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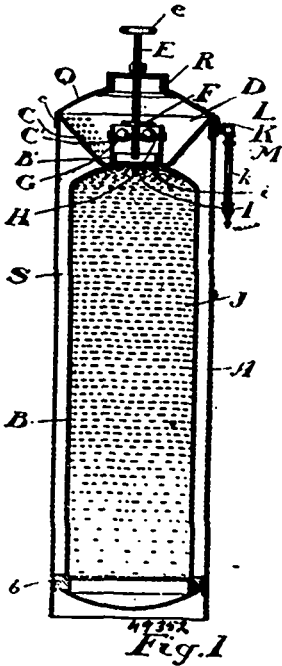
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INVENTIONS PATENTED.

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No. 49,352. Fire Extinguisher. (*Extincteur d'incendie.*)

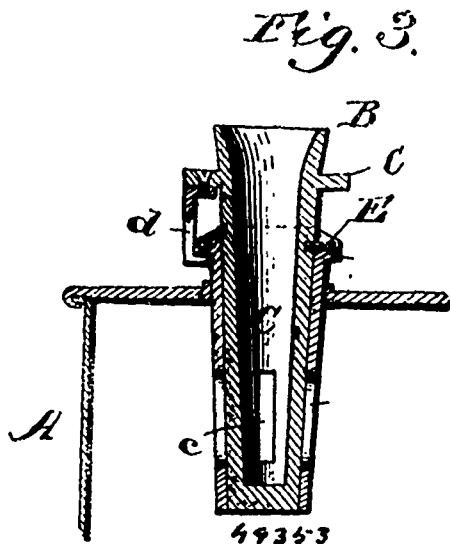


James Henry Byrns and George William Booth, both of Toronto, Ontario, Canada, 2nd July, 1895; 6 years.

Claim.—1st. In a hand fire extinguisher, the combination with two cylinders forming two chambers, of a partly perforated dia-

phragm forming a third chamber, a breakable seal closing one of said chambers and breakable balls or vessels contained in one of said chambers, means for breaking the balls and seal, and a valve, substantially as described and for the purpose specified. 2nd. In a hand fire extinguisher, the combination with two cylinders located one within the other, and forming two chambers, of a partly perforated diaphragm forming a third chamber, a breakable seal closing one of the chambers, and breakable balls, means for breaking the balls and seal, and a valve located in the outer cylinder opposite to the perforated part of the diaphragm and outside the third chamber, substantially as described and for the purpose specified. 3rd. In a hand fire extinguisher, the combination with two cylinders, one located within the other so as to form a chamber surrounding the inner cylinder, of a breakable seal closing the neck of the inner cylinder, a cone-shaped shelf or diaphragm, a portion of which is perforated, applied to the ends of the two cylinders, so as to form a third chamber to retain the carbonate, breakable balls or vessels for containing acid, a breakable seal centrally located in the neck of the inner cylinder, means for breaking the breakable balls and breakable seal so as to admit liquid to the third chamber when the extinguisher is inverted and to liberate the acid which combines with the carbonate, and a swivel cock located in the outer cylinder outside the third chamber and opposite to the perforated wall thereof, and which is adapted to shut off the gas charged liquid when the nozzle is turned parallel to the major axis of the cylinder and to turn it on when turned at an angle thereto, substantially as described and for the purpose specified. 4th. In a hand fire extinguisher, the combination of the outer cylinder A, and the inner cylinder B, forming two chambers, a third chamber D, having perforations c in the wall thereof, slotted neck C¹, in one of said chambers, saddle H, resting in said neck, breakable seal I closing the entrance to one of said chambers, valve K, a plunger rod E, and a break-bar F, substantially as described and for the purpose specified. 5th. In a hand fire extinguisher, the combination of the outer cylinder A, and inner cylinder B forming two chambers, diaphragm C, containing perforations c, the slotted neck C¹, in one of said chambers, the saddle H, comprising cups h, for breakable balls G, said saddle having arms h¹, adapted to rest in the slotted neck C¹, and ring d¹, in said saddle H, and heads h¹¹, substantially as described and for the purpose specified. 6th. In a hand fire extinguisher, the combination of the outer cylinder A, and inner cylinder B forming two chambers, a screw-cap R, forming a cover to the outer cylinder, diaphragm C, forming a third chamber and having perforations c, slotted neck C¹ in said third chamber, saddle H, supported thereby and forming a support for breakable vessels, breakable seal I, sealing the inner vessel, plunger E, and break bar F, substantially as described and for the purpose specified. 7th. In a hand fire extinguisher, the combination of the inner and outer cylinders forming two chambers, third chamber D, containing perforations c, and closed by cap R, and breakable seal I, located in the neck B¹, of the inner cylinder B, a breakable vessel in one of said chambers, means for breaking said vessel and said seal I, and the swivel cock K, located in the outer cylinder A, immediately without the third chamber D, and opposite to the perforations c, substantially as described and for the purpose specified. 8th. A hand fire extinguisher, comprising the following elements:—outer cylinder A, closed by a screw cap R, and having a ledge b, inner cylinder B, resting on said ledge b, and having a neck B¹, a perforated diaphragm C, provided with a neck C¹, having slots d, saddle H, resting in said slots, breakable balls supported by said saddle, a breakable seal closing the inner cylinder B, a plunger rod E, having a break bar F, and a valve comprising a discharge branch L, elbow M, central opening m, water outlet n, swivel joint O, chamber o, water chamber P, and nozzle k, substantially as described and for the purpose specified.

No. 49,353. Closure for Cans. &c. (*Fermeture de bidon, etc.*)



Frank Lamotte Salisbury, Trustee, Assignee of John Rau, both of Chicago, Illinois, U.S.A., 2nd July, 1895; 6 years.

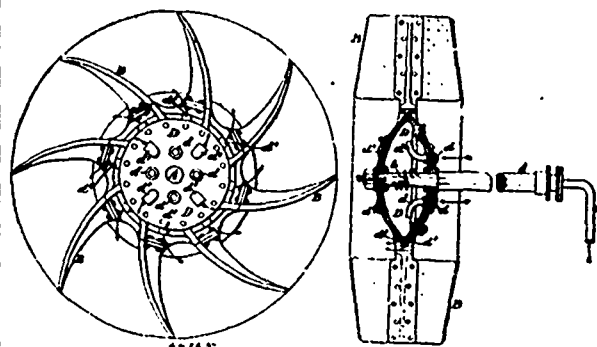
Claim.—1st. The combination with a vessel, of a tube secured in an opening in the vessel, said tube extending into the vessel and another tube open at its outer end and rotatively mounted within the first tube, one of said tubes being closed at the inner end, and both of said tubes within the vessel being provided with openings adapted to be brought to register with each other by a rotary movement of the inner tube, and a finger, or its equivalent, outside of the vessel on one of the tubes in constant engagement with a flange on the outside of the other tube to prevent lateral movement, said finger being removable whereby the inner tube may be removed from the outer tube from the outside of the vessel, substantially as set forth. 2nd. The combination with a vessel, of a tube secured in an opening in the vessel, said tube extending in the vessel and another tube open at its outer end and rotatively mounted within the first tube, one of said tubes being closed at the inner end, and both of said tubes within the vessel being provided with openings adapted to be brought to register with each other by a rotary movement of the inner tube, a pin on one of the tubes adapted to engage with shoulders on the other tube for limiting the rotary movement of the inner tube and a finger, or its equivalent, outside of the vessel on one of the tubes in constant engagement with a flange on the outside of the other tube to prevent lateral movement, said finger being removable whereby the inner tube may be removed from the outer tube from the outside of the vessel, substantially as set forth. 3rd. The combination with a vessel having an opening, of the tube B secured in said opening and projecting into the vessel, the tube C fitting within the tube B and capable of movement relative thereto, one of said tubes being closed at its inner end and both being provided with openings which are adapted to be brought to register with each other by a movement of the inner tube, a shoulder formed on one of said tubes, and a finger carried by the other and engaging said shoulder for preventing the withdrawal of the inner tube, said inner tube being left open at its outer end for the discharge of the contents of the vessel, substantially as set forth. 4th. The combination of a vessel having an opening, the tapering tube B secured in said opening and having a shoulder *b* and the opening *b'*, the latter located within the vessel, the tapering tube C having opening *c*, fitting within the tube B and left open at its outer end for the discharge of the contents of the vessel, the finger D carried by the tube C and engaging the shoulder *b*, the pin E carried by the tube C, and shoulders on the tube B for engaging the pin E and limiting the relative rotary movement of the tubes, the inner end of one of the tubes being closed, substantially as set forth.

No. 49,354. Process of Obtaining Gold and Silver From Ores and Other Compounds. (*Procédé pour obtenir de l'or et de l'argent des minerais et autres composés.*)

The Cassel Gold Extracting Company, Glasgow, Scotland, assignee of John Stewart MacArthur Pollockshields, Robert Wardrop Forrest and William Forrest, both of Glasgow, all in Scotland, 2nd July, 1895; 6 years.

Claim.—The process of separating precious metal from ore containing base metal, which process consists in subjecting the powdered ore to the action of a cyanide solution, containing cyanogen in the proportion not exceeding eight parts of cyanogen to one thousand parts of water.

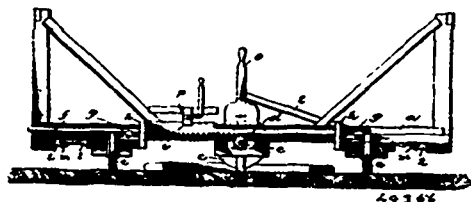
No. 49,355. Apparatus for Treating the Fire Gases Evolved in Steam Boilers and Other Furnaces. (*Appareil pour le traitement des gaz des chaudières à vapeur et autres fournaies.*)



James Patterson and James Ramsay Sandilands, both of Glasgow, Scotland, 2nd July, 1895; 6 years.

Claim.—1st. In apparatus for treating the fire gases evolved in steam boiler and other furnaces, a fan having a casing which is connected with the flue or passage through which the gases to be treated pass on their way to the chimney or uptake, the spindle of such fan hollow and connected with any suitable supply of water or other fluid for treating such gases, and the hub of the spindle provided with openings for permitting the water to enter the fan casing, and with other openings permitting air or gases to enter such hub from the casing, all substantially as and for the purpose specified. 2nd. The blades of the fan described mounted on a separate spindle or shaft to that on which the hub through which the water or other fluid for treating the gases issues, is mounted, and actuating such spindles or shafts so as to cause them to revolve in opposite directions. 3rd. The orifices for the exit of water or other fluid for treating the gases from the hub of the fan arranged so that the issue of the water assists in propelling the fan, while at the same time it also serves to keep the fan-blades clean, substantially as specified. 4th. The combination with the fan, of screens through which the gases after treatment in such fan are caused to pass on their way to the chimney or uptake, substantially as and for the purpose specified.

No. 49,356. Turn-Table. (*Table tournante.*)



Joseph B. Tinsley and Henry C. Vinton, both of Kansas City, Kansas, U.S.A., 2nd July, 1895; 6 years.

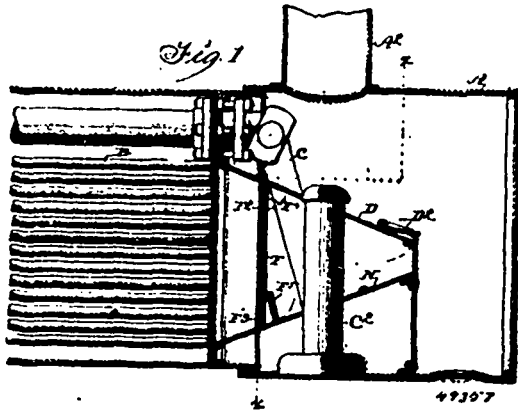
Claim.—1st. A turn-table having a longitudinally movable rack-bar, adapted to be moved by the locomotive entering the turn-table and geared to the driving mechanism of the turn-table to operate the same, substantially as described. 2nd. A turn-table provided with a longitudinally movable bar, adapted to be moved longitudinally by a locomotive entering the table and connected with the driving mechanism of the table to revolve the table by the movement of the locomotive, substantially as described. 3rd. A turn-table having its main drive shaft provided with a pinion and a longitudinally movable rack-bar gearing with said pinion and arranged to be engaged and moved longitudinally by means carried by the locomotive, substantially as described. 4th. A turn-table having its main drive shaft provided with a pinion, the longitudinally sliding rack-bar on said turn-table meshing with said pinion, the supporting pulleys, and guides for said rack-bar, said rack-bar having an elevated portion provided with the notch arranged to receive means carried by the locomotive so as to move the rack-bar as the locomotive enters the turn-table, substantially as described. 5th. A locomotive provided with vertically movable means arranged to engage the notch of the rack-bar on the turn-table, and means for operating said engaging means, substantially as described.

No. 49,357. Diaphragm for Locomotive Boilers. (*Diaphragme pour chaudières de locomotive.*)

William Britton and Robert M. Weir, both of Boone, Iowa, U.S.A., 2nd July, 1895; 6 years.

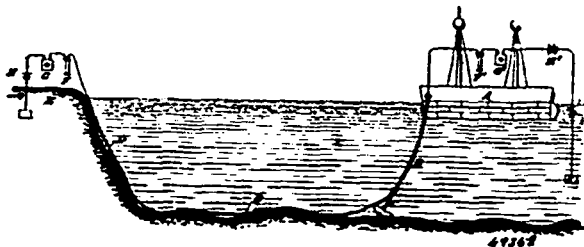
Claim.—1st. The combination, with a locomotive boiler and

cylinder, of a flat metal plate extending from the lower end of the boiler forwardly and upwardly and a diaphragm located in advance



of the boiler above said plate and having two or more horizontal draft passages therein and means for opening and closing said draft passages, for the purpose stated. 2nd. The combination, with a locomotive boiler and cylinder, of a flat metal plate extending from the lower end of the boiler forwardly and upwardly, a deflector plate extending from the top of the boiler downwardly and forwardly, a damper on the lower end of the deflector, a diaphragm located in advance of the boiler and two or more horizontal draft passages therein and means for opening and closing said draft passages for the purposes stated. 3rd. The combination, with a locomotive boiler and cylinder, of a diaphragm located in the cylinder in advance of the boiler having a perforated central portion and openings at its top and bottom, two dampers hinged to the diaphragm for covering said openings and means for independently operating the dampers from the exterior of the cylinder, for the purposes stated. 4th. The combination, with a locomotive boiler and cylinder, of a diaphragm located in the cylinder in advance of the boiler having a perforated central portion and openings at its top and bottom, two dampers hinged to the diaphragm for covering said openings and means for independently operating the dampers from the exterior of the cylinder, a deflector plate leading from the top of the boiler forwardly and downwardly as shown, a damper hinged to its forward end and means for operating said damper from the exterior of the cylinder, for the purposes stated. 5th. The combination with a locomotive boiler and cylinder, of a diaphragm located in the cylinder in advance of the boiler having a perforated central portion and openings at its top and bottom, two dampers hinged to the diaphragm for covering said openings, means for independently operating the dampers from the exterior of the cylinder, a deflector plate leading from the top of the boiler forwardly and downwardly as shown, a damper hinged to its forward end and means for operating said damper from the exterior of the cylinder, and a flat metal plate leading from the bottom of the boiler upwardly and forwardly, all arranged and combined substantially as and for the purposes stated.

No. 49,358. Sub-marine Signalling.
(Système de signal sous-marin.)

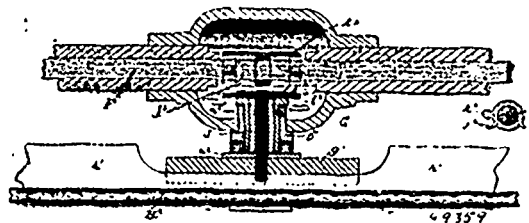


Lucien J. Blake, Lawrence, Kansas, U.S.A., 2nd July, 1895; 6 years.

Claim.—1st. A system of signalling between an anchored light-ship and the shore, comprising in combination telephonic or telegraphic signalling instruments and batteries on the ship and shore respectively, an insulated cable extending from the shore station to the ship's anchor with which the core of the cable is electrically connected, a conducting anchor-chain or hawser, and a circuit on the ship from said chain to a submerged metallic plate, said circuit including the signalling instruments on the ship, as set forth. 2nd. In a system of signalling between an anchored light-ship and a short station, the combination with telephonic signalling instruments at the shore station, and telephonic signalling instruments on the ship, of an insulated cable extending from the instruments on shore to a

point near the anchor, a conducting anchor chain or hawser, a transformer interposed between the cable and the chain and having its low resistance coil in circuit with the anchor chain and its high resistance coil in circuit with the cable, and a circuit leading from the anchor chain to a submerged plate over the ship's side and including the instruments on the ship.

No. 49,359. Insulator for Electric Wires, Etc.
(Isolateur pour fil électrique, etc.)



Willer Ruben Hitchcock, Cornwall, Ontario, and Lewis King McLaurin, Trimpleton, Quebec, both in Canada, 2nd July, 1895; 6 years.

Claim.—1st. In combination, a tubular conduit, a yoke within the conduit for securing the sides and top of the conduit together, track rails spaced from the conduit, tie rods secured at their outer ends directly to the rails, and nuts for securing the inner ends of the tie rods, the sides of the conduit and the yoke rigidly together, substantially as set forth. 2nd. A sectional working conductor, comprising suitable insulating blocks, and sections jointed together by said insulating blocks, each of said sections comprising a wire and a strip of conducting material encasing said wire, the two edges of the strip being brought together and turned upwardly to form a stiff rib, whereby the said section is made rigid, vertically, substantially as set forth. 3rd. In combination, a conduit, an insulated feeder extending along the conduit, insulated casings for supporting the feeder spaced apart along the conduit, a sectional conductor extending along the conduit directly beneath the insulated feeder, and connecting pins extending from the sectional conductor up into the insulated casings, said pins being adapted to contact directly with the feeder when the said sectional conductor is raised, and adapted to fall away from the feeder by gravity when the conductor is released, substantially as set forth. 4th. The combination with the insulated feeder F, and conducting pin I, of the spring clip J', held by the bolted clasp K', the disk K', secured to the pin I, and the mica insulators n', substantially as set forth.

No. 49,360. Packing. (Garniture.)

James Walker Peelle, Louisa Willan Peelle and Sarah Smith Peelle, all of Brooklyn, New York, U.S.A., 2nd July, 1895; 6 years.

Claim.—1st. An improvement in the art of making packings which consists in immersing dry packing in a bath of lubricants, then removing said packings from the bath, and then drying and coating the same with a metallic powder. 2nd. An improvement in the art of making packings which consists in immersing dry packing in a bath of lubricants, then removing said packing from the bath and then drying the same and before completely dried coating them with a metallic powder. 3rd. An improvement in the art of making packings which consists in heating said packings in a high temperature, then immersing said packings in a limpid bath of lubricants, then removing said packings from the bath, and then drying the same and before completely dried coating them with a metallic powder. 4th. In the art of making packings, a bath for said packings composed of non-animal oils, wax, and a finely powdered metal, softer than iron. 5th. In the art of making packings, a bath for said packings consisting of a mineral oil, rapeseed oil, wax, and a finely powdered metal, softer than iron. 6th. In the art of making packings, a bath composed of non-animal oils, and wax heated to a limpid state, and a finely powdered metal, softer than iron. 7th. As an article of manufacture, a packing having an outer coat of finely powdered metal, softer than iron. 8th. As an article of manufacture, a packing consisting of a body and having as part of its elements, oils, wax, and a finely powdered metal, softer than iron. 9th. As a new article of manufacture, a packing consisting of a body, oils, wax, and finely powdered metal softer than iron within the body, and a coating of said powdered metal in said body. 10th. As a new article of manufacture, a packing the body of which is made of layers of duck alternated with layers of gum rubber having their sides coated with a layer composed of gum rubber and fine divided mica.

No. 49,361. Spindle for Spinning Machines. (Broche pour machines à filer.)

Herbert Hortentious Ham, Boston, Massachusetts, U.S.A., 2nd July, 1895; 6 years.

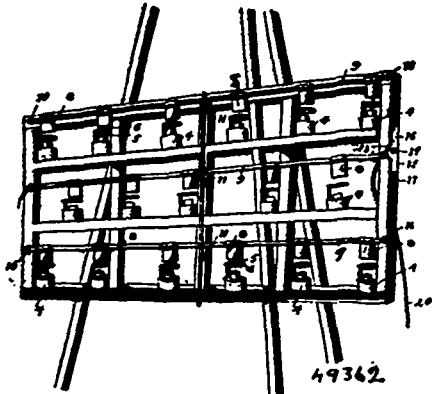
Claim.—1st. In combination a bolster and whirl, said parts being formed upon opposing faces with ball bearings and balls mounted in

said bearings, substantially as and for the purpose described. 2nd. In combination a bolster, a boss mounted upon said bolster and se-



cured thereto, a ball bearing surface upon the lower part of said boss, a whirl mounted upon said boss and provided with ball bearings on its upper and lower side, a collar provided with a ball bearing upon its upper side and secured at the upper end of said boss, and balls arranged between the bearings on said boss and collar and the corresponding bearings on said whirl, substantially as and for the purpose described.

No. 49,362. Photographic Flash Light. (Appareil photographique à jet de lumière.)

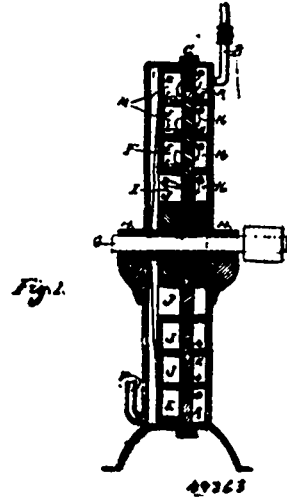


Charles Clifford and Fred H. Clifford, both of Muscatine, Iowa, U.S.A., 2nd July, 1895; 6 years.

Claim.—1st. In a flash light apparatus, the combination of a stationary perforate combustion pan adapted to be supported over a suitable heater, and a swinging imperforate charging plate supported to work over said pan, substantially as set forth. 2nd. In a flash light apparatus, the combination of a stationary perforate combustion pan adapted to be supported directly over a heater, a swinging imperforate charging plate arranged to work directly over said pan, means for temporarily supporting the plate horizontally above the pan to receive the heat therefrom, and means for tilting or dropping said plate to drop its contents on to the pan, substantially as set forth. 3rd. In a flash light apparatus, a frame having a series of horizontal parallel bars, suitable heaters arranged on said horizontal bars, horizontal perforate combustion pans supported in a stationary position above the heaters, a series of horizontal connected rock shafts journaled on the frame above the combustion pans, imperforate charging plates connected to the rock shafts and arranged to swing over the combustion pans, and a combined lock and releasing device for said rock shafts, substantially as set forth. 4th. In a flash light apparatus, a frame having a series of parallel bars and a recess at one end thereof, suitable heaters arranged on said horizontal bars, stationary perforate combustion pans supported directly above the heaters, a series of horizontal rock shafts journaled on the frame above the pans, one

of said shafts being provided with a squared extremity, a connection between said shafts to insure the simultaneous rotation thereof, imperforate charging plates connected to the rock shafts and arranged to swing over the combustion pans, a spring releasing plate attached to one end of the frame and provided with a squared lock opening adapted to normally engage the squared shaft extremity, and a releasing air bulb seated in the recess at one end of the frame and adapted to expand against the free end of said spring plate to disengage the same from said squared shaft extremity, substantially as set forth.

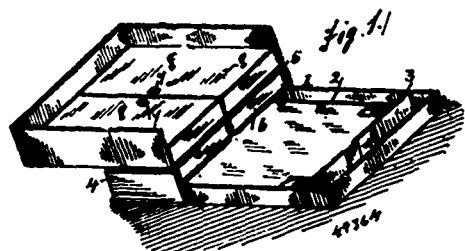
No. 49,363. Rotary Engine. (Machine rotatoire)



Robert Hewson, San Francisco, California, U.S.A., 2nd July, 1895; 6 years.

Claim.—1st. A rotary wheel F, buckets E, J, J, J, disc C, having concentric chambers A, K, K, K, openings or feeds D, and exhaust slots O, substantially as and for the purpose herein set forth. 2nd. A rotary wheel F, buckets E, J, J, J, stationary disc C, having concentric chambers A, K, K, K, diagonal feed slots D, depressed openings N in said wheel, and exhaust slots O, substantially as and for the purpose herein set forth.

No. 49,364. Method of and Apparatus for Teaching Office and Business Practice. (Méthode et appareil d'enseigner.)

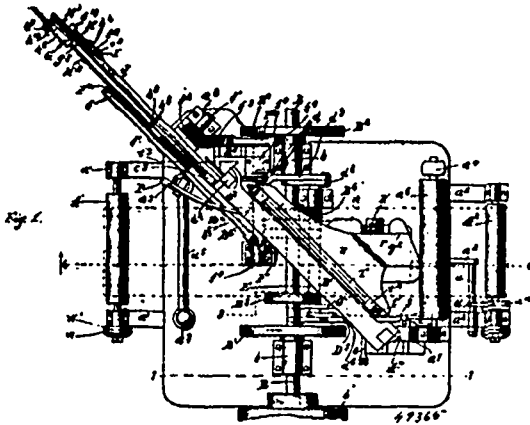


Warren H. Sadler, Baltimore, Maryland, U.S.A., 2nd July, 1895; 6 years.

Claim.—1st. In an apparatus for teaching business practice, the combination of a series of sheets or pages suitably secured together to retain independent papers interleaved between them, so that the interleaved matter cannot be removed or examined until the sheet above it is torn off, with a series of independent business papers such as checks, bills, letters, etc., interleaved between the pages, substantially as described. 2nd. In an apparatus for teaching business practice, the combination of a series of sheets of paper secured together in any suitable manner at their edges or portions thereof, so that the interleaved matter cannot be removed or examined until the sheet above it is torn off and perforated or slitted around the points at which they are secured together so as to adapt each sheet to be torn from the pad or budget, with a number of independent examples of business transactions such as checks, bills, etc., interleaved loosely between the pages but retained between the sheets, substantially as described. 3rd. In an apparatus for teaching business practice, the combinations of a series of sheets of paper secured together in any suitable manner, so that the interleaved matter cannot be removed or examined until the sheet above is torn off and having printed upon them a problem or instructions for the

guidance of a student in the use of a series of business papers, with a series of independent business papers such as checks, bills, etc., interlaid between the sheets and retained in place by the means of securing the sheets together, so that when the instruction sheet is torn off the independent papers constituting the materials for the problem will be exposed, substantially as described. 4th. In an apparatus for teaching business practice, the combination of a series of sheets of paper secured together at the top and bottom and having printed upon them a problem or instructions for the guidance of a student in the use of a series of business papers, with a series of independent business papers such as checks, bills, etc., interlaid between the sheets and retained in place by the means of securing the sheets together, so that when the instruction sheet is torn off the independent papers constituting the materials for the problem will be exposed, substantially as described.

No. 49,865. Cane Weaving Machine.
(*Métier à tisser la canne.*)



Ford Johnson & Co., assignee of Henry Burling Morris, all of Michigan City, Indiana, U.S.A., 2nd July, 1895; 6 years.

Claim.—1st. In a machine for inserting diagonal strands in cane-weaving, mechanism for holding the mat in fixed position, in combination with a revoluble crossing-needle having a bent tip, mechanism for thrusting the crossing-needle diagonally across the mat, and mechanism for simultaneously rotating said needle, substantially as described. 2nd. In a machine for inserting diagonal strands in cane-weaving, a clamping mechanism adapted to adjust and clamp the mat in proper position, in combination with a revoluble crossing-needle provided with a bent tip, mechanism for reciprocating said needle across the mat, and mechanism adapted to rotate said needle on the forward movement thereof but inoperative on the return movement, substantially as described. 3rd. In a machine for inserting diagonal strands in cane-weaving, a revoluble crossing-needle having a bent tip, in combination with mechanism for reciprocating said needle diagonally across the mat, threading mechanism adapted to thread a strand of cane into the needle at the end of its forward thrust, and mechanism adapted to rotate the said needle during its forward thrust but inoperative on its return movement, substantially as described. 4th. In a machine for inserting diagonal strands in cane-weaving, a revoluble crossing-needle having a bent tip, in combination with mechanism for reciprocating said needle diagonally across the mat, mechanism for threading a strand of cane to said needle at the end of its forward thrust, driving mechanism adapted to rotate said needle on its forward thrust but inoperative on its return movement, and a cutting mechanism adapted to sever the diagonal strand as the tip of the needle is withdrawn from the opposite edge of the mat on its return movement, substantially as described. 5th. In a machine for inserting diagonal strands in cane-weaving, a revoluble crossing-needle having a bent tip, in combination with mechanism for thrusting said needle back and forth across the mat, threading mechanism adapted to thread a strand of cane into the needle at the end of its forward thrust, driving mechanism adapted to rotate said needle on its forward thrust but inoperative on its return movement, cutting mechanism adapted to sever the cane-strand after the threaded end is withdrawn at the opposite edge of the mat by the returning needle, and mechanism for unthreading the needle just after the severing of the strand, substantially as described. 6th. In a machine for inserting diagonal strands in cane-weaving, a revoluble crossing-needle having a bent tip, in combination with mechanism for reciprocating said needle across the mat, mechanism adapted to rotate said needle on its forward thrust but inoperative on its return, and mechanism adapted to feed the mat step by step through the machine as the diagonal strands are successively inserted, substantially as described. 7th. In a machine for inserting diagonal strands in cane-weaving, a revoluble crossing-needle having a bent tip, in combination with mechanism for reciprocating said needle

ward thrust but inoperative on its return, mechanism adapted to feed the mat step by step through the machine as the diagonal strands are successively inserted, and mechanism adapted to roll the finished web upon a drum simultaneously with its forward feed, substantially as described. 8th. In a machine for inserting diagonal strands in cane-weaving, an adjusting clamp adapted to adjust the mat in proper position for the operation of the crossing-needle and secure it in this adjustment, a revoluble crossing-needle, mechanism adapted to reciprocate said needle just in front of said clamp, and mechanism adapted to rotate the needle on its forward movement but inoperative on the return thereof, substantially as described. 9th. In a machine for inserting diagonal strands in cane-weaving, two drums arranged respectively at the front and rear of the machine and adapted to carry the woven mat as described, in combination with an adjusting and clamping mechanism arranged between the drums, a revoluble crossing-needle, mechanism adapted to reciprocate and revolve said needle in front of the said clamp, and feeding and winding mechanism arranged to operate in rear of said clamp, substantially as described. 10th. In a machine for inserting diagonal strands in cane weaving, a support arranged diagonally of the mat, in combination with a main slide mounted and adapted to be reciprocated thereon diagonally across the mat, a revoluble crossing-needle mounted on said slide, mechanism also mounted on said slide, and adapted to revolve said needle on the forward movement thereof but inoperative on the return, and mechanism adapted to give a reciprocal sliding movement to the said main slide, substantially as described. 11th. The mat-supporting plate C¹, arranged diagonally of the mat and provided with a groove c¹, running lengthwise thereof, in combination with revoluble crossing-needle having a bent tip, and mechanisms for reciprocating said needle directly over the said groove and simultaneously revolving it, substantially as described. 12th. The mat-support plate C¹, provided with longitudinal groove c¹, and line of perforations c², just in rear thereof, in combination with a movable clamping-bar D, provided with teeth d, corresponding to the perforations c¹, revoluble crossing-needle, and mechanisms adapted to reciprocate the same along the line of said groove and simultaneously rotate said needle on its forward thrust, substantially as described. 13th. The cross-head D¹, carrying the toothed clamping bar D, in combination with perforated clamping-bar C¹, movable supports d², vertical guide-ways in which said supports are mounted and are free to slide up and down, toggle-arms d³, d⁴, rock-shaft E, provided with crank-arms connected respectively to the said toggle-arms, and grooved-cam B¹, fixed on the main shaft and engaging with an arm also fixed to the rock-shaft, whereby the latter is oscillated and the toothed clamp raised and lowered by the revolution of the cam, substantially as described. 14th. The supporting-beam C, arranged diagonally of the mat and provided with a longitudinal groove, c¹, in the front side thereof, in combination with a main slide F, mounted in said groove and adapted to slide back and forth therein, mechanism adapted to reciprocate said main slide, a revoluble crossing-needle, and mechanism for rotating the same, both mounted on and carried by said bar, substantially as described. 15th. The main slide F, mounted on a support arranged diagonally of the mat and adapted to slide back and forth lengthwise thereon, a revoluble crossing-needle mounted on said main slide, pitman f, shaft f¹ provided with crank F¹, and bevel-pinion f², bell-crank lever F², mounted on a support, on which it is free to oscillate, and provided with a rack-segment f³, on one arm, and cam B², fixed on the main shaft and provided with a cam groove engaging the short arm of the said bell crank lever, substantially as described. 16th. The slide, F, mounted on a support diagonally of the mat and free to slide back and forth thereon, in combination with a revoluble crossing-needle mounted on and carried by said slide, mechanism for rotating said needle and means for operating said mechanism by the forward movement of the slide to rotate the needle during said forward movement of the slide, substantially as described. 17th. A main slide mounted upon a suitable support on which it is free to reciprocate diagonally of the mat, in combination with a revoluble shaft, H, mounted on said main slide, crossing-needle I¹, connected to and carried by said shaft, pinion h¹, mounted loosely on said shaft and having a pawl and ratchet connection therewith, gear-wheel, H¹, also mounted on the main slide and engaging with said mechanism for reciprocating the main slide upon its support, and mechanism whereby said gear-wheel is rotated by the reciprocation of the said main slide, substantially as described. 18th. A main slide mounted upon a suitable support on which it is free to reciprocate diagonally of the mat, in combination with a needle shaft mounted on said slide and carrying the crossing-needle, pinion h¹, mounted loosely on said shaft and connected therewith by pawl and ratchet, gear-wheel H¹, mounted on the slide and engaging with the said pinion, hub G¹, secured to one side of the gear-wheel, carrier G, mounted on a fixed support on which it is movable lengthwise, a locking device by which said carrier is secured to its support, and a cable g¹ wound around the hub G¹, fastened at its ends to the respective ends of the carrier G, and mechanism for reciprocating the main slide upon its support, substantially as described. 19th. A fixed support arranged diagonally of the frame, in combination with the main slide F, mounted upon said support and free to slide thereon, the revoluble needle shaft mounted on the main slide and provided with driving pinion, and gear-wheel H¹, mounted on the same slide and engaging with the said pinion and provided with a hub G¹, on one side thereof, carrier G, mounted and adapted to slide on a fixed support, as C², cable g², wound upon the

said hub and connected at its respective ends to the said carrier, spring-catch e^6 , pivoted to the stationary support C^2 , and engaging with the carrier G , to fasten the latter to its support, lug c^7 on the main slide adapted to engage the said spring-catch and release the carrier G , and mechanism for reciprocating the main slide upon its support, substantially as described. 20th. The main slide, in combination with a support arranged diagonally of the frame on which said slide is mounted and free to move lengthwise thereof, a revoluble crossing-needle mounted thereon, gear-wheel H^1 , also mounted on said slide and connected by gearing with the said needle-shaft, driving-hub G^1 , fastened to said wheel, carrier G , mounted on a fixed support on which it is free to slide, and provided with depending arms, g , g^1 , at its respective ends, spring-catch e^6 , adapted to connect the carrier G to its support, lugs c^7 and g^7 , on the main slide, F , and mechanism for reciprocating the latter on its support, substantially as described. 21st. The main slide F , in combination with the revoluble needle-shaft mounted thereon, driving-gear H^1 , also mounted on the slide geared to the needle-shaft and provided with hub G^1 , sliding carrier G , mounted on a fixed support on which it is free to slide, spring-catch adapted to secure the carrier G , to its support, lug c^7 , on the main slide adapted to release the catch and move the carrier forward with the main slide, and stationary stop-block e^6 , substantially as described. 22nd. The revoluble crossing-needle, in combination with the gear-wheel H^1 , connected by gearing with the said needle-shaft, driving hub G^1 , secured to said wheel and composed of sectors g^1 , adjustable radially of their axis, and the driving-cable g^2 , applied to said hub, substantially as described. 23rd. The main slide, in combination with a revoluble needle-shaft mounted thereon, needle-chuck I , secured to the shaft and provided with a stud i^2 , at one side thereof, and a stationary stop-plate i^1 , provided with slot i^3 , adapted to receive the chuck-stud i^2 , substantially as described. 24th. In a machine for inserting diagonal strands in cane weaving, a main slide arranged to move diagonally of the mat, in combination with means to move the said carrier diagonally, a revoluble crossing-needle mounted thereon, a sliding standard mounted on a suitable support at the front edge of the mat and in the path of the said main slide, and threading mechanism mounted on said standard and adapted to be operated by the sliding movement thereof as it is carried outward by the main slide, substantially as described. 25th. In a machine for inserting diagonal strands in cane-weaving, a main slide arranged to move diagonally of the mat, in combination with the revoluble crossing-needle, having a bent tip, mounted thereon, mechanism for rotating said needle during its forward thrust through the mat, mechanism for stopping said rotation as the tip of the needle reaches the front edge of the mat, and mechanism adapted to adjust and fix the needle in a position with its bent tip horizontal by the further forward movement thereof, substantially as described. 26th. In a machine for inserting diagonal strands in cane-weaving, a main sliding carrier arranged to move diagonally of the mat, in combination with a revoluble crossing-needle, having a bent tip, mounted thereon, mechanism for rotating said needle during its forward thrust through the mat, mechanism for stopping said rotation as the tip of the needle reaches the front edge of the mat, mechanism adapted to adjust and fix the needle in a position with its bent tip horizontal by the further forward movement thereof, and threading mechanism adapted to thread a strand of cane into the eye of the needle-tip when thus adjusted, substantially as described. 27th. A diagonal main slide, F , in combination with a revoluble crossing-needle J , mounted thereon, and a fixed level plate, C^2 , arranged at the front edge of the mat and adapted to turn the tip of the needle into a horizontal position toward the end of its forward thrust, substantially as described. 28th. A main slide, in combination with a revoluble crossing-needle, J , mounted thereon and having a bent tip, a stationary level plate, C^2 , the needle-guide J^2 , and the upper movable member, D , of the clamp to which said guide is secured, substantially as described. 29th. In a machine for inserting diagonal strands in cane-weaving, a diagonal main slide, F , a revoluble crossing-needle, J , mounted thereon and having a bent tip, a sliding standard K , outside of the front edge of the mat, an arm, k^1 , mounted thereon and provided with a funnel-shaped opening, k^2 , adapted to receive the needle-tip, and a horizontal slot, k^3 , in front thereof, adapted to permit the insertion of the end of a cane strand, substantially as described. 30th. In a machine for inserting diagonal strands in cane-weaving, a crossing-needle provided with a bent tip with an eye therein, in combination with the funnel-shaped receiver k^1 , having a funnel-shaped opening k^2 , adapted to receive the bent eye of the needle, and a short horizontal slot k^3 , in combination with a feeding mechanism adapted to feed the end of a cane strand into said slot and through the eye in the needle-tip, substantially as described. 31st. In a machine for inserting diagonal strands in cane-weaving, a crossing-needle provided with a bent tip with an eye therein, in combination with the funnel-shaped receiver k^1 , having a funnel-shaped opening k^2 , adapted to receive the bent eye of the needle and a short horizontal slot k^3 , in combination with a feeding mechanism adapted to feed the end of a cane-strand into said slot through the eye in the needle-tip, and a device for bending the end of the strip projecting through the eye of the needle at an angle to the main strip, substantially as described. 32nd. A main slide F , in combination with a revoluble crossing-needle mounted thereon and having a bent tip and eye therein, a sliding standard K , adapted to be moved by contact of the main slide therewith, funnel-shaped needle-tip receiver k^1 , having slot k^3 , feed-wheels L and M , mounted on the standard K ,

and adapted to receive a cane-strip between them, and mechanism adapted to be operated by the outward sliding movement of the standard to actuate said wheels to feed the cane-strip into the receiving-funnel and thread it into the eye of the needle, substantially as described. 33rd. The sliding standard K , in combination with strand feeding-wheels L and M , the former mounted on a stationary journal and the latter immediately above on a journal vertically adjustable, and mechanism operated by the sliding of the standard to raise and lower said journal to engage and disengage the feed-wheels, substantially as described. 34th. A sliding standard K , in combination with a feed-wheel M , mounted on a fixed journal, the upper journal-pin M^1 , mounted loosely in its bearing and having an eccentric section m^2 , the upper feed-wheel M , mounted on this eccentric section, both wheels being provided with gear-teeth, the forked-crank M^2 , secured to the journal-pin M^1 , inflexible hook n , pivoted at one end to a fixed support and at the other engaging with one arm of the forked-crank, and a retracting spring m^3 , connected at one end to the opposite arm of the forked-crank and at the other to the sliding standard, substantially as described. 35th. The strip feed-wheel L , provided with gear-teeth l , and flanges l^1 , having a channel l^2 , between them, in combination with a companion feed-wheel M , provided with gear-teeth m , a narrow annular groove m^1 , and outer web m^2 , substantially as described. 36th. The sliding standard K , in combination with means for sliding said standard, a feed wheel L , mounted thereon, ratchet-wheel L^1 , connected to said feed-wheel, upper feed-wheel M , both feed-wheels provided with engaging gear-teeth, and pawl n^1 , mounted on a fixed support and arranged to engage the ratchet-teeth as the standard is moved outward, substantially as described. 37th. The main slide F , in combination with revoluble crossing-needle mounted thereon and provided with a bent eye-tip, the sliding standard K , mounted outside the mat and in the path of the main slide F , a stationary bar provided with threading funnel k^1 , slotted as specified, strip feeding-wheels L and M , mounted on the standard K , oscillating eccentric journal M^1 , on which the upper wheel M is mounted, forked crank M^2 , secured to the eccentric journal pin, inflexible hook n , and spring m^3 connected to the respective arms of said fork, ratchet-wheel L^1 , connected to the feed-wheel L , and pawl n^1 pivoted to a stationary support and arranged to engage the teeth of said ratchet, whereby the standard K is moved outward by contact of the main slide F on its forward travel, thereby actuating the feeding devices to feed the diagonal strand into the threading funnel and eye of the needle lying thereon, substantially as described. 38th. A crossing needle provided with a bent eye-pointed tip, in combination with a stationary bar provided with a threading funnel k^1 slotted as described, feeding mechanism adapted to thrust the diagonal strip into said funnel and thread the needle, star-wheel K^1 just back of said funnel, and mechanism for giving an intermittent rotation to said wheel to bend the projecting end of the cane-strip upon the tip of the needle substantially as described. 39th. A stationary bar provided with the threading-funnel k^1 , in combination with a crossing-needle J , having a bent eye tip, feed-wheels L and M adapted to carry the cane-strand into said funnel and thread the needle, star-wheel K^1 , fixed on shaft k^2 , pinion k^6 at the opposite end of said shaft, and pinion L^2 connected with the feed-wheel L , whereby the pinion L^2 is rotated intermittently with the feed-wheel to give a corresponding movement to the star-wheel, substantially as described. 40th. In a machine for inserting diagonal strands in cane-weaving, the main slide F , in combination with a revoluble crossing-needle J mounted thereon and provided with a bent eye-tip, a sliding standard K arranged in the path of said main slide and adapted to be moved outward by contact therewith, cane-feeding and threading mechanism mounted on said standard, mechanism connected with said standard and constructed to be operated by the outward sliding movement thereof to operate the cane feeding and threading mechanism, and a retracting spring k^7 , adapted to return the sliding standard K upon the retreat of the main sliding carrier, substantially as described. 41st. The cutter O , pivoted to the standard K , in combination with mechanism for turning said cutter on its pivot to raise the cutter end and compress an actuating spring, a spring catch adapted to engage the outer arm of the cutter and hold it in its said adjustment, and tripping mechanism on the main slide arranged to engage and trip said catch near the end of the return movement of said main slide, thereby releasing the cutter to sever the diagonal strip with a quick, sharp blow under the influence of the compressed spring just about as the needle is withdrawn from the rear edge of the mat, substantially as described. 42nd. The pivoted cutter O , in combination with a rod o^2 , passing loosely through the outer end of the cutter-arm, spring-coil o^1 , secured on the rod immediately below the cutter-arm, movable cam B^3 , rocking-lever O^1 , connected at one end to the lower end of the rod o^2 , and at the other end provided with a roller-pin working in the cam-groove b^2 , of the cam B^3 , the spring-catch O^2 , adapted to engage the cutter-arm when depressed, and provided with toe-piece o^4 , and the main slide F , provided with tappet o^3 , adapted to engage the toe of the catch and thereby release the cutter-arm, substantially as described. 43rd. The diagonal sliding carrier F , in combination with a crossing-needle mounted thereon, feeding and threading mechanism at the front edge of the mat whereby the diagonal strand of cane is threaded to the needle on its outward thrust, and a gripping device arranged at the back edge of the mat, and mechanism arranged to operate the grip to seize the diagonal strand just as the needle is withdrawn

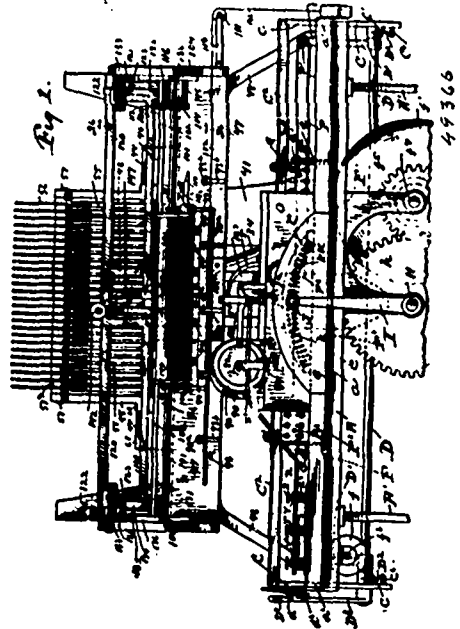
from the mat on its backward thrust, thereby unthreading the needle, substantially as described. 44th. The pivoted upper and lower grip-arms p, p^1 , connected at their rear ends by a slot p^2 , and pivot bolt p^3 , spring p^4 , connecting the said grip-arms between their pivots and their rear connection, rocking-lever P^1 , swinging-arm p^5 , hinged to the rear end of said rocking-lever, connecting-rod p^6 , hinged respectively to the swinging-arm P^2 , and lower grip-arm p^1 , projecting cam arm B^1 , fixed on a revolvable shaft and adapted to contact at each revolution with the forward end of the rocking-lever P^1 , and crossing needle J , whereby the grip-arms are sharply closed upon the projecting end of the diagonal strand to unthread the needle, substantially as described. 45th. In a machine for inserting diagonal strands in cane weaving, a mechanism for inserting the diagonal strand, in combination with a sliding support mounted in rear of said mechanism, a clamping device mounted on said sliding support and arranged to clamp the mat of cane just in rear of the adjusting and holding clamp, an adjusting and holding clamp mounted on the main frame in front of the said sliding support and mechanism adapted to move said sliding support rearward a short distance as the main clamp is opened, to feed the mat one step forward, substantially as described. 46th. In a machine for inserting diagonal strands in cane weaving, mechanism for inserting the diagonal strand, in combination with a sliding support mounted in rear of said mechanism, a clamping device mounted on the said support and arranged to clamp the mat of cane just in rear of the adjusting and holding clamp, a main adjusting and holding clamp mounted on the main frame in front of said sliding support, mechanism adapted to move said sliding support rearward a short distance as the main clamp is opened, to feed the mat one step forward, and the rear drum and mechanism for turning the same actuated by the sliding feed-support to wind the finished mat upon the drum simultaneously with the feed, substantially as described. 47th. The sliding support R , provided with standards r^2 , forming a kind of yoke, upper clamp-bar, S , mounted on the upper ends of these standards, lower clamp-bar S^1 , mounted loosely on said standards and movable vertically, rock-shaft S^2 , mounted in said standards below the clamp-bars and provided with eccentrics s^1 , and skew-gear pinion s^2 , eccentric straps s^3 , applied to said eccentrics and hinged to the lower clamp-bar, bell-crank lever s^4 , mounted loosely on its support and having one arm s^5 , provided with a skew-gear segment s^6 , engaging with the said skew-gear pinion, main shaft and cam B^3 , fixed thereon and provided with cam grooves b^7 , and the short arm s^7 , of the said bell-crank lever, provided with a pin fitted into the cam groove b^7 , substantially as described. 48th. The standard, Q , provided with ways in combination with the support, R , provided with a base r , mounted and adapted to slide between the ways on said standard, clamp-bars S, S^1 , mounted on said support to grip the finished mat of cane, bell-crank lever R^1 , pivoted to the standard Q , and having one of its arms hinged to the sliding base, r , bell-crank lever R^2 , mounted loosely on its support and having its outer arm, r^2 , connected to the inner arm r^1 , of the lever R^1 , by slot in one end and pin on the other, and revolvable cam B^2 , provided with cam-groove, b^7 , engaging with the pin on the end of the inner arm r^1 , of the lever R^2 , substantially as described. 49th. In a machine for inserting diagonal strands in cane-weaving, a stationary clamping mechanism for adjusting and holding the mat in fixed position, in combination with a crossing-needle, mechanism for reciprocating the crossing-needle diagonally of the mat, cutting mechanism to sever the diagonal strip, mechanism for unthreading the needle after drawing through the strand, movable clamping mechanism for feeding the mat, a sliding support on which said feed-clamp is mounted, movable back and forth to make the feed, a main driving-shaft, a series of cams fixed on said shaft and adapted to actuate the said several mechanisms and connecting devices between said cams, and the said respective mechanisms whereby the latter are actuated by the said cams respectively, substantially as described.

No. 49,366. Typograph Machine.
(Machine typographique.)

Emil Werner and Moses Montague Hobart, both of Cleveland, Ohio, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. In a typograph-machine, the combination with the type-die impressing plunger, a vertically reciprocating frame provided with a horizontal track extending lengthwise of said frame and a type-die carrier movably mounted upon said track and provided with two or more series of reciprocating type-dies arranged substantially as indicated, of suitable means whereby said vertically reciprocating frame and horizontally reciprocating type-die carrier are actuated to bring the selected die in either or any of the series of type-dies in proper position relative to the type-die impressing plunger, substantially as set forth. 2nd. In a typograph-machine, the combination with the type-die impressing plunger, a vertically reciprocating frame provided with a horizontal track extending lengthwise of said frame and a wheeled type-die carrier mounted upon said track and provided with two or more series of reciprocating type-dies arranged substantially as indicated, of suitable means whereby said vertically reciprocating frame and horizontally reciprocating type-die carrier are actuated to bring the selected die in either or any of the series of type-dies in the proper position relative to the type-die impressing plunger, substantially as set forth. 3rd.

In a typograph machine, the combination with the type-die impressing-plunger, a vertically reciprocating frame, type-die-carrier



adapted to reciprocate endwise of said frame and provided with two or more series of reciprocating type-dies arranged substantially as shown, said vertically reciprocating frame comprising at each end a U-shaped member C , flanged inwardly as at C^1 , and plates or bars as at C^2 , secured to said inwardly projecting flanges, rigidly connecting said U-shaped members with each other and constituting a track, the type-die carrier having upwardly extending arms d^2 provided at their upper end, respectively, with a wheel mounted on the adjacent rail or way of the track aforesaid, of suitable means whereby said vertically-reciprocating frame and said horizontally-reciprocating type-die carrier may be actuated to bring the selected die in either or any of the series of type-dies in proper position relative to the impressing plunger, substantially as set forth. 4th. The combination, with the bed of the typograph-machine, a vertically-reciprocating frame, sideways a^1 for said frame, the latter being provided with a track extending lengthwise thereof, a horizontally-reciprocating type-die-carrier mounted on said track, two or more series of type-dies having suitable bearing in said type-die-carrier and arranged substantially as indicated, and suitable mechanism for actuating the type-dies to impress the matrix-blank or matrix, of a shaft extending in the direction of the length of said vertically-reciprocating frame, suitable means operatively connecting said frame with the shaft aforesaid, and suitable means for oscillating said shaft, the arrangement of parts being such that by oscillating said shaft in the one direction or the other the aforesaid frame and type-die-carrier supported thereby are elevated or lowered to bring the desired series of type-dies at the proper elevation relative to the aforesaid type-die plunging or actuating mechanism, substantially as set forth. 5th. The combination, with the bed of a typograph-machine, a vertically-reciprocating frame, sideways for said frame, the latter being provided with a track extending lengthwise of the frame and a type-die-carrier mounted upon and adapted to reciprocate endwise of said track, two or more series of type-dies having suitable bearing in said type-die-carrier and arranged substantially as indicated, and suitable mechanism for actuating the type-dies to impress the matrix-blank or matrix, of a shaft extending lengthwise of said vertically-reciprocating frame, rock-arm operatively mounted on the shaft and operatively connected with said frame, a lever operatively mounted on said shaft for oscillating the same, the arrangement of parts being such that by manipulating said lever in the one direction or the other the aforesaid frame and type-die-carrier supported thereby are elevated or lowered to bring the desired series of type-dies at the proper elevation relative to the aforesaid type-die plunging or actuating mechanism substantially as set forth. 6th. In a typograph-machine, the combination with the type-die impressing-plunger, a vertically-reciprocating frame, a type-die-carrier mounted upon and adapted to reciprocate endwise of said frame, said type-die-carrier having two or more series of type-dies arranged substantially as indicated, of a shaft extending in the direction of the length of said supporting-frame, suitable means for operatively connecting said frame with the shaft, and a hand-lever operatively mounted on the shaft, of a stationary segment provided with as many notches or recesses as there are series of type-dies and with notches or recesses arranged in a plane concentric with the axis of the aforesaid shaft, a latch

pivoted to the aforesaid hand-lever and adapted to engage either or any one of said notches or recesses, the arrangement of parts being substantially as and for the purpose set forth. 7th. In a typograph machine, the combination with the mechanism for actuating the type-dies to cause the latter to impress the matrix blank or matrix, of a vertically reciprocating type-die carrier, two or more series of type-dies having suitable bearing in said carrier, and arranged substantially as indicated, a horizontally reciprocating slide, suitable means rigidly connected with said slide to engage or adapted to engage and cause the type-die carrier to reciprocate therewith, and suitable means whereby said vertically reciprocating type-die carrier and horizontally reciprocating type-die carrier slide may be actuated to bring any type-die in either or any of the series of type-dies in proper position relative to the aforesaid type-die actuating means, substantially as set forth. 8th. In a typograph machine, the combination with a horizontally reciprocating slide provided at or near each end with an upwardly extending member, a vertically reciprocating type-die carrier confined between said upwardly extending members of the slide, two or more series of type-dies having bearing in said type-die carrier and arranged substantially as indicated, of a type-die impressing plunger, and suitable means whereby said vertically reciprocating type-die carrier and horizontally reciprocating slide may be actuated to bring any type-die in either or any of the series of type-dies in proper position relative to the type-die impressing-plunger, substantially as set forth. 9th. In a typograph machine, the combination with suitable means for actuating the type-dies to cause the latter to impress the matrix blank or matrix, of a horizontally reciprocating slide provided at or near each end with an upwardly extending member, a vertically reciprocating type-die carrier supported between said upwardly extending members, two or more series of type-dies having bearing in said type-die carrier and arranged substantially as indicated, suitable means whereby said vertically reciprocating type-die carrier and horizontally reciprocating slide may be actuated to bring any type-die in either or any of the series of type-dies in proper position relative to the aforesaid type-die actuating means, and a spring interposed between the one end of the type-die carrier and the adjacent upwardly extending member of the type-die carrier slide, the arrangement of parts being substantially as and for the purpose set forth. 10th. In a typograph machine, the combination with suitable means for actuating the type-dies to cause the latter to impress the matrix blank or matrix, of a horizontally reciprocating slide provided at or near each end with an upwardly extending member, a vertically reciprocating type-die carrier supported between said upwardly extending members, two or more series of type-dies having bearing in said type-die carrier and arranged substantially as indicated, suitable means whereby said vertically reciprocating type-die carrier and horizontally reciprocating slide may be actuated to bring any type-die in either or any of the series of type-dies in proper position relative to the aforesaid type-die actuating means, and means substantially as indicated, for preventing upward displacement of the aforesaid slide, substantially as set forth. 11th. In a typograph machine, the combination with suitable means for actuating the type-dies to cause the latter to impress the matrix blank or matrix, of a horizontally reciprocating slide provided at or near each end with an upwardly extending member, a vertically reciprocating type-die carrier confined between said upwardly extending members, two or more series of type-dies having bearing in said type-die carrier and arranged substantially as indicated, suitable means whereby said vertically reciprocating type-die carrier and horizontally reciprocating slide may be actuated to bring any type-die in either or any of the series of type-dies in proper position relative to the aforesaid type-die actuating means, and means substantially as indicated, for holding the slide aforesaid strictly in line both horizontally and vertically, substantially as set forth. 12th. The combination, with the bed of the typograph machine and type-die impressing plunger, the bed being offset downwardly as at *a*, of a horizontally reciprocating slide operating endwise of said downwardly offset portion of the bed, means substantially as indicated, for guiding said slide, the latter at or near each end of the same having an upwardly extending member, a type-die carrier confined between said upwardly extending members of the slide, two or more series of type-dies having bearing in the type-die carrier and arranged the one series above another, means substantially as indicated for propelling the slide, and suitable means for elevating and lowering the type-die carrier and holding it at the desired elevation relative to the type-die impressing-plunger, the arrangement of parts being substantially as shown and described. 13th. In a typograph machine, the combination with the type-dies and matrix-feeding mechanism adapted to be actuated by the dies, said matrix feeding mechanism comprising a pair of feed rollers adapted to feed the matrix blank or matrix past the point at which it is impressed, of a single spring bearing upon the top of both of said feed-rollers, substantially as and for the purpose set forth. 14th. In a typograph machine, the combination with a pair of guides arranged at opposite sides, respectively, and extending lengthwise of the path of the matrix blank or matrix, of one or more springs located in a recess in one of said guides and adapted to act against the matrix-blank or matrix in the direction of the impression, substantially as and for the purpose set forth. 15th. In a typograph machine, the combination with a pair of guides arranged at opposite sides, respectively, and extending lengthwise of the path of the matrix-

blank or matrix, of a spring at each side of the point at which the matrix-blank or matrix receives its impression, acting against the matrix-blank or matrix in the direction of the impression, substantially as and for the purpose set forth. 16th. In a typograph machine, a type-die adapted to impress the matrix-blank or matrix, in combination with suitable type-die actuating mechanism adapted to engage, actuate and cause a second impulse to be given to the die during the latter's impression of the matrix-blank or matrix, and suitable means for returning the type-die and its actuating mechanism to their normal position, substantially as and for the purpose set forth. 17th. In a typograph machine, a type-die adapted to impress the matrix-blank or matrix, in combination with mechanism, substantially as shown, for engaging, actuating and causing a second impulse to be given to the type during the latter's impression of the matrix-blank or matrix, substantially as and for the purpose set forth. 18th. In a typograph machine, the combination with a horizontal type-die adapted to impress the matrix-blank or matrix, of means substantially as shown and described, for guiding and properly holding the die in its movement to impress and during its impression of the matrix-blank or matrix, and suitable means for simultaneously exerting a pressure downward upon the matrix-blank or matrix and at right angles to such impression, substantially as set forth. 19th. In a typograph machine, a horizontal reciprocating type-die adapted to impress the matrix-blank or matrix and provided with a laterally projecting nose or rib *G*, of suitable mechanism for feeding the matrix-blank or matrix, said feeding mechanism comprising a conveyor-belt, an upright bar or member operatively connected with said conveyor-belt and provided at its lower end with a bevel or incline adapted to be engaged by said rib or nose of the type-die, and suitable means for positively returning said upright bar or member and attachments to their normal position immediately upon the recession of the type-die from the matrix-blank or matrix, substantially as set forth. 20th. In a typograph machine, the combination with a type-die, of an upright feed-bar *R*, feed-rollers *SS*, and a conveyor-belt *P*, said feed-rollers, feed-bar and conveyor-belt being operatively connected with each other, the type-die being adapted to engage the lower end of the feed-bar and thereby actuate the feeding mechanism, substantially as set forth. 21st. In a typograph machine, a type-die adapted to impress the matrix-blank or matrix, and provided with a laterally projecting nose or rib, in combination with suitable mechanism for feeding the matrix-blank or matrix, said feeding-mechanism comprising an upright bar or member terminating at its lower end in a bevel or incline adapted to be engaged by said nose or rib of the type-die preparatory to the impression of the matrix-blank or matrix and suitable means for maintaining the verticality of said upright bar or member of the feeding-mechanism, said feeding-mechanism also comprising feed-rollers located at opposite sides of the line of endwise travel of the type-die and adapted to take hold on the matrix-blank or matrix, substantially as set forth. 22nd. In a typograph machine, a type-die adapted to impress the matrix-blank or matrix, and provided with a laterally projecting nose or rib, in combination with suitable mechanism for feeding the matrix-blank or matrix, said feeding mechanism comprising an upright bar or member terminating at its lower end in a bevel or incline adapted to be engaged by said nose or rib of the type-die preparatory to the impression of the matrix-blank or matrix, and suitable means for maintaining the verticality of said upright bar or member of the feeding-mechanism, said feeding-mechanism also comprising feed-rollers located at opposite sides of the line of endwise travel of the type-die and adapted to take hold on the matrix-blank or matrix, and a conveyor-belt adapted to feed the matrix-blank or matrix to the adjacent feed-roller, said upright bar or member, feed-rollers, and conveyor-belt being operatively connected with each other, substantially as set forth. 23rd. In a typograph machine, a type-die adapted to impress the matrix-blank or matrix, in combination with suitable mechanism for feeding the matrix-blank or matrix, said mechanism comprising an upright bar or member *R*, adapted to be engaged and elevated by the type-die preparatory to the impression of the matrix-blank or matrix by the die, feed-rollers *SS*, located at opposite sides of the line of endwise travel of the type-die, and suitable mechanism adapted to communicate motion from said upright bar or member to said feed-rollers, and comprising an annular disc or ring loosely mounted on the respective feed-rollers, and suitable means for temporarily establishing frictional contact between said annular disc or rings and the respective feed-rollers, substantially as and for the purpose set forth. 24th. In a typograph machine, a type-die adapted to impress the matrix-blank or matrix, in combination with suitable mechanism for feeding the matrix-blank or matrix, said mechanism comprising an upright bar or member, *R*, adapted to be engaged and elevated by the type-die preparatory to the impression of the matrix-blank or matrix by the die, feed rollers, *SS*, located at opposite sides of the line of endwise travel of the type-die and suitable means operatively connecting said feed-rollers with said upright bar or member, said connecting means comprising an annular disc or ring mounted on the respective feed-rollers outside the line of travel of the matrix-blank or matrix, and provided with curved grooves or slots on the inner periphery, a roller located within the respective grooves or slots, and a spring located between the respective rollers and the adjacent wall of the respective groove or slot opposite to the direction in which said annular disc or rings move to feed the matrix-blank or matrix, said springs being adapted to act in the direction to wedge the respective roller within the reduced portion of the re-

