanding in one direction to substantially the width of the furnace and discharging into the furnace through numerous openings in the walls, and adjustable guide or deflector plates within said flue and between the fuel feed and the furnace, substantially as described.

No. 66,013. Lubricator. (*Graisseur.*)

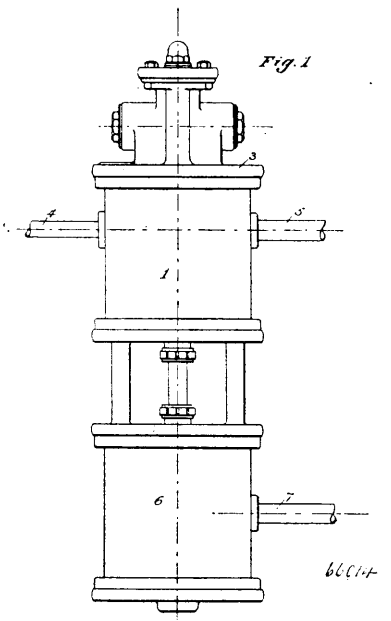


Frank W. Edwards, Logansport, Indiana, U.S.A., 29th January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. In a lubricator, the combination with the oil delivery pipe, the oil reservoir and an oil receiving chamber, of means including differential pistons and a valve arranged to act in unison therewith for overcoming back pressure in the oil delivery pipe by

the admission of live steam at boiler pressure. 2nd. In a lubricator, a cylinder connected with the boiler for receiving steam at boiler pressure, and with the oil delivery pipe, combined with differential pistons movable in said cylinder and a valve acting automatically in conjunction with the said pistons for overcoming back pressure from the steam chest through such delivery pipe. 3rd. In a lubricator, the combination of a reservoir, a cylinder connected therewith, a condenser, a connection between the condenser and cylinder, means for admitting steam from the steam chest through the delivery pipe to said cylinder and means within said cylinder for overcoming back pressure through the delivery pipe by the admission of live steam to said cylinder. 4th. In a lubricator, the combination with a cylinder, of a piston therein, a valve controlling a port from said cylinder and acting in conjunction with said piston, means for conveying live steam from said cylinder to the oil receiving chamber of the lubricator, and means for conveying steam from the steam chest through the oil delivery pipe to the rear of the piston. 5th. In a lubricator, the combination with a cylinder having a port, of a pipe in communication with said port and leading to the oil receiving chamber of the lubricator, a piston in said cylinder, a valve controlling said port and arranged to act in unison with the piston, a connection between the cylinder at the rear of the piston and the oil delivery pipe, a condenser and a connection between the same and the source of supply of live steam from the boiler. 6th. In a lubricator, a cylinder having connection for the admission of live steam from the boiler at boiler pressure, and a port for the passage of live steam to the oil receiving chamber of the lubricator, a piston in said cylinder, a valve mounted to act in conjunction with the piston to control said port, a condenser with connection with the cylinder, and a valve controlling the passage of water of condensation from the condenser, and an independent valve for controlling the passage of live steam from the said condenser. 7th. In a lubricator, the combination with the sight tubes, of cross passages affording communication between the said tubes, and means for preventing cross feeding of the oil. 8th. In a lubricator, having a plurality of sight tubes, means in connection therewith for preventing cross feeding of the oil from one tube to the other. 9th. In a multiple feed lubricator, an oil reservoir having passages affording communication substantially transversely between the sight tubes, and check valves in said passages for preventing cross feeding of the oil. 10th. In a lubricator, the combination with the oil reservoir, the condenser and the casting at the upper end of the reservoir having passages as described, one communicating with the condenser, of a valve controlling said passages, and a check valve in one of said passages at the junction of the two for preventing back flow. 11th. In a lubricator, an upper feed arm having a water chamber, a valve located in a chamber communicating with the water chamber and provided with passages for admitting and controlling the admission of condensed steam to the sight tube, as set forth. 12th. In a lubricator, the combination with the oil reservoir, of a casting connected therewith and with the sight tube, a by pass in said connection, and a valve having longitudinal and transverse passages for controlling the by pass through the connection or casting to the sight tube. 13th. In a lubricator, the combination with the oil reservoir, of a casting connected therewith, a choke plug mounted in said casting, and a valve rotatably mounted in said casting at right angles to the said plug for controlling the flow of condensed steam into the sight tube. 14th. In a lubricator, the upper feed arm having the following elements: a water chamber, an oil receiving chamber, check valve in the water chamber, choke plug between said valve and the receiving chamber, and a valve at right angles to said plug for admitting water of condensation to the sight tube when the same becomes exhausted. 15th. In a lubricator, the upper feed arm provided with a by pass and a rotatable valve mounted in said arm at right angles to the sight tube and spring pressed to its seat, for controlling the passage of water of condensation through said by pass. 16. In a lubricator, the lower feed arm having removable tapered sleeve, with port at its inner end and a transverse port between its ends, removable r tatable valve with longitudinal and transverse ports, a cap nut, and a removable plug at right angles to the length of the sleeve. 17th. In a lubricator, the combination of an oil reservoir, a lower feed arm detachably connected therewith a pipe within the reservoir add held in said arm, a removable tapered plug in the feed arm, a removable tapered valve in said plug, means for assuring a tight joint between said parts, a removable plug in said arm opposite the securing means for said pipe, and means for rotating the tapered plug. 18th. In a lubricator, the combination, with the oil reservoir and the cylinder having steam supply pipe, of the oil receiving chamber, the oil delivery pipe, an injector in said chamber communicating with the said cylinder with its lower and end extended beyond the lower end of the chamber and a pipe for delivering live steam under boiler pressure to said injector. 19th. A lubricator provided with a plurality of sight tubes, means for preventing cross feeding of the oil from one to the other of said tubes, and means for admitting and controlling the flow of condensed steam to the sight tube. 20th. In combination with a lubricator provided with suitable pipes and passage ways whereby the contents of the lubricator are balanced between opposing forces, an auxiliary steam passage way adapted to furnish an auxiliary supply of steam to carry forward the lubricating oil escaping from the oil cup of the lubricator, and an automatically actuated valve adapted to close said auxiliary passage and to control steam passing therethrough.

No. 66,014. Water Pump. (*Pompe à eau.*)

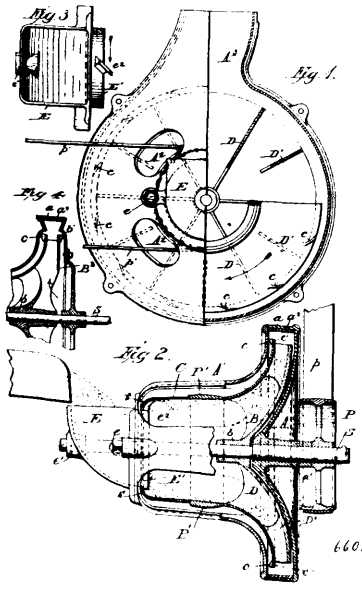


Joseph Eli Normand, New York City, New York, U.S.A., 29th January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. The combination in a water and air pump with a cylinder and piston mounted therein, of a steam operated main valve for controlling the admission and exhaust of steam to and from the cylinder, a primary valve adapted in its movement to control the movement of the steam operated main valve, and means whereby the primary valve may be moved at or near the end of a stroke of the piston, but will remain stationary during the remainder of the movement of said piston, substantially as specified. 2nd. The combination in a water or air pump with a cylinder and piston mounted therein, of a steam operated main valve for controlling the admission and exhaust of steam to and from the cylinder, a primary valve adapted in its movement to control the movement of the steam operated main valve, a reach sleeve and an actuating rod adapted to move the primary valve at or near the end of a stroke of the piston, substantially as specified. 3rd. The combination in a water or air pump with a cylinder and piston mounted therein, of a steam operated main valve for controlling the admission and exhaust of steam to and from the cylinder, a primary valve adapted and arranged to apply pressure to reverse the position of the steam operated valve at or near the end of a stroke of the piston and to maintain the predominance of pressure to hold the valve in such position during the balance of movement of the piston and until the said primary valve is again moved at or near the end of the return stroke of the piston, and means whereby the primary valve may be moved at or near the end of a stroke of the piston, substantially as specified. 4th. The combination in a water or air pump with a cylinder and piston mounted therein, of a steam operated main valve for controlling the admission and exhaust of steam to and from the said cylinder, the said main steam valve comprising a plurality of piston heads, a bushing in which the said piston heads are mounted and arranged to reciprocate, a primary valve adapted in its movement to control the movement of the steam operated valve, and means whereby the primary valve may be moved at or near the end of a stroke of the piston, but will remain stationary during the remainder of the movement of the piston, substantially as specified. 5th. A bushing for use in combination with a piston valve, having a cross over port or passage in its outer periphery, communicating at one of its ends with a port leading into the interior thereof and at the other of its ends adapted to register with a port in the casing or support in which the bushing is arranged to be mounted, substantially as specified. 6th. The combination in a water or air pump with a cylinder and piston mounted therein, of a steam operated main valve for controlling the admission and exhaust of steam to and from said cylinder, the said steam valve comprising four piston heads, a bushing in which the said piston heads are mounted and arranged to reciprocate, ports leading from the interior of the bushing to the exhaust and to the opposite ends of the said cylinder, said ports terminating in the bushing at points between the outer piston heads of the main steam valve in any position in which the said valve may be, ports in open communication with the steam source of supply and communicating with the interior of the bushing between the outer piston heads of the main steam valve, a primary valve having a cavity always in communication with the exhaust, and ports communicating with the outer piston heads of the main steam valve and with the steam source of supply or the

exhaust, the said primary valve arranged to control the said last named ports so that when one of the ports leading to one of the outer piston heads is in communication with the steam source of supply the other is always in communication with the exhaust, and vice versa, substantially as specified.

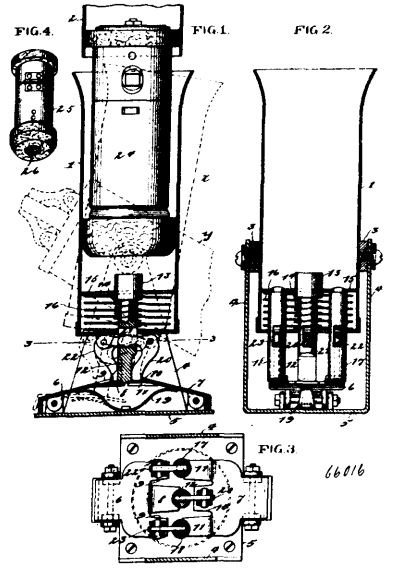
No. 66,015. Pneumatic Elevator and Conveyor.
(*Elevateur et transport pneumatique.*)



Frank F. Landis, Waynesboro, Pennsylvania, U.S.A., 29th January, 1900; 6 years. (Filed 16th January, 1900.)

Claim.—1st. A discharger for a pneumatic elevator and conveyer, comprising a rotary fan and an outer casing mounted to revolve therewith, which casing is formed with a central horizontally extending portion constituting the receiver for the material to be operated upon, substantially as set forth. 2nd. A pneumatic elevator and conveyer, comprising an outer casing having a discharge spout, a rotary casing within having a central horizontal portion outside the fan blades, said fan blades, and the driving mechanism, substantially as set forth. 3rd. A pneumatic elevator and conveyer, comprising an outer casing with a discharge spout, a hopper or pipe attached to the central portion of its open end, a rotary discharger therein consisting of an end disc and a bell shaped casing connected by transversely set fan blades between them, the small end of the outer part being arranged to receive the material, said fan blades and driving mechanism, substantially as set forth. 4th. In a pneumatic elevator and conveyer, the combination of the casing A A^1, the part A^1 being bell shaped and having the hopper E connected to its outer end, said hopper formed with a flange extending within said end, the discharger comprising the disc B, bell shaped casing C and fan blades connecting them mounted on a shaft within said outer casing, the outer end of said casing C extending under the flange of said hopper and driving mechanism, substantially as set forth. 5th. The combination in a pneumatic elevator and conveyer, of the outer casing, the rotary discharger within, the rotary casing for said discharger having a central portion extending to receive the material from a feeding device, and a deflector set above the receiving point at an angle to direct said material toward the discharge end of the apparatus, substantially as set forth. 6th. The combination in a pneumatic elevator and conveyor, of the outer casing, the rotary discharger therein consisting of an end disc and a bell shaped cylindrical casing connected by fan blades, said end disc being somewhat cone shaped with the point inward, whereby the space between said disc and said bell shaped cylinder is made of substantially uniform area from where the material is introduced to its periphery, and the air current pressure thereby maintained uniform, and said fan blades, substantially as set forth. 7th. A discharger for a pneumatic elevator and conveyer, comprising a rotary cylindrical casing having fan blades therein, said casing constructed with a substantially uniform area inside from the receiving point to the discharging point, and said fan blades, substantially as set forth. 8th. In a pneumatic elevator and conveyer, the combination of the outer casing, the rotary discharger therein comprising an end disc and bell shaped casing connected by fan blades, the diameter of said bell shaped casing at its large end being somewhat greater than that of the disc and fan blades, and said fan blades, substantially as set forth. 9th. In a pneumatic elevator and conveyer, the combination of the outer casing, the discharger therein formed with its outside edge of greater diameter than its inner edge, and small fan blades mounted on the outside of said larger side at its periphery, substantially as set forth. 10th. The combination in a pneumatic elevator and conveyer, of the outside casing, the rotary discharger therein, consisting of the two parts a distance apart connected by fan blades, said fan blades, a portion of which runs to the centre, and a portion of which does not, whereby the capacity of the fan is maintained and the centre thereof not crowded, substantially as set forth. 11th. A pneumatic elevator and conveyer, comprising an outer casing having a discharger spout, a rotary casing therein which encloses the fan blades and is formed with a substantially horizontal cylindrical portion at its centre, outside the fan blades, which horizontal cylindrical portion revolves therewith and constitutes a receiver into which the material is dropped, which thus may gather rotary momentum gradually therefrom, to the same speed of that of the fan before the fan receives said material, and said fan blades, substantially as set forth. 12th. A pneumatic elevator and conveyer, comprising an outer casing with a discharger spout, a rotary discharger therein, having a substantially horizontal and cylindrical portion around its centre, outside the fan blades, which horizontal cylindrical portion receives the material, whereby centrifugal motion is imparted gradually thereto before entering the fan or coming into contact with the blades, and said fan blades, substantially as set forth. 13th. In a pneumatic elevator and conveyor, the combination of the outer casing, a discharger therein having two sets of wings, the one set being out of the path or plane of the other and of less width, but larger in diameter than the other, substantially as and for the purpose set forth. 14th. In a pneumatic elevator and conveyer, a rotary discharger, the casing of which is formed with a central horizontally extending portion, on which extending portion is formed, a pulley to receive the driving belt for the discharger, substantially as set forth. 15th. In a pneumatic elevator and conveyer, the combination of an outer casing, and a discharger therein having several sets of wings in different planes, the centre set being inclosed within said discharger and of less diameter than said casing and wider than the outside wings, and said wings, substantially as set forth.

No. 66,016. Parcel Carrier Distributor.
(*Porte et distributeur de paquet.*)



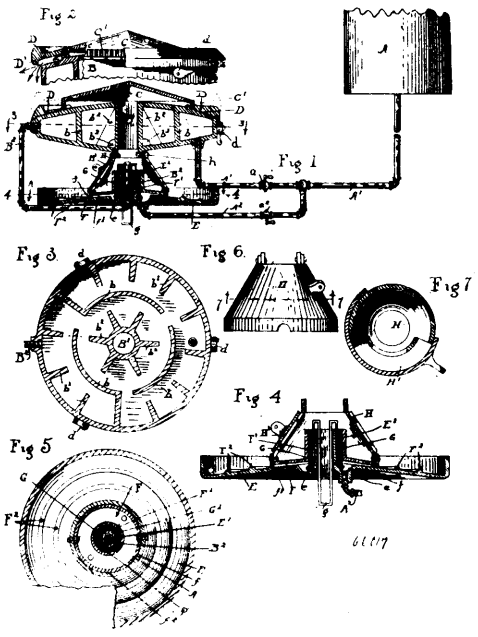
The Lamson Consolidated Store Service Company, Newark, New Jersey, assignee of William H. Sheppard, New York City, New York, U.S.A., 30th January, 1900; 6 years. (Filed 20th October, 1899.)

Claim.—1st. A distributor for cash or parcel carriers, comprising a receiver for carriers pivoted at a point which is above its centre of gravity when empty but below it when loaded so as to be capable of tilting with the load, means for starting the receiver, and devices in the path of the incoming carriers for releasing and actuating the starting means whereby the receiver may be tilted sufficiently to discharge the carrier, substantially as specified. 2nd. A distributor for cash or parcel carriers, comprising a receiver pivoted at a point which is above its centre of gravity when empty but below it when loaded so as to be capable of tilting when loaded, two starting devices for the receiver, and a releasing and actuating device for each starting device the said releasing and starting devices being in the path of the incoming carriers and differently formed to be actuated by correspondingly formed carriers, substantially as described. 3rd. A distributor for cash or parcel carriers, comprising a tilting receiver, spring held pivoted latch plates below the receiver, a trip rod extended through the bottom of the receiver and engaging with one of the latch plates, a plate in the receiver below the plane of the top of the trip rod, a trip rod extended from said

plate and engaging with the other of said latch plates, an angle lever for engaging with one of the latch plates and actuated by the first named trip rod, and an angle lever for engaging with the other latch plate and operated by the second named trip rod, substantially as specified. 4th. In a cash or parcel carrier distributor, a receiver adapted to be actuated by differently formed carriers to move the receiver in different directions, means for holding the receiver normally in position to receive the carriers, and means whereby one form of carries will release and move the receiver in one direction to deliver a carrier, and another form. of carrier will release and move the receiver in another direction to deliver a carrier. 5th. In a cash or parcel carrier distributor, a tilting receiver adapted to be actuated by differently formed carriers to move the receiver in different directions, means for holding the receiver normally in position to receive the carriers, and means whereby one form of carrier will release and move the receiver in one direction to deliver a carrier, and another form of carrier will release and move the receiver in another direction to deliver a carrier.

No. 66,017. Hydro Carbon Burner.

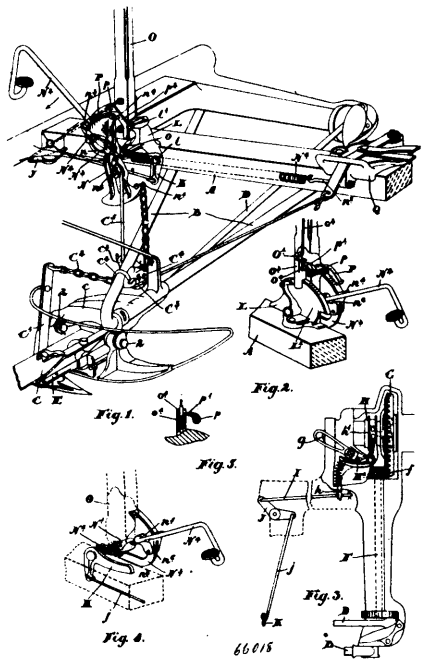
(*Bruleur à hydro-carbon.*)



Edwin E. Crook, Indianapolis, Indiana, U.S.A., Miles A. Hunting, and Peter D. Crerar, both of Hamilton, Ontario, Canada, 30th January, 1900; 6 years. (Filed 28th March, 1899.)

Claim.—1st. The combination in a retort or generator of a central vapour tube, a kerfed spreader, or cap, resting on the retort over the tube and a vertically adjustabie plate to throw the flame from the spreader up or down, substantially as described and for the purpose specified. 2nd. The combination in a retort or generator of a central vapor tube, a spreader resting on the retort over the tube and adjustable means connected with the burner throwing the flame up or down for the purposes specified. 3rd. The combination in a retort or generator of a central vapor tube, a kerfed spreader or cap, resting on the retort over the tube and a vertically adjusted plate resting on the retort outside of the spreader below the kerfs and having a flange to direct the heat and flame in an upward direction, said plate having an outwardly and downwardly shaped underside and means for elevating the plate to a position above the kerfs of the spreader and sustaining it in its elevated position, substantially as described and for the purpose specified. 4th. The combination in a retort of a central vapor tube with flanges on the inside of the retort rediating from the tube and other radial flanges around the inside margin of the retort integral with its marginal wall but not connected with the central tube or its flanges, and a kerfed spreader resting on the retort over the central tube. 5th. The combination in a retort or generator of a central vapor tube with flanges on the inside of the retort radiating from the tube with transverse openings through the lower inner corners of the flanges, substantially as shown and a kerfed spreader resting on the retort over said tube. 6th. In a hydro-carbon burner a retort or generator having a central vapour tube in combination with a spreader resting on the retort over the tube and a centre draft burner located under the retort under the tube and adapted to support a wick saturated with oil, substantially as described and for the purposes specified. 7th. In a hydro carbon burner a retort or generator having a vapour tube passing vertically through it, in combination with a spreader resting on the retort over the tube and a double tube centre draft burner below the generator under the vapour tube having an aborbant oil saturated wick between the two tubes of the burner, and means for adjusting the height of the wick, substantially as specified. 8th. In a dydro carbon burner a retort or generator having a vertical tube in combination with a spreader resting on the retort over the tube an auxiliary burner below the generator under the vapour tube having an absorbent wick saturated with oil and a hood surrounding the auxiliary burner, substantially as described and for the purpose specified. 9th. In a hydro carbon retort or generator having a vertical vapour tube a spreader resting on the generator over the vapour tube, an auxiliary burner below the generator under the tube having an oil receptacle at its base, and having overflows, means for supplying oil to the receptacle, a pan surrounding the auxiliary burner into which the overflow from the receptacle is deposited and a hood surrounding the auxiliary burner. 10th. The combination consisting of a generator having inside lugs to conduct heat to the interior of the generator and a vertical vapour tube, a spreader resting on the generator over the vapour tube, a hood secured to the under side of the generator surrounding the tube and having doors to permit access to the interior of the hood, a plate secured to the lower end of the hood closing same, and having a central opening with an upwardly projected tubular wall, said plate having underside grooves or channels, an oil pan larger in diameter than the hood and approximetely the same diameter as the generator, said pan having a central opening with a tubular wall adapted to fit into the tubular wall around the central opening through the plate, and said pan having a concavity in the base of the centre tube, an absorbent wick means for supplying oil to the generator and to the cavity around the centre of the oil pan and for conveying the vapor from the generator to a point under the vapour tube, substantially as described and for the purposes specified. 11th. The combination with a hydro carbon burner of an oil pan having an inwardly dished bottom and a series of concentric ribs, substantially as shown and described.

No. 66,018. Mower. (*Faucheuse.*)



The Massey-Harris Company, assignee of Lyman Melvin Jones and William John Clokey, and Charles McLeod, all of Toronto, Ontario, Canada, 30th January, 1900; 6 years. (Filed 11th January, 1900.)