spective groove or slot, between the periphery of the respective feed-roller, and the opposing wall of said groove or slot, substantially as and for the purpose set forth. 25th. In a typograph-machine, a type-die adapted to impress the matrix blank or matrix, and provided with a laterally projecting rib or nose at its advancing end, in combination with suitable mechanism for feeding the matrix-blank or matrix, and comprising a bar or member provided with a bevel or incline adapted to be engaged by said nose or rib of the type-die, and feed-rollers operatively connected with said bar or member, the periphery of said feed-rollers being milled or muled or provided with suitable projections, whereby said rollers are adapted to take a positive hold upon the matrix blank or matrix, substantially as set forth. 26th. In a typograph-machine, a type-die adapted to impress the matrix-blank or matrix, and suitable mechanism for feeding the matrix-blank or matrix, in combination with suitably actuated means adapted, during the impression of the matrix blank or matrix by the die, to bear upon the latter directly forward of the point at which the matrix blank or matrix receives its impression, and at right angles to said impression, substantially as and for the purpose set forth. 27th. The combination with a type-die and suitable means for exerting a pressure upon the matrix blank or matrix during the impression of the latter, and at right angles to said impression, of a plunger for actuating the type-die to cause the die to impress the matrix blank or matrix and suitable means for reciprocating said plunger, said plunger being adapted to actuate the aforesaid pressure-exerting means, substantially as and for the purpose set forth. 28th. In a typograph-machine, the combination with a horizontal type-die adapted to impress the matrix blank or matrix, and suitably actuated plunger for actuating the die, of means substantially as shown and described for guiding and properly holding the die in its movement to impress and during its impression of the matrix-blank or matrix, and suitable means for simultaneously exerting a pressure downward upon the matrix-blank during the impression of the matrix-blank or matrix and at right angles to such impression, said pressure-exerting means being actuated by the aforesaid plunger, substantially as set forth. 29th. The combination with a type-die, of a plunger for actuating the type-die to cause the die to impress the matrix-blank or matrix, and suitable means for reciprocating said plunger, of a rearwardly and upwardly extending incline on the plunger, a lever U , adapted to be actuated by the aforesaid incline, and suitable means connected with the lever for exerting a pressure downward upon the matrix-blank or matrix, the arrangement of parts being such that said lever will be operated to actuate said pressure-exerting means preparatory to the impression of the impression of the matrix-blank or matrix by the type-die and to cause said pressure-exerting means to remain in action, during the impression, substantially as and for the purpose set forth. 30th. In a typograph-machine, cam-actuated means, substantially as indicated, and comprising a lever U , fulcrumed to any suitable support, and terminating at its forward end in a depending member U^1 , that at its lower extremity, is provided with a roller adapted to bear upon the matrix-blank or matrix, substantially as described, in combination with suitable means for maintaining the verticality of said depending member of the lever, substantially as set forth. 31st. In a typograph-machine, a type-die adapted to impress the matrix blank or matrix, and provided with a laterally-projecting nose or rib, a box O , open at the ends and top, suitable mechanism for feeding the matrix-blank or matrix and comprising an upright bar or men bar, as at R , extending into a vertical bore or perforation in the rear wall of said box, and being provided at its lower end with a bevel or incline, substantially as indicated, adapted to be engaged and elevated by said rib or nose of the type-die preparatory to the impression of the matrix-blank or matrix, the rear side of said box being perforated laterally with the perforation in open relation with the vertical perforation or bore aforesaid, said lateral perforation being funnel-shaped with the smaller end next adjacent to the path of the matrix-blank or matrix, and just large enough to accommodate the passage of the type-die, said rear wall of the box aforesaid also having a slot in open relation with said last mentioned perforation and of such size as to accommodate the reception of the nose or rib of the type-die aforesaid, substantially as set forth. 32nd. In a typograph-machine suitable mechanism for feeding the matrix-blank or matrix, said mechanism comprising two feed-rollers located respectively, at opposite sides of the point at which the matrix blank or matrix receives its impression and suitable means for bearing upon the matrix means for bearing upon the matrix preparatory to its delivery to said feed-rollers, said means comprising a roller extending transversely of the path of the matrix blank or matrix, and one or more springs bearing downward on said roller, substantially as and for the purpose set forth. 33rd. In a typograph-machine, suitable mechanism for feeding the matrix-blank or matrix, said mechanism comprising two feed-rollers located, respectively, at opposite sides of the point at which the matrix-blank or matrix receives its impression a roller adapted to bear upon the matrix preparatory to its delivery to said feed-rollers, said roller having a limited upward movement, substantially as and for the purpose set forth. 34th. In a typograph-machine, the combination with suitable mechanism for feeding the matrix-blank or matrix, of a spacing-lever adapted to actuate said feeding mechanism, and suitable means seated upon said lever, whereby the latter may be caused to actuate the feeding mechanism more or less according to the distance it is desired to feed the matrix-blank or matrix, and suitable means adapted to return

the lever to its normal position, substantially as set forth. 35th. In a typograph-machine, the combination with suitable mechanism for feeding the matrix-blank or matrix, of a spacing-lever X adapted to actuate said feeding mechanism, buttons Z seated upon the power-arm of said lever, and adapted, respectively, to be pressed downwardly, the arrangement and construction of said buttons, relative to each other, being such that said feeding mechanism is actuated more or less according to the button receiving the downward pressure, and one or more springs adapted to return the spacing-lever to its normal position. 36th. In a typograph-machine, the combination, with suitable mechanism for feeding the matrix-blank or matrix and comprising an upright bar or member R , of a spacing-lever X adapted to lift or elevate said bar, hollow posts or barrels Y , Y^1 , Y^2 , a button Z seated upon the power-arm of said spacing-lever within the respective barrels, the barrels and shanks of the buttons being slotted, substantially as indicated, and the power-arm of the spacing-lever extending through said slots, the shanks of said buttons terminating at different distances, relative to each other below the spacing-lever, and a spring mounted upon the shank of the buttons between the spacing-lever and bottom of the respective barrel, substantially as and for the purpose set forth. 37th. In a typograph-machine, the combination with a rotating-shaft, type-die carrier, a series of type-dies having bearing in said carrier, type-die impressing-plunger, a cam-wheel loosely mounted on said shaft and adapted to actuate said plunger, a wheel operatively mounted on the shaft, and suitable clutch-mechanism for operatively connecting said wheels, of a stationary index provided with a series of holes representing, respectively, a die in the aforesaid series of type-dies, an index-key operatively connected with the type-die carrier in such a manner that the selected type-die, by manipulating or actuating said index-key as required, is brought into the proper position relative to the impressing-plunger, a movable plate at the rear of the index adapted to be actuated by the index-key upon the engagement by said key of any of the aforesaid holes in the index-plate, a rod rigidly connected with said movable plate and adapted to actuate the clutch-mechanism to establish operative connection between the aforesaid wheels, and suitable means for automatically operatively disconnecting said wheels, the arrangement of parts being substantially as described and for the purpose specified. 38th. In a typograph-machine, the combination with the type-die impressing-plunger, of a rotating shaft, a cam-wheel loosely mounted on said shaft and adapted to actuate said plunger, a grooved wheel operatively mounted on said shaft within said cam-wheel, suitable clutch-mechanism adapted to establish frictional contact between said wheels, suitable means for applying said clutch-mechanism and stationary means for actuating said clutch-mechanism to operatively disconnect the wheels aforesaid, substantially as and for the purpose set forth. 39th. In a typograph-machine, the combination with the type-die impressing-plunger, of a rotating shaft, a cam-wheel loosely mounted on said shaft and adapted to actuate said plunger, a grooved wheel operatively mounted on said shaft within said cam-wheel, suitable clutch-mechanism adapted to establish frictional contact between said wheels, suitable means for applying said clutch-mechanism, a spring acting in the direction to retain said clutch-mechanism in its operative position and suitable means for automatically operatively disconnecting the aforesaid wheels, substantially as and for the purpose set forth. 40th. In a typograph-machine, the combination with a type-die impressing-plunger, a rotating-shaft, a cam-wheel loosely mounted on said shaft and adapted to actuate said plunger, said cam-wheel having a hole L^1 , a grooved wheel operatively mounted on said shaft within said cam-wheel, a friction-shoe L^2 , located between the side-walls of said groove and having a pin or member L^3 , extending outwardly through hole L^2 in the cam-wheel and terminating at its outer end in a comparatively large head, suitable means for engaging said head to cause the friction-shoe to establish frictional contact between the aforesaid wheels preparatory to the actuation of the impressing-plunger, and suitable means for automatically actuating said clutch-mechanism to operatively disconnect the wheels aforesaid, substantially as set forth. 41st. In a typograph-machine, the combination with a type-die impressing-plunger, a rotating-shaft, a cam-wheel loosely mounted on said shaft and adapted to actuate said plunger, said cam-wheel having a hole L^1 , a grooved wheel operatively mounted on said shaft within said cam-wheel, a friction-shoe L^2 , located between the side-walls of said groove and having a pin or member L^3 , extending outwardly through hole L^2 in the cam-wheel and terminating at its outer end in a comparatively large head, suitable means for engaging said head to cause the friction shoe to establish frictional contact between the aforesaid wheels preparatory to the actuation of the impressing-plunger, and a stationary fork for automatically engaging and actuating said clutch-mechanism to operatively disconnect the wheels aforesaid and adapted to permit the passage of said clutch-mechanism upon the performance of its function, substantially as set forth. 42nd. In a typograph-machine, the combination with a rotating shaft, type-die-carrier, type-dies having bearing in said carrier, type-die impressing-plunger, a cam-wheel loosely mounted on said shaft and adapted to actuate said plunger, a wheel operatively mounted on the shaft, and suitable clutch-mechanism for operatively connecting said wheels, of a stationary index provided with a series of holes representing respectively, one or more of the aforesaid type-dies, an index-key operatively connected with the type-die-carrier in such a manner that the selected type-die, by manipulating or actuating said index-key as required, is brought into the proper position

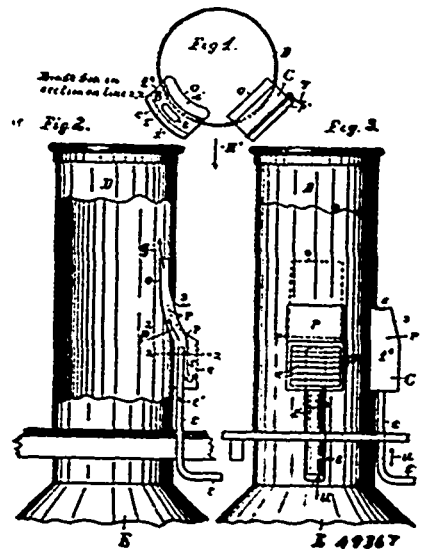
relative to the impressing-plunger, a movable plate at the rear of the index adapted to be actuated by the index-key upon the engagement by said key, of any of the holes in the index-plate, a rod operatively connected with said movable plate and adapted to actuate the clutch-mechanism to establish operative connection between the aforesaid wheels, suitable means for automatically operatively disconnecting said wheels, and suitable means for returning the aforesaid plate to its normal position upon the disengagement of the index by the index-key, substantially as set forth. 43rd. In a typograph-machine, the combination with a rotating-shaft, type-die carrier, type-dies having bearing in said carrier, type-die impressing-plunger, a cam-wheel loosely mounted on said shaft and provided with a peripheral cam for actuating said plunger, a wheel operatively mounted on said shaft and suitable clutch-mechanism for operatively connecting said wheels, of a stationary index provided with a series of holes representing, respectively, one or more of the aforesaid type-dies, an index-key operatively connected with the type-die carrier in such a manner that the selected type-die by manipulating or actuating said index-key as required is brought into the proper position relative to the impressing-plunger, a tilting-plate at the rear of the index adapted to be actuated by the index-key upon the engagement by said key of any of the holes of the index-plate, a rod or suitable member operatively connected with said index-plate and adapted to actuate the clutch-mechanism to establish operative connection between the aforesaid wheels, suitable means for operatively disconnecting said wheels and suitable means for returning the aforesaid tilting-plate to its normal position upon the disengagement of the index by the index key, substantially as set forth. 44th. In a typograph-machine, the combination with a rotating shaft, type die carrier, type-dies having bearing in said carrier, type-die impressing-plunger, a cam-wheel loosely mounted on said shaft, and provided with a cam for actuating said plunger, a wheel operatively mounted on said shaft and suitable clutch-mechanism for operatively connecting said wheels, of a stationary index provided with a series of holes representing, respectively, one or more of the aforesaid type-dies, an index-key operatively connected with the type-die carrier in such a manner that the selected type-die by manipulating or actuating said index-key, as required, is brought into the proper position relative to the impressing-plunger, a movable plate at the rear of the index adapted to be actuated by the index-key upon the engagement by said key of any of the holes in the index, a rod or suitable member operatively connected with said movable plate and adapted to actuate the clutch-mechanism to establish operative connection between the aforesaid wheels, and a peripheral cam on the aforesaid cam-wheel adapted to engage and actuate the aforesaid rod to return the aforesaid movable plate to its normal position upon the disengagement of the index by the index-key, substantially as set forth. 45th. In a typograph-machine, the combination with a rotating-shaft, type-die-carrier, type-dies having bearing in said carrier, type-die impressing-plunger, a cam-wheel loosely mounted on said shaft and provided with a cam for actuating said plunger, a wheel operatively mounted on said shaft, suitable clutch-mechanism for operatively connecting said wheels, of a stationary index provided with a series of holes representing, respectively, one or more of the aforesaid type-dies, an index-key operatively connected with the type-die-carrier in such a manner that the selected type-die by manipulating or actuating said index-key, as required, is brought into the proper position relative to the impressing-plunger, a movable plate at the rear of the index adapted to be actuated by the index-key upon the engagement by said key of any of the holes in the index, a rod or suitable member operatively connected with said movable plate, and adapted to actuate the clutch-mechanism to establish operative connection between the aforesaid wheels, and one or more springs acting in the direction to retain said movable plate in its normal position, substantially as set forth. 46th. The combination with the type-die-carrier of a typograph-machine, of type-writer mechanism comprising a series of type-levers operatively connected with said type-die-carrier in such a manner as the movement of said type-die-carrier in the one direction or the other will cause said type-levers to be moved sidewise, the arrangement of parts being such that the corresponding type-die and type-lever will simultaneously be brought into position for operation, substantially as set forth. 47th. The combination with the type-die-carrier of a typograph-machine, of type-writer mechanism and suitable mechanism operatively connecting the type-writer mechanism with the aforesaid type-die-carrier, said type-writer mechanism comprising a supporting-bed 47, rigid with the supporting-bed of the typograph-machine, a sliding-block adapted to move endwise of bed 47, a series of type-lever-bars supported transversely of said block, a series of type-levers fulcrumed to any suitable support and operatively connected with the respective type-lever-bars, a rack connected with and extending lengthwise of said sliding-block and in mesh with a gear of said connecting-mechanism, substantially as set forth. 48th. The combination with the type-die-carrier, of a typograph-machine, of type-writer mechanism, and suitable mechanism operatively connecting the type-writer mechanism with the aforesaid type-die-carrier, said type-writer mechanism comprising a sliding-block 46, a series of type-lever-bars supported transversely of said sliding-block, a series of type-levers fulcrumed to any suitable support and operatively connected with the respective type-lever-bars, a rack extending lengthwise and adapted to communicate motion to said sliding-block from the connecting mechanism aforesaid, said connecting mechanism comprising a horizontal shaft 40, inter-

geared with said rack and with an upright shaft 31, operatively connected with the type-die carrier, substantially as set forth. 49th. The combination, with the type-die carrier of a typograph-machine, of suitable type-writer mechanism comprising a supporting bed 47, a sliding block 46 operatively connected with the aforesaid type-die carrier and adapted to move endwise on said bed upon and between rollers arranged at suitable intervals lengthwise of said block, said block having grooves on its upper side and extending transversely thereof, type-lever bars supported in the respective grooves and type-levers operatively connected with the respective type-lever bars, substantially as set forth. 50th. The combination, with the type-die carrier of a typograph-machine, of suitable type-writer mechanism, comprising a supporting bed 47, a sliding block 46, adapted to move endwise on said bed, said sliding block being operatively connected with the type-die carrier aforesaid, having grooves or recesses on its upper side and extending transversely thereof, type-lever bars supported in said grooves or recesses, a cap-plate 61, adapted to hold said type-lever bars to their seats in said grooves or recesses, of the sliding block, and type-levers operatively connected with said type-lever bars, substantially as set forth. 51st. The combination, with the type-die actuating mechanism, of a typograph-machine and type-writer mechanism comprising a series of type-levers, of suitable mechanism operatively connected with the aforesaid type-die actuating mechanism for actuating said type-levers to cause the latter to make their imprint, substantially as set forth. 52nd. The combination, with the type-die actuating mechanism, of a typograph-machine and the type-levers of type-writer mechanism, of suitable mechanism operatively connected with said type-die actuating mechanism and adapted to actuate said type-levers, the arrangement of parts being such that the imprint by the type-levers will follow the impression of the matrix-blank or matrix by the corresponding type-die, substantially as set forth. 53rd. The combination, with cam-actuated mechanism for actuating the type-dies of a typograph-machine and type-writer mechanism comprising a series of type-levers, of suitable means operatively connected with the type-die actuating mechanism and adapted to actuate said type-levers, the arrangement of parts being such that the imprint of a type-lever will immediately follow the impression of the matrix-blank or matrix by the corresponding type-die, substantially as set forth. 54th. The combination, with a typograph-machine comprising a suitably actuated plunger adapted to engage and actuate the type-die substantially as indicated, and type-writer mechanism comprising a series of type-lever-bars and a series of type-levers operatively connected with said type-lever-bars, the latter being notched, respectively, on their under surface, the type-die actuating plunger aforesaid having an upwardly-extending arm or member, of suitable mechanism adapted to operatively connect said type-lever-bars and type-die-actuating plunger, said connecting mechanism comprising a bolt located within said upwardly-extending arm or member of the plunger with the head thereof adapted to engage the notch in the under side of the type-lever-bar immediately above said bolt, an incline located at one or either side of said bolt, the latter having a lateral pin or pins adapted to engage and ride upon said incline or inclines, and a spring acting in the direction to retain the bolt in its shot position, substantially as set forth. 55th. The combination with the type-die actuating mechanism of a typograph-machine and type-levers, of type-writer mechanism of suitable means operatively connected with the type-die actuating mechanism and adapted to actuate the aforesaid type-levers, and a spring for each type-lever adapted to act in the direction to return said lever to its normal position, substantially as set forth. 56th. In combination with a typograph-machine comprising suitable mechanism for actuating the type-dies, of type-writer mechanism comprising a series of type-lever-bars and a series of type-levers operatively connected with said type-lever-bars, suitable mechanism adapted to operatively connect said type-lever-bars with the aforesaid type-die-actuating mechanism, and a spring for each type-lever-bar and adapted to act in the direction to retain said bar in its normal position, said type-lever-bars being adapted to travel on rollers, substantially as and for the purpose set forth. 57th. In combination with a typograph-machine comprising suitable type-die-supporting members or type-die-carrier movable in a vertical plane, of type-writer mechanism comprising a paper-carriage, and suitable means operatively connecting said paper-carriage with the type-die-carrier, whereby the paper-carriage will be elevated or lowered with the raising or lowering of the type-die-carrier, substantially as set forth. 58th. In combination with a typograph-machine, a type-die-carrier carrying sets of type-dies arranged respectively, in two or more series substantially as indicated, said type-die-carrier being adapted to be raised or lowered, of type-writer mechanism comprising a paper-carriage and a series of type-levers provided, respectively, with as many type as there are series of type-dies in the type-die-carrier, and suitable mechanism connecting said paper-carriage with the type-die-carrier in such a manner that said type-die-carrier and paper-carriage are elevated or lowered simultaneously, said connecting mechanism comprising a vertically-sliding-plate provided with a rack at or near either end of said plate, a sector in mesh with the respective racks and suitable means operatively connecting said sector with the paper carriage, substantially as and for the purpose set forth. 59th. The combination with a typograph machine comprising a type-die-carrier carrying two or more series of type-dies, of type-writer mechanism comprising a supporting-bed 47, a plate 120 adapted to slide up and

down the forward end of said bed, racks 131 rigid or integral with said sliding-plate, forwardly-extending brackets 104 rigid with said supporting-bed, sectors 132 in mesh with said racks and pivotally connected with said forwardly-extending brackets, said brackets having recesses 135, plates or blocks 103 adapted to slide endwise of said recesses, and links 134 connecting said sliding-plates or blocks 103 with the respective sector 132 aforesaid, substantially as and for the purpose set forth. 60th. In combination with a typograph-machine comprising a suitable type-die-carrier movable in a vertical plane, of type-writer mechanism comprising a paper-carriage, and suitable means operatively connecting said paper-carriage with the type-die-carrier, whereby the paper-carriage will be elevated or lowered with the raising or lowering of the type die-carrier, and one or more springs adapted to act in the direction to return said paper-carriage to its lowermost position, substantially as set forth. 61st. The combination with the matrix-feeding-mechanism of a typograph-machine, of type-writer mechanism comprising a paper carriage, and suitable means adapted to operatively connect said paper-carriage with the matrix-feeding-mechanism aforesaid and advance said paper-carriage as required, and adapted to operatively disconnect said matrix-feeding-mechanism and paper-carriage when the latter has reached the terminus of its advance movement and allow the same to remain disconnected until the paper-carriage has returned to its place of beginning, substantially as set forth. 62nd. In a typograph-machine and attachments, the combination with a horizontally reciprocating type-die-carrier, of type-writer mechanism comprising a series of type-levers operatively connected with said type-die-carrier, the arrangement of parts being such that the corresponding type-die and type-lever shall simultaneously be brought into position for operation, substantially as set forth. 63rd. The combination with a typograph-machine comprising a horizontally reciprocating type-die-carrier, a shaft, as at H, and suitable means for operatively connecting the type-die-carrier with said shaft, a stationary index having a series of lateral holes or perforations concentric with the axis of said shaft, an arm, as at I, bearing an index-key, operatively mounted on the forward end of said shaft, of type-writer mechanism comprising a series of type-levers operatively connected with said shaft, the arrangement of parts being such that upon the engagement by the index-key, of the selected hole or perforation in the index, the corresponding type-die and type-lever of the typographic and type-writer mechanism, respectively, will simultaneously be brought into position for operation, substantially as set forth. 64th. The combination with a typograph-machine comprising a horizontally reciprocating type-die-carrier, a shaft, as at H, and suitable means for operatively connecting the type-die-carrier with said shaft, a stationary index having a series of lateral holes or perforations concentric with the axis of said shaft, an arm, as at I, bearing an index-key, operatively mounted on the forward end of said shaft, of a shaft, as at f, intergearred with the aforesaid shaft H, substantially as indicated, and a series of type-levers of type-writer mechanism operatively connected with said shaft f, the arrangement of parts being such that the corresponding type-die and type-lever will simultaneously be brought into position for operation, substantially as set forth. 65th. The combination with a typograph-machine comprising a horizontally reciprocating type-die carrier movable in a vertical plane, of type-writer mechanism comprising a paper-carriage, and suitable means operatively connecting said paper-carriage and reciprocating type-die carrier in such a manner that the paper-carriage will be moved up and down simultaneously with the elevation and lowering of the type-die-carrier, substantially as set forth. 66th. The combination with a typograph-machine comprising a reciprocating type-die-carrier movable in a vertical plane, and an oscillating-shaft, of type-writer mechanism comprising a paper-carriage, and suitable means operatively connecting said paper-carriage with said oscillating shaft in such a manner that the paper-carriage will be elevated or lowered according as said shaft is oscillated to elevate or lower the type-die-carrier, substantially as and for the purpose set forth. 67th. The combination with a typograph-machine comprising a type-die-carrier, a shaft as at D, rock-arms mounted on said shaft and operatively connected with the type die-carrier and suitable means for oscillating said shaft, of type-writer mechanism comprising a paper-carriage and suitable means operatively connecting said paper-carriage with said shaft in such a manner that the paper-carriage will be elevated or lowered according as the aforesaid shaft is oscillated to elevate or lower the type-die-carrier, substantially as set forth. 68th. The combination with a typograph-machine comprising a reciprocating type-die-carrier, an oscillating shaft, suitable means operatively connecting the type-die-carrier with said shaft, and suitable means for oscillating said shaft, of type-writer mechanism comprising a paper-carriage, one or more vertically-reciprocating racks operatively connected with the aforesaid shaft, and operatively connected with the paper-carriage, the arrangement of parts being such that the type-die-carrier and paper-carriage will be simultaneously elevated or lowered according as the aforesaid shaft is oscillated in the one direction or the other, substantially as set forth. 69th. The combination with a typograph-machine comprising a type-die-carrier, a horizontal shaft as at D, rock-arms operatively connecting the type-die-carrier with said shaft, of a vertically reciprocating slide operatively connected with said oscillating shaft, racks rigid or integral with said slide type-writer paper-carriage, and toothed sectors operatively connected with said carriage and meshing with the aforesaid racks, the arrangement

of parts being substantially as shown and for the purpose specified. 70th. The combination with a typograph-machine comprising a type die-carrier movable in a vertical plane, of a type-writer comprising a bed, a vertically reciprocating slide secured to said bed and operatively connected with the type-die-carrier, said slide being slotted for the passage of the securing-bolts and to accommodate the vertical movement of the slide and a paper-carriage operatively connected with said slide in such a manner that said carriage is elevated or lowered with the elevation or lowering of the type-die-carrier, substantially as set forth. 71st. The combination with an oscillating-shaft, as at D, and a type-die-carrier and type-writer paper-carriage operatively connected with said shaft in such a manner that the oscillation of said shaft in the one direction or the other will simultaneously elevate or lower said type-die-carrier and paper-carriage, and suitable means for operating said shaft, of suitable means for locking the type-die-carrier and paper carriage at the desired elevation, substantially as set forth. 72nd. The combination with the matrix-feeding-mechanism of a typograph-machine, of a type-writer mechanism comprising a paper-carriage, a pulley as at 90, a cord or band operatively connecting said pulley with the paper-carriage and adapted to propel the latter in the one direction, and suitable means for communicating motion from the matrix-feeding mechanism to said pulley, substantially as set forth. 73rd. The combination with the matrix-feeding-mechanism of a typograph-machine, of type-writer mechanism comprising a paper carriage, suitable mechanism operatively connecting the paper-carriage with the matrix feeding mechanism and adapted to advance the paper-carriage as required, said connecting mechanism comprising a bar 93, a pulley 90, a cord or band 93a, operatively connecting said bar and pulley, of suitable means for communicating motion from the matrix feeding mechanism to said pulley, and suitable means for preventing the lifting or upward displacement of said bar, substantially as set forth. 74th. The combination with the type-die-actuating mechanism of a typograph-machine and type-levers of type-writer mechanism of suitable means operatively connected with the type-die-actuating mechanism and adapted to actuate the aforesaid type-levers, and suitable means for preventing lateral movement or deflection of the type-levers in their operation of rendering the imprint, substantially as and for the purpose set forth. 75th. The combination with the type-die-actuating mechanism of a typograph-machine and type levers of typewriter mechanism of suitable means operatively connected with the type-die-actuating mechanism and adapted to actuate the aforesaid type-levers, and a forked guide, substantially as indicated, for receiving the type-levers and preventing lateral movement or deflection of the levers in the performance of their function, substantially as and for the purpose set forth. 76th. The combination with the type-die-actuating mechanism, of a typograph machine and type levers of type-writer mechanism, of suitable means operatively connected with the type-die-actuating mechanism and adapted to actuate the aforesaid type-levers, and an inking roller for said type-levers, said inking-roller being located substantially as shown, for the purpose specified.

No. 49,367. Draft Appliance for Smokestacks.
(Appareil de tirage pour cheminées.)

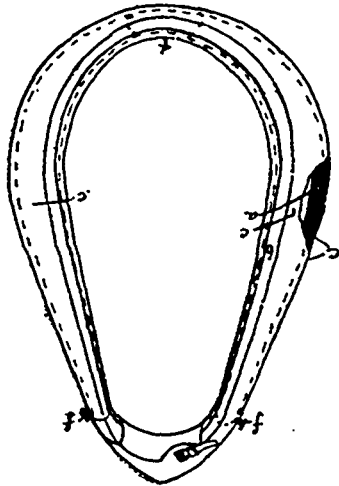


The Taylor Improved Draught Company, assignee of Benjamin Franklin Taylor, both of Newark, New Jersey, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. The combination, with a chimney having the aperture formed in its side, of the draft conductor o projected upward

from the inner side of the aperture, and a draft box having suitable air inlets upon its exterior applied to the front side of such aperture, as herein set forth. 2nd. The combination, with a chimney having the aperture formed in its side, of a draft conductor *o* projected upward from the inner side of the aperture, a draft box having air inlets upon its exterior applied to the lower end of such aperture and provided with an adjustable flap *p* to close the outer inlet of the conductor when desired, as herein set forth. 3rd. The combination, with a chimney having an aperture in its side, a draft conductor *o* projected upward from the inner side of the aperture, a draft box with air inlets upon its outer side applied to such aperture, and a partition extended downward within the box from the top, as set forth. 4th. The attachment for sheet metal chimneys, consisting in the draft box having the inclined slats *c* upon its outer side, the auxiliary draft pipe *t* projected upward through its bottom and the draft conductor *o* extended from its upper end, as herein set forth. 5th. The combination, with a smokestack having a lateral aperture, of a draft box having a series of lateral draft openings in its outer side, a draft conductor extended from the box upward within the stack, a partition extended downward within the box and a ventilating pipe extended upward through the bottom of the draft box behind the partition, as and for the purpose set forth.

No. 49,368. Horse Collar. (Collier de cheval.)



Hewitt Boslock, assignee of Henry Lawrence Gulline, both of Victoria, British Columbia, Canada, assignee of Laurow Ingels, Seattle, Washington, U.S.A., 3rd July, 1895; 6 years.

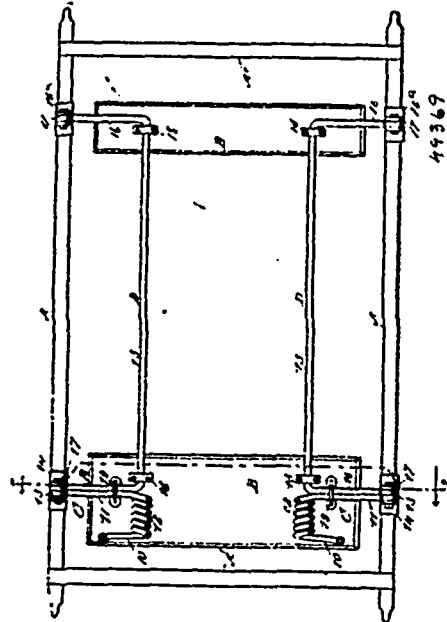
Claim.—1st. A horse collar having the pad portion on each side and the throat or breast portion free of stuffing material, and separate air-tight bags inserted in the free space thereof, with means for allowing the inflation of the bags with air and retaining same therein for the purpose set forth. 2nd. A horse collar having the pad portion on each side and the throat or breast portion free of stuffing material, and separate air-tight bags inserted in the free space thereof with or without their lower ends diminished to fit the throat or breast portion and with or without such lower ends crossing or overlapping each other in such throat or breast portion, with means for allowing the inflation of the bags with air and retaining same therein for the purpose set forth. 3rd. A horse collar having a rigid rim *b*, a casing or covering *c*, and separate air-tight filling bags *a*, enclosed within the casing with their lower ends overlapping each other in the throat or breast portion of the collar with or without an intervening shield or lining *g*, between said filling bags and covering, and suitable valves allowing the inflation of the bags with air and serving to retain the air therein for the purpose set forth.

No. 49,369. Vehicle Spring. (Ressort de voiture.)

Willie Nason Snow, Snowville, Eaton, New Hampshire, U.S.A., 3rd July, 1895; 6 years.

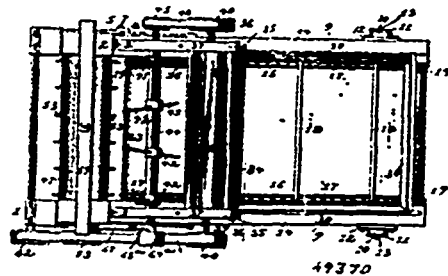
Claim.—1st. The combination, with the bolster, and side bars or like part of a vehicle, of a substantially yoke-shaped equalizing frame journaled on the bolsters and having its end arms pivotally connected with the side bars, and a spring one end whereof is secured to the bolster while the other end thereof is contiguous to one of the end arms of the equalizing frame and is secured to the side bar, substantially as described. 2nd. The combination, with the bolster and side bars of a vehicle, of the coiled springs having essentially parallel end members one of which is secured to the bolster and the other to the side bar, and an equalizing frame journaled on the bolsters and having its end arms pivotally connected to the side bars, one end arm of the spring and one end arm of the equalizing frame extending contiguous to one another and

being tied together, as set forth. 3rd. The combination, with the bolster and the side bar or like part of a vehicle, of a coiled spring



having the axis of the coil extending longitudinally of the vehicle, one end of the spring being secured to the bolster, and the other to the side bar, as set forth.

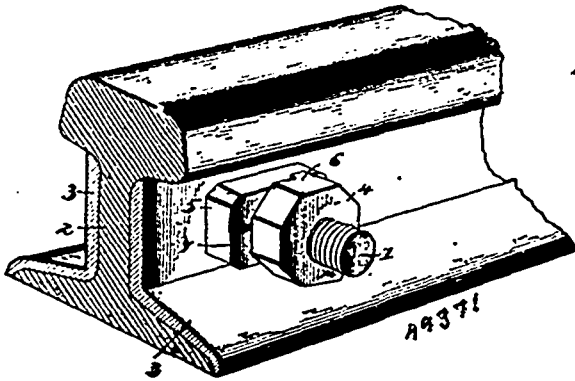
No. 49,370. Band Cutter and Feeder. (Coupe-hart et alimentateur.)



Augustus Johnson, Falun, Kansas, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. In a band cutter and feeder, the combination of a feeder frame provided at its opposite upper sides with side bearing boards having at one end a series of openings, the endless apron arranged within the frame, a hopper box removably supported on the feeder frame above the apron and provided with an inner open end, a regulating board mounted for vertical adjustment at the inner open end of the hopper box, adjusting pins passed through the ends of said regulating board and adapted to engage the openings at one end of said side bearing boards to secure the regulating board in any vertically adjusted position, an auxiliary longitudinally corrugated feed roller supported between the side bearing boards directly adjacent to one side of the regulating board to receive the grain as it passes thereunder, and a rotary band cutter mounted between the said bearing boards closely adjacent to one side of the corrugated feed roller, substantially as set forth. 2nd. In a band cutter and feeder, the combination of the fixed feeder frame, upper and lower feed rolls mounted within said fixed frame, the upper of said rolls being provided with short teeth, and the lower of said rolls being provided with a peripheral series of integrally formed longitudinal feed notches, the shoulders of which are adapted to be carried forwardly toward the cylinder of the separator, an outer feeder frame connected to the fixed frame, the opposite apron rollers journaled in said outer frame, and the inner of which rollers is disposed adjacent to the lower feed roll and is provided with end chain wheels, and a peripheral series of integrally formed longitudinal feed notches, the shoulders of which travel toward said lower feed roll, the open apron arranged on said apron rollers and having endless chains engaging the chain-wheels of the inner roller, the band cutter, and a loose-grain trough arranged below and projecting up between the notched roll and roller, substantially as set forth.

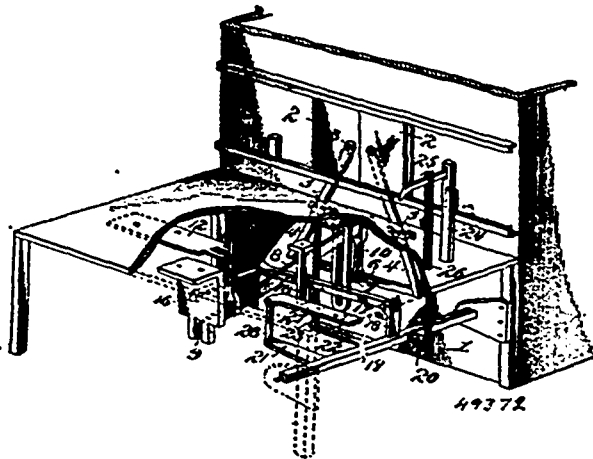
No. 49,371. Nut Lock. (Arrête-écrou.)



John J. Kine, Kendallville, Indiana, U.S.A., 3rd July, 1895; 6 years.

Claim.—In a nut lock, the combination with a bolt, of a nut provided on its inner face with ratchet-teeth, and an oblong locking plate or washer having a slot or elongated bolt opening and provided on its outer face at the sides and ends of the slot or opening with ratchet-teeth adapted to interlock with those of the nut, the latter being capable of securing the locking plate or washer against movement, and being adapted to be rotated forward a partial revolution, to release the locking plate or washer, substantially as and for the purpose described.

No. 49,372. Furnace Door. (Porte de fournaise.)

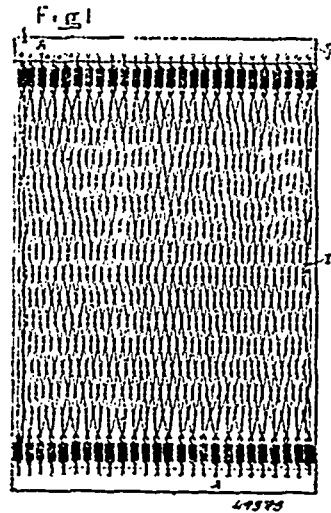


David E. Robinson, Arden, West Virginia, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. A furnace door comprising twin halves or sections, each composed of front and rear plates and mounted in suitable horizontal tracks or ways adapting said sections to move laterally in a horizontal plane, in combination with the pivoted and spring-actuated levers arranged with their ends between said plates and slotted to engage pins also arranged between said plates for operating the door sections, and one or more foot levers for operating said door levers, substantially as specified. 2nd. A furnace door made of two halves or sections and arranged to move in a horizontal plane between suitable ways or tracks, in combination with a pair of pivoted levers connected with said sections for opening and closing the same, a forwardly extending horizontal lever for operating said door levers, a foot post or standard connected with said horizontal lever, and extending to a point within convenient reach of the attendant, and a spring-actuated catch for holding the door sections open, substantially as specified. 3rd. The combination, with a furnace door made in two sections, of two vertical levers for opening and closing the same, a horizontal lever connected with said vertical levers for operating the same, a spring actuated catch for holding the door sections open, and a releasing mechanism consisting of a rock-shaft and a push-rod connected with said spring-actuated catch for closing the door sections, substantially as specified. 4th. The combination, with a furnace door made in two sections and provided with trunnions or pivots, of two vertical levers slotted at their upper ends to engage said pivots, a pair of pivoted links or toggle levers connecting the lower ends of said vertical levers, a horizontal lever for

operating said toggle lever, a foot post for depressing the horizontal lever, and a catch for engaging said foot post, as and for the purpose substantially specified. 5th. A furnace door made in two sections, adapted to be moved laterally in a horizontal plane, means for opening and closing said door sections, and a pivoted catch for holding the same open, in combination with a rock-shaft provided with a crank-arm, a rod interposed between said crank-arm and the pivoted catch, and means for operating said rock-shaft, in the manner substantially as specified. 6th. A furnace door made in two sections, means connected therewith for opening and closing the same, and a spring-actuated catch for holding the door sections open, in combination with a rod for releasing the catch, a rock-shaft provided with a crank-arm for operating said rod, a vertically extending rod connected with a crank-arm on the rock-shaft and passing up through the floor or platform, and a pivoted hand lever connected to said vertical rod, and located within convenient reach of the engineer or fireman, substantially as specified.

No. 49,373. Spring Mattress and Frame therefor. (Sommer elastique et cadre.)

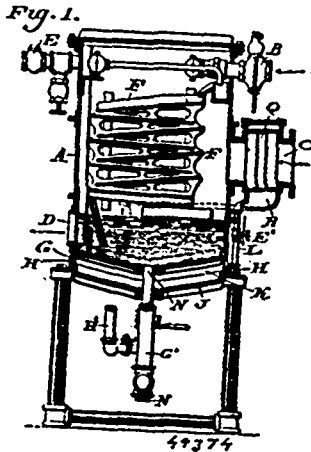


Francis Gilbert Gale, Waterville, Quebec, Canada, 3rd July, 1895; 6 years.

Claim.—1st. A mattress frame consisting of two side and two end rails, the former made of material preferably of uniform width and thickness from end to end, and provided at each end with a step preferably of spring tempered steel suitably secured to the upper surface of the ends of the said rails; and the tension attachment hereinbefore described consisting of a screw-threaded shank to which a nut is fitted, the other end of the bolt turned into an eye or ring to receive the bolt which secures the ends of the end rails upon the step by means whereof endwise tension may at pleasure be given to the mattress fabric hung or suspended between the end rails by screwing the nut of the eyebolt down against the outer surface of the step, substantially as and for the purposes set forth. 2nd. A step of flat steel of suitable width and thickness made a part of the side rails of a mattress frame, by being rigidly secured thereto provided with a regular shaped slotted or elongated hole the shortest diameter of which is answerable to that of the securing bolt which holds the ends of the end rail down upon said step to act functionally with said side rails to form the mattress frame and to suspend the mattress fabric a suitable distance above the edges of the side rails and on a horizontal plane parallel therewith and provided with a tightening or tension bolt having a ring or eye to receive the securing bolt and a nut adapted by pressing against the outer surface of said step to impart at pleasure a suitable tension to the fabric so suspended between the end rails, all substantially as set forth. 3rd. A mattress frame comprising two side rails and two end rails, the latter joined to the former through a step of suitable height above the upper surface of the former and at each end thereof and of suitable strength to hold the end rails in place while supporting the mattress fabric strained within the frame, a suitable height above the side rails; the step provided with a tension attachment and the said mattress frame combined with a mattress fabric of woven wire and end tension springs; the wire of the fabric woven in zig-zag strands across from side to side of the same in each way towards the head and foot from the centre made up of a tier or brand or several of these bent or cramped in zig-zag form and at each angle turned into a loop or ring to receive the mesh of the other weaving, and to hold the fabric spread out laterally, all arranged substantially as described. 4th. The mattress fabric made by weaving or interlocking strands of wire first bent into zig-zag form and then carried from side to side of the fabric, the central strand turned into loops at the apices to give a lateral bracing to spread the fabric out

and provided with separate links at the ends to join the fabric to the end tension springs, substantially as set forth. 5th. The mattress fabric made by weaving or linking separate V-shaped links of wire into a central band or bands of wire first bent into zig-zag form and then carried or turned into loops at the apices of the angles to receive the links forming the fabric from the centre either way towards the ends and the end tension springs, said band or bands so centrally placed across the bed serving to give it a lateral bracing and to hold it spread out at the middle part and towards the edges, all substantially as set forth. 6th. The mattress fabric made by weaving or linking wires across from side to side of the same each way from the centre in V or lozenge-shaped meshes, said centre being formed of wire of uniform gauge or heavier and bent in zig-zag form, the angles turned into loops to give lateral bracing, and the bands proportioned to give shorter V's or lozenges to break up the lines of resistance from end to end or from corner to corner of the bed fabric whereby one or many springs at the end will be brought to bear to tensionally withstand a pressure at any point upon the fabric, more particularly at the centre, thus preventing it from sagging or bagging in the centre, substantially as and for the purposes described. 7th. A bed composed of a mattress frame having a step to raise the end rails above the side rails, a tension attachment of an eyebolt engaging with said end rails and said step, and a fabric of wire made up of V or lozenge-shaped meshes secured to the end rails by end tension springs and having across its centre a lateral brace in the form of a band or bands of wire of a uniform or heavier gauge bent zig-zag and looped at the apices of the angles to form uniform or shorter V's or lozenges than those of the other parts of the fabric, substantially as and for the purposes set forth.

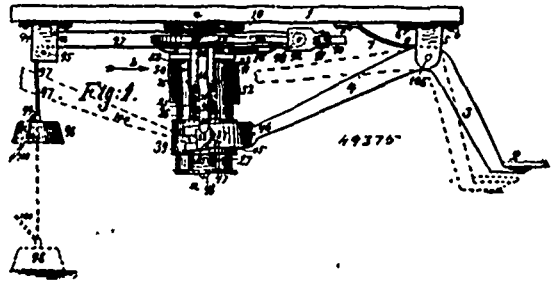
No. 49,374. Steam Jacket Attachment for Feed Water Heaters. (Appareil de chemise à vapeur pour rechauffeurs d'eau d'alimentation.)



Warren Webster, Merchantville, New Jersey, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. In a feed water heater, a casing, a steam inlet pipe therefor, a jacket, forming an independent chamber, surrounding the lower portion of said casing, and a separate steam pipe leading into the space between said jacket and the bottom of said casing, said parts being combined substantially as described. 2nd. In a feed water heater, water and steam inlet pipes, and a discharge water pipe therefor, a jacket forming an independent heating chamber surrounding the lower portion of said casing, a steam supply for said jacket, a drip pipe for the latter, and a drain pipe for the casing, said parts being combined substantially as described. 3rd. In a feed water heater, a casing, water and steam inlet pipes, and a discharge water pipe therefor, a jacket forming an independent heating chamber, for the lower portion of said casing, a steam supply for said jacket, a drip pipe for the latter, and a drain pipe for said casing, said drain pipe passing through said jacket, substantially as described. 4th. In a feed water heater, in which the feed water comes into direct contact with the steam, a steam inlet pipe, a separator interposed between said inlet and the heater, a steam jacket in the lower portion of said heater, a pipe conveying steam to said jacket from the drip chamber of said separator, and suitable drip and drain pipes, substantially as described. 5th. In a feed water heater, in which the feed water comes into direct contact with the steam, a steam inlet pipe, a separator for the latter, a steam jacket in the lower portion of the heater, a pipe for conveying steam to said jacket, a drip for the latter, a drain pipe having communication with the interior of the heater, and scum and overflow pipes, substantially as described. 6th. In a feed water heater, in which the feed water comes into direct contact with the steam, a pan-shaped vessel suitably attached to the lower portion of the same, so as to form a steam jacket, said vessel having a lip projecting toward the steam inlet pipe, whereby steam is conveyed into said jacket, substantially as described.

No. 49,375. Hitching Device. (Enrénore.)



Olof William Orill, Minneapolis, Minnesota, U.S.A., 3rd July, 1895; 6 years.

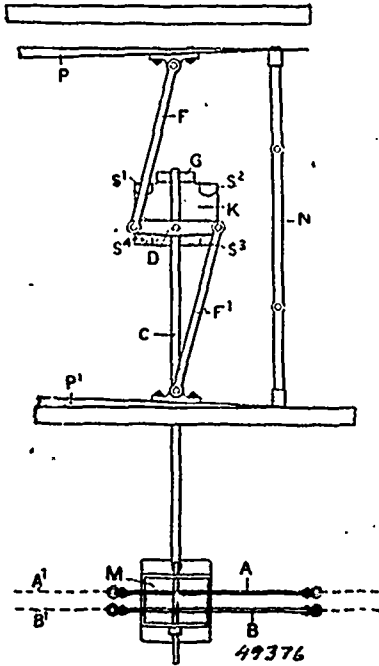
Claim.—1st. A hitching device adapted to be secured to a vehicle and having a pivoted swinging step for the driver to step on in entering and leaving the vehicle, a swinging lever operated by said step, said lever being pivoted at one end and having to its swinging end secured a sheave or pulley over which passes a loop of a rope, belt or chain having one of its ends secured to the vehicle and its other end secured to the hitching weight after being passed over a pulley secured to the vehicle so that the motion of the weight is twice that of the end of the swinging lever, and means for locking the lever, substantially as and for the purpose set forth. 2nd. A hitching device adapted to be secured to the vehicle and having a pivoted swinging step adapted to be operated by the driver's foot in entering and leaving the vehicle, a swinging lever operated by said step and which is pivoted at one end and by its swinging end raises and lowers the hitching weight, and a spring assisting in operating the lever so as to lift the weight, said spring being so arranged that it is wound up or given tension by the descension of the driver and the weight, and unwound or expanded when the driver uses the step for entering the vehicle and raise the weight, substantially as and for the purpose specified. 3rd. In a hitching device adapted to be secured to the bottom of a vehicle, the combination of the frame plate 10, having the lugs 12, the lever 54, having the yokes 13, 15, 16, with the toothed rack bars 15 and 16, the gear 30-30' adapted to engage alternately the said racks and having the spring-held pawl 34, and the shaft 31, the oscillating externally spiral-grooved spindle 25, having the central hole 29, for receiving the shaft 31, and the two notches 28, by which to engage the pawl 34, and rotate the gear, the bridge or retaining plate 18, secured to the lugs 12, and having the central pocket or casing 20, with the side slots 21, and bottom stem 23, with the central cavity 24, forming journals respectively for the lower end of the spindle 25, and the shaft 31, the latter having its upper end journaled in the frame plate as at 49, the said swinging yoke-shaped lever 54, being pivoted with one end to the frame plate and having its free or swinging end provided with a hood as 92, carrying a sheave as 93, the bracket 94, having the sheave 95, and pin 96, the hitching weight 98, having attached to it the hitching strap 100, and the cord or strap 97, passing over the pulleys or sheaves 95, 93, and having its upper end secured to the pin or bolt 96, the ring 39, having the guiding ribs 40, the internal studs 41, and friction rollers thereon adapted to engage the spiral grooves of the spindle 25, and the external studs or trunnions 43, the fork 46, having the notches 44 in its arms, fitting upon said trunnions, the bracket 5, and bell crank lever 3, 4, pivoted therein and having secured to one of its arms the forks 46, and to its other arm a step plate as 2, for the driver to step on in entering and leaving the vehicle, a spring for holding said step plate normally elevated and the means for automatically locking and unlocking the lever 54, both when the weight is down and when it is up, substantially as and for the purpose set forth.

No. 49,376. Railway Signal. (Appareil de signal pour chemins de fer.)

The Canada Switch Manufacturing Company, Montreal, Quebec, assignee of Charles Hodgson, Canterbury Road, Kilburn, London, England, 3rd July, 1895; 6 years.

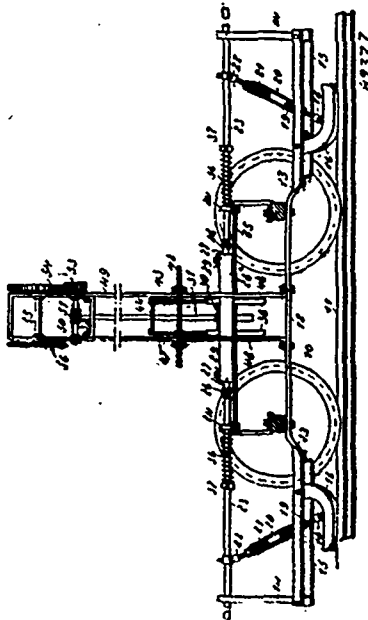
Claim.—1st. In combination with a pair of railway points, the detecting and interlocking signal apparatus, as set forth. 2nd. In combination with a pair of railway points, a scale beam lever, connecting bars, plate having suitable stops, interlocking bar and signal pulls as described. 3rd. In combination with a pair of railway points, moved and locked by a single lever, a scale beam lever adapted to operate detector apparatus. 4th. In a railway point detector apparatus, the combination of a scale beam lever and a plate having stops to limit the motion of such lever. 5th. In a railway point detector apparatus, the combination of a scale beam lever and a signal locking bar. 6th. In combination with a pair of railway points, a scale beam lever having each of its ends connected to one of the points, a notched interlocking bar connected to the centre of such lever and

signal pulls adapted to interlock with such bar. 7th. In combination with a pair of railway points, a scale beam lever having its ends



connected to the two points respectively, a plate having stops between which the lever can move and an interlocking signal bar connected to the centre of such lever.

No. 49,377. Rail-Brake. (Frein de rail.)

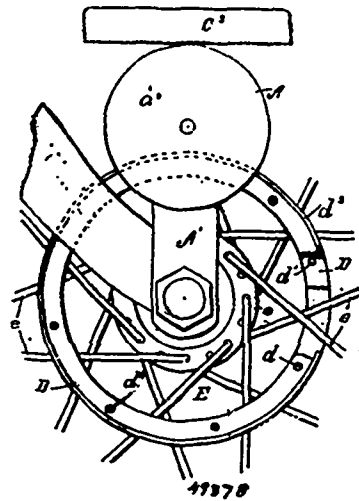


Frederick Leon Des Moneaux and Peter S. Kauffman, both of Lawson, Colorado, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. The combination with the truck, of the swinging brake shoe thereon, the longitudinally movable spring-pressed brake rods arranged above the central portion of the truck and connected with the shoes, and mechanism for moving the brake rods against their springs, substantially as described. 2nd. The combination with the truck, of the swinging brake shoes thereon, the longitudinally movable brake rods arranged above the central portion of the truck, mechanism for actuating the brake rods, and adjustable connecting rods extending downward and outward from the brake rods

to the brake shoes, substantially as described. 3rd. The combination with the truck, the swinging shoes thereon, the longitudinally movable brake rod and an operative connection between the rods and shoes, of the sliding racks pivoted to the brake rods, the revoluble pinion between the racks, and mechanism for throwing the racks into and out of engagement with the pinion, substantially as described. 4th. The combination, with the longitudinally movable brake rods and an operative connection between them and the brakes, of the sliding racks pivoted to the brake rods, the revoluble pinion between the racks, spring-pressed arms to force the racks out of engagement with the pinion, and means, as the cam rods, for moving the racks against the spring arms, substantially as described. 5th. The combination, with the sliding and swinging racks and the revoluble pinion between the racks, of the depressible cam rods for moving the racks into engagement with the pinion, and a locking device to hold the cam rods depressed, substantially as described. 6th. The combination, of the brake rods, the brakes operatively connected therewith, the racks for moving the brake rods, the revoluble shaft between the racks, mechanism for throwing the racks into and out of gear with the shaft, and a worm and gear mechanism for turning the shaft, substantially as described. 7th. The combination, with the truck, of the longitudinal side pieces thereon, the shoes pivoted on the side pieces, the braces connecting the end portions of the side pieces, the brake rods held to slide in guides on the truck and on the said braces, and an operative connection between the brake rods and the shoes, whereby the shoes are set and released, substantially as described.

No. 49,378. Pace Indicator for Wheels. (Indicateur de vitesse pour roues.)



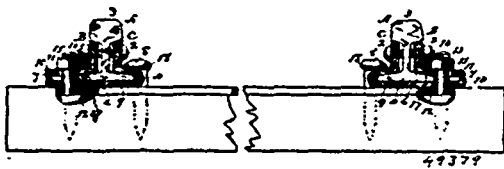
Turney Clark & Co., assignee of Eugene Thomas Turney, both of Chicago, Illinois, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. In a pace indicating mechanism for wheels and other like devices, a wheel, in combination with a circular rim secured to one side thereof, a frame or casing mounted on the supporting frame, a shaft journaled in said casing and projecting at its inner end through the case head toward the wheel, a hub or collar, of suitable material, fixed on the projecting end of said shaft and making contact with the rim on the wheel, motor weights or balls pivoted respectively to one end of connecting arms or links and carried by a pair of arms hinged or pivoted to a support fixed on the shaft, a collar mounted loosely on the motor shaft, free to slide thereon and connected by pivots to the outer ends of the arms which are pivoted to the balls, a disc mounted above the motor shaft, an index finger pivoted above said disc, and mechanism, connecting the journal of said index finger with the motor, whereby the index finger is operated through the motor driven by the wheel, substantially as described. 2nd. In a pace indicating mechanism for wheels and other like devices, a wheel, in combination with a circular rim secured to one side thereof, a frame or casing mounted on the supporting frame, a shaft journaled in said casing and projecting at its inner end through the case head toward the wheel, a hub or collar, of suitable material, fixed on the projecting end of said shaft and making contact with the rim on the wheel, motor weights or balls pivoted respectively to one end of connecting arms or links and carried by a pair of arms hinged or pivoted to a support fixed on the shaft, a collar mounted loosely on the motor shaft, free to slide thereon and connected by pivots to the outer ends of the arms which are pivoted to the balls, an upright arm or lever pivoted at its lower end within the case, at its upper end projecting through a slot in the upper portion of the case and connected to the sliding collar on said shaft, a dial mounted above the upper end of said arm, an index finger pivoted to the dial, and mechanism, between the said finger and the

free upper end of the arm, whereby the swinging of the latter, produced by the operation of the motor, imparts a turning movement to the index finger, substantially as described. 3rd. In a pace indicating mechanism for wheels and other like devices, a wheel, the combination of a shaft mounted so as to rotate freely in a suitable frame or casing, a drive wheel on said shaft, adapted to engage a circular tread formed on the wheel or drum to which the device is applied, motor weights, each secured to one of two pivotally connected arms or links which are pivoted at their other ends, one to the motor shaft and one to a collar freely movable longitudinally of said shaft, pins or rods freely secured in the motor shaft, which embrace the motor weight supporting arms at a considerable distance from said shaft, and an index finger pivoted above the same and operative connection between the staff of said index finger and said motor, said connection comprising a pinion on the staff of the index finger, a gear or train of gears meshing therewith, a lever pivoted at one end, a yoke in which embraces the loose collar of the motor and pins inserted through which engage a groove formed in the periphery of said loose collar and the free end of said lever being applied to the gear or train of gears meshing with the index finger pinion, whereby pivotal movement of said lever, under the influence of said motor, will impart rotary movement to said gear or train of gears, and a spring, the tension on which may be adjusted, applied so as to resist the action of the motor, substantially as described. 4th. In a pace driving mechanism for wheels, a wheel, in combination with a circular driving rim secured thereto, a casing mounted at the same side of the wheel as the driver, a shaft journaled in said case and provided with a friction driving hub outside the case and in contact with the driver, motor weights within the case, link rods fixed at one end to the said weights respectively and hinged at the other end to a fixed support on the shaft, a sliding collar mounted loosely on said shaft near its opposite end, link rods pivoted at their outer ends to said slide and at their inner ends to the respective motor weights, and pins secured in pairs to the driving shaft and extended outward therefrom to embrace the single-hinge connecting arms, substantially as described. 5th. In a pace indicating mechanism for wheels and other like devices, a wheel, in combination with a ring provided with a bearing rim on one side of the wheel and a flat ring on the opposite side of said wheel, clamped to the latter by fastening bolts, a motor case mounted at one side of the wheel, a motor shaft journaled in said case with one end projecting beyond the same toward the wheel and provided with a hub-like collar arranged to contact with the said ring rim on the wheel, centrifugal motor weights or balls connected to a rigid support on the shaft by arms linked to the latter, a sliding collar mounted loosely on the opposite end of the said shaft and connected by jointed links to said weights or balls, an upright lever pivoted at its lower end to a support within the case, extending up through a slot in the top of the latter and provided with a yoke, between its respective ends, constructed to engage with the said sliding collar, a dial mounted above the upper end of said lever and an index finger journaled in the dial plate and provided with a small gear pinion fixed on its journal, a gear wheel C₁ journaled below the dial plate, engaging with said pinion and provided with a short depending pin, an angular lever C¹, one arm of which passes in front of the upper free end of the upright lever and extends in front of the said pin on the wheel C, a disc section F, cut out at one side to provide a straight edge, with the outer edge of the cut in contact with the short arm or finger c¹⁰, of the angular lever C¹, and a spring G, with a central coil set at the pivot of the lever C¹, and having expanding ends resting respectively against pins on the disc F, and long arm of lever C¹, substantially as described.