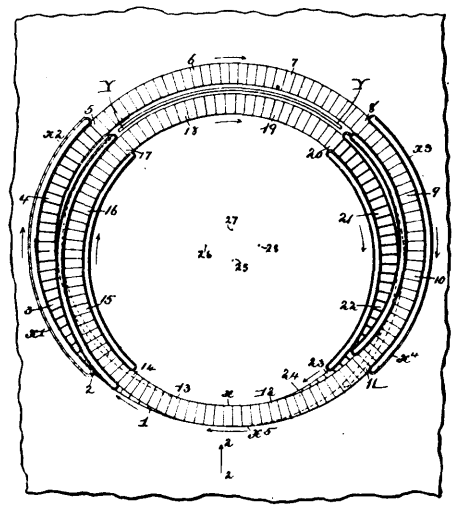
Claim.—1st. The combination of a mower bar hinged the pivotally swung supporting bracket and lifting means for the bracket, of the rod connected to the bracket and to the lifting means and designed to hold the inner end of the end of the cutter bar from lowering too quickly, as and for the purpose specified. 2nd. The combination with the mower bar suitably hinged to the pivotally swung supporting bracket, of the raising chain and means for operating the same and the rod connected to the bracket and to the aforesaid means and designed to hold the inner end of the cutter from lowering too quickly, as shown and for the purpose specified. 3rd. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to which the upper end of the chain is connected and the supplemeneal rod connected to the bracket and to a slot in the double arm and means for

imparting the requisite movement to the double arm, as and for the purpose specified. 3rd. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to which the upper end of the chain is connected, the boss extending inwardly from the top of the double arm and the foot lever extending into a boss socket and projecting over the inwardly extending lug or boss, as and for the purpose specified. 4th. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to which the upper end of the chain is connected, the laterally inwardly extending boss secured in the upper end of the double arm, the bell crank pivoted on the tongue and having the free end extending underneath the path of partial rotation of the boss on the double arm, and a connection between the opposite end of the bell crank and the driving gear whereby upon the boss coming in contact with the free end of the double arm the driving gear is thrown out of mesh as and for the purpose specified. 5th. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to which the upper end of the chain is connected, the laterally inwardly extending boss secured in the upper end of the double arm, the bell crank pivoted on the tongue and having the free end extending underneath the path of partial rotation of the boss on the double arm, the rod *j*, bell crank J, and rod I and arm *h*, and bell crank H^1, extending into the collar H, as shown and for tue purpose specified. 6th. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to which the upper end of the chain is connected, the boss extending inwardly from the top of the double arm, the foot lever extending into a boss socket and projecting over the inwardly extending lug or boss, the end notches formed the upper quadrantal end of the double arm, the hand lever pivoted on the hub of the double arm and means secured on the hand lever to engage such notches when the hand lever is thrown rearwardly, as and for the purpose specified. 7th. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to to which upper end of the chain is connected, the boss extending inwardly from the top of the double arm, the foot lever extending into a boss socket and projecting over the inwardly extending lug or boss, the end notches formed in the upper quadrantal end of the double arm, the hand lever pivoted on the hub of the double arm, and a dog pivoted on the lever and designed to engage such notches, as and for the purpose specified. 8th. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to which the upper end of the chain is connected, the boss extending inwardly from the top of the double arm, the foot lever extending into a boss socket and projecting over the inwardly extending lug or boss, the end notches formed in the upper quadrantal end of the double arm, the hand lever pivoted on the hub of the double arm, a dog pivoted on the lever and designed to engage such notches and provided with a tail designed to engage with the laterally extending boss forming part of the bracket L, when the lever is thrown forward, as and for the purpose specified. 9th. In a mower, the combination with the supporting V-shaped swinging bracket and the mower bar hinged thereto, of the upright secured to the end of the mower bar, the sheaf and block secured to the bracket, the chain connected to the upright and passing under the sheaf, the double arm pivoted on the tongue and to which the upper end of the chain is connected, the boss extending inwardly from the top of the double arm, the foot lever extending into a boss socket and projecting over the inwardly extending lug or boss, the end notches formed in the upper quadrantal end of the double arm, the hand lever pivoted on the hub of the double arm, a dog pivoted on a pin journalled on the lever, an arm at the opposite end of the said pin extending into the plunger, the socket, the plunger and spring thereof designed when operated to raise the arm and depress the dog, as and for the purpose specified.

No. 66,019. Elevator. (*Elevateur.*)

Charles David Seeberger, New York City, New York, U.S.A., 30th January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. As an elevating apparatus, endless circular tracks which have the form of a double spiral comprising two or more endless curves when projected on a horizontal plane, the said tracks through part of their length being horizontal, through part inclined, an endless series of interconnected platforms adapted to move along the said tracks, means for moving the said platforms, and devices



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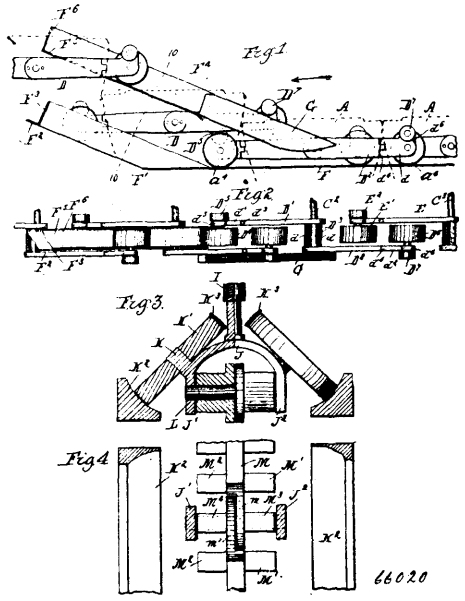
adapted to keep the said platforms in a horizontal position throughout their movement. 2nd. As an elevating apparatus, endless circular tracks extending horizontally on a certain level, ascending to a second level, extending horizontally thereon, ascending to a third level, extending horizontally thereon, decending to the second level, again extending horizontally thereon, decending to the first level, and extending horizontally thereon to the starting point, the whole forming a double spiral, the one circle of which in horizontal projection within the other, an endless series of interconnected platforms adapted to move along the said tracks, and devices adapted to keep the said platforms in a horizontal position throughout their movement. 3rd. In an elevating apparatus, an endless series of interconnected platforms A, provided with the wheels B^3 B^4, and the rollers C^6, tracks g^1, through part of their extent horizontal, and through part inclined, upon which the said wheels are adapted to move, secondary inclined tracks I^2, mounted over the inclined portions of the tracks g^1, short guide tracks H, adapted to receive the rollers C^6, and guide the said wheels B^4, upon the secondary tracks I^2, whereby the said platforms remain severally horizontal throughout their movement, and means for moving the said series of platforms. 4th. In an elevating apparatus, an endless series of interconnected platforms provided with the wheels B^3 and B^4, and with the rollers C^6, tracks g^1, through part of their extent horizontal, through part inclined, adapted to receive the said wheels, secondary tracks I^2, mounted above the inclined portions of the tracks g^1, short guide tracks H, adapted to receive the rollers C^6, and guide the wheels B^4 on to the tracks I^2, upthrust tracks I^3, against which the wheels B^3, are adapted to bear, located beyond the end of each ascent and before each decent of the tracks, and means for moving the said series of platforms. 5th. In an elevating apparatus, an endless series of interconnected platforms provided with the wheels B^3 and B^4, and with the rollers C^6, tracks g^1, through part of their extent horizontal, through part inclined, adapted to receive the said wheels, tracks I^2, mounted above the inclined portions of the tracks g^1, short guide tracks H, adapted to receive the roller C^6, and guide the wheels B^4, on to the tracks I^2, upthrust tracks J, against which the rollers C^6, are adapted to bear located before the beginning of each ascent of the tracks, and means for communicating movement to the said series of platforms. 7th. In an elevating apparatus, an endless series of interconnected platforms provided with the wheels B^3 and B^4, and with the rollers C^6, tracks g^1, through part of their extent horizontal, through part inclined, adapted to receive the said wheels, tracks I^2, mounted above the inclined portions of the tracks g^1, short guide tracks H, adapted to receive the rollers C^6, and guide the wheels B^4, on to the tracks I^2, upthrust tracks J, located before the beginning of each ascent of the tracks, against which the wheels B^3, are adapted to bear, upthrust tracks I^3, against which the wheels B^3, are adapted to bear, located beyond the end of each ascent and before each descent of the tracks, and means for communicating movement to the said series of platforms. 6th. In an elevating apparatus, an endless series of interconnected platforms provided with the wheels B^3 B^4, and with the axle bar C^1, offset connections C^3, and rollers C^6, tracks g^1 adapted to receive the wheels B^3 B^4, through part of their extent horizontal, through part inclined, secondary tracks I^2 mounted above the inclined portions of the tracks g^1, guide tracks H adapted to receive the rollers C^6, and guide the wheels B^4 upon the secondary tracks I^2, upthrust tracks I^3 projecting within the offset portions C^3 of the roller supports, and adapted to bear against the wheels B^3, and means for moving the said series of platforms. 8th. In an elevating

apparatus, an endless series of interconnected platforms, provided with the wheels B^3 B^4, and with the axle bar C^1, offset connections C^3 and rollers C^6, whereby the axles of the wheels and rollers may be brought in the same horizontal plane on the inclined parts of the tracks g^1, tracks g^1 adapted to receive the wheels B^3 and B^4, through part of their extent horizontal, through part inclined, secondary tracks I^2 mounted above the inclined portions of the tracks g^1, guide tracks H adapted to receive the rollers C^6 and guide the wheels B^4 upon the secondary tracks I^2, and means for moving the said series of platforms. 9th. In an elevating apparatus, an endless series of platforms A, provided with wheels B^3 B^4, tracks g^1 upon which the said wheels are adpted to move, through part of their extent horizontal, through part inclined, secondary tracks I^2 mounted above the inclined portions of the tracks g^1, devices adapted to guide the wheels B^4 upon the tracks I^2, connecting bars D pivoted at their opposite ends to centrally disposed supports carried by the adjoining platforms, and means for moving the said series of platforms. 10th. In an elevating apparatus of the general type described, the steps A, connecting bars D pivotally secured at opposite ends to the adjacent platforms, and means for moving the platforms. 11th. In an elevating apparatus of the general type described, the platforms A, the centrally disposed axle bars C^1, the chain bars D connecting the adjacent platforms and provided with teeth, and sprocket wheels adapted to engage with the said teeth and communicate motion to said platforms. 12th. In an elevating apparatus of the general type described, the platforms A, the centrally disposed axle bars C^1, the chain bars D pivotally connected therewith and provided with the teeth D^2 and D^3, and the sprocket wheels E^5, provided with the flanges e and teeth e^1, adapted to engage with the said chain bars and supply motion to the said platforms. 13th. In an elevating apparatus of the general type described, the series of platforms A, the chain bars D connecting the adjacent platforms, automatic means for changing the length of the chain bars, and means for moving the platforms. 14th. In an elevating apparatus of the general type described, the series of platforms A adapted to move over two or more curves of different radii, chain bars D connecting the adjacent platforms and on opposite sides thereof, the chain bars upon one side of the said platforms being connected at one end by a swivelled attachment, at the other by a screw threaded attachment, automatic devices adapted to rotate the said chain bars and change the length thereof, and means for moving the said series of platforms. 15th. In an elevating apparatus of the general type described, adapted to move over two or more curves of different radii, the series of platforms A, the chain bars D connecting the adjacent platforms and on opposite sides thereof, those chain bars upon one side of the platforms A being each connected at one end by a swiveled attachment, at the other by a screw threaded attachment, projections mounted upon the sides of the said chain bars, a pinion F^5, adapted to engage with the said projections and rotate the said chain bars, means for supplying movement to the said pinion from the movement of the apparatus, and means for moving the apparatus. 16th. In an elevating apparatus of the general type described, a series of platforms A adapted to move over two or more curves of different radii, chain bars D, provided with teeth D^2, connecting the adjacent platforms and on opposite sides thereof, the chain bars upon one side of the said platforms being each connected at one end by a swiveled attachment, at the other by a screw threaded attachment, a pinion F^5, adapted to engage with the said teeth D^2 and rotate successively the chain bars; D, the sprocket wheel F, adapted to engage with and be rotated by successive chain bars D, devices connecting the sprocket wheel F with the pinion F^5, and means for supplying movement to the said elevating apparatus. 17th. In an elevating apparatus of the general type described, a series of platforms A, adapted to move over two or more curves of different radii, the chain bars D connecting the adjacent platforms and on opposite sides thereof, the chain bars upon one side of the platforms being each connected at one end by a swiveled attachment, at the other by a screw threaded attachment, teeth, D^2 and D^3, mounted upon the said chain bars, substantially as described, the sprocket wheel F, adapted to engage with and be rotated by the successive chain bars, means for transmitting the movement of the sprocket wheel F to a pinion F^5, the pinion F^5 adapted to engage with and rotate the chain bars D, the sprocket wheels E^5, adapted to engage with the chain bars D, and communicate motion to the apparatus. 18th. In an elevating apparatus, substantially as described, the series of platforms A, chain bars D, teeth D^1, D^2-D^3, the sprocket wheels E^5, the sprocket wheels F, the pinion F^5, connections between the said sprocket wheels F and the said pinion F^5, constructed and operating, substantially as described. 19th. In an elevating apparatus of the general type described, the combination with a series of tracks or ways comprising horizontal and inclined portions, of a series of movable stops co-operating with said ways and having their tread surfaces horizontal to form a continuous landing on the horizontal portions of the tracks and a moving stairway on the inclined portions, the tread surfaces of the steps each having a portion in the center of the step, but not extending to the edges of the adjacent step, constructed differently from the rest of the tread surface so as to make it evident to a person standing on the steps, when they form a continuous landing, whether or not he is standing upon a single step or upon more than one, substantially as and for the purpose specified. 20th. In an elevating apparatus of the general type described, the combination with a series of tracks or ways comprising horizontal and inclined portions, of a series of movable steps co-operating with said ways and having their tread surfaces horizontal to form a continuous landing on the horizontal portions of the tracks and a moving stairway on the inclined portions, the tread surfaces of the steps each being provided with a raised mat A^1, in the center of the step, but not extending to the edges of the adjacent steps, so as to make a pronounced depression between the adjacent steps when they form a continuous landing, whereby the passenger will know whether or not he is standing upon a single step, substantially as and for the purpose specified. 21st. In an elevating apparatus of the general type described, the combination with a series of tracks or ways comprising horizontal and inclined portions, of a series of movable steps co-operating with said ways and having their tread surfaces horizontal to form a continuous landing on the horizontal portions of the tracks and a moving stairway on the inclined portions, and a rail A^2 upon each step adapted to afford support to a passenger standing upon the step, substantially as and for the purpose described. 22nd. In an elevating apparatus of the general type described, the platform A provided with thread surfaces, portions of each of which are expansible, for the purpose specified. 23rd. In an elevating apparatus of the general type described, the platforms A provided with expansible nosings A^3, for the purpose specified. 24th. In an elevating apparatus of the general type described, adapted to move along curves of different radii, the platforms A, the adjustable nosings A^3, and automatic devices adapted to adjust the said nosings to fill the intervals between the said platforms. 25th. In an elevating apparatus substantially of the type described, the platforms A, the pivoted nosing plate UU^1, and automatic means for adjusting the free end of the said plate to fill the interval between the adjacent platforms. 26th. In an elevating apparatus of the type described, the platforms A, the pivoted nosing plate $U\,U^1$, the rod T^4, the tooth pinion T^3, the ratchet wheel T^1, and the stationary rack T^2 operating substantially in the manner and for the purpose described. 27th. In an elevating apparatus substantially of the type described, the platform A, the pivoted nosing plate $U\,U^1$, the spring bars $V\,V^1$, and means for adjusting the free end of the pivoted plate, operating substantially in the manner and for the purpose described. 28th. In an elevating apparatus of the general type described, the platform A, the risers A^4, and the springs a^4 adapted to hold the said risers in contact with the adjacent platforms. 29th. In an elevating apparatus of the general type described, the platforms A, the nosings A^3, the pivoted risers A^4, and the springs a^4 adapted to hold the free edges of the risers in contact with the nosings, substantially as described. 30th. In an elevating apparatus of the general type described, the platforms A, the expansible nosings A^3, the risers A^4, pivotally attached at their upper edges to the said platforms, and the springs a^4 adapted to hold the lower and free edges of the risers in contact with the expansible nosings of the adjacent platforms. 31st. In an elevating apparatus, a series of platforms A, in combination with endless wainscotings at the sides of the said platforms but separate therefrom, adapted to move with the said platforms along part of the said platforms in the general manner described. 32nd. In an elevating apparatus, a series of platforms adapted to move upon an incline in combination with wainscottings adapted to move at the side of and at the same rate of speed as the said platforms. 33rd. In an elevating apparatus, a series of platforms adapted to move upon an incline, a wainscotting adapted to move by the sides of and at the same rate as the said platforms, and hand rails carried by and moving with the said wainscotting. 34th. In an elevating apparatus of the general type described, the hoods L, the travelling wainscotting O, and the hand rail S^2, operating in the general manner and for the purpose described. 35th. In an elevating apparatus of the general type described, a wainscoting adapted to travel at the sides of the said apparatus along the inclined portions of the same, the said wainscoting comprising an endless belt, N^1, a series of panels O, attached to the said belt, and pulleys E, adapted to support and move the said belt. 36th. In an elevating apparatus of the general type described, wainscotings mounted at the sides of the inclined portions of the said apparatus, the said wainscotings comprising the panels, O, the endless belt, N^1, vertically sliding connections between the said panels and the said belt, guides P^1, for the said panels, and pulleys N, adapted to support and move the said belt. 37th. In an elevating apparatus of the general type described, the hoods L, open on the sides adjacent to the said apparatus, the endless wainscoting O, adapted to move with the said elevating apparatus, and return in a contrary direction within and enclosed by the said hoods. 38th. In an elevating apparatus of the general type described, a travelling wainscotting comprising the shafts, H^4, the pulleys N, the belt N^1, the panels O, vertically sliding connections between the said panels and the said belt, rollers, P^1, tracks upon which the said rollers move, and means for communicating motion to the said shaft, M^5, from the movement of the rest of the apparatus. 39th. In an elevating apparatus of the general type described, the travelling hand rail device comprising the shafts N^4, means for communicating motion to the said shafts from the movement of the rest of the apparatus, sprocket wheels R^2 carried by the said shaft, sprocket chain R^1, rollers attached to the said sprocket chain, guides for the said rollers, arms carried by the said rollers, and an endless hand rail, S^2, carried by the said arms. 40th. In an elevating apparatus of the general type described, the sprocket wheels, M, the vertical shafts, M^4, connections between said sprocket wheels and said shafts, pulleys N, the endless belt N^1, wainscotting panels O,

sprocket wheels, R^2, the sprocket chain R^1, rollers R, guides for the said rollers, and the brackets R^3, connecting the said rollers and the wainscoting panels O, constructed substantially in the manner and for the purpose specified. 41st. In an elevating apparatus, a series of moving platforms A, in combination with entrance passages 31, arranged at an incline to the direction of movement of the said conveying apparatus, substantially as described and for the purpose specified. 42nd. In an elevating apparatus of the general type described, the turnstiles 33, adapted to control the admission of passengers, and devices for communicating the movement of the conveying apparatus to rotate the said turnstiles. 43rd. In an apparatus of the class described, the continuously moving conveying surface, with entrance mechanism operated automatically and synchronously therewith to regulate the number of entrances in accordance with the capacity of the conveying surface. 44th. In an apparatus of the class described, the continuously moving conveying surface, with a turnstile operated automatically and synchronously therewith to regulate the number of passages in accordance with the capacity of the conveying surface. 45th. In an apparatus of the class described, the continuously moving conveying surface, with a turnstile operated automatically and synchronously therewith by the same source of power to regulate the number of passages in accordance with the capacity of the conveying surface. 46th. In an apparatus for conveying passengers of the general type described, the passage way 31, the turnstile 33, the pivoted float 45, devices for communicating the movement of the conveying apparatus to rotate the said turnstile, and devices connected to the float adapted to break the said communication when the float is depressed. 47th. In an apparatus for conveying passengers of the general type described, a device for controlling entrance to the said apparatus comprising a rotating turnstile 33, carrying a gear 64, a shaft 58, rotated by the movement of the apparatus, a gear wheel 57, adapted to slide upon and turn with the said shaft, a pivoted float 45, and devices connecting the said float with the said gear 57, adapted to throw it out of engagement with the gear 64, when the said float is depressed. 48th. In an apparatus for conveying passengers of the general type described, a device for controlling entrance to the said apparatus comprising the passageway 31, a turnstile 33, a float 45 held yieldingly in a normal position, a shaft 58, the gear wheel 57, adapted to slide on and move with the said shaft the gear wheel 62, locked against rotation in one direction, the sliding bar 52, connected with the gears 57 and 62, the gear wheel 64, mounted upon the turnstile shaft, and lever devices connecting the said float with the said sliding bar 52, all constructed and operating substantially in the manner specified. 49th. In a conveying apparatus, a series of moving platforms A, connected to move together, with horizontal and inclined ways for said platforms, in combination with a device for compelling the landing of passengers consisting of a wainscoting O moving diagonally across the path of the platforms upon a horizontal portion of the ways, substantially as and for the purpose described. 50th. In a conveying apparatus, a series of moving platforms in combination with a shunting device consisting of a wainscoting, and a hand rail S^2, moving across the path of the said platforms at the point of exit, substantially as described. 51st. In an elevating apparatus, a series of platforms having tread surfaces and connections between said platforms to which the propelling power is applied forming an endless carrier, with ways leading to and from different horizontal planes, said ways being so constructed and arranged as to retain the platforms with their tread surfaces uppermost throughout their movement. 52nd. In an elevating apparatus, a series of platforms having tread surfaces, links to which the propelling power is applied connecting said steps and forming an endless carrier, with ways leading to and from different horizontal planes, said ways being so constructed and arranged as to retain the platforms with their tread surfaces uppermost throughout their movement. 53rd. In an elevating apparatus, a series of platforms having tread surfaces and connections between said platforms to which the propelling power is applied forming an endless carrier, with inclined ways leading to and from different horizontal planes, said ways being so constructed and arranged as to retain the platforms with their tread surfaces horizontal and uppermost throughout their movement. 54th. In an elevating apparatus, a series of platforms having tread surfaces, links to which the propelling power is applied connecting said steps and forming an endless carrier, with inclined ways leading to and from different horizontal planes, said ways being so constructed and arranged as to retain the platforms with their tread surfaces horizontal and uppermost throughout their movement. 55th. In an elevating apparatus, the series of platforms having tread surfaces, means for propelling said platforms, and ways leading to and from different horizontal planes, said ways being so constructed and arranged as to retain the platforms with their tread surfaces uppermost and available for transportation throughout their entire movement and without interfering with adjacent platforms, substantially as described. 56th. In an elevating apparatus, the series of platforms having tread surfaces, means for propelling said platforms and ways leading to and from different horizontal plans, said ways being so constructed and arranged as to retain the platforms with their tread surfaces uppermost, horizontal and available for transportation throughout their entire movement, substantially as described. 57th. In an elevating apparatus, the series of platforms having tread surfaces, means for propelling said platforms, and ways leading to and from different horizontal planes, said ways provided with means to retain the platforms with their tread surfaces uppermost and free from interfering with adjacent platforms, substantially as described. 58th. In an elevating apparatus, the series of platforms having tread surfaces, means for propelling said platforms, and ways leading to and from different horizontal planes, said ways being curved throughout their length and constructed so as to retain the platforms with their tread surfaces uppermost and free from interfering with the adjacent platforms, substantially as described. 59th. In an elevator, a movable stairs and landing comprising a series of steps, and tracks or guide ways having inclined portion being curved, the steps on the horizontal portion of the guide-way having their upper surfaces in alignment and forming a movable level landing of practically unbroken continuity, and forming winding stairs on the inclined portions. 60th. In an elevator, a movable stairs and landing comprising a series of steps, and tracks or guide-ways having inclined and horizontal portion being curved, and the steps when on the horizontal portion of the guide-way having their upper surfaces in alignment and forming a movable level landing of practically unbroken continuity. 61st. In an elevator, a movable stairs and landing comprising a series of steps, and tracks or guide-ways having inclined or horizontal portions curved throughout their length, the steps on the horizontal portion of the guide-way having their upper surface in alignment and forming a movable level landing of practically unbroken continuity, and forming winding stairs on the inclined portion. 62nd. In an elevator, a movable stairs and landing comprising a series of steps, and tracks of guide-ways curved throughout a portion of their length and having inclined and horizontal portions, the steps on the horizontal portion of the guide-way having their upper surfaces in alignment and forming a movable level landing of practically unbroken continuity. 63rd. In an elevator, a movable stairs and landing comprising a series of steps, and tracks or guide-ways curved through a porttion of their length, the steps on the horizontal curved portion of the guide-way having their upper surfaces in alignment and forming a movable landing of practically unbroken continuity. 64th. In an elevating apparatus, a series of platforms having tread surfaces, means for moving said platforms, and substantially circular tracks for said platforms, which tracks have the form of a double spiral comprising two or more endless curves when projected on a horizontal plane, the said tracks connecting different horizontal planes, and arranged to keep the tread surfaces uppermost throughout the movement of said platforms. 65th. In an elevating apparatus, substantially circular tracks which have the form of a double spiral comprising two or more endless curves when projected on a horizontal plane, the said tracks connecting different horizontal planes, a series of platforms adapted to move along said tracks, and means for moving said platforms, substantially as described. 66th. In an elevating apparatus, substantially as circular tracks which have the form of a double spiral comprising to or more endless curves when projected on a horizontal plane, the said tracks connecting different horizontal planes, a series of platforms adapted to move along the said tracks, means for moving said platforms, and moving said platforms, and devices for keeping said platforms in a horizontal position throughout their movement.

No. 66,020. Elevator. (*Elevateur.*)

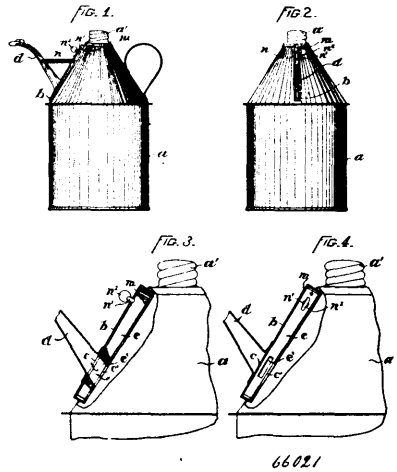


Charles David Seeberger, New York City, New York, U.S.A., 30th January, 1900; 6 years. (Filed 15th January, 1900.

Claim.—1st. In an elevating apparatus, a series of travelling steps, the upper surfaces of which are adapted to remain severally

horizontal whether the steps be moving horizontally or on an incline, the said steps being provided with risers having a convex surface and so mounted thereon as to keep the adjoining steps in contact throughout their length in passing from a horizontal to an inclined surface, and vice versa, and in passing from one vertical plane of movement to another, substantially as described. 2nd. In an elevating apparatus, a series of travelling steps, the upper surfaces of which are adapted to remain severally horizontal whether the steps be moving horizontally or on an incline, the said steps being provided with risers having a convex surface and centrally pivoted thereon so as to keep the adjoining steps in contact throughout their length in passing from a horizontal to an inclined surface and vice versa, and in passing from one vertical plane of movement to another, substantially as described. 3rd. In a elevating apparatus of the general type described, the combination of a series of interconnected steps having risers convex, as B^3, and provided with elastic nosings b^1, and of tracks for said steps, said tracks being partly horizontal and partly inclined. 4th. In an elevating apparatus of the general type described, the steps A, comprising a tread A^1, and one or more risers B^1 pivoted to rotate in a horizontal plane. 5th. In an elevating apparatus of the general type described, the steps A each comprising a tread A^1, and one or more risers B^1, each of the said risers consisting of a horizontal part B^2, pivoted beneath the tread A^1, and a depending part B^3. 6th. In an elevating apparatus of the general type described, the steps A, each comprising the steps A^1, the brackets A^2, and one or more risers B^1, consisting of a horizontal portion B^2, and a convex depending portion B^3, being pivoted between the said tread A^1 and the said brackets A^2. 7th. In an elevating apparatus of the general type described, the steps A, provided with the depending bracket C, the upright arm C^1, the wrist C^2 connecting with the wheel supports of the steps and the track casing H, the inner side of which H^3, projects down within the space between the arm C^1 and the body of the step. 8th. In an elevating apparatus of the general type described, the steps A, provided with wheels, the front wheels of one step being in advance of the rear wheels of the adjacent preceding step, substantially as shown and described. 9th. In an elevating apparatus of the general type described, the platform trucks comprising the yokes D, each yoke consisting of the horizontal body portion provided with the wheels D^4 and D^6 journalled in its respective ends and one wheel in advance of the other, and with the rollers D^5 and D^7 also journalled in said ends of the yoke, and in different planes from the wheels D^4 and D^6, substantially as and for the purposes described. 10th. In an elevating apparatus of the general type described, the platform trucks comprising the yokes D, each consisting of the horizontal arms D^1 and D^2 projecting forwardly and rearwardly from the centre of the yoke and in different parallel planes, the wheels D^4 and D^6 carried by the arms D^1 and D^2, and journalled on the inner side of said arms so as to be in the same plane, and the rollers D^5 and D^7 also carried by the arms D^1 and D^2, and journalled on the outer sides thereof so as to be in different planes with the rollers D^4 and D^6, and in different planes from each other, substantially as and for the purpose described. 11th. In an elevating apparatus of the general type described, the platform trucks comprising the yokes D, each consisting of the horizontal arms D^1 and D^2 projecting forwardly and rearwardly from the centre of the yoke and in different parallel planes, and having the pivoted ends d^1 and d^2, the wheels D^4 and D^6 carried by the pivoted ends d^1 and d^2, and journalled on the inner side of said ends so as to be in the same plane, and the rollers D^5 and D^7 also carried by the ends d^1 and d^2, and journalled on the outer sides thereof so as to be in different planes from the rollers D^4 and D^6, and in different planes from each other, substantially as and for the purpose described. 12th. In an elevating apparatus of the general type described, the platform trucks comprising the yokes D, each yoke consisting of the horizontal body portion provided with the wheels D^4 and D^6 journalled in its respective ends and one wheel in advance of the other, and with the rollers D^5 and D^7 also journalled in said ends of the yoke, and in different planes from the wheels D^4 and D^6, the horizontal tracks F, and the inclined tracks F^1 and F^4, with which the wheels D^4 and D^6 co-operate, and the switch track G in a different plane from the tracks F, F^1, and F^4, to co-operate with the roller D^7, substantially as and for the purposes described. 13th. In an elevating apparatus of the general type described, the steps A, the yokes D, and the wheels D^4 and D^6, etc., arranged so that the front wheels are in advance of the rear wheels of the adjacent preceding step, the rollers D^5 and D^7, the horizontal tracks F, the inclined tracks F^1 and F^4, and the switch track G, arranged and operating substantially as shown and described. 14th. In an elevating apparatus of the general type described, a series of interconnected steps, in combination with adjustable inclined tracks, substantially as shown and described. 15th. In an elevating apparatus of the general type described, a series of interconnected steps, in combination with inclined tracks horizontally and vertically adjustable in their mountings, substantially as shown and described. 16th. In an elevating apparatus of the general type described, the steps A, centrally located depending posts 1, supporting wheels, tracks, and mechanism connected with the posts 1 adapted to transmit movement to the steps. 17th. In an elevating apparatus of the general type described, the steps A, the centrally disposed depending posts 1, the yoke J, the pivot L, and the chain bars M, the adjoining ends of which are mounted on the pivot L. 18th. In an elevating apparatus of the general type described, the steps A, the depending post 1, the yoke J, the pivot L, the chain bars M, provided with teeth M^1 and M^2, and rabbeted at their ends as at m and m^1, the said ends carrying the teeth M^3 and M^4 respectively, and being mounted on the pivot L. 19th. In an elevating apparatus of the general type described, the steps A, the depending post 1, the yoke J, mechanism attached thereto adapted to transmit movement to the steps, one or more guide rollers K mounted on the said yoke, and the tracks K^2, on which said rollers run. 20th. In an elevating apparatus of the general type described, the steps A, the depending post 1, the yoke J, mechanism attached to the said yoke adapted to move the steps, one or more guide rollers K mounted on the said yoke, the guide tracks K^2 on which said rollers run, and the upthrust tracks K^3, against which said rollers bear. 21st. In an elevating apparatus of the general type described, a balustrading comprising a series of stanchions O, the elastic strips Q connecting the stanchions, and means for supporting and moving the said balustrading, substantially as shown and described. 22nd. In an elevating apparatus of the general type described, a balustrading comprising the stanchions O, the elastic metal strips Q connecting said stanchion, the blocks Q^2 carried by said strips, and means for supporting and moving the stanchions, substantially as described. 23rd. In an elevating apparatus of the general type described, a balustrading comprising the stanchions O, the elastic strips Q connecting said stanchions, the blocks Q^2, the pivots q, the spring washers q^1, and means for supporting and moving the said balustrading, substantially as described. 24th. In an elevating apparatus of the general type described, a balustrading comprisng the stanchions O, the arms S pivoted to the said stanchions and carrying a hand rail, positive acting mechanism adapted to tip the arms S into a vertical position where the balustrading makes its turns, and means for supporting and moving the said stanchions. 25th. In an elevating apparatus of the general type described, the stanchions O, the pivoted arm S, the gear S^1, the shaft T, the worm T^1, and means adapted to rotate the said shaft, and tip the arm S into a vertical position, located at the point where the balustrading makes its turn, substantially as described. 26th. In an elevating apparatus of the general type described, the stanchions O, the supporting rollers N^3, the sprocket chain P carried by the stanchions, the shaft P^2 carrying a sprocket wheel P^1, adapted to engage with the sprocket chain P to supply movement thereto, and carrying a sprocket wheel P^3 adapted to engage with the brackets O^4 carried by the stanchions, the guide rolls O^5 carried by said brackets O^4, guides in which said rolls are adapted to travel, and means for revolving said shaft P, substantially as described.

No. 66,021. Oil Can valve. (*Soupape de bidon à huile.*)



Hadley C. Clapp, and Emanuel Lawson, both of Brewer, Maine, U.S.A., 30th January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. In an oil vessel, a tube or valve casing set into an elongated opening in the wall thereof so as to project beyond the outer and inner surface of said wall and provided at its lower end with an outlet opening for the escape of the contents of the vessel, and at its upper end with an air inlet opening and a slot, and a valve located in said casing provided at its lower end with an aperture, and at its upper end with an aperture and a pin, the apertures in the valve adapted to simultaneously register with the openings in the valve casing, and the pin on the valve adapted to project through the slot in the valve casing and provide means for operating the valve, substantially as described.

No. 66,022. Air Brake. (*Frein à air.*)

Joseph Elie Normand, New York City, New York, U.S.A., 30th January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. In an air brake system the combination with a brake cylinder, a train pipe, a service reservoir and a reinforcing reservoir,

of an automatic valve mechanism, adapted under variations of pressure in the train pipe, firstly, to permit free communication

Fig. 1.

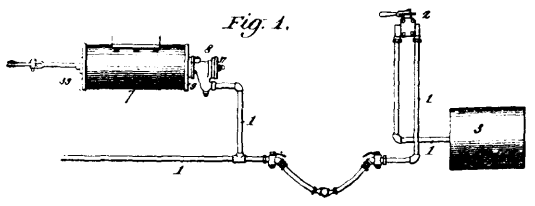


Fig. 2.

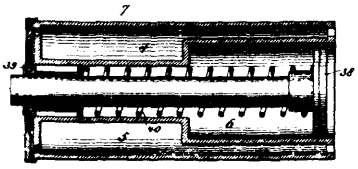
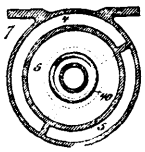


Fig. 3.

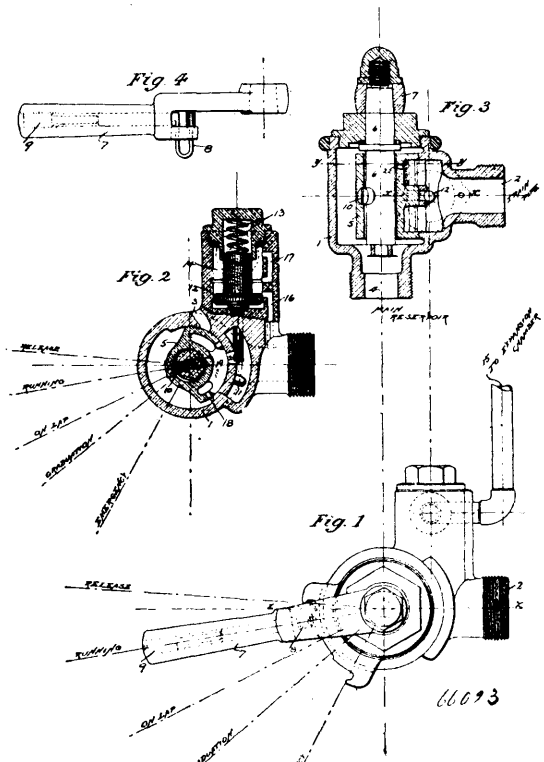


6602.

between said service reservoir and said reinforcing reservoir in either direction under normal or running condition, secondly, to close communication to or from said reinforcing reservoir and to open communication between said service reservoir and said brake cylinder, under ordinary service stop conditions, and thirdly, to open communication between both said reservoirs and said brake cylinder under full service stop conditions. 2nd. In an air brake system the combination with a brake cylinder, a train pipe, a service reservoir and a reinforcing reservoir, of an automatic valve mechanism, adapted under variations of pressure in the train pipe, firstly, to permit free communication between said service reservoir and said reinforcing reservoir in either direction under normal or running conditions, secondly, to close communication to or from said reinforcing reservoir and to open communication between said service reservoir and said brake cylinder, under ordinary service stop conditions, thirdly, to open communication between both said reservoirs and said brake cylinder under full service stop conditions, and fourthly, to open such commuication through a large or emergency port under emergency conditions. 3rd. In an air brake system the combination with a brake cylinder, a train pipe, a service reservoir and a reinforcing reservoir, of a valve, a valve chamber, ports leading from said valve chamber to the service reservoir, to the reinforcing reservoir, to the brake cylinder, and to an exhaust, said valve adapted when in its position at one end of its stroke to open the ports leading from the valve chamber to the service reservoir, and to the reinforcing reservoir, to close the port leading from the valve chamber to the brake cylinder, and to put in communication ports leading to the brake cylinder and to the exhaust—when in an intermediate position, to open ports leading from the valve chamber to the service reservoir and to the brake cylinder, to close the port leading from the reinforcing reservoir and to close the port leading to the exhaust, and when in its position at the opposite end of its stroke to open in addition to the ports opened when in an intermediate position, the port leading from the interior of the valve chamber to the reinforcing reservoir, whereby the reinforcing reservoir is put in communication with the brake cylinder, and means for operating said valve. 4th. In an air brake system the combination with a brake cylinder, of an outer casing surrounding same, the space between the outer casing and the brake cylinder divided into a plurality of chambers adapted to be used as reservoirs for air under pressure. 5th. In an air brake system the combination with a brake cylinder, of an outer casing surrounding same, the space between the outer casing and the brake cylinder divided into two chambers by a diaphragm arranged longitudinally thereof, the said chambers being adapted to be used as reservoirs for air under pressure. 6th. In an air brake system the combination with a brake cylinder, a train pipe, a service reservoir, a reinforcing reservoir and a valve chamber, ports leading from said valve chamber to the service reservoir and to the reinforcing reservoir, a service port leading from the valve chamber to the brake cylinder, an emergency port of larger size leading from the valve chamber to the brake cylinder, and a port connecting the brake cylinder with the exhaust, of a valve adapted, firstly, to put in communication the ports leading to the service reservoir and to the reinforcing reservoir, to close the service port from the valve chamber to the brake cylinder and to open the port connecting the brake cylinder with the exhaust, secondly, to put in communication the port leading to the service reservoir and the service port leading to the brake cylinder, to close the port leading from the valve chamber to the reinforcing reservoir and to close the port connecting the brake cylinder with the exhaust, and thirdly, to open, in addition to the ports opened by the said valve under said second conditions, the port leading from the valve chamber to the reinforcing reservoir, whereby the said port is put into communication with the brake cylinder, and an emergency valve, adapted to open the said emergency port. 7th. In an air brake system the combination with a brake cylinder, a train pipe, a service reservoir and a reinforcing reservoir, of a valve mechanism arranged to govern communication between the service reservoir, the reinforcing reservoir and the brake cylinder, and an emergency valve arranged to govern communication between the service reservoir and the brake cylinder, and at the same time to govern communication between the train pipe and a discharge passage. 8th. In an air brake system the combination with a brake cylinder, a train pipe, a service reservoir and a reinforcing reservoir, of a valve mechanism arranged to govern communication between the service reservoir, the reinforcing reservoir and the brake cylinder, and an emergency valve arranged to govern communication between the service reservoir and the brake cylinder, and at the same time to govern communication between the train pipe and a discharge passage leading to the brake cylinder. 9th. In an air brake system, the combination with a brake cylinder, a train pipe, a service reservoir and a reinforcing reservoir, of a valve, a valve chamber, ports leading from said valve chamber to the service reservoir, to the reinforcing reservoir, to the brake cylinder, and to an exhaust, said valve adapted, when in its position at one end of its stroke to open the ports leading from the valve chamber to the service reservoir, and to the reinforcing reservoir, to close the port leading from the valve chamber to the brake cylinder, and to put in communication ports leading to the brake cylinder and to the exhaust, when in an intermediate position to open ports leading from the valve chamber to the service reservoir and to the brake cylinder, to close the port leading from the reinforcing reservoir and to close the port leading to the exhaust, and when in its position at the opposite end of its stroke to open, in addition to the ports opened when in an intermediate position, the port leading from the interior of the valve chamber to the reinforcing reservoir, whereby the reinforcing reservoir is put in communication with the brake cylinder, and an impositive stop limiting, against spring pressure, the movement of the valve beyond its intermediate position, and means for operating said valve. 10th. The combination in a valve mechanism with a casing, a piston, and a graduating and releasing valve controlled by the movement of said piston, said valve arranged to govern communication between an air reservoir and a brake cylinder, and the brake cylinder and an exhaust, respectively, of a piston, mounted and arranged to move independently of said first-mentioned piston and an emergency valve controlled by the movement of said last-named piston, the movement of said emergency valve being adapted, mechanically, to force the movement of said first-mentioned valve in one direction. 11th. The combination in a valve mechanism with a casing, a piston and a graduating and releasing valve controlled by the movement of said piston, said valve arranged to govern communication between an air reservoir and a brake cylinder, and the brake cylinder and an exhaust, respectively, of a piston mounted and arranged to move independently of said first-mentioned piston, an emergency valve controlled by the movement of said last-named piston, the movement of said emergency valve being adapted, mechanically, to force the movement of said first-mentioned valve in one direction, and a spring for returning the said last-named piston to its normal position. 12th. The combination of a valve mechanism, of a valve casing, a valve chamber, a graduating and releasing valve arranged in said chamber and controlling ports leading to an air reservoir, a brake cylinder and an exhaust, a graduation piston open on one side to said chamber and on the other to a train pipe, an emergency valve, and an emergency piston, adapted to control in its movements the movements of the said emergency valve, said emergency piston being open on one side to the said valve chamber and on the other side to said reservoir. 13th. The combination in a valve mechanism of a valve casing, a valve chamber, a graduating and releasing valve arranged in said chamber and controlling ports leading to an air reservoir, a brake cylinder and an exhaust, a graduation piston arranged at one end of said chamber and open on one side to said chamber and on the other to a train pipe, an emergency valve also mounted in said valve chamber, and an emergency piston arranged at the opposite end of said chamber and open on one side to the said chamber and on the other side to the said reservoir. 14th. In an air brake system, the combination with a train pipe, an air reservoir and a brake cylinder, of a valve mechanism including a valve casing, a valve chamber, a graduating and releasing valve arranged in said chamber and controlling ports leading to the air reservoir, the brake cylinder and an exhaust, a graduation piston open on one side to said chamber, and on the other to the train pipe, an emergency valve also mounted in said chamber, and an emergency piston mounted in a cylindrical bore in a head of the air reservoir, and open on one side to said reservoir and on the other to said valve chamber. 15th. In an air brake system, the combination with a service reservoir and a reinforcing reservoir combined, a train pipe and a brake cylinder, of a triple valve device including a valve chamber, a graduating and releasing valve arranged in said valve chamber, and controlling ports leading to the service reservoir, the reinforcing reservoir, the brake cylinder and an exhaust, a graduation piston, open on one side to said chamber and on the other to said train pipe, an emergency valve also mounted in said chamber, and an emergency piston mounted in a cylindrical bore in a head of the combined service and reinforcing reservoirs, said emergency piston being open on one side to the service reservoir and on the other to the valve chamber. 16th. In an air brake system, the combination with a service reservoir, a reinforcing reservoir, a train pipe and a brake cylinder, of a valve mechanism including a valve chamber, a gradu-

ating and releasing valve controlling ports leading to the service reservoir, the reinforcing reservoir, the train pipe and an exhaust, a graduation piston open on one side to the said valve chamber and on the other side to the train pipe, an emergency valve controlling an emergency port and a communication between the train pipe and a discharge passage, and an emergency piston open on one side to the said valve chamber and on the other side to the service reservoir. 17th. In an air brake system the combination with a service reservoir, a reinforcing reservoir, a train pipe and a brake cylinder, of a valve mechanism including a valve chamber, a graduating and releasing valve controlling ports leading to the service reservoir, the reinforcing reservoir, the train pipe and an exhaust, a graduation piston open on one side to the said valve chamber, and on the other side to the train pipe, an emergency valve controlling an emergency port and a communication between the train pipe and a discharge passage, an emergency piston open on one side to the said valve chamber and on the other side to the service reservoir, and a communication between the said train pipe discharge passage and that side of the emergency piston which is open to the service reservoir. 18th. In an air brake system the combination with a service reservoir, a reinforcing reservoir, a train pipe and a brake cylinder, of a valve mechanism including a valve chamber, a graduating and releasing valve controlling ports leading to the service reservoir, the reinforcing reservoir, the train pipe and an exhaust, a graduation piston open on one side to the said valve chamber and on the other side to the train pipe, an emergency valve controlling an emergency port and a communication between the train pipe and a discharge passage, an emergency piston open on one side to the said valve chamber and on the other side to the service reservoir, a communication between the said train pipe discharge passage and that side of the emergency piston which is open to the service reservoir, and a non-return check valve arranged in said last named passage.