No. 49,379. Railway Rail Joint.

(Joint de rail de chemin de fer.)

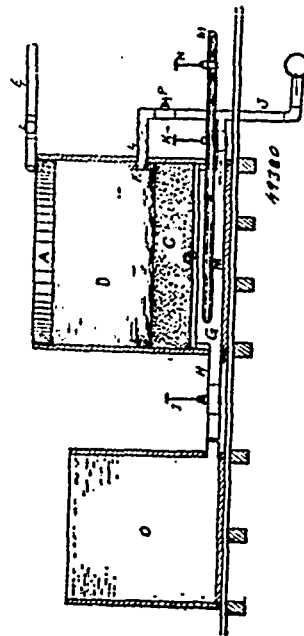


Major Hall, Boise, Idaho, William Henry Baker, Jacob Weber Thompson and William Arthur Wheaton, all of St. Paul, Minnesota, U.S.A., 3rd July, 1895; 6 years.

Claim.—1st. In a railway rail joint, the combination with the rails, of the angle bars adapted to be clamped on opposite sides of the meeting ends thereof and having extensions, one bent underneath and serving as a support for the rails, and both projecting parallel with, but separated from each other, beyond the rails, and means permitting relative lateral movement of said extensions for clamping the same together, substantially as described. 2nd. In a device of the class described, the combination with the rails, of the angle bars, a lateral horizontal extension upon the lower member of one bar, an extension upon the lower member of the other bar extending beneath and beyond the rail, substantially parallel with the extension of the other bar, but not in contact therewith, registering

bolt holes in said extensions, and the securing bolt arranged in said bolt holes outside said rails, said holes being enlarged or slotted transversely of the rails, substantially as described. 3rd. In a railway rail joint, the combination with the rails, of the angle bars, the extensions upon the lower edges of said angle bars, one projecting beneath the base of the rails and both projecting substantially parallel beyond the edge of the base, the registering openings through said extensions elongated or enlarged in a direction transverse of the rails, the securing bolt arranged in said registering openings, and the tie bar connected at one end to the opposite joint or rail, and having an opening to receive said bolt and be secured thereby to said joint, substantially as described. 4th. In a railway rail joint, the combination with the meeting ends of the rails, of the angle bars having lateral extensions upon their lower edges, the horizontal securing bolts passing through said angle bars and the webs of the rails, the vertical securing bolts passing through said extensions, and the locking bar inserted between and bearing against the adjacent faces of the vertical and horizontal bolts to keep the same from turning. 5th. In a railway rail joint, the combination with the meeting ends of the rails, of the angle bars wedging between the balls and bases of the rails but out of contact with the web, the lateral extensions upon the lower members, the extension upon one bar being bent underneath the rails and projecting beyond their opposite edge and having a vertical bend forming a strengthening rib or flange, the registering slotted openings in said extensions substantially at right angles with the rails, and the bolt secured therein.

No. 49,380. Process of Filtering and Purifying Water or other Liquids. (Procédé pour filtrer et purifier l'eau ou autres liquides.)



David Frederic Maxwell, Saint Stephen, New Brunswick, 3rd July, 1895; 6 years.

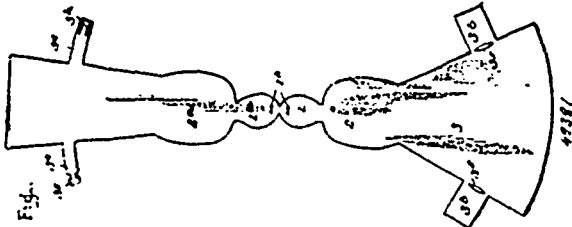
Claim.—In a water filter, the combination of a pipe having suitable outlets, said pipe being placed under the filtering material and used to convey steam, substantially as and for the purposes set forth.

No. 49,381. Designing and Constructing Dolls out of Paper or other Materials. (Appareil pour ébaucher et faire des poupées de papier.)

Bertha Alice Trufant, New Orleans, Louisiana, U.S.A., 4th July, 1895; 6 years.

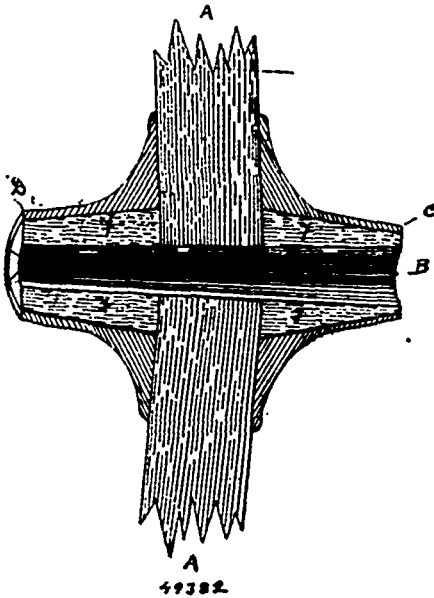
Claim.—1st. A blank for a figure-form formed of one or more pieces of paper or analogous firm material, having front and back skirt portions, one of the skirt portions having approximately triangular side extensions to form a rounded skirt, substantially as described. 2nd. A blank for a figure-form formed of one or more pieces of paper or analogous firm material, having front and back head portions, front and back body portions, a front skirt portion having approximately triangular side extensions, and a rear skirt portion, substantially as described. 3rd. A blank for a figure-form formed of one or more pieces having front and back skirt portions, connecting tabs on one portion having slits and connecting tabs on the other portion having a fastening consisting of a tongue and slits, substantially as described. 4th. A blank for a figure-form formed of one or more pieces having front and back head portions, front

and back body portions, front and back skirt portions, one of the skirt-portions having approximately triangular side extensions, con-



necting tabs for the skirt portions, and a base portion connecting the lower edges of the skirt portions, substantially as described. 5th. A figure-form formed of paper or analogous firm material having head and body portions secured together, and downwardly flaring skirt portions having tabs by which they are secured together, one of the skirt portions having approximately triangular side extensions, substantially as described. 6th. A figure-form having head and body portions secured together, and downwardly flaring skirt portions having approximately triangular side extensions extending from the waist-line to the bottom of the skirt portions, substantially as described. 7th. A garment blank having body-portions longitudinally slitted for the head of the figure-form, a neck-opening, and skirt portions, substantially as described. 8th. The combination of the figure-form having head and body portions, and downwardly flaring skirt portions, secured together, and a garment having a neck-opening longitudinally slitted body portions, and skirt portions, substantially as described. 9th. A blank for a bridal veil formed with a train portion, and illusion portion, a tongue, and slits between the tongue and the illusion portion, substantially as described. 10th. A blank for a head covering having a front portion formed with a tongue, and slits for receiving the head at the sides of the tongue, and a back portion connected with the front portion, and adapted to be folded on the front portion, substantially as described. 11th. A blank for a mantle having a divided front portion, a neck-opening and a back portion, and means for fastening the portions together, substantially as described. 12th. The combination of the figure-form having head portions formed with a transverse slit in the upper part thereof, and body portions secured together, downwardly flaring skirt portions secured together, and the head covering having front and back portions secured together and having a tongue and slits on the front portion for connecting the head covering with the head portions, the head portions being inserted in the slits of the rear of the tongue of the head-covering, and the tongue bearing against the head portions and inserted in the slit of the latter, substantially as described. 13th. The blanks for figure-forms, garments and head coverings, constructed substantially as herein shown and described.

No. 49,382. Wheel Hub. (Moyeu de roue.)



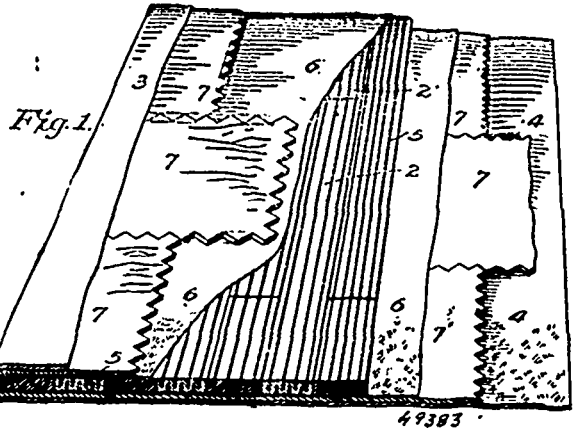
John Henry Partridge, Chatsworth, Ontario, Canada, 4th July, 1895; 6 years.

Claim.—1st. The combination, with the collars C and D of the wooden packing in sections, substantially as and for the purpose

hereinbefore set forth. 2nd. The combination of the collars C, D, with the packing F, F, and the spokes A, A, substantially as and for the purpose hereinbefore set forth.

No. 49,383. Artificial Lumber.

(Bois de construction artificiel.)

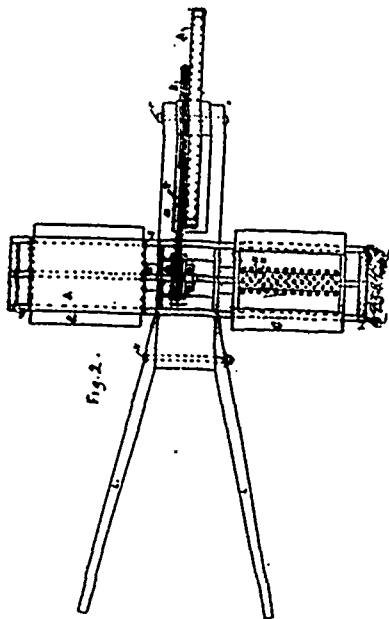


George S. Mayhew, Minneapolis, Minnesota, U.S.A., 4th July, 1895; 6 years.

Claim.—1st. The combination, in a composition material, of a wooden core composed of thin strips laid in courses or layers having their grain crossed, with two heavy sheets of pulp board forming facings for said core, and an interposed adhesive material between and securing all of said parts firmly together, substantially as described. 2nd. In an artificial lumber or composition material, a wooden core composed of three thin layers of wood, each made up of a series of thin sheets or strips and the grain of the outer layers having a common direction transverse to that of the middle layer, in combination with thick paper or pulp board facings for said core, and an interposed adhesive material or cement between and securing all of said parts firmly together to form a thin but inflexible board, substantially as described. 3rd. The combination, in a composition material, of two thick sheets of heavy paper or pulp board, with a core arranged between said sheets of paper and composed of a layer of wide but thin sheets of wood and a layer of thin wide veneers arranged transversely with respect to said sheets of wood, and an interposed adhesive material securing all of said parts firmly together, substantially as described. 4th. The combination, in a composition material, of two thick sheets of heavy paper or pulp-board, with the core arranged between said sheets of paper and composed of a layer of wide but thin sheets of wood, and two layers arranged upon opposite sides thereof and composed of thin wide veneers arranged transversely with respect to said sheets of wood, and an interposed adhesive material securing all of said parts firmly together, substantially as described. 5th. The combination, in an artificial lumber or composition material, of a series of thin wide wooden sheets, with thin cement carrying webs arranged upon opposite sides of said series or layer, and thin and wide veneers laid upon opposite sides thereof, with their grain running across that of the said wooden sheets, substantially as described and for the purpose specified. 6th. The combination, in an artificial lumber or composition material, of a series or layer of thin wide wooden sheets, with thin cement carrying webs arranged upon opposite sides of said series or layer, and thin and wide veneers laid upon opposite sides thereof with their grain running across that of the said wooden sheets, and thick paper or pulp-board facings secured upon said veneers by a suitable adhesive material or cement, substantially as described. 7th. The combination, in an artificial lumber or composition material, of a series of thin wide sheets of wood arranged edge to edge and provided in their opposite sides with a series of rows of indentations, with a series of thin wide wood veneers arranged upon opposite sides of said thin sheets and secured thereto by an adhesive material, said veneers being arranged with their grain crossing that of said sheets, substantially as described. 8th. The combination, in an artificial lumber or composition material, of a series of thin sheets of wood arranged edge to edge and having their sides provided with a series of rows of indentations, thin wide wood veneers arranged upon opposite sides of said thin sheets of wood, thick sheets of paper or pulp-board enclosing said veneers, and an adhesive material interposed between said parts to secure the same firmly and inflexibly together, substantially as described. 9th. The combination, in an artificial lumber or composition material, of the thin wide sheets of wood arranged edge to edge and having both sides provided with a series of rows of indentations extending with the grain of the wood, with a course of thin wood veneers laid cross-grained to said sheets of wood, the sheets of paper secured upon

opposite sides of the wooden core thus formed by a suitable adhesive material, substantially as described. 10th. The combination, in an artificial lumber or composition material, of the thin wooden sheets arranged in a thin layer with the carrying webs for the adhesive material and whereby the same is applied, thin wood veneers having serrated and interlocking edges and secured by the adhesive material upon said webs, the grain of the wood veneers extending in an opposite direction to that of the wooden sheets, substantially as described. 11th. The combination, in an artificial lumber or composition material, of the thin wooden sheets arranged in a thin layer, with two layers arranged upon opposite sides thereof and each composed of a series of thin wood veneers having serrated and interlocking edges, and the thick paper or pulp-board facings secured upon said veneers, and all parts being firmly secured together by a suitable adhesive material, substantially as described. 12th. The combination, in an artificial lumber or composition material, of the thin wooden sheets, with the carrying webs for the adhesive material and whereby the same is applied, thin wood veneers having serrated and interlocking edges and secured by the adhesive material upon said webs, the grains of the wood veneers extending in an opposite direction to that of the wooden sheets, and thick facings of artificial material secured upon said veneers by adhesive material, substantially as described. 13th. The combination, in an artificial material or composition material, of the thin wooden sheets arranged edge to edge, with carrying webs for adhesive material applied to opposite sides of said wooden sheets, thin wood veneers arranged across grain to and secured upon the same, thick paper sheets secured upon said veneers, said wooden sheets provided with the closely arranged indentations in opposite sides, said veneers having serrated interlocking edges, and the whole secured together by an adhesive material and subjected to a heavy pressure and dried, substantially as described.

No. 49,384. Machine for Applying Paris Green, Etc., on Potatoes to Destroy the Potato Bugs.
(Appareil à distribuer le vert de Paris pour détruire les mouches à patates.)



William Adams, Burlington, Prince Edward Island, Canada, 4th July, 1895; 6 years.

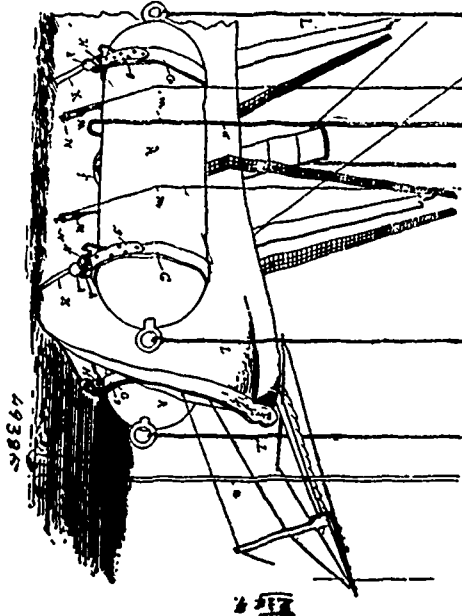
Claim.—1st. The combination of the brushes H, H, and the pieces of perforated tin R, R, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the brushes H, H, and the perforated tin R, R, with the iron slide plates S, S, substantially as and for the purpose hereinbefore set forth.

No. 49,385. Apparatus for Raising Sunken Vessels.
(Appareil pour mettre à flot les vaisseaux coulés.)

John Taylor and Call Taylor, both of Detroit, Michigan, U.S.A., 4th July, 1895; 6 years.

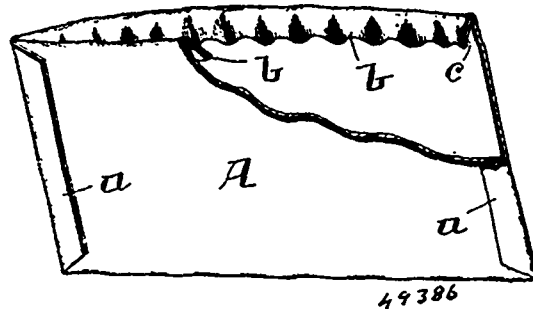
Claim.—1st. In a wrecking device, the combination of submergible pontoons, means for hauling the same under water, and means for forcing air into said pontoons, and braces having bearing ends P, Q, connecting links R, R', and an adjusting bolt, substantially

as described. 2nd. In a wrecking device, means of securing submergible pontoons in place, comprising a cable secured to its end



side and passed under the wreck, and an adjustable strut, one end of which is secured to the wreck, the other end of which bears against the pontoon, substantially as described.

No. 49,386. Envelope. (Enveloppe.)



Brent Waters, Baltimore, Maryland, U.S.A., 4th July, 1895; 6 years.

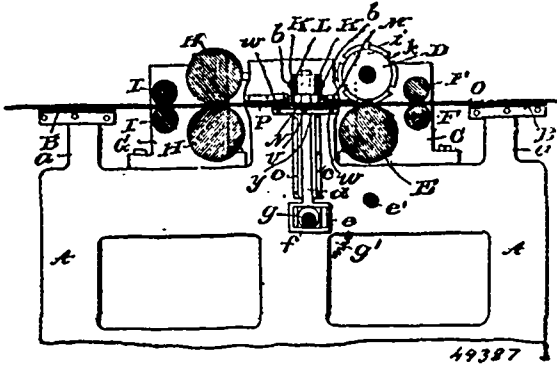
Claim.—1st. An envelope having inwardly extending flanges upon both sides thereof which come in contact with each other without being secured together to close the envelope, said flanges cut-away at their ends to enable them to freely yield when placing the contents in the envelope, as set forth. 2nd. An envelope having inwardly extending flanges fluted or corrugated and cut-away at their ends as shown, said flanges coming in contact with each other to close the opening in the envelope, substantially as set forth.

No. 49,387. Method of Making Match Splints.
(Méthode de faire les éclats pour les allumettes.)

The American Safety Head Match Company, assignee of Isaac D. Weaver, both of Lebanon, Pennsylvania, U.S.A., 5th July, 1895; 6 years.

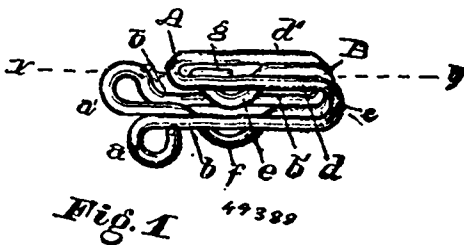
Claim.—1st. The method of making match splints, which consists in slitting a sheet or slab longitudinally and leaving a back-bone or uncut portion between the slitted portions of the sheet, and then serving each alternate splint of the sheet at the back-bone of the match card. 2nd. The method of making match splints, which consists in slitting a sheet or slab longitudinally and leaving a back-bone or uncut portion between the slitted portions of the sheet and then simultaneously severing the sheet transversely at the back-bone of the match card and forming slots in the free ends of the splints. 3rd. The method of making match splints, which consists in slitting a sheet longitudinally and severing the sheet transversely, and then partially separating the cards of splints longitudinally and leaving the splints interlocked and frictionally held together. 4th. In a machine for making match splints, the combination of a revoluble

cutter provided with a plurality of knives separated circumferentially, a pair of vertically reciprocating cutters having a plurality of



separated cutting edges and a stock supporting plate provided with slots and shearing edges. 5th. In a machine for making match splints, the combination of a revoluble cutter, a vertically reciprocating cutter and intermittent feed mechanism, and means for partially separating the severed splints longitudinally. 6th. In a machine for making match splints, a revoluble cutter, and a pair of vertically reciprocating cutters having chisels to sever each alternate splint from each side of the back-bone of a match card, in combination with a driving shaft which operates the reciprocating cutter, a gear-wheel, a ratchet-wheel having a rock-arm supporting a pawl and a lever connected to a master gear-wheel and to said rock-arm and a suitable connection with the shaft of the revoluble cutter. 7th. In a machine for making match splints, the combination of a revoluble cutter provided with a plurality of knives separated circumferentially by spaces equal in length to the width of the back-bone of a match card a pair of vertically reciprocating cutters in parallel vertical planes arranged to sever each alternate splint from each side of the back-bone. 8th. In a machine for making match splints, a revoluble cutter, and a pair of vertically reciprocating cutters, in combination with suitable mechanism for operating said cutters intermittently, feed and delivery rolls and a pair of splint separating rolls provided with means for accelerating the motion thereof. 9th. A sheet or slab cut into a series of match cards with the splints on both sides of the back-bone of the cards, and the cards partially separated longitudinally and held together by frictional contact of the severed splints.

No. 49,388. Garment Hook. (Crochet de vêtement.)



Orville Lewis Mason, Cleveland, Ohio, Romaine Clark Cole, Waverly, New York, both in the U.S.A., 5th July, 1895; 6 years.

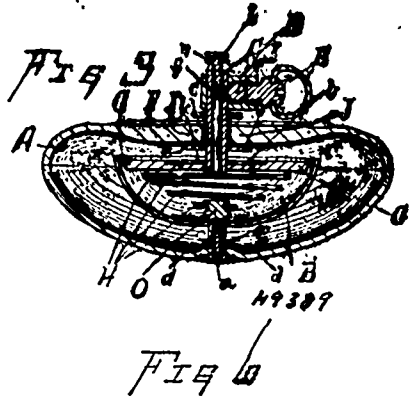
Claim.—A hook having a tongue extending through the shank and hook proper between the side bars thereof, said tongue having a retaining bend extending from the hook portion toward the shank portion and a relieving bend in the shank portion opposite to the retaining bend, and in the same direction therewith, substantially as described.

No. 49,389. Truss. (Bandage herniaire.)

Adeline Mary Louise Armstrong, assignee of James Lyman Armstrong, both of Ottawa, Ontario, Canada, 5th July, 1895; 6 years.

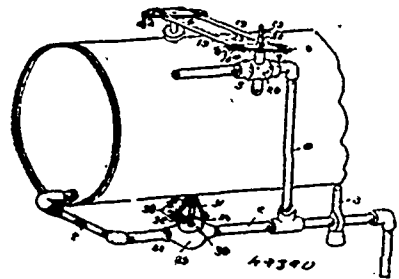
Claim.—1st. A soft pure rubber oval-shaped hollow truss pad A, provided with a round hole U, in centre of top and a smaller round hole in the bottom opposite the hole U, the edge of holes being strengthened by the extra thickness of rubber as shown and described. 2nd. An oval-shaped hollow hard truss pad B, provided with a round hole in the centre of the top and a smaller round hole in the centre of bottom which is concaved τ . 3rd. In a compound truss pad, the attachment O, fitted to a spring H at one end, and fitted to the soft pad A, at the other end, and receiving the body of the hard pad B, as shown and described. 4th. In a compound

truss pad, the tubular piece C, attached to the outside of the hard pad B, and projecting through the hole U, in the soft pad A, and



provided with a faucet and set screw, as shown and described. 5th. In a truss pad, the tubular piece C, flange b, thumb-screw L, and washer n, as shown and described. 6th. In a truss pad, a soft pad A, provided with a hard pad B, combined with a guide attachment O, and capable of being inflated with air or water, as shown and described. 7th. In a truss pad, a hard hollow pad B, containing a spring H, and surrounded with a soft rubber pad A, without flanges and made to contain air or water, as shown and described. 8th. A soft truss pad A, made to contain air or water and having a depression W in the centre of its outer surface at the bottom, as shown and described, and for the purpose set forth. 9th. The combination in an adjustable air or water cushioned waterproof truss pad, a soft rubber pad A, inclosing a hard pad B, screw-pin a, washer d, nut g, spring H, guide O, tubular piece C, flange b, plate F, nut e, washer n, and screw L, as shown and described. 10th. A truss pad formed of a soft rubber outer pad capable of being inflated and inclosing a hard pad, for the purpose set forth. 11th. In a truss pad, an inner pad of hard material surrounded by a soft pad containing air or water and means to hold said pad in a central position, as and for the purpose set forth. 12th. A hard truss pad B, inclosed in a soft rubber truss pad A, having a screw-pin A, washer D, nut g, spring H, guide O, tubular piece C, flange b, plate F, nut e, washer n, screw L, as shown and described.

No. 49,390. Feed-Water Regulator. (Régulateur d'eau d'alimentation.)

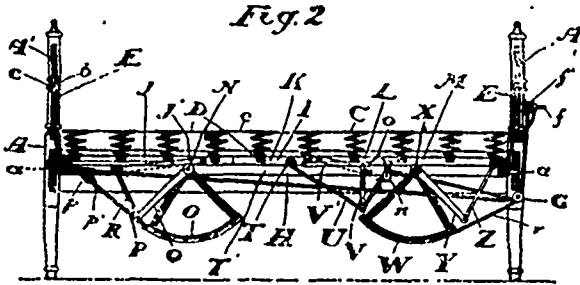


Hodoram Bowman, Hunt Spur, and James Wilbur Fisk Summers, Gould City, both in Michigan, U.S.A., 5th July, 1895; 6 years.

Claim.—1st. In a device of the class described, the combination with a continuously operating pump and a pipe in communication therewith, of a controlling valve having a stationary casing in communication with said pipe, a conical or tapered tubular member revolvably mounted in said casing and provided with lateral slots, said tubular member being provided at its upper end with a series of notches, an axial member or plug fitting in said tubular member and provided with an opening adapted to register with the lateral openings in the tubular member, an actuating spring connected at one end to the lower end of said axial member or plug and at the other end to the tubular member, a cross-pin carried by the axial member or plug to engage diametrically opposite notches in the upper end of the tubular member, and float operated means connected to the tubular member for opening and closing the valve, substantially as specified. 2nd. In a device of the class described, the combination with a boiler feed-pipe, a continuously operating pumping device, and a waste-pipe communicating with the feed-pipe, of means for obstructing the passage through the feed-pipe, a controlling valve arranged in the water-pipe, a spindle mounted in the wall of the boiler, float operated mechanism connected to said spindle, cross-heads secured to the spindle and the plug of the controlling valve, and rods connecting the arms of said cross-heads and capable of

adjustment toward and from the extremities of the arms to vary the throw thereof, substantially as described. 3rd. In a device of the class described, the combination with a boiler feed-pipe, a continuously operating pumping device, a waste-pipe, a controlling valve arranged in the waste-pipe, and float-operated means for actuating said valve, of an obstructing-valve arranged in the feed-pipe and having a rotatable stem provided within the casing of the valve with radial wings, and an alarm mechanism connected to and operated by said stem, substantially as specified.

No. 49,391. Invalid Bed. (Lit d'invalide.)

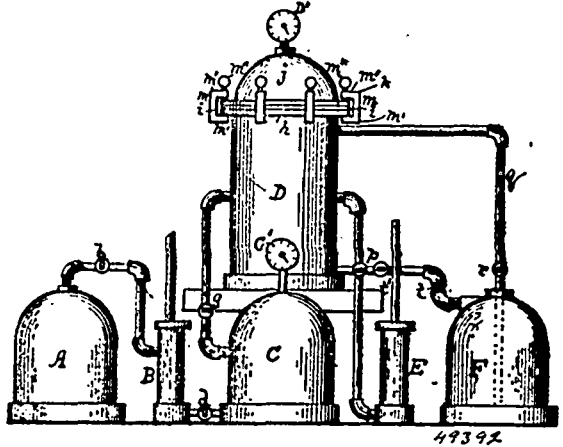


William John Dawson, Richard Henry Dawson and Richard Henry Dawson, all of Cammington, Ontario, Canada, 5th July, 1895; 6 years.

Claim.—1st. In an invalid bed, a lower frame carried by the main frame of a bed, in combination with an upper frame divided into four sections, of which one only is stationary, quadrants on spindles, crank arms and pivoted links operated by rope and pulley, and a pivoted stay similarly operated, substantially as described and for the purpose specified. 2nd. In an invalid bed, a lower frame centrally supported by gudgeons journalled in the main frame of a bed, a slotted semicircle and clamping bolt, in combination with the head-board, an upper frame divided into four sections, of which one only is stationary, quadrants on spindles, crank arms, and pivoted links operated by rope and pulley, and a pivoted stay similarly operated, substantially as described and for the purpose specified. 3rd. In an invalid bed, a lower frame H, in combination with section J, of the upper sectional frame I, spindle N, quadrant O, pulley p, rope P, and spindle f of drum f¹, ratchet-wheel f², and pawl f³, the crank arms Q, pivoted links R, pins j, slotted pieces S, and pivoted links J¹, substantially as and for the purpose specified. 4th. In an invalid bed, a lower frame H, with gudgeons a, in combination with main frame A, head-board A¹, slotted semicircle E, carriage bolt b, thumb-screw c, section J, of the upper sectional frame I, slats D, longitudinal braces T¹, spindle X, quadrant O, rope P, pulleys p, p¹, guide pulley G, spindle f, drum frame F, drum f¹, ratchet-wheel f², pawl f³, crank-arms Q, pivoted links R, pin j, slotted piece S, and links J¹, substantially as described and for the purpose specified. 5th. In an invalid bed, the lower frame H, having gudgeons a, centrally located at the head and foot thereof, in combination with the main frame A, head-board A¹, the slotted semicircle E, the carriage bolt b, and thumb-screw c, substantially as described and for the purpose specified. 6th. In an invalid bed, a lower frame H, in combination with section L, and section M, of the upper sectional frame I, the said sections having bevelled ends l and m, respectively, pins k, slotted pieces S¹, and pivoted links L¹, the hinge o, slats D, longitudinal braces T¹, bar T, bars V¹, pivoted stay V, pulley n, rope U, and spindle f, drum f¹, ratchet-wheel f², and pawl f³, substantially as described and for the purpose specified. 7th. In an invalid bed, a lower frame H, with gudgeons a, in combination with main frame A, head-board A¹, slotted semicircle E, carriage bolt b, thumb-screw c, section L and section M, of the upper sectional frame I, and having bevelled ends l and m respectively, the pin k, slotted piece S¹, pivoted links L¹, the hinges o, slats D, longitudinal braces T¹, bar T, bars V¹, pivoted stay V, pulley n, rope U, guide pulley G, spindle f, drum frame F, drum f¹, ratchet-wheel f², and pawl f³, substantially as described and for the purpose specified. 8th. In an invalid bed, a lower frame H, in combination with section M, of the upper sectional frame I, slats D, spindle X, quadrant W, crank-arms Y, links Z, the rope r, and spindle f, drum f¹, ratchet-wheel f², and pawl f³, substantially as described and for the purpose specified. 9th. In an invalid bed, the lower frame H, with gudgeons a, in combination with main frame A, head-board A¹, slotted semicircle E, carriage bolt b, thumb-screw c, section M of the upper sectional-frame I, hinges o, slats D, longitudinal braces T¹, spindle X, quadrant W, crank arms Y, links Z, rope r, guide pulley G, spindle f, drum frame F, drum f¹, ratchet-wheel f², and pawl f³, substantially as described and for the purpose specified. 10th. In an invalid bed, a lower frame H, in combination with section J, the pin j, slotted piece S, and pivoted links J¹, substantially as described and for the purpose specified. 11th. An invalid bed comprising the following elements:— main frame A, with head board A¹ and foot-board A², slotted semicircle E, carriage bolt b, thumb-screw c, lower frame H, with gudgeons a, sections J, K, L and M, respectively, of upper sectional-frame I, bevelled ends l and m on sections L and M, spindle X, quadrant O,

rope P, pulleys p, p¹, crank-arms Q, pivoted links R, pins j, slotted pieces S, pivoted links J¹, pins k, slotted pieces S¹, pivoted links L¹, slats D, carrying springs C, bar T, longitudinal braces T¹, rope U, pivoted stay V, bars V¹, pulley n, hinges o, quadrant W, spindle X, crank-arm Y, links Z, rope r, guide pulleys G, spindles f, drum frame F, drums f¹, ratchet-wheels f², and pawls f³, substantially as described and for the purpose specified.

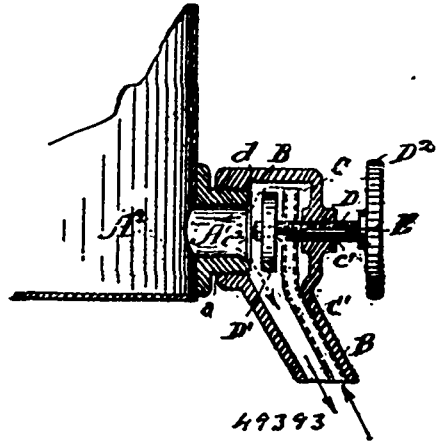
No. 49,392. Device for Preserving Meat. (Appareil pour conserver la viande.)



Chas. O. Brown, San Diego, California, assignee of Jay Woodard Powers, Minneapolis, Minnesota, all in the U.S.A., 5th July, 1895; 6 years.

Claim.—1st. The herein described apparatus for curing meat, consisting of a smoke generator or vapour retort, A, a reservoir C, a pump B, having communication on one side with said generator or retort and on its opposite side with said reservoir, said pump serving to compress the smoke or vapour into said reservoir, an air-tight meat receiver, communicating with said vapour or smoke reservoir C, a vacuum pump E communicating with said meat receiver and serving solely to produce a vacuum therein, a saline solution reservoir, means connecting the same with said meat receiver for the discharge of the saline solution into the meat receiver and for draining the same back to the reservoir, gauges on said meat receiver and reservoir C, for indicating the degree of vacuum in the former and of compression in the latter, and valves or stop-cocks for regulating communication of the generator or retort with the force pump, of the force pump with reservoir C, of said reservoir with the meat receiver, of the vacuum pump with said meat receiver and of the solution reservoir with said meat receiver, all substantially as shown and described.

No. 49,393. Oil Can Faucet. (Robinet de bidon à huile.)

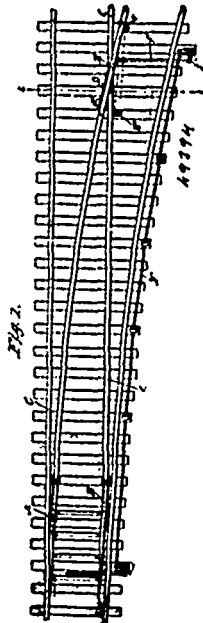


George W. Arper, Oakland, California, U.S.A., 5th July, 1895; 6 years.

Claim.—1st. The combination, with a faucet for drawing off the contents of oil cans and similar packages, of an air chamber communicating with the interior of the can, an air vent tube leading from the end of the faucet spout into the air chamber, and the cut-off valve of the faucet. 2nd. The combination of an oil can or similar vessel, the boss projecting therefrom, an air chamber formed

within the boss, the faucet movably secured to the boss so as to be swung at right angles to the can whereby the end of the faucet may be carried above the bottom of the can, said faucet connected with the air chamber, the air vent tube leading from the end of the faucet into the air chamber, and the cut-off valve for the faucet. 3rd. In a faucet for drawing off the contents of oil cans or similar packages, the combination with the air chamber, an air vent tube leading from the lower end of the faucet into the air chamber, a valve stem extending into the chamber, a valve carried thereby and an air vent groove cut within the outer portion of the stem, said groove adapted to vent the air chamber when the valve is closed. 4th. The combination with the oil can, a boss of hard metal projecting therefrom, a faucet connected thereto, a valve stem, and a soft metal valve removably secured to the inner end of the valve stem. 5th. The combination, with an oil can or similar package, of a faucet secured thereto, the spout of which extends below the can, said faucet being so connected to the can as to permit of being swung at right angles thereto. 6th. A faucet for drawing off the contents of oil cans or similar packages, consisting of the spout, an upper enlarged air chamber to which the spout is directly connected, a cut-off valve for controlling the outflow from the spout and a vent tube leading from the lower end of the spout into the air chamber.

No. 49,394. Railroad Switch. (Aiguille de chemin de fer.)



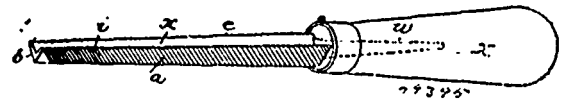
Edward William Coughlin, Baltimore, Maryland, U.S.A., 5th July, 1895; 6 years.

Claim.—1st. The improvement in switches, substantially as described, consisting of the section having a base-plate *d*, and seat *d*², and the swing section pivoted at one end to the base-plate and having at its other end a tongue movable onto and off the seat *d*², substantially as set forth. 2nd. The improvement in switches comprising the base section having a laterally projecting rib *d*³, to fit the hollow of a rail, and provided with a seat *d*² and the swing section, substantially as set forth. 3rd. The improved switch, comprising the base section having a base-plate *d*, and upright *d*¹, having a seat *d*², and the swing section having a tongue at one end and pivoted, substantially as set forth. 4th. The combination of the main line rail, the base section *D* having a base-plate *d* extended below and beyond the main line rail, and also provided with an upright *d*¹, having a seat *d*², and the swing section, substantially as set forth. 5th. The improvement in switches, substantially as described, consisting of the section *D*, having base plate *d*, upright *d*¹, provided at its side with the rib *d*³, and at its top with the seat *d*², and the swing section pivoted at or near one end of the plate *d*, and having at its other end a tongue movable onto and off the seat *d*², all substantially as and for the purposes set forth. 6th. In a switch, substantially as described, the combination of the main line rail, the base section having a base-plate extended under and beyond the main line rail and provided with a seat for the tongue of the swing section, the swing section pivoted at one end on the base-plate of the base section and provided with a tongue and with a rib to fit the hollow of the main line rail, substantially as set forth.

No. 49,395. Saw File. (Lime pour scie.)

The Arcade File Works, assignee of Alfred Weed, both of Anderson, Indiana, U.S.A., 5th July, 1895; 6 years.

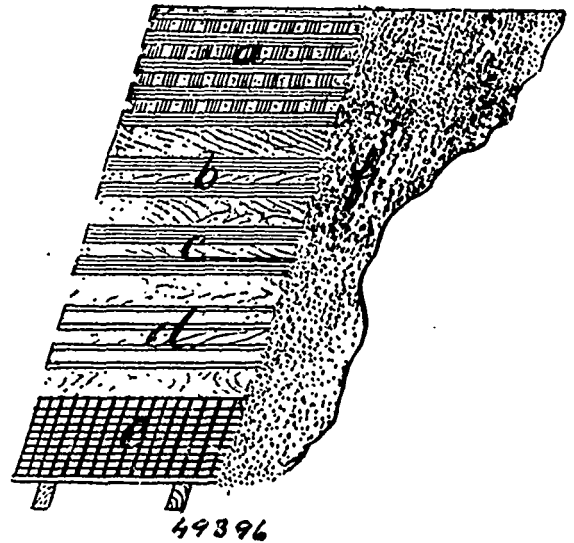
Claim.—The within described file having two flat faces *a*, *b*, at an



angle, to each other, and with a groove at the back forming edges *c*, *i* to said faces which edges are cut, substantially as and for the purpose set forth.

No. 49,396. Roofing. (Système de toiture.)

Fig. 1



John McKenna and John Fair, both of Brantford, Ontario, Canada, 5th July, 1895; 6 years.

Claim.—In a system of roofing a lattice or strips of either wood or metal, extending from ridge to eaves and covered with a suitable cement, substantially for and as set forth and described.

No. 49,397. Wind Motor. (Moteur à vent.)

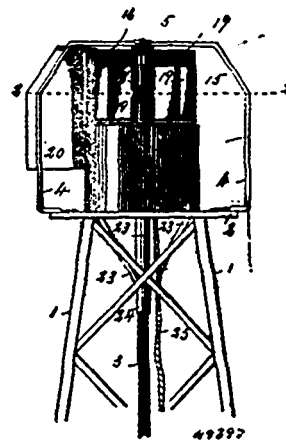


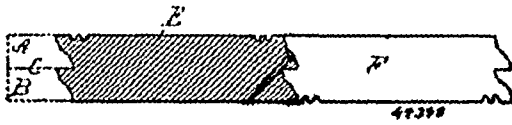
Fig. 1.

Aaron Lancaster, Princeton, Iowa, U.S.A., 5th July, 1895; 6 years.

Claim. 1st. In a wind motor of the class described, a disc mounted on suitable supports, another disc revolvably mounted on the first mentioned disc, an upwardly projecting casing a portion of which is cut away connected to the last mentioned disc, a vertical shaft passing through the centre of said disc and the casing, a series of radial blades located in the chamber formed by said casing and connected

to said shaft, and means for opening and closing the cut-away portion of said casing, by the telescoping of the casings, substantially as herein specified. 2nd. In a wind motor, a vane constructed with a bar connected to one edge the upper end bent at right angles thereto, a bar connected to the upper end of said vane which projects outwardly adjacent to and parallel with the upper end of the first mentioned bar, substantially as set forth.

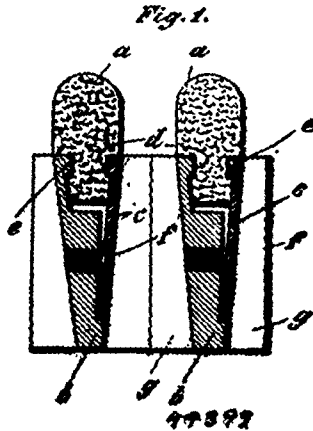
No. 40,308. Matched Board.
(*Planche à rainure et languette.*)



Rinald Hamilton Stilwell, Detroit, Michigan, U.S.A., 5th July, 1895; 6 years.

Claim.—1st. A matched board having each ridge provided with double faces, divided by the middle line of the board, the diagonally opposite faces being alike. 2nd. A matched board having on one edge two interlocking faces, arranged above and below the middle line C, the diagonally opposite faces being alike. 3rd. A matched board, having on each edge two interlocking faces, arranged above and below the horizontal face C, each including an inclined nailing face, extending from the outer edge of the board, substantially as described.

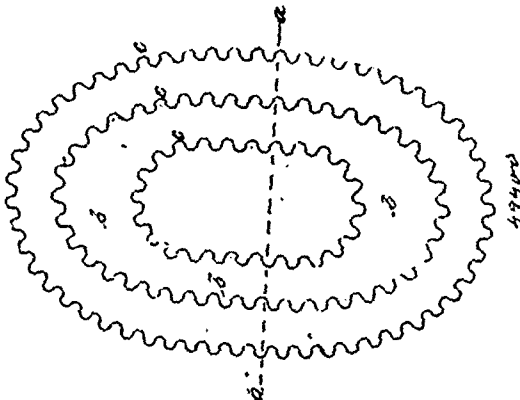
No. 40,309. Fire-Bar. (*Barreau de grille.*)



Jacob Leopold Waldapfel, 73 Ehrenstrasse, Cologne, German Empire, 5th July, 1895; 6 years.

Claim. The improved fire-bar consisting of a top or head *a* of fire-resisting material secured to a lower part *b* of cast-iron by means of a clamping plate *c* and by feathers or projections *e* on the parts *b* and *c* taking into the grooves *d* of the part *a*, substantially as described.

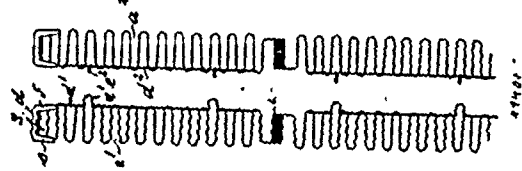
No. 40,400. Curry Comb. (*Etrille.*)



Francis H. Burke, Peterboro, Ontario, Canada, 5th July, 1895; 6 years.

Claim.—The scalloped edges *c* on plain or corrugated metal rims of curry-combs substantially as and for the purpose hereinbefore set forth.

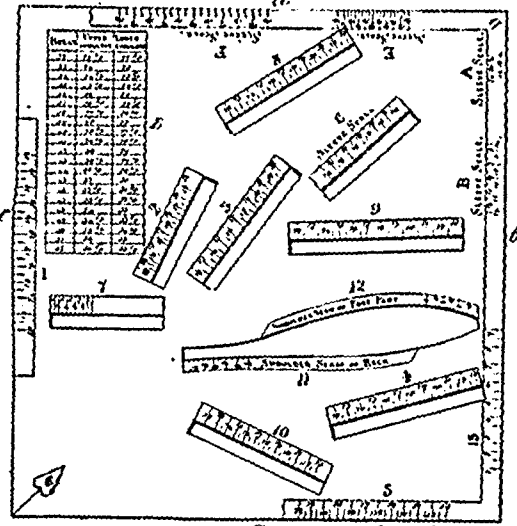
No. 40,401. Corset Steel and Clasp. (*Hensfort de corset et agrafe.*)



Carl Scholl, Goppingen, Wurtemberg, Empire of Germany, 5th July, 1895; 6 years.

Claim.—1st. The combination with two corrugated corset steels, of a wire interposed between the corrugations of each of said corset steels, one of the said wires being provided at certain intervals with loops, whilst the other is provided with hooks adapted to engage said loops, substantially as described. 2nd. The combination with two corrugated corset steels, one of which is provided at certain intervals with projecting loops integral with the corset steel, heads or pins on the other corset steel and adapted to engage said loops, and means for securing said heads or pins to said corset steel, substantially as and for the purposes described.

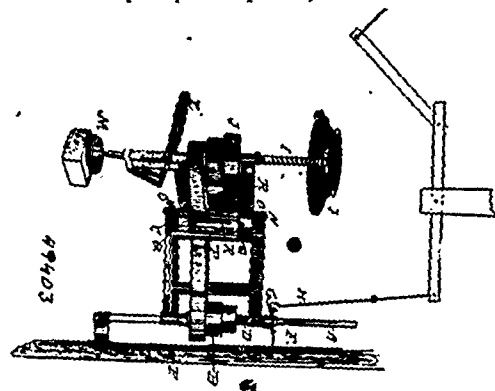
No. 40,402. Chart for Drafting Coats and Vests.
(*Patron pour tracer les vêtements.*)



Alois Wesler, Formosa, Ontario, Canada, 5th July, 1895; 6 years.

Claim.—A drafting chart for cutting coats and vests, comprising an approximately square sheet inscribed with a table of proportional scale measurements in columns for the breast, the upper shoulder and the lower shoulder, a scale *I*, at the right hand edge *c*, sleeve scales *E*, *F*, at the upper edge *b*, sleeve scales *A* and *B*, and non-symmetrical scale *13* at the right hand edge *b*, and a scale *5*, at the lower edge *a*, the diagonal scales *2*, *3*, *4*, *8*, the scales *7*, *9*, *11*, *12*, diagonal sleeve scale *C*, and a pointer *6*, at the lower left hand corner, as set forth.

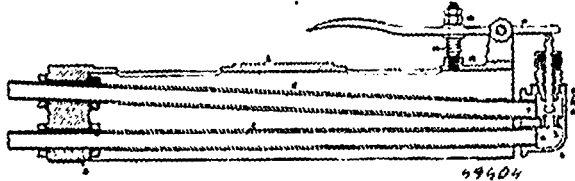
No. 40,403. Machine for Polishing Stone. (*Appareil pour polir la pierre.*)



Alfred F. Spaulding, Northfield, Vermont, U.S.A., 6th July, 1895; 6 years.

Claim.—The combination of the drive shaft and the pulleys thereon, of the jointed frame, jointed upon said shaft and having the grinding shaft and its pulleys journaled in its outer ends; the arms mounted upon the pivot of the joint in said frame and the rolls journaled in said arms, all substantially as shown and described.

No. 49,404. Steam Trap. (Trappe de vapeur.)



William Geipel, London, England, 6th July, 1895; 6 years.

Claim.—A steam trap consisting of the combination of two metal tubes, having different coefficients of expansion, a valve seat and a spring controlled valve, substantially as and for the purposes set forth.

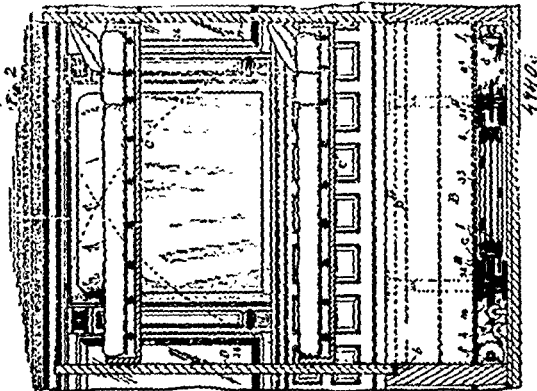
No. 49,405. Yarn Roll and Method of Making the Same. (Fusée pour le fil et méthode de fabrication.)



Simon Willard Wardwell, jr., Boston, Massachusetts, U.S.A., 6th July, 1895; 6 years.

Claim. 1st. The within described improvement in making rolls of yarn and like material, the same consisting in first winding the yarn upon a spindle to form a cop, laying the yarn in successive layers and forming each layer of a series of parallel coils of yarn, and bending the thread of each coil back at the end of the cop to form a reverse coil, then removing the cop thus formed from the spindle or other support or holder, and then elongating it by drawing outwards the ends of the cop, thereby increasing its length and reducing its diameter, substantially as and for the purpose set forth. 2nd. The within described yarn roll, the same composed of a series of layers, each layer consisting of a series of parallel coils of yarn, each coil extending from end to end of the roll, and bent back at the end, and consisting wholly of a flexible mass of yarn without any bobbin or other support and solid throughout from the centre outward, as set forth. 3rd. A yarn roll or cop consisting of a mass of yarn, and a supporting loop extending from the said mass, and secured at the centre thereof, substantially as described. 4th. The within described yarn roll, consisting of a flexible mass of yarn composed of successive layers each having a series of parallel coils with a supporting loop or cord extending from the centre at one end, substantially as set forth.

No. 49,406. Parlor and Sleeping Car. (Char dortoir.)



The American Palace Car Company, Boston, assignee of Henry Pearson, Springfield, both of Massachusetts, U.S.A., 6th July, 1895; 6 years.

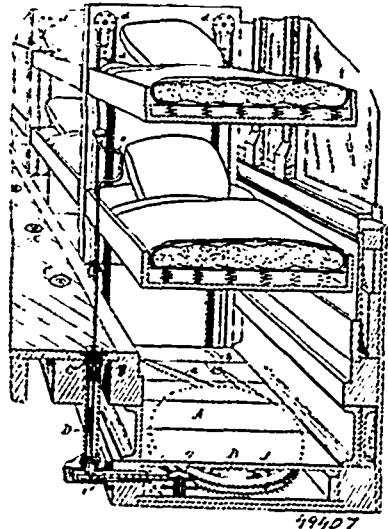
Claim.—1st. The combination with the car provided with a berth pocket and trap doors therefor to serve as uprights, which are provided with sheaves, of the berth, winding drums mounted independently of the berth, and cables or like flexible connections connected to

the berth, having running and supporting engagements over the sheaves, and having winding connections with the drums, substantially as described. 2nd. In a railway sleeping car having the pit or berth pocket, the trap doors adapted to constitute uprights and having the sheaves, the berths, the winding drums in the berth pocket, the cables each having a connection with the berth and with one of the drums, and by an intermediate part having a running engagement over the sheaves supported on the trap doors, and means for rotating the winding drums, substantially as described. 3rd. The combination with the car body having the pit or berth pocket and a berth adapted to have an out-of-the-way disposition in said berth pocket, of a winding drum mounted independently of, and removed from the berth, and cables connected to the berth and to the winding drums and guiding supports for the cables intermediate between the berth and the winding drum, substantially as described. 4th. In a railway sleeping car, in combination, the car body having a berth pocket with a winding drum therein, a berth adapted to be disposed in the berth pocket and to be elevated therefrom, trap doors for covering the berth pocket and to be upwardly swung into an upright position and having sheaves mounted thereon, cables connected to the winding drum and also to the berth and having intermediately thereof supporting and guiding appliances, the same essentially comprising the aforesaid sheave, a sprocket-wheel *n*, having a gear connection with the drum, a chain around said sprocket-wheel and extending horizontally and transversely to the outside of the berth pockets, a second sprocket-wheel around which the chain passes, and the vertical operating shaft, substantially as described. 5th. In a railway sleeping car, the combination with the berth and a cable or like flexible connection having a supporting attachment the berth, of a winding drum to which the cable is also attached, and a guiding support for the cable intermediate between the berth and the winding drum, substantially as described. 6th. In a railway sleeping car, in combination, the car body having a berth pocket with two winding drums *f, f*, therein, each having the gear-teeth *h*, the berths adapted to be disposed one above the other in said berth pocket, cables or like flexible connections connected to the berths and to the winding drums and having intermediately thereof supporting and guiding appliances therefor, sprocket-wheels *n, n*, fast to gear-wheels which mesh into the gear-teeth of the winding drum, chains around sprocket-wheels and extending horizontally therefrom to and around the sprocket-wheels *p*, which are mounted at a position transversely from and outside of the berth pocket, and the operating shafts *r, r*, for said sprocket-wheels *p*, substantially as described. 7th. The railway car body having a berth pocket, and the two berths adapted to be disposed therein, the winding drums arranged to independently rotate one upon and above the other in the berth pocket, means for rotating the drums, and winding cables connected to the drums and to the berths and having intermediately thereof supporting and guiding devices therefor, substantially as described. 8th. In a railway car having a berth pocket and the two berths adapted to be disposed therein, one above the other, and having combined therewith the two drums supported in the bottom of the berth pocket for rotation about a vertical axis, the upper one being superimposed on the lower one and both having their proximate faces annularly grooved, receiving therein the interposed balls, and winding cables connected to the drums and to the berths and having intermediately thereof supporting and guiding devices therefor, substantially as described. 9th. In a railway sleeping car, the combination with the car body having the berth pocket and the two berths, of the suitably supported cylindrical part *g²* having at its bottom the outwardly extending flange *g²* with the ball groove *g²* within its upper face, the lower winding drum having its hub set loosely about said part *g²* and having its upper and lower faces concentrically grooved, the top drum having its hub set loosely about said part *g²* and having its upper and lower faces concentrically grooved, the sets of balls in the grooves therefor, between the two drums and between the lower drum and said flange *g²*, the plate *i* supported in proximity to the top of the hub of the upper drum and the set of balls between it and said latter hub, means for rotating the drums, the winding cables connected to the drums and to the berths, having, intermediately, supporting and guiding devices therefor, substantially as described. 10th. In a railway sleeping car, the combination with the car body having the berth pocket and the two berths, of the suitably supported cylindrical part *g²* having at its bottom the outwardly extending flange *g²* with the ball groove *g²* within its upper face, the lower winding drum having its hub set loosely about said part *g²* and having its upper and lower faces concentrically grooved, the top drum having its hub set loosely about said part *g²* and having its upper and lower faces concentrically grooved, the sets of balls in the grooves therefor, between the two drums and between the lower drum and said flange *g²*, the plate *i* supported in proximity to the top of the hub of the upper drum and the set of balls between it and said latter hub, the hubs of the upper and lower drums having concentric rib-and-groove engagements, and said plate *i* and the upper drum having rib-and-groove engagements, means for rotating the drums, and winding cables connected to the drums and to the berths, having, intermediately, supporting and guiding devices therefor, substantially as described. 11th. In a railway sleeping car, the combination with the framing *l*, comprising horizontal portions which are separated and supported at different heights, the sleeve *g²* axially, vertical and arranged centrally of and confined to and between the upper and lower parts of said frame, the two winding drums having their hubs surrounding said sleeve, the

lower drum deriving its support upon an outwardly extending annular flange with which the sleeve at its bottom is provided, the plate *r* above the hub of the upper drum and the central bolt *g*, together with the berths, cables and cable guiding supporting devices, substantially as described. 12th. In a railway sleeping car, the raising and lowering berth and a winding drum therefor, two cables for and connected at different points to each end of the berth, they both having their ends secured to the winding drum at the same circumferential point whereby the turning of the drum in the proper direction winds both of the cables for equal draft upon the berth, and intermediate supporting and guiding appliances for the cables between the winding drum and berth, substantially as described. 13th. In a railway sleeping car, the combination with two berths, two winding drums, cables for each berth connected to the winding drums therefor, and a retaining ring concentrically surrounding the circumferential portions of both of the drums about which the cables are wound which are apertured for the passage therethrough of the cables in their courses from the drum, substantially as described. 14th. In a railway sleeping car, the combination of a berth, a winding drum and cables, having connections with the berth and drum, and having intermediate supporting and guiding devices therefor, a wheel having a gear-tooth connection with the winding drum, and means for rotating the wheel, substantially as described. 15th. In a railway sleeping car, the combination of a berth, a winding drum having the ring gear *H*, the cables connected to the berth and to the drum, intermediate guiding and supporting devices therefor, a wheel having a gear-tooth engagement with the winding drum, means for rotating the wheel, and a shaft or arbour rotatably mounted and provided with a gear meshing into the ring gear and having the volute spring, one end of which is secured thereto, the other end thereof having a restraining engagement with a part independent of said arbour, substantially as described. 16th. In a railway sleeping car, in combination, the winding drum and winding cables running tangentially therefrom obliquely to the sides of the berth pocket, paired guiding sheaves and an enclosing case therefor, the latter having the attachment lugs whereby they may be secured to the wall of the berth pocket, paired guiding sheaves and an enclosing case therefor, the latter having the attachment lugs whereby they may be secured to the wall of the berth pocket, and having the enclosing portions *f'*, *f'* arranged obliquely to said attachment lug, the journal pin supported by and perpendicularly extended from the one to the other of said enclosing portions, the chamber within the one half of the casing being of smaller diameter than that within the other, and the sheaves of unequal diameters rotating sidewise about said journal pin, substantially as described. 17th. In a sleeping car, in combination, the winding drum provided with the gear-teeth and the berth, the cables connected to the berth and to the drum and intermediately having guiding supports over sheaves which are intermediate between the berth and the winding drum, a gear in mesh with the winding drum gear-teeth, and an arbour therefor, a counterbalancing spring applied to said arbour so that as the berth is raised, it assists in the rotation of the winding drum, and so that, as the berth is lowered, it, through the gear-connections with the winding drum, becomes wound up, substantially as described. 18th. In a sleeping car, in combination, the winding drum provided with gear teeth and the berth, the cables connected to the berth and to the drum and intermediately having guiding supports over sheaves which are intermediate between the berth and winding drum, a gear in mesh with the winding drum gear-teeth, and an arbour therefor, a counterbalancing spring applied to said arbour so that, as the berth is raised it assists in the rotation of the winding drum, and so that, as the berth is lowered, it, through the gear connections with the winding drum becomes wound up, the gears *m*, also in mesh with the winding drum gears, and mechanism for rotating said gears, substantially as described. 19th. In a sleeping car, in combination, the winding drum, berth, and berth connections and the gear-teeth provided on the winding drum, the arbour rotatably mounted with the winding spring having one end secured thereto, and the other end restrained, a gear wheel in mesh with the gear-teeth of the winding drum and having a detachable connection with the arbour for the spring, substantially as described. 20th. In a railway sleeping car having a berth pocket, the combination with the upper and lower movable berths, the winding drums and the trap door having the grooves therein, and having the upper and lower sets of guiding and supporting sheaves, the upper of which are of greater diameter than the lower ones, of the winding cables secured to the drums and to the ends of the berths near their corners, and intermediately thereof engaging said sheaves of unequal size and freely running in the grooves therefor of the trap doors, substantially as described. 21st. In a railway sleeping car, the combination with the upright supports having the upper pair of guide sheaves and the lower pair of guide sheaves which are smaller than, and directly vertically below, the upper ones, of the berths and winding drums, the cables connected to the winding drums and to the ends of the berths near their corners, the same having intermediate guide-supports over suitable pairs of said sheaves, substantially as and for the purpose set forth. 22nd. The combination in a railway sleeping car having a berth pocket and with a winding drum provided with geared part *H*, and the gear *m*, rotatably mounted to mesh with said geared part *H*, and to move as one with the sprocket-wheel *n*, the sprocket-wheel case *q*, which is secured to the outer wall of the berth pocket, and has the opening which sidewise communicates with an aperture

through the side wall of the berth pocket, the sprocket-wheel *p*, and means for turning it and the sprocket-chain running around said two sprocket-wheels, substantially as described. 23rd. In a railway car having the berth pocket with the aperture through the side thereof, and a winding drum in the berth pocket, of the sprocket-wheel case *q*, secured to the side of the berth pocket and having an opening which sidewise communicates with the said opening through the side of the berth pocket, said case being formed in upper and lower separable halves, the lower half having a suitable depression in its bottom for a set of bearing balls, the upper half having the vertically apertured hub *q''*, the shaft *r*, with the lower end enlargement formed with the conical portions or shoulders *r¹*, *r²*, and having upon such enlarged end the sprocket-wheel *p*, the ball bearing ring *q'*, set within the apertured hub and having between it and the adjacent conical shoulder the bearing balls, and the ring screw-threading into the apertured hub against said ball bearing ring, and mechanism for driving connection between said wheel and the winding drum, substantially as described. 24th. In a railway sleeping car, the combination with the berth and the hoisting cable therefor, of a means of attachment between the cable and the berth, consisting of a casing or guide secured to the berth, a part movable therein to which the cable is connected, and a spring for forcing the movable part downwardly in the casing, substantially as described. 25th. In a railway sleeping car, the combination with the berth having the casing secured thereto, a tube having a nut secured to its lower end, the cable passed through an opening in the top of the casing and through and connected with said tube, the spiral spring within the casing, surrounding said tube and cable, supported by the nut, and having an upper end bearing against a stop therefor within the casing, substantially as described.