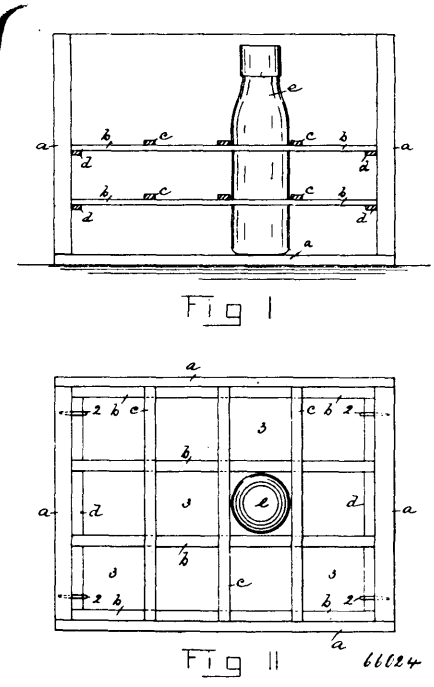
No. 66,023. Valve. (*Soupape.*)



Joseph Elie Normand, New York City, New York, U.S.A., 30th January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. In an engineer's brake valve the combination of a valve casing having ports and a valve adapted to open and close said ports upon its movement, of means for returning said valve to a predetermined position by fluid pressure and a regulating spring adapted to augment such movement to such extent as the tension of said spring may be adjusted. 2nd. In an engineer's brake valve the combination of a valve casing having ports and a valve adapted to open and close said ports upon its movement, of means whereby said valve may be returned to a predetermined position under fluid pressure, and means whereby said valve may have a certain movement independent of said means under fluid pressure. 3rd. In an engineer's brake valve the combination with a casing having a plurality of ports and a valve contained in said casing having a passage adapted when in position opposite certain of same ports to connect same of a cylinder and piston mounted therein, one end of said cylinder being in free communication at all times with one of said ports, a passage leading to the other end of said cylinder adapted to be closed upon the movement of the piston in one direction, and means whereby the said valve may be operated at certain times by the movement of said piston. 4th. In an engineer's brake valve the combination of a valve having an exhaust port, a train pipe connection and a connection to a source of fluid pressure supply of a valve fitted therein adapted to connect said train pipe connection with said exhaust or said fluid pressure connection according to the relative position of the valve with said ports or connections, a cylinder, a piston therein, said cylinder being in communication on one side of said piston with said train pipe connection at all times but adapted to be cut off from such communication on the other side of said piston upon a movement thereof in one direction, and means whereby the said valve may be operated at certain times by the movement of said piston.

No. 66,024. Bottle Case. (*Boite pour bouteilles.*)



John B. Freed, Hamilton, Ontario, Canada, 30th January, 1900; 6 years. (Filed 16th January, 1900.)

Claim.—1st. A packing case for bottles, comprising longitudinal strips, transverse slats secured on and to said strips at their point of intersection, and transverse slats secured to said strips and by means of which the two casing partitions are secured to the packing case, one above the other, the rectangular openings, formed by the intersection of the strips and tranverse slats, to hold the bottles. 2nd. In a packing case for bottles, double partitions one above another in said case, said partitions comprising longitudinal strips, and transverse slots secured together at each intersection, rectangular openings formed by the said intersections to stay the bottles, said partitions secured one above the other to the casing by staples, as described.

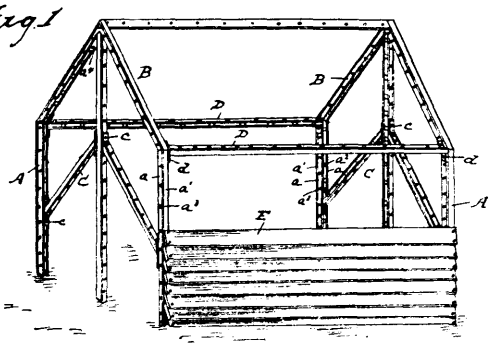
No. 66,025. Fireproof Structure.
(*Construction à l'epreuve du feu.*)

Joseph Ray, Emery, Illinois, U.S.A., 30th January, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—1st. In a fireproof structure, the combination with a suitable base, of a framework, comprising a plurality of connected beams, each consisting of two spaced metallic strips and an auxiliary metallic strip lapped over two of the side edges of the spaced strips and having a plurality of spaced projections which extend between said spaced strips to hold them the desired distance apart, and connecting bolts passed through the respective spaced strips to secure the whole together, substantially as described. 2nd. In a fireproof structure, the combination with a suitable base, of a framework, comprising metallic side beams and end beams, a plurality of inclined beams connecting the side and end beams, and a plurality of horizontal beams connecting the side beams, each of said side beams comprising two spaced metallic strips, and an auxiliary strip

having a plurality of projections adapted to extend between the spaced strips, and metallic weather boarding applied over said

Fig. 1



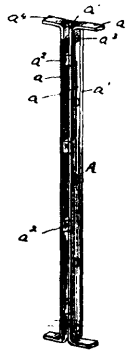
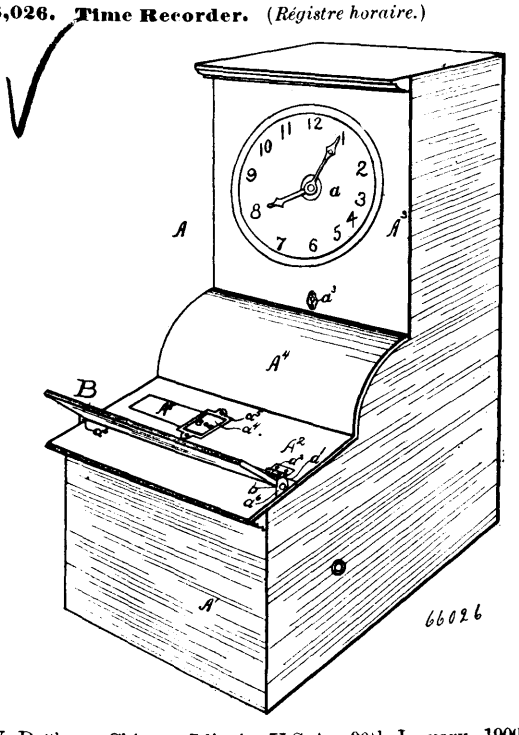


Fig. 2

beams, substantially as described. 3rd. In a fireproof structure, the combination with a suitable base, of a framework, comprising a plurality of connected beams, each of which consist of two spaced metallic strips, the opposite ends of which are bent at right angles to their lengths to form attaching flanges, and an auxiliary metallic strip lapped over two of the side edges of the spaced strips and having a plurality of spaced projections which extend between said spaced strips to hold them the desired distance apart, and bolts connecting said spaced strips to bind the whole securely together, substantially as described.

No. 66,026. Time Recorder. (*Régistre horaire.*)

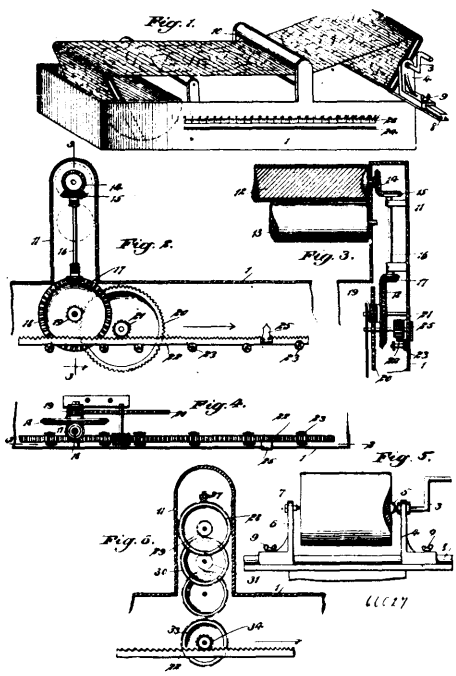


John W. Deübner, Chicago, Illinois, U.S.A., 30th January, 1900; 6 years. (Filed 7th June, 1898.)

Claim.—1st. In a time recorder, the combination with the casing and the clock controlled printing mechanism and recording sheet therein, of means operable from without the casing for taking an impression from the printing mechanism, means enabling the individual effecting the impression to attach his identification mark thereto, and a sight opening through which the said impression may be viewed, whereby the individual is enabled to inspect for identification the record to which he attaches his identification mark. 2nd. In a time recorder, the combination of a casing, a clock controlled printing mechanism, a normally stationary recording sheet or strip therein, and means for feeding the sheet step by step, means operable from without the casing for effecting the printing of a time record, means enabling the individual making the time record to mark the same for identification, and a sight opening through which the time record may be viewed, whereby the individual is enabled to inspect for identification the record to which he attaches his identification mark. 3rd. In an autograph time recorder, the combination of a casing, clock controlled time printing mechanism, and a recording sheet within the casing, means operable from without the casing for effecting the printing of a record on the recording sheet, a slot in the casing through which the sheet is exposed for signature, and a sight aperture through whicht he record may be viewed, whereby the individual is enabled to inspect for verification the record to which he attaches his identification mark. 4th. In an autograph time recorder, the combination with a casing and a time recording mechanism and recording sheet therein, of a slot in the casing through which the recording sheet is exposed for signature, and a transparency adjacent to said slot through which the printed record to which the signature is affixed may be viewed when affixing the signature thereto. 5th. In an autograph time recorder, the combination with a casing provided with a slot, and clock controlled printing mechanism embracing printing forms arranged within the casing, of a carriage pivotally mounted within the casing, a platen upon said carriage, a recording sheet carried by the carriage and arranged to pass over the platen thereof, and means for swinging the carriage about its pivotal support, said printing forms being arranged directly in the path of the platen so that the latter is brought into printing intact with said forms by the swinging of the carriage. 6th. In an autograph time recorder, the combination of a casing provided with a slot, and clock controlled printing mechanism arranged within the casing, a movable platen carrying carriage mounted within the casing, a recording sheet arranged to pass over the platen and adapted to be brought into position to receive the signature thereon through the slot, and a sight opening through which the printed record upon the recording sheet may be inspected at the time of affixing the signature thereto. 7th. In an autograph time recorder, the combination of a casing, clock controlled printing mechanism and an oscillatory platen carriage within the casing, a recording sheet carried by said carriage, a slot within the casing through which the recording sheet may be exposed for signature, and means for oscillating the carriage to carry the recording sheet into printing contact with the printing devices and to thereafter carry it into position to expose the recording sheet through the slot. 8th. In an autograph time recorder, the combination of a casing, clock controlled printing mechanism and an oscillatory platen carriage within the casing, a recording sheet carried by said carriage, a slot in the casing through which the recording sheet may be exposed and means for oscillating the carriage to first carry the recording sheet into printing contact with the printing devices and to thereafter return it to and beyond its normal position into position to expose the recording sheet for signature through the slot. 9th. In an autograph time recorder, the combination of a casing, clock controlled printing mechanism and an oscillatory platen carriage within the casing, a recording sheet carried by said carriage, a slot in the casing through which the sheet may be exposed, and means for oscillating the carriage to first carry the recording sheet into printing contact with the printing devices and to thereafter return it to and beyond its normal position into position to expose the recording sheet for signature to the slot, said movement being effected by means of an oscillatory operating bar arranged outside of the casing and suitable operative connections whereby both the forward and return movements of the carriage are caused by a single movement in one direction of said operating bar. 10th. In an autograph time recorder, the combination of a casing, clock controlled printing mechanism and an oscillatory platen carriage within the casing, a recording sheet carried by said carriage, a slot in the casing through which the sheet may be exposed, means for oscillating the carriage to first carry the recording sheet into printing contact with the printing devices and to thereafter return it to and beyond its normal position into position to expose the recording sheet for signature through the slot, said movement being effected by means of an oscillatory operating bar arranged outside of the casing and suitable operative connections whereby both the forward and return movements of the carriage are caused by a single movement in one direction of said operating bar, and means operating to automatically return the carriage to a position rendering the recording sheet inaccessible through the slot. 11th. The combination, in a time recorder having a casing provided with a slot through which the recording sheet is adapted to be exposed, and a printing mechanism and recording sheet within the casing, of means for effecting the printing of a time record and for bringing the sheet into position to receive a signature, consisting of an operating bar located outside the casing adjacent to the slot and arranged to nor-

mally stand in an upwardly projecting position, said operating bar being adapted to accomplish the printing of a time record upon the recording sheet and the bringing of the latter into position to receive a signature, with the time record exposed to view, when depressed into or toward a horizontal position by resting the hand thereon when in writing position. 12th. In an autograph time recorder, the combination of a casing provided in its upper side with a slot, an oscillatory carriage mounted within the casing adjacent to said slot provided with a platen bar and an impressing bar and carrying receiving and supply rolls, a recording sheet upon said rolls arranged to pass over the impressing bar and platen in its passage from the supply to the receiving roll, minute and hour type wheels rotatably mounted in the path of the impressing bar, mechanism for rotating said type wheels to cause them to present printing characters representing the time of day at the printing point, an inking device adapted to co-operate with the type wheels, and means operable from without the casing for oscillating the carriage to cause an impression upon the recording sheet and to bring the latter into position to receive a signature with the time record exposed to view. 13th. In an autograph time recorder, the combination of a casing provided at its upper side with a slot, an oscillatory carriage mounted within the casing adjacent to said slot and consisting of two parallel triangular shaped side or end frames rigidly secured together and pivotally mounted upon an axis extending longitudinally of the carriage adjacent to one of the outer angles of the same, a combined impressing bar and platen extending between said side frames at one of the other angles of the carriage having its impressing surface arranged in a plane substantially radial to the pivotal axis of the carriage, receiving and supply rolls upon the carriage, a recording sheet mounted upon said roll arranged to pass over the impressing and platen bar in its passage from the supply to the receiving roll, minute and hour type wheels rotatably mounted in the path of the impressing bar, mechanism for actuating said type wheels, an inking device adapted to co-operate with the type wheels, and an operating bar arranged outside the casing and provided with operative connections for oscillating the carriage to cause an impression upon the recording sheet and to bring the platen into position to receive a signature upon the recording sheet. 14th. In an autograph time recorder, the combination with a casing provided with a slot, through which the recording sheet is adapted to be exposed, an oscillatory carriage provided with a platen and carrying supply and receiving rolls, a recording sheet arranged to pass over said platen in its passage from the supply to the receiving rolls, mechanism for printing a time record upon the sheet, and automatic paper feeding devices adapted to feed the paper into position upon the platen to receive a signature thereon opposite the time record as the platen is brought into register with the slot. 15th. The combination, in a time recorder provided with printing forms, of an inking device comprising an oscillatory arm carrying at its free end an inking pad, a spring tending to hold said arm normally free from the type, a tappet block mounted adjacent to the oscillatory arm and adapted to act upon the latter to depress the inking pad into contact with the type, and a radial arm upon the tappet block arranged to project into the path of a reciprocatory part of the recorder mechanism, said reciprocatory part being adapted to oscillate the inking device into contact with the types and to thereafter permit it to spring back to its normal position. 16th. In a time recorder, the combination with a casing provided with a slot and an oscillatory platen carriage adapted to bring the recording sheet into position to expose it through the slot, of means for actuating said carriage, comprising an oscillatory bar arranged outside the casing and provided with a rigid arm extending within the casing, a shift bar pivotally connected with the arm at one end and having sliding support upon the machine frame at its other end, a stud upon the shift bar, an oscillatory lever pivoted between its ends upon the machine frame and adapted to be engaged by the stud of the shift bar, oscillated a limited distance thereby and released in the further movement of the bar, a stud upon the carriage frame located in position to be engaged by the opposite end of the oscillatory lever to oscillate the carriage in one direction, and a second stud upon the shift bar adapted to directly engage the carriage frame to oscillate it in an opposite direction, whereby the impressing movement and the returning of the platen carriage into position to receive a signature upon the recording sheet are effected by the movement in a single direction of the operating bar. 17th. In a time recorder, the combination with the recording mechanism, a motor for actuating the printing forms, and an operating device arranged outside the casing for effecting the printing operation, of an automatic winding device, consisting of a ratchet wheel arranged to act upon the winding shaft of the motor, and a pawl arranged to act upon the ratchet wheel and operatively connected with the printing mechanism whereby the ratchet wheel will be operated each time an impression is taken from the printing forms. 18th. In a time recorder, the combination with the recording mechanism, a motor for actuating the printing forms, and an operating device arranged outside the casing for effecting the printing operation, of an automatic winding device, consisting of a ratchet wheel arranged to act upon the winding shaft of the motor, and a pawl arranged to act upon the ratchet wheel and operatively connected with the printing mechanism whereby the ratchet wheel will be operated each time an impression is taken from the printing forms, and means operating to automatically throw the self winding mechanism out of operation when the motor has been wound up to a predetermined limit.

No. 66,027. Measuring Device. (*Appareil à mesurer.*)



Thomas S. Jones, John James Stewart, and Richard McGinn, Prince Albert, Saskatchewan, North-West Territories, Canada, 31st January, 1900; 6 years. (Filed 19th May, 1899.)

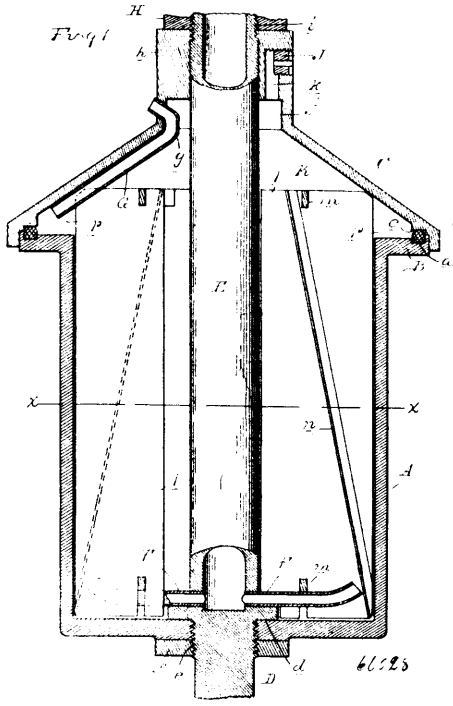
Claim.—A cloth measuring device, comprising a base, having a cloth receptacle at one end and an adjustable winding device at the other end, a pair of rollers having bearings in uprights on the base, a bevel gear on the shaft of one of said rollers, an upright shaft having a bevel gear engaging with the first named bevel gear, a bevel pinion on the lower end of said upright shaft, a bevel gear engaging therewith, a gear wheel driven from said bevel gear, a rack driven from the gear wheel, a pointer carried by said rack, and a yard scale on the base over which said pointer is movable, substantially as specified.

No. 66,028. Centrifugal Separator. (*Séparateur centrifuge.*)

George H. Paine, Detroit, Michigan, assignee of William C. Hartmann, Cleveland, Ohio, U.S.A., 31st January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. In a centrifugal separator, the combination of a bowl having an axial inlet passage leading to near the bottom thereof and then branching into a series of outwardly extending passages extending to near the wall of the bowl, and a series of transverse wings respectively arranged across the mouth of said outwardly extending passages and extending upward and inclining toward the top of the bowl. 2nd. In a centrifugal separator, the combination of a bowl having an axial inlet passage leading to near the bottom thereof and then branching into a series of radial passages extending to near the wall of the bowl, a series of transverse wings arranged respectively across the mouth of said outwardly extending passages and extending upward and inclining inward towards the top of the bowl, and a series of radial wings to which said transverse wings are secured dividing the bowl into a series of wedge shaped compartments. 3rd. In a centrifugal separator, the combination with a bowl having an axial inlet passage leading to near the bottom thereof and then branching into a series of radial passages extending to near the circumferential wall of the bowl of a detachable structure within the bowl comprising a series of radial wings and a series of flanges or wings secured and perpendicular to said radial wings, said flanges at their lower ends extending across the mouths of said radial wings said flanges at their lower ends extending across the mouths of said radial passages and extend upward and inward to near the top of the bowl. 4th. A centrifugal separator, comprising a bowl open at its upper end and having thereat an outward extending circumferential flange and a conical cap secured to said flange forming an annular chamber thereabove without the diameter of the body of the bowl, said cap having an outlet passage leading from said annular chamber upward and inward and then out therethrough. 5th. In a centrifugal separator, the combination of a bowl, an inlet into the bottom of the bowl for the full milk, a series of separated radial wings within the bowl and transverse strips between the wings of a width less than the space between adjoining wings. 6th. In a centrifugal separator, the combination of the bowl, an inlet at the bottom, a series of separated

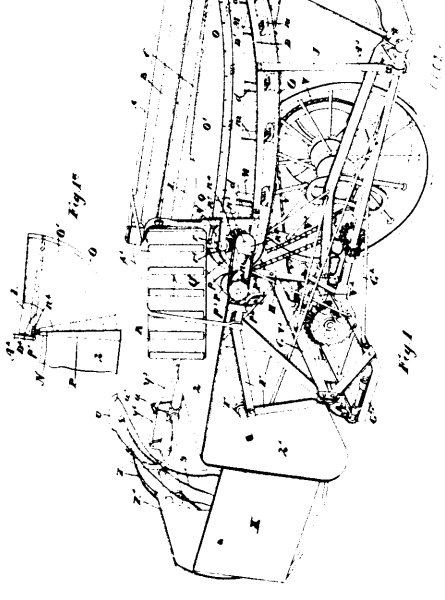
radial wings within the bowl and transverse strips between the wings, of a width less than the space between adjoining wings, said



strips being inclined from the bottom inward toward the top. 7th. In a centrifugal separator, the combination with a bowl, a tubular spindle therein, a supply inlet at the bottom thereof, a series of separated radial wings within the bowl, part of said wings extending from near the periphery inward to the tubular spindle and part separated therefrom by a small space, transverse strips between the wings of a width less than the space between adjoining wings and milk and cream outlets at the top of the bowl.

No. 66,029. Harvester Mechanism.