No. 49,407. Parlor and Sleeping Car. (Chamber-dortoir.)

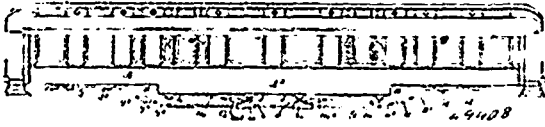


The American Palace Car Company, Boston, assignees of Henry Pearson, Springfield, both of Massachusetts, U.S.A., 6th July, 1895; 6 years.

Claim.—1st. In a railway sleeping car, the combination, with an operating shaft of the berth hoisting mechanism and the casing or fixture for the car within which said shaft projects, having internal projections of a part adapted for a clutch engagement within the case, and having a sliding, though non-rotatable engagement with the shaft, and which is movable along the shaft whereby it may be freed from its clutch engagement permitting it and the shaft to be rotated, substantially as described. 2nd. In a railway sleeping car, the combination with a berth hoisting mechanism, comprising the operating shaft therefor having the squared upper end, of the casing *C*, having the apertured bottom and open top with threaded orifices, the ring fixedly set in the case with the inwardly projecting teeth, the cylindrical part *q* with the squared hole, having a sliding engagement over the squared end of the shaft and provided with a toothed ring *t*, the elevating spring and the threaded ring *u*, screwing into the upper open end of the casing and limiting the upward movement of the said part *q*, substantially as described. 3rd. In a railway sleeping car, the combination with an operating shaft of the berth hoisting mechanism and the casing or fixtures for the car within which said shaft projects, having internal projections, of a part adapted for a clutch engagement within the case and having a sliding, though non-rotatable engagement with the shaft, and which is movable along the shaft whereby it may be freed from its clutch engagement permitting it and the shaft to be rotated, and spring for normally maintaining the said movable part in clutch with the casing, substantially as and for the purposes described. 4th. In a railway sleeping car, the combination with the hoisting mechanism

for the berths comprising the operating shaft D, having the squared or equivalent upper extremity and the enlargement 16, of the casing C to be fitted in the car floor, constructed with an open top and a bottom with an aperture a², provided therein with the hardened ring a, between which and said shaft enlargement are comprised the balls 17, the toothed ring p set within a seat therefor in the casing, the part q having a sliding fit about the squared extremity of the operating shaft and having the toothed ring t affixed thereto, the elevating spring u, applied between the shaft enlargement and said part q, and the ring v screw threading into the open mouth of the casing and overhanging the teeth of said ring t, all substantially as described and for the purposes set forth.

No. 49,408. Trussing for Cars. (Tirant pour chars.)



The American Palace Car Company, Boston, assignee of Henry Pearson, Springfield, Massachusetts, U. S. A., 6th July, 1895; 6 years.

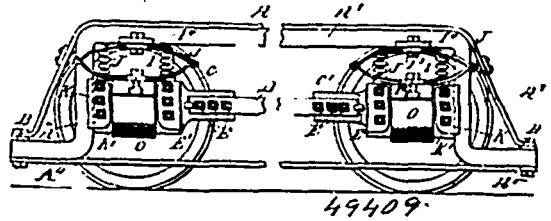
Claim. 1st. In a railway car, the car body having at its sides the main sills B, and constructed with the depressed intermediate portion or well, which has the sub-sills C, a main truss at each side of the car body constituted as to its upper chord by the main sill and comprising the lower chord G, struts h, h, between the lower chord and main sill, and ties extending obliquely between the lower chord and main sill, substantially as described. 2nd. In a railway car, the car body having at its sides the main sills B, and constructed with the depressed intermediate portion or well, which has the sub-sills C, the longitudinal channel-irons between the main and sub-sills, a main truss at each side of the car constructed as to its upper chord by the main sill and comprising the lower chord G, struts h, h, between the lower chord and sill, and ties extending obliquely between the lower chord and main sill, substantially as described. 3rd. In a railway car, the car body having the main sills and constructed with the intermediate well A², which has the sub-sills C, a main truss and a secondary truss at each side of the car, the main truss having the top chord thereof constituted by the main sill, and having the bottom chord G, the struts h, h, between the end portions of the sub sill and the ends of the lower chord and the ties H, H, obliquely connecting the lower chord with the main sill, and the secondary truss comprising the ties m, m, connecting intermediate portions of the chord G, with the end portions of the chord G, with the end portions of the well, and one or more struts j, substantially as described. 4th. In a railway car, the car body having the main sills and constructed with the intermediate well which has the sub-sills, the longitudinal channel irons f, f, between the main and sub-sills, the struts h, h, depending from the ends of the sub-sill, the lower chord C, of the main truss ranging below the sub-sill and engaged by said struts, the ties H, H, extending obliquely from the points of engagement of said struts with the main truss lower chord to the main sill at points endwise outside of the aforesaid well, one or more intermediate struts j, between the aforesaid chord G, and the sub-sills, and the tie-bars m, m, connecting the points of engagement of the intermediate struts with chord G, and the ends of the channel irons, substantially as described. 5th. In a railway car, in combination with the car body having the main sills and constructed with the depressed intermediate portion which has the sub-sills C, the longitudinal channel irons between the main and sub-sills, the main truss comprising the main sill, lower chord G, struts h, h, and ties H, H, the plates resting against the ends of the channel irons and having the aperture extending from one edge thereof, the tie-members m, comprised in the secondary truss having enlarged heads which engage the said apertured plate and extend obliquely between the channel irons to connection each with an intermediate point of the aforesaid lower chord members G, and the struts j, j, substantially as described. 6th. In a railway car in combination, the car body having the intermediate well A², from end portions of which are the depending struts h, h, and the chord member G, which is constructed with the upwardly standing ear-lugs r, r, and having the obliquely turned terminals o², the rods o², and the turn-buckles which connect them with said terminals o², whereby the tie-members H, are constituted which are connected to the bottom of the car proper, the intermediate struts j, depending from the base of the well at intermediate points thereof, and having their lower ends in bearing engagements against the tops of said ear-lugs, and the tie members m, m, having connections with the base of the well near the end portions thereof and extending diagonally therefrom to connections with and between said ear-lugs, of the chord member G, substantially as shown and described.

No. 49,409. Car Truck. (Châssis de chars.)

George Brenton Esterly, Fall River, Massachusetts, U.S.A., 6th July, 1895; 6 years.

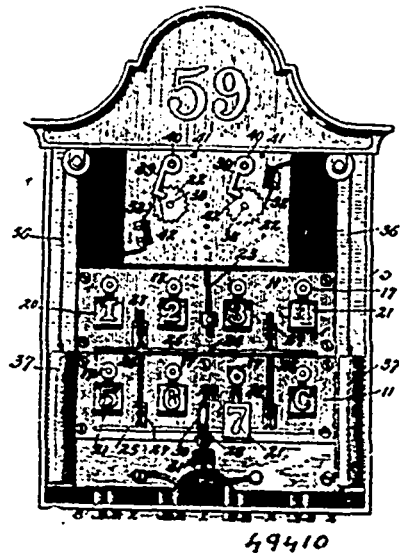
Claim. 1st. A car truck, comprising a frame provided with slideways, axle boxes having guided movement on said slideways, and a bar rigidly connecting the axle boxes and having an adjustable

connection therewith to permit of longitudinally adjusting the bar, substantially as described. 2nd. A car truck, provided with a frame



having each side formed of an inverted approximately U-shaped bar, axle boxes connected with each other and each fitted to slide on one of the opposed faces of the depending sides of the said bar, and springs interposed between the said boxes and the middle portion of the said bars, substantially as shown and described. 3rd. A car truck, comprising a truck frame, axle boxes fitted to slide in the truck frame, a set of inner and outer elliptical springs connecting each axle box with the truck frame, and a set of coiled springs interposed between each axle box, and the truck frame and arranged between the set of inner and outer elliptical springs, substantially as shown and described. 4th. In a car truck, the combination with an axle box, of a brass fitted in the said box and formed on its top with a lug fitting into a recess in the top of the said axle box, and a bolt held in the said box and screwing in the said lug, substantially as shown and described. 5th. A car truck, provided with a brass engaging the axle from above, and slidable longitudinally thereof an oil casing supported on the said brass, and an axle box likewise supported on the brass and recessed to receive the same and the oil casing, substantially as described. 6th. A car truck, provided with an axle brass formed on its top with a shoulder, and an oil casing formed in its top with an opening for the passage of the top of the said axle brass, the said casing resting on the said shoulder, to be supported from the axle brass, substantially as described. 7th. A car truck, provided with a brass, an axle box in which the brass is capable of longitudinal sliding movement and interlocking parts on the brass, and axle box to normally hold the former stationary in relation to the latter, the axle box being open at the bottom to permit of raising it relatively to the brass and disengaging the interlocking parts of the brass and axle box, substantially as described. 8th. A car truck, provided with a frame, an axle box fitted to slide in the side of the frame, thrust plates held on the said axle box and having sliding engagement with the said side of the frame, and a yoke held in one of the said plates and adapted to abut against the hub of the car wheel, substantially as shown and described.

No. 49,410. Automatically Operated Fire Alarm. (Acertisseur d'incendie actionné automatiquement.)



Frank K. Ludlow, Madisonville, Ohio, U.S.A., 6th July, 1895; 6 years.

Claim.—1st. In an automatic fire alarm the combination of a series of pressure inducing devices arranged to be rendered active by heat of a conflagration, and a series of annunciators and alarm actuating devices, having independent connections with respective pressure-inducing devices, the circuit closer or breaker under control of all of the alarm actuating devices and suitable circuits leading to an alarm

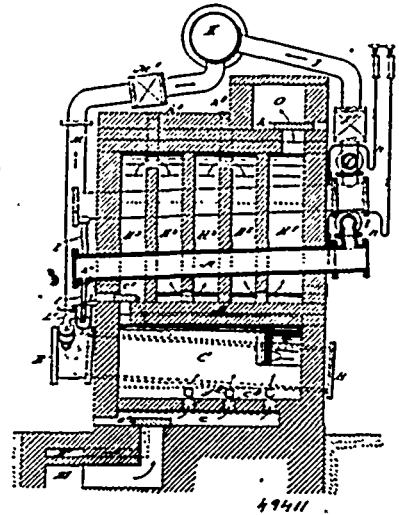
apparatus, as explained. 2nd. In an automatic fire alarm device, the combination of the alarm actuating device, a pair of circuit wheels, both under control of said alarm actuating device and having independent circuit connection with the alarm, said circuit wheels being independently operated or operative concurrently, substantially in the manner explained. 3rd. In an automatic fire alarm two or more circuit wheels having independent driving connection, and single escapement controlling both the driving connections, substantially as and for the purpose set forth. 4th. In an automatic fire alarm, the combination of an alarm actuating device, having means whereby it is operated by starting of a fire, two independently operative circuit wheels, having connection with the alarm to be actuated, and an escapement under control of the alarm actuating device and having connection with both circuit wheels through the medium of ratchets, whereby both circuit wheels are caused to move simultaneously when in operation, but each permitted to move with the escapement wheel if the other remains at rest, substantially as set forth. 5th. In an automatic fire alarm, the combination of the independently movable circuit wheels, independent circuits for the respective circuit wheels and recorders under control of each circuit and operated independently, substantially as and for the purpose set forth. 6th. In an automatic fire alarm, the combination of the independent circuit wheels, independent circuits, independent relays at a station, independent local circuits controlled by said relays and recorders controlled by each local circuit, substantially as and for the purpose set forth. 7th. In an automatic fire alarm, the combination of two independent make-and-break devices, a normally open circuit, and normally closed circuit, controlled by said make-and-break devices, independent relays at a station controlled by respective circuits, independent local circuits controlled by the respective relays and recorders adapted to be actuated by either of the local circuits or by both of them simultaneously, as explained. 8th. In an automatic fire alarm, the combination of the pressure inducing device, a tube for communicating pressure therefrom, a diaphragm with one side of which said tube communicates and which carries a push-pin, the trigger 13 controlled by said push-pin, and the drop lever 14 controlled by said trigger, substantially as and for the purpose set forth. 9th. In an automatic fire alarm, the combination of the diaphragm adapted to be operated by pressure, the trigger 13 under control of said diaphragm, and carrying the counterbalance 17, and the drop lever 14, having a retaining arm 19, and carrying at its end annunciator block 21, substantially as and for the purpose set forth. 10th. In a signal, the combination of diaphragm 10, adapted to operate by pressure, compression or concussion, and carrying the push-pin 12, the trigger 13 projecting down in front of the push-pin and fulcrumed in brackets 18, and carrying the detent arm 19, and the drop weight 20 having its face presented and exposed to view indicating character 21, as explained. 11th. In an automatic fire alarm, the combination of a series of diaphragms, and a series of drop levers 14, having suitable detents controlled by said diaphragms, independent circuit make-and-break devices, (and the frame 25 controlling said circuit make-and-break devices), and under the control of each of the drop levers 14, substantially as and for the purpose set forth. 12th. In an automatic fire alarm, the combination of the series of drop levers arranged to be released upon the starting of a fire in places with which they have operative connection, the drop frame 25 under control of said levers and having the uprights 26, movable in sliding bearings 27, the circuit wheels under control of said frame, substantially as and for the purpose set forth. 13th. In an automatic fire alarm, the combination of suitable circuit wheels, having driving connections, an escapement for controlling the movement of said driving connections, a drop frame normally in engagement with said escapement, and insulated therefrom, and a series of drop levers which are adapted to control said frame, and having connections whereby they are released by heat of a fire, substantially as set forth. 14th. In an automatic fire alarm, the combination of the escapement controlling an alarm, the drop frame controlling the escapement, a grip 28, 30, for holding the frame in elevation with a yielding force and the drop levers adapted to depress said frame, as explained. 15th. In an automatic fire alarm, the combination of the independent circuit wheels, independent driving connections for said circuit wheels, a pair of wheels having clutch connection with the drive connections for controlling them in one direction, a wheel for coupling the clutch wheels together and an escapement controlling said coupling wheel, substantially as and for the purpose set forth.

No. 49,411. Apparatus for Manufacturing Oil Gas.
(Appareil pour fabriquer le gaz à huile.)

Walter Ralph Herring, Hudders Field, York, England, 1885; 6 years.

Claim.—1st. The herein described method of converting crude mineral oils, coal-tar, and other liquid hydrocarbons into permanent gas of high illuminating quality, by a continuous process of destructive distillation at progressively increasing temperatures, (corresponding to the increase in the specific gravity of the liquid whilst undergoing distillation), without intermediate fractional condensation and re-distillation of the condensed products, substantially in the manner and by means of apparatus such as herein specified. 2nd. The apparatus for carrying out the herein described process of destructive distillation of oil, tar and other liquid hydrocarbons at progressively

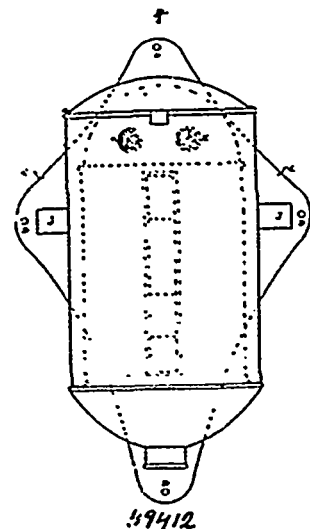
increasing temperatures corresponding to the increase in the specific gravity of the liquid undergoing distillation, the said apparatus



consisting essentially of upper and lower series of oppositely inclined retorts connected for the flow of oil therethrough, and heated by flues arranged so as to subject the oil to progressively increasing degrees of heat, substantially as herein described and illustrated in the drawings. 3rd. In apparatus for the destructive distillation of liquid hydrocarbons for the manufacture of illuminating gas, as herein described, the arrangement of the flues for heating the retorts so as to convey the heating gases alternately to and fro in directions transverse to the length of the retorts and thereby produce in the length of the same retorts regions of progressively varying temperature, substantially as and for the purpose specified. 4th. In apparatus for the destructive distillation of liquid hydrocarbons for the manufacture of illuminating gas as herein described, the combination with the heating flues arranged so as to convey the heating gases alternately to and fro in directions transverse to the length of the retorts, of separate inlets for the admission of cold air to successive portions of such flues independently, substantially as and for the purpose specified.

No. 49,412. Milk Delivery Box.

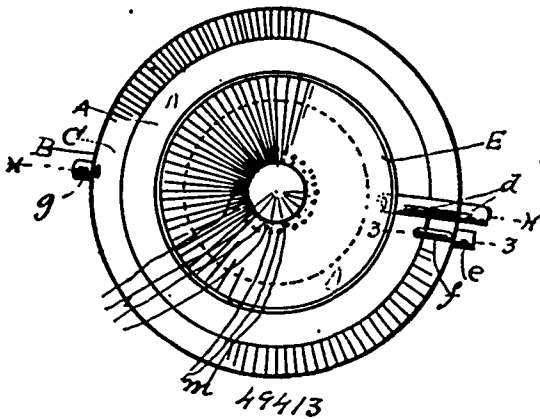
(Boite pour délivrer le lait.)



Harry Cullen, Toronto, Ontario, Canada, 8th July, 1895; 6 years.

Claim.—As an article of manufacture, a milk delivery box comprising wall support G, body F, attached to said support C, strengthened by braces J, and having a milk receptacle support N, and cave bottom L, having an aperture M, covered by a sieve, ventilating aperture K, near the top, covered by a sieve, a lid or top having a milk ticket receiver H, all formed and combined, substantially as and for the purpose heretofore set forth.

No. 49,413. Milk Cooler and Aerator. (Garde-lait.)



Henry W. Gazlay, Cortland, New York, U.S.A., 8th July, 1895; 6 years.

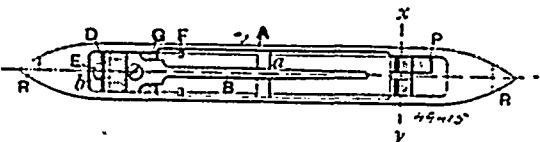
Claim.—1st. In a milk cooler, a primary cooling chamber having a conical wall, an annular and supplemental cooling chamber surrounding the lower end of the primary chamber and in communication therewith, and an annular milk receptacle intermediate said cooling chambers, in combination with a milk reservoir provided with perforations through which the milk is discharged. 2nd. In a milk cooler a primary cooling chamber having a conical wall, an annular and supplemental cooling chamber surrounding the lower end of the primary chamber and communicating therewith at the bottom and top of said secondary chamber and having an inwardly and downwardly inclined inner wall, and an annular V-shaped milk receptacle intermediate said chambers in combination with a milk reservoir provided with perforations through which the milk is discharged.

No. 49,414. Paving Block. (Bloc de pavage.)

Joseph H. Amies, Philadelphia, Pennsylvania, and George W. Sheppard, Brooklyn, New York, both in the U.S.A., 8th July, 1895; 6 years.

Claim.—1st. As a new article of manufacture a paving block having a dense central part of compressed vegetable fibre only and an exterior part composed of such fibre saturated with a plastic material impervious to moisture, substantially as described. 2nd. As a new article of manufacture a paving block of peat or equivalent vegetable fibre, having a dense part composed of such material only and an exterior encasing part composed of such material saturated with any resinous composition impervious to moisture, substantially as set forth.

No. 49,415. Shuttle for Looms. (Navette de métier.)



Henry Cruse, Salford, Lancaster, England, 8th July, 1895; 6 years.

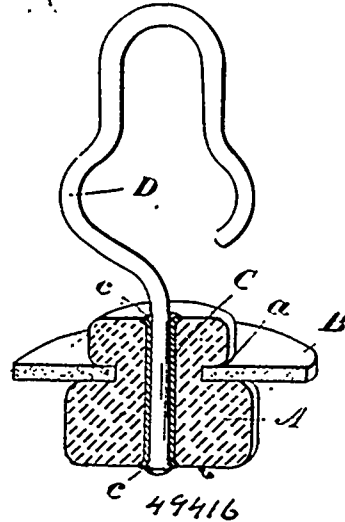
Claim.—1st. A loom shuttle, having its body formed of aluminium and a yarn bridge and tongue bridge cast in one therewith a tongue constructed of slightly bowed strips of steel pivotally connected to the shuttle and a spring for retaining such tongue in its open or closed positions, substantially as hereinbefore described. 2nd. In a loom shuttle, a tongue constructed of slightly bowed strips of steel united at both ends and pivotally connected to the shuttle, and a spring for retaining such tongue in its open or closed positions, substantially as hereinbefore described. 3rd. In a loom shuttle, a yarn bridge consisting of a slotted or perforated transverse partition or partitions, constructed and arranged substantially as hereinbefore described. 4th. In a loom shuttle, a body constructed of aluminium or of an alloy of aluminium in which that metal predominates, and having cast therein or thereon hard metallic tips, substantially as hereinbefore described.

No. 49,416. Internal Bottle Stopper. (Bouchon intérieur de bouteille.)

John Henry Stone, Toronto, Ontario, Canada, 8th July, 1895; 6 years.

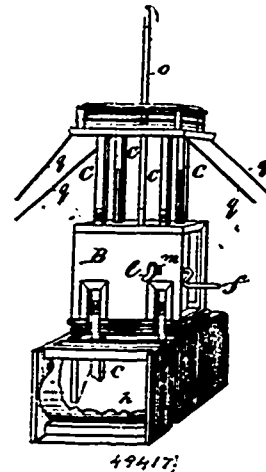
Claim. 1st. As a new article of manufacture: an internal bottle stopper comprising a recessed plug formed of non-corrosive material, the rubber ring fitting into the recess, and the catch wire having the lower end extending through and secured in the centre of the

plug as and for the purpose specified. 2nd. In an interior bottle stopper in combination, the recessed plug, the rubber ring fitting



into the recess, the metal sleeve extending through the centre of the plug and the wire soldered in the sleeve as and for the purpose specified. 3rd. In an interior bottle stopper in combination, the recessed plug, the rubber ring fitting into the recess, the metal sleeve, with outwardly extending flanges, extending through the centre of the plug, and the wire soldered in the sleeve as and for the purpose specified.

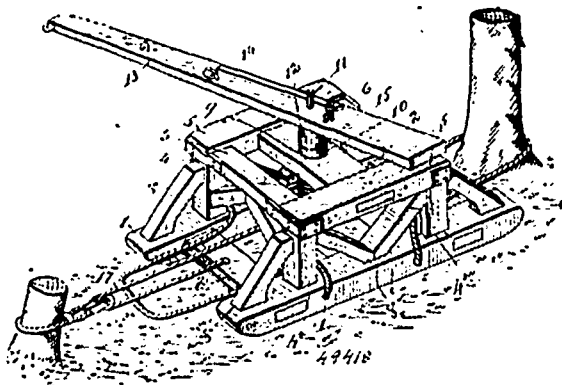
No. 49,417. Portable Elevator. (Élévateur portatif.)



William Malanthon Smith Garrison, Elizabeth, New Jersey, U.S.A., 8th July, 1895; 6 years.

Claim. 1st. The improved elevator herein described, consisting of a box or receptacle, a frame mounted thereon, a trough like guide piece at each end of the box, sectional supports working vertically in said frame, a platform mounted on said supports, a device for steadying said platform, and means for raising and lowering the latter and holding it in position as described and for the purposes set forth. 2nd. In an elevator, the combination with the cage or platform thereof, each of said supports being composed of hinged sections, a frame in which said supports work vertically, means for raising and lowering said platform, and a box or receptacle to receive and house the sections of said supports when the latter are lowered, as and for the purposes set forth. 3rd. In an elevator, the combination with the cage or platform thereof, of sectional hinged supports, each support being provided with a toothed rack, one end of which projects beyond the end of said section and overlaps the end of the adjacent section, a box or receptacle to receive and house said supports, and guide plates secured in said box to guide said sections, as described and for the purposes set forth. 4th. In an elevator, the combination, with a frame, of vertically movable supports therein, each support being composed of a series of sections hinged together, a cage or platform upon said supports, a jointed pole rigidly secured to the frame and projecting through the platform, and means for raising and lowering the supports and the platform, substantially as set forth.

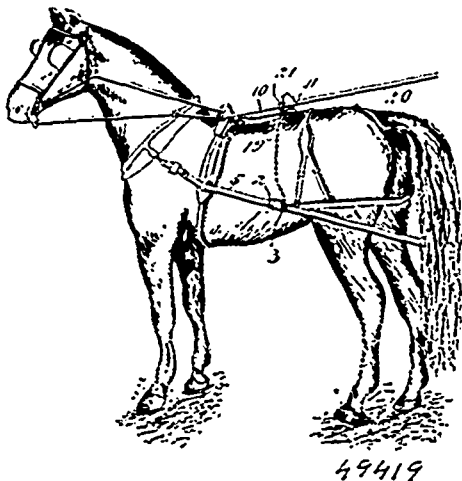
No. 49,418. Stump Puller. (Arrache-souche.)



Henry Payment and Eugene E. Guilbert, both of Gervais, Oregon, U.S.A., 8th July, 1895; 6 years.

Claim.—1st. The herein described stump extractor, consisting of the frame-work, a winding drum mounted in suitable bearings centrally thereof, a chain or cable connected at one end to said frame, an operating lever by means of which said drum is rotated, and means for connecting and disconnecting at will said operating lever and said rotating drum, substantially as and for the purpose described. 2nd. The herein described stump extractor, consisting of the combination of a frame made up of suitable longitudinal upright and cross beams, a winding drum made in two parts, one of which is mounted centrally of said frame-work and has connected thereto one end of a chain or cable, and provided with shoulders on its upper surface, and the other part provided with similar shoulders on its lower end, connected to a lever mounted for rotation upon the shaft upon which said pulley is mounted, said shaft projecting slightly beyond the upper surface of said lever, an auxiliary lever fulcrumed to said main operating lever adjacent to the pivotal shaft thereof, and adapted to disconnect the two parts of said drum by elevating said main operating lever, substantially as and for the purpose described.

No. 49,419. Horse Detacher. (Déclage instantané.)



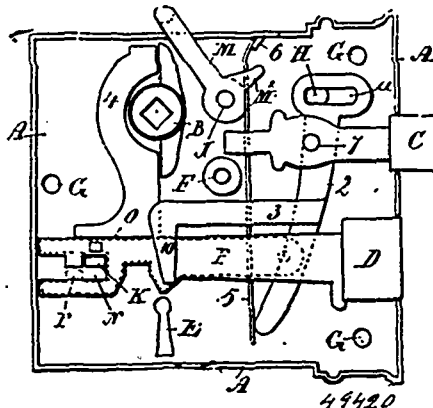
William August Ulrich, Freeland, Pennsylvania, U.S.A., 8th July, 1895; 6 years.

Claim.—1st. In a horse detacher, the combination of traces composed of two portions and provided with trace couplings, consisting of two sections, and a removable pin connecting the same, a back-strap consisting of two portions and provided with a back-strap coupling connecting the portions and provided with a removable pin connecting the portions, the transversely disposed flexible connections arranged at opposite sides of the harness and extending from the traces to the back-strap and secured to the removable pins thereof, and reins attached to the flexible connections and adapted to withdraw the pins, substantially as described. 2nd. In a horse detacher, the combination of the traces having front and rear portions, and provided with connecting couplings composed of two sections, one of the sections being provided with a socket, and the other having a tongue fitting in the socket, pins mounted on the sections and engaging detachably the tongues, and springs for holding the pins normally in engagement with the tongues, a back-strap having front and rear portions and provided with a coupling receiv-

ing the adjacent ends of the portions of the back-strap, and permanently secured to one end and provided with a spring-actuated pin for detachably engaging the other end, flexible connections disposed transversely of the harness and extending from the back-strap to the traces and secured to the pins thereof, and reins attached to the flexible connections and adapted to withdraw the pins, substantially as described. 3rd. In a horse detacher, the combination of traces having front and rear portions and provided with couplings composed of two sections and provided with pins detachably connecting the sections, a back-strap composed of front and rear portions provided with a coupling secured to one portion and having a pin detachably engaged in the other portion, the flexible connections disposed transversely of the harness and extending from the back-strap to the traces and secured to the pins thereof, and provided at opposite sides with loops, and reins passing through the loops and secured therein, substantially as and for the purpose described.

No. 49,420. Combined Latch and Lock.

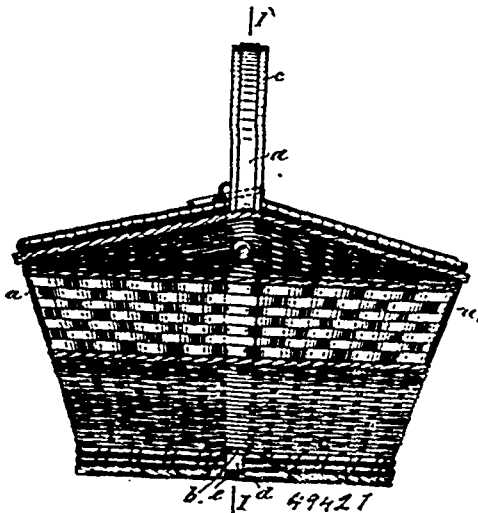
(Loguet et serrure.)



Alexander Watson, Kinnount, Ontario, Canada, 8th July, 1895; 6 years.

Claim.—The combination, with the lock case, safety catch M, sliding latch C, locking bolt D, and tappet B through which the knob spindle passes, of the lever 2, having arms 3, 4, and a spring 5, engaging said lever near the free end, said lever pivoted slidingly to the lock case through an elongated eye a, and the arm 3 engaging the tappet and having frictional contact with the tail of the locking bolt, and the latch loosely connected to said lever, as and for the purpose set forth.

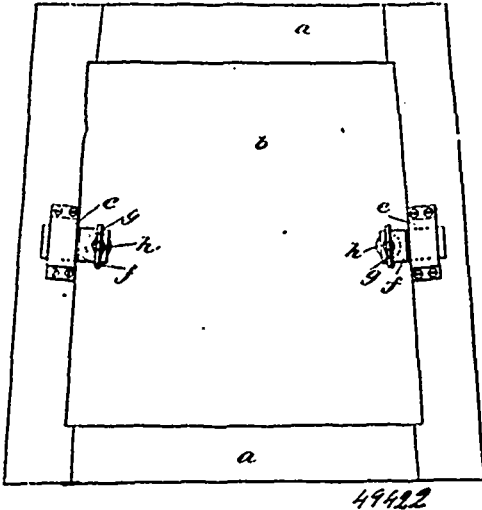
No. 49,421. Haulie for Baskets. (Anse de panier.)



Amédée Hourdeaux, Bamberg, Bavaria, Germany, 8th July, 1895; 6 years.

Claim.—The improvement in and connected with handles for baskets of all sorts, consisting in making the handle separate from the body of the basket and providing it with a metal strap or the like, the attachment of said handle to the basket when required, being effected by inserting its ends in holders b secured for the purpose in the sides of the basket, bending over the ends of the strap and securing the whole in position by means of split pins c or the like, substantially as described and illustrated.

No. 49,422. Removable Seat for Chairs, Top for Tables and the Like. (Fond mobile pour chaise, dessus de tables, etc.)

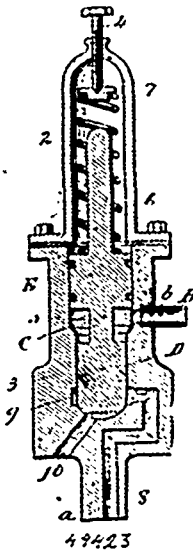


49422

Jeremiah O'Meara, New York, State of New York, U.S.A., 8th July, 1895; 6 years.

Claim.—1st. The combination of a stationary or fixed supporting frame, a removable portion arranged therein, and fastenings for securing the removable portion to the frame and adjusting it therein, each fastening comprising a stationary part or keeper, a bolt, a set-screw in said bolt, and a wear-plate to receive the thrust of the set-screw, substantially as described. 2nd. A chair seat fastening and adjusting device composed of a keeper *c*, the bolt *f*, the screw *g* arranged in said bolt, and the wear-plate *b*, having a shank fitted in a hole in the point of the screw, substantially as and for the purpose described. 3rd. The combination of a stationary or fixed supporting frame, a removable portion, such as a chair-seat arranged in said frame, the adjacent edges of these two members being complementally bevelled, and fastenings for detachably and adjustably uniting these members, such fastenings comprising a keeper, a bolt, a set-screw in said bolt and a wear-plate to receive the thrust of the set-screw, substantially as described.

No. 49,423. Brake. (Frein.)



49423

Toney Silvene, Victoria, British Columbia, 8th July, 1895; 6 years.

Claim.—1st. A release valve for the cylinders of an automatic brake mechanism, comprising a casing adapted to make connection with the brake cylinder and train pipe, two pistons differential in area, operating in the valve casing and comprising a chamber between their opposing ends, which at all times is in communication with the train pipe, two passages, the one communicating with the brake cylinder, the other with the outer air and controlled by the smaller of the two pistons, and a spring similarly exerting a pressure to close

the piston and cut off the communication between the said two passages, substantially as set forth. 2nd. The herein shown and described release valve for the cylinders of automatic brake mechanism, comprising a valve casing, differential pistons operating in said casing and having a chamber between their opposing ends, which is at all times in communication with the train pipe, an annular chamber surrounding the lower portion of the smaller piston and two passages extending therefrom the one adapted to communicate with the brake cylinder, the other leading to the outer air, a coiled spring located in the upper portion of the valve casing and surrounding the valve stem, and a set screw passing through a threaded opening in the upper end of the valve casing and adapted to regulate the tension of the said coiled spring, substantially as described.

No. 49,424. Method of Attaching Shades to Rollers. (Méthode d'attacher les rideaux aux 'atons.)

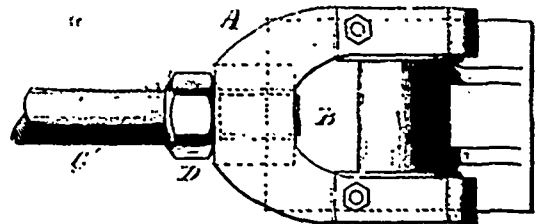


49424

Wilhelm F. D. Grounenger and Frederick Schwenkel, both of Bridgeport, Connecticut, U.S.A., 8th July, 1895; 6 years.

Claim. 1st. The combination with a shade roller having a longitudinal groove 3 and a clamp having at one end an eye adapted to lie in said groove and at the other end a socket adapted to receive the end of a shade, of caps 10 which pass over the ends of the roller and over the ends of the clamp whereby the clamp and with it the shade are securely locked to the roller. 2nd. The combination with a shade roller having a longitudinal groove 3 and a clamp having at one end an eye adapted to lie in said groove and at the other end a socket adapted to receive the end of a shade, of a rod adapted to pass through the eye, means for securing the ends of the rod at the ends of the roller, and caps 10 adapted to pass over the ends of the roller and over the ends of the clamp the latter clamping a fold of the shade between itself and the roller. 3rd. The combination with a shade roller having a groove 3, and a clamp B having at one end an eye adapted to lie in the groove and an opening 13, and at the other end a socket adapted to receive the end of the shade, of a supplemental clamp C having an eye 12 adapted to lie in the opening, said clamp C partially inclosing the roller and inclosing clamp B, a rod adapted to pass through eyes 7 and 12, means for securing the ends of the rod at the ends of the roller and caps 10 adapted to pass over the ends of the roller and over the ends of clamp B the latter clamping a fold of the shade between itself and the roller.

No. 49,425. Device for Securing Piston Rods to Cross-Heads. (Appareil pour assujétir les tiges de piston aux têtes.)



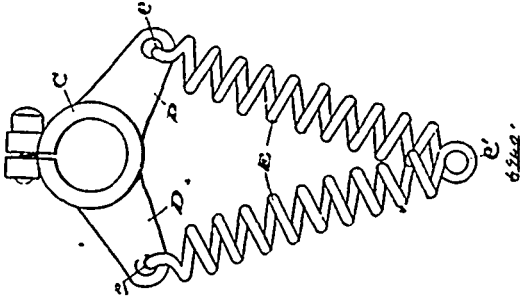
49425

Edwin J. Armstrong, New York, Oswego, U.S.A., 8th July, 1895; 6 years.

Claim.—1st. The combination, with a cross-head A, having an opening *a* therethrough formed with screw-threads *b*, a bevelled mouth or seat *d*, at the end of said opening, and a blank or unthreaded portion *e*, intermediate said bevelled mouth and the screw-threaded portion of the opening, of a piston rod C having a screw-threaded end *c*, and a nut D having a bevelled face *f* adapted to fit the bevelled mouth of the opening, substantially as described. 2nd. The combination, with a cross-head A, having a screw-threaded opening *a* therethrough of greater diameter for a portion of its length at one end than at the other, and with a bevelled mouth or seat *d*, of a screw-threaded piston rod C adapted to fit the smaller diameter of the opening, and a nut D having a bevelled face *f* adapted to fit the bevelled mouth of the opening, substantially as described. 3rd. The combination, with a cross-head A, having an opening *a*, formed with a bevelled seat or mouth *d*, a portion of said opening being screw-threaded, of a piston rod C, having an un-

threaded portion *g*, between two threaded portions at one end, and a nut *D*, having a bevelled face adapted to fit said bevelled seat, substantially as described. 4th. The combination, with a cross-head *A*, having an opening *a*, formed with screw-threads *b*, and a bevelled mouth or seat *d*, of a piston rod *C* adapted to engage a section of said opening at one end thereof, whereby a space is provided surrounding said rod within the opening adjacent its bevelled mouth, and a jam nut *D*, adapted to fit into said bevelled mouth or seat, substantially as described.

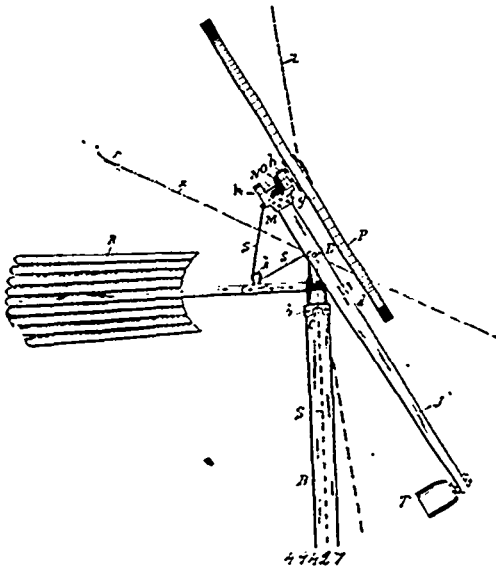
No. 49,426. Velocipede. (Vélocipède.)



John Galt, Toronto, Ontario, Canada, 8th July, 1895; 6 years.

Claim.—1st. In a velocipede, the combination of the steering apparatus, of means for yieldingly restraining the steering apparatus to normally retain it in its correct alignment with the other parts of the velocipede, substantially as specified. 2nd. In a velocipede, the combination with the steering part of a restraining spring connected to the steering parts and to a stationary part of the velocipede to normally retain the steering parts in correct alignment with the remaining parts of the velocipede, substantially as specified. 3rd. In a velocipede, the combination, with the steering parts of a spring or springs connected to the steering parts and to the main frame of the velocipede, substantially as specified. 4th. In a velocipede, the combination, with the handle bars of a clamp rigidly connected to the handle bars, provided with a rearwardly extending lug, the upper reach bar, an adjustable clamp rigidly connected to the upper reach bar, and a restraining spring connected to the clamps on the handle bars and reach bars, to normally retain the steering apparatus in proper relation to the remaining parts of the velocipede, substantially as specified.

No. 49,427. Wind-mill Regulator. (Régulateur de moulin à vent.)

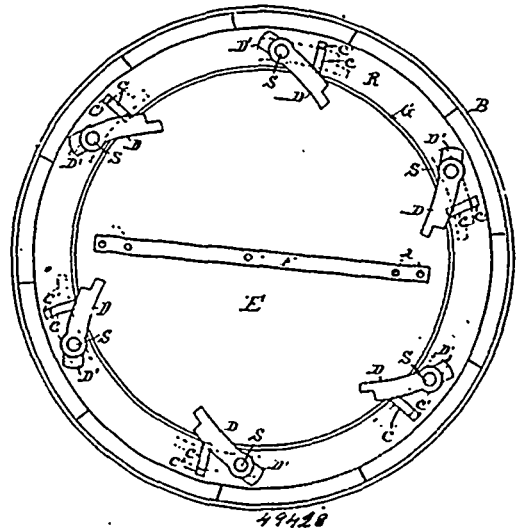


Edgar J. Marsh, Coldstream, Ontario, Canada, 8th July, 1895; 6 years.

Claim.—1st. A pivotal tilting lever or frame in combination with and supporting the wind-wheel or sail, and controlled by a weight or its equivalent, substantially as and for the purpose set forth. 2nd. A pivotal tilting lever or frame *J*, and means for supporting the latter in combination with and supporting a wind-wheel or sail *P*, and a weight *T*, or its equivalent, engaging with said lever to govern the speed of said wheel, substantially as and for the purpose set forth. 3rd. A pivotal tilting lever or frame *J*, supporting a wind-wheel or sail *P*, and controlled by a weight *T*, or its equivalent, in combina-

tion with a pivot bar *E*, turn table *D*, and means for supporting the latter, substantially as and for the purpose set forth. 4th. A pivotal tilting lever or frame *J*, supporting a wind-wheel or sail *P*, and controlled by a weight *T*, or its equivalent, in combination with the pivot bar *E*, turn table *D*, head *C*, tubular shaft *G*, standard *B*, and means for communicating motion from said wheel *P*, to said shaft *G*, substantially as and for the purpose set forth. 5th. A pivotal tilting lever or frame *J*, supporting a wind-wheel or sail *P*, and controlled by a weight *T*, or its equivalent, and means for supporting said frame *J*, in combination with the rope *S*, substantially as and for the purpose set forth. 6th. A pivotal tilting lever or frame *J*, provided with the cap *g*, and brace *f*, a weight *T*, or its equivalent controlling said lever, a stop brace *d*, a pivot bar *E*, turn table *D*, collar *F*, head *C*, shaft *G*, standard *B*, and tower *A*, in combination with the wheel *P*, shaft *N*, gear-wheels, *O* and *M*, shaft *K*, and gear-wheels *L*, *I* and *H*, substantially as and for the purpose set forth. 7th. A pivotal tilting lever or frame *J*, supporting a wind-wheel or sail *P*, and controlled by a weight *T*, or its equivalent, in combination with the pivot bar *E*, forked turn table *D*, provided with a brace *e*, collar *F*, head *C*, provided with the outwardly projecting portion *i*, and socket *a*, a standard *B*, the upper end of which is fitted to, and secured in said socket *a*, and the tubular shaft *G*, substantially as and for the purpose set forth.

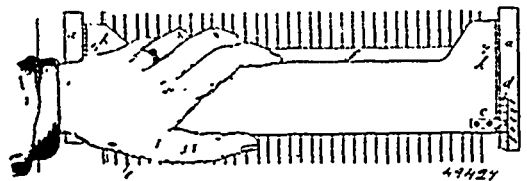
No. 49,428. Barrel Head. (Fond de baril.)



William Corbin Blundell, and George Phillip Dold, both of Wichita, Kansas, U.S.A., 9th July, 1895; 6 years.

Claim.—1st. The appendable barrel head comprising the rim *R*, provided with the annular marginal groove *G*, adapted to hold packing material, the cover *E*, provided with the depending marginal flange adapted to be seated in said groove upon the packing placed therein, and the keepers *D* studded to said rim, and adapted to be turned to ride upon the cover margin to thereby hold the cover seated, substantially as set forth. 2nd. The combination with a barrel, of the rim *R* seated in the croze thereof, and provided with the depending annular marginal groove *G*, the packing *P* placed in said groove, the keepers *D* studded to said rim, and the cover *E* provided with the depending marginal flange *J* adapted to be seated in said groove, upon said packing, and to be held thus seated by means of said keepers, in the manner substantially as and for the purpose specified.

No. 49,429. Zither. (Cithare.)

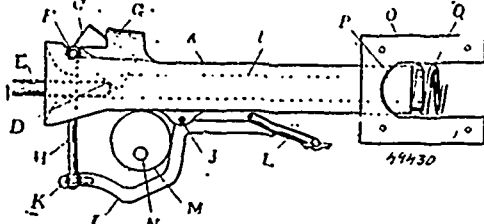


The Fabrick Lockman Scher Musikwerke Aktien-Gesellschaft, in Peipzig-Gohlis, assignee of Karl Rudolf Essig, Leipzig, both of Germany, 9th July, 1895; 6 years.

Claim.—A zither characterized by having a swinging adjustable finger board, provided with a changeable music sheet, so that on the depression of the board into a bar provided with movable pins some of the latter are set free by the music sheet, whilst the remainder move under in such a way that the dampers or bevels situ-

ated throbender prevent the strings struck from sounding or giving out notes, or directly set them in vibration and cause them to sound, by which means the adjusting or moving of the finger board may be made to produce any desired harmonics, the whole for the object of producing with one and the same finger board harmonies of said desired kind of tone.

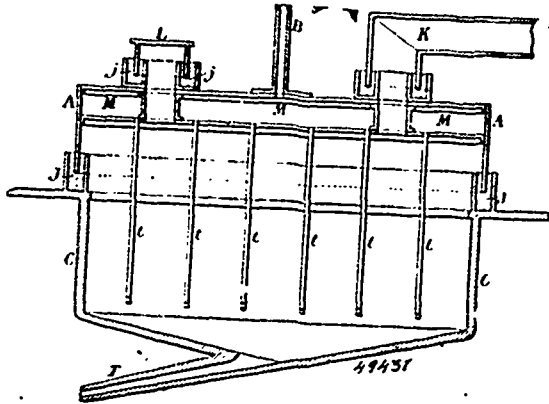
No. 49,480. Car-Coupler. (*Attelage de chars.*)



William Richmen Roberts, Kinglake, Ontario, Canada, 9th July, 1895; 6 years.

Claim.—1st. The combination of the gate C, and the levers I and L, substantially as and for the purpose here-in-before set forth. 2nd. The combination of the eccentric M, and the circle plates O, O, substantially as and for the purpose hereinbefore set forth.

No. 49,431. Apparatus for Separating the Metals, Etc., from Blends. (*Appareil pour séparer les métaux, etc., des blends.*)



Jean Marie Alcide Desmazures, assignee of Marie Antoine Joseph Boux, both of Paris, France, 9th July, 1895; 6 years.

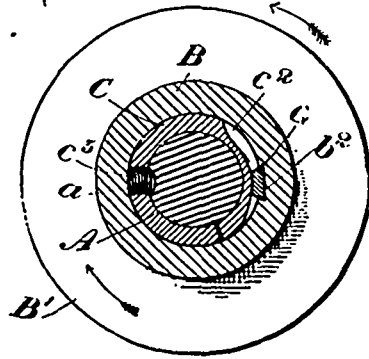
Claim.—1st. The herein described process for separating the metals and other ingredients from blends by melting in a closed crucible a mixture of the pulverized blende with lead oxide, tapping off such argentiferous lead as may be thus separated, adding flux and fusing, then blowing heated air or oxidizing gas through the fluid residue, and removing zinc oxide from its surface. 2nd. Apparatus for separating the metals and other ingredients from blends, consisting of a crucible adapted to be heated over a furnace and having a tapping pipe, a hollow cover, a hot air supply pipe communicating with the hollow space of the cover, blast pipes extending within the crucible from such hollow space of the cover, outlets through said cover with interchangeable pipes and covers and sand troughs, for the purpose set forth.

No. 49,432. Matching Head for Planing Machines. (*Porte-rainure et languette pour machines à raboter.*)

Cowan & Co., and Agnes Aussen Eby, assignees of Isidore Emanuel Eby, all of Galt, Ontario, Canada, 9th July, 1895; 6 years.

Claim.—1st. The combination, with the matching head and cylindrical portion thereof, of a binding cam connection between the cylindrical portion of the matching head and the spindle, as and for the purpose specified. 2nd. The combination, with the matching head and cylindrical portion thereof, of a spindle sleeve secured to the same and key and cam groove designed to co-act, as and for the purpose specified. 3rd. The combination, with the matching head and cylindrical portion thereof, of a spindle sleeve secured to the same and key secured in a recess in the inside of the cylindrical portion and designed to co-act with a cam groove in the sleeve, as and for the purpose specified. 4th. The combination, with the matching head and cylindrical portion thereof, of a spindle having a vertical slot, a screw stud extending through the sleeve into the slot in the spindle, a key secured in a recess in the inside of the cylindrical por-

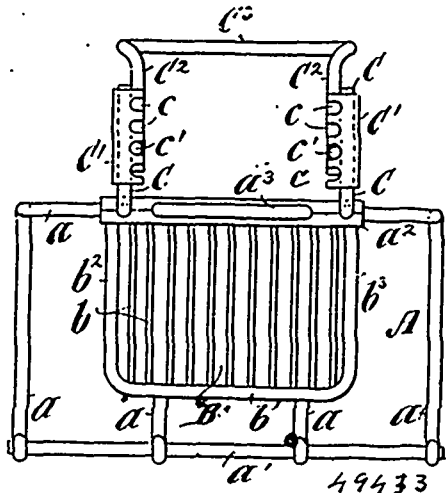
tion and designed to co act with a cam groove in the sleeve, as and for the purpose specified. 5th. The combination, with the matching



49432

lead having a cylindrical portion provided with a bottom flange, the cutters supported by such flange, of a screw thread cut on the upper part of the cylindrical portion and a nut screwed on to such thread, as and for the purpose specified.

No. 49,433. Adjustable Connection. (*Connecteur ajustable.*)

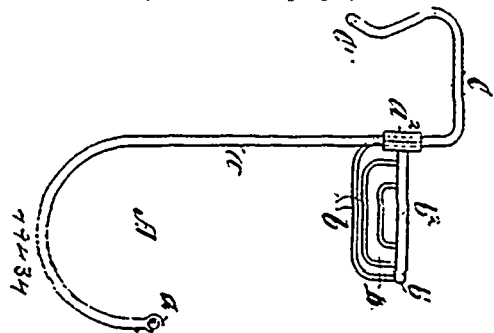


49433

Leo Frank and William Bernard, both of New York, assignees of Otto Henry Huebel, Brooklyn, all of New York State, U.S.A., 9th July, 1895; 6 years.

Claim.—The combination with a part having sockets C', C', with or without notches c, of another part provided with resilient arms C', C', with or without pins c', c', united at one end and adapted at their free ends to enter said sockets and be pressed against the opposite sides of the latter in virtue of their resiliency, substantially in the manner and for the purpose herein set forth.

No. 49,434. Soap and Sponge Holder. (*Porte-savon et éponge.*)

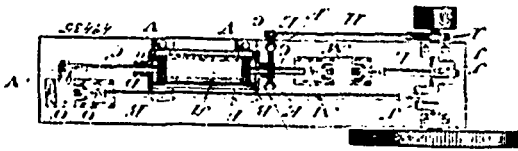


49434

Leo Frank and William Bernard, both of New York, assignees of Otto Henry Huebel and Frederick William Manger, both of Brooklyn, all in New York State, U.S.A., 9th July, 1895; 6 years.

Claim.—A rack comprising a number of wires *a* bent downwardly and at their lower extremities bent forwardly and upwardly, a cross bar or wire *a*¹ connected to the upturned extremities of the wires *a*, and a bar or plate *a*² connected to the downwardly bent portions of the wires *a* in combination with a soap holder *B*, and means comprising hook shaped wires *C* and a cross wire *C*¹ for securing the rack to the edge of a bath tub, substantially in the manner and for the purpose herein set forth.

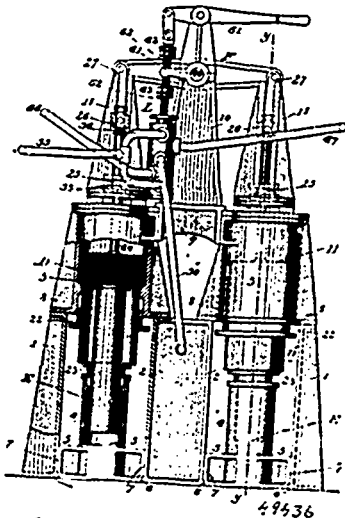
No. 49,435. Steam Engine. (Machine à vapeur.)



Joseph Hardell, Benson French and Robert Talbot Harding, all of Stratford, Ontario, Canada, 9th July, 1895; 6 years.

Claim.—1st. In a steam engine, a cylinder provided with two piston heads and two piston rods and a suitable valve whereby the steam is only admitted to the inner faces of the piston heads, substantially as described and for the purpose specified. 2nd. In a steam engine, a cylinder in combination with two independently operating piston heads and piston rods, a suitable valve for centrally admitting the steam to the cylinder between the piston heads at the commencement of the stroke, and exhaust ports for exhausting the steam when the piston heads reach the end of their strokes, substantially as described and specified. 3rd. In a steam engine, a cylinder in combination with two piston heads and two piston rods fitted therein, a suitable valve and a steam port centrally located in the cylinder so as to admit steam between the piston heads at the commencement of the stroke, and exhaust ports for exhausting the steam when the piston heads reach the ends of their strokes, parallel slides, a cross head and connecting rod for connecting one piston rod with a crank arm on the crank shaft, and a cross head-arm, parallel slides, a cross head and connecting rod for connecting the other piston rod with a crank arm of opposite throw on the crank shaft, substantially as described and for the purpose specified. 4th. In a steam engine, the combination with the cylinder *A* of the steam chest *R*, the valve *T*, the steam port *U*, the exhaust outlet *W*, and the exhaust ports *V*, substantially as described and for the purpose specified. 5th. In a steam engine, the combination of the cylinder *A*, piston heads *B*, *B*¹, piston rods *C*, *C*¹, parallel slides *M*, cross head *M*¹, connecting rod *L*, crank arm *J*¹, crank shaft *J*, cross head arm *N*, parallel slides *O*, cross head *O*¹, connecting link *G*, rock shaft *F*, standards *E*, *E*¹, rod *P*, crank arm *J*², eccentric *I*, eccentric pitman *H*, valve rod *Q*, valve rod *Q*, valve *T*, steam chest *R*, steam port *U*, exhaust outlet *W*, exhaust ports *V*, exhaust pipe *Y* and fly-wheel *K*, substantially as described and for the purpose specified.

No. 49,436. Pump. (Pompe.)

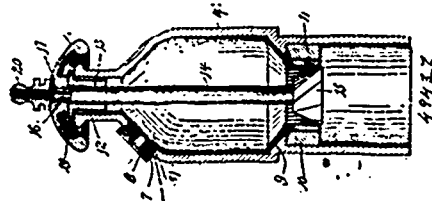


The General Manufacturing Company, assignee of Ernest W. Naylor, all of Bound Brook, New Jersey, U.S.A., 9th July, 1895; 6 years.

Claim. 1st. In a pumping apparatus the combination of two vertical plunger pumps, two motive cylinders and pistons of predominating area above the pumps respectively, means for moving said pistons in opposite directions simultaneously, two long stroke dis-

tributing valves for the motive cylinders, two short stroke distributing valves for the pumps, and a vibrating operating beam for said valves, connected to said motive cylinder valve from greater radii of said beam, and connected to the said pump valves from lesser radii of said beam. 2nd. In a duplex hydraulically operated apparatus, the combination of two admission valves for admitting motive fluid to the actuating part of the apparatus consisting in vertically reciprocating pistons, respective ports controlled thereby, inlets for the operating fluid beneath said pistons wherein the pressure of said fluid partially or wholly counter-balances the same, and a vibrating beam mechanically connected at opposite sides of its fulcrum to said pistons adapted to move them in opposite directions simultaneously, and to balance the weight of one by the other. 3rd. A pump valve, consisting in a vertically reciprocating piston, a lateral port connecting with the pump, an inlet above the piston, and a delivery passage below the piston, wherein the back pressure of the delivered fluid partially or wholly counterbalances the weight of said piston. 4th. In a duplex pumping apparatus, the combination of two single acting force pumps working in opposite directions simultaneously, of two pump valves consisting in vertically reciprocating pistons, respective lateral ports connecting with the pumps, inlets above the said pistons, delivery passages below said pistons, in which back-pressure is adapted to partially or wholly counter-balance the weight of said pistons, and a vibrating beam mechanically connected at opposite sides of its fulcrum, to said pistons, moving them in opposite directions simultaneously, and balancing them, the one by the weight of the other. 5th. In a hydraulically operated pumping apparatus, the combination of an operating ram, a forcing ram, a distributing valve for the said operating ram, a distributing valve for the said forcing ram, a motor for actuating both said valves, and a controlling valve for the motor mechanically actuated by said rams. 6th. In a hydraulically operated pumping apparatus, the combination of two vertically reciprocating operating rams, two vertically reciprocating forcing rams respectively attached thereto, a vibrating beam mechanically connected to balance said rams, a controlling valve actuated by the said beam connected to the rams, a motor, and suitable hydraulic connections between the controlling valve and the motor, a vibrating beam operated by the motor, and two series of oppositely moving distributing valves for the rams mechanically connected to said beam that is operated by the motor, substantially as described. 7th. In a hydraulically operated pumping apparatus, the combination of two vertical operating rams and respectively attached forcing rams, a vibrating beam connected from opposite extremities to the rams, a controlling valve having tappets, a tappet arm on the said beam for engaging said tappets, a motor, a second vibrating beam actuated by the motor, and two series of vertically reciprocating distributing valves respectively connected to opposite extremities of said second beam, the whole adapted for the operation of the said distributing valves mechanically independent of the rams, thereby giving a movement which throws the said distributing valves full open either way irrespective of the length of stroke or lineal speed of said rams. 8th. In a pumping apparatus, the organization of the framework, consisting in two vertical operating cylinders mounted on pillars, two forcing cylinders vertically beneath the operating cylinders, arranged to bind said pillars together, and a cross-tie uniting the operating cylinders and supporting the beam column, the operating cylinders supporting the cross-head guides, substantially as shown. 9th. The two vertical series of valve casings independently supported by U-shaped connecting pipes beneath them and suitable pedestals supporting said pipes from a central point in the foundation, substantially as described.

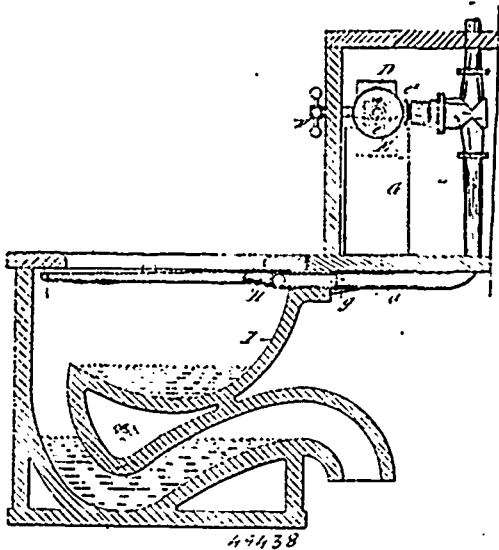
No. 49,437. Cruet. (Huilier.)



Franz Zehetner, South Kaukauna, Wisconsin, U.S.A., 9th July, 1895; 6 years.

Claim.—The combination, of a receptacle having an open lower end and provided with an interior grinding surface, a bushing within the neck of the bottle, said bushing provided at its upper end with a flange overlapping the upper edge of the neck of the bottle, a spindle provided with a grinding surface co-acting with the grinding surface of the receptacle, and having its upper end threaded, a cap or cover removably carried by the spindle, said cap or cover provided with a depending boss adapted to rest, and to be rotated upon the flange of the bushing, the cap or cover proper being free from contact, with the receptacle, and a nut engaging the threaded end of the spindle, and bearing against the cap or cover, said nut, when disengaged from the threads, allowing the cap or cover to be removed and the spindle to drop through the lower open end of the receptacle, substantially as set forth.

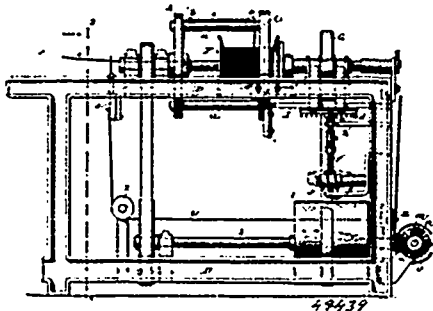
No. 49,438. Apparatus for Flushing Water Closets.
(Appareil à lavage des latrines.)



Hugh Thomson, Kew, Victoria, 9th July, 1895, 6 years.

Claim.—1st. In apparatus for flushing water closets, a valve (such as A, B) adapted to supply high pressure water to the closet pan in combination with a cylinder or vessel such as E which, when filled by a portion of the water passing through the valve, will close said valve, substantially as and for the purposes specified. 2nd. In apparatus for flushing water closets, a valve (such as A, B) made to screw down on to its seat and having a passage through its spindle leading to a hollow cylinder or vessel such as E secured upon said spindle, substantially as and for the purpose specified. 3rd. In apparatus for flushing water closets, a hollow cylinder or vessel such as E supplied with a certain proportion of water when the flushing valve is turned on in combination with a cistern such as G, in communication with the closet pan, substantially as and for the purposes specified. 4th. In apparatus for flushing water closets, a hollow cylinder or vessel such as E adapted to turn off the supply or flushing valve after a certain time, and having a diaphragm or partition such as e² across it near its end, substantially as and for the purposes herein specified.

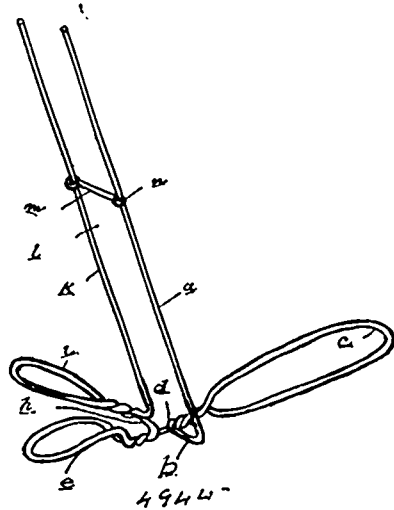
No. 49,439. Spinning Jenny. (Jeannette.)



Heeydrich Raffloer & Company, Havana, Cuba, assignee of George Harrison Marsh, Brooklyn, New York, both in the U.S.A., 9th July, 1895; 6 years.

Claim.—1st. In a flyer, the combination of a rotary head with flyer-rods that are connected at one end to said rotary head, a stationary ring parallel to said head, said stationary ring having a groove in its face into which groove the loose ends of said flyer-rods enter, as and for the purpose specified. 2nd. In a flyer, the combination of a rotary head with flyer-rods that are connected at one end to said rotary head, a stationary ring parallel to said head, said stationary ring having a groove in its face into which groove the loose ends of said flyer-rods enter, and means substantially as described for adjusting the stationary ring in a vertical plane, and for holding the same in its adjusted position, as and for the purpose specified. 3rd. The combination, with a jenny and mechanism for operating the same of a two-part extensible and contractible stop lever having means for holding its parts together frictionally so that they will remain either in the contracted or extended position and a connection between said stop lever and the mechanism for operating the jenny, as and for the purposes set forth.

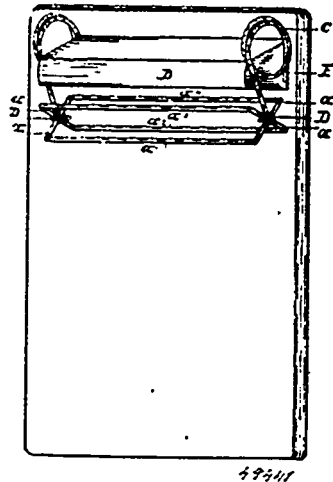
No. 49,440. Necktie Holder. (Porte-cravate.)



George F. Minto, Minlan, Michigan, U.S.A., 9th July, 1895; 6 years.

Claim.—A rack for holding neck ties, comprising two parallel upwardly inclined pins, a forwardly extending supporting loop c, at the base of the pins, a lateral support t extending out from a point adjacent the base of the pins, a sliding cross-bar on the pins, and a rearward upwardly inclined handle forming a continuation of the supporting loop, substantially as described.

No. 49,441. Letter Clip. (Serre-papier.)



Stephen H. Chapman, Toronto, assignee of Colin Campbell McPhee, Chatham, both of Ontario, Canada, 9th July, 1895; 6 years.

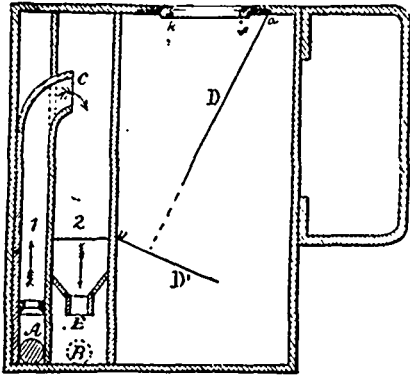
Claim.—The combination in a letter clip of a base board E, (having hanger G), a stop block B, coil springs C, C, secured one at each end to base of block B, with free ends bent toward each other on which revolves a wheel in the form of a turnstile, all substantially as and for the purpose set forth.

No. 49,442. Fare Box or Slot Cash Collection Box.
(Boîte à billets ou à argent.)

Charles Taucède Lamoureux, Montreal, Quebec, Canada, 9th July, 1895; 6 years.

Claim. 1st. A controlling mechanism for fare-boxes consisting in a tube 1, curved at its upper end and communicating with a chamber 2, said chamber having near its bottom a funnel-shaped passage E, dividing said chamber, substantially as shown and described. 2nd. A controlling mechanism for fare-boxes consisting in a tube 1, curved at its upper end and communicating with its chamber 2, said chamber having near its bottom a funnel-shaped passage E, dividing said chamber, in combination with a ball A, of such a

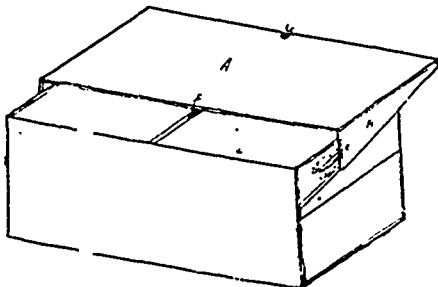
size as to travel freely in said tube and passage, substantially as and for the purpose set forth. 3rd. The fitting up to the fare-box of



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two opposite incline planes, at a certain distance of each other, forming as a second interior box inside the fare box to prevent in the successive reversals of the fare box, the fares to glide towards the slot.

No. 49,443. Egg Case. (Boîte à œufs.)

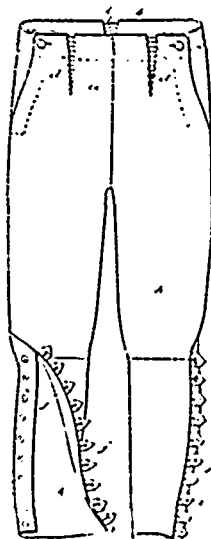


49443

William Alexander Martin, Eldon, Prince Edward Island, 10th July, 1895; 6 years.

Claim. - An inclined sliding cover with a groove in the end pieces thereof, to slide over an iron attachment on each end of the case or box, also the iron attachment and a spring centre fastening to keep the cover from sliding off, as shown and described.

No. 49,444. Bicycle Trousers. (Pantalon pour bicyclists.)



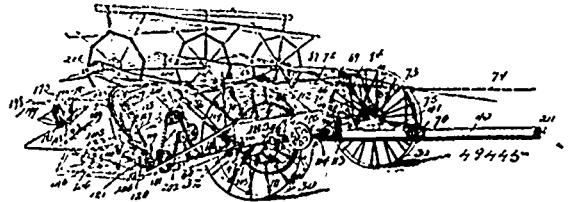
49444

Harry James Roch, New York, State of New York, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. As a new article of manufacture, trousers provided

in their interior with a supporter attachment, having connection with the trousers on the inside thereof, at the sides, and secured at its centre at the crotch, substantially as described. 2nd. As a new article of manufacture, trousers provided in their interior with a supporter attachment having connection with the trousers on the inside thereof at the sides, and secured centrally at the crotch of the trousers, the bottom edge tapering from the sides toward the crotch connection, substantially as described. 3rd. As a new article of manufacture, trousers having side openings forming front and back flaps, and provided between said flaps with a supporter attachment secured by its side edges to the back flap, and secured at about the centre of its bottom edge to the trousers on the inside thereof at the centre of the crotch, substantially as described. 4th. As a new article of manufacture, trousers having side openings forming front and back flaps, and provided between said flaps with a supporter attachment secured by its side edges to the back flap, and secured at about the centre of its bottom edge to the trousers on the inside thereof at the centre of the crotch, the said attachment being divided and having a laced connection at the point of division, substantially as described.

No. 49,445. Grain Binder. (Lieuse.)



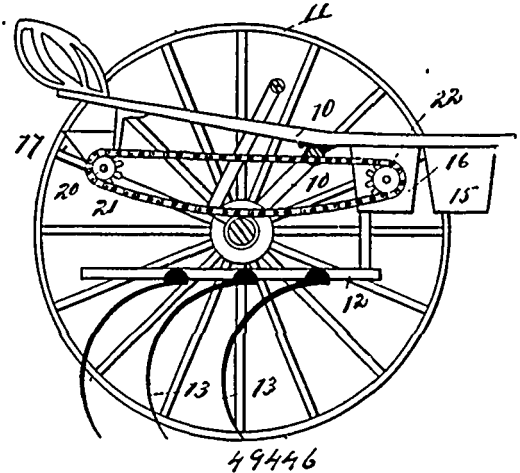
Charles F. Craver, Harvey, assignee of John Francis Appleby, Chicago, both of Illinois, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. In a self-binding harvester, the combination with a grain platform arranged in front of the driving wheels, of a push pole extending rearwardly from the driving wheels and a self-binder mounted upon one end of the grain platform, substantially as described. 2nd. In a self-binding harvester, the combination with the ground wheels and their axle, of a tubular beam sleeved upon the axle, a platform connected to said tubular beam, a push pole also pivotally connected to the tubular beam, and extending rearwardly therefrom and provided with a driver's platform, a tilting lever on the driver's platform and connections between the tilting lever and the grain platform whereby the latter may be rocked about the axle, substantially as described. 3rd. In a self-binding harvester, the combination with the ground wheels and their axle, of a tubular beam sleeved upon the axle, a grain platform connected to said tubular beam and extending in front of and parallel to the axle, a push pole and braces pivotally connected to the tubular beam in the rear of the axle, the line of pivots being parallel thereto and means whereby the platform may be rocked upon the axle, substantially as described. 4th. In a self-binding harvester, the combination with the ground wheels and their axle, of a tubular beam sleeved over the axle, a platform connected thereto and means for rocking the platform comprising suspension rods connected to the platform in front of the axle, pull rods connected therewith and extended rearwardly to the driver's station, a counterbalancing spring or springs connected with the pull rods and an operating lever for manually tilting the platform, substantially as described. 5th. In a self-binding harvester, the combination with the ground wheels and their axle, of a tubular beam sleeved over the axle, a grain platform on which the binding mechanism is mounted connected to said tubular beam and a tilting mechanism comprising standards mounted on the tubular beam, suspension rods connected therewith and to the platform, pull rods connected to the upper ends of said standards and extended rearwardly to the driver's station and swinging brace having diverging legs and adapted to support said pull rods, substantially as set forth. 6th. In a self-binding harvester, the combination with the ground wheels and their axle, of a tubular beam sleeved upon the axle, platform carrying arms clamped upon said beam, a grain platform mounted on said arms and supporting the binding mechanism, upright standards mounted upon said beam, suspension rods connected to the top of said standards and to the platform, diverging pull rods connected to the tops of said standards, a push pole hinged to the tubular beam and extending rearwardly and supporting a driver's platform, a swinging brace having diverging legs mounted upon said push pole and pivotally connected with the diverging pull rods, a tilting lever mounted upon the driver's platform and a connection between said tilting lever and the top of the swinging brace, substantially as described. 7th. In a self-binding harvester, the combination with the ground wheels and their axle, of a grain platform arranged in front of the ground wheels, and having the binding mechanism mounted thereon, a push pole hinged to the tubular beam and extending rearwardly therefrom, and supporting a driver's platform, a reel mounted upon the grain platform, said reel having an adjustment independent of the platform, and means extended to the driver's station for adjusting the reel, substantially as described. 8th. In a self-binding harvester, the combination with the ground wheels and their axle, of a tubular beam mounted thereon, a platform connected

with said tubular beam, a push pole hinged to said tubular beam and extended rearwardly therefrom, a reel pivotally supported upon the platform and adapted to be adjusted independently thereof, said reel having arms extended rearwardly from its pivot, and a system of rods and levers connected to said rearwardly extended arms, and extending to the driver's station whereby the reel may be tilted, substantially as described. 9th. In a self-binding harvester, the combination with the ground wheels and their axle, of a platform arranged in front of the ground wheels, and a push pole extending rearwardly therefrom, a binding mechanism mounted upon one end of the platform, means for elevating the grain to said binding mechanism, and a pivoted butter with connections extending to the driver's station at the rear end of the push pole, and means for raising and lowering the grain platform and reel, and whereby the butter is adjusted automatically when the grain platform is adjusted, substantially as described. 10th. In a harvester of the class described, wherein the grain platform and binding mechanism are mounted in front of the driving wheels and a push pole extends rearwardly therefrom, of a driver's platform mounted upon the rear end of the push pole, a pivoted steering wheel, a standard connected therewith and a steering arm pivotally connected to said standard, whereby it may be turned to provide a driver's seat, substantially as described. 11th. In a self-binding harvester, the combination with intermittently operating packers, of a vibrating needle for carrying the binding cord about the gavel, and means whereby the packers may be thrown out of gear while the needle is in operation, substantially as described. 12th. In a binding mechanism for self-binding harvesters, the combination with a driving shaft capable of a slight lateral movement at one end thereof, and having a gear thereon, a packer shaft having a co-working gear, a needle shaft and a needle and mechanism intermediate, the needle shaft and the driving shaft whereby the latter may be moved to disengage said gears and arrest the movement of the packers while the needle is in operation, substantially as described. 13th. In a self-binding harvester, the combination with a driving shaft and gearing for continuously driving it, of a binder shaft for operating the knotting mechanism, a pivoted compressor arm, packers, and gearing between the driving shaft and the packer shaft and gearing between the driving shaft and the binder shaft, said gearing being adapted to be put in motion by the pressure of the gavel upon the compressor arm affected by the packers which are thereby thrown out of gear, substantially as described. 14th. In a self-binding harvester, the combination with a driving shaft, of a binder shaft for driving the knot tying mechanism, a pivoted compressor arm, a vibrating needle, gearing between the driving shaft and the binder shaft, means operated by the compressor arm for controlling said gearing, and means for effecting an increased pressure upon the gavel while the knot tying mechanism is in operation, substantially as described. 15th. In a self-binding harvester, the combination with a constantly rotating driving shaft having a sprocket gear thereon, a binder shaft having a sprocket gear loosely mounted thereon, a belt carried over said sprocket-wheels, the binder shaft sprocket having a circular rack and the binder shaft carrying a segmental cam and a pivoted dog, a needle shaft having a cranked end and a pitman connecting the segmental cam with the needle shaft crank, a compressor arm mounted upon a rock-shaft having a sliding bolt connected therewith, a spring normally sustaining said bolt, a rocking plate pivotally connected to said bolt and adapted to hold the dog out of contact with the circular rack and the compressor arm being adapted when rocked under the pressure of the forming gavel to release the dog whereby it is engaged with the circular rack and the binder shaft is put in gear with the driving shaft, substantially as described. 16th. In a self-binding harvester, the combination with a constantly rotating driving shaft, of a binder shaft adapted to be intermittently driven therefrom, a segmental cam mounted upon the binder shaft and having a raised portion, a needle shaft having a crank end, a pitman connecting said crank to the segmental cam, a ratchet and pawl mechanism for connecting the binder shaft and the segmental cam, a compressor arm and a rock-shaft on which said compressor arm is mounted, a crank upon said rock-shaft, a spring sustained bolt connected with said crank and a skeleton frame in which said bolt slides, a ratchet plate adapted to slide upon said skeleton frame and a pivoted dog mounted on the frame and adapted to be engaged with said ratchet plate whereby to lock said parts against yielding during the tying of the knot simultaneous with the increased pressure effected by the raised portion of the cam, substantially as described. 17th. In a self-binding harvester, the combination with a intermittently vibrating needle adapted to carry one strand of the cord over the gavel, of a cord holder and carrier comprising a rotating shaft having a cross-head with up-standing arms and a curved shoe, said chord holder being adapted to engage the chord by one of its up-standing arms and carry it towards the knotting hook, substantially as described. 18th. In a self-binding harvester, the combination with a vibrating cord carrying needle, of a cord holding mechanism comprising a rotatable shaft having a cross-head thereon and up-standing arms arranged on opposite sides of the chord holder shaft, a curved shoe arranged concentric to the path of the arms, and said arms being adapted to successively engage the cord and carry it toward the knotting hook, the engagement being effected by one arm simultaneous with the release of the cord by the other arm, substantially as described. 19th. In a self-binding harvester, the combination with a knot tying mechanism comprising a knotter hook shaft and means for intermittently driving

it, said knotter hook having a fixed jaw and a movable jaw, a cam for rocking the movable jaw on its pivot whereby to open it to receive the cord and a spring plate adapted to hold the movable jaw closed after the cord is engaged, substantially as described. 20th. In a self-binding harvester, the combination with a slotted breast plate through which the cord is carried to the knotter, said slot having a shoulder projecting therein, a latch pivoted on the breast plate, a rotating cord holder adapted to hold said plate in position to cover the slot during one part of the knot tying operation and the cord being adapted to turn the plate on its pivot whereby to uncover the slot at the beginning of the knot tying operation, substantially as described.

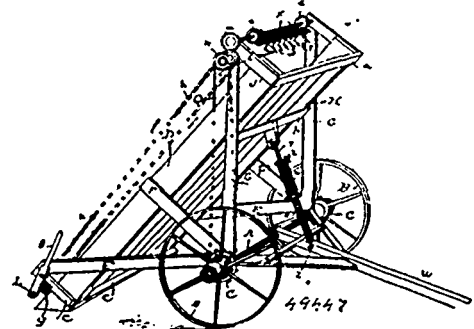
No. 49,446. Seeder Attachment for Harrows.
(*Attache de semoir pour herse.*)



William A. Van Deusen, Sprout Brook, New York, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. The combination, with a harrow and the seeding attachments, of the arms hung on the axle of the harrow, the leveller supported on the arms, and the springs arranged to press downwards upon the arms, substantially as described. 2nd. The combination, with the grass seeder and its driving shaft, of the detachable clutch controlled sprocket-wheel on the end of the said shaft, and the angle bracket detachably secured to the seeder and provided with a stud which enters the shaft of the sprocket-wheel, substantially as described. 3rd. The combination, with the harrow and its supporting frame mounted on wheels, of the grain seeder delivering in front of the harrow, the grass seeder delivering behind the harrow teeth, the double sprocket-wheel on one of the main wheels, and drive chains extending from the double sprocket-wheel to the grain and grass seeders, respectively, substantially as described.

No. 49,447. Hay Rake and Loader.
(*Râteau chargeant le foin.*)

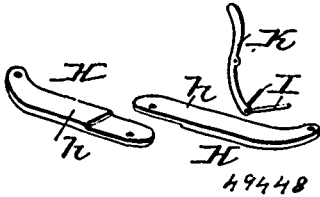
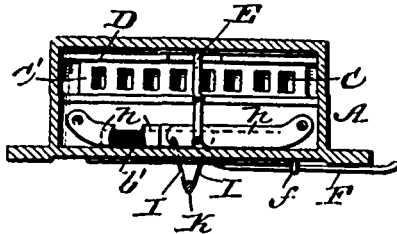


Joseph E. Van Nostran, Canton, Ohio, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. The combination of a hay loader, of the supporting and driving wheels, of the cross-shafts K and L, elevator chains h, to which are secured rake heads M, rakes N, stripper head O, hinged thereto, the stripper P, and trip P¹, substantially as described and for the purpose set forth. 2nd. The combination in a hay loader, of the supporting and driving wheels and the trough, of the chain h, the rake head M secured thereto, teeth secured to the head, and a rake stripper support carried by said chain in advance of the rake head said stripper having a trip P¹, to engage a shaft or cross-bar, whereby the stripper support is rocked to throw the

stripper forward to remove the hay from the rake, substantially as described and for the purpose set forth. 3rd. The combination in a hay loader, of the trough and tongue, of an adjusting mechanism, comprising the spring R, cylinder *u*, rod T, cross-heads *v*, and *x*¹, and means for securing the parts in desired adjustment, substantially as described and for the purpose set forth.

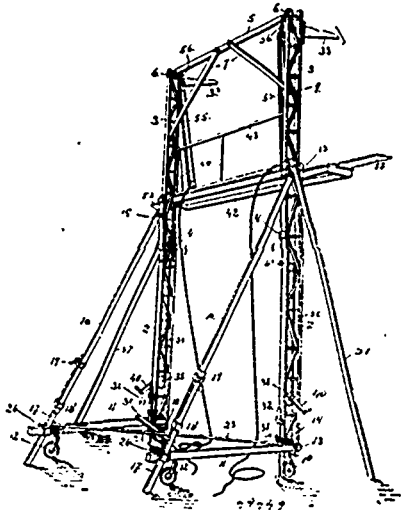
No. 49,448. Damper for Fire-Place Grates.
(*Registre pour grilles de foyer.*)



Delass Slaten, Cadiez Junction, Ohio, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. In an open fire-place grate, the combination with a case, of the damper D, composed of sections D¹, and D², having a pin D³, and slots D⁵, respectively, whereby said sections are connected, and a link E, and lever F, for operating the said sections of the damper simultaneously, substantially as shown and described. 2nd. The combination, with the fire place grate and mantal facing, of the damper made in two sections pivoted at their outer ends to the top plate of the fire-place grate, the links connected with the inner ends of said sections, and the lever pivoted to the mantal facing and connected with the links, substantially as shown and described.

No. 49,449. Scaffold. (*Echafaud.*)

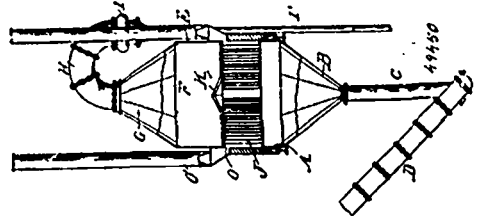


Sewell Aldrich Brooks, Strykensville, New York, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. The herein described scaffold consisting essentially of the sections 1, 1, supported by the horizontal braces 11, cross-braces 28, and diagonal braces 16 and 57, and provided with a vertical adjustable platform, said platform being provided with upwardly projecting hasps 52, for the reception of the extension boards 53, substantially as and for the purpose stated. 2nd. The herein described scaffold consisting essentially of the section 1, 1, supported by the horizontal braces 11, cross-braces 28, and diagonal braces 16 and 57, and provided with a vertically adjustable platform, said diagonal braces 16 being provided with extension pieces 17, and secured thereto by the clamps 19, having cam levers 22, and depression plates 23, substantially as shown and described. 3rd. The herein

described scaffold being of a knock-down character, and consisting essentially of an adjustable extension frame supported by adjustable extension brace and provided with a vertically adjustable platform, either side of said frame or platform being adapted to be independently extended, substantially as and for the purpose set forth. 4th. The herein described scaffold consisting of an extension frame and vertically adjustable platform, said platform being a guard rail hinged to its back edge, detachable extension boards at its ends, and provided with friction roller, which engage the vertical supports of the frame, substantially as shown. 5th. The herein described scaffold being of knock-down character and consisting essentially of the section 1, 1, vertically adjustable platform 42, provided with friction rollers 51, 47 and 48, engaging with said sections and hinged guard-rail 43, supported by the hinged arms 46, detachable extension boards 53, the whole being held in a vertical position by the guard arms 33, extension braces 16, side rails 11, and cross-braces 28, substantially as and for the purpose stated. 6th. In combination with a knock-down scaffold a clamp consisting of a rectangular frame, in which a cam-lever is mounted and adapted to depress a pivoted securing-plate, substantially as shown. 7th. A scaffold consisting of a vertical frame provided with traction wheels at its base, and having two end rails resting on traction wheels at their outer ends, said end rails being connected by cross-arms, substantially as shown.

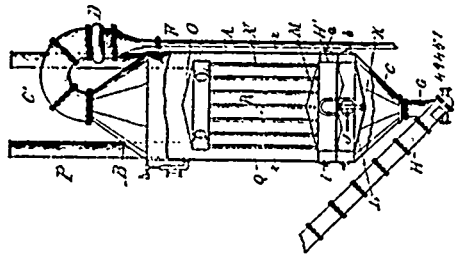
No. 49,450. Salt Grainer. (*Appareil à greneler le sel.*)



Thomas Craney, Bay City, Michigan, U.S.A., 10th July, 1895; 6 years.

Claim. 1st. In a salt grainer, the combination of the brine tank, having a settling leg, an evaporating chamber having a vapour discharge pipe therefrom a condenser therein, a tubular connection between the brine tank and evaporating chamber and a casing therefor forming the combustion chamber of a furnace, substantially as described. 2nd. In a salt grainer, the combination of the brine tank, a settling leg at the base thereof, an evaporating chamber having a vapour discharge pipe therefrom a condenser therein a chamber between the two, connecting tubes from the top of the brine tank to the bottom of the evaporating chamber, a casing around the tubular chamber, and furnaces for which said chamber forms a common combustion chamber, substantially as described. 3rd. In a salt grainer, the combination of the brine tank, a settling leg at the base, an evaporating chamber above, a series of tubes *c, f* connecting the two and encased to form a chamber, flues formed by perforated walls extending from the side of the sand chamber to near the centre, and smoke flues from the top of said chamber, substantially as described.

No. 49,451. Salt Grainer. (*Appareil à greneler le sel.*)

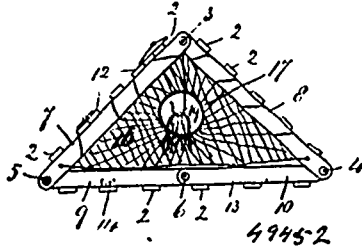


Thomas Craney, Bay City, Michigan, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. In a salt grainer, the combination of the outer casing, of a furnace suspended within, substantially as described. 2nd. In a salt grainer, the combination of the outer casing, of an inner casing at the lower end thereof, of smaller diameter concentrically arranged therein, heating pipes extending from the top of the furnace within the casing and circulating flues between the casings substantially as described. 3rd. In a salt grainer, the combination of the outer casing, of a furnace concentrically arranged within the same, and of lesser diameter, arched door frames extending from the outer casing to the furnace casing forming annular circulating flues between circulating pipes and smoke pipe for the furnace, substantially as described. 4th. In a salt grainer, the combination of the casing, a furnace within the lower end thereof, of lesser diameter than the outer casing forming annular circulating flues between, of a radial series of grates extending from the inner face of the furnace casing

to the centre, a post supporting the inner ends of the grates, the tubes extending from the top of the furnace, the smoke chamber into which said tubes connect and the smoke pipes extending from said smoke chamber, substantially as described. 5th. In a salt grainer, the combination, with the outer casing of two concentrically arranged separated casings within one forming the furnace chamber and the other the smoke chamber, of tubes connecting the top of the furnace chamber with the bottom of the smoke chamber, such tubes being arranged in separate series to form passage ways between, having openings to permit of communication between all the rows, substantially as described.

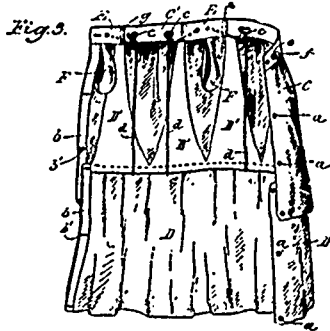
No. 49,452. Lobster Trap. (Parc à homards.)



George Hurst, Canso, Nova Scotia, Canada, 10th July, 1895; 6 years.

Claim.—1st. A collapsing lobster trap comprising a series of open-work frames hinged together to form a tube, the ends of said tube having a tubed cone flexible netting provided with a ring at the small end within the tube, as set forth. 2nd. A knock-down lobster trap having a body comprising two side and two bottom frames pintled together and forming a triangular tube when set up, the ends of said tube covered by a flexible netting tapering within the tube and provided with a ring at the small end and cords to hold the netting stretched, as set forth. 3rd. A lobster trap having a collapsing body comprising rectangular frames made of slats and cross-bars and hinged together to form a triangular tube, and a flexible tubular netting closing the ends of the tube and tapering inwardly, substantially as set forth. 4th. A lobster trap, comprising three slatted frames secured together and forming a triangular tube, the ends of the tube provided with a netting having an aperture to admit the lobsters to be caught, as set forth.

No. 49,453. Combined Bicycle and Walking Costume. (Costume de promenade et de bicyclette combiné.)

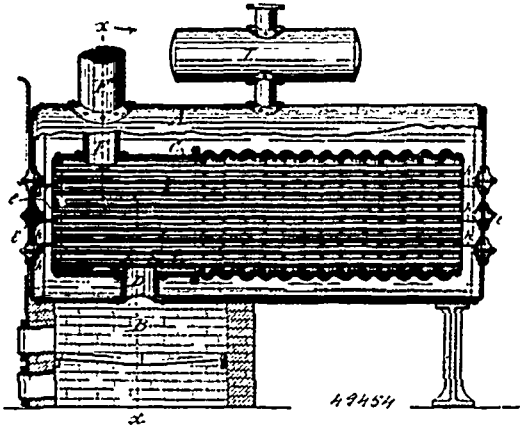


Matte Lucette Peck, New York, State of New York, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. In a combined bicycle and walking costume, the combination with a short outer bicycle skirt having a band or belt at the top, of an inner walking skirt, the main body of which extends from above the bottom of the outer skirt considerably below the same, the said skirt having an upper portion of thin or flimsy material cut out to form strips secured to the band of the outer skirt and depending therefrom, and cords secured to the top of the main body of the said inner skirt and extending to the band, whereby the said inner skirt may be elevated to the level of the outer skirt,

substantially as shown and described. 2nd. In a combined bicycle and walking costume, the combination with a short outer bicycle skirt having a band at the top, and open throughout at the side with means for securing the ends thereof, of an inner walking skirt comprising a lower body extending considerably below the outer skirt, and an upper skeleton portion of thin or flimsy material secured to the band of the outer skirt, the said inner skirt being also open at the side and provided with means of fastening, and cords secured to the top of the lower body thereof of the walking skirt and extending upwardly to the band thereon, substantially as shown and described. 3rd. In a combined bicycle and walking costume, the combination with a short outer bicycle skirt having a band at the top and open at the side with means of fastening the same, of an inner walking skirt comprising a lower body extending considerably below the outer skirt, similarly open and having means of fastening thereon, and an upper skeleton portion of thin or flimsy material secured to the band of the outer skirt and depending therefrom, guide-pieces secured to the said band, hooks adjacent thereto, cords secured to the top of the lower portion of the skirt extending upwardly around the hooks through the guides and the band to the outside of the skirt, and buttons upon the said cords, substantially as shown and described. 4th. In a combined bicycle and walking costume, the combination with an outer bicycle skirt having a band at the top thereof and open at the side throughout, buttons, upon one of the ends thereof, and button-holes in the opposite end, of an inner walking skirt comprising a lower main body extending from above the level of the bicycle skirt considerably below the same, the said main body being similarly open and provided with like means of fastening, and an upper skeleton portion of thin or flimsy material cut out to form strips secured to the band of the outer skirt and depending therefrom, guide-pieces secured to the inside of the band having strengthening strips therein, hooks secured to the said band adjacent thereto, cords secured to the top of the main body of the inner skirt, passing upwardly around the hooks and into the guides and extending through the band to the outside of the skirt, and buttons secured to the ends of the said cord, whereby the inner or walking skirt may be elevated to the level of the outer skirt, substantially as shown and described.

No. 49,454. Steam-Boiler. (Chaudière à vapeur.)

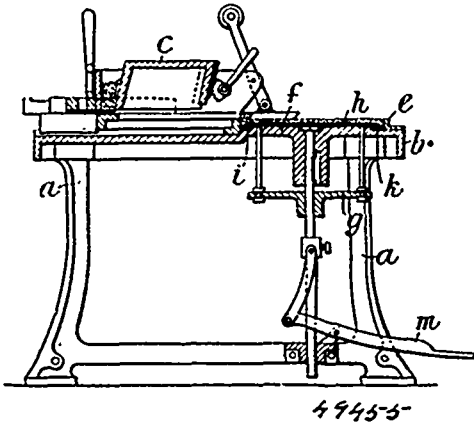


John Jay Toukin, Oswego, New York, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. A steam-boiler comprising two shells arranged one within the other, a fire-box communicating with one end of the inner shell, a smoke-exit pipe extending from the same end of said shell, and a partition extending from said end of the inner shell part-way toward the opposite end thereof, as set forth. 2nd. The combination with the main boiler-shell, of a secondary shell within said main shell, a fire-box under the main shell, a flue extending from the fire-box to one end of said inner shell, an exit pipe extending from said end of the latter shell, a partition extending from said end part-way toward the opposite end of the inner shell, and water-tubes extending through said shell and communicating at opposite ends with the interior of the main shell, as set forth. 3rd. The combination with the main boiler-shell, of a secondary shell disposed horizontally within said shell and surrounded water spaces, water-tubes extending longitudinally through said inner shell, a fire-box and smoke-exit communicating with one end of the inner shell, and a partition between the water-tubes and extending from said end of the shell part-way toward the opposite end thereof, as set forth and shown. 4th. The combination of a horizontally elongated boiler shell, a secondary shell disposed longitudinally within said boiler shell and with a water space surrounding it, a fire-box under the said boiler shell, and communicating with one end of the interior of the secondary shell, a smoke-exit extending from the same end of the latter shell, a partition extending from said end part-way toward the opposite end of the secondary shell and interposed between the inlet and

outlet of the products of combustion water tubes extending longitudinally through the secondary shell, and cleaning-tubes extending from the ends of the secondary shell through corresponding ends of the main shell. 5th. In combination with the main shell, a fire chamber corrugated longitudinally and disposed inside of said main shell with a water space surrounding it, a fire-box under the main shell and communicating with the interior of one end of the aforesaid fire-chamber, an exit-flue extending from said end of the chamber, water-tubes extending through the fire-chamber and communicating at opposite ends with the interior of the main shell, and a partition in the fire-chamber extending from the end adjacent to the fire-box partway toward the opposite end of said chamber as set forth and shown.

No. 49,455. Apparatus for Moulding Tiles. (*Appareil pour mouler les tuiles.*)



Abraham Weil and Wilhelm Prasse, both of Steinheim, Westphalia, Germany, 10th July, 1895; 6 years.

Claim.—1st. In apparatus for moulding cement or other tiles the combination with a suitable support of a removable sheet metal under mould or plate *b* serving also as a support or basis for the tile during operations, subsequent to the moulding, substantially as set forth. 2nd. The sheet metal part mould or plate provided with suitable rectangularly bent portions *i, k*, and with suitable impressions *l*, substantially as described and for the purposes set forth.

No. 49,456. Bicycle Wheel-Hub.

(*Moyeu de roue de bicyclee.*)



Seward T. Johnson, Noblesville, Indiana, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. In a bicycle wheel-hub, the combination with a fixed axle 2, and a rotative hub 6 mounted thereon, of a gear wheel 28 on said axle, an internal actuating gear-wheel 17 on said hub, intermediate gears 16 meshing with the gear-wheels 28, and internal gear-wheels 17, and suitable means for locking the gear-wheel 28 with said axle, substantially as and for the purpose set forth. 2nd. In a bicycle wheel-hub, the combination with a fixed axle 2, and a rotative wheel-hub 6 mounted thereon, of a central gear pinion 28 adapted to turn and to slide on said axle, an internal gear-wheel 17 journaled on said hub, the intermediate gear-wheels 18 meshing with gears 17, and the gear 28, a fixed clutch 33, and a hub clutch 34, and means whereby the pinion 28 may be moved into engagement with either said clutches, substantially as and for the purpose set forth. 3rd. In a bicycle wheel-hub, the combination with a fixed axle 2, and a rotative wheel-hub 6 mounted thereon, of a central gear pinion 28 adapted to turn and to slide on said axle, an internal gear-wheel 17 journaled on said hub, the intermediate gear-wheels 18 meshing with the gears 17 and the gear 28, the journals 15 carried by the discs 9 and 10, the fixed clutch 33, the hub clutch 34, the key 24, the rod 25, the cam collar 32, having the cam grooves 31, and the shifting sleeve 29, all substantially as and for the purpose set forth.

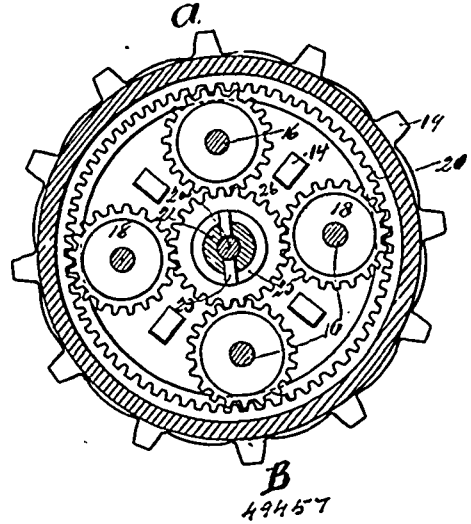
No. 49,457. Bicycle Wheel-Hub.

(*Moyeu de roue de bicyclee.*)

Seward T. Johnson, Noblesville, Indiana, U.S.A., 10th July, 1895; 6 years.

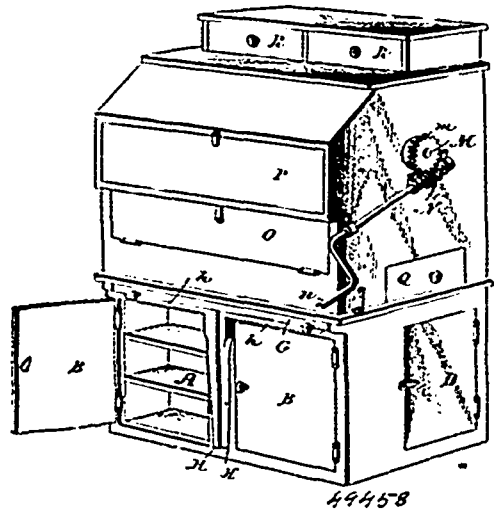
Claim. 1st. In a bicycle wheel hub, the combination, with the axle 2, and the hub having the gear carrying discs 10 and 13, of the

gears 18, the internal gear 20, having the exterior sprocket-teeth 19, the pinion 26, and means whereby the said pinion may be fixed with



the axle. 2nd. In a bicycle wheel-hub, the combination with the axle 2, the hub mounted thereon and composed of the end sections 7 and 12, and having the integral discs 10 and 13, the bars 14, the bolts 16, the gear-wheels 18, the friction rollers 17, the internal gear-wheel 20, having the exterior sprocket-teeth 19, the pinion 26, the fixed clutch 34, the clutch 36, and suitable means whereby said pinion may be alternately engaged with said clutches. 3rd. In a bicycle wheel-hub, the combination with the axle 2, the hub composed of the sections 7 and 12, and having the gear carrying discs 10 and 13, the bars 14, the bolts 16, of the gears 18, the friction rollers 17, the internal gear-wheel 20, having the exterior sprocket-teeth 19, the clutch 34, the clutch 36, the key 23, the rod 24, and suitable means whereby said rod may be moved longitudinally, substantially as and for the purpose set forth. 4th. In a bicycle wheel-hub, the combination with the axle 2, the hub composed of the end sections 7 and 12, and having the internal discs 10 and 13, the bars 14, and the bolts 16, of the gear-wheels 18, the rollers 17, the internal gear-wheel 20, having the exterior sprocket-teeth 19, the bearing rings 21, the clutch 34, the clutch 36, the pinion 26, the key 23, the keep washers 25, the rod 24, the cam roller 27, and the cam sleeve 30, all substantially as and for the purpose set forth.

No. 49,458. Kitchen Cabinet. (*Cabinet de cuisine.*)

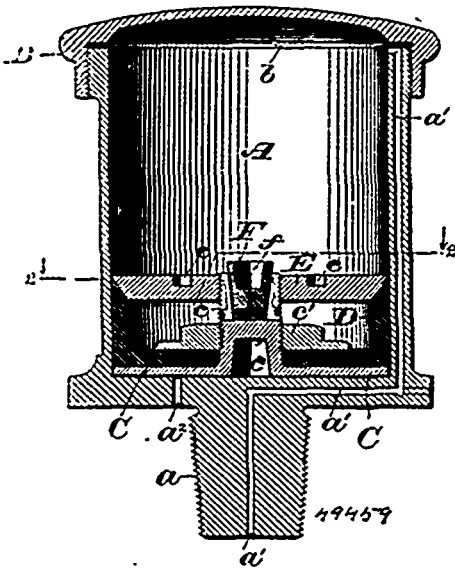


William H. Phenice, Murry, Ohio, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. In a kitchen cabinet, the combination with a series of revolving shelves accessible through an opening in the front of the cabinet which is closed by a door, a drawer *Q* located below the shelves and adapted to receive the ice and slide through an opening in the side of the cabinet, a series of compartments *O* located in the space in front of the drawer *Q* and below the outer portion of the series of revolving shelves, substantially as described. 2nd. In a kitchen cabinet, the combination with a flour chest *E* having cleat *e*², of the folding pastry board adapted when closed to form a cover

for the chest, having cleat f^1 , and hooks f , the latter engaging with the cleat e^2 to hold the board in place when in use as a kneading board, substantially as described. 3rd. The herein shown and described kitchen cabinet comprising a series of shelves A which are closed by doors B , a series of shelves C at one side closed by door D , a flour chest D at the opposite side, a cover F for the flour chest and shelves C and A , movable legs H connected with and operated with the said sliding shelf, a series of revolving shelves I held from lateral swinging by gearing substantially in the manner set forth, a series of compartments O located in front of the shelves I and over the sliding shelf G , water tight drawers Q adapted to slide through the side of the cabinet and contain a cooling medium, as ice, the drawers R above the series of revolving shelves to receive cutlery, &c., substantially as set forth.

No. 49,459. Centrifugal Lubricator.
(*Graisneur centrifuge.*)



Christopher Heinrich, Milwaukee, U.S.A., 10th July, 1895; 6 years.

Claim.—1st. In a centrifugal lubricator, the combination of an oil cup or receptacle, having a feed passage leading from the upper or outer part through the base, a piston or follower adapted to be moved outwardly therein against the contents of the cup by centrifugal force and an adjustable frictional bearing between the piston and cup whereby the movement of the piston and the feed of oil are regulated as desired, substantially as and for the purposes set forth. 2nd. In a centrifugal lubricator, the combination of an oil cup or receptacle having a feed passage leading from the upper or outer part thereof to the bearing to be lubricated, and a vent opening or passage in the bottom, and a piston or follower adapted to be moved outwardly therein against the contents of the cup by centrifugal force, and provided with an expansible bearing and means wholly within the cup of spreading said bearing more or less whereby adjustable resistance to the movement of the follower is afforded, substantially as and for the purposes set forth. 3rd. In a centrifugal lubricator, the combination of an oil cup or receptacle having a feed passage leading from the upper or outer part thereof through the base, and a piston or follower adapted to be moved outwardly against the contents of the cup by centrifugal force, and provided with an expansible packing, a spreader for expanding the packing and means of securing the spreader in place, whereby the rate of feed may be regulated as desired, substantially as and for the purposes set forth. 4th. In a centrifugal lubricator, the combination of an oil cup or receptacle having a feed passage leading from the upper or outer part thereof, and a vent opening or passage through the bottom, a piston or follower provided with an internally and externally threaded split stem, and with cup-shaped flexible packing having a bevelled edge, a spreading disc threaded upon said stem and having a bevelled periphery, and a tapered plug threaded in said stem, substantially as and for the purposes set forth.

No. 49,460. Safety Match. (*Allumette de surét.*)

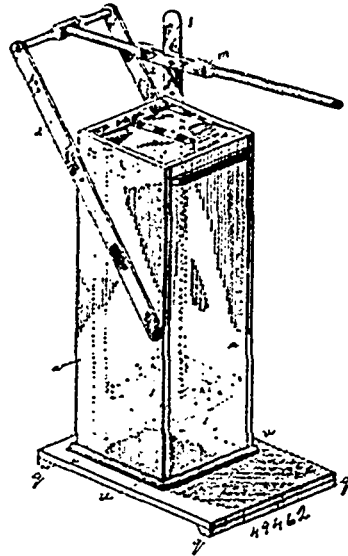
Anton Viebig, No. 1 Hauptstrasse, Kostheim, near Mayence, German Empire, 10th July, 1895; 6 years.

Claim.—Safety matches which will ignite on all rubbing surfaces, consisting of ordinary safety matches the heads of which are covered either with a separate thin layer of the suitably prepared substance of the corresponding rubbing surface or with a separate thin layer of a substance which will ignite on all rubbing surfaces, constructed and arranged substantially as hereinbefore described.

No. 49,461. Compressed Yeast. (*Levain comprimé*)
Louis Thomas Galarneau, Montreal, Quebec, Canada, 10th July, 1895; 6 years.

Claim. A composition, consisting of water, malt, hops, flour and corn starch, mixed together in the proportions stated and boiled in the manner, substantially as set forth.

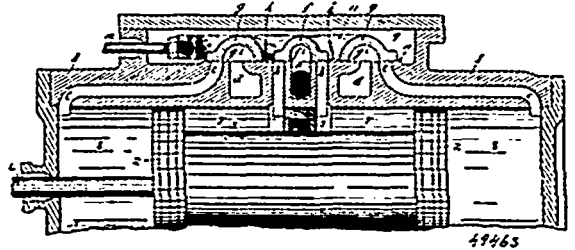
No. 49,462. Churn. (*Baratte.*)



John Bennett, Lucknow, Ontario, Canada, 10th July, 1895; 6 years.

Claim. In combination with the cream chamber or body a of the Bennett churn a metallic vessel o fitting into said chamber or body internally so as to allow the free circulation of the cream around such water chamber through the openings r and s and adapted to contain hot or cold water for regulating the temperature of the cream while being churned.

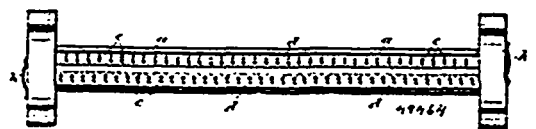
No. 49,463. Compound Engine (*Machine compound.*)



The Woolf Valve Gear Company, assignee of Ellis J. Woolf, both of Minneapolis, Minnesota, U.S.A., 11th July, 1895; 6 years.

Claim.—A compound engine having a valve and valve-seat, for effecting the complete distribution, located in a combined valve-chest and low pressure receiver, with the ports arranged to distribute the high pressure fluid from a limited area underneath the valve and to render low pressure fluid available over the top of the valve for holding the valve to its seat and balancing the same, substantially as described.

No. 49,464. Device for Knitting Woollen and the like Articles. (*Appareil pour tricoter la laine, etc.*)



Charles Albert Farmer and John Parnall, both of Bristol, England, 11th July, 1895; 6 years.

Claim.—1st. A device for knitting woolen, silken and the like articles, consisting essentially of a block or frame a , having a straight or curved slot b , formed therein and a row of pegs C , arranged at each side of said slot, substantially as described and illustrated in the accompanying drawing. 2nd. In a device for knitting woolen, silken and other like articles the formation of

the block or frame *a* in two distinct portions each carrying a row of pegs *c*, and adjustably connected together that the width of the space *b* between them may be varied, substantially as and for the purpose described. 3rd. In a device for knitting woollen, silken and other like articles, the combination with a block or frame *a*, having an opening *b* formed therein, of a pair of plates *d*, each plate provided with a row of pegs *c*, and the pair adjustably secured to said block or frame, one on each side of said opening *b*, that the distance between them and consequently between the rows of pegs may be increased or diminished as found necessary or desirable, substantially as and for the purpose described. 4th. In a device for knitting woollen, silken and other like articles, the combination with a block or frame *a*, having an opening *b* formed therein, of two or more pairs of plates *d*, each plate provided with a row of pegs *c*, and the rows of said pegs arranged at different distances from the inner edges of said plates in each pair, substantially as and for the purpose described. 5th. In a device for knitting woollen, silken and other articles, the combination with a block or frame *a*, having an opening *b* formed therein, of two or more pairs of plates *d*, each of which plates is provided with a row of pegs *c*, whilst the pegs of each pair of plates are arranged at a different distance apart to those pegs carried by the other pair or pairs of plates, substantially as and for the purpose described. 6th. In a device for knitting woollen, silken and other articles, the combination with a block or frame *a*, having an opening *b* formed therein, of two or more pairs of plates *d*, each of said plates being provided with a row of pegs *c*, which pegs in each pair of plates, are arranged at a different distance apart and from the inner edges of said plates to those pegs in the other pair or pairs of plates, substantially as and for the purpose described.

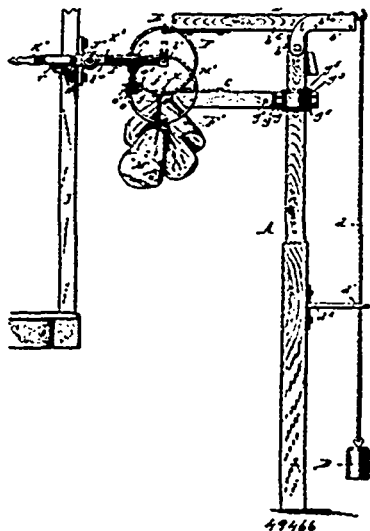
No. 49,465. Art of Treating Milk for Food.

(Art de traiter le lait comme aliment.)

George Hiram Walker and Gustavus Ede Gordon, both of Boston, and John Howard Waterhouse, Malden, all in Massachusetts, U.S.A., 11th July, 1895; 6 years.

Claim.—The improvement in the art of treating milk which consists in dividing or separating a quantity of original milk into cream, milk without fat, and sugar of milk and water, each of which fluids is made to contain a definite and known percentage of milk constituents, then recombining these fluids into milks in accordance with a particular prescription or requirement, without regard to the proportions of the original combination.

No. 49,466. Mail Bag Catcher. (Attrappe-sac pour char postal.)

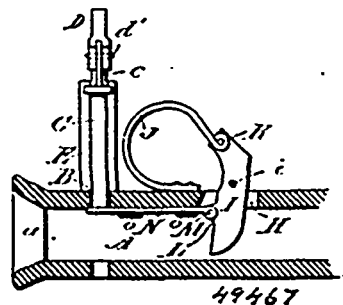


The Fleming Mail Catcher and Deliver Company, assignee of Hugh Neely Fleming, both of Erie, Pennsylvania, U.S.A., 11th July, 1895; 6 years.

Claim.—1st. The combination with the standard, of a supporting bar pivoted to swing vertically upward and provided with a cross-bar having front and rear arms arranged on opposite sides of the supporting bar, a ring adapted to hang on one arm of said cross-bar and support a mail bag, a catch arm arranged below the supporting bar pivoted to swing vertically downward and provided with a cross-bar having front and rear arms arranged on opposite sides of the catch arms, one arm of the latter cross-bar being adapted to rest in said ring for steadying the latter, while the other arm thereof is

held in the proper position for engaging with the mail bag ring of the car, substantially as set forth. 2nd. The combination with the standard, of a supporting bar pivoted to the standard, a cross-bar arranged on the supporting bar and provided with seats in its end portions, a catch arm pivoted to the standard below the supporting bar, a cross-bar arranged on the catch arm and provided with notches in its end portions, and a ring adapted to rest with its upper and lower portions in the notches and seats of said cross-bars and support a mail bag, substantially as set forth. 3rd. The combination with the standard, of a supporting bar arranged on the standard and provided with a cross-bar, a catch arm pivoted on the standard to swing horizontally, a cross-bar arranged on the catch arm and provided with a detent finger and a ring detachably connecting said cross-bars and adapted to support a mail bag, substantially as set forth. 4th. The combination with the standard, of a supporting bar arranged on the standard, a weighted rope or chain arranged adjacent to the standard and a catch arm pivoted on the standard to swing horizontally and adapted to strike said rope or chain, substantially as set forth. 5th. The combination with the standard, of a supporting bar pivoted to the standard to swing vertically, a weighted rope or chain arranged vertically adjacent to the standard and attached with its upper end to the supporting bar, an eye or guide in which the lower portion of the rope or chain is arranged and horizontally swinging catch arm pivoted to the standard and adapted to strike against said rope or chain, substantially as set forth. 6th. The combination with the bag-carrying arm of the car provided with a cross-bar, of a ring hung on the cross-bar and adapted to support a mail bag, a retaining arm arranged on the carrying arm and provided with a cross-head which bears against the ring about midway of its height, and a holding spring arranged on the retaining arm and adapted to embrace the ring, substantially as set forth. 7th. The combination with the bag carrying arm of the car provided with a cross-bar, of a ring adapted to be hung on either end of said cross-bar and support a mail bag, and a reversible retaining arm pivoted on said carrying arm, whereby the same can be swung on either side of the catch arm for engaging with said ring when hung upon either end of the cross-bar, substantially as set forth. 8th. The combination with the bag-carrying arm of the car provided with a cross-bar and a flat sided socket, of a ring supported on said cross-bar, a reversible retaining arm pivoted at one end to the carrying arm and provided with a flat sided head arranged in said socket, a holding device arranged on the other end of the retaining arm and adapted to grasp the ring, and a spring whereby the head of the retaining arm is yieldingly held in said socket, substantially as set forth. 9th. The combination with an arm adapted to support a ring attached to a mail bag, of a holding spring consisting of a catch adapted to embrace said ring, a handle and a loop pivoted on said arm and a locking block arranged to slide lengthwise between the handle and the arm and adapted to hold the catch in its operative position, substantially as set forth. 10th. The combination with the bag-carrying arm of the car provided with a cross-bar adapted to carry a ring supporting a mail bag, of two detent springs supported on the carrying arm and having guide arms which converge toward said carrying arm, substantially as set forth. 11th. The combination with the bag-carrying arm of the car provided with a bar, of a detent spring consisting of a guide arm attached at one end to the bar and having a retaining loop at its other end which passes around said bar, substantially as set forth. 12th. The combination with the bag-carrying arm of the bar provided with a bar, of a detent spring consisting of attaching arms secured to said bar, guide arms, coils connecting one end of both guide arms with the attaching arms, and a retaining loop connecting the other ends of the guide arms and passing around said bar, substantially as set forth.

No. 49,467. Car-Coupler. (Attelage de chars.)

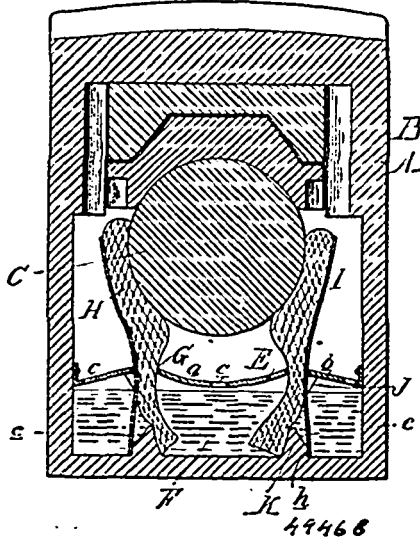


Adolph Schneider, Menardville, and Charles Schneider, Castell, both in Texas, U.S.A., 11th July, 1895; 6 years.

Claim.—In a car-coupling, the combination of a draw-head provided with a vertical standard, a coupling pin, an approximately Z-shaped lever pivoted to the said standard, and having a forwardly extending lug and constructed to operate the said coupling pin, and a spring interposed between the draw-head and the aforesaid lug, substantially as set forth.

No. 49,468 Car-Axle Lubricator.

(Boîte à graisse de chars.)

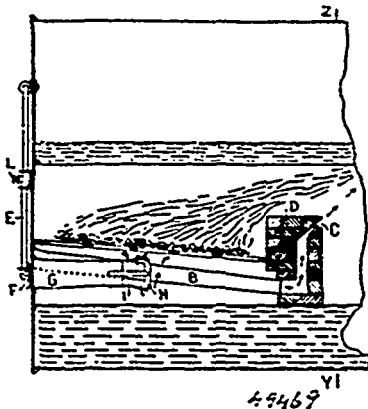


Julia E. Wright, Ann F. Wright and Eric E. Wright, all of Windsor, Ontario, Canada, assignees of Arthur W. Wright, Detroit, Michigan, U.S.A., 11th July, 1895; 6 years.

Claim. 1st. The combination of a car axle box having a receptacle in the bottom with an apertured top, of a vertical spring supported in the box, and an oiling pad supported on the spring and passing through the aperture in the top of the receptacle. 2nd. The combination of a car-axle box having a receptacle in the bottom, an apertured top therefor, spring standards detachably secured in each side of the box, and oiling pads secured on the spring standards and passing through the apertures in the top of the receptacle. 3rd. The combination of a car-axle box a transverse partition below the journal therein having longitudinal apertures beneath the front and rear faces of the journal, blocks or lugs in the bottom, spring standards having shoulders on their outer faces and pads secured to the standards, the parts being combined as and for the purposes set forth. 4th. In a lubricator for car journals, the combination of the box, a transverse partition therein below the journal to form an oil receptacle, the fibrous lubricating pads passing through such apertures into the receptacle, the standards F to the upper end of which the pads are secured, the lower ends thereof passing through the apertures in the partition, the shoulders J on the standards, the lug K in the bottom of the box having the inclined face c and the vertical face h, the parts being arranged as and for the purpose described.

No. 49,469. Boiler or other Furnace.

(Chaudières ou autres fournaies.)

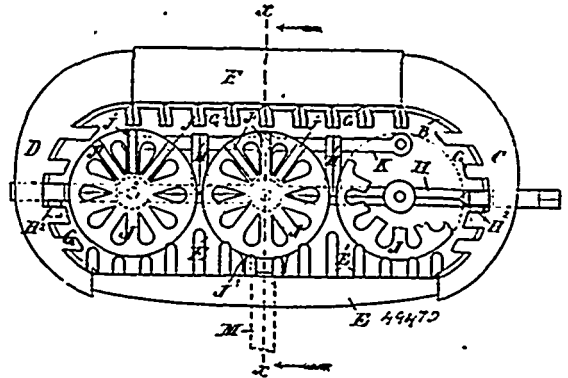


George Alexander Newton, Liverpool, England, 12th July, 1895; 6 years.

Claim. 1st. The improvements in boilers or other furnaces which consist in an arrangement of baffled injector tubes and passages for admission of air beyond the bridge through which air is forced in regulated quantities, substantially as described. 2nd. The arrangement of baffled air admission into the closed ash-pit, substantially

as herein described. 3rd. In combination with the forced draught, the admission of air through the bridge into the space beyond through a long slip or series of orifices placed as near as practicable to the top of the bridge and opening in an angular direction, so that the forced air will impinge on the crown of the furnace behind the bridge and mix the gases from the furnace passing over the bridge, substantially as described. 4th. In combination with the baffled air entrance pipes arranged substantially as described, the steam jets with regulated stop valves, substantially as described. 5th. In combination with the air entrance pipes G, the ring or steam jets, substantially as described. 6th. The improvement in furnace grates which consists in forming them of a series of shallow grids supported by bottomless troughs, bearers or the like, the said grids being constructed of a series of wedge-shaped bars with channels between, gradually tapering towards the top where they terminate in narrow openings in the grid surface, substantially as and for the purpose described. 7th. In the manufacture of furnace grates, forming them wedge shaped or of a series of wedge-shaped bars with tapering air channels between, these latter being so arranged as to ventilate the grate and prevent it burning away, substantially as described. 8th. A furnace grate consisting substantially of a shallow grid or grids having a grooved or channelled surface for the fuel, and having perforations for the air and wedge-shaped ribs or bars below the tapering air channels between whereby the perforations above can receive air. 9th. The improved furnace grate constructed and arranged substantially as described, with reference to the accompanying sheet of drawings.

No. 49,470. Stove Grate. (Grille de poêle.)

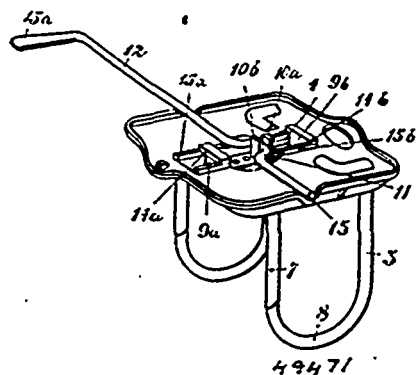


The James Smart Manufacturing Company, assignee of William J. Stevenson, both of Brockville, Ontario, Canada, 12th July, 1895; 6 years.

Claim.—The combination with the base B, having fingers G, and rotary grates J, of the middle grate having a socket J², at the front and radial bars J¹, the rear bars J², provided with raised surfaces, the grate-connecting link or bar K, terminating below the grates, the rock-shaft H, having a finger H¹, intermediately of the grates and provided with a stop projection H², and the front plate E, having abutments E¹, along the lower edge and projecting into the fire-box, as and for the purposes set forth.

No. 49,471. Temporary Letter File.

(Serre-papier temporaire.)

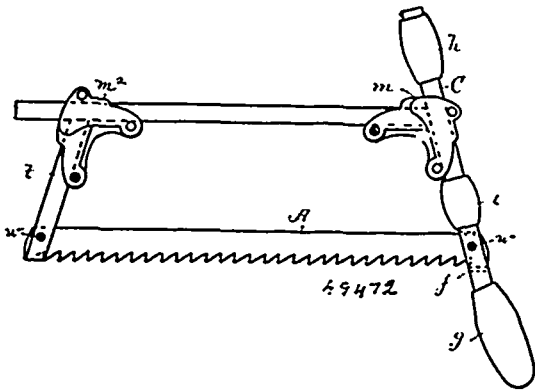


Walter Henry Morden, Toronto, Ontario, Canada, 12th July, 1895; 6 years.