(*Mécanisme de moissonneuse.*)

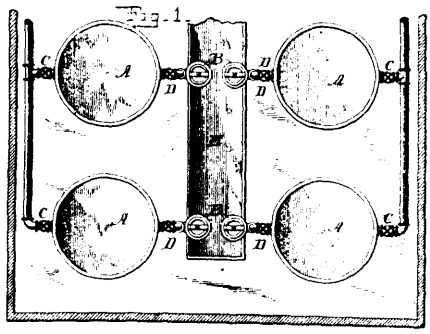


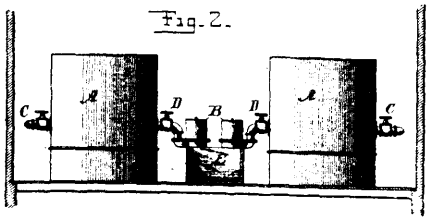
James Calder and George Sheldon Bingham, both of Hamilton, Ontario, Canada, 31st January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. In a harvester binder, the combination with the elevating aprons and a binding deck and mechanism extending outwardly at right angles therefrom and at the rear end thereof, of the segmental carrying apron extending from the elevating aprons to the binding deck, as and for the purpose specified. 2nd. In a harvester binder, the combination with the elevating aprons and a binding deck and mechanism extending outwardly at right angles therefrom and at the rear end thereof, of the segmental carrying apron extending from the elevating aprons to the binding deck and a roller interposed between the discharge end of the apron and the binding deck and means for driving the same, as and for the purpose specified. 3rd. In a harvester binder, the combination with the elevating aprons and a binding deck and mechanism extending outwardly at right angles therefrom, and at the rear end thereof, of the seventh roller tapered as shown and supported in suitable bearings and the tapered end roller also supported in suitable bearings in the frame and extending out substantially at right angles to the seventh roller and the endless segmental carrying apron extending around and from roller to roller, and means for driving the tapered rollers, as and for the purpose specified. 4th. In a harvester binder, the combination with the elevating aprons and a binding deck and mechanism extending outwardly at right angles therefrom, and at the rear end thereof, of the seventh roller tapered as shown and supported in suitable bearings and the tapered end roller also supported in suitable bearings in the frame and extending out substantially at right angles to the seventh roller, the endless segmental carrying apron extending around and from roller to roller, means for driving the tapered rollers, the groove pulley on the outer end of the seventh roller and the grooved pulley on the end of the right angularly placed roller, the belt connected to the outer edge of the segmental apron and the guiding rollers suitably supported in the frame and forming a guide for the belt, as and for the purpose specified. 5th. In a harvester binder, the combination with the elevating aprons and a binding deck and mechanism extending outwardly at right angles therefrom and at the rear thereof, of the segmental carrying apron having an edge belt, the seventh roller tapered as shown and a corresponding roller extending at right angles therefrom, the arc-shaped bar and frame, the braces I and J supporting the same on the wheel frame and the brackets and rollers journalled therein and designed to form a guide for the belt, as and for the purpose specified. 6th. In a harvester binder, the combination with the elevating aprons and a binding deck and mechanism extending outwardly at right angles therefrom and at the rear thereof and the segmental carrying apron and frame thereof having an arc-shaped bar forming the foundation thereof, of the supporting bent brace S^1 connected at one end to the rod S and at the opposite end to the arc shaped bar of the segmental frame, as and for the purpose specified. 7th. In a harvester binder, the combination with the elevating aprons and a binding deck and mechanism extending outwardly at right angles therefrom and at the rear thereof and the segmental carrying apron and frame thereof having an arc-shaped bar forming the foundation thereof, of the triangular frame F and the frame G and supporting rod T all suitably connected to and supporting the binder deck and suitably secured to the end of the side boards of the elevating frame, as and for the purpose specified. 8th. The combination with the segmental carrying apron, the guiding supporting rollers for the same and the arc-shaped frame supporting the outer ends of the rollers, of the butter, the vertical frame extending upwardly from the arc-shaped frame and suitably connected thereto and forming journals for the spindle of the butter, the bevel gear on the spindle of the tapered roller extending at right angles to the other tapered roller, the said bevel gear pinion meshing with the pinion on the end of the spindle of the butter, as and for the purpose specified. 9th. The combination with the segmental carrying apron and rollers thereof and the binding deck arranged at right angles to the elevating frame, of the intermediate roller situated between the segmental carrying apron and the binder deck, the sprocket wheel on the end of one of the rollers of the carrying apron, the sprocket wheel on the end of the supplemental roller and the sprocket chain connecting the sprocket wheels, as and for the purpose specified. 10th. The combination with the binding deck extending at right angles to the elevating aprons and the frame for supporting the same and the vertical depending apron of the binder deck at the rear of the machine, of the rectangular frame suitably connected to the frame supporting the binder deck, the shocking receptacle having the bottom arc-shaped in cross section, the pivotal connection, near the front and discharge end of the receptacle, to the frame and means for tilting the frame as and for the purpose specified. 11th. The combination with the binding deck extending at right angles to the elevating aprons and the frame for supporting the same and the vertical depending apron of the binding deck at the rear of the machine, of the rectangular frame suitably connected to the frame supporting the binding deck, the shocking receptacle having the bottom arc shaped in cross section, the pivotal connection near the front and discharge end of the receptacle to the frame, means for tilting the receptacle and the gate extending across the discharge end of the receptacle and means for opening the same when the receptacle is tilted, as and for the purpose specified. 12th. The combination with the binding deck extending at right angles to the elevating aprons and the frame for supporting the same and the vertical depending apron of the binding deck at the rear of the machine, of the rectangular frame suitably connected to the frame supporting the binding deck, the shocking receptacle having the bottom arc shaped in cross section, the pivotal connection near the front and discharge end of the recep-

tacle to the frame, means for tilting the receptacle, the gate hinged to the downwardly extending apron of the binding deck, the rod having a ball and socket connection to the gate and to the side bar of the receptacle as and for the purpose specified. 13th. The combination with the shocking receptacle suitably supported, of the closing gate at the discharge end thereof and the U shaped rod adjustably held in brackets on the downwardly extending portion of the binder deck, the hinges of the gate being pivoted on said rod as and for the purpose specified. 14th. The combination with the binder deck and downwardly extending apron thereof, of the shocking receptacle having an arc shaped bottom and suitably pivoted and tilted as and for the purpose specified. 15th. The combination with the rectangular frame and bearing bracket and crank suitably journalled therein, of the shocking receptacle having a bracket attached to the side bar thereof and suitably connected to the crank, a pitman also suitably connected to the crank and means for imparting a reciprocating motion to the pitman, as and for the purpose specified. 16th. The combination with the frame and shocking receptacle and the pivotal bearing connecting the same to the frame, of the bracket rest 7 attached to the apron and forming a support for the inner end of the receptacle when in its normal position, as and for the purpose specified. 17th. The combination with the rectangular frame and bearing bracket and crank suitably journalled therein and having an arc shaped slotted end of the shocking receptacle having a bracket attached to the side bar thereof and provided with a slotted portion connected to the crank by a bolt and the pitman connected to the crank and the side bracket by a suitable bolt or pin as and for the purpose specified. 18th. The combination with the frame and the shocking receptacle supported and connected to a suitable bearing crank, of the pitman, the stud shaft journalled on the frame and provided with a crank connected to the opposite end of the pitman and means for imparting an intermittent movement to the stud shaft as and for the purpose specified. 19th. The combination with the frame and the shocking receptacle supported and connected to a suitable bearing crank of the pitman, the stud shaft journalled on the frame and provided with a crank connected to the opposite end of the pitman, the bevel wheel loosely held on the stud shaft, the shaft supported in the frame provided with a bevel wheel meshing with the bevel wheel on the stud shaft, the collar secured to the stud shaft, the spring trip pivoted on the collar, the sprocket wheel secured on the bevel wheel, the spindle suitably journaled and provided with a bent end spring held to normally engage with the trip and means to release the bent end at predetermined intervals, as and for the purpose specified. 20th. The combination with the frame and the shocking receptacle supported and connected to a suitable bearing crank, of the pitman, the stud shaft journalled on the frame and provided with a crank connected to the opposite end of the pitman, the bevel wheel loosely held on the stud shaft, the shaft supported in the frame provided with a bevel wheel meshing with the bevel wheel on the stud shaft, the collar secured to the stud shaft, the spring trip pivoted on the collar, the sprocket wheel secured on the bevel wheel the spindle suitably journalled and provided with a bent end spring held to normally engage with the trip, the wheel on the spindle provided with a segmental notch, the shocking mechanism needle suitably journalled and provided with an arm, means for imparting movement to the needle, a rod connected to the arm and provided with a spring held bent and designed to engage with the segmental notch and wheel on the spindle, as and for the purpose specified. 21st. The combination with the ordinary binding compressor arm and the knotter shaft of the shocking mechanism, the tube for supporting the same, and the right angular rearwardly extending tube having a bearing intermediate of its length, of the needle of the shocking mechanism having the spindle thereof journalled therein and provided with an arm, a crank on the end of the knotter shaft and a rod connecting such crank with the arm on the needle spindle, and mechanism interposed between the compressor arm and the knotter shaft for imparting a movement to the needle at predetermined intervals, as and for the purpose specified. 22nd. The combination with the ordinary binding compressor arm and the knotter shaft of the shocking mechanism, the tube for supporting the same, and the right angular rearwardly extending tube having a bearing intermediate its length, of the needle of the shocking mechanism having the spindle thereof journalled therein and provided with an arm, a crank on the end of the knotter shaft and a rod connecting such crank with the arm on the needle spindle, the counter spindle, the face ratchet wheel loosely journalled thereon and having a slotted arm suitably connected to the tail of the compressor arm, the engaging ratchet wheel spring held against the aforesaid ratchet wheel and held on the spindle so as to rotate therewith, the spring on the spindle, the arm suitably pivoted and provided with a slotted end and a depending lug, the knotter wheel having a trip pivoted thereon and designed to normally engage with the lug on the pivoted arm and the sprocket pinion on the knotter shaft designed to be engaged by the trip upon its being released from the lug on the slotted arm, as and for the purpose specified. 23rd. The combination with the compressor arm and knotter shaft and needle suitably driven therefrom, of the counter spindle, the face ratchet wheel loosely journalled thereon and having a slotted arm suitably connected to the tail of the compressor arm, the engaging ratchet wheel spring held against the aforesaid ratchet wheel and held on the spindle so as to rotate therewith, the spring on the spindle, the arm suitably pivoted and provided with a slotted end and a depending lug, the knotter wheel having a trip pivoted thereon and designed to normally engage with the lug on the pivoted arm and the sprocket pinion on the knotter shaft designed to be engaged by the trip upon its being released from the lug on the slotted arm, as and for the purpose specified. 24th. The combination with the compressor arm and knotter shaft and needle suitably driven therefrom, of the counter spindle, the face ratchet wheel loosely journalled thereon and having a slotted arm suitably connected to the tail of the compressor arm, the engaging ratchet wheel spring held against the aforesaid ratchet wheel and held on the spindle so as to rotate therewith, the spring on the spindle, the arm suitably pivoted and provided with a slotted end and a depending lug, the knotter wheel having a trip pivoted thereon and designed to normally engage with the lug on the pivoted arm, the sprocket pinion on the knotter shaft and designed to be engaged by the trip upon its being released from the lug on the slotted arm, and the ratchet wheel, provided with a derminate number of teeth corresponding to the teeth of the ratchets before mentioned, engaged to a dog, and having a laterally extending teeth designed to engage with the slotted end of the arm, as and for the purpose specified. 25th. The combination with the ordinary trip arm, suitably connected to and throwing into operation the ordinary binding mechanism for the sheaf, of the knotter shaft, of the shocking binding mechanism, and means interposed between the trip arm and such shaft for momentarily holding the trip arm rigid during a period that the shock is being tied, as and for the purpose specified. 26th. The combination with the ordinary trip arm, suitably connected to and throwing into operation the ordinary binding mechanism for the sheaf, of the knotter shaft, of the shocking binding mechanism, the disc on the end of the knotter shaft provided with a segmental notch, the rod designed to ride on the disc during the period that the shock is being bound, such rod being suitably held and extending underneath the trip arm and normally resting in the segmental notch, as shown, and for the purpose specified. 27th. The combination with the shocking knotter mechanism and the tube forming a bearing for the same, and the right angular rearwardly extending tube connected to the former tube, the needle having a spindle suitably journalled in bearings intermediate of the length of the tube, deriving movement from the knotter shoft, and provided with an arm upon the end of the spindle thereof, and the bearing tube extending at right angles to the rearwardly extending tube at the rear end thereof, the crank spindle journalled in such tube and provided with an end arm, the rod connecting the arm to the arm on the needle spindle, the compressor arms suitably connected to the laterally extending ends of the crank and adjustably held in position at the bottom to the frame, as and for the purpose specified. 28th. The combination with the rectangular frame and the bar extending rearwardly therefrom and provided with the laterally extending pin, and the shocking receptacle, of the compressor arm provided with a looped and extending over the pin and means deriving motion from the knotter shaft for imparting an inward and downward movement to the double compressor arm for the shock as and for the purpose specified, 29th. The combination with the shocking receptacle and the frame supporting the same, of the double compressor arm having a substantially vertical adjustable connection to the frame at the bottom, means for imparting an inward and downward movement to the compressor arm and a short needle suitably journalled, extending in between the members on the compressor arm and deriving movement from the knotter shaft of the shocking mechanism, so as to move between such members, as and for the purpose specified. 30th. The combination with the shocking receptacle and the frame supporting the same, of the needle deriving movement as specified, the bar forming part of the frame and provided with a lateral extension, the plate underneath such extension between which and the lateral extension the cord passes, spring means for holding the plate up against the lateral extension, a spring plate secured on the lateral extension and provided with a pin projecting through such extension against the spring held plate and means for depressing such spring, as and for the purpose specified. 31st. The combination with the shocking receptacle and the frame supporting the same, of the needle deriving movement as specified, the bar forming part of the frame and provided with a lateral extension, the plate underneath such extension between which and the lateral extension the cord passes, spring means for holding the plate up against the lateral extension, a spring plate secured on the lateral extension and provided with a pin projecting through such extension against the spring held plate, the crank spindle journalled in the right angular extension on the end of the rearwardly extending tube and the arm secured to the crank and designed to engage with a spring plate, so as to release the cord at the proper time, as and for the purpose specified. 32nd. The combination with the binder deck and frame thereof and the shocking receptacle, of a compressor arm or arms suitably pivoted and held to the rear of the shocking receptacle and means for imparting an inward and downward movement to such arm or arms, as and for the purpose specified. 33rd. The combination with the binder deck and shocking receptacle and a rearward extension from the binder deck at the inner side of the shocking receptacle, of the needle journalled intermediate of the length of such extension and means for imparting the requisite movement to the needle, as and for the purpose specified.

No. 66,030. Liquid Pressure Regulator.
(*Régulateur de pression pour liquides.*)



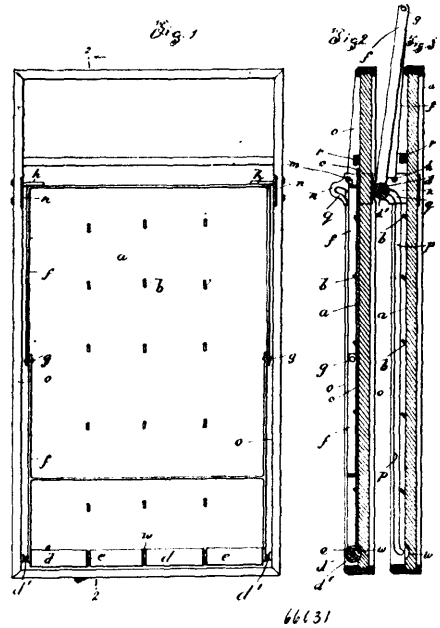


66030

The New York Filter Manufacturing Company, New Jersey, assignee of Edmund Brownell Weston, and Walter Weldon Jackson, both of Providence Rhode Island, U.S.A., 31st January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. In a module, a constant discharge opening consisting of an orifice traversing a tube of unvarying diameter through the movement of a disc situated in said tube and means for operating the same, substantially as described. 2nd. In a module, the combination of a float and disc, a discharge tube, and inlet valves, said valves being operated by the float, substantially as described. 3rd. In a module, the combination of an orifice traversing a tube through the movement of a disc operated by a float, and one or more balanced inlet valves operated by said float, substantially as described. 4th. In a module, the combination of an orifice traversing a tube through the movement of a disc operated by a float, and one or more balanced inlet valves situated in a false bottom in the filter chamber and operated by said float, substantially as described. 5th. In a module, the combination of an orifice traversing a tube through the movement of a disc operated by a float, one or more balanced inlet valves situated in a false bottom in the float chamber and operated by said float, and a baffling plate in said float chamber, substantially as described. 6th. In a module, the combination of an orifice traversing a tube through the movement of the disc operated by a float, one or more balanced inlet valves situated in a false bottom in the float chamber and operated by said float, a baffling plate in said float chamber and a funnel shaped discharge outlet, substantially as described. 7th. In a module, the combination of an orifice traversing a tube through the movement of a disc operated by a float, and a balanced valve situated in the inlet pipe to the float chamber and operated by said float, substantially as described. 8th. In a module, the combination of an orifice traversing a tube through the movement of a disc operated by a float, a balanced valve situated in the inlet pipe to the float chamber and operated by said float and a baffling plate in said float chamber, substantially as described. 9th. In a module, the combination of an orifice traversing a tube through the movement of a disc operated by a float, a balanced valve situated in the inlet pipe to the float chamber and operated by said float, a baffling plate in said float chamber, and a funnel shaped outlet, substantially as described. 10th. In a module, the combination of an inlet balanced valve operated by a lever connected to a sliding stem traversing the controller chamber, said stem having a submerged disc mounted thereon, and a discharge tube, substantially as described. 11th. In a module, the combination of an inlet balanced valve operated by a lever connected to a sliding stem traversing the controller chamber, said stem having a weighted submerged disc mounted thereon, and a discharge tube, substantially as described. 12th. In a module, the combination of an inlet balanced valve operated by a pinion, and a rack connected to a sliding stem traversing the controller chamber, said stem having a submerged stem mounted thereon, and a discharge tube, substantially as described. 13th. In a module, the combination of an inlet balanced valve operated by a lever connected to a sliding stem traversing the controller chamber, said stem having a submerged compound disc, consisting of two or more superposed discs mounted thereon, and a discharge tube, substantially as described. 14th. In a module, the combination of an orifice traversing a tube through the movement of a submerged disc mounted upon a stem, said stem being connected to a lever operating a balanced inlet valve, substantially as described. 15th. In a module, the combination of an inlet balanced valve operated by a lever connected to a sliding stem traversing the controller chamber, said stem having a submerged disc mounted thereon, and the pressure of the fluid on said disc being counterbalanced by a weight, and a discharge tube, substantially as described. 16th. In a module, the combination of an orifice traversing a tube through the movement of a submerged disc mounted upon a stem, said stem being connected to a jointed lever operating a balanced inlet valve, the pressure of the fluid on said disc being counterbalanced by a weight, substantially as described. 17th. In a module, the combination of an orifice traversing a tube through the movement of a submerged disc mounted upon a stem, said stem being connected to a jointed lever operating a balanced inlet valve, the weight of said disc, stem, and the pressure of the fluid on said disc being counterbalanced by a weight, substantially as described. 18th. In a module, the combination of an orifice traversing a tube through the movement of a submerged disc mounted upon a stem, said stem being connected to a jointed lever operating a balanced inlet valve, the weight of said disc being counterbalanced by a weight, and a baffling plate, substantially as described. 19th. Ic a module, the combination of an orifice traversing a tube through the movement of a submerged disc mounted upon a stem, said stem being connected to a jointed lever operating a balanced inlet valve, the weight of said disc, stem, and the pressure of the fluid on said disc being counterbalanced by a weight, a baffling plate, and a funnel shaped discharge outlet, substantially as described.

No. 66,031. Bulletin Board. (*Tableau à nouvelles.*)



66131

Colin Campbell McPhee and Frederick Abraham, both of Montreal, Quebec, Canada, 31st January, 1900; 6 years. (Filed 28th September, 1898.)

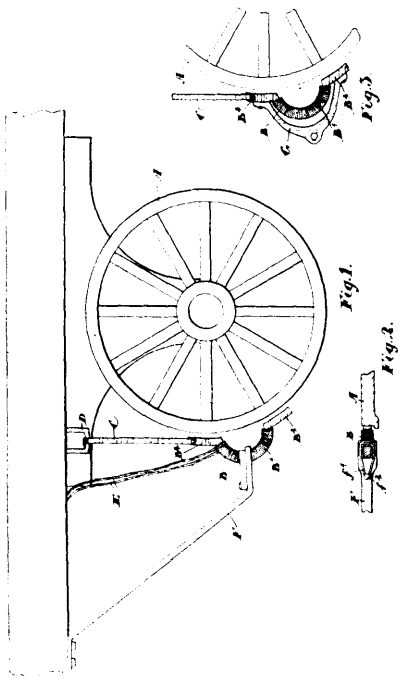
Claim.—1st. In a bulletin board, the combination with the board paper having numerous fixed projecting points arranged in a series of lines on its face and adapted to pierce and retain the bulletin sheets when pressed upon same, of a grooved roller adapted to traverse the board for so depressing every part of the sheets and sliding frame connections between the board and roller, substantially as described. 2nd. In a bulletin board, the combination with the board proper, of the points *b*, the frame *f*, carrying roller *d*, runways *p*, and plate *n*, all substantially as shown and described. 3rd. In a bulletin board, the combination with the board proper having recess *w*, of the points *b*, the frame *f*, carrying roller *d*, runways *p*, and plates *n*, all substantially as shown and described. 4th. In a bulletin board, the combination with the board proper whose position is vertical when in use, of a sliding frame *f*, comprising two parts hinged together and adapted to hang by gravity against the vertical face of the board and having trunnions *h*, at its upper end, and plates *n*, carried by the board, having slots *m*, inclined at an angle to the vertical from an outer upper point to a a lower point nearer the board, to receive the said trunnion, as shown and described. 5th. In a bulletin board, the combination with the board proper, of a frame pivoted at one end to the board and having its other and free end slidingly movable up and down over the face of the board, substantially as described. 6th. In a bulletin board, the combination with the board proper, of a frame composed of two sections hinged together about centrally of the length of the frame, pivotted at its upper end to the board and carrying a roller at its lower end, substantially as described.

No. 66,032. Electric Light. (*Lumière électrique.*)

Theron Clark Crawford, New York City, New York, assignee of William Lawrence Vœlker, Russell Square, London, 31st January, 1900; 6 years. (Filed 22nd September, 1898.)

Claim.—1st. In the manufacture of filaments for incandescing electric lamps, the herein described method for producing carbides of the earth metals uranium or thorium, same consisting in taking two parts by weight of chemically pure nitrate of the earth metal, and one part by weight of pure cane sugar, dissolving the same in a minimum quantity of distilled water and heating the solution in a suitable evaporating dish to boiling point, then withdrawing the source of heat and allowing the mass to assume the condition at which spontaneous combustion takes place, and then, the evolution of nitrous fumes having ceased and the resulting black porous mass having cooled, compressing the same into cakes of a size to fit the hearth of an electric furnace, and then reducing the same to a molten fluid by a large volume of current at a relatively low pressure, substantially as set forth. 2nd. The herein described method of producing filaments for incandescing electric lamps, consisting in reducing to impalpable power the carbide of one of the earth metals uranium or thorium, by grinding in a suitable mill under benzol or naptha, between grinding surfaces of the like carbide, separating the powder from the benzol or naptha, mixing the former with a viscous compound of gun cotton and oil of cassia, rolling the mass between hard polished rollers, squirting the same through jewel dies, drying the filaments so formed, heating the latter to a bright red color by means of an electric current of high voltage, in an atmosphere of a purified and attenuated gas, then volatilizing at a very high temperature and in vacuo the surface carbon deposited from the gas, and finally completing the union of any uncombined carbon with the carbide in the core of the filaments by bringing them to the highest degree of incandescence, substantially as set forth. 3rd. In the manufacture of filaments for incandescing electric lamps from carbide of uranium, the herein described means for increasing the whiteness of the light emitted by the filament, same consisting in adding to the uranium nitrate and cane sugar solution a suitable proportion of thorium nitrate, the mass being ultimately reduced in the electric furnace, substantially as set forth. 4th. In the manufacture of filaments for incandescing electric lamps from carbide of uranium, the herein described means for increasing the electrical resistance, consisting in adding to the uranium nitrate and cane sugar solution a suitable proportion of titanium nitrate, the mass being ultimately reduced in the electric furnace, substantially as set forth. 5th. The herein described method of producing filament for incandescing electric lamps, consisting in forming carbide by heating an oxide of one of the earth metals, uranium or thorium, to a high temperature in the presence of carbon, producing a viscous mass of the resultant carbide and an agglutinating agent, forming filaments from the mass, and exposing the same to a high temperature, substantially as set forth.