Claim. 1st. In a temporary letter file the combination of a stationary plate 1, the arched receiving wires secured to the stationary plate at or near one end thereof, a sliding plate mounted upon the stationary plate moving thereon, the standard receiving wires secured to the sliding plate and moving therewith, a rock-shaft

secured to the temporary letter file, means for securing the rock-shaft to the sliding plate, means for holding the sliding plate to the stationary plate, substantially as described. 2nd. In a temporary letter file the combination of a stationary plate 1, arched receiving wires 3 secured to the one end of the plate 1, each of said arched receiving wires having an L-shaped base secured in a groove formed in the under side of the plate 1, a sliding plate 6 mounted on the plate 1, standard receiving wires 7 secured to the plate 6 and moving therewith, the standard 7 formed of one continuous piece of tubing and secured in a groove in the under side of the plate 6, and passing through a longitudinal slot 4 in the plate 1, an enlarged head 14^a and 14^b respectively for each of the lugs 9^a and 9^b overlapping the edges of the said slot and securing the plate 6 to the plate 1, lugs 10^a and 10^b secured to the under side of the plate 6 and passing through the slot 4, a rock shaft 12, having a cranked portion 11 engaging with the lugs 10^a and 10^b, and adapted to move the said plate in either direction when engaging with the said lugs, the said rock-shaft extended to the edge of the board having a handle formed at the said end and longitudinal ribs 5, formed on the plate and located one at either side of the said plate to prevent lateral displacement of the said end of the plate 6, when moved to close the standard receiving wires, substantially as described. 3rd. In a temporary letter file; the combination of the stationary plate 1, arched receiving wires 3, secured to the one end of the plate 1, a sliding plate 6, mounted on plate 1, standard receiving wires 7, secured to the plate 1 and moving therewith, the lugs 9^a and 9^b, secured to the under side of the plate 6, and passing through the longitudinal slot 4 in the plate 1, an enlarged head for each of the lugs 9^a and 9^b, overlapping the edges of the said slot and moveably securing the plate 6 to the plate 1, lugs 10^a and 10^b, secured to the under side of the plate 6, and passing through the slot 4, a rock-shaft 12, having a cranked portion 11 engaging with the lugs 10^a and 10^b, and adapted to move the plate 6, longitudinally the rock-shaft extended to the edge of the board 2, substantially as described. 4th. In temporary letter file, the combination of the stationary plate 1, arched receiving wires 3, secured to the one end of the plate 1, a sliding plate 6, mounted on the plate 1, standard receiving wires 7, secured to the plate 6, and moving therewith, the lugs 9^a and 9^b, secured to the under side of the plate 6, and passing through the longitudinal slot in plate 1, and enlarged head for each of the lugs 9^a and 9^b, overlapping the edges of the said slot and moveably securing the plate 6 to the plate 1, lugs 10^a and 10^b, secured to the under side of the plate 6, and passing through the slot 4, a rock-shaft 12, having a cranked portion 11 engaging with the lugs 10^a and 10^b, and adapted to move the plate 6 longitudinally, the rock-shaft extended to the edge of the board 2, longitudinal ribs 5, formed on the plate 1, and located at either side of the said plate to prevent lateral displacement of the top end of the plate 6, when moved to close the standard receiving wires, substantially as specified.

No. 49,472. Frame or Buck Saw. (Scie de travers.)

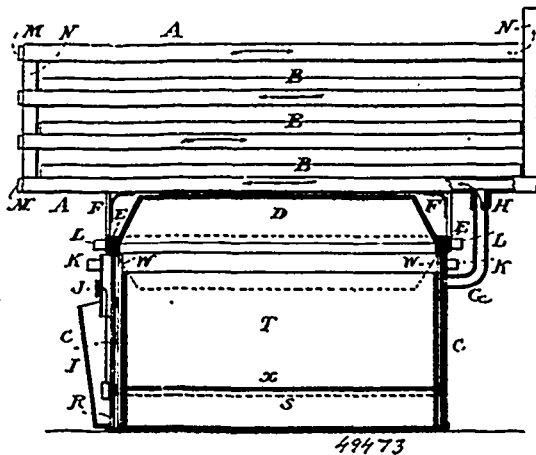


Nathaniel H. Shaw, Somerville, Massachusetts, U.S.A., 12th July, 1895; 6 years.

Claim.—1st. In a frame-saw, the frame comprising a metallic handle-bar, a spring-beam and a front bar, said beam being detachably connected to the handle-bar and the front bar by couplings. 2nd. In a frame saw having a frame comprising a metallic spring-beam; a metallic handle-bar detachably secured thereto by a clamp, a metallic front bar detachably secured to said beam by a clamp and arranged at an angle thereto, said handle-bar projecting above the beam and below the blade to form handles. 3rd. In a frame-saw a metallic spring-beam; a metallic handle-bar detachably secured thereto by a clamp; a clamp fitted to be adjusted longitudinally of the outer end of said beam and a front-bar held by said clamp at an angle to said beam all being arranged, substantially as set forth. 4th. In a frame-saw having a metallic frame, a handle *r*, *z*, mounted on the upright portion on the frame between the blade and spring beam, substantially as and for the purpose set forth. 5th. The herein described frame-saw comprising the handle-bar and front bar, the beam *D*, detachably connected and secured to the handle-bar and front-bar by clamps *m*, *m*². 6th. The blade

A, connecting the handle-bar and the front-bar, said handle-bar projecting below the blade and above the beam and provided at these points with non-metallic handles, substantially as described.

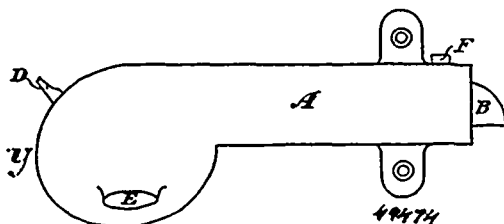
No. 49,473. Fruit Drier. (Etuve à fruit.)



Cullen Brown Clark, Englewood, Illinois, U.S.A., 12th July, 1895; 6 years.

Claim.—A fruit evaporator consisting of a steam generator and a superposed evaporating chamber connected by a steam-pipe, the evaporating chamber being provided with vertical pipes *N*, legs *F*, and adapted to receive the trays *B*, and the generator having a reversible cover with packed rim, substantially as shown and described.

No. 49,474. Sash Regulator. (Régulateur de croiséc.)



Alexander Steen Roy, Winnipeg, Manitoba, Canada, 12th July, 1895; 6 years.

Claim.—The combination of a sash lift *E*, attached to a case *A*, with a regulating bolt *B*, shot forward by a spring *C*, and governed by a thumb latch *D*, working against a ratchet *G*, which is secured to one or both inside stops of a window.

No. 49,475. Hypodermic Syringe. (Seringue hypodermique.)



Leonhardt Schmidt, 16 Grosse Burstah, Hamburg, Germany, 12th July, 1895; 6 years.

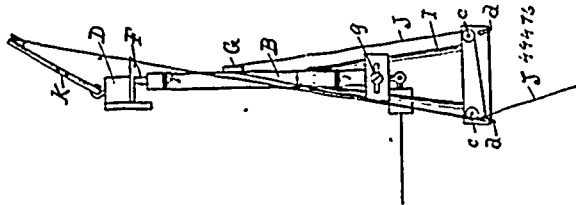
Claim.—1st. A hypodermic syringe having a plunger which works fluid tight in a packing-box, at the rear end of the instrument, constructed and arranged substantially as hereinbefore described. 2nd. The combination with the improved hypodermic syringe of a cord *h* for limiting the travel of the plunger, constructed and arranged substantially as hereinbefore described.

No. 49,476. Gate Operating Mechanism. (Mécanisme pour actionner les barrières.)

Aaron B. Groff, Baden, Ontario, Canada, 12th July, 1895; 6 years.

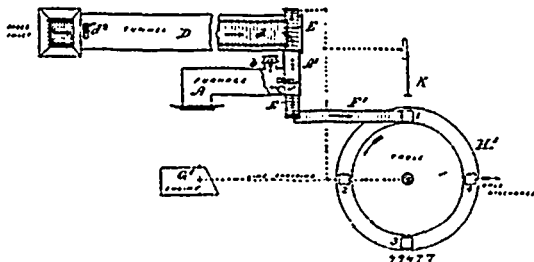
Claim. The combination with a swinging gate and its self-closing latch-bolt *E*, of the latch operating lever *G*, the link *H* detachably

engaging with the latch-bolt, the pin M, the spring L, the outrigger I on the gate, provided with pulleys c and d, the latch posts D and



the ropes J trained around the pulleys c and guides d on the outrigger and extending from the latch post to the latch operating lever, substantially as described.

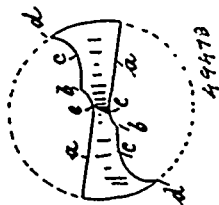
No. 49,477. Treatment of Peat Moss for the Manufacture of Moss Litter and like Products. (*Traitement de la tourbe comme litière.*)



Archibald Anderson Dickson, Toronto, Ontario, Canada, 12th July, 1895; 6 years.

Claim.—1st. The method of treating peat mosses, or like fibrous materials, for the purpose of reducing their constituent moisture to a regulated degree, which consists in first subjecting the same to the action of breaking-up and picking mechanism, and then to the drying action of a regulated blast or current of heated air in a practically closed chamber or tunnel (such heated air being admitted at one end and liberated at the other) while such fibrous material is moved therethrough on a carrier travelling at a regulated speed in opposition to such air blast or current, such movement of material commencing at the feed ingress and coolest end of the chamber or tunnel, and progressing towards the point of egress and hottest area, or opposite end of same, whereby the damp vapours are constantly driven off from the dried material and prevented from being reabsorbed therein, substantially as set forth. 2nd. The method of treating peat moss for the manufacture of moss litter and like products, which consists in first cutting the moss from the bog or marsh, breaking it up and removing the sticks, and then subjecting it to the action of a blast or current of hot air in a practically closed chamber or tunnel to deprive it of surplus moisture, and then compressing it into bales or packages, substantially as set forth. 3rd. The method of treating peat moss for the production of moss litter and the like, which consists in subjecting it to the drying action of a blast or current of hot air in a practically closed chamber or tunnel while such moss is moved therein in a direction towards the point of introduction of hot air, and then compressing it into bales or packages, substantially as set forth. 4th. The method of treating peat moss for the production of moss litter, and the like, which consists in feeding the moss in a broken condition into a chamber or tunnel, carrying the same therethrough in opposition to a blast or current of hot air, and packing and pressing the resultant dried moss into bales by successive automatic relations, substantially as set forth.

No. 49,478. Drilling or Boring Tool. (*Outil à forer.*)



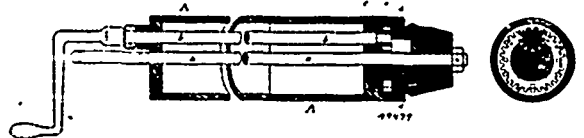
Bruno Wesselmann and Theodore Wesselmann, both of Berlin, Prussia, 12th July, 1895; 6 years.

Claim.—1st. A straight borer bar of even rectangular section with two sharp edged ridges b, b which are so arranged opposite one another on the wide sides of the cross-section, that on the bar being ground to two surfaces inclined towards one another, a double borer with two pairs of special cutting surfaces results, substantially as hereinbefore described and shown. 2nd. A spiral borer bar made

from the bar of even rectangular section with two sharp edged ridges b, b and from which by simply grinding two cutting surfaces in the same manner as hereinbefore described, a double borer may be formed with two pairs of cutters, substantially as described and shown. 3rd. A bar of even rectangular section and with several equal or unequal pairs of ridges for forming 3 or more pairs of cutters, substantially as described.

No. 49,479. Moulding the Beading on Iron Pipes.

(*Montage pour l'emboutissage des tuyaux.*)

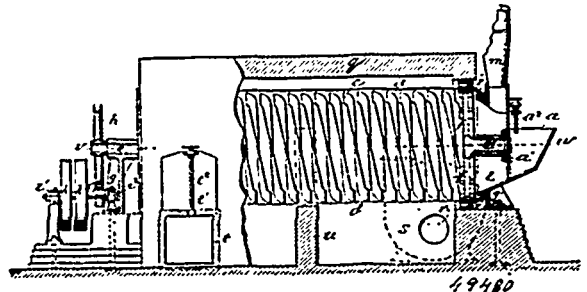


James Thomson, Hamilton, and George Thomson, Dundas, all in Ontario, Canada, 12th July, 1895; 6 years.

Claim.—1st. A mechanical device to be attached to the end of iron pipe patterns, consisting of one or more "slickers" which can be projected and revolved at the lower end of the pattern, when the sand has been rammed round the pattern, so as to form a mould or matrix for the beading of the pipe, and then withdrawn to or below the level of the external surface of the pattern, to allow of the withdrawal of the pattern from the mould, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the slickers "d d" and the gearing e, and the rod b, and pinion c, as a device to be attached to the lower end of an iron pipe pattern, substantially as and for the purpose hereinbefore set forth.

No. 49,480. Apparatus for decarbonizing and for re-vivifying bone-black.

(*Appareil pour décarboniser et ré-vivifier le charbon d'os.*)



Moriz Weinrich, St. Louis, Missouri, U.S.A., 12th July, 1895; 6 years.

Claim.—1st. Apparatus for decarbonizing and for re-vivifying bone-black without charring the same, comprising in its construction a horizontal slowly revolvable drum into which air is admitted, a wall surrounding such drum, inwardly projecting ribs on its interior face, means for adjustably feeding the bone-black to the drum, and adjustable dampers at the discharging end of the drum to regulate the draft of air through it, all substantially as described. 2nd. An apparatus adapted for decarbonizing and for re-vivifying bone-black without charring the same, having in combination a horizontal or nearly horizontal, revolvable drum into which atmospheric air is admitted and provided with interior projecting ribs, a wall surrounding such drum, means for regulating the continuous draft of air through the drum, and a flue for admitting hot air or gases from an extraneous source of supply into the space beneath such drum, all substantially as set forth. 3rd. An apparatus adapted for decarbonizing and for re-vivifying bone-black without charring the same, having in combination a horizontal or nearly horizontal, revolvable, sheet iron drum into which atmospheric air is admitted, and provided with interior projecting ribs, a wall surrounding such drum, means for regulating the continuous draft of air through the drum, and a flue provided with a damper, and located under the rear end of the drum, and serving to supply and admit air from a furnace or other outside source of heat all the heat required, all substantially as set forth.

No. 49,481. Process of Revivifying Bone-Black.

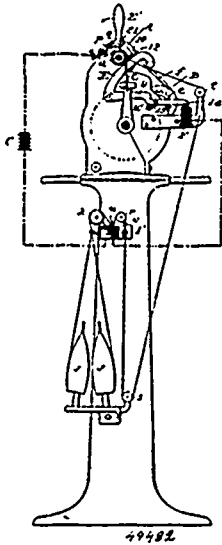
(*Procédé pour ré-vivifier le charbon d'os.*)

Moriz Weinrich, St. Louis, Missouri, U.S.A., 12th July, 1895; 6 years.

Claim.—1st. The described process of regenerating and re-carbonizing spent and discarded bone-black, consisting in first depriving it as far as practicable, of all its old carbon whether vegetable or animal, then impregnating such cleansed mineral with a solution of vegetable matter such as molasses, glucose, starch, or flour, and then drying and charring such product, all substantially as set forth. 2nd. The described process of regenerating and re-carbonizing spent

bone black consisting in first depriving it as far as possible of all its old carbon, and then re-supplying it with a new charge or coating by impregnating it with a solution of starch or flour prepared by dissolving it in cold acidulated water, then heating it to decompose the gluten, and then neutralizing it with lime.

No. 49,482. Method of and Apparatus for Winding Cops. (*Méthode et appareil pour l'émondage des fils sur les bobines.*)



Simon Willard Wardwell, jr., Boston, Massachusetts, U.S.A., 13th July, 1895; 6 years.

Claim.—1st. The within described improvement in doubling thread, the same consisting in laying two or more strands side by side, and in winding them together to form a cop, in coils extending from end to end of the cop, the thread turned back at each end of the cop to start a reverse coil, and the strands of the thread preserved at all points parallel to each other, substantially as described. 2nd. A multi-wound cop in which the thread composed of two or more strands is in concentric layers, each consisting of a series of reverse coils, the thread of each coil bent back at the ends of the cop and the strands of the thread being at all points parallel to each other, substantially as described. 3rd. A machine for multiple winding provided with a rotating cop holder, a reciprocating guide, and means for varying the relative movements of the cop holder and guide to lay the thread in reverse coils, as set forth, the guide provided with an eye rounded at the bottom, substantially as set forth. 4th. A machine for multiple winding provided with a rotating cop holder, reciprocating guide, supports for a number of bobbins, a stop device and electro-magnet for controlling the same, and a series of switches each in a circuit including the said electro-magnet, and each having a part controlled by one of the strands from one of the bobbins, all substantially as set forth. 5th. The combination, with the winding devices, of an electro-magnet, and connections for controlling the movements of said winding devices, supports for a series of bobbins, a series of switches, each having a part arranged to be supported by the threads of said bobbins, each of said switches in a circuit including the electro-magnet, substantially as set forth. 6th. The combination, with winding devices of a multiple winding machine, of supports for a series of bobbins and a roller provided with a coating of felt or its equivalent, and guides arranged to conduct each of the strands from the said bobbin around said roller, substantially as and for the purpose set forth. 7th. The combination, with a series of electric switches, of rollers *k* and *r*, means for conducting a series of threads over said rollers, movable parts of the said switches arranged to be supported by the threads between the rollers, substantially as set forth. 8th. The combination, with the rollers *k* and *r*, of electric switches, each having a movable part *u*, with an eye to receive one of the strands of a series of threads, and means for securing the said parts independently in position out of contact with the other part of the switch, substantially as set forth.

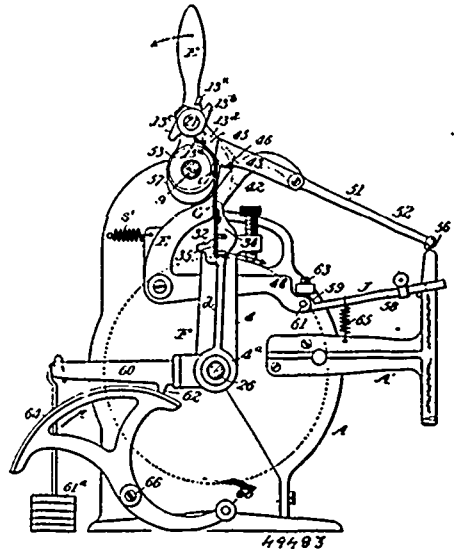
No. 49,483. Apparatus for Winding Cops.

(*Appareil pour l'émondage des fils sur les bobines.*)

Simon Willard Wardwell, jr., Boston, Massachusetts, U.S.A., 13th July, 1895; 6 years.

Claim.—1st. The combination, with a cop winding machine, having a cop holder *a*, a shaft 9, a driving pulley on said shaft and a reciprocating guide, of means for driving the said guide from the

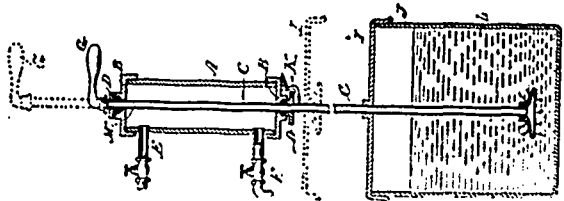
shaft 9, said means including two pulleys and a belt, one of said pulleys being an expansion pulley and arranged upon the shaft.



substantially as and for the purpose set forth. 2nd. The combination of a cop holder *a*, shaft 9, a reciprocating guide and operating mechanism, and gear between the shaft and guide operating mechanism comprising two pulleys and a belt, one of the pulleys being an expansion pulley, the pulleys having V-shaped grooves, and a belt V-shaped in cross-section passing round said pulleys, substantially as set forth. 3rd. The combination, in a winding machine of a driving shaft, and an expansion pulley, the latter consisting of a section having a sleeve adapted to receive said shaft and means for connecting it thereto and another section adjustable upon said sleeve, substantially as set forth. 4th. The combination of the rotating spindle *a*, of a swinging frame *F* having longitudinal grooves, a guide *C* consisting of a blade of metal having two arms extending into the said grooves, a projection extending from one of said arms, and a driving cam having a groove to receive such projection, substantially as set forth. 5th. The combination with the reciprocating guide and its driving cam *D*, of a gear 31 connected with said cam detachably therefrom, and a swinging frame 27, carrying a gear 30 and stud therefor, and means for adjusting the said stud to different positions in respect to the axis of the frame, substantially as set forth. 6th. The combination of the cam *D* and gear 31 connected detachably therewith, of a swinging frame 27 carrying a cylinder *c* rotatably adjustable in said frame and a shaft passing through said cylinder eccentrically thereto and carrying a pinion 30, substantially as set forth. 7th. The combination with the shaft 10 for operating the holder of the cop, and with a shaft 29 and connections for operating a guide, of a frame carrying the shaft 29, pulleys, upon the two shafts and a belt passing around the same and means for preventing the said frame from swinging toward the shaft 9 without preventing its movement away from the same, substantially as set forth. 8th. The combination of the shaft 9 and its pulley *F*, the shaft 29 and its pulleys *D*, a swinging frame carrying the shaft 29, and an eccentric *L* bearing upon said frame to prevent it from swinging toward the shaft 9, substantially as and for the purpose set forth. 9th. The combination with the stop shaft 21 of a cop winding machine, of an arm 45 having a shoulder 46, an arm *E*, having a shoulder 43, a pivoted arm 51 having a bearing for the thread, a winding shaft 9 and an eccentric thereon arranged opposite the end of the arm 51, all substantially as set forth and for the purpose specified. 10th. The combination with the shaft 21 of a cop winding machine, of an arm 45 on said shaft, an arm 42 upon a lever *E* pivoted to the frame of the machine, engaging shoulders upon the said arms, and a lever *E'* having a projection arranged to make contact with a projection on the lever *E*, substantially as set forth. 11th. The combination with the stop devices of a winding machine, of an arm *J* having a slit for the passage of the thread, and pivoted and connected with the said devices to shift the same when the arm *J* is moved by the contact of a knot of thread, substantially as set forth. 12th. The combination of the stop devices of a winding machine, of a detent lever *E*, for holding them out of operation, lever *J* pivoted to the lever *E*, and having a cam bearing upon a part of the machine, and provided with a slit for the passage of the threads, substantially as set forth. 13th. The combination with the shaft 21, of an arm 45 connected to said shaft and having a shoulder 46, and projections 13^a, 13^b, a detent lever *E*, having the shoulder engaging the shoulder 46, and a lever *E'*, having projections 13^a and 13^b, and an arm extending from the lever *E*, in position to make contact with the projection 13^a, substantially as set forth. 14th. The combination in a winding machine of a cop

holder, a guide movable to and from the axis of said holder, means to reciprocate the guide longitudinally of the axis, and means for preventing the inward movement of the guide after it is moved outward by and during the formation of the cop, substantially as set forth. 15th. The combination in a cop winding machine, of a cop tube holder, a thread guide, and means for reciprocating it opposite to said holder, and devices for carrying the guide against the holder, means for preventing the inward movement of the guide after it is forced outward by and during the building up of the cop, substantially as set forth. 16th. The combination of a cop tube holder, a reciprocating guide, and means for carrying it towards the cop, a support for said guide permitting it to move outward solely under the pressure of the increasing size of the cop, and engaging devices for preventing the inward movement of the guide after it has been forced outward, substantially as set forth. 17th. The combination of the reciprocating guide, means for carrying it inward and a support permitting the outward movement of the guide, of a pawl and rack arranged to permit the outward movement under the increasing size of the cop and to restrain the inward movement of the guide, substantially as set forth.

No. 49,484. Steam Heater. (Calorifere à la vapeur.)

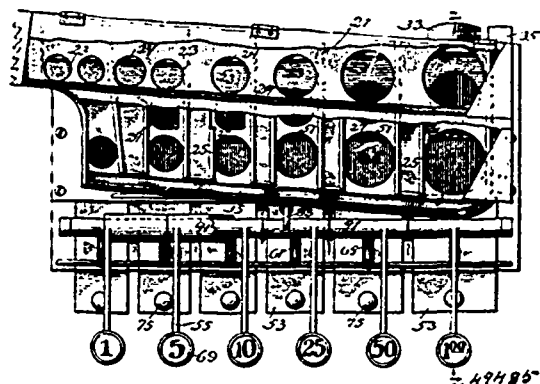


Frank W. Olds, Detroit, Michigan, U.S.A., 13th July, 1895; 6 years.

Claim. 1st. A steam heater, comprising a steam chamber provided with steam inlet and drip pipes, a steam discharge pipe having a port and slidingly engaging through, and adapted to be connected and disconnected with said steam chamber, and a discharge nozzle at the end of the pipe adapted to enter a receptacle containing the matter to be heated. 2nd. In a steam heater, the combination with a steam chamber provided with steam inlet and drip pipes, a steam discharge pipe slidingly engaging through the ends of said chamber, a port near the upper end thereof, a receptacle into which the lower end of said pipe extends and a receptacle cover sliding on the pipe, substantially as described. 3rd. In a steam heater, the combination with a steam chamber, a steam discharge pipe slidingly extending there-through, a handle at the upper end of said pipe, an aperture therein below the handle, a detent L on the pipe near the cover and a catch on the steam chamber adapted to engage with the detent or shoulder when the receptacle is opened, substantially as and for the purpose described.

No. 49,485. Change Maker and Deliverer.

(Appareil pour changer la monnaie.)



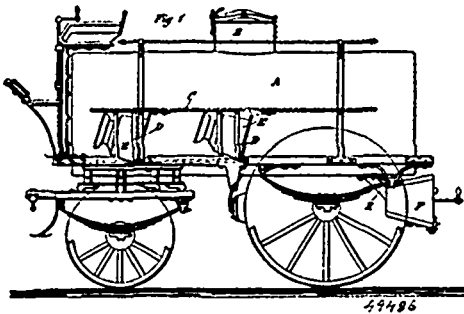
Samuel J. Taylor, Minneapolis, Minnesota, U.S.A., 13th July, 1895; 6 years.

Claim. 1st. In a machine of the class described, the combination with a series of coin receptacles, of a coin hopper, and an inclined chute connected therewith and provided with a series of openings in its bottom, corresponding in size to the respective coins to be distributed, some of the openings being duplicated whereby if a coin rests upon another of larger size in passing down the chute, and is thereby carried over the first opening for which it is designed the larger coin will dip in passing over said first opening, thereby throwing forward the smaller coin so that it will pass through the second opening of the same size whereby the overflow will be reduced and a series of transverse or lateral chutes, also inclined and extending from the space beneath the opening in said first named chute to the top of said coin receptacle, substantially as described.

2nd. In a machine of the class described, the combination with a series of coin receptacles, of a coin distributing chute provided with a series of openings corresponding in size to the coins to be distributed, a series of transverse or lateral chutes extending from beneath said opening to the coin receptacles, each of said transverse chutes being provided with an opening smaller in size than the coin for which said chute is designed, but larger in size than the coin destined for other preceding chutes and receptacles, substantially as described. 3d. The combination, in a machine of the class described, with the coin distributing chute provided with a series of openings corresponding in size to the diameter of the coins to be distributed, a series of receptacles designed to receive said coin, a series of transverse or lateral chutes extending from beneath the holes in said coin distributing chutes to the tops of said receptacles, each of said transverse chutes being provided with an opening smaller than the diameter of a coin that should pass through said chute, but larger than the diameter of the coin which should pass into the preceding transverse chute and receptacle, and an over-flow chute arranged to receive all the coins that pass through the opening in said chutes, substantially as described and for the purpose set forth. 4th. In a machine of the class described, the combination with a series of coin receptacles provided with inclined tops, the longitudinally and transversely inclined coin assorter chute provided with a series of openings corresponding to the diameters of the coins to be distributed, a series of inclined transverse chutes extending from beneath the openings in said assorter chute to said receptacles, and an over-flow chute arranged in front of said receptacles to receive the coins which pass over the top of any receptacle that is already full of coins, substantially as described. 5th. The combination with the coin receptacles and the individual chutes leading thereto, of the longitudinally and transversely inclined assorter chutes, provided with a series of openings corresponding in size with the diameters of the coins to be distributed and provided with the depressed ledges 24 arranged upon the underside of the chute and extending across the upper side of each of the openings therein, for the purpose set forth. 6th. The combination, with the coin receptacles, of the dumping slides 53 arranged beneath said receptacles, to empty them of all the coins contained therein at one operation of the slide, and the ejector slides 47 arranged upon said slides 53 and provided with openings corresponding in size to the diameter of the coins in the corresponding receptacles, and each provided with a depressed ledge 51 extending across said openings, for the purpose set forth. 7th. The combination, with the coin receptacles, of the dumping slides 53 arranged beneath said receptacles, to empty them of all the coins contained therein at one operation of the slide, the ejector slides arranged above the slides 53 and provided each with an opening to receive a single coin and with a depressed ledge 51 extending partially across said opening, the key levers 55 provided with arms engaging said slides 47 and the retracting springs engaging said arms, for the purpose set forth. 8th. The combination, with a series of receptacles and the slides therefor, said slides being provided with vertical openings or holes, of a suitable casing enclosing said receptacles, a vertical sliding bar 77, provided with the pins 79 adapted to engage the holes in said slide, an upwardly extending arm 81, and suitable means extending to said casing for engaging and depressing said arm and thereby locking said slides, substantially as described. 9th. The combination, with the casing provided with the coin delivering chute 9 and with the cash drawer having the overflow compartment 7 and the separate compartment 5, of the removable frame work arranged to be placed in said casing and provided with a series of coin receptacles, having ejector slides, arranged to deliver coins from all of said receptacles, into said chute 9 and having slides adapted to be moved to empty the coins in any receptacle into their appropriate compartment 5, and overflow chutes leading to said overflow receptacle 7, substantially as described. 10th. The combination, with the coin receptacles and slides, of the statutory shaft 57, the key levers provided with hubs mounted upon said shaft and having projecting arms engaging said slides, one or more of said key levers being provided with a long hub passing through one or more of the hubs of the other levers for the purpose set forth. 11th. The combination, with the coin receptacles and slides, of the coin delivering chute having the narrow groove therein and provided with a vertical and an outwardly curved side wall, and arranged to receive coins from all of said receptacles, whereby said coins fall into said chute and roll on edge along therein, substantially as described. 12th. The combination, with the coin receptacles and slides, of the coin delivering chute having a narrow groove therein, the side walls of said chute spreading slightly longitudinally from the starting point to the orifice thereof, and said chute being arranged to receive coins from all of said receptacles, substantially as described. 13th. The combination with the coin receptacles and slides, of the coin delivering chute having a narrow groove therein and provided with a vertical and an outwardly curved side wall, the bottom of said chute being curved upwardly at its upper end and arranged to receive coins from all of said receptacles, substantially as described. 14th. The combination, with the coin receptacles, of the dumping slides 53 arranged beneath said receptacles, to empty them of all the coins contained therein, at one operation of the slide, and the ejector slides 47 arranged upon said slides 53 and provided with openings corresponding in size to the diameter of the coins in the corresponding receptacles, substantially as described. 15th. The combination,

with the coin receptacles, of the ejector slides, the key levers for operating said slides, and a bell arranged near said key levers to be rung when any one or more of said levers are operated, to eject coins from said receptacles, substantially as described. 16th. The combination, with the coin receptacles and ejector slides thereof, the rod 57, the key levers carried by said rod, the yoke 92 also carried by said rod in position to be engaged by said key levers, a bell secured to one of said receptacles, and said yoke being provided with a pivoted hook or arm arranged to operate the hammer of said bell, whereby when one or more of said key levers are operated said yoke and hook will be moved to raise said hammer and ring the bell, substantially as described. 17th. The combination, with the coin receptacles and slides, of the pivoted key levers having the depending arms 61, springs for normally holding said arms in a retracted position, a bell secured near said key levers, a pivoted arm or yoke arranged to be engaged by said key levers and provided with a hook for engaging the hammer of said bell, whereby when said key levers are operated the bell will be rung, substantially as described. 18th. The combination with the coin receptacles and ejector slides, of the key levers for engaging said slides, the stationary shaft 57, whereby said key levers are supported, the yoke 92 also carried by said stationary shaft 57 and arranged to be engaged by each of said key levers, and provided with the curved arm 93 and the spring actuated hook 94, a bell 95 secured near said key levers and having a hammer arranged to be engaged by said hook 94, when said key levers are operated, substantially as described. 19th. The combination, with the coin receptacles, of the dumping slides 53 arranged beneath said receptacles, to empty them of all the coins contained therein, at one operation of the slide, the ejector slides 47 arranged above said slides 53, and provided with openings corresponding in size to the diameter of the coins in the corresponding receptacles, and each of said slides being provided at its inner end with a ledge conforming to the shape of the opening in said slide, and forming at the inner side of said opening a greater depth of wall, whereby the coins will be pushed back into their respective receptacles in case of partial discharge of any of the coins, and said ledge being also arranged to engage the end of said slides 53 thereby forming a step for the slide 47, substantially as described.

No. 49,486. Petroleum Tank, Cart or Wagon with Controlled Delivery Apparatus. (Char à réservoir pour pétrole ou wagon avec appareil contrôleur de livraison.)



Hugo Carl Delm, No. 17 Beim, Lubecker Thor, Hamburg, Germany, 13th July, 1895; 6 years.

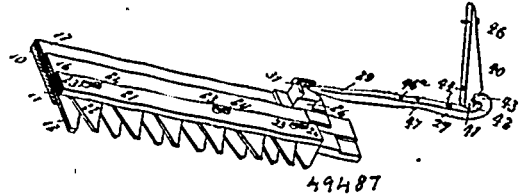
Claim.—1st. A tank, cart or wagon for petroleum and the like, consisting of a welded tank with filling funnel or dome in combination with a delivery apparatus automatic control device for the liquid to be delivered, constructed and arranged, substantially as hereinbefore described. 2nd. The improved delivery apparatus, consisting of two closed vessels K, K' of equal capacity, between which is fixed at the highest and lowest parts an exit and inlet cock H, H' respectively, the plugs of which have a common axis of rotation, the lower cock regulating, after the rotation of the plug, the feed of the liquid into one or other of the vessels, while the upper cock simultaneously allows the excess of liquid to escape through the pipe r into the tank, a counting mechanism actuated by the connecting spindle of the plugs indicating each time that the vessel is filled or discharged respectively, constructed and arranged, substantially as hereinbefore described.

No. 49,487. Cutting Mechanism for Mowers and Reapers. (Mécanisme à couper pour faucheuses et moissonneuses.)

John Sherrett, Gardiner, Oregon, U.S.A., 13th July, 1895; 6 years.

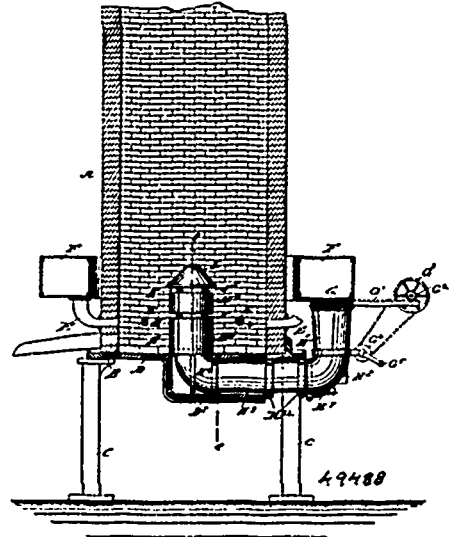
Claim.—1st. In cutting mechanism, the pitman herein described, the same comprising a body and a clamp section, the two serving to receive and clamp a globular wrist pin, substantially as described. 2nd. The herein described pitman, comprising a body and a clamp section held at one end to the body to have a pivotal adjustment, the two serving to clamp a globular wrist pin, and means for adjustably securing that end of the clamp section opposite its pivot end, substantially as described. 3rd. A cutting mechanism for mowers and the like, comprising a cutter-bar, having fixed cutters, a series

of separate cutters or sickles pivoted to rock and having cutting edges at each side, and a reciprocating bar for actuating the pivoted



cutters, the cutters having rounded rear ends and the reciprocating bar having corresponding recesses, substantially as described. 4th. A cutting mechanism for mowers and the like, comprising a cutter bar having fixed cutters, a series of separate pivoted cutters, a top bearing plate above the pivoted cutters and projecting beyond the rear ends of the latter, and a reciprocating bar having free guided movement between the cutter-bar and the top bearing plate, connections, between said reciprocating bar and the pivoted cutters, and a pitman for actuating the reciprocating bar, the connection between the said pitman and bar permitting a transverse movement of the bar, substantially as described. 5th. A cutting mechanism for mowers and the like, comprising a main cutter bar, a series of pivoted cutters, and means for rocking said cutters, the main cutter bar having vertical openings for permitting escape, of any dirt entering between the pivoted cutters, substantially as described. 6th. The combination of the main cutter bar, the separate pivoted cutters, the top bearing plate into which the bar and plate the pivots of the cutters extend, the cover plate removably held on the top bearing plate, the reciprocating bar for actuating the cutters and the pitman, substantially as described. 7th. In combination with a reciprocating bar, of a head rising from the inner end of said bar, having a circular opening or socket therein and a bevelled entrance opening extending from the inner end of the upright and through the said opening, and also provided with flanges on opposite sides of the upper portions thereof, a slide plate movably mounted in said guides and provided with a V-shaped opening in the rear portion thereof, a pitman having a ball formed on the outer end thereof which is movably mounted in the said socket or opening, and a pin adapted to be inserted through the small opening of the slide plate and extend into the body of the head and prevent said slide plate from becoming accidentally displaced, substantially as described.

No. 49,488. Blast Furnace. (Fourneau à soufflet.)

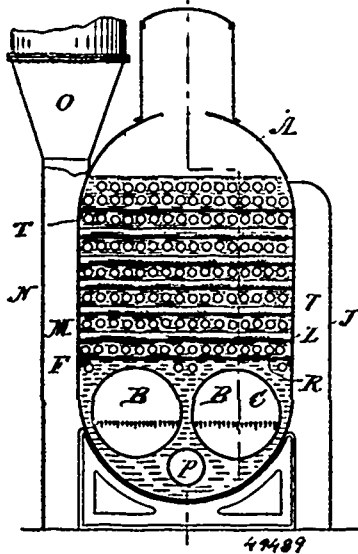


Charles Johnson, Rutland, Vermont, U.S.A., 13th July, 1895; 6 years.

Claim.—1st. In a blast furnace, a blast pipe comprising a relatively fixed section extending into the stack, and axially connected to the blast supply so that an axial current of air will be produced in the fixed section, and an adjustable pipe section located in the continuation of the said fixed section and of substantially the same cross-section therewith so that the inner walls of the two sections are substantially in alignment with each other, substantially as described. 2nd. In a blast furnace, a blast pipe comprising a relatively fixed section axially connected to the blast supply, and a longitudinally movable section located in the continuation of the

said fixed section, substantially as described. 3rd. In blast furnace, a blast pipe comprising a relatively fixed section axially connected to the blast supply, and a cylindrical section located in the continuation of the fixed section and arranged to move longitudinally toward and from the same, substantially as described. 4th. A blast furnace, comprising a stack, adapted to receive the charge, tuyeres discharging into the stack at the sides thereof, to deliver air upon the sides or outer portion of the charge, and a blast pipe extending into the stack and having an adjustable opening above the said tuyeres, substantially as described. 5th. In a blast furnace, a blast pipe comprising in a relatively fixed section, an adjustable section located in the continuation of the fixed section and spacing devices engaging the opposing edges of the said pipe sections, substantially as described. 6th. In a blast furnace, a blast pipe comprising a relatively fixed section, an adjustable section located in the continuation of the fixed section, the said sections being provided with axially aligning pin-receiving sockets in their opposing ends, substantially as described. 7th. In a blast furnace, a blast pipe comprising a relatively fixed section, an adjustable section located in the continuation of the fixed section, the said sections being provided with sockets in their opposing ends, pins extending into the said sockets, and collars on the pins, substantially as described. 8th. A blast furnace provided with a stack, a centre blast pipe extending through the bottom thereof, and trap doors hinged on opposite sides of the stack to form a bottom therefor and embrace the blast pipe, substantially as described. 9th. The combination with the blast pipe or its cap, of the spaced rings surrounding the same, and the refractory cover on the rings, substantially as described. 10th. The combination with the blast pipe or its cap, of the spaced cup-shaped rings surrounding the same, and the refractory cover on the rings, substantially as described.

No. 49,489. Steam Generator. (Générateur de vapeur)



Thomas Crane, Bay City, Michigan, U.S.A., 13th July, 1895; 6 years.

Claim.—1st. The combination of the furnace, the boiler shell, two series of tubes extending respectively longitudinally and transversely through the boiler, and end and side chambers connected and arranged so that the products of combustion will pass successively through the two series of tubes. 2nd. The combination of the furnace, the boiler, two series of tubes extending therethrough longitudinally and transversely, a jacket around the middle of the boiler on both sides and ends, a connection from the furnace into the end section of the jacket, and from the front jacket into one side jacket, substantially as described. 3rd. The combination of the boiler, the furnace flue therethrough, the furnaces therein, the rear end chamber, into which the furnace flue connects, the longitudinal tubes through the boiler connecting the rear chamber with the front, a front chamber, side chambers, with one of which the front chamber connects and a series of transverse tubes connecting the side chambers, substantially as described.

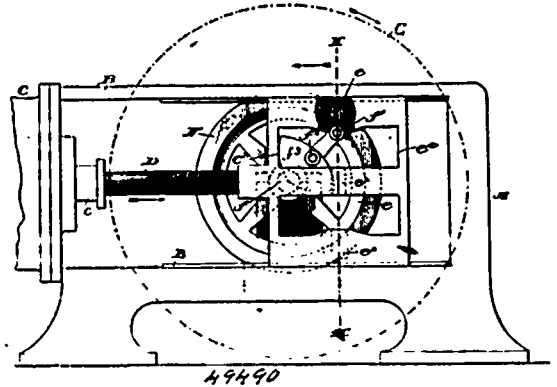
No. 49,490. Means for Changing Motion.

(Moyen de changer le mouvement)

Jonathan Joseph Hamilton, Neepawa, Manitoba, Canada, 13th July, 1895; 6 years.

Claim.—1st. The combination, with a cross head provided with slot therein, of a rotating element having a projection or stud adapted to enter the slots in said cross-head, together with a cam

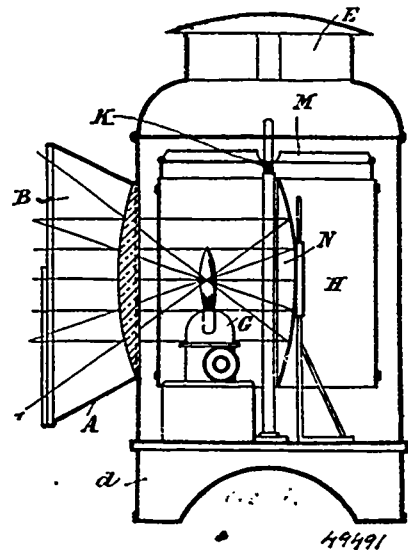
arranged on said rotating element adapted to gradually stop and initially start the cross head at each end of the stroke, substantially



as described. 2nd. A means for changing motion, comprising a cross head mounted upon suitable supports and provided with a slot at the upper and lower portion respectively thereof, a drive wheel having a stud or projection arranged therein adapted to enter said slots, and a cam arranged on the drive wheel adapted to contact with a portion of the cross head to gradually stop and initially start the same at each end of the stroke, substantially as described. 3rd. A means for changing motion, comprising a cross-head provided with slots at the upper and lower portion, respectively thereof, a substantially rectangular block arranged on said cross-head, a drive wheel provided with two projections or studs, one of which is adapted to contact with said block and the other adapted to enter the slots in the cross-head, and a cam arranged on the drive wheel adapted to contact with a portion of said cross-head to gradually stop and initially start the same at each end of the stroke, substantially as described. 4th. In a means for changing motion, the combination with a cross-head having slots in the upper and lower portion, respectively, thereof and provided with a centrally arranged substantially rectangular block, of a drive-wheel provided with two studs arranged in the same radial line and projecting from the same side of said drive-wheel, one of which studs is adapted to contact with the block and the other adapted to enter the slots in said cross-head, together with a cam arranged on the drive-wheel adapted to gradually stop and initially start the same at each end of the stroke, substantially as described.

No. 49,491. Lamp for Advertising.

(Lampe pour annoncer.)

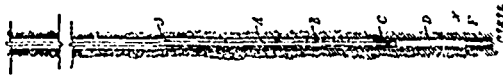


Alfred Cecil Wright, Birmingham, England, 15th July, 1895; 6 years.

Claim.—1st. An advertising lantern comprising a body portion, a screen containing the advertisement, a lamp within the body, the lens interposed between the lamp and the screen, the reflector and a series of coloured glasses arranged in cylindrical form and having its side revolving between the lamp and the screen and the current wheel at the top of said cylinder, substantially as described. 2nd.

The combination of a cylinder or barrel carrying different coloured transparent plates and having vanes or turning blades mounted thereon, with a burner and a reflector, a lens and an outer advertising plate, screen or disc to form a lamp or lantern for causing an alteration in the colour or effect upon the advertisement plate or screen, substantially as described.

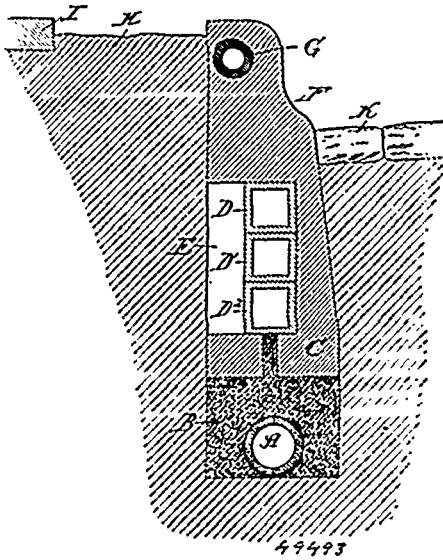
No. 49,402. Core Boring Apparatus, Etc.
(Appareil de sondage, etc.)



Francis Harley Davis, Melbourne, Victoria, Australia, 15th July, 1895; 6 years.

Claim.—1st. In boring machinery of the kind described, a chip cup located about the core barrel, and constructed substantially as and for the purposes set forth. 2nd. In boring machinery, a rock cutter F constructed, substantially as and for the purposes set forth. 3rd. In boring machinery, a cutter G for coal or the like, constructed substantially as and for the purposes set forth and as illustrated. 4th. In boring machinery, the general arrangement and combination of the boring rods as A, chip cup as B, reducing plug as C, and the core barrel as D, substantially as and for the purposes set forth and as illustrated. 5th. In boring machinery, the general combination and arrangement of core barrel as D, with an inversely coned surface as N, substantially as and for the purposes set forth. 6th. In boring machinery operations, the mode herein set forth of gripping cores, and enabling them to be raised by means of fragments of hard material introduced from above, substantially as described.

No. 49,403. Combined Curb and Conduit.
(Bordure et conduit combinés.)



Nels Sampson, Norwood Park, Illinois, U.S.A., 15th July, 1895; 6 years.

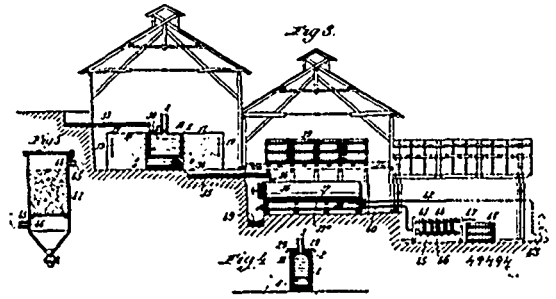
Claim.—1st. A combined curb and conduit, comprising a drain pipe covered and inclosed in a bed of gravel, a bed of gravel forming a foundation for the curb and conduit proper, a conduit proper formed of artificial stone and tiling embedded in the artificial stone forming the curb and conduit proper, substantially as described. 2nd. A combined curb and conduit, comprising a drain pipe covered and inclosed in a bed of gravel, a bed of gravel forming a foundation for the curb and conduit proper, a conduit proper formed of artificial stone, tiling embedded in the artificial stone forming the curb and conduit proper, and metallic pipe located near the top of the curb to strengthen the same, substantially as described.

No. 49,404. Furnace for Desulphurizing Ores.
(Fourneau pour dessoufrer les minerais.)

Louis Pelatan, Paris, France, and Fabrizio Clerici, Milan, Italy, 15th July, 1895; 6 years.

Claim.—1st. The process herein described for desulphurizing refractory ores, said process consisting in arranging the ore in a series of quantities each of which is a step nearer the fire, roasting part of

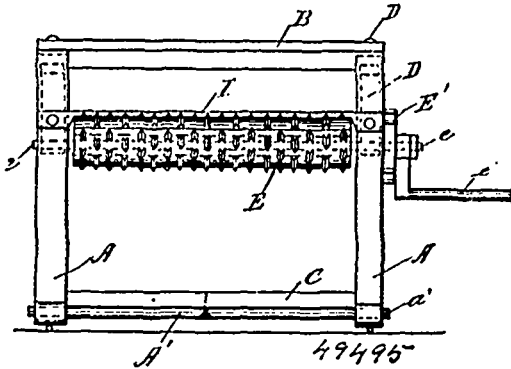
the whole number of quantities in direct contact with the fire, and simultaneously roasting the remaining number of quantities without



access of fire, and periodically advancing the whole series a step whereby one of the separate quantities is discharged from and another is brought into the fire, while all the quantities in one part of the series are brought a step nearer the fire, substantially as described. 2nd. The process described for desulphurizing refractory ores, said process consisting in arranging the ore in a series of separate quantities, separating several of said quantities from the remaining quantities, roasting the entire series simultaneously, part of the whole series with, and the other part without direct contact with the fire, and transferring the entire series step-by-step to bring the quantities in one part into and through the fire and out of the furnace, and to advance the quantities in the other part toward the fire and bring them successively into the first series, substantially as described. 3rd. The process described for the complete desulphurization of refractory ores by a single, continuous treatment, said process consisting in arranging the ore in separate quantities one above the other, roasting those quantities above a given point without access of fire, and those below said point in the presence of both air and fire, periodically transferring the several separate quantities of ore a step downward whereby they successively approach, enter, and ultimately pass through the fire and out of the furnace, and periodically supplying quantities of fresh ore at the top, substantially as described. 4th. The process described, which consists in arranging separate quantities of ore one above another, roasting part of said quantities without contact with fire and the remainder with contact of both air and fire, transferring the separate quantities of ore periodically a step downward to bring them successively nearer to and into the fire, carrying the separate quantities of said ore through the fire out of the same, transferring the roasted ore to a vat, flooding it with a chlorine solution, filtering, and finally precipitating the chlorides of gold by aluminium, substantially as described. 5th. A furnace for desulphurizing refractory ores, said furnace having a series of horizontally movable soles arranged one above another over the fire-chamber of a furnace, a series of rakes arranged over each sole and pivotally connected to each other, below their pivotal supports, and to a pivoted rod capable of swinging outwardly, one of said soles between the top and bottom being adapted to cut off the upward passage of air and products of combustion, and means for conducting the latter from the space beneath said sole to the chimney, substantially as described. 6th. A furnace for desulphurizing refractory ores, the same comprising a series of soles arranged one above another in a closed chamber above the fire-chamber, one of said soles at or near the middle of the series being adapted to cut off the upward passage of air and products of combustion, means for drawing said soles out of and into said chamber independently, a series of rakes arranged over each sole and connected to each other, and to an arm in such manner as to turn on pivotal supports when the soles are drawn into the chamber, and to stand rigidly vertical when said sole is drawn out and external pipes connecting the space beneath the middle sole with the chimney, substantially as described. 7th. In a furnace for desulphurizing refractory ores, the combination with a series of soles arranged one above another in a chamber over the fire-chamber, their edges resting on rolls mounted on fixed axes in recesses in the walls, of means for drawing said soles out of and into said chamber in opposite directions alternately, supplemental supporting rolls mounted on extension side-walls, rakes arranged over each sole and connected together and to a pivoted external arm, a series of movable rakes over a fixed sole at the bottom of the fire-chamber, an outlet chute and an automatic feeder for supporting ore at the top, one of the soles at or near the middle of the series being adapted to cut off the passage of air and products of combustion, and deflect the same into external passage, substantially as described. 8th. The combination with a desulphurizing furnace having horizontally movable soles arranged in a vertical series in a chamber over the fire-chamber, of means for drawing said soles independently out of and into said chamber, external pipes connecting the chimney with the space beneath a sole at or near the middle of the series, a feeder, a chlorination tank having filtering material in its bottom and receiving the roasted ore from the furnace, and reservoirs containing a solution of chlorine arranged above the level of the tank, substantially as described. 9th. The process described for recovering gold from its ores, the same consisting in arranging the ore in separate quantities removed

successively, a step farther from the fire, separating part of the whole number of quantities from the other part, roasting the whole series by a single fire simultaneously, one part with and the other part without direct access of fire, advancing the separate quantities periodically to bring them nearer to, into, through and out of the fire, treating the roasted ore with a chlorine solution, filtering, precipitating the gold from the chloride solution by aluminium and recovering the coarse gold present in the tailings by amalgamation substantially as described.

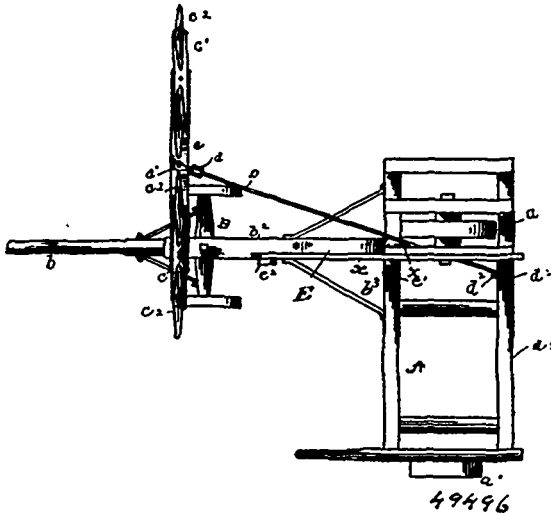
No. 49,495. Mashing Machine. (Machine à broyer.)



David Laplante, West Superior, Wisconsin, U.S.A., 15th July 1895; 6 years.

Claim.—1st. In a mashing machine, the combination, with the side frames, of the springs centrally secured to the said side frames and provided with bearings at their ends, the revoluble toothed rollers journaled in the said bearings, and the toothed wheels operatively connecting the said rollers, substantially as set forth. 2nd. In a mashing machine, the combination, with the side frames, and the springs centrally secured to them, of the revoluble toothed rollers carried by the said springs and the check rods carried in the holes in the said springs, and provided with pins for the said springs to bear against, substantially as set forth.

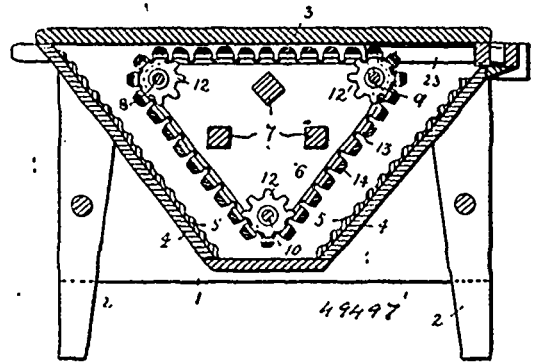
No. 49,496. Draft Equalizer. (Régulateur du tirage.)



William Ekenbary, Union, Nebraska, U.S.A., 15th July, 1895; 6 years.

Claim.—In a draft equalizer, the combination with a frame of a short curved tongue b^2 , an arm b^4 extended laterally from the outer end of said short tongue and held by a pivot bolt at its inner end, a double-tree C pivotally mounted on the outer end of the arm b^4 , and extending over the same and projecting from opposite sides thereof, whiffle-trees C^1 attached to the said double-tree which are provided with single-trees, three of the same being on one side of the tongue and one on the opposite side, a rod D attached by a link at its front end through the medium of a clip to the said double-tree, the rear end of the said rod being extended diagonally across the frame to the back of the same where it is attached to relieve the said draft, a lever pivotally connected to the said frame, an arm e^2 pivotally connected to the said lever at one end and at its opposite end to the said short tongue, and a truck B which has a tongue b , said truck being loosely connected to the forward end of the said curved tongue, substantially as described.

No. 49,497. Washing Machine. (Machine à laver.)

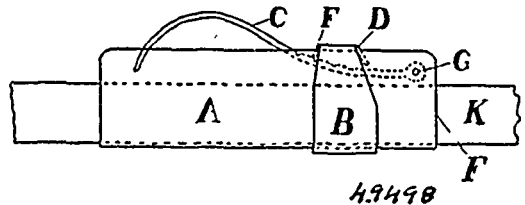


John W. Beewar, Millbank, South Dakota, and David Shaw, Ortonville, Minnesota, and William Ross, Millbank, South Dakota, all in the U.S.A., 16th July, 1895; 6 years.

Claim.—In a washing machine, the combination of a casing or housing having inclined end walls, corrugated strips secured to said walls, a triangular frame pivoted at one of the upper corners in the casing, shafts mounted in the corners of the frame and carrying sprocket-wheels, one of the upper shafts passing through the casing at one end and carrying a crank, the shaft at the other upper corner extending beyond the frame, recesses in the side walls of the casing forming bearings for the ends of the shaft, pivoted plates having a serrated edge bearing against the ends of the shaft, arms connected to the plates for holding them in position, a sprocket chain passing over the sprocket-wheels and having the inclined grasping lugs to hold the rubbing strips.

No. 49,498. Baby Food Regulator.

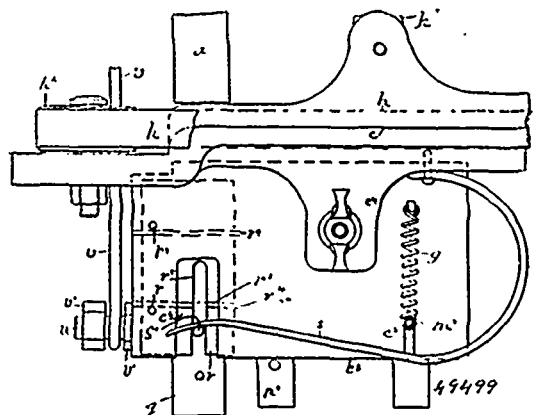
(Régulateur d'aliments pour enfants.)



Augustus Alexander Davidson, Victoria, British Columbia, Canada, 16th July, 1895; 6 years.

Claim.—An improved device to be attached to the rubber tubes of feeding bottles for the purpose of regulating the consumption of food therein, consisting of a mainpiece having an opening at the top and at each end, a slide having two returns, to move back and forth on the mainpiece, and a tongue having a joint at one end which is connected to the mainpiece by a pivot, substantially as described.

No. 49,499. Feed Mechanism for Cork Cutting Machines. (Mécanisme d'alimentation pour machines à tailler le liège.)



John Auld, assignee of Joseph Adelard Lafrance, both of Montreal, Quebec, Canada, 16th July, 1895; 6 years.

Claim. 1st. In feed mechanism for cork cutting machines, a horizontal conveyer travelling uninterruptedly in the same direction, and means for imparting an uninterrupted movement to such con-

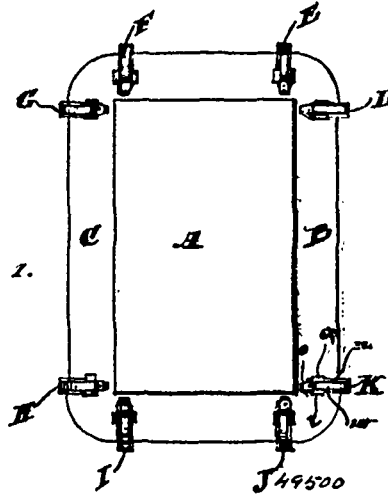
veyor. 2nd. In feed mechanism for cork cutting machines, a horizontal conveyer in the form of an endless belt travelling uninterruptedly in the same direction, and means for imparting an uninterrupted movement to such conveyer. 3rd. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction and means for imparting an uninterrupted movement to such conveyer and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 4th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer travelling uninterruptedly in the same direction for conveying the corks endwise between such hopper and the receiver of the cutting machine, and means for imparting an uninterrupted movement to such conveyer and for conducting the corks in a straight line endwise and individually from the conveyer to the receiver, for the purpose set forth. 5th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction for conveying the corks sidewise between such hopper and the receiver, of the cutting machine, and means for imparting an uninterrupted movement to such conveyer and for conducting the corks in a straight line endwise and individually from the conveyer to the receiver for the purpose set forth. 6th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction between such hopper and the receiver of the cutting machine, adjustable devices in said receiving hopper for adjusting the corks by agitation only to the required position relatively to the conveyer, and means for imparting an uninterrupted movement to the conveyer and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 7th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer travelling uninterruptedly in the same direction between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper for adjusting the corks to the required position relatively to the conveyer, and means for imparting an uninterrupted movement to the conveyer and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 8th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction for conveying the corks endwise between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper for adjusting the corks to the required position relatively to the conveyer, and means for conducting the corks in a straight line sidewise and individually from the conveyer to the receiver and means for imparting an uninterrupted movement to the conveyer, for the purpose set forth. 9th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction between such hopper and the receiver of the cutting machine, devices for controlling the movement of the corks produced by the conveyer, and means for imparting an uninterrupted movement to the conveyer, and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 10th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction beneath the hopper and extending between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper above the receiving end of the conveyer for adjusting the corks by agitation only so as to fall by gravity to a longitudinal position relatively to said conveyer, means for imparting an uninterrupted movement to the conveyer, for controlling the movement of the corks produced by the conveyer, and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 11th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, adjusting devices comprising a grooved guide strip contained in, and an agitator drum operating in said receiving hopper for adjusting the corks to the required position relatively to said conveyer, means for controlling the movement of the corks produced by the conveyer, and means for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 12th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer having adjustable slide guards for the corks between such hopper and the receiver of the cutting machine, adjusting devices comprising a grooved guide strip contained in, and an agitator drum operating in said receiving hopper, for adjusting the corks in the required position relatively to said conveyer, means for controlling the movement of the corks produced by the conveyer, and means for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 13th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer travelling uninterruptedly in the same direction between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper, for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely of the conveyer and a stop for controlling the movement of the corks produced by the conveyer, means for imparting an uninterrupted movement to such conveyer for operating such holder and gate and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 14th. In feed

mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction between such hopper, for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely of the conveyer, and a stop for controlling the movement of the corks produced by the conveyer, means for operating such holder and gate and means for imparting an uninterrupted movement to such conveyer and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 15th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction for conveying the corks endwise between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely of the conveyer and a stop, for controlling the movement of the corks produced by the conveyer, means for imparting an uninterrupted movement to such conveyer, for operating such holder and gate and for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 16th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer travelling uninterruptedly in the same direction for conveying the corks endwise between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper, for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely of the conveyer, and a stop, for controlling the movement of the corks produced by the conveyer, means for imparting an uninterrupted movement to such conveyer, for operating such holder and gate, and for conducting the corks in a straight line endwise and individually from the conveyer to the receiver, for the purpose set forth. 17th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer travelling uninterruptedly in the same direction for conveying the corks endwise between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper, for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely of the conveyer, and a stop, for controlling the movement of the corks produced by the conveyer, means for imparting an uninterrupted movement to such conveyer, for operating such holder and gate, and for conducting the corks in a straight line endwise and individually from the conveyer to the receiver, for the purpose set forth. 18th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a travelling conveyer having stationary adjustable side guards for the corks between such hopper and the receiver of the cutting machine, adjusting devices comprising a grooved guide strip and an agitator drum in said hopper, the guide strip being interchangeable with other guide strips and detachably set on a groove in the floor of the hopper, devices for controlling the movement of the corks produced by the conveyer, and means for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 19th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a travelling conveyer having stationary adjustable side guards, for the corks between such hopper and the receiver of the cutting machine, adjusting devices comprising a grooved guide strip and an agitator drum in said hopper, the guide strip being interchangeable with other guide strips and detachably set in a groove in the floor of the hopper and the agitator drum being hollowed centrally of its length and having an uneven or studded surface, devices for controlling the movement of the corks produced by the conveyer, and means for conducting the corks individually from the conveyer to the receiver for the purpose set forth. 20th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a travelling conveyer for the corks between such hopper and the receiver of the cutting machine, means for controlling the movement of the corks produced by the conveyer, a plain "pusher" moving in a horizontal line transversely of the length of the conveyer for bearing upon one side only of the corks and pushing them individually from the conveyer to the receiver, a stop extending transversely of the conveyer for arresting the corks immediately opposite such pusher and means for operating such travelling carrier and "pusher" for the purpose set forth. 21st. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer travelling uninterruptedly in the same direction between such hopper and the receiver of the cutting machine, means for controlling the movement of the corks produced by the conveyer, an adjustable "pusher" moving in a horizontal line transversely of the length of the conveyer for conducting the corks individually from the conveyer to the receiver, and means for imparting an uninterrupted movement to such carrier and for operating and adjusting such "pusher" for the purpose set forth. 22nd. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, means for controlling the movement of the corks produced by the conveyer, a longitudinally and laterally adjustable pusher moving transversely of the conveyer for conducting the corks individually from the conveyer to the receiver, and means for operating such pusher, for the purpose set forth. 23rd. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper

and the receiver of the cutting machine, alternately reciprocating slides and means for operating same for controlling the movements of the corks produced by the conveyer, a pusher moving in a horizontal line transversely of the length of the conveyer for conducting the corks individually from the conveyer to the receiver, and means for operating such pusher, for the purpose set forth. 24th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, adjustable alternately reciprocating slides and means for operating same for controlling the movement of the corks produced by the conveyer, a pusher moving transversely of the conveyer for conducting the corks individually from the conveyer to the receiver, and means for operating such pusher, for the purpose set forth. 25th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, alternately reciprocating slides and means for operating same for controlling the movement of the corks produced by the conveyer, a longitudinally and laterally adjustable pusher moving transversely of the conveyer for conducting the corks individually from the conveyer to the receiver, and means for operating such pusher, for the purpose set forth. 26th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, adjustable alternately reciprocating slides and means for operating same, for controlling the movement of the corks produced by the conveyer, a longitudinally and laterally adjustable pusher moving transversely of the conveyer for conducting the corks individually from the conveyer to the receiver, and means for operating such pusher, for the purpose set forth. 27th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, adjustable alternately reciprocating slides and means for operating same, for controlling the movement of the corks produced by the conveyer, a longitudinally and laterally adjustable pusher moving transversely of the conveyer to the receiver, and means comprising a rotating cam piece or arm, a lever, a connecting rod and cushion bearing between said rod and lever, with connections for operating such pusher, for the purpose set forth. 28th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper, for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely and adjustable longitudinally of the conveyer, and a stop for controlling the movement of the corks produced by the conveyer, means for operating and securing the adjustment of such holder and gate, and means for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 29th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontal conveyer for the corks between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper, for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely of the conveyer, and an adjustable stop, for controlling the movement of the corks produced by the conveyer, means for operating such holder and gate, and for securing the adjustment of such stop and means for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 30th. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a horizontally travelling conveyer for the corks between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper, for adjusting the corks to the required position relatively to said conveyer, a holder and an obstructing gate moving transversely of the conveyer, and an adjustable stop, for controlling the movement of the corks produced by the conveyer, means for operating such holder and gate, and for securing the adjustment of such stop and means for conducting the corks individually from the conveyer to the receiver for the purpose set forth. 31st. In feed mechanism for cork cutting machines, the combination of a receiving hopper, having an agitator drum, and a strip with a guiding groove, said strip being interchangeable with other strips having guiding grooves, a horizontally travelling conveyer with adjustable stationary walls, means for operating such belt, controlling table stop, an adjustable pusher, an adjustable stop on the carrier of the holder, adjustable gate, all suitably guided and supported, and means for securing the adjustment and operation thereof, for the purpose set forth. 32nd. In feed mechanism for cork cutting machines, the combination of a receiving hopper, a conveyer for the corks between such hopper and the receiver of the cutting machine, adjusting devices in said receiving hopper, for adjusting the corks to the required position relatively to said stops on the carrier of the conveyer, a holder and an obstructing gate moving transversely and adjustable longitudinally of the conveyer, and an adjustable stop, for controlling the movement of the corks produced by the conveyer, means for operating and securing the adjustment of such holder and gate and for securing the adjustment of such stop, and means for conducting the corks individually from the conveyer to the receiver, for the purpose set forth. 33rd. In feed mechanism for cork cutting machines, the combination of a receiving hopper, having an agitator drum, and a string with a guiding groove, said string being interchangeable with other strips having guiding grooves, a conveyer composed

of a travelling endless belt with adjustable stationary walls, means for operating such belt, controlling devices consisting of an adjustable holder and its carrier, an adjustable gate and its carrier, and an adjustable pusher, an adjustable stop on the carrier of the holder, adjustable stops on the carrier of the gate, all suitably guided and supported, and means for securing the adjustment and operation thereof, for the purpose set forth. 34th. In feed mechanism for cork cutting machines, the combination of the receiving hopper *e*, having agitator drum *d* and guiding groove *c*, the conveyer composed of travelling endless belt *h* and adjustable walls *k*, with means for operating such belt, the controlling devices consisting of the holder *m* and its carrier, the gate *n* and its carrier, and the stop *p*, the pusher *q* and the adjustable stop *m'* on the carrier of the holder, the adjustable stops *n'*, *n''* on the carrier of the gate and the connecting plate *q'* on the pusher slide, all suitably guided and supported, and together with the operating lever *l*, springs *g* and *s*, cross bar *a*, a main shaft and intermediate cam lever and rod operative connections and means of adjustment, all substantially as and for the purpose set forth.

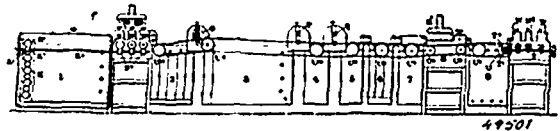
No. 49,500. School Slate. (Ardoise.)



Elijah Dawe, Albert Dawe and John McGregor, assignees of John William Rickers, all of Vancouver, British Columbia, Canada, 16th July, 1895; 6 years.

Claim. The combination, in school slates and frames A, B and C, with brass clip *n*, spokes *o* and *p*, clips *g*, *r*, *s* and *l*, *u* and *v* for fastening on frame and holding rubber cushion *w*.

No. 49,501. Process of and Apparatus for the Treatment of Rhea Grass, &c., for Commercial Purposes. (Procédé et appareil pour le traitement d'herbages.)

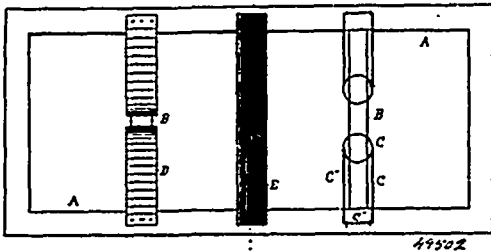


Henry Hungerford Boyle, London, England, 16th July, 1895; 6 years.

Claim.—1st. The combination of a series of tanks and travelling chains carrying cross rods travelling in the different tanks to carry the raw material through same, the chains of the one tank being arranged to deliver the grass between the intermediate rollers or into the chains of the next tank, substantially as described and shown. 2nd. The combination of the various solutions in the different tanks, consisting of, in tank No. 1, caustic soda and water of 2° Baume strength; in tank No. 2, hydrochloric acid and water, strength 1° Twaddell; in tank No. 3, caustic soda and water, 1° Baume strength; in tank No. 4, permanganate of potash 7 oz. to 36 gallons of water; in tank No. 5, hyposulphite of soda, strength 1° Twaddell, slightly acidulated with hydrochloric acid; in tank No. 6, water acidulated with hydrochloric acid; in tank No. 7, hyposulphite of soda, 1° Twaddell; and in tank No. 9, hot water and soap, all substantially as described. 3rd. In a tank, the combination, with travelling chains carrying supporting cross rods for the grass, of a series of steam pipes to boil the solution and steam the grass while being carried through tanks, substantially as described and set forth. 4th. The combination, with a series of tanks and means for an output delivery of the grass from same, of rollers between two tanks to receive the grass and squeeze it to break up the bark

and loosen the fibres, substantially as described and set forth. 5th. The combination, with a series of tanks and means for an output delivery of the grass from same, of a series of rollers with conducting guides between, the first set travelling at a slower surface speed than the other sets, so that the grass passing through may be held by the first set and pulled out by the following sets, substantially as described. 6th. The combination, with a series of tanks, of a double set of endless chains carrying cross rods, said chains and rods arranged to enter the tanks together to carry in the raw material and pass it preferably in a serpentine course through the tank and deliver the same at the outside, substantially as herein described and shown. 7th. The apparatus described, in combination with the solutions used in the different tanks, as described and shown. 8th. In the process for treating rhea grass, passing the same through the various solutions hereinbefore and in the order named, as described and shown.

No. 49,502. Spring Seats. (Siège à ressort.)

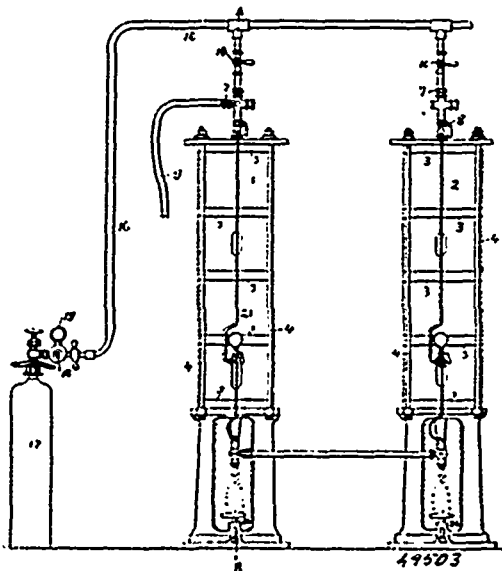


George E. Howard, St. Louis, Missouri, U.S.A., 16th July, 1895; 6 years.

Claim.—In a spring seat, the combination of the seat frame A, and spring C within the frame each of said springs having the wire of its top coil continued outward in about a straight line and the plane of the coil to form an arm C¹, then bent to form an intermediate connecting part C², and then turned back to form the arm C² with its end secured to the said top coil, the arm C¹, part C², and arm C² constituting a support for the spring and secured to the frame, substantially as shown and described.

No. 49,503. Process of Manufacturing Wines.

(Procédé pour la fabrication des vins.)

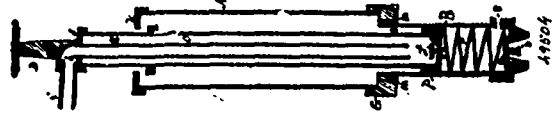


Dr. Eugene Louis Doyen, Reims, France, 16th July, 1895; 6 years.

Claim.—1st. The improved process for the manufacture of champagne, wines, cider and other sparkling liquors consisting in causing the formation of the mousse to take place in receivers of large capacity formed by superposed tubes of earthenware or glass capable of withstanding great pressure and placed in communication with a carbonic acid reservoir, substantially as herein described. 2nd. The process of clarifying and liquering large quantities of wines or other liquid at a time by passing the liquids after the mousse is formed into a second large receiver whence the liquid is passed direct into the bottles, substantially as herein described. 3rd. In the manufacture of effervescent liquors the combination of the column and of a receiver for liquering with a system of pipes communicating with

a carbonic acid receiver kept at constant pressure allowing the apparatus as well as the bottles to be filled at the pressure existing in the system of pipes and by the operation of cocks, substantially as herein described.

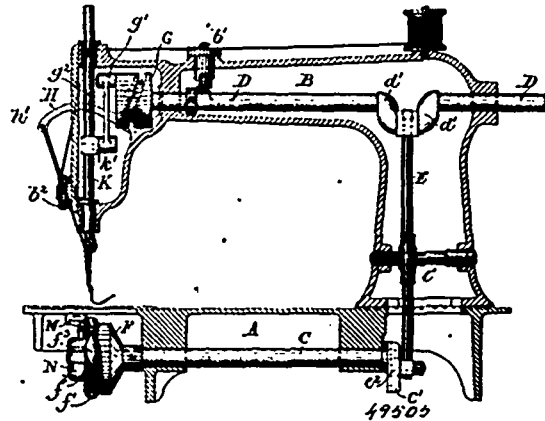
No. 49,504. Pump. (Pompe.)



Mott Billings Brooks, Oak Point, New York, U.S.A., 16th July, 1895; 6 years.

Claim.—1st. The spring F, substantially as and for the purpose set forth. 2nd. The openings *m, m*, substantially as and for the purpose set forth. 3rd. The inlet and outlet *z*, substantially as and for the purpose set forth.

No. 49,505. Sewing Machine. (Machine à coudre.)

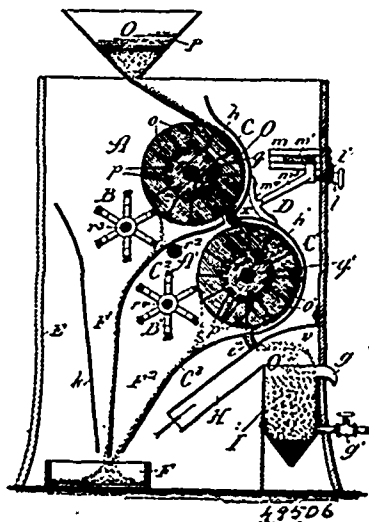


The Two Lock Stitch Sewing Machine Company, assignee of Daniel Jones, both of Birmingham, England, 16th July, 1895; 6 years.

Claim.—1st. A revolving tubular looper F, formed to engage the loop of the needle thread, and to enlarge and pass the said loop untwisted around a commercial reel or pin of under thread, whereby the loop becomes decreased in size by the action of a take-up lever H, to retain part of the thread forming the said loop securely around the extension *f*² until the looper hook *f*² is ready to engage the next succeeding needle thread loop and draw the remaining part of the former loop up through and into the material in enlarging the next succeeding loop, the said looper being provided with a groove *f*¹ to support a ring or frame I for carrying the under thread which ring or frame is by any suitable means kept stationary when the looper revolves. 2nd. A sewing machine containing an eye-pointed thread-carrying needle, a looper provided with a hook or point, a loop spreading and retaining extension in rear of the looper point, a needle clearance space in the looper, a ring or frame supporting a reel or pin case containing a supply of under thread, which ring or frame is provided with a notch for the reception and retention of the needle thread, and with a lug adapted to engage with a bar on the frame of the machine to prevent rotation of the said ring or frame, all combined, arranged and operating substantially as described. 3rd. In a sewing machine having an eye-pointed thread-carrying needle a looper F provided with a hook or point *f*² a loop spreading and retaining extension *f*² and a needle clearance space *f*¹, in combination with a take-up action operating to draw up part of the thread forming a fully extended loop, and the rest of such thread being drawn up by the looper point *f*² in forming the next succeeding stitch, all combined, arranged and operating substantially as described. 4th. In a sewing machine having an eye-pointed thread-carrying needle and a circularly movable loop taker provided with a hook or point, a reel case or under thread container consisting of an upper and lower section embraced by a band adapted to assist in spreading the loop of needle thread, the upper section of the said case carrying an under tension spring and the lower section hinged or pivoted to the supporting ring which ring is in turn supported by the revolving looper and prevented from revolving by a lug engaging a bar fixed to the frame of the machine all combined and arranged substantially as and for the purpose described. 5th. A sewing machine having an eye-pointed thread-carrying needle and a circularly movable loop taker provided with a hook or point, and a reel case or under thread container having a removable centre pin or stud adapting the said reel case for the use of wound masses of under thread commonly known as balls or pins. 6th. The revolving loopers having an internal groove in the cylindrical or cup-shaped portion to carry a thread carrier frame, a circumferential opening for the purpose of inserting the thread carrier frame L, together with means for retaining the

frame L, within the looper groove. 7th. A circularly movable looper having a removable or detachable hook point fitted into a seat formed in the body of the looper, substantially as described. 8th. In a sewing machine having an eye-pointed thread-carrying needle, a revolving looper built in sections and provided with a hook or point f^2 , in combination with an under thread carrier frame L, supported in a groove formed between the front and rear portions of the said looper, the said carrier frame having a reel or pin case consisting of the back section f^3 , and front section f^4 , all substantially as shown and described. 9th. A sewing machine having the undermentioned mechanical devices, viz., a reciprocating eye-pointed thread-carrying needle, a take-up action preferably consisting of lever H, and cam G, with their necessary adjuncts, a revolving looper F, provided with a hook or point f^2 , a needle clearance space f^5 , a loop spreading and loop retaining extension f^6 , and a thread carrier ring groove f^7 , an under thread carrier ring L, supporting a suitable under thread case and prevented from rotating, said ring L, having a notch f^8 , into which the hook or point f^2 , of the revolving looper F, draws one part of the loop of thread from the eye-pointed needle, the notch f^8 , being constructed to retain part of the thread of the said loop till the said loop has been passed around the under thread, and then is drawn off the hook or point f^2 , and is contracted by the action of the take-up arm H, the said contracted loop being retained about the rear extension f^6 , of the looper F, until released therefrom, by the tail end of the said extension f^6 , of the looper F, coming into position over the said notch f^8 , when the thread of the said loop is liberated from the said notch f^8 , and is drawn into the material during the formation of the next succeeding loop, all combined and arranged, substantially as and for the purposes described.

No. 49,506. Magnetic Ore Separator.
(*Séparateur magnétique.*)



Francis Mary Quaife, assignee of Colin John Basil MacIver, both of New York, State of New York, assignee of James Houlihan, Chicago, Illinois, all in the U.S.A., 16th July, 1895; 6 years.

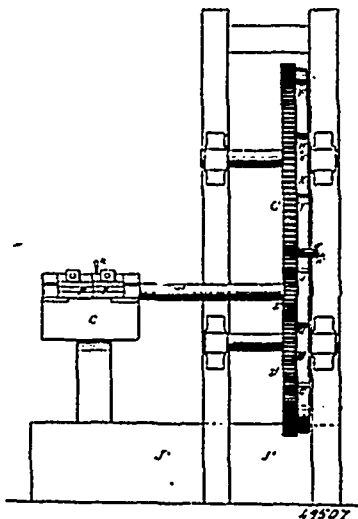
Claim.—1st. In a magnetic ore-separator, the combination of a movable magnet and an armature forming an interposed ore-passage, substantially as and for the purpose set forth. 2nd. In a magnetic ore-separator, the combination of a movable cylindrical magnet and an armature supported with relation to and conforming more or less to the peripheral surface of the magnet and forming therewith an interposed ore-passage, substantially as and for the purpose set forth. 3rd. A magnetic ore-separator comprising, in combination, rotary magnets A, A', provided with armatures C, C', forming with the magnets the ore-passages h, h', communicating between the magnets, the armatures having extensions C², C³, forming chutes, rotary brushes B, and B', for the magnets, a water-holder I, communicating with the discharge-end of the passage h¹, an air-blast conduit H, leading past the discharge from the said passage h¹, and over the surface of the said water-holder, and an inclosing case for the mechanism, the whole being constructed and arranged to operate, substantially as and for the purpose set forth.

No. 49,507. Mechanism for Forming Eyes and Crimping Wire. (*Mécanisme pour faire des willets et gaufrer le fil de fer.*)

Joel Bennett and Hugh A. Stringer, both of London, Ontario-Canada, 16th July, 1895; 6 years.

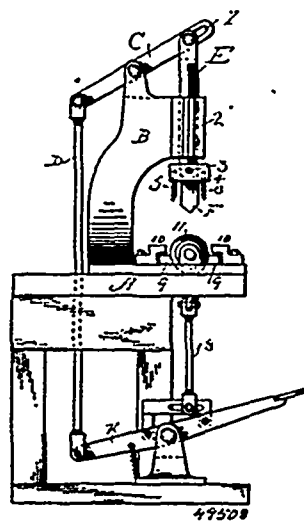
Claim.—1st. The sliding-frame B, discs D, D, straps E, E, hinged jaws or fliers F, F, having a circular hinge G, and bending-plates L, L, all arranged and operating substantially as shown and

described. 2nd. The mandril H, eccentrically attached to circular-hinge G, pin I, and gauge K, all arranged and operating substan-



tially as shown and described. 3rd. The sliding-frame N, discs M, M, cam arms Q, Q, cams P, P, bending-plates R, R, and gauge V, all arranged and operating substantially as shown and described. 4th. The wheels A', B', having recesses F', dies G', and dowel-pin N', operated by the toothed gearing C', D', and pinion E', and main shaft W, all arranged and operating, substantially as shown and specified. 5th. The feed and discharge table H', groove O', gauge K', guard-plate L', dog M', and gate P', all arranged and operating, substantially as shown and specified.

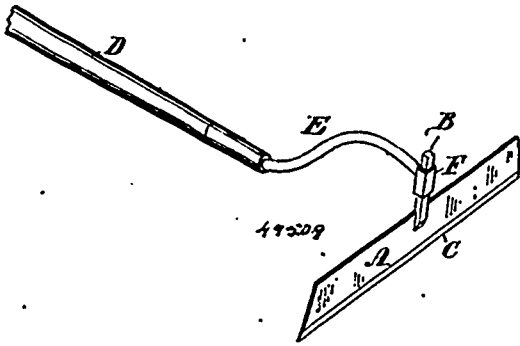
No. 49,508. Machine for Making Leather Loops, Etc.
(*Machine pour faire des ganses de cuir.*)



Allen J. Lloyd, Oakland, California, assignee of Friend Johnson Bringham, Chicago, Illinois, both in the U.S.A., 18th July, 1895; 6 years.

Claim.—1st. A machine for making endless leather loops comprising a reciprocating cross-head, with means for operating the same, a knife F, for slitting the leather, and a second knife arranged at right angles to the first knife and at a distance therefrom to cut off the slitted piece, substantially as described. 2nd. In a machine for making endless leather loops, a reciprocating head, a slitting knife carried thereby and a trimming knife arranged at right angles thereto, a distance therefrom and centrally on the slitting knife when-by the leather is slit, and the slitted portion is cut-off leaving an uncut portion between the slit and the cut end of the leather, substantially as described.

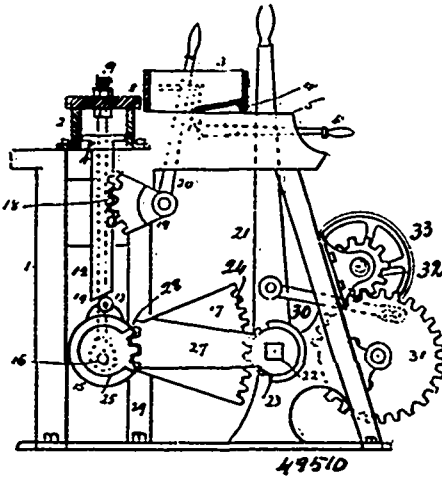
No. 49,509. Combined Hoe and Cutter.
(Houe et tranche combinés.)



George Henry Caverly, Alphas Field Wood, and Robert Rollins all of Madoc, Ontario, Canada, 18th July, 1895; 6 years.

Claim.—A combined hoe and cutter, comprising a blade A, having a tang B, and the handle D, having a goose-neck E, provided with a socket F, substantially as set forth.

No. 49,510. Brick Machine. (Machine à brique.)

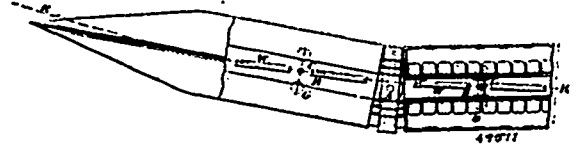


Charles Griffiths Davies, Benton Harbour, Michigan, U.S.A., 18th July, 1895; 6 years.

Claim. 1st. A brick machine consisting of a frame, a feed box, a mould box, an upper presser block, a presser plunger having an inclined or bevelled lower end, a shaft, a roller carried by said shaft, and adapted to engage with the bevelled portion of said plunger, an operative lever and gearing connecting said lever and shaft, substantially as and for the purpose set forth. 2nd. A combined hand and power brick machine consisting of a frame, a pair of power shafts journaled therein, a main operative lever connected with one of said shafts, segmental toothed gearing connecting said lever and the other power shaft, a roller carried by said latter shaft, a rocking upper presser block, mould box, a lower presser block, a pitman connected with said lower presser block, and having an inclined lower end to engage with said roller, a toothed rack segment and lever connected with and adapted to reciprocate said pitman, a reciprocating feed box, gearing journaled in said frame and having connection with a suitable source of power, and a strap removably connecting said power, gearing and the main operative lever, substantially as and for the purpose set forth. 3rd. In a brick machine, a mould box, a rocking upper presser block, a lower presser block, a pitman connected with said lower block and having an incline or bevelled lower end, a shaft, a roller journaled thereon to engage said level, a lever and gearing connecting the same and the shaft carrying said roller, substantially as and for the purpose set forth. 4th. In a brick machine, the combination with the frame and mould box, of a feed box, having roller supports, a lever journaled in said frame, and rods connecting said lever and feed box for the purpose of reciprocating the same, substantially as set forth. 5th. In a brick machine, a frame, a mould box, an upper presser block, rods connected with said blocks and depending therefrom and pivoted to said frame, and having at their lower ends enlargements provided with curved under faces on said rods, an operative lever and gearing connecting said lever and shafts, substantially as and for the purpose set forth. 6th. In a brick machine, the combination with the mould box, of a lower presser block, a pitman connected there-

with, a rack carried by said pitman, a toothed segment engaged with said rack, and a lever for actuating said segment, substantially as and for the purpose set forth. 7th. In a brick machine, the combination with the frame and mould box, of a feed box having a slide and roller supports, a hand grasp attached thereto for actuating the same, a lever journaled to shaft for locking, unlocking and operating the upper presser block, a lower presser block, pitman connected with lower presser block, a roller, a toothed rack, segment and lever connected with the said pitman shafts and levers, substantially as and for the purpose specified.

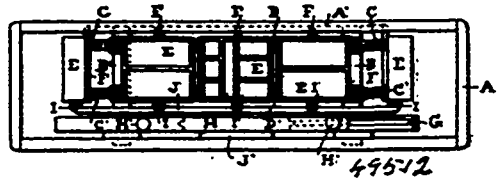
No. 49,511. Vehicle and Electric Locomotive for Single Line Elevated Railway. (Voiture et locomotive électrique pour chemins de fer aériens.)



Fritz Bernhard Behr, 10 Drapers Gardens, London, England, 18th July, 1895; 6 years.

Claim.—1st. An electric locomotive for a single rail elevated railway having a pair of bogies each consisting of a bogie frame carrying a pair of vertical running wheels and a pair of horizontal guide wheels and passenger compartments supported on said frames, each of said vertical wheels being mounted between a pair of electro-magnets, and provided with coils and a commutator on each of its faces to operate as an electric motor, substantially as described. 2nd. In a single line elevated railway, the combination with a passenger vehicle and two parallel guide rails, of a pair of bell cranks pivoted to each of the opposite sides of said vehicle, each pair being connected by a rod pivoted to one of said cranks and loosely passing through an eye in the other crank, a spring interposed between the latter crank and a nut on the end of said crank, and guide wheels journaled in the free ends of said cranks and bearing against said guide rails, substantially as described. 3rd. In a single line elevated railway, the combination with a covered trough carrying a conductor and provided upon its side with a slot and having suitable outlets, of a carbon contact carried by a support suspended from the locomotive, said carbon and support being provided with a conduit for supplying water to the said conductor, substantially as described.

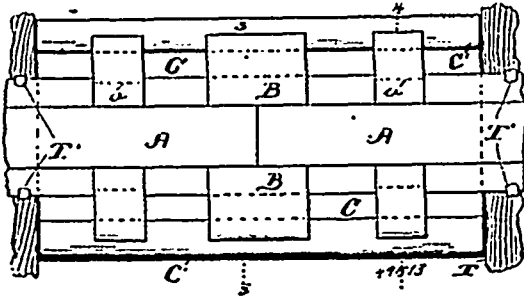
No. 49,512. Revolving Book-case and Display Cabinet. (Bibliothèque et cabinet d'étalage tournants.)



Reuben H. Ober, Garrettsville, Ohio, U.S.A., 18th July, 1895; 6 years.

Claim. 1st. In a revolving book-case and display cabinet, the vertical drums B, B located at opposite ends of a cabinet having a grooved or slotted roof, said drums having upper and lower sprocket-wheels affixed thereto connected by endless chains, in combination with the cases E secured to said chains by the rods F projecting into the groove or slot in said cabinet roof, in the manner substantially as and for the purpose set forth. 2nd. In a revolving book-case and display cabinet, the cases E having rollers or slides at the bottom to support said cases upon the track J, and provided with rods F, running in the groove A', in the roof of the cabinet A, and attached to endless chains connecting the upper and lower sprocket-wheels of the vertical drums B, B in combination with said drums having the pulleys G, G rigidly secured thereto and connected by an endless chain or belt for revolving the same, in the manner, substantially as and for the purpose set forth. 3rd. The combination, in a revolving book-case and display cabinet, of the vertical drums B, B bearing in the floor and roof of the cabinet A, and having the pulleys G, G at the bottom connected by an endless chain or belt, the track J, supported from the floor of said cabinet above said pulleys, sprocket-wheels secured to the upper and lower ends of said drums and connected by endless chains, and the cases E attached to said sprocket-wheel chains supported at the bottom by rollers or slides on said track and provided with the rods F extending above said cases to travel in the groove A' in the cabinet roof, in the manner, substantially as set forth.

No. 49,513. Rail Joint or Coupling.
(Joint ou attelage de rails.)



James Grear Miller, Youngstown, Ohio, U.S.A., 18th July, 1895; 6 years.

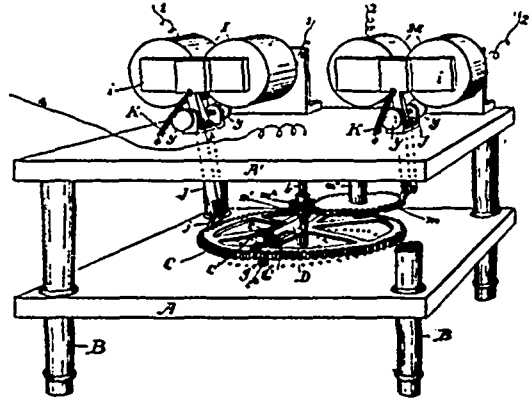
Claim.—1st. In a rail-joint or coupling, the combination with the rails and one or more pairs of jaws pivotally supported at the opposite sides, respectively, of the rails, and fitting between the head and base of the rails, each jaw having an inwardly projecting flange, as at B¹, below the rails, of blocks or pieces, as at D, resting upon said flanges and engaging the lower side of the base of the rails, all arranged and operating substantially as shown, for the purpose specified. 2nd. In rail-joint or coupling, the combination with the meeting or contiguous ends of the rails, of a pair of clamping-jaws B pivoted at b, and flanged inwardly at B¹, and blocks or pieces D flanged downwardly at d, all arranged and operating substantially as shown, and for the purpose specified. 3rd. In a rail-joint or coupling, the combination with the meeting or contiguous ends of the rails and a pair of jaws B journalled at b, each jaw being bevelled at b², and provided with an inwardly projecting flange B¹ bevelled at b³, of blocks or pieces D bevelled at D² and flanged downwardly at d, with the flange bevelled at d³, all arranged and operating substantially as shown, for the purpose specified. 4th. In a rail-joint or coupling, the combination with the rails of a plate C, one or more pairs of clamping-jaws at opposite sides, respectively, of the rails, and fulcrumed upon the aforesaid plate substantially as indicated, said jaws engaging the rails between the head and base of the latter and having inwardly projecting flanges in under the aforesaid plate, and blocks or pieces resting upon said flanges and engaging the under side of the base of the rails, all arranged and operating substantially as shown, for the purpose specified. 5th. In a rail-joint or coupling, the combination with the rails A A recessed at a, of a plate C located a suitable distance below the base of the rails, two pairs of rail-clamping-jaws at opposite sides, respectively, of the rails, and fulcrumed upon the aforesaid plate substantially as indicated, said jaws having inwardly-projecting flanges in under the aforesaid plate, and blocks or pieces resting upon said flanges and engaging the under side of the base of the rails, all arranged and operating substantially as shown, for the purpose specified. 6th. In a rail-joint or coupling, the combination with the rails A A, and pair of rail-supporting-ties T T at the meeting or contiguous ends of the rails, of a plate C located a suitable distance below the base of the rails, one or more pairs of clamping-jaws at opposite sides of the rails, respectively, and fulcrumed upon the aforesaid plate substantially as indicated, said jaws engaging the opposite sides of the head and base of the rails and having inwardly projecting flanges in under the aforesaid plate, and blocks or pieces resting upon said flanges and engaging the under side of the base of the rails, the arrangement of parts being substantially as described, and the aforesaid plate being slotted to just accommodate the location and operation of the clamping-jaws and blocks or members supported thereby, substantially as set forth.

No. 49,514. System of Telegraphic or Telephonic Exchange. (Système d'échange de téléphone et télégraphique.)

Wallace Childs, Neosho, Missouri, U.S.A., 18th July, 1895; 6 years.

Claim. 1st. A system of telegraphic, or telephonic exchange, comprising, a switch board having a pathway formed of a series of convolutions substantially as shown, with wires run there-to connecting said switch board with all the like switch boards of the system, a wheel as C carrying an arm as D, which has an electrode switch, and electro-mechanical propelling devices therefor in a line to a local station, to move said switch into connection with said wires. 2nd. A system of telegraphic, or telephonic exchange, comprising, a switch board having a pathway formed of a series of convolutions, substantially as shown, contact points of wires located in said convolutions, and a switch movably secured upon an arm or wheel, the contact point of said switch is movable radially and annularly relatively to the axis of said convolutions. 3rd. A switch board comprising a spiral pathway, substantially as shown, in combination with circuit wires extending from said pathway to the like pathways of all the other switch-boards of the system, an electrode-switch in

line to a subscriber's office to connect with said circuit wires, one or more deflecting flanges, and electrical propelling devices to operate



said switch. 4th. A switching instrument comprising, a spiral pathway, one or more deflecting flanges, a travelling switch, and electrical propelling devices to move said switch, substantially as and for the purpose specified. 5th. A telegraphic, or telephonic exchange switch-board comprising, a series of contact points arranged spirally, and a relatively moving switch adapted to co-operate with said contact points, substantially as specified. 6th. A telegraphic, or telephonic exchange switch-board comprising, a series of contact points arranged thereon spirally, a relatively movable switch adapted to co-operate with said contact points, and circuit connection from said contact points to like contact points in all like switch-boards of said exchange. 7th. A telegraphic, or telephonic exchange switch-board comprising, a series of contact points arranged spirally, a switch-contact adapted to co-operate with said contact points and move centrifugally across the coils, as and for the purpose specified. 8th. A telegraphic, or telephonic exchange switch-board comprising, a series of contact points arranged spirally, a rotary switch-arm and contact piece movably attached thereto, said contact-piece adapted to move lengthwise of the coils and transversely thereto for the purpose specified. 9th. A system of telegraphic, or telephonic exchange having a switch-operating instrument electrically connected to a switching instrument, said switching instrument having a spiral switch path, an electrode-switch, circuit wire-contact points located in said path, and a spring to move said electrode-switch from the inner end of the path to the outer end of the path for the purpose specified. 10th. In a system of telegraphic or telephonic exchange having at a subscriber's office a switch-operating instrument connected in circuit with a switching instrument in a central office, the combination in such switching instrument of a wheel as C carrying an electrode-switch movably attached thereto, a smaller wheel as m, a lever-arm with an adjustable catch or pawl, one for each of said wheels, and adapted to co-operate with said wheels, and electro-mechanism controlled electrically from the said switch-operating instrument to move said levers, substantially as and for the purpose specified. 11th. A switch operating instrument of the character shown and described comprising, a compound switch having two connecting arms, gearing capable of being operated by one of said arms, line wires as 1 and 2 capable of having their circuits opened or closed by and through the other of said arms, and means to operate said switch and move its said arms, simultaneously as set forth. 12th. A switch-operating instrument comprising, a compound switch having two connecting arms, gearing capable of being operated by one of said arms, line wires as 1 and 2 capable of having their circuits opened or closed by and through the other of said arms, and a switch as V to carry a grounded wire as 5, and means to operate said switch and move said arms simultaneously as set forth. 13th. A system of telegraphic or telephonic exchange having a switch-operating instrument connected in open circuit with a switching-instrument in the central office, which has a dial made in two concentric circular plates joined together but insulated from each other, gearing to connect and operate at different rates of speed two electrode hands alternately, or together, said hands insulated from each other, and revolve them over the dial and make contact with said plates at points thereon, and means to revolve said hands. 14th. In a telegraphic or telephonic exchange system, a switch-operating instrument, comprising two electrode hands insulated from each other, a shaft to which one of said hands is rigidly attached, a gear-wheel fitting loosely over said shaft to which the other hand is likewise attached, one of said hands capable of being independently operated, the other only in conjunction therewith, a plate composed of two dials or rings insulated from each other and in open circuit with a central office, means to operate said hand into contact with electrode points on said dials and close said circuit, and a non-electrode hand and its dial operative thereon only in conjunction with the hand capable of the independent movement to indicate the numbers of revolutions made by said independently operated electrode hand, substantially

as and for the purpose set forth. 15th. In an automatically operated switching instrument for telegraphs, or telephones, the combination of an adjustable electrode-switch, one or more deflecting flanges to guide said switch, a spring to operate against said switch, a catch and ratchet controlling said spring, and electro-mechanical devices to move said switch in a concentric pathway, substantially as shown and described. 16th. In a telegraphic, or telephonic system of exchange, a switch-operating instrument comprising, two electrode hands insulated from each other, a shaft to which one of said hands is firmly attached, a gear-wheel fitting loosely over said shaft carrying the other hand, one hand capable of being independently operated, the other only in conjunction therewith, a dial composed of two plates or rings insulated from each other and in open circuit with a central office, and means to operate said hands into contact with electrode points on said dial and close said circuit. 17th. In an automatically operated switching instrument for telegraphs, or telephones, the combination of a revolving electrode-switch, a spring to operate against said switch, a ratchet and catch controlling said spring, and electro-mechanical devices to revolve said switch in a convolute pathway, substantially as set forth. 18th. In an automatically operated telegraphic, or telephonic exchange system, the combination with a single line or circuit, of two electro-magnets, two propelling devices, two batteries of ordinary construction, one of said batteries permanently located on said line and adapted to energize one of said electro-magnets and operate but one of said propelling devices, the other battery adapted to be switched on, or off said line, and capable of energizing both of said electro-magnets and operating both propelling devices simultaneously, and a travelling electrode switch capable of being operated by such mechanism, substantially as specified. 19th. In a telegraph, or telephone of ordinary construction having one end of its main line wire run to a switching instrument and terminating therein with a revolving electrode switch, the other end of said line run to a switch-operating-instrument and terminating therein in a stationary insulated point which is capable of being connected to by a switch carrying a ground wire, and means to move said switch into, or out of contact with said line wire whereby said line wire may open, or close a circuit with said revolving electrode switch, as and for the purpose specified. 20th. In a switch-board in a central office or exchange having electrical connection with a subscriber's office, a single wire having one or more contact points in the switch-path of said switch-board and running to the switch-path of each of all the like switch-boards of the system and exposing but one contact point in each of all of said like switch-boards, an electrode switch to co-operate with said contact points and electro-mechanism to move said switch, substantially as specified. 21st. A switch-board having its switch-path constructed spirally, or in concentric coils substantially as shown, in combination with circuit wires extending from said switch-path to the like switch-paths of all the other switch-boards of the system, a revolving switch in line to a subscriber's office to co-operate with said circuit wires, and propelling devices to revolve said switch. 22nd. In a system of telegraphic, or telephonic exchange a switching-instrument comprising a circuit making and breaking wheel carrying an electrode-switch radially movable on said wheel, a spiral switch-path, circuit wire contact points located in said path, and propelling devices to operate said wheel and move said electrode switch into connection with each of said circuit wire contact points. 23rd. In a system of telegraphic, or telephonic exchange containing switching mechanisms automatically operated by electro-mechanical devices, the combination of spiral or winding switch-path substantially as shown, and an electrode switch adapted to move along said switch-path, into contact with circuit wire contact points located in said switch-path substantially as specified. 24th. The combination with a circuit making and breaking wheel as C, of an armature lever for propelling said wheel one contact point at a time, and clutch-gears operated by a propelling wheel and its armature lever to move said circuit making and breaking wheel more than one contact point at a time, substantially as and for the purpose specified.

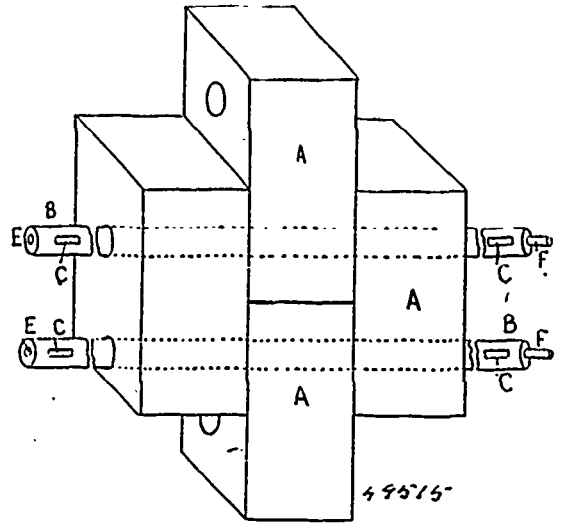
No. 49,515. Fabric for Paving, etc.

(Tissu pour pavage, etc.)

Victor Jetley and Gustave Jetley, both of London, England, 18th July, 1895; 6 years.

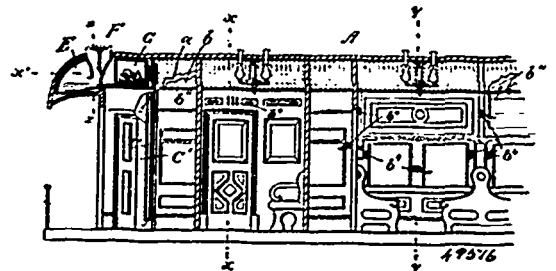
Claim.—1st. A tissue-like structure or fabric consisting of a series of blocks or the like threaded on a series of bars and means for securing the blocks on the bars, substantially as set forth. 2nd. A rigid tissue-like structure consisting of a series of blocks or the like threaded on a series of bars and means for securely keying the blocks on the bars, substantially as set forth. 3rd. A flexible tissue-like structure consisting of a series of blocks or the like threaded on a series of bars and means for securing the blocks on the bars, substantially as set forth. 4th. A rigid tissue-like structure consisting of a series of blocks A¹ threaded on a series of bars B having slots C, cotter pins D, recesses E and projections F, substantially as set forth. 5th. A rigid tissue like structure consisting of a series of blocks A having recesses A² and projections A⁴ to fit in the corresponding recesses of adjoining blocks and cover the joints between the said blocks, substantially as set forth. 6th. A rigid tissue-like structure consisting of a series of blocks A made of pieces of tube or flat material bent to the form desired and threaded on a series of bars B, substantially as set forth. 7th. A rigid tissue-like

structure consisting of a series of blocks A each having a recess A² and a projection A⁴ taking over the recess of the next block and



threaded on a series of bars B, substantially as set forth. 8th. A flexible tissue-like fabric consisting of a series of blocks A with rounded or curved ends threaded on a series of bars B, substantially as set forth. 9th. A flexible tissue-like fabric consisting of a series of blocks A having partly rounded or curved ends with a recess at one end and a correspondingly formed projection at the other and taking into or over the recess of the next block, substantially as set forth.

No. 49,516. Heating and Ventilating Railway Carriages. (Système de chauffage et ventilation des chars de chemin de fer.)



Samuel Hughes, Lindsay, Ontario, Canada, 18th July, 1895; 6 years.

Claim.—1st. In a system of ventilating railway carriages, the combination with the non-perforate sides and car lines of the monitor roof, of an interior covering forming an arched and perforated ceiling extending from the lower part of the monitor sides on one side to the lower part of the side on the other side and forming spandrels in the upper angles of the sides and carlines forming, with a non-perforate sheeting on the underside of the carlines within said spandrels, continuous longitudinal ducts having the side towards the interior of the car perforate, and allowing the air in the body of the carriage to pass through the central part of perforated ceiling into the space formed between the carlines, substantially as set forth. 2nd. In a system of ventilating railway carriages, the combination of the non-perforate sides of the monitor roof and the adjoining portion of the side roof forming side and bottom of a duct of an outer casing consisting of an extension of the monitor roof covering and a downward extension forming a side parallel to the monitor side to form an exhaust duct, substantially as set forth. 3rd. In a system of ventilating railway carriages, the combination with the non-perforate side of the monitor roof, of the adjoining part of the side roof provided with perforations to form the bottom of a duct, and an extension of the monitor roof covering its top and a downward extension of the same to form the other side thereof, limited openings between the ends of the carlines communicating with the space between said carlines, of doors B¹ adapted to close said openings and a rod B² held slidingly and having said doors secured thereto, substantially as set forth. 4th. In a system of ventilating railway carriages, the combination with the carlines and non-perforate sides of the monitor roof and the adjoining parts of the side roof, of an arched inner surface formed of perforated material secured to the lower part

of the sides and the central parts of the carlines forming spandrels in the angles which are sheeted on the carlines to form ducts, ducts on the outside of the non-perforate monitor sides formed by an extension of the outer covering of the monitor roof and downwardly extending sides, and adjustable openings between the ends of the carlines within the last mentioned ducts, substantially as set forth.

5th. In a system of ventilating railway carriages, the combination with a longitudinal duct formed externally on the non-perforate side of the monitor roof and the adjoining side roof, of passages extending down the side roof and car wall or side between the inner and outer sheeting of the same and communicating with said duct at one end and with the interior of the car by slits or openings in the inner sheeting or skin, substantially as set forth.

6th. In a system of ventilating railway carriages, the combination with the longitudinal duct formed externally on the non-perforate side of the monitor roof and the adjoining side roof, of passages extending down through the inner partitions and communicating with said duct at one end and with the interior of the car by slits or openings in the sheeting or skin of said partition and of ventilating pipes C communicating with said duct, substantially as set forth.

7th. In a system of ventilating railway carriages, the combination with the distributing fresh air duct *a* and the end of the car roof, of a water tank E within the hood overhanging the platform and extending into the car roof and having a sloping bottom provided with a draining plug and overflow, an injector or blower F having a double mouth extending above the roof surface, a cooling chamber *g* within said tank, a passage 5 at the side of said cooling chamber and connecting with said duct laterally, heating coils K adapted to heat said tank and passage, a damper I in said passage, a wind wheel J operating said damper and a tubular duct J¹ directing a current to said wheel, substantially as set forth.

8th. The combination with a confined passage 5, of a valve or damper I pivoted therein horizontally and adapted to close said passage except a vertical portion on one side, an adjustable balance weight at the upper part, a projection at the lower part, a rod linked to said projection, a chain or cord coupled to said projection, a wind wheel J on a vertical spindle having a pulley adapted to coil up said chain or cord, and a tubular conical duct J¹ extending from the chink at the side of the damper to the wind wheel, substantially as set forth.

9th. In a purifying and cooling tank the combination of a sloping bottom *c*, with longitudinal ribs *c*¹, sides *c*¹¹ and *c*¹¹¹, a curved end and top fitting the hood of the car roof end and a square end facing the interior of the car with doors *g*⁰ and *c*², a partition *f* separating one portion into a topped passage 5 and a cooling chamber *g*, curved plates *f*¹, *f*¹¹ forming an injector or blower with wide mouth at the top of the tank, one springing from the bottom and forming one end of the cooling chamber, a deflecting lip *f*² at the lower edge of the other plate, a partition *f*¹¹¹ between the upper portion of said plates and extending above the mouth, a hood *f*⁴ covering said partition at a right angle and forming two mouths 2, 2 with a common throat 3, the transverse ribs *c*² on the bottom in the passage 5 perforated near said bottom, and a rib or ridge *c*² separating said passage bottom from that of the joint fresh air duct, substantially as set forth.

10th. In an air purifying and tempering tank, the combination of a sloping bottom *c*, sides *c*¹¹ and *c*¹¹¹, square end with doors and curved combined end and top fitting the hood of the roof end, a partition *f* separating a portion of the space into an inlet 2 and 3, cooling chamber *g* and passage 5, an injector or blower consisting of the curved plates *f*¹, *f*¹¹, with partition *f*¹¹¹, and hood *f*⁴ forming the inlet 2 and 3 and a partition between the straining space and cooling chamber, a deflecting lip and ledge *f*² at the lower edge of the inlet nozzle, a strainer H supported at one end on said ledge and by a float *h* at the other, a strainer H¹ having sides *h*¹¹, and a mat strainer H¹¹ in the exit end of the passage *c*², longitudinal ribs *c*¹ on the sloping bottom, transverse ribs *c*² with perforations in the passage 5, and a ridge at *c*² at the end of said passage, substantially as set forth.

11th. The combination with a water tank, of two curved plates *f*¹, *f*¹¹ having their convex faces turned towards each other and forming a narrow nozzle below with a wide mouth at the top, a partition *f*¹¹¹ midway between said plates extending partly down at the throat and above the mouth, and a hood *f*⁴ at the upper edge of said partition, substantially as set forth.

12th. The combination of a double mouthed injector or blower F having its mouths just above the surface of the car roof and its nozzle in a water tank above the surface of the water, a cooling chamber at the rear of said throat, a water space in front and at the side thereof and a covered passage forming a continuation of said side space, a strainer in front of said injector and supported at one end on the lip of the nozzle and at the other by a float, a strainer with sides at the side of said floating strainer, a damper I in said passage, a distributing fresh air duct joined to said passage and having its bottom separated therefrom by a ridge, and an auxiliary fan in said duct near its junction with the passage, substantially as set forth.

13th. In a system of ventilating railway carriages, the combination of exhaust ducts *b* with ejectors or blowers M, discharge opening *m*¹¹ in said ducts opposite said ejectors, deflectors N forming spaces *G* around said discharge openings, auxiliary ejectors O having their discharge nozzles in the upper part of said spaces *G*, auxiliary fans L¹ in said ducts near said discharge openings, nozzle L¹¹ for said fans, dampers P near said discharge openings and doors *p* to give access thereto, substantially as set forth.

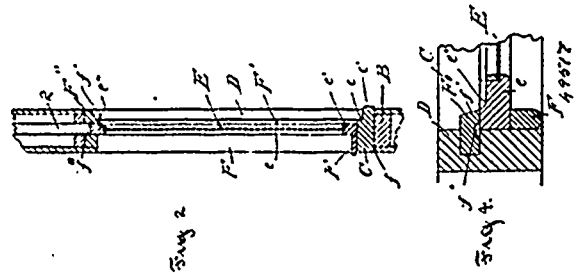
14th. In a system of ventilating railway carriages the combination of an exhaust duct *b* of which the monitor side forms one side, a discharge opening in the side near each end having lips *m*¹¹, an

ejector M having its nozzle opposite said discharge opening and deflectors *n*, *n*¹ and *n*¹¹ forming a space surrounding said discharge opening for the escape of the discharge from said opening without interference from currents parallel to said duct, substantially as set forth.

15th. The combination with the monitor roof of a railway carriage, of a central injector F, two ejectors M, one at each end, and two ejectors O, one at each end of the latter, all formed in line across said roof and near the end thereof and each consisting of curved plates having their convex faces turned towards each other, their upper edges further apart than the lower and flush with the roof surface and having a central partition projecting part of the way down the throat and above the upper edges, and the injector and one adjoining ejector at each end thereof covered with a hood at a right angle to form mouths 2, the ends of the ejectors curved sideways to form lateral nozzles, a tank into which the injector projects and two exhaust ducts having discharge openings with which said ejectors are connected opposite said discharge openings, substantially as set forth.

No. 49,517. Window Sash and Sash Frame.

(Cadre de chassis et croisée.)



Samuel Hughes, Lindsay, Ontario, Canada, 18th July, 1895; 6 years.

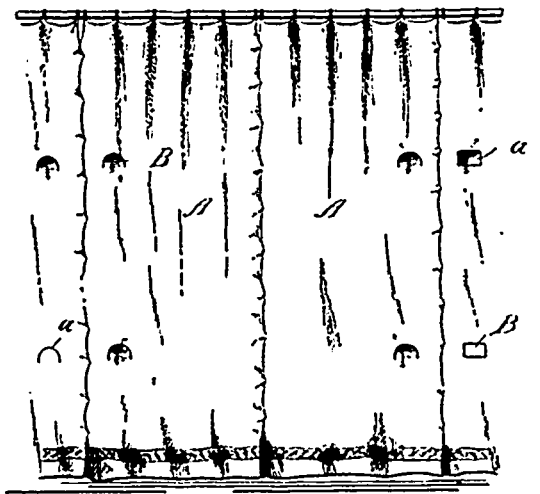
Claim.—1st. In a sash casing and sash, the combination of a sill C, having a sunk weathered face *c*¹, and vertical shoulder *c*, stops having bevelled outer edges *f*¹, and chamrels *f*¹¹ on the inner face, and sash stiles and rails *e* and *e*¹¹ having their free faces sunk or recessed so that the shoulders forming said recess fall into line with the bevelled edges of the stops, substantially as set forth.

2nd. In a window sill, the combination of a vertical shoulder flush with the face of the sash rail and a sunk weathered face, substantially as set forth.

3rd. In a sash casing and sash, the combination of an outer stop having a bevelled edge and a channel on its inner face, and the sash stiles and rails having their free faces sunk or recessed from the point at which they meet the stops, substantially as set forth.

4th. In a sash casing and sash the combination of the bottom rail and inner stop having a channel *f* formed in their faces facing the sill extending partly in both stop and rail, substantially as set forth.

No. 49,518. Berth Curtain. (Rideau de cabine.)



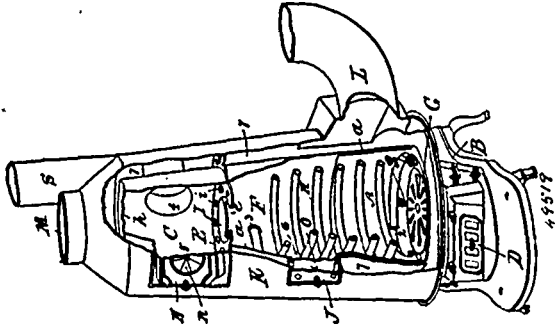
Samuel Hughes, Lindsay, Ontario, Canada, 18th July, 1895; 6 years.

Claim.—The combination, with a curtain, of a lap having an upper free edge formed by a curved or angular incision passing in a transverse direction and a substantially rectangular piece B placed between said lap and the main curtain and secured to said lap across

the base line and along its edge and to the main curtain along the side edges *b, b* of said piece so as to form a slack upper edge, substantially as set forth.

No. 49,519. Hot Water Boiler.

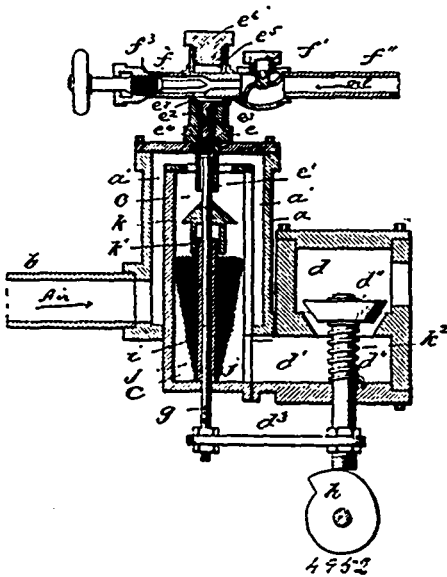
(*Chaudière à eau chaude.*)



John D. McEachren, Galt, Ontario, Canada, 18th July, 1895; 6 years.

Claim.—1st. In a portable hot water boiler, the combination with a boiler consisting of a fire pot, fire chamber and combustion chamber of a conical shape, a hot water coil contained in the said fire pot and fire chamber, of an outer casing jacket forming a ventilating space around the said fire pot, fire chamber and combustion chamber and an air inlet and air outlet connected with the space so formed, substantially as set forth. 2nd. In a portable hot water boiler, the combination, with the hot water coil *H*, of the supports *g*, in which the said coil rests, substantially as set forth. 3rd. In a portable hot water boiler enclosed in an inner and outer casing, having a heating coil spirally arranged and fire pot enclosed in the said inner casing, the combination with the said inner and outer casing having openings situated above the said fire pot, and connected together, of the door *J*, and sliding door *O*, substantially as set forth. 4th. In a portable hot water boiler, the combination with the fire pot, grate and fire chamber, having a spirally arranged conical shaped coil located therein, of the combustion chamber located above the said fire chamber, a diaphragm having a central opening and deflecting plate, separating the said fire chamber from the said combustion chamber. 5th. In a portable hot water boiler, the combination with the fire chamber and combustion chamber, of a diaphragm having a central aperture and a series of perforations around the said aperture, and a movable deflecting plate over the said central aperture, substantially as set forth.

No. 49,520. Carburetor. (*Carbureteur.*)

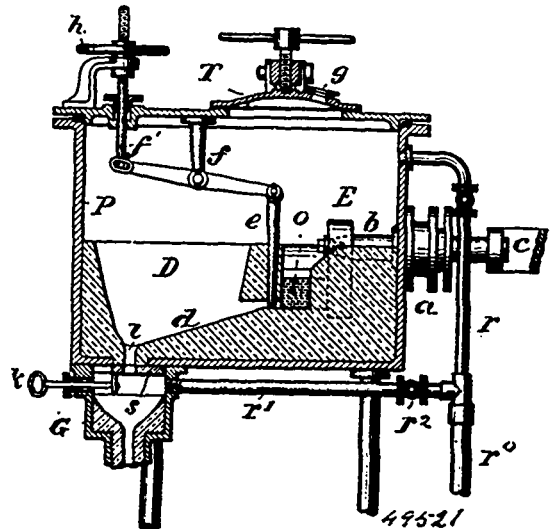


John W. Lambert, Anderson, Indiana, U.S.A., 18th July, 1895; 6 years.