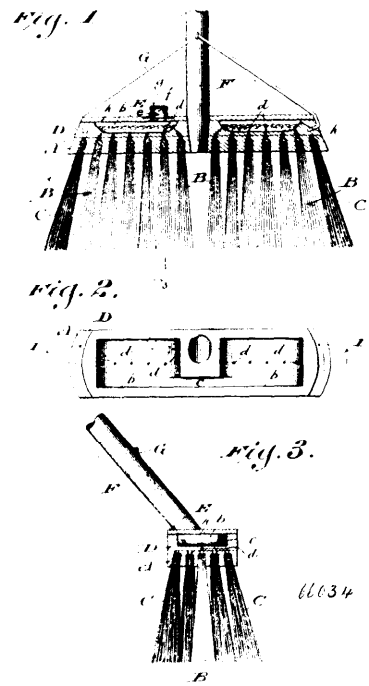
No. 66,033. Electric Brake. (*Frein électrique.*)



George Henry Bingham Hooper, Toronto, Ontario, Canada, 31st January, 1900; 6 years. (Filed 7th April, 1899.)

Claim.—1st. A brake for wheels, comprising a bar magnet of uniform cross section throughout, having the wound portion formed on a core, the arc of which is that of a circle less than that of the rim of the wheel to which it extends, pole ends extending entirely outside such arc and formed on arcs concentric to the perimeter of the wheel and having their inner arc-shaped sides disposed to contact with the wheel, as specified. 2nd. A brake for wheels, comprising a bar magnet having the wound portion formed on a core, the arc of which is that of a circle less than the arc of the rim of the wheel to which it extends, pole ends extending entirely outside such arc and formed on arcs concentric to the perimeter of the wheel and having their inner arc-shaped sides disposed to contact with the wheel, a link supporting the same pivotally connected at the bottom to the top of the arc-shaped pole end thereby leaving the opposite pole end perfectly free and the inner side of both pole ends disposed to contact with the wheel, a rigidly supported guiding hanger having the bottom end embracing the central portion of the core and limiting its movement, and a suitable spring connected to the magnetic brake shoe at the centre and to a suitable portion of the hanger at the opposite end, as specified. 3rd. A brake for wheels, comprising a bar magnet of uniform cross section throughout, having the wound portion formed on a core, the arc of which is that of a circle less than that of the rim of the wheel to which it extends, pole ends extending entirely outside such arc and formed on arcs concentric to the perimeter of the wheel and having their inner arc-shaped sides disposed to contact with the wheel, the links supporting the bar magnet at the top and the straddle bracket secured to the ends of the core and provided with a cross rod, as and for the purpose specified.

No. 66,034. Sweeping Brush. (*Balayeuse.*)



John Peter Wiens and Conrad Reichert, both of Milwaukee, Wisconsin, U.S.A., 31st January, 1900; 6 years. (Filed 16th January, 1900.)

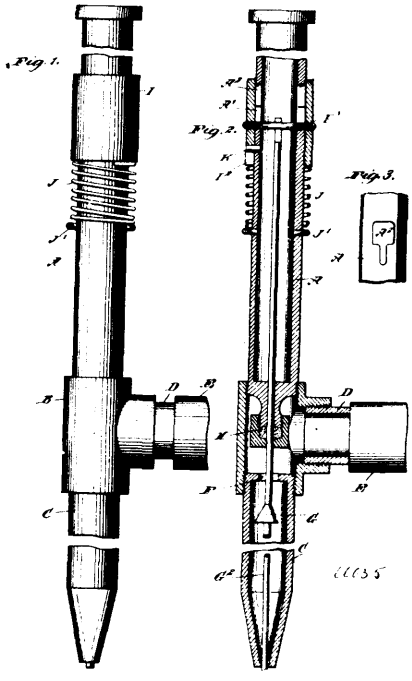
Claim.—1st. A brush, comprising a reservoir back, absorbent tufts exposed at their butts to oil contained in the back, and non-absorbent tufts bordering those aforesaid. 2nd. A brush, comprising absorbent tufts, non-absorbent tufts and a reservoir back provided with bottom perforations in register with the absorbent tufts. 3rd. A brush, comprising a covered back having a port provided with a closure and hollowed out to form channel connected recesses, the bottom of said back being perforated to intercept said recesses, absorbent tufts in register with the perforations, and non-absorbent tufts bordering those aforesaid. 4th. A brush, comprising a reservoir back of wood made impervious to oil contained therein, absorbent tufts exposed at their butts to the oil, and non-absorbent tufts bordering those aforesaid. 5th. A brush, having a triangular bent wire stay in connection with its back and handle to serve as a fender.

No. 66,035. Improvements in Drills. (*Forêt.*)

Rufus Elias Farrington and Lucius Day Copeland, Phoenix, Arizona, 31st January, 1900; 6 years. (Filed 23rd June, 1899.)

Claim.—1st. A drill, comprising a handle bar, a hollow drill point connected therewith, a steam supply connected with said hollow

drill point, a valve controlling the admission of steam to said point, and a sleeve slidably fitted on said handle bar and connected with

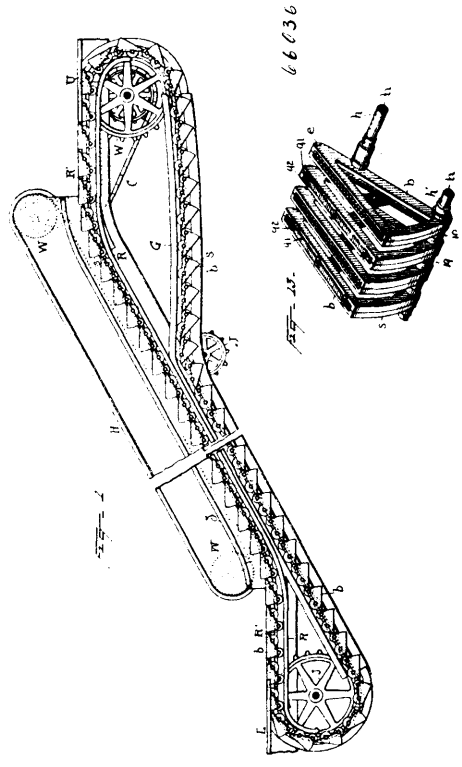


the said valve, said sleeve being arranged for engagement with one hand of the operator, whereby to open the valve, as and for the purpose set forth. 2nd. A drill comprising a handle bar, a hollow drill point connected therewith, a steam supply connected with said hollow point, a valve in said point for controlling the admission of steam thereto, said valve being provided with a stem whose lower end extends into the end of the said point, a sleeve mounted to turn and slide longitudinally upon said handle bar and connected to the opposite end of said valve stem whereby to unseat the valve and thrust the extension of its stem through the drill point, and a projection upon said handle bar and contacting with said sleeve to abridge the aforesaid movement thereof when the said sleeve is turned, as and for the purpose set forth. 3rd. A drill comprising a hollow point, a steam supply pipe connected therewith, a valve for controlling the admission of steam to said point, a handle bar connected to said point, a spring pressed sleeve mounted to turn and sildable longitudinally upon said handle bar, said sleeve being connected with the stem of said valve whereby it may open the same when moved longitudinally upon the handle bar and formed with a slot in its lower edge, and a pin on said handle bar, said pin coming in contact with the lower edge of said sleeve to limit the longitudinal movement of the same and being adapted to enter the said slot whereby to permit of the further movement of said sleeve, as set forth. 4th. A drill provided with a hollow point, a heating medium supply connected with the point, a valve for controlling the flow of the heating medium to the said point, means for manipulating the said valve, to hold the same open or closed, the said means comprising a spring pressed sleeve slidable on the drill handle bar and carrying the plug stem, and a stop limiting the movement of said sleeve, substantially as shown and described. 5th. A drill, comprising a hollow point, a steam supply pipe connected therewith, a valve for controlling the admission of steam to said point, a handle bar connected to said point and provided with widened slots, and a projection below said slott, a sleeve fitted to slide on said handle bar and provided with a cross pininserted through said slots and connected to the stem of the valve, the said sleeve being provided with a slot in its lower edge adapted to be brought into register with the projection on the handle bar as and for the purpose set forth.

No. 66,036. Elevator. (*Elevateur.*)

Charles David Seeberger, assignee of George A. Wheeler, both of New York City, New York, U.S.A., 21st January, 1900; 6 years. (Filed 15th January, 1900.)

Claim.—1st. The combination in an elevator of the class described, of a moving structure composed of a series of stops forming in their operation an endless chain, with a supporting structure for tracks for said stops, said tracks being arranged in two or more sections at different angles to a horizontal plane, said sections being connected by a curve to which said sections are tangent, whereby the change of steps from one angle of movement to another may be made gradual, substantially as and for the purpose described. 2nd. The combination in an elevator of the class described, of a moving structure composed of a series of steps forming in their operation an endless chain, with a supporting structure having tracks for said



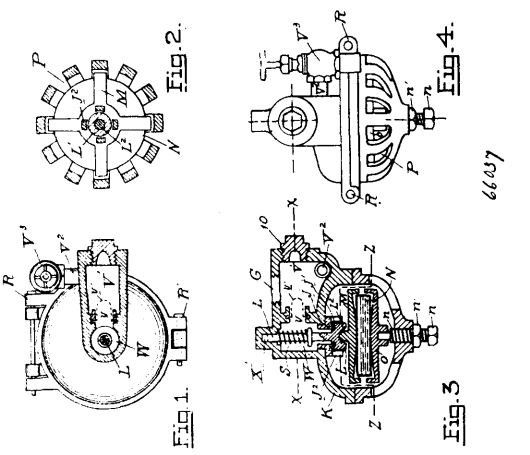
steps, said tracks being arranged in two or more sections at different angles to a horizontal plane, said section being connected by a curve to which they are tangent, and bearing connections between said steps and tracks arranged so as to maintain the tread surfaces always horizontal, so that on the horizontal portions of the tracks the stops will form a continuous horizontal landing surface, and on the inclined sections, a stairway having the risers of the steps of a uniform depth, and on the curved portions a stairway having the risers of gradually increasing depth, substantially as and for the purpose described. 3rd. The combination in a passenger elevator of the character described of a moving structure composed of a series of steps united at each end by a series of pivoted links into an endless chain, wheels or rollers at each end of each step with a supporting structure, and rails for the wheels arranged in two sections, one section being horizontal and one section inclined, said rail sections being united by a curve to which the said sections are tangent, substantially as described. 4th. In an elevating apparatus of the class described, the combination of a moving structure composed of a series of steps forming in their operation an endless chain and having their tread surfaces longitudinally grooved in the direction of their movement, with a supporting structure forming ways for said steps, said ways being arranged in horizontal and inclined sections to form landings and stairs respectively, and so constructed as to maintain the tread surfaces of the steps horizontal upon the operative portions of said landings and stairs, and a grated landing composed of substantially horizontal parallel bars separated by spaces with which the grooved tread surfaces of the steps interleave, each tread surface at the beginning or ending of the interleaving action occupying a maximum elevation at least flush with the upper surface of the grated landing and subsequently sinking or previously having risen through said landing so as to deposit the load thereon or take it therefrom and remaining horizontal until the interleaving action has ceased. 5th. In an elevating apparatus of the class described, the combination of a moving structure composed of a series of steps forming in their operation an endless chain, each step being composed of a series of parallel brackets separated so as to form a tread surface grooved longitudinally in the direction of its movements, with a supporting structure forming ways for said steps, said ways being arranged in horizontal and inclined sections to form leadings and stairs respectively and so constructed as to maintain the tread surfaces of the steps horizontal upon the operative portions of said landings and stairs, and a grated landing composed of substantially horizontal parallel bars separated by steps with which the grooved tread surfaces of the steps interleave, each tread surface at the beginning or ending of the interleaving action occupying a maximum elevation at least flush with the upper surface of the grated landing and subsequently sinking or previously having risen through said landing so as to deposit the load thereon or take it therefrom

and remaining horizontal until the interleaving action has ceased. 6th. In an elevator of the class described, the combination of a landing composed of parallel bars and spaces, located at a slight angle with respect to the horizontal, a series of moving steps forming in their operation an endless chain, each step having a tread surface composed of parallel bars and spaces which are kept horizontal throughout their operative movement, wheels for the stops, and rails for the wheels extending below said landing in a line such that the steps when in a horizontal plane interleave with the grating of the landing, each tread surface at the beginning or ending of the interleaving action occupying a maximum elevation at least flush with the upper surface of the grated landing and subsequently sinking or previously having risen through said landing so as to deposit the load thereon or take it therefrom and remaining horizontal until the interleaving action has ceased. 7th. In an elevator of the character described, the combination of a series of steps united at opposite ends into an endless jointed chain or structure, wheels or rollers at the ends of each step and a pair of rails at each end of the steps on the lower or return run, one rail above and one rail below each wheel to maintain control in case of separation of said chain, substantially as described. 8th. In an elevator, a series of steps united at opposite ends into a jointed structure or chain, wheels or rollers at each end of each step, rails upon which said wheels travel, a moving hand rail located at one side and a sheathing for the interior exposed side of said hand rail extending down between the ends of the steps and said supporting rollers to the axles of said rollers, substantially as described. 9th. In an elevator, a series of steps united at opposite ends into a jointed structure or chain, wheels or rollers at each end of each step, rails upon which the wheels travel, a moving hand rail located at one side thereof, a sheathing for the interior exposed side of said hand rail and a continuous rail or projection upon said sheathing, substantially as and for the purpose described. 10th. In an elevator of the character described, a series of steps each consisting of a tread and a riser, each riser having an exterior convex surface, said steps being united at each end by links into an endless chain, wheels upon which said chain is supported, and a track for said wheels arranged in horizontal sections joined to incline sections, substantially as described. 11th. The combination in an elevator of the character described of horizontal and inclined track sections, a series of steps each composed of a tread and a riser the latter having an exterior convex surface, pivoted links between successive steps uniting them into an endless chain and a series of antifriction devices supporting the chain structure upon the track, substantially as described. 12th. In an elevator of the character described, a track arranged in horizontal and inclined sections, said sections being united, a series of steps, a series of links flexibly uniting said series of steps into an endless movable structure, each step being composed of a tread and a riser, said riser having a convex exterior surface, the arc of curvature being substantially equal to an arc having a radius in length equal to the link connecting the adjacent steps, substantially as and for the purpose described. 13th. In an elevating apparatus, a series of travelling steps arranged to move together, the treads of which are adapted to remain severally horizontal whether the steps be moving horizontally or on an incline, the said steps being provided with risers, having convex surfaces toward the adjacent edge of adjacent steps, substantially as and for the purpose described. 14th. In an elevating apparatus, a series of travelling steps arranged to move together, the treads of which are adapted to remain severally horizontal whether the steps be moving horizontally or on an incline, the said steps being provided with curved risers having convex surfaces toward the adjacent edge of adjacent steps adapted to prevent any divergence between the riser and the edge of the adjacent step in passing from an inclined to a horizontal portion of the track and vice versa. 15th. The combination in an elevator, of a series of carriages constructed to move from inclined to horizontal positions, and vice versa, each carriage having a tread and a riser curved outward to substantially coincide with the path travelled, relative to said carriage, by the edge of the adjacent tread in moving from one position to another, the curve of the riser being so laid out that the edge of the following tread diverges slightly from the riser in passing from an inclined to a horizontal position, substantially as and for the purposes described.

No. 66,037. Thermostatic Trap. (*Piège thermostatique.*)

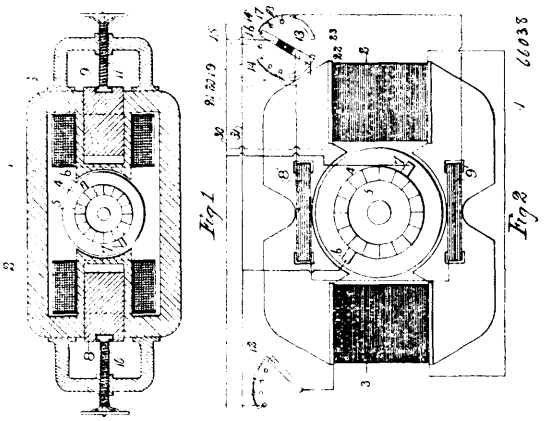
The Consolidated Car Heating Company, assignee of James F. McElroy, all of Albany, New York, U.S.A., 31st January, 1900; 6 years. (Filed 28th December, 1899.)

Claim.—1st. A thermostatic trap, consisting of a casing, within which casing are a sediment chamber, an overflow chamber, a perforated screen placed in the port connecting said sediment chamber and said overflow chamber, and a valve in said overflow chamber operated by means of a thermostatic cell placed in said casing, substantially as described. 2nd. A thermostatic trap, consisting of a casing, said casing containing a sediment chamber, an overflow chamber, a screen placed in the port communicating between said sediment chamber and said overflow chamber, a spring actuated valve in said overflow chamber, a thermostatic cell adapted to close said valve against the tension of said spring, with a blow-off pipe located in said sediment chamber, substantially as described. 3rd. In a thermostatic trap, a casing adapted to be connected to a car heating system, a sediment chamber in said casing, into which the discharge from said car heating system passes, a screen placed in a port communicating between said sediment chamber and an



overflow chamber, also located in said casing, a valve in said overflow chamber, a thermostatic cell adapted to close said valve, and a means for opening said sediment chamber and removing said screen when desired, substantially as described. 4th. In a thermostatic trap, adapted to be connected to a railway car heating system, a casing containing a sediment chamber and an overflow chamber, with a thermostatic cell and a valve adapted to be closed by said thermostatic cell, a drum and metallic connections between said casing and said drum, substantially as described.

No. 66,038. Dynamo Electric Machine.
(*Machine dynamo-électrique.*)

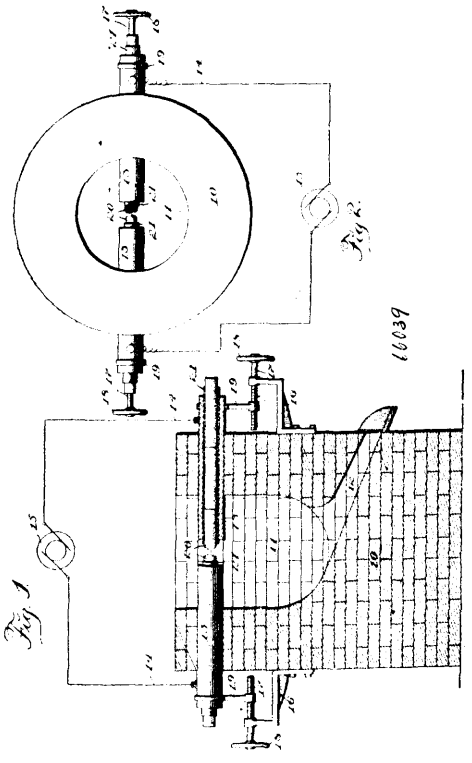


The Stow Manufacturing Company, assignee of Frederick Ayres Johnson, all of Binghampton, New York, U.S.A., 31st January, 1900; 6 years. (Filed 16th January, 1900.)

Claim.—1st. The method of producing and varying the magnetic flux in a dynamo-electric machine, which consists in creating a magneto-motive force in a magnetic circuit composed, at one or more points, of several branches generating in one or more of said branches, a second magneto-motive force, and varying said second magneto-motive force at will to vary the total flux through the machine, while maintaining a strong flux through those branches of the magnetic circuit which furnishes the field for the coils under commutation. 2nd. The method of regulating the speed of an electric motor, which consists in varying the total flux through the armature at will within wide limits to vary the speed of the motor, and maintaining at all speeds a strong field at those portions of the pole pieces under which the commutation takes place, substantially as described. 3rd. The method of varying the speed of an electric motor, which consists in varying the total flux through the armature at will within wide limits, to vary the speed of the motor, and maintain at all speeds a strong and approximately constant field at those portions of the pole pieces under which the commutation takes place, substantially as described. 4th. The method of varying the speed of an electric motor, which consists in generating a flux passing through the coils under commutation by a practically constant magneto motive force, and generating a second flux passing through other coils of the armature, by an independent magneto motive force, and varying said second flux at will independent of the conditions of the main circuit. 5th. The method of avoiding sparking in a dynamo

electric machine, which consists in exciting those portions of the field magnets under which commutation takes place with a magnetism independent of the magnetism exciting the remaining portions of the field magnets, and varying the said independent magnetism at will, independent of the conditions of the circuit, to vary the total flux of the armature. 6th. In an electric motor, in combination with the field magnets and armature, of means for adjusting and varying at will the magnetic flux passing through a portion of each or any pole piece, without greatly affecting the quantity passing through the portion of the pole pieces furnishing the field for the coils under commutation. 7th. In an electric motor, the combination with the armature and field magnet, a switch for increasing the flux passing through one tip of one of the pole pieces, and for at the same time diminishing the flux through the centre of the pole pieces to vary the speed of the motor without causing sparking. 8th. In an electrie motor, the combination of a field magnet and armature, main field magnet windings, an auxiliary field magnet winding wound in a slot in one or more of the pole pieces in such a way as to embrace only a portion thereof, and a switch for varying the current in the auxiliary winding, substantially as described. 9th. In an electric motor, the combination of a field magnet and armature, main field magnet windings, an auxiliary field magnet winding surrounding a part only of one or more of the pole pieces, and a switch for varying and reverse windings the current in the auxiliary winding, substantially as described. 10th. In an electric motor, the combination of a field magnet, an armature, main field magnet windings, auxiliary field magnet and a switch adapted to strengthen the field acting upon the coils under commutation and at the same time to weaken the total flux through the armature. 11th. In an electric motor, the combination of a field magnet, an armature, main field magnet windings, auxiliary field magnet windings, and a switch and a resistance adapted to gradually strengthen the field acting upon the coils under commutation and at the same time to weaken the total flux through the armature, substantially as described. 12th. In an electric motor, the combination of the two sources of magneto motive force, acting upon separate magnetic circuits terminating in a common pole piece, and means for varying at will within wide limits that one of the two sources of magneto motive force which does not furnish the flux for the coils under commutation to vary the speed of the motor without materially decreasing the flux through the coils under commutation, substantially as described.

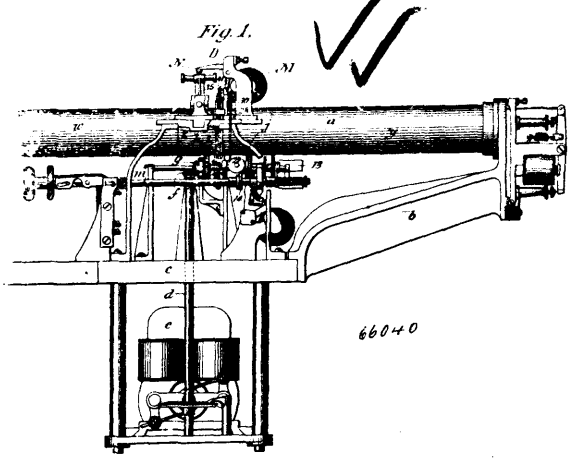
No. 66,039. Method of Producing Calcium Carbide.
(*Méthode de production de carbure de calcium.*)



Corydon L. Wilson, Charles Muma, John W. Unger, Henry Schneckloth, Amos P. Brosius, Joseph C. Kuchel and Robert H. Smith, all of Holstein, Iowa, U.S.A., 31st January, 1900; 6 years. (Filed 26th May, 1898.)