Claim.—1st. A carburetor, consisting of a vapourizing-chamber having an air inlet, an oil inlet pipe opening into said chamber, an inlet valve in said pipe, a passage connecting the vapourizing-

chamber and engine, an outlet valve in this passage, and mechanism for opening and closing this latter valve and the valve in the oil inlet pipe, said mechanism closing the oil inlet valve before the vapour outlet valve is closed, substantially as described and for the purpose set forth. 2nd. A carburetor consisting of a vapourizing-chamber having an air inlet, an oil inlet pipe opening into said chamber, an inlet valve in said pipe, a rod, as *g*, passing through the vapourizing-chamber, its upper end being adapted to open the inlet valve in the oil pipe, when said rod is raised a sufficient distance, a passage leading the gas from the vapourizing-chamber, an outlet valve in said passage the stem of said valve being connected to rod *g*, and mechanism for intermittently opening and closing this valve, said mechanism intermittently opening and closing the inlet valve through the rod *g*, said oil inlet valve being closed before the gas outlet valve is closed. 3rd. A carburetor consisting of a vapourizing-chamber having an air inlet, an oil inlet pipe opening into said chamber, an inlet-valve in this pipe, a rod extending through the vapourizing-chamber and operating the oil inlet valve, a tube surrounding this rod and extending from the bottom of the vapourizing-chamber to near the upper end thereof, a cone secured on the rod above the end of the tube, said cone being formed with downwardly extending annular flange which surrounds the upper end of the tube, and a passage to lead the gas from the vapourizing-chamber. 4th. A carburetor consisting of a vapourizing-chamber *c*, an air chamber *a* surrounding said vapourizing-chamber, a space being formed between the two chambers, the air entering chamber *c*, through an opening in its top, an oil inlet tube passing through the chamber *a*, and into chamber *c*, through the air opening in the top thereof, an inlet valve in this pipe, a valve regulating the flow of oil to this inlet valve, and means for breaking and spreading the oil in the chamber *c*, and a passage leading the gas from the chamber *c*.

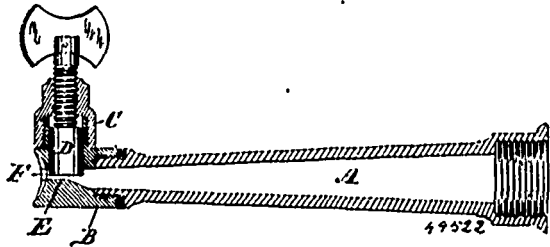
No. 49,521. Extraction of Metal by means of Electricity and Apparatus therefor. (*Extraction de métaux au moyen de l'électricité et appareil pour cet objet.*)



Edward Taussig, Bahrenfeld, Schleswig-Holstein, and German Empire, 18th July, 1895; 6 years.

Claim.—1st. The process of extracting metals from their ores and oxides or from slag and other waste and compounds consisting in subjecting the disintegrated materials to be smelted, reduced or extracted to the passage through them of a current of electricity in a rarified atmosphere, substantially as and for the purpose set forth. 2nd. An apparatus for extracting metals by means of electricity from their ores and oxides or from slag and other waste and compounds, consisting of a smelting chamber *a*, and a trough *D*, communicating therewith both being enclosed by an air-tight box, from which leads a channel *G*, to the mould or moulds to be arranged contiguous to or at a certain distance from the furnace, the latter being provided with electrodes adapted to conduct the electric current directly through the materials to be smelted, reduced or extracted, and of means for rarifying the air in said furnace and, if required, in the mould or moulds, substantially as and for the purpose set forth. 3rd. In combination with the herein described smelting furnace, a horse-shoe-shaped smelting chamber *a*, to receive the materials to be smelted, reduced or extracted, and metallic electrodes *E, E*, presenting large surfaces, and being arranged side by side of the branches of the said horse-shoe-shaped smelting chamber, substantially as and for the purpose set forth.

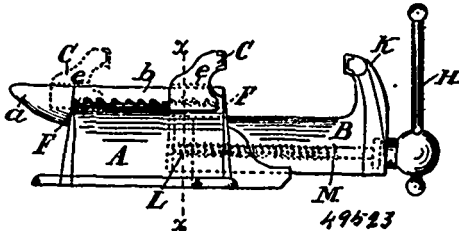
No. 49,522. Spray Nozzle. (*Lance de jet d'eau.*)



Thomas G. Holmes and Henry J. Holladay, both of Clarksburg, Ontario, Canada, 22nd July, 1895; 6 years.

Claim.—1st. A spraying nozzle, comprising an L-shaped body B, one end tapped and the other screw-threaded and provided with a valve seat E, a screw down valve D, having a cap C, screwing on said threaded end, said body B, having an oblong rectangular orifice F, in the front immediately above said seat, and the wall reduced in thickness from the exterior around said orifice, substantially as set forth. 2nd. The combination of the L-shaped tubular body B, having a valve seat E, and provided with an oblong rectangular orifice F, and the screw down valve D, closing said orifice, as set forth.

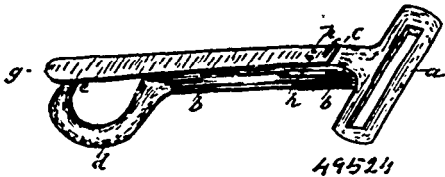
No. 49,523. Anvil and Vise Combined.
(*Enclume et étai combinés.*)



Fay O. Farwell and The Adams Company, all of Dubuque, Iowa, U.S.A., 22nd July, 1895; 6 years.

Claim.—1st. In a combined anvil and vise the body A and plate B, integral therewith, said plate projecting upon either side of the body A and having notches F, F', upon the under side of the projection of the plate B, the jaw C, having notches F¹ F¹ with spring c, in combination with the jaw K, stay B, screw M and handle H, the two jaws being cut away or curved inwardly on their inner sides so as to adapt them to grasp a pipe and hold it against the corner or edge of the anvil all arranged to operate as described and shown. 2nd. In a combined anvil and vise, the body A, having a face plate secured thereto which is wider than the body and provided with notches F, and a sharp inner edge or corner, combined with the jaw C, which is adjustable by means of the notches on the body, and the jaw K, both jaws being recessed on their inner sides and provided with sharp edges or corners, whereby a pipe or round object may be clamped against the edge of the body, substantially as described.

No. 49,524. Harness Snap. (*A grafe de harnais.*)



Rhoda Ann Law, assignee of Charles Douglass Bemrose, both of Neepawa, Manitoba, Canada, 22nd July, 1895; 6 years.

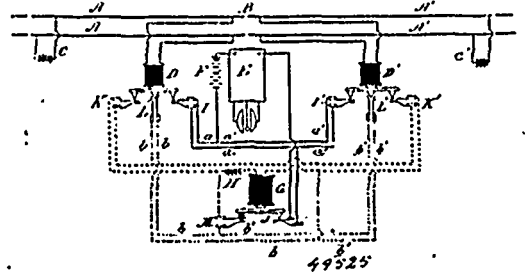
Claim.—As an article of manufacture a harness snap, comprising a hook having loop or eyelet A, haft B, flattened on the outside of shoulder C, curve D, flattened hook point E, and spring H rivetted to the body of the hook as shown and described.

No. 49,525. Electric Signal. (*Signal électrique.*)

James J. Ross and George R. Holden, both of Detroit, Michigan, U.S.A., 22nd July, 1895; 6 years.

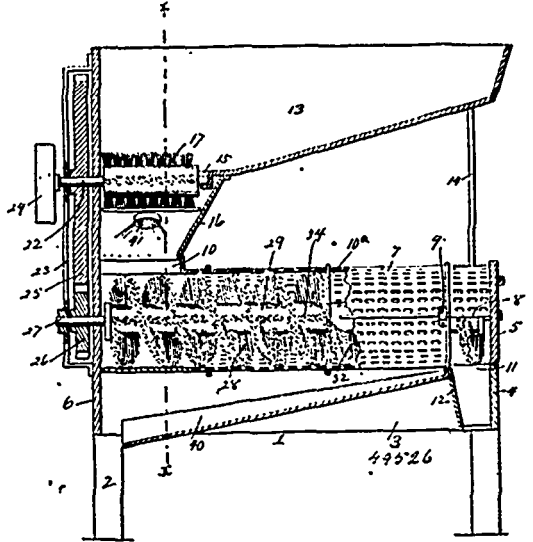
Claim.—1st. In an electric signal for railway crossing, the combination of three electric circuits, one containing an electric alarm and the other two circuits forming the main and shunt circuit of a locking relay, two normally open brakes in each circuit, those of the alarm circuit and the shunt circuit being located in two branches, one break being adapted to be closed on the passage of a train over a

portion of the track on one side of the crossing and the other on the passage of the train over a portion of the track on the other side



of the crossing, and two brakes controlled by the locking relay, one normally open included in the shunt circuit, and one normally closed included in the alarm circuit, all substantially as described. 2nd. In an electric railway signal, the combination of two normally closed rail circuits at opposite sides of a crossing, each including a track relay adapted to be short circuited by the train while passing over the rails of an electric alarm circuit having two branches containing normally open brakes controlled by the track relays, a controlling relay provided with a main and shunt circuit, two normally open brakes in said main circuit controlled by the track relays, two normally open brakes in branches of the shunt circuit controlled by the track relays, a normally open brake in the shunt circuit controlled by the controlling relay, and a normally closed brake in the alarm circuit controlled by the controlling relay, substantially as described.

No. 49,526. Machine for Cleaning Fruit.
(*Machine pour nettoyer les fruits.*)

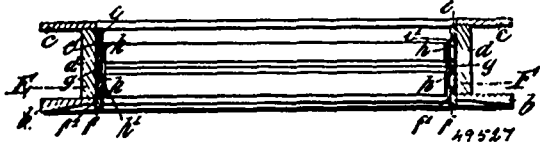


Jared Henry Beamer, Hamilton, Ontario, Canada, 22nd July, 1895; 6 years.

Claim.—1st. A fruit cleaning machine comprising a cylinder perforated from an intermediate point of its length to the discharge end and having the imperforate portion at its forward end, a rotary brush arranged in said cylinder, a feed hopper adapted to discharge into the perforated cylinder, and a spray nozzle connected with a source supply and arranged so as to enable it to spray water on the fruit before the same enters the cylinder, substantially as and for the purpose set forth. 2nd. In a fruit cleaning machine, the combination of a foraminous or perforated, horizontally disposed cylinder and a rotary brush arranged in said cylinder and having spirally arranged rows of fine steel wire bristles and also having the diametrically opposite, straight, longitudinal rows of fine steel wire bristles arranged parallel to its axis, the said fine steel wire bristles of said straight rows being shorter than the fine steel wire bristles of the spiral rows, substantially as and for the purpose set forth. 3rd. In a fruit cleaning machine, the brush described comprising the body formed of the two semi-circular sections and the end caps secured on the ends of the said sections and serving to hold the same together, the spirally arranged and straight rows of fine steel wire tufts arranged in the semi-circular body sections and continuous wires securing the said fine steel wire tufts in the body sections, substantially as and for the purpose set forth. 4th. A fruit cleaning machine, comprising the main frame having the door 5 at one end, the horizontal cylinder arranged in the main frame and perforated from an intermediate point of its length to its discharge end

and having the forward imperforate portion, the rotary cleaning brush arranged in said cylinder in alignment with the door 5, and having spirally arranged rows of fine steel wire bristles 32, and straight longitudinal rows of fine steel wire bristles 34, of a less length than the bristles 32, the hopper arranged above the cylinder and having an opening in its bottom and also having the depending spout communicating with the interior of the cylinder, the rotary feed facilitating brush arranged in the opening in the hopper bottom, the feed regulating plate arranged at the bottom of the hopper and having the concave portion at the inner end and an angular portion 20, at its outer end, a screw for adjusting and adjustably fixing said plate, taking through an aperture in the angular branch thereof, suitable means for rotating the feed facilitating brush and the cleaning brush, and a spray nozzle connected with a source of supply arranged so as to enable it to spray water on the fruit before the same enters the cylinder, substantially as and for the purpose set forth.

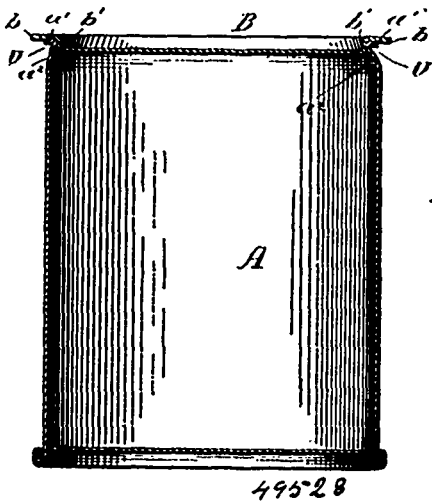
No. 49,527. Window Sash. (Croisée de fenêtre.)



Charles Joseph Cooze, Carterton, Wellington, New Zealand, 22nd July, 1895; 6 years.

Claim.—1st. The combination of a window sash having pivots h^1 with hanging slides h sliding in trenches formed in the window frame by beads c, f and g , as and for the purposes substantially as described herein. 2nd. The combination of a window sash hanging on pivots h^1 attached to hanging slides h and fitted with tongues p working into the said hanging slides, as and for the purposes substantially as described herein. 3rd. The metallic slides h carrying sash cord k and pivot pin h^1 , as and for the purposes substantially as described herein. 4th. In a window sash as described herein, the two cords of each sash actuated by one weight and two guide pulleys having an inspection slips, as and for the purposes substantially as described herein. 5th. The improved window frame and sash apparatus, substantially as described.

No. 49,528. Pail. (Seau.)



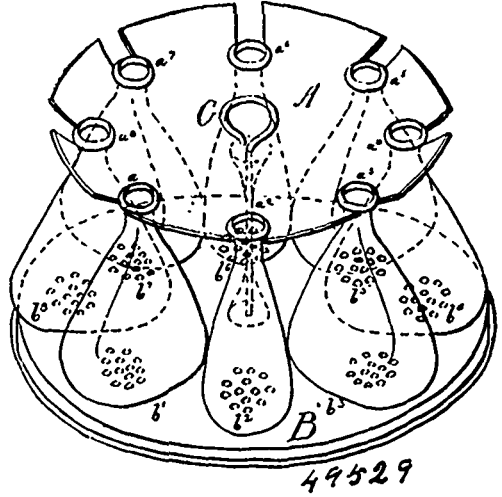
John Alden Steward, East Clarendon, Vermont, U.S.A., 22nd July, 1895; 6 years.

Claim.—1st. A can or pail body having at an end thereof an inwardly-projecting bead merging into a seam-flange, and a cover therefor having an outwardly-projecting bead directly at its seam-flange, substantially as described. 2nd. A can or pail body having at an end thereof an inwardly-projecting bead merging into a seam-flange, and a cover therefor having an outwardly-projecting bead terminating in a seam-flange, the respective extreme diameters of the beaded portions being such as to separately connect the parts when assembled and to form contact portions of the body and cover seam when permanently united, substantially as specified. 3rd. The combination with a can body having at its end an inward bevel and an outwardly-projecting seam-flange, of a cover or head having an outward bevel and seam-flange, said bevels being proportioned to permit the insertion of the cover and its separable retention within the body, substantially as specified. 4th. A can or pail body having at an end thereof an inwardly-projecting bead merging in a flange projecting outwardly at substantially a right angle to the body, and a cover having an outwardly-projecting bead and a flange projecting

outwardly in a plane substantially parallel with the main portion of the cover, said cover being frictionally held within the body with its flange in position to be seamed with the flange of the body, substantially as specified.

No. 49,529. Milk Sterilizer.

(Appareil pour stériliser le lait.)

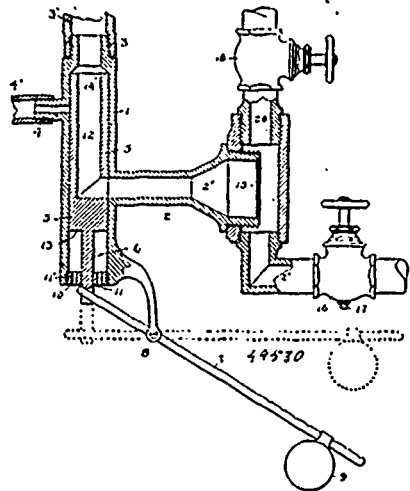


Alexis Robert, Montreal, Quebec, Canada, 22nd July, 1895; 6 years.

Claim.—The combination of the shields A & A , and the grooves $a, 1, 2, 3, 4, 5, 6, 7$ and 8 , and the groups of holes $b, 1, 2, 3, 4, 5, 6, 7$ and 8 , substantially as and for the purposes herebefore set forth.

No. 49,530. Fluid Pressure Governor.

(Régulateur à pression de fluides.)



William Hoffman, Salt Lake, Utah, U.S.A., 22nd July, 1895; 6 years.

Claim.—1st. In a fluid pressure governor, the tube 1, provided with suitable nipples 2 and 3, and a safety outlet 4, and the piston 5, having the bent passage 12, and the weighted lever pivoted to the piston rod to counterbalance a part of the downward pressure in the valve, the power arm of the said lever being lowest when the valve inlet is open, and horizontal when the safety outlet is open, whereby the leverage increases as the valve closes and reaches a maximum when the valve is open, substantially as set forth. 2nd. In a fluid pressure governor, the tube 1, provided with suitable nipples 2 and 3, and a safety outlet 4, and the piston 5, having the bent passage 12, and means for counterbalancing part of the downward pressure on the valve, said means exerting a minimum effect when the inlet is fully open, and a maximum when the safety outlet is open, and the inlet closed, and said valve having greater surface exposed to the downward than to the upward pressure of the fluid, substantially as set forth. 3rd. In a fluid pressure governor, the tube 1, provided with suitable nipples 2 and 3, and a safety outlet 4, and the piston 5

having a bent passage 12, whereby the passages through the nipples may communicate, said piston exposing more surface to downward than to upward pressure, and when the inlet is closed exposing no surface to pressure from the main in either direction of the piston's path, and having means distinct from said upward pressure for moving it to open the inlet, said means having a maximum effect when the inlet is closed, all substantially as set forth. 4th. The combination of a fluid pressure governor, and a distributing system with an inlet pipe 21, having a branch 20, and a strainer 15, the branch pipe being provided with a cock the fluid may either be cut-off in said branch pipe or be permitted to flow therethrough to wash the strainer, substantially as set forth. 5th. The combination of the cylinder having inlets and exits as described, the piston having a passage therethrough, and the counterbalance adapted to automatically open a safety vent, substantially as set forth, whereby the necessity of packing is avoided, and whereby the device is made operative notwithstanding accidental leakage, and whereby no choking by sediment or corrosion can occur except when the inlet is shut and the safety escape open. 6th. The combination of the cylinder having inlets and exits as described, the piston having a passage therethrough and the counterbalance adapted to automatically open a safety vent, and a waste cock 16, whereby the circulating system and the governor can be entirely drained, the necessity of packing avoided, and the device made operative notwithstanding accidental leakage, and whereby no choking by sediment or corrosion can occur except when the inlet is shut and the safety escape open, substantially as set forth.

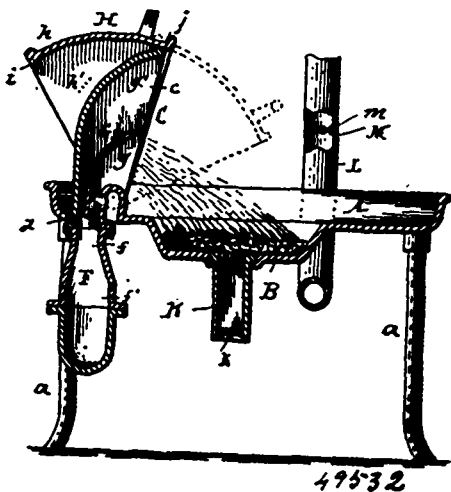
No. 49,531. Nut Lock. (Clé à écrou.)



Thomas McDonald, jr., Allegheny, Pennsylvania, U.S.A., 22nd July, 1895; 6 years.

Claim.—1st. The herein-described nut lock, comprising the spring-washer, the locking pivotally connected to said spring-washer at one end and designed to engage a nut at its other end, substantially as set forth. 2nd. The herein-described improved nut lock, comprising the spring-washer having a bifurcated end, the locking lever pivoted to said bifurcated end and having a post or abutment, the other end of said locking lever being designed to engage a nut, substantially as set forth. 3rd. The herein-described improved nut lock, comprising the spring-plate having a bolt opening at or near one end, its other end being bifurcated to form pivot bearings, and the locking lever having hinge pins designed to be held by said bifurcated end, a heel, and a post abutment, substantially as set forth.

No. 49,532. Forge. (Forge.)

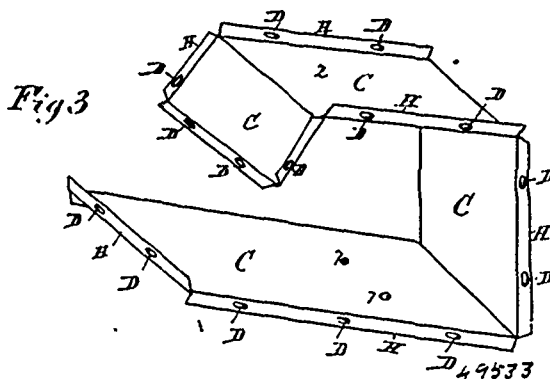


The Buffalo Forge Company, assignee of Henry William Wendt, both of Buffalo, New York, U.S.A., 22nd July, 1895; 6 years.

Claim.—1st. The combination with the hearth, of an upright smoke funnel located on one side of the hearth, leaving the space over the hearth entirely free, the said smoke funnel having a lateral opening or inlet at the hearth and a fan whereby the products of combustion rising from the hearth are drawn into said smoke funnel, substantially as set forth. 2nd. The combination with the hearth,

of a smoke funnel having its inlet arranged above the hearth and its outlet extending downwardly, and a partition dividing the funnel into a main passage and a secondary passage, substantially as set forth. 3rd. The combination with the hearth and the cylindrical suction pipe arranged below the hearth, of a smoke funnel having its inlet arranged above the hearth and having an elongated outlet, and a coupling pipe having an elongated outlet which connects with the elongated outlet of the funnel, and a cylindrical outlet which connects with the cylindrical suction pipe, substantially as set forth. 4th. The combination with the hearth, of an upright smoke funnel arranged at one side of the hearth and having its inlet arranged to open laterally towards the hearth, and a pivoted head forming an extension of said funnel and capable of swinging toward and from the hearth for lengthening and shortening said funnel, substantially as set forth. 5th. The combination with the hearth, of a smoke funnel having its inlet arranged above the hearth, and a movable hood adapted to form an extension of the funnel and consisting of a segment arranged over the top of the funnel and side pieces arranged on opposite sides of the funnel and pivoted at their lower ends to the sides of the funnel, substantially as set forth. 6th. The combination with the hearth and smoke catcher arranged adjacent thereto, of a fan or blower having its blast spout connected with the hearth, a suction pipe leading from the smoke catcher to the eye of said fan, and a smoke pipe leading from the blast spout of the fan, substantially as set forth. 7th. The combination with the hearth and a smoke catcher arranged adjacent thereto, of a fan or blower having its blast spout connected with the hearth, a suction pipe leading from the smoke catcher to the eye of said fan, and a smoke pipe leading from the blast spout of the fan and having an automatic damper, substantially as set forth.

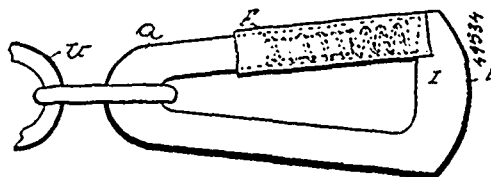
No. 49,533. Cooking Stove. (Poêle de cuisine.)



John Milne, Hamilton, Ontario, Canada, 23rd July, 1895; 6 years.

Claim.—1st. A cooking stove having a sheet steel oven formed of one entire piece provided with side flanges containing oval holes through which bolts pass to fasten the oven to the frames of the stove, substantially as and for the purpose specified. 2nd. A cooking stove having a sheet steel oven formed of one entire piece provided with side flanges in which are made oval holes through which bolts pass to fasten the oven to the frames of the stove by nuts on their threaded ends, in combination with the air chamber in front of the oven, all substantially as described. 3rd. In a cooking stove, the combination of the sheet steel oven and the flue strips supporting the same, formed with double projections 5 for a substantial bearing for the oven, all constructed as described. 4th. In a cooking stove, the combination of the sheet steel oven formed in one piece with countersunk bolt openings in the bottom flanges on every side with oval bolt openings therein to allow of expansion and contraction, with the flue strips constructed with side projections, between which pass the bolts to secure the oven to the leg bottom of the stove, all constructed substantially as and for the purpose specified.

No. 49,534. Links or Couplings for Poles and other Chains, also Pole Pieces and Traces. (Maille ou attelage pour timon, etc.)



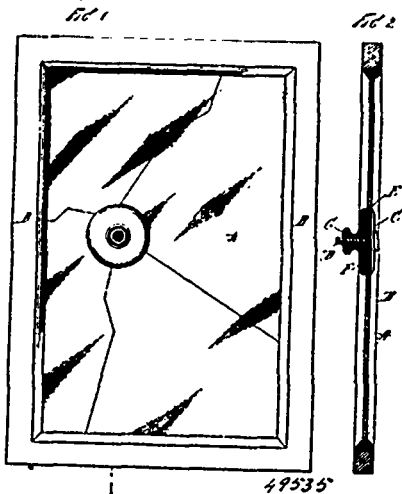
Alfred Wood, Bouverie Street, Folkestone, Kent, England, 23rd July, 1895; 6 years.

Claim.—1st. In links or fastenings for pole straps or chains, traces and the like, the use of a sliding-tube or sleeve F, substantially as

hereinbefore described, with reference to figures 1, 2, 3, 4, 5 and 6. 2nd. In the manufacture of links or fastenings for pole straps or chains, traces and the like, the application of spiral springs and sliding tubes or sleeves to the arms, whether rigid or joined, of coupling or slip-links, substantially as hereinbefore described and as illustrated by figures 1, 2, 3, 4, 5 and 6 of the accompanying drawings.

No. 49,535. Clamp or Clamps for Broken Glass.

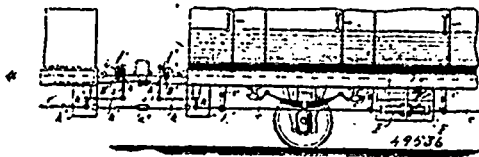
(*Lien et agrafe pour le verre brisé.*)



Frederick Everitt, Dunham, New York, State of New York, U.S.A., 23rd July, 1895; 6 years.

Claim.—1st. A glass clamp or clasp, consisting of a plate, provided with a screw threaded bolt or pin adapted to be passed through a puncture or hole in the glass, a plate mounted on said pin or bolt, and a screw threaded thumb nut, by which said plates are caused to clamp and hold the glass, substantially as shown and described. 2nd. A glass clamp or clasp, consisting of a plate or head, provided with a screw threaded bolt or pin, adapted to be passed through a punctured hole in a glass, a washer mounted on said pin or bolt and means for clamping said washer and said plate or head to the glass on opposite sides thereof, substantially as shown and described. 3rd. A glass clamp or clasp, consisting of a head or plate, provided with a screw threaded bolt or pin, adapted to be passed through a puncture or hole in a glass, a washer of cork or other material mounted on said bolt or pin, a plate also mounted thereon, and a screw threaded thumb nut, by means of which the parts may be securely clamped to the glass, substantially as shown and described.

No. 49,536. Car-Coupling. (*Attelage de chars.*)

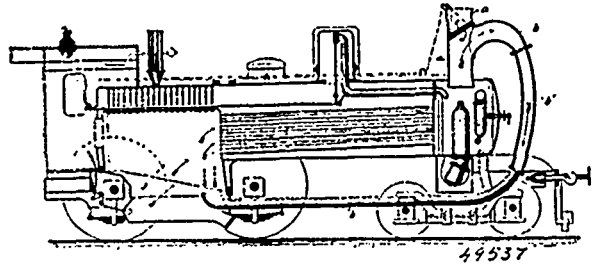


Carl Moradelli, Munich, Bavaria, Germany, 23rd July, 1895; 6 years.

Claim. 1st. In a car-coupling, the combination of hooks pivotally attached to the car ends, frames elastically attached to the said car ends and arranged underneath said hooks, said frames being capable of receiving the hook above them, and also the hook of the next car, means for letting down the said hooks into the said frames when overlapping each other, and means for tightening up the latter, substantially as described. 2nd. In a car-coupling, the combination of the pivoted hooks g , g , and frames a^2 , a^2 thereunder, having rods or bars a , tapered edges to the said frames, a sleeve b , loosely mounted over the said bar, and means in connection therewith for tightening up the said frames, a disc having spherically formed surface to rest against the end of the said sleeve, said disc resting against around shoulder of the bar a , a spring c , arranged around the said bar a , a nut to support the opposite end of the spring c , and a second light spring c^1 , between said nut, and a fixed bearing l , on the carriage frame, through which the said bar a , extends in the manner, and for the purpose substantially as described. 3rd. In a car-coupling, the combination of hooks g^1 , g^1 , pivotally attached to the car ends, frames a^2 , a^2 , having tapered ends, elastically attached to the said cars, and means for tightening up said hooks, a bar M , to operate said hooks and means for arresting the

said bar in position, substantially as described. 4th. The combination of pivotally attached hooks g , g , and frames elastically mounted as specified, and a device for disconnecting the cars consisting of electric magnets arranged underneath the car, armatures, to the same adapted to raise the coupling hooks when attracted by said magnets, separate conductors from each magnet to a switch-board on the locomotive or at other convenient position on the train, a dynamo, and means for connecting same with the magnets, substantially as described. 5th. The combination of electro-magnets F , arranged underneath each car separate conductors from the magnets of each car to the locomotive or other part of the train a dynamo, and means for connecting the same to any one of said car magnets, armatures to said magnets and means in connection with same to operate car hooks when the magnets are excited, free lying conductor ends at the end of each car, elastically mounted and having cylindrical contact heads a^4 , with conically pointed ends in the manner, and for the purpose substantially as described. 6th. The combination of electro-magnets arranged under each car, armatures to said magnets, a coupling hook g , a spindle h , pivoted crank pin to engage said hook stem, a bell, crank lever k , k^1 , pivoted to the car, and having its horizontal arm connected to an arm of the shaft h , a connecting rod r , to connect the free end of said angle lever with the armature, and means for exciting each of the magnets of each car from any predetermined point of the train, separately in the manner and for the purpose substantially as described.

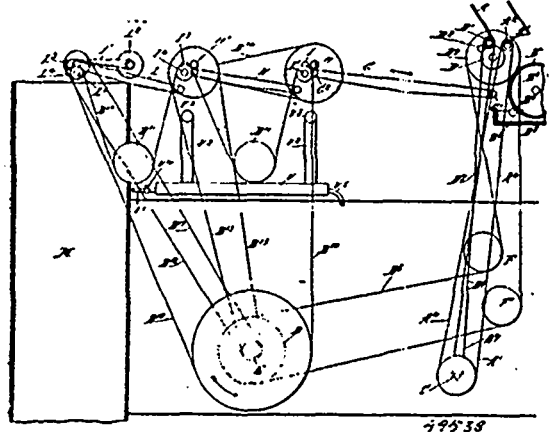
No. 49,537. Smoke Consuming Apparatus for Locomotive Boilers. (*Foyer fumoir pour chaudières de locomotives.*)



Albert Silbermann, Berlin, Prussia, German Empire, 23rd July, 1895; 6 years.

Claim.—1st. In a locomotive or other boiler, the combination of a pipe b extending from the chimney to the fire-box, and means for regulating the exit of combustion gases from the said chimney, in the manner and for the purpose substantially as described. 2nd. In combination, with a boiler, the pipe b extending from the chimney to the fire-box, and a sieve d in the chimney above the point of communication of said pipe with the chimney and a valve c to cover said sieve and means for operating said valve, substantially as described. 3rd. The combination of a pipe b extending from the chimney of a boiler to the fire-box and having its ends enlarged at the points of junction with the chimney and fire-box, a removable front piece to said pipe and means in the chimney for regulating the exit of surplus combustion gas, in the manner and for the purpose substantially as described and shown.

No. 49,538. Method of and Means for Preparing Bristles for Brush Making. (*Méthode et moyen de préparer les soies pour la fabrication des brosses.*)



Alfred Seaman Miles, Brooklyn, New York, U.S.A. 23rd July, 1895; 6 years.

Claim.—1st. The herein described method of treating bristles, the

same consisting in subjecting them as they are being moved to the action of a quiet current of steam, with or without the preliminary chilling process, for the purposes set forth. 2nd. The method of straightening and arranging bristles, consisting in effecting their separation, preventing electrification and permitting them to fall through an open space, substantially as explained. 3rd. The combination, with the hopper of the dampening roll and the strengthening roll, one or both, as set forth. 4th. The combination, with the hopper and the endless belts of the projecting rolls constructed and operating, substantially as set forth. 5th. In a machine for straightening bristles, the combination of the travelling aprons and the chute, the aprons being moved at different speeds, for the purposes explained. 6th. In a machine for straightening bristles, the combination of travelling aprons and the steam conduits located below them, for the purposes set forth. 7th. The chute for receiving the bristles from the aprons, the same being supplied with the fluted bottom and operating with or without the wind guard, substantially as set forth. 8th. In combination with the chute, the roller table in advance of the discharge end of the chute for receiving the bristles, the same operating as set forth, with or without the endless apron beneath it, substantially as shown.

No. 49,539. Fencing Wire. (*Fil de fer pour clôtures.*)

Fig. 1



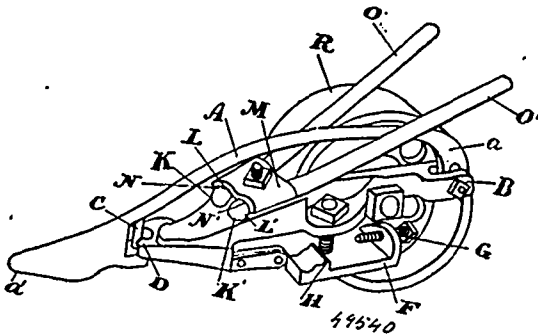
Fig. 2



John B. Cleveland, Indianapolis, Indiana, U.S.A., 23rd July, 1895; 6 years.

Claim.—The above described fencing-wire consisting of four wire strands arranged in pairs, each pair being twisted together in one direction to form independent strands, the strands thus formed being then twisted together in the opposite direction, substantially as set forth.

No. 49,540. Pea Harvester. (*Appareil pour récolter les pois.*)



Richard Sylvester, Lindsay, Ontario, Canada, 23rd July, 1895; 6 years.

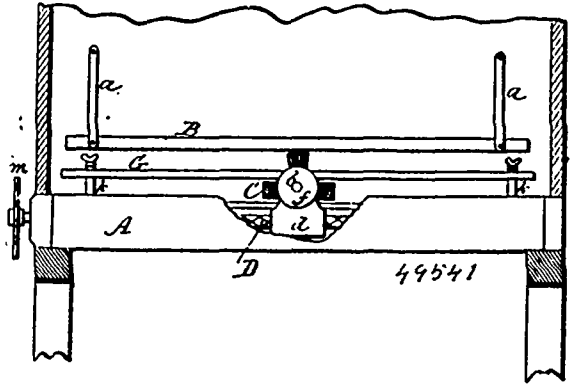
Claim.—1st. In a pea harvester, the combination with the gatherer of two separator rods connected to the top of the gatherer, adapted to separate the cut from the uncut peas, and means for connecting the separator to the gatherer, substantially as specified. 3rd. In a pea harvester, the combination with the pea harvesting attachment, the cutter bar, a clamp securing the pea harvesting attachment to the cutter bar, and means to adjust the clamp to the cutter bar, substantially as specified. 4th. In a pea harvester, the combination with the gatherer of a separator rod connected to the top of the gatherer, and a wheel pivotally connected to the pea harvester attachment, substantially as specified.

No. 49,541. Bolting Apparatus. (*Appareil à embouteiller.*)

Colin Francis Hardy, Scottsville, New York, U.S.A., 23rd July, 1895; 6 years.

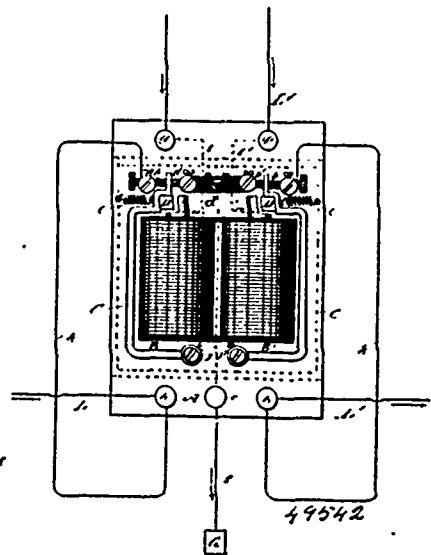
Claim.—1st. In a bolting apparatus, the combination of the rotary brush C, the yoke e, which forms its bearings, the double

acting screw shaft D, the nut *f*, attached to the yoke and resting on the screw shaft, the friction wheels *ff*, on the brush shaft, and the



ways *g g*, on which the friction wheels run, as shown and described and for the purpose specified. 2nd. In a bolting apparatus, the combination of the rotary brush G, the yoke e, which forms its bearings, the double acting screw shaft D, the nut *f*, attached to the yoke and resting on the screw shaft, the friction wheels *ff*, on the brush shaft, the ways *g g*, on which the wheels travel, the loose rollers *h h*, on the brush shaft, and the bars G G, resting over the rollers, as shown and described and for the purpose specified.

No. 49,542. Automatic Line Discharger. (*Ligne de décharge automatique.*)



Jacinto Ferrer Ganduxer, Gracia, Barcelona, Spain, 23rd July, 1895; 6 years.

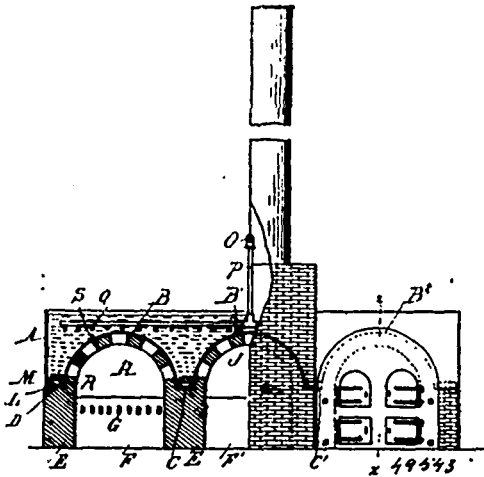
Claim.—1st. In a line discharger, the combination of an electro-magnet, a spring-actuated armature, back contacts connected with the line, and front contacts connected with the ground, substantially as specified. 2nd. In a line discharger, the combination of a pair of bar electro-magnets, two armature levers oppositely arranged with respect to each other and carrying armatures held normally in the field of the magnets, and front and back contacts connected with the line and ground, substantially as specified. 3rd. In a line discharger, the combination of the magnet B provided with a notched pole, the bent armature lever C carrying the armature D, the retractile spring e, the contact screws *b, b'*, and the line connections, substantially as specified.

No. 49,543. Apparatus for Manufacturing Salt. (*Appareil pour la fabrication du sel.*)

Thomas Craney, Bay City, Michigan, U.S.A., 23rd July, 1895; 6 years.

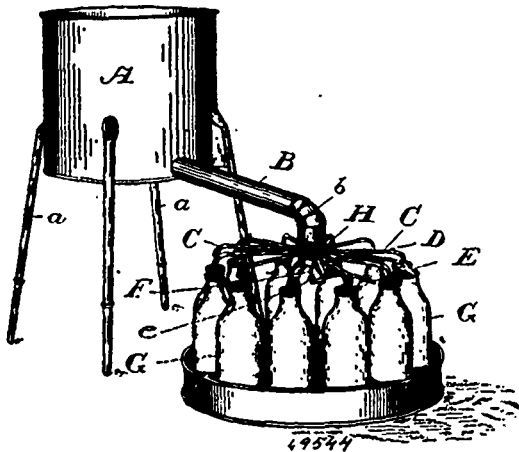
Claim.—1st. In an evaporating apparatus, the combination of a metallic pan, having an arch shaped bottom, a furnace beneath the same, and sectional brick arches or checker work on the under face of the bottom, substantially as described. 2nd. In an evaporating apparatus, the combination of a metallic tank, an arch shaped bot-

tom, troughs at each side of the arch shaped bottom, conveyors in the troughs, and a furnace under the arch shaped bottom. 3rd. In



an evaporating apparatus, the combination of a metallic pan, having three arch shaped bottom sections, horizontal bottom sections between the arch shaped sections, furnaces beneath the outer arches, connections between the inner and outer arches at the rear end, a stack at the forward end of the central arch, and conveyors in the horizontal bottom sections. 4th. In an evaporating apparatus, the combination of a metallic pan having a series of arch shaped bottom sections and intermediate horizontal bottom sections, of furnaces beneath the arches, walls supporting the tank under the horizontal section, the side extensions R of the walls beside the horizontal sections and the conveyors between the arches. 5th. In an evaporating apparatus, the combination of a metallic pan having a series of arch shaped bottom sections and intermediate horizontal bottom sections, furnaces beneath the arches, conveyors in the horizontal sections, air pipes depending into the tank, cross pipes at the bottom of the air pipes extending over the arches, and having jets directed downward, substantially as and for the purpose described.

No. 49,544. Bottling Machine. (Machine à embouteiller.)



James Iredale, Toronto, Ontario, Canada, 23rd July, 1895; 6 years.

Claim.—1st. In a bottling machine, a reservoir supported in a suitable position, in combination with a tap provided with a series of lateral discharge orifices and radial spouts fitting into and extending from the same, a plunger fitting within said tap so as to normally close the said orifices when seated, and means for raising the said plunger from its seat so as to permit the liquid to flow through the radial spouts, substantially as described and for the purpose specified. 2nd. In a bottling machine, the tap H provided with lateral discharge orifices J, in combination with arm D, lever E, plunger K, and plunger rod F, substantially as and for the purpose specified. 3rd. In a bottling machine, the tap H provided with shoulders I, and lateral discharge orifices J, in combination with arm D, lever E, cup c, plunger K, plunger rod F, and vertical sleeve L, substantially as described and for the purpose specified. 4th. In a bottling machine, the reservoir A, provided with legs a, in combination with main spout B, provided with elbow b, tap H, pro-

vided with shoulders I, and lateral discharge orifices J, radial spouts C, arm D, lever E, cup c, plunger K, plunger rod F, and vertical sleeve L, substantially as described and for the purpose specified.

No. 49,545. Manufacture of Pharmaceutical Products. (Fabrication de produits pharmaceutique.)

Farbenfabriken, Vormals Friedrich Bayer & Co., Elberfeld, assignees of Jacob Meyer, Frankfort-on-the-Main, both of Germany, 23rd July, 1895; 6 years.

Claim.—1st. The process for the production of pharmaceutical products, consisting in heating tanning with a mixture of glacial acetic acid and acetic acid anhydride, substantially as described. 2nd. As a new article of manufacture, the pharmaceutical product consisting of a mixture of mono and diacetyl tannin and which forms an amorphous light yellow powder soluble in alcohol, insoluble in water and dilute acid, soluble in cold dilute alkali, and which is precipitated from its alkaline solution by means of acids in an unaltered state, substantially as described.

No. 49,546. Grain Dryer. (Stchoir à grains.)

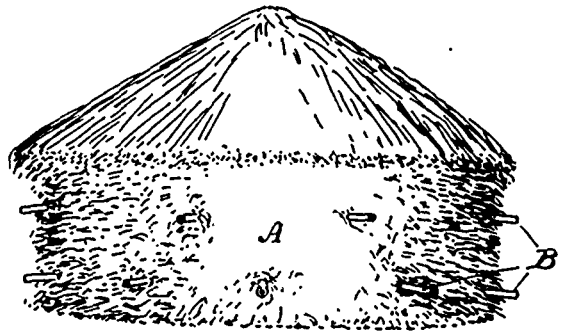
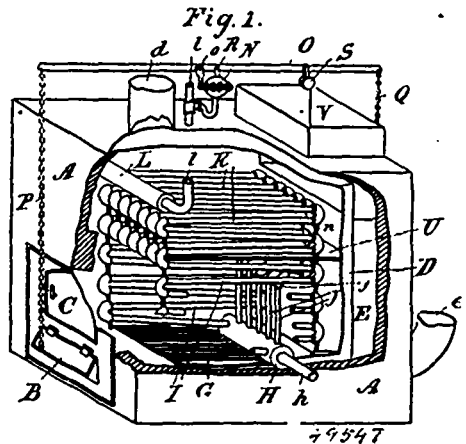


Fig. 1 49546

John Andrew Rivington, Carp, Ontario, Canada, 23rd July, 1895; 6 years.

Claim.—1st. The combination of a stack of cut grain, or hay, with one or more pipes leading from the outside to the interior of the stack so as to convey air through the stack. 2nd. The combination of a stack of cut grain or hay with one or more perforated pipes, so laid as to allow of the passage of air through them to the interior of the stack. 3rd. The combination of a stack of cut grain or hay with one or more half pipes or troughs, so placed as to ensure ventilation of the stack, substantially as set forth.

No. 49,547. Hot Water Boiler. (Chaudière à vapeur.)

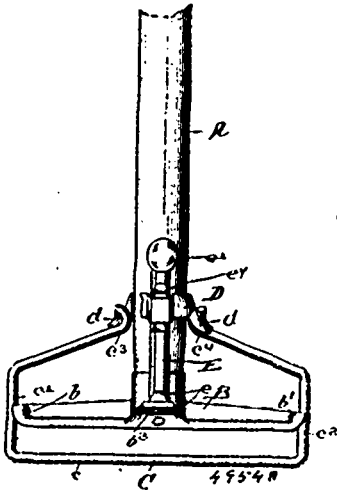


John D. McEachren, Galt, Ontario, Canada, 23rd July, 1895; 6 years.

Claim.—1st. A hot water or steam boiler having an inner and outer casing, the said inner casing being of metal or other suitable material as ventilation may be required and the outer casing of brick work, a space between the said casings, an air inlet and an air outlet communicating with said space, a series of tubes forming the boiler, the said tubes forming the sides, end and top of the fire box, substantially as set forth. 2nd. In a brick set boiler, the combination with the brick work A, of the metal or other suitable material, lining D surrounding the boiler and furnace, substantially as set

forth. 3rd. In a hot water or steam boiler, the combination with the fire box of the tubes or coils I, forming the sides of the said fire box, substantially as set forth. 4th. In a tubular boiler, the combination with the tubes forming said boiler of the counter bored fittings M, substantially as set forth. 5th. In a tubular boiler, the combination with the tubes forming the said boiler of the counter bored fitting M, having a hollow depending supporting lug n, whereby the said tubes are splayed and supported, substantially as set forth. 6th. The fitting M, being counter bored, and also threaded for the reception of tubes or pipes, &c. and for the purpose set forth.

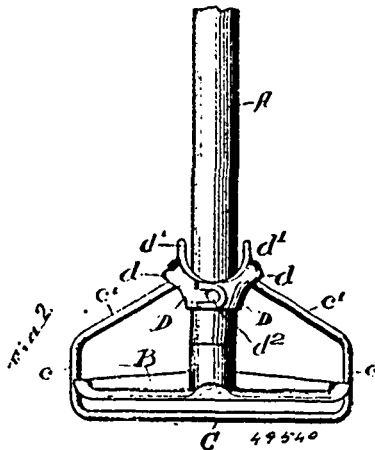
No. 49,548. Mop Head. (Tête de guipon.)



Charles Morgan, Freeport, Illinois, U.S.A., 23rd July, 1895; 6 years.

Claim.—1st. The combination in a mop-head, of the handle A, the head proper B, the collar D, the loop C, having the horizontal portion c, the end portions c¹, c², and hooked to the collar D, the ratchet lever E, pivoted to the head proper and provided with ratchet teeth to engage the collar, and a spring interposed between it and the handle to keep up the engagement between the lever and the collar, substantially as described. 2nd. The combination with the handle A, of the head B, having the end sockets b, b¹, and staple b², the lever E, having the hook c, the ratchet teeth c¹, and spring c², the collar D, having ears d, to which the ends of the loop are hooked, and a tooth or edge d¹, adapted to engage the ratchet teeth c¹, substantially as described.

No. 49,549. Mop Head. (Tête de guipon.)



Charles Morgan, Freeport, Illinois, U.S.A., 23rd July, 1895; 6 years.

Claim.—1st. In a mop-head, the combination with the mop-handle and a cross-bar attached thereto, of a bail co-acting with the cross-bar

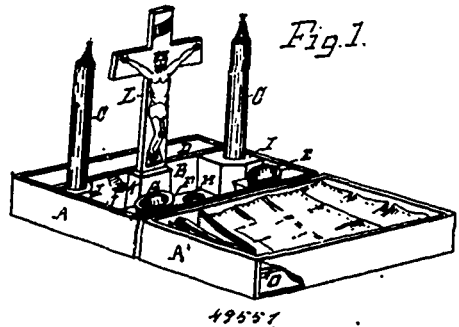
and having a central portion approximately parallel thereto and parts approximately at right angles to the said central portion and adapted to permit sliding movement of the bail with reference to the cross-bar, a clasp sliding on the handle and provided with a lever adapted to impinge, at one end, upon the handle, the opposite end of the lever being in engagement with the corresponding end of the bail and the bail being normally under tension and adapted to press the impinging end of the lever against the handle. 2nd. In a mop-head, the combination with a handle provided with a suitable cross-bar, of a clasp made up of two levers pivoted together and each adapted to impinge at one end upon the handle, and a bail having its central portion normally parallel to the cross-bar and its ends in engagement with the free ends of said levers and adapted to press them apart, thereby pressing the impinging ends of the levers firmly against the handle. 3rd. The combination with the handle A, having the cross-bar B, of the clasp made up of the semi-annular parts D, D, formed with gudgeons d², d², and corresponding sockets and the bail having the central portion C, parallel to the cross-bar, the approximately parallel portions c, c, and the oblique portions c¹, c¹, terminating in hooks c², c², engaging suitable loops upon the levers D, D. 4th. The combination with the handle A, having the cross-bar B, of the ratchet bars E, E, set in the handle, the two part clasp D, D, formed substantially as described and adapted to engage the ratchet bars and the bail having its ends in engagement with the levers D, D, and adapted to press their ends into engagement with the ratchet bars, substantially as shown and described.

No. 49,550. Manufacture of Artificial Fuel. (Fabrication de combustible artificiel.)

Graham Sergeant Cory, and Colin Cory, both of Swansea, Glamorgan, England, 24th July, 1895; 6 years.

Claim.—The process of, by grinding or mixing, obtaining an intimate mixture of coal dust and grindable pitch, and either simultaneously with the grinding or subsequently, but always so as to prevent the softening of the pitch before the mixture is accomplished, adding a small percentage of naphthaline or other suitable hydro-carbon, substantially as and for the purpose hereinbefore described.

No. 49,551. Sacramental Case or Box. (Boîte sacramentelle.)



Henry Eummelen, Vancouver, British Columbia, 24th July, 1895; 6 years.

Claim.—1st. In a sacramental case the combination of the casing proper with the partition extending longitudinally of the same, dividing the interior of the casing into two compartments of unequal size, the narrower one to receive the candles C, and means for raising them thereout as J, the wells I, I, and the well or opening K, as and for the purposes substantially as set forth. 2nd. In a sacramental case, or box, the combination of the wells D¹, and G, and the hollow H, with the stand F, as and for the purposes substantially as set forth. 3rd. In a sacramental case the combination of the case A, the crucifix I, with means for fastening the crucifix securely for transportation as M, N, the case A¹, hinged to case A, and the bottom or board O, hinged to case A¹, as and for the purposes hereinbefore substantially as set forth.

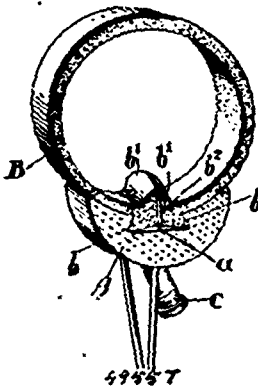
No. 49,552. Electric Light Head Gear for Personal Wear. (Lumière électrique pour coiffures de bicycliste.)

Alfred Marcus Rodriguez, Brooklyn, New York, and Edward Dayton, Rockwell, all in the U.S.A., 24th July, 1895; 6 years.

Claim.—1st. A cap for the use of bicyclists, having two cap-wires permanently applied to it, and terminating at their rear and forward ends in exposed contact points, adapting the cap to have an electric lamp and electric body-wires removably connected with it, the lamp to the forward contact points of the cap and the body-wires to the rear contact points thereof, substantially as described. 2nd. A cap for bicyclists' use having two wires permanently located in it and terminating at their rear and forward ends in exposed contact points of which there is a pair at the front of the cap and a pair

drawings. 3rd. In a fog signal machine, jaws controlled by balance weight for gripping the detonator holder, the upper jaw and balance weight being moved to free the detonator holder through a friction roller and lever, the former moving along a cam, substantially as described, and illustrated in the accompanying drawing. 4th. The combination of the weight controlled jaw and the connected mechanism for raising the latter, the rack and pinion mechanism and balance lever operating the latter and the treadle bar and dash-pot and connected parts, all substantially as set forth, for the purposes specified and as illustrated in the accompanying drawings. 5th. The combination of the weight controlled jaw and the connected mechanism for raising the latter, the rack and pinion mechanism and balance levers one operating the latter and the other being operated by the signal lever for the purposes of placing a detonator on the line and withdrawing the same therefrom, substantially as herein described. 6th. A treadle bar operating through a transverse lever, an inverted cylinder the latter moving about a piston fulcrumed at its lower end, the cylinder and piston being incased in a suitable case, substantially as herein described, and as illustrated in the accompanying drawing. 7th. Apparatus consisting of links for placing in gear and out of gear a treadle bar, substantially as described and illustrated with reference to figures 1 to 4 of the drawings annexed.

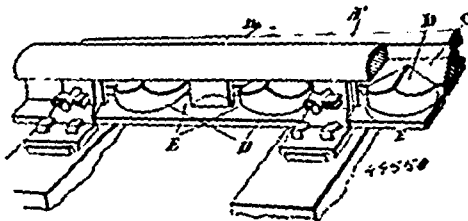
No. 49,557. Pneumatic Tyre for Bicycle Wheels.
(*Bandage pneumatique pour roues de bicycles.*)



Henry William Parker, Toronto, Ontario, Canada, 24th July, 1895; 6 years.

Claim.—1st. In a bicycle wheel, the combination, with the rim provided with an annular groove substantially dove tail in shape, of a divided single tube provided with tongues extending beneath the sides of the groove and having broad abutting edges cemented together and held in position by the air pressure in the tube, as and for the purpose specified. 2nd. The combination, with the rim provided with an annular groove substantially dove tail in shape, of a divided tube provided with tongues extending beneath the sides of the groove, having broad abutting edges, and an over-lying flap all cemented together and held in position by the air pressure in the tube, as and for the purpose specified. 3rd. In a bicycle wheel, the combination with the rim provided with an annular groove, of a divided single tube provided with broad abutting faces suitably cemented together and held in position by the air pressure in the tube, as and for the purpose specified.

No. 49,558. Railroad Switch. (*Aiguille de chemin de fer.*)

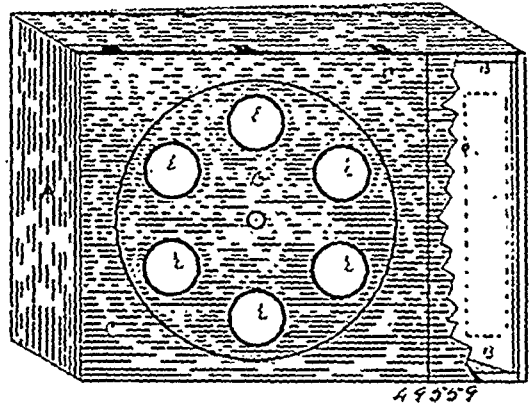


Charles Stewart Jackson, Bridgeburg, Ontario, Canada, 24th July, 1895; 6 years.

Claim.—1st. In a railroad switch the combination with the main rail having a series of openings in the web, of the split rail having a series of projections formed on or attached to the adjacent side of the split rail opposite the openings in the main rail as and for the purpose specified. 2nd. In a railroad switch the combination with the main rail having a series of openings in the web, of the split rail the bar fitted into it and provided with a series of projections opposite the openings in the main rail as and for the purpose specified.

3rd. In a railroad switch the combination with the main rail having a series of openings in the web, of the split rail of the bar fitted into and secured to the same, and the rounded projections having the ridge tops arranged as and for the purpose specified.

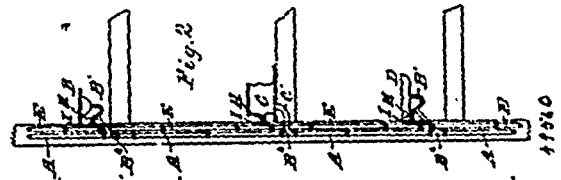
No. 49,559. Egg Tester. (*Appareil à faire l'épreuve des œufs.*)



William George Glenn, Owen Sound, Ontario, Canada, 25th July, 1895; 6 years.

Claim.—1st. In an egg tester of the kind specified, a revolving disc D having any required number of apertures E, each of a size to hold one egg, so that all sides of the eggs may be examined by turning said disc, substantially as and for the purpose set forth. 2nd. In an egg tester of the kind set forth, a hinged or sliding cover C having any required number of egg apertures, or one large aperture over which a disc having any number of egg apertures may be placed, substantially as and for the purpose heretofore set forth. 3rd. An egg tester comprising a box of four sides and bottom, one of which sides is higher than its side opposite, the other two sides made slanting so that the cover may be at a slant or angle to the bottom, a sliding or hinged cover having an oblong opening at its upper end and a large central aperture, a pivoted disc having a socket in its centre which bears on or is held by a vertical pin in the inside centre of the box so that the disc may revolve on the cover over the central aperture thereof, said disc also having any desired number of apertures in which eggs may be placed, a vertical sight tube over the oblong slot formed at its upper end to conform to a person's face so as to exclude the light, a mirror set at an angle in the box under the sight tube to reflect the light, passing through the eggs, direct to the eye, all formed, arranged and combined substantially as and for the purpose heretofore set forth.

No. 49,560. Fitting for Vent, Back Vent and Local Vent and other Sanitary Purposes. (*Appareil pour ventouses, etc.*)



Oliver Schlemmer, Cincinnati, Ohio, U.S.A., 25th July, 1895; 6 years.

Claim.—1st. The main vent conduit E having two branch openings L, L, near each other, respectively venting receptacles for liquid and provided with diaphragms K, K, each diaphragm forming a vent passage way P for its respective vent branch L, each passage way being everywhere separated from the main vent passage of the conduit E except at the upper end of the said partitions, the partitions being respectively higher than the point at which the liquids in the respective receptacles they vent can rise, substantially as and for the purposes specified. 2nd. A discharge conduit A, having a connecting discharge pipe C¹, connected to the lower portion of the receptacle for holding liquids, and having a trap B¹ therein, and a main vent conduit E, having a partition K, whereby a vent passage P is formed for the passage of the foul gases from said receptacle, the upper end of said partition being above the highest point that the liquids can rise in said receptacle, a vent pipe as H connecting the upper bend or part of the trap B¹, with a vent passage P at a point below the plane of the top of the said receptacle, the partition forming a cross diaphragm upheld by the sides of the main conduit, substantially as and for the purposes specified. 3rd.

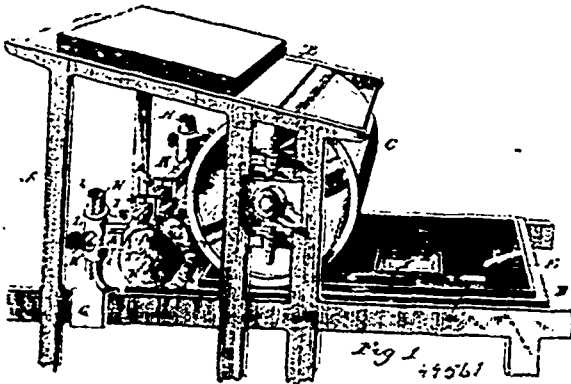
The combination of the receptacle for holding liquids, discharge pipe or trap B¹, main discharge conduit A, main vent conduit E, having diaphragmatic partition K, and vent passage P formed thereby, and vent opening inlet L, located in said main conduit above the base of said partition K, which latter extends to the side of the main conduit beneath the said inlet opening, and vent pipe H united to the trap B¹ and to said vent passage at a point below the top of the said receptacle for liquids, the upper end of the partition K being higher than the level to which the liquids can rise in said receptacle for liquids, the partition and vent inlet being cast with the main conduit, the pipe H being a separate one, and the inlet opening L being provided with means for the attachment thereto of said pipe, substantially as and for the purposes specified.

4th. In a ventilating system, the two main conduits, one A for the discharge of the waste fluid and solid products, and the other E for the discharge of the foul gases, and a receptacle for receiving the liquids, the main conduit being composed of sections, one of the sections having opening L, and diaphragmatic partition P, located in the latter section and beginning below the opening L, and at the side of the main conduit, and connected to the side of the conduit, forming a separate vent passage way for the ventage of foul gas from the liquid receptacle, as far as the top of partition P, the latter being higher than the point in the liquid receptacle above which the liquids cannot rise, a liquid discharge pipe, connecting the liquid receptacle with the main discharge conduit A, and provided with trap B¹, and vent passage H connected at one end to the trap at the upper bend thereof, and at the other end connected to opening L, below the top of the receptacle