Claim.—1st. The process of producing calcium carbide which consists in first causing the base and sides of the furnace or receptacle in which the process is carried on, to be lined with calcium carbide in grandular form, and then causing a mixture of lime and carbon to be fed into the space between the electrodes or the said arc so that the molten product may run into the base and sides covered with calcium carbide. 2nd. The process of producing calcium carbide which consists in first causing lime and carbon, or their equivalents to be pulverized, then causing them to be commingled, then causing the mixture to be compressed into blocks or sticks, then causing the blocks or sticks to be connected, then causing the furnace or receptacle in which the calcium carbon is to be melted to be lined with pulverized or grandulated calcium carbide, then causing an electric arc to be established, and finally causing the sticks or blocks to be fed into the said arc. 3rd. A apparatus for producing calcium carbide, comprising a furnace a lining of calcium carbide loosely arranged within the furnace wall, means for establishing an electric arc within the furnace and means for feeding lime and carbon into said arc, for the purposes stated.

No. 66,040. Printing Telegraph. (*Télégraphe imprimant.*)

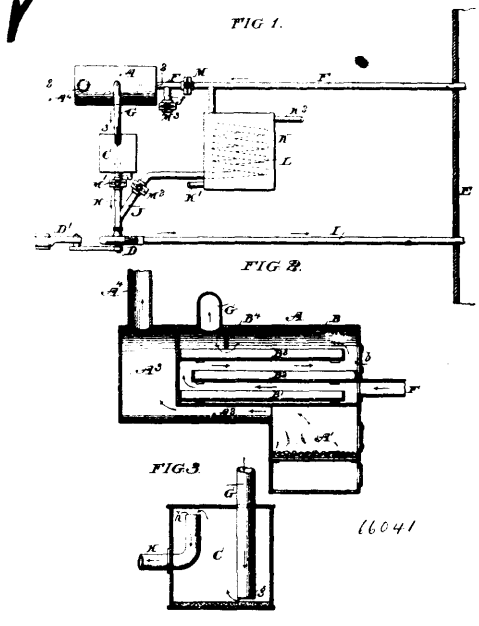


Charles Luman Buckingham, New York City, and Emil Germann, Brooklyn, both in the State of New York, U.S.A., 31st January, 1900; 6 years. (Filed 23rd March, 1898.)

Claim.—1st. In a printing telegraph apparatus, a stationary tubular support, a sheet of paper formed into a tube having a row of holes perforated in the lap of said tube, an escapement wheel, a spur wheel meshing with said row of holes and a train of gearing for positively connecting the escapement and spur wheels together, as and for the purpose set forth. 2nd. In a printing telegraph, a stationary support, a paper tube having a row or series of perforations, a step-by-step wheel, a train of gearing positively connected with said step-by-step wheel and a spur wheel gearing with the holes in said sheet of paper which is positively driven with said step-by-step wheel and train of gearing, as and for the purpose set forth. 3rd. In a printing telegraph, a stationary tubular support, a sheet of paper formed into a tube movable thereon, a feed wheel positively engaging with said sheet of paper, a step-by-step actuating mechanism and a train of gearing for positively connecting said actuating mechanism with said wheel in engagement with said paper tube. 4th. In a printing telegraph, a tubular support for a sheet of paper, a paper tube upon which a message is to be printed, a wheel whose teeth engage with said paper tube, means for rotating said wheel circumferentially around said tubular support with a paper blank, means for rotating said wheel about its own axis for feeding said paper tube axially from one line position to the next, a step-by-step actuating mechanism and a train of gearing positively connecting said actuating mechanism with said feed wheel, as and for the purpose set forth. 5th. In a printing machine, a stationary support, a tubular blank adapted to be rotated thereon, having a row of holes along its seam, a feed wheel whose teeth mesh with said holes, a wheel carrying said feed wheel circumferentially around said tubular support and paper blank, a train of gearing connected therewith, an escapement for controlling the step-by-step action of said train of gearing and circumferential and inclined grooves cut in the periphery of said stationary support, as and for the purpose set forth. 6th. In a printing telegraph, the combination of a stationary support a having circumferential grooves r^1, s^1, t^1, inclined grooves v^1, w^1, x^1, gear wheel l, feed wheel f^1, an escapement wheel i and a train of gearing for positively connecting wheels l and f^1 together, as and for the purpose set forth. 7th. In a printing telegraph, a stationary support a, a tubular blank upon which messages are printed in page form, a row of holes perforated in said blank parallel with its axis, a feed wheel for engaging with said row of holes, and an auxiliary wheel for carrying said feed wheel circumferentially around said stationary support, means for holding said feed wheel against rotation upon its own axis during the printing of lines, and cams for causing rotation of said wheel upon its axis between the end of one line and the beginning of the next, as and for the purpose set forth.

8th. In a printing telegraph, the combination of a fixed support, a paper tube upon which messages are printed, a row of holes perforated in said tube parallel with its axis, a spur wheel meshing with said row of holes, and an auxiliary wheel within which said spur wheel is journalled, as and for the purpose set forth. 9th. In a printing machine, a stationary support for a paper tube, a tube upon which messages are printed in page form having a series of holes in said tube, a feeding device meshing with said row of holes, means for moving said feeding device around said tube, and means for connecting said feeding device positively with a step-by-step escapement motor. 10th. In a printing telegraph, a support for carrying a paper tube, a sheet of paper in tubular form having a row of holes perforated parallel with its length, a feed wheel meshing with said row of holes, a ring wheel moving outside of said tubular support carrying said feed wheel and circumferential grooves formed within the exterior of such support, as and for the purpose set forth. 11th. In a printing telegraph, the combination of a paper tube upon which messages are printed, a spur wheel for feeding the same circumferentially and axially, a ring wheel for carrying said feed wheel, a dogging disc q^1, and a pallet or dog p^1 for holding the teeth of said feed wheel in their desired position. 12th. In a printing telegraph, a fixed tubular support, a feed wheel f^1, a bracket within which said feed wheel is journalled, said bracket being connected to and forming part of a ring wheel l for carrying wheel q^1, as and for the purpose set forth. 13th. The combination of feed wheel f^1, a ring carrying wheel l having spur teeth upon its periphery, guiding surfaces s and a bracket formed of parts a^1, c^1, b^1, as and for the purpose set forth. 14th. In a printing machine, a stationary tubular support, a paper tube upon which messages are to be printed, a row of holes perforated therein parallel with its axis, a feed wheel f^1, a ring wheel l for carrying said feed wheel, circumferential and inclined grooves cut in the periphery of said tubular support, and a slot w^1 cut in said support parallel with its axis, as and for the purpose set forth. 15th. In a printing machine, the combination of a stationary support, a paper tube upon which messages are to be printed, a feed wheel for moving said tube, means for carrying said feed wheel around the tube, circumferential grooves cut in said stationary support and a groove u^1 within which said feed wheel is adapted to rotate, as and for the purpose set forth. 16th. In a printing machine, a stationary support, a paper tube upon which messages are to be printed, a feed wheel connecting with said paper tube, a wheel l carrying said feed wheel around the tube, having flanges s, and grooved rollers for supporting said wheel, as and for the purpose set forth. 17th. A tubular typewriter or telegraph blank, upon which messages or other matter is to be printed, with a lapped edge having a row of equidistant holes in the lap. 18th. A tubular typewriter or telegraph blank, upon which messages or other matter is to be printed, with a lapped edge parallel to the axis of the tube having a row of equidistant holes in the lap. 19th. In a printing machine, an escapement wheel, two escapement pallets, one movable and the other fixed, and means for manually disengaging said escapement wheel from its fixed pallet whereby the escapement wheel is withdrawn from the fixed rather than from the movable pallet, as and for the purpose set forth. 20th. In a printing machine, a stationary paper support, a tube upon which messages are to be printed, a feed wheel meshing with said tube, a ring wheel carrying said feed wheel, a manual disengaging device, and a unison stops, as and for the purpose set forth. 21st. A stationary support, a paper tube upon which messages are to be printed, a feed wheel gearing with said paper tube, an auxiliary wheel carrying said feed wheel, a train of gearing connected therewith, an escapement for controlling the step-by-step action of said feed wheel, a manual disengaging device for releasing said feed wheel from its pallets, a unison stop for arresting said feed wheel and its train in unison position, and a fly train which is automatically put in connection with said feeding apparatus to modify or slow its movement upon disengagement of the escapement wheel from its pallets. 22nd. In a printing machine, a stationary tubular support a for carrying a paper tube, said support being formed in three parts w, x, y, in the part x of which are cut circumferential and inclined grooves, as and for the purpose set forth. 23rd. In a printing telegraph system, a tubular support having an opening 21, a press pad within said tubular support, and a type wheel on the exterior thereof, a rubber band or belt 19, mounted within said tube, a ratchet wheel 16, and a pawl 15, for actuating said belt, as and for the purpose set forth. 24th. In a printing telegraph, the combination of a message blank formed into a paper tube having a row of equidistant holes parallel with its axis, a tubular support having circumferential and diagonal grooves, a slot u^1 across said grooves lengthwise of the tube, a gear train for rotating the paper tube, a motor for driving said train, an escapement therefor, means for disconnecting the escapement wheel from its pallets, and a setting arm which is moved within the teeth of the wheel f^1 while the latter is in line with slot u^1 and which is moved away from the teeth of said wheel when it is desired to insert a new message blank. 25th. In a printing machine, the combination of a message blank formed into a paper tube having a row of equidistant holes parallel with its axis, a tubular support having circumferential and diagonal gooves, a slot u^1 across said grooves lengthwise of the tube, a gear train for rotating the paper tube, a wheel f^1 whose teeth project through the holes in said paper tube into the circumferential and diagonal grooves of said support, and a removable directing arm, for adjusting the teeth of wheel f^1, which, during normal operation, serves to guide the teeth of said wheel into circumferential grooves in passing slot u^1, as and for the purpose set forth. 26th. In a printing machine, the combination of a message blank formed into a paper tube having a row of equidistant holes parallel with its axis, a tubular support having circumferential and diagonal grooves, a slot u^1 across said grooves lengthwise of said tube, a gear train for rotating the paper tube, a wheel f^1, a removable directing arm for adjusting the teeth of said wheel to enter said circumferential grooves after leaving slot u^1, and a hand device for controlling said directing device for removing the same from the teeth of said wheel during the insertion of a message blank and for replacing said guide during the printing of a message, as and for the purpose set forth. 27th. In a printing machine, the combination of a stationary support, a paper tube, a step-by-step or escapement wheel j, a train of gear, feed wheel f^1, a manual disconnecting apparatus, cam 36, means for lowering said cam through said manual disconnecting apparatus, and means, substantially as as described, whereby said wheel f^1 may be raised and lowered, as and for the purpose set forth. 28th. In a printing machine, the combination of a stationary support, a tube of paper thereon having a row of holes, circumferential and diagonal slots in said fixed support, feed wheel f^1, a step-by-step or escapement wheel, a train of gearing joining said step-by-step or end feed wheels and means for raising the feed wheel from the paper tube at the end of a message, as and for the purpose set forth. 29th. In a printing machine, the combination of a stationary support, a paper tube mounted thereon having a row of holes at its lap, a step-by-step or escapement wheel, a feed wheel gearing with said row of holes, a train of gearing joining the escapement and feed wheels, a cam with which the bearings of the feed wheel engage, and a manual device for disconnecting the escapement wheel from its pallets at the end of a message. 30th. In a printing machine, the combination of a stationary, tubular support, a paper tube, a feed wheel engaging therewith, an escapement or step-by-step wheel, a train of gearing connecting said escapement and feed wheels, and means for raising and lowering said feed wheel, for the purpose set forth. 31st. In a printing machine, the combination of a stationary support, a tube of paper, a feed wheel, an escapement wheel, a train of gearing joining said wheels, a cam for raising said feed wheel from the paper tube at the end of a message and a manual device for operating said cam for the purpose set forth. 32nd. In a printing machine, the combination, substantially as described, of a stationary, tubular support, a paper tube, feed wheel f^1, ring wheel l, a pivoted support 40, carrying arms 41, 38, cam 36, spring 37, circumferential grooves in said tubular support, escapement wheel i, unison stop 7 and 18, manual disconnecting rod n^{11}, and means whereby the movement of said rod is communicated both to lower cam 36 and disconnect escapement wheel j from its pallets, as and for the purpose set forth.

No. 66,041. Method and Apparatus for Fumigating and Extinguishing Fires in closed Compartments. (*Méthode et appareil pour fumiger et éteindre les feux dans les compartments fermés.*)



Thomas Adam Clayton, Philadelphia, Pennsylvania, U.S.A., 31st January, 1900; 6 years. (Filed 22nd August, 1899.)

Claim.—1st. The method of fumigating closed compartments which consists in generating fumes in a furnace, both the intake and outlet of which are connected to the compartment to be treated causing a forced circulation through the furnace and compartment

until the circulating fumes or gases are of the desired strength and then cutting the furnace out of the circulating conduit and maintaining the circulation through the compartment until the gasses have cooled down. 2nd. The method of fumigating closed compartments which consists in generating fumes in a retort, both the intake and outlet of which are connected to the compartment to be treated causing a forced circulation through the retort and compartment until the circulating fumes or gases are of the desired strength and then cutting the retort out of the circulating conduit and maintaining the circulation through the compartment and a system of conduits outside of the compartments until the gases have cooled down. 3rd The method of fumigating closed compartments which consists in generating fumes in a furnace, both the intake and outlet of which are connected to the compartment to be treated causing a forced circulating through the furnace and compartment until the circulating fumes or gases are of the desired strength and then cutting the furnace out of the circulating conduit and maintaining the circulation through the compartment and a refrigating apparatus connected in the conduit until the gases have cooled down. 4th. The method of fumigating closed compartments which consists in heating sulphur in the retort of a furnace, connecting the intake and outlet of said retort with a closed compartment, maintaining a circulation of the air and gases through the compartment and retort until the gases have reached the condition required and then cutting the retort out of the circulating conduit and maintaining the circulation through a refrigerating apparatus. 5th. The combination of a closed compartment, a furnace, conduits connecting the intake and outlet of said furnace with the closed compartment, a bypass conduit cutting out the furnace, valves controlling the course of the gases through furnace and bypass, a circulating device connected in the conduit to maintain forced circulation either through the furnace or the bypass and a refrigerating device situated in the circuit as specified. 6th. The combination of a closed compartment, a furnace heated retort, conduits connecting the intake and outlet of said furnace retort with the closed compartment, a bypass conduit cutting out the furnace retort, valves controlling the course of the gases through the furnace retort and bypass, a circulating device connected in the circuit to maintain forced circulation either through the furnace retort or the bypass and a refrigerating device situated in the circuit as specified. 7th. The method of extinguishing fire in closed compartments which consists in generating outside of said compartment gases incapable of supporting combustion forcing such gases into said compartment until the fire is subdued and then causing said gases to circulate through said compartment and a refrigerating apparatus until the heat of the compartment is reduced to a safe degree. 8th. The method of extinguishing fires in closed compartments which consists in generating gases of a character incapable of supporting combustion in a furnace having its intake and outlet connected with the compartment by circulating conduits, maintaining a forced circulation through the furnace and compartment until the fire is extinguished, then cutting out the furnace from the circulating conduits and maintaining a further circulation through the chamber and a cooling apparatus connected in the conduits in order to reduce the temperature of the chamber and finally admitting air to the chamber by introducing it gradually through the circulating conduits.

No. 66,042. Turning Tool. (*Outil à tourner.*)

William Allen Pendry, Detroit, Michigan, U.S.A., 31st January, 1900; 6 years. (Filed 20th November, 1899.)

Claim.—1st. A sharpening device, a turning tool stationary in working position, a rotatable shaft carrying said tool, and means to partially rotate said shaft to compensate for the wear in sharpening the tool, substantially as described. 2nd An annular turning tool stationary in working position, a shaft carrying said tool, and a rotatable device carrying said shaft, said turning tool rotatable transversely of the length of said shaft, substantially as described. A turning tool, a rotatable shaft carrying said tool, and a rotatable device carrying said shaft, said tool stationary in working position, substantially as described. 4th. A rotatable device, a turning tool stationary in working position, a shaft eccentrically mounted upon said device and carrying said tool, and a chuck arranged at right angles to said shaft, substantially as described. 5th. A rotatable device, a sharpening device, a turning tool, a shaft carrying said tool mounted upon said rotatable device, and means to give a partial rotation to said shaft, substantially as described. 6th. A rotatable cylinder, a turning tool, a shaft carrying said tool mounted in said cylinder, and mechanism housed within the cylinder and actuated thereby to give a partial rotation to said shaft, substantially as described. 7th. A rotatable device, a turning tool, a shaft mounted in said device carrying said tool at right angles thereto, and means to lock said device in a working position, substantially as described. 8th. A rotatable device, a turning tool, a shaft mounted in said device carrying said tool, means to lock said device in working position, and means to give to said shaft a partial rotation, substantially as described. 9th. A rotatable device, a turning tool, a shaft mounted in said device carrying said tool, means to lock said device in working position, and means to give to said shaft a partial rotation, and means to reciprocate said device, substantially as described. 10th. A rotatable device, a turning tool stationary in operation, a shaft mounted in said device carrying said tool, means to lock said device in a working position, and means automatically rotate said device, substantially as described. 11th. A rotatable device, an annular turning tool constructed with a cutting edge at its periphery, a shaft carrying said

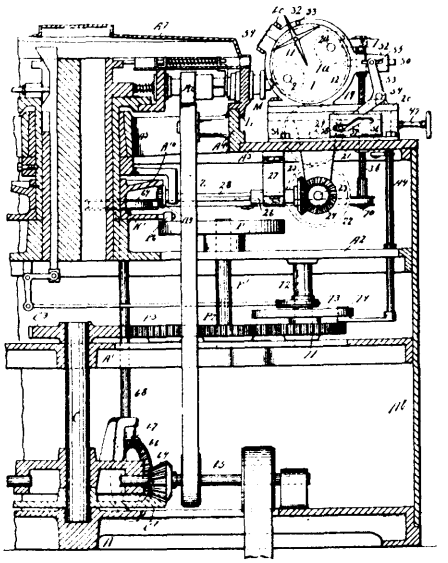
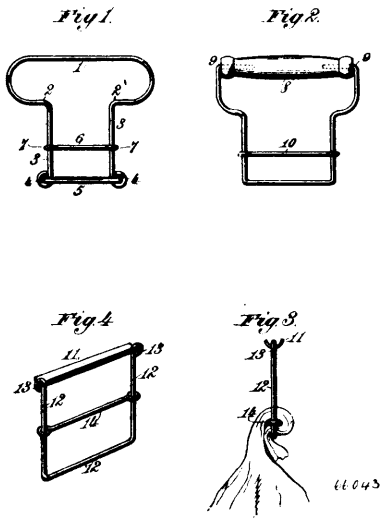


Fig 1. 66,042

tool mounted in said device, means to automatically rotate said device, and means to automatically give to said shaft a partial rotation, substantially as described. 12th. A rotatable device, a turning tool stationary in operation, a shaft carrying said tool mounted in said device, means to give to said tool a step by step partial rotation, and means to automatically sharpen said tool, substantially as described. 13th. A turning tool, means to carry said tool from a working position to a non-working position, and to return the tool to a working position, and a sharpening device to sharpen the tool when in a non-working position, said tool being stationary when in working position, substantially as described. 14th. A turning tool stationary in operation, means to carry said tool from a working position to a non-working position, and to return the tool to working position, a sharpening device to sharpen the tool when in a non-working position, and additional means to move the tool toward and from the work, substantially as described. 15th. Plural turning tools, means to carry said tools from a working position to a non-working position and to alternately return the tools to working position, a sharpening device to sharpen said tools when in a non-working position, and means to shift said sharpening device toward and from a working position, substantially as described. 16th. A turning tool, a shaft to carry said tool, a rotatable device to carry said shaft and the turning tool from a working position to a non-working position, mechanism to reciprocate said device, and means to turn said shaft upon the reciprocation of said device, substantially as described. 17th. A turning tool, a shaft to carry said tool, a rotatable device to carry said shaft and its tool from a working position to a non-working position, means to reciprocate said device, means to turn said shaft upon the reciprocation of said device, and means to adjust said reciprocatory mechanism at right angles to the line of its reciprocation, substantially as described. 18th. Multiple turning tools, a sharpening device, and means to interchange the position of said tools to bring said tools consecutively into position to be sharpened by said device and to return said tools consecutively to working position, said tools being stationary when in working position, substantially as described. 19th. Multiple turning tools, a shaft carrying each of said tools, means to interchange the position of said tools, and mechanism to give a partial rotation to each of said shafts, substantially as described. 20th. Multiple turning tools stationary in operation, a shaft carrying each of said tools, and a rotatable device carrying said shafts, substantially as described. 21st. Multiple turning tools stationary in operation, a shaft carrying each of said tools, a device carrying said shafts, and means to give a partial rotation to said device, substantially as described. 22nd. A rotatable device, multiple turning tools stationary in operation, and shafts eccentrically mounted upon said device carrying said tools, substantially as described. 23rd. A turning tool stationary in operation, a device to carry said tool from a working position to a non-working position and to return the tool to working position, means to reciprocate said device, and means to rotate said shaft and its tool when out of working position, substantially as described. 24th. A rotatable cylinder, a shaft carried by the cylinder, a turning tool mounted upon the shaft, means whereby the rotation of the cylinder shall effect a partial rotation of the shaft, and means to hold the shaft stationary when the tool is in a working position, substantially as described. 25th. A rotatable device, mechanism to reciprocate the device, a

shaft carried by said device, a turning tool upon said shaft, a grinding wheel, and means to withdraw the reciprocatory mechanism from working position and to withdraw the grinding wheel from working position before said device is rotated, substantially as described. 26th. A rotatable device, mechanism to reciprocate the device, a shaft carried by said device, a turning tool upon said shaft, a grinding wheel, means to retract the reciprocatory mechanism from working position and to withdraw the grinding wheel from working position before said device is rotated, said grinding wheel being withdrawn from working position at or near the limit of the retracting movement of the reciprocatory mechanism, and means to restore the grinding wheel to working position when the reciprocatory mechanism begins to advance, substantially as described.

No. 66,043. Bag Carrier and Closure.
(*Porte et fermeture de sac.*)



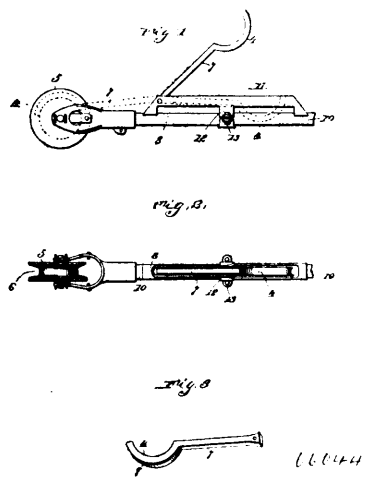
Eldridge James Smith, Washington, Columbia, U.S.A., 31st January, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. As a new article of manufacture, a combined bag closure and carrier, comprising a frame formed from a single piece of wire having parallel side arms and a bag embracing cross bar, combined with a hand holding portion formed of a channeled metal strip having openings at its opposite ends to receive the free ends of the said parallel side arms, and a locking bar slidably mounted upon said frame and movable to and from the cross bar. 2nd. As a new article of manufacture, a combined bag closure and carrier, comprising a wire frame having a hand holding portion at one end, a bag embracing cross bar at the opposite end and a locking bar slidably mounted upon said frame and movable to and from the said cross bar, said locking bar being formed of wire having its opposite ends bent to form eyes which encircle the wire frame. 3rd. As a new article of manufacture, a combined bag closure and carrier, comprising hand holding means provided with openings at the opposite ends thereof, a wire frame having a bag embracing cross bar and parallel arms, the free ends of which are shaped to enter the openings in said hand holding means, and a locking bar slidably mounted upon said wire frame. 4th. As a new article of manufacture, a combined bag closure and carrier, comprising a substantially U-shaped wire frame having a hand holding portion and a bag embracing portion, and a locking bar slidably supported upon the frame, said locking bar being formed of wire having its opposite ends bent to form eyes which encircle the parallel arms of the frame.

No. 66,044. Trolley Sleeter. (*Trolle pour le grésil.*)

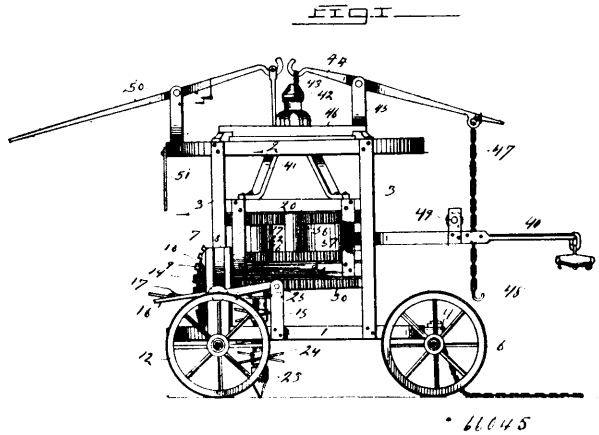
James B. Mock, Fort Wayne, Indiana, U.S.A., 31st January, 1900; 6 years. (Filed 8th January, 1900.

Claim.—1st. In a trolley sleeter of the class named, an ice clearer consisting of a metallic bar formed and curved to lie within part of the groove of a trolley wheel, and provided with a groove for the wire, the groove forming cutting edges to cut the ice, a frame for holding the ice cleaner firmly attached to the trolley pole, an arm for the clearer pivoted to the frame, the arm provided at its pivoted end with extensions adapted to form bearings for a spring, and a spring operating against the said bearings alternately to hold the arm in and out of position. 2nd. In a trolley sleeter of the class



named, an ice clearer consisting of a metallic bar formed and curved to lie within part of the groove of the trolley wheel, and provided with a groove for the wire, the groove forming cutting edges to cut the ice, an arm for holding the same in place secured to the trolley pole, and means to hold the arm in and out of position without changing its connection to the pole. 3rd. In a trolley sleeter of the class named, a frame for holding an ice clearer, an ice clearer provided with an arm pivoted to the frame, the arm provided at its pivoted end with extensions adapted to form bearings for a spring, a spring operating against said bearings alternately to hold the arm in and out of position, and means to attach the frame firmly to the trolley pole.

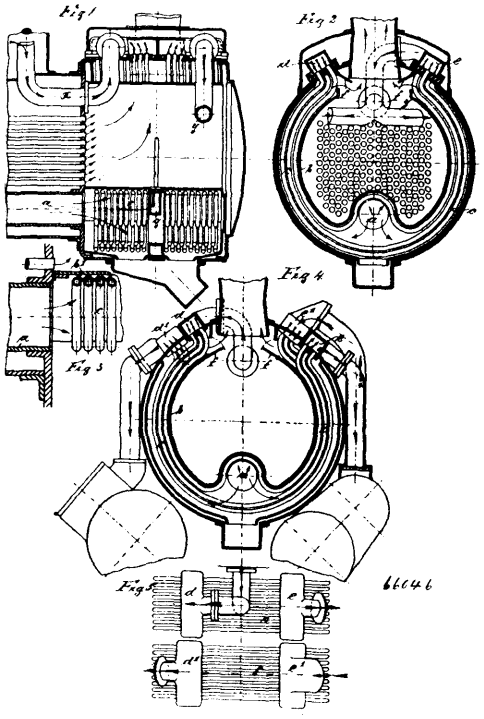
No. 66,045. Post Hole Digger. (*Tarière à trou de poteaux.*)



Ammon B. Spigelmyer, Bannerville, Pennsylvania, U.S.A., 31st January, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—In a post hole digger, a universally adjustable frame, a cage slidably mounted in said frame, means engaging the cage to raise and lower the same, a shaft terminating at its lower end in an auger journalled in said cage, a shaft journalled in the forward end of said cage, a loose gear wheel provided with ratchet teeth on its lower face mounted on said shaft, also a ratchet gear wheel secured to said shaft, and a lever carrying spring pawls engaging said ratchet wheels, whereby a continuous motion is imparted to said auger, substantially as shown and described.

No. 66,046. Tubular Boiler. (*Chaudière tubulaire.*)



Wilhelm Schmidt, Wilhelmshöhe, near Cassel, Hesse-Nassau, Germany, 31st January, 1900; 6 years. (Filed 16th January, 1900.)

Claim.—1st. A tubular boiler with arrangements for obtaining hot gases of different temperatures and for passing these gases according to their temperature into different comparments, so that superheated steam may be obtained from the hot gases with a very small superheater, substantially as described. 2nd. In tubular boilers with superheaters, as hereinbefore described, arranging the superheater tubes inside of an annular channel, which is mounted on the inner wall of the smoke box, in such manner, that the middle part of the same smoke box is not obstructed by the superheater, substantially as described. 3rd. A tubular boiler with superheater, in which one or more rows of superheater tubes are arched to form a distribution channel for the superheating gases, all substantially as described. 4th. In tubular boilers, the combination with a superheater in two divided annular chambers surrounding the chimney, by which the hotter gases divided in the boiler flow in a raising and falling direction before passing into the chimney together with the utilized and consequently cooled gases, substantially as described.

TRADE-MARKS

Registered during the month of January, 1900, at the Department of Agriculture—Copyright and Trade-Mark Branch.

7187. JULES CHARLES DORION, Limoilou, St. Roch de Québec, Nord, Que. Un Papier Poison, Destructeur infaillible des Mouches, Coquerelles, Punaises, Rats, Souris et Insectes des Plantes, etc., 2 janvier, 1900.

7188. WILLIAM PEARSON, Paris, France. Preparation for use in Medicine and Pharmacy, 2nd January, 1900.

7189. ANTOINE CHARLES ANNA LECHENICH, Lostwithiel, Cornwall, England. China Clay and China Stone for the manufacture of Porcelain Stoneware and Pottery, 4th January, 1900.

7190. MICAJAH & Co., Warren, Pennsylvania, U.S.A. Micajah's Medicated Uterine Wafers, 4th January, 1900.

7191. EDOUARD D. MARCEAU, Montreal, Que. Tea, 4th January, 1900.

7192. EDOUARD D. MARCEAU, Montreal, Que. Tea, Coffee and Spices, 4th January, 1900.

7193. THE BRACKMAN & KER MILLING COMPANY, LIMITED, Victoria, B.C. Rolled Oats, 5th January, 1900.

7194. TELLIER, ROTHWELL & Co., Montreal, Que. Washing Blues, 5th January, 1900.

7195. THOMAS ALEXANDER LYTLE AND SAMUEL CRANE, Toronto, Ont. Pickles, Catsup, Relishes, Sauces, Jellies, Jams, Mince Meat, and Maple Syrup, 8th January, 1900.

7196. THE J. D. KING COMPANY, LIMITED, Toronto, Ont. Boots and Shoes, 8th January, 1900.

7197 } THE RATHBUN COMPANY, Deseronto, Ont. Portland Cement, 10th January, 1900.
7198 }

7199. P. W. ELLIS & Co., Toronto, Ont. Watches, Watch Movements and Watch Cases, 10th January, 1900.)

7200. THOMAS BARROW, Longueuil, District of Montreal, Que. Coffee and Spices, 11th January, 1900.

7201. R. A. LISTER & Co., LIMITED, Dursley, England. Centrifugal Cream Separators, 11th January, 1900.

7202. TELLIER, ROTHWELL & Co., Montreal, Que. Washing Blues, 11th January, 1900.

7203. AMERICAN STEEL HOOP COMPANY, New York, N.Y., U.S.A. Steel, Iron, and Manufactures of Steel and Iron, 12th January, 1900.

7204. NETTLEFOLDS, LIMITED, Birmingham and London, England. Iron and Steel Wire and Rolled Iron and Steel, 16th January, 1900.

7205. P. W. ELLIS & Co., Toronto, Ont. Watches, Watch Movements and Watch Cases, 16th January, 1900.

7206. EDWARD THOMPSON, Orangeville, Ont. Men's, Youths' and Boys' Ready-made Clothing, 16th January, 1900.

7207. GEORGE A. SIMARD, Montreal, Que. Name of Newspaper: *Le Petit Journal*, 16th January, 1900.

7208. GEORGE WASHINGTON SLAUGHTER, Montreal, Que. Medicinal Preparations and particularly Herb Tablets, 22nd January, 1900.

7209. J. and N. FAIR, Clinton, Ont. Flour, 23rd January, 1900.

7210. A. M. BENINGER & COMPANY'S SUCCESSORS, Borough of Manhatten, New York, N.Y., U.S.A. Medicinal Preparation, 23rd January, 1900.

7211. GEORGE GORDON McPHERSON, Toronto, Ont. A Volatile Sterilizing and Antiseptic Compound, 24th January, 1900.

7212. JAMES FERRIER, Montreal, Que., trading as THE CANADA HORSE SHOE NAIL COMPANY. Horse Shoe Nails, 25th January, 1900.

7213. DANFORTH CHEMICAL COMPANY, Leominster, Massachusetts, U.S.A. Powder called Bug Death, 25th January, 1900,

7214. ANGELO MARIANI, Paris, France. Pilules, 25 janvier, 1900.

7215. ANGELO MARIANI, Paris, France, Un Vin Medicinal, 25 janvier, 1900.

7216. ALBERT HERBERT, Montreal, Que. Certain named articles of Groceries, 26th January, 1900.

7217. J. H. STEWART, Antigonish, N.S. Tea, 26th January, 1900.

7218. E. N. CUSSON & Co., Montreal, Que. Cigars, 27th January, 1900.

7219. THE JOLIETTE TOBACCO COMPANY, Joliette, Que. Tobacco, 29th January, 1900.

7220. OHLHAVER GEBRUDER, Hamburg, German Empire. Cream Separators and Accessories for the same, 31st January, 1900.

7221. ROBERT L. HALL, Detroit, Michigan, U.S.A. Soaps, 31st January, 1900

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11070. A.O.U.W. MEMBERS REGISTER. A. Stewart, Toronto, Ont., 2nd January, 1900.

11071. THE GOOD SAMARITAN. (Song.) Words by James Montgomery. Music by G. W. Chadwick. The John Church Co., Cincinnati, Ohio, U.S.A., 2nd January, 1900.

11072. AT REST—BUT READY. (Waltz.) By W. J. Ryan, Battleford, Saskatchewan, N.W.T., 2nd January, 1900.

11073. THE LIEUTENANT GOVERNORS OF UPPER CANADA AND ONTARIO, 1792-1899. By D. B. Read, Q.C. William Briggs, Toronto, Ont., 2nd January, 1900.

11074. INSURANCE PLANS OF BYNG INLET, DEPOT HARBOR, HEPWORTH, HOLSTEIN, SAULT STE. MARIE, SIMCOE, STURGEON FALLS, THAMESFORD, VITTORIA AND WOODSTOCK, IN ONTARIO; GRANBY, GRAND'MERE AND LAKE MEGANTIC, IN QUEBEC; SACKVILLE, IN NEW BRUNSWICK; AND WINDSOR, IN NOVA SCOTIA. Charles Edward Goad, Montreal, Que., 2nd January, 1900.

11075. INSURANCE PLANS OF CYPRESS RIVER, DAUPHIN, ELKHORN, GRISWOLD, HAMIOTA, RUSSELL, STONEWALL AND WINKLER, IN MANITOBA; EDMONTON AND STRATHCONA, IN ALBERTA; MEDICINE HAT AND MOOSE-JAW, IN ASSINIBOIA; ASHCROFT, CHILLIWACK, CRANBROOK, FERNIE, FORT STEELE, GOLDEN, GRAND FORKS AND COLUMBIA, GREENWOOD, MIDWAY, NELSON AND SANDON, IN BRITISH COLUMBIA. Charles Edward Goad, Montreal, Que., 2nd January, 1900.

11076. HAIL CANADA! FAIR CANADA! Patriotic song. Words and music by J. I. Manthorne, Toronto, Ont, 2nd January, 1900.

11077. D. J. GILLON'S MAP OF PART OF SEINE RIVER. D. J. Gillon, Fort Frances, Ont., 2nd January, 1900.

11078. 1900. SOUVENIR OF THE HOLY YEAR. THE CATHOLIC ALMANAC OF ONTARIO AND CLERGY LIST. Mrs. Emma O'Sullivan, Toronto, Ont., 2nd January, 1900.

11079. A MESSAGE. Song. John Miller, Middlesex, N.B., 2nd January, 1900.

11080. DR. KOHR'S RESTORINE. (Book.) The Dr. Kohr Medicine Company, Montreal, Que., 2nd January, 1900.

11081. A BIT OF ATLANTIS. By Douglas Erskine. Illustrated by H. Julien and R. G. Mathews. A. T. Chapman, Montreal, Que., 3rd January, 1900.

11082. CHRISTMAS '99. March and Two-step. By Elmer H. Smith. Amey & Hodgins, Toronto, Ont, 4th January, 1900.

11083. THE CANADIAN MAGAZINE. January, 1900. The Ontario Publishing Company (Ltd.), Toronto, Ont., 4th January, 1900.

11084. THE DRUMMER'S PASTORAL CALL. Story. By E. Ryerson Young, Jr., Toronto, Ont., 8th January, 1900.

11085. THE PURPLE HEATHER. Song. Words by G. Hubi Newcombe. Music by Hamilton Gray. John Hanna, Toronto, Ont., 8th January, 1900.

11086. REAL ESTATE CHRONICLE. Volume I. No. 1. January, 1900. John Y. Caldwell, Ottawa, Ont., 8th January, 1900.

11087. THE FARMER'S ADVOCATE AND HOME MAGAZINE. Christmas, 1899. The William Weld Company (Ltd.), London, Ont., and Winnipeg, Man., 8th January, 1900.

11088. THE ABSTAINERS GUARANTEED INVESTMENT PLAN OF LIFE INSURANCE. (Premium Rates, Tables and Contract.) H. Sutherland, Toronto, Ont., 8th January, 1900.)

11089. LOVELL'S LOOSE LEAF INVOICE FORM. (Marked A.) Robert James Lovell, Toronto, Ont., 9th January, 1900.

11090. LOVELL'S LOOSE LEAF INVOICE FORM. (Marked B.) Robert James Lovell, Toronto, Ont., 9th January, 1900.

11091. MY JANE. Waltz Song. Words by "Rene." Music by Lee Orean Smith. Whaley, Royce & Co., Toronto, Ont., 10th January, 1900.

11092. DAT GINGAH-TINTED COON DONE STOLE A—MAH BABY. Words by George Strayer Maxwell. Music by Lee Orean Smith. Whaley, Royce & Co., Toronto, Ont., 10th January, 1900.

11093. GAY MAM'SELLE. French-Hibernian Chansonnette. Words by Mark E. Swan. Music by Chas. E. Hart. Whaley, Royce & Co., Toronto, Ont., 10th January, 1900.

11094. THE CANADIAN INVESTMENT GUIDE. The Investment Guide Company, Toronto, Ont., 10th January, 1900.

11095. PLAN OF PROPOSED HIGH LEVEL GRAVING DOCK AT LONGUE POINTE. Thomas J. Darling, Montreal, Que., 12th January, 1900.

11096. BRIGGS' LEDGER SYSTEM. (Book.) F. W. Briggs, Montreal, Que., 12th January, 1900.

11097. MEMBERS OF GUELPH CONTINGENT TO SOUTH AFRICAN WAR. (Photograph) W. Burgess & Son, Guelph, Ont., 12th January, 1900.

11098. CANADIAN PRICE LIST, L. MARTIN & Co., MANUFACTURERS OF PURE LAMP BLACK. L. Martin & Co., Philadelphia, Pennsylvania, U.S.A., 13th January, 1900.

11099. BUT HOW—CAN YOU HELP IT. Words and Music by J. M. Gould, Toronto, Ont., 13th January, 1900.

11100. LITTLE CANADIANS. By Elizabeth Rollit Burns. Illustrations by Miss Mary M. Phillips. (Booklet.) Elizabeth Rollit Burns, Montreal, Que., 13th January, 1900.

11101. CANADIAN NATIONAL HYMN. Words by Edwin Crowell. Music by Arch. Porter. Edwin Crowell, Chegoggin, N.S., 13th January, 1900.

11102 MANUEL DE L'INSTITUTEUR CATHOLIQUE DE LA PROVINCE DE QUEBEC. Préparé par Paul de Cazes, Quebec, Qué., 16 Janvier, 1900.

11103. CANADIAN DRILLS AND EXERCISES No. 2. HOW THE FAIRIES CHOSE THEIR QUEEN. (Book.) By Edith LeLean, Toronto, Ont., 16th January, 1900.

11104. COME BID YOUR SOLDIER BOY ADIEU. (Song) Words and Music by Rebecca Jane Balkwill, Township of East Whitby, Ont., 16th January, 1900.

11105. HENDERSON'S MANITOBA, NORTH-WEST TERRITORIES AND WESTERN ONTARIO GAZETTEER AND DIRECTORY, 1900. The Henderson Publishing Co., Limited Liability, Winnipeg, Man., 17th January, 1900.

11106. THE CIRCUIT GUIDE, No. X. SPRING ASSIZES, 1900. (Book.) George ALLAN KINGSTON, Toronto, Ont., 17th January, 1900.

11107. THE READERS' REFERENCE BOOK. Albert C. Berrie, Turtle Creek, N.B., 18th January, 1900.

11108. CANADA FIRST. (Song.) Words by John H. Bernard. Music by Roberta Geddes-Harvey. Mary C. Grundy, Winnipeg, Man., 18th January, 1900.

11109. HURRAH FOR THE UNION JACK. (Song.) Words by John H. Bernard. Music by Roberta Geddes-Harvey. Mary C. Grundy, Winnipeg, Man., 18th January, 1900.

11110. THE INSTRUCTION OF CHILDREN IN REGARD TO THEIR DUTIES TO THE LOWER ANIMALS. Published in the "Educational Record." (Temporary Copyright.) Lilian B. Robbins, Montreal, Que., 18th January, 1900.

11111. KNIGHTS OF THE CROSS. By Henryk Sienkiewicz. (Book.) George N. Morang & Co (Ltd.), Toronto, Ont., 19th January, 1900.

11112. LESSONS IN SKATING. With Suggestions respecting Hockey, its Laws, &c. By George A. Meagher. George N. Morang & Co (Ltd.), Toronto, Ont., 19th January, 1900.

11113. DIRECTORY OF CANADIAN NEWSPAPERS, 1900. The Central Press Agency (Ltd.), Toronto, Ont., 19th January, 1900.

11114. A WAR SONG. Words by Richard Scrace. Music by Roberta Geddes-Harvey, Mus.Bac. Roberta Geddes-Harvey, Guelph, Ont., 22nd January, 1900.

11115. THE SPIRIT OF THE NORTH. And other Poems. By A. Evelyn Gunne, Rat Portage, Ont., 23rd January, 1900.

11116. SOUTH AFRICAN WAR CORRESPONDENCE. Published in the "Montreal Gazette" and "Halifax Chronicle." (Temporary Copyright.) The National Press Agency (Ltd.), London, England, 23rd January, 1900.

11117. CANADIAN DRILLS AND EXERCISES, No. 1. FANCY FLAG DRILL. By Edith Le Lean, Toronto, Ont., 23rd January, 1900.

11118. A MEMORIAL. (Lithograph.) Charles M. Hall and Herbert J. Cozens, Toronto, Ont., 23rd January, 1900.

11119. IN NAPLES FAIR. (Song.) Words by Charles Horwitz. Music by Frederick V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 23rd January, 1900.

11120. JUST DRY AWAY YOUR TEARS. (Song.) Words by Charles Horwitz. Music by Frederick V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 23rd January, 1900.

11121. SHE'S A PRINCESS JUST THE SAME. (Song.) Words by Charles Horwitz. Music by Frederick V. Bowers. Hill, Horwitz and Bowers, Chicago, Illinois, U.S.A., 23rd January, 1900.

11122. WAIT. (Song.) Words by Charles Horwitz. Music by Frederick V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 23rd January, 1900.

11123. WHEN I THINK OF YOU. (Song.) Words by Charles Horwitz. Music by Frederick V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 23rd January, 1900.

11124. YOU'RE GETTING KIND OF DISTANT IN YOUR WAY. (Song.) Words by Charles Horwitz. Music by Frederick V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 23rd January, 1900.

11125. GOLDEN MOMENTS No. 2. VERY EASY PIANO SOLOS. Arranged by Paul Kellar. The Nordheimer Piano & Music Company, (Ltd.), Toronto, Ont., 24th January, 1900.

11126. LONDON TIMES NEWS AND VIEWS, No. 2. (Book.) The *Globe* Printing Company, Toronto, Ont., 24th January, 1900.

11127. THE OLD FAITH AND THE NEW PHILOSOPHY. By G. J. Low, D.D. William Briggs, Toronto, Ont., 24th January, 1900.

11128. FRASER'S SCOTTISH ANNUAL. Edited by Alexander Fraser, Toronto, Ont., 25th January, 1900.

11129. HOCKEY. (Book.) By Arthur Farrell, Montreal, Que., 25th January, 1900.

11130. I LOVE YOU, YES I DO. Words and Music by J. M. Gould, Toronto, Ont., 27th January, 1900.

11131. THE CANADIAN LAW LIST. (Hardy's.) 1900. Edited by Henry Cartwright, Toronto, Ont., 27th January, 1900.

11132. THE FAITH-CUP OF THE WHITE MEN. By Rudyard Kipling. W. A. Fraser, Toronto, Ont., 27th January, 1900.

11133. THE LINE FENCES ACT. Annotated. By James Morrison Glenn, Q.C., LL.B. The Municipal World, St. Thomas, Ont., 29th January, 1900.

11134. THE IDEAL INCOME BOND. (Book.) The London Life Insurance Company, London, Ont., 29th January, 1900.

11135. THE CANADIAN CONTINGENT MARCH. By Byron C. Tapley, St. John, N.B., 29th January, 1900.

11136. CANADIAN BROOM SONG. Words and Music by S. T. Church. Whaley, Royce & Co., Toronto, Ont., 29th January, 1900.

11137. LADYSMITH WALTZES. By W. D. Shanks. The Anglo-Canadian Music Publishers' Association, (Ltd.), London, England, 29th January, 1900.

11138. CANADIAN CONTINGENT. March and Two-Step. By Edward W. Miller. The Anglo-Canadian Music Publishers' Association, (Ltd.), London, England, 29th January, 1900.

11139. HOW TO SELL THE STORY OF SOUTH AFRICA. (Book.) James Walter Lyon, Guelph, Ont., 30th January, 1900.

11140. SNOW'S LEGAL COMPENDIUM, 1900. John Lovell & Son, Montreal, Que., 31st January, 1900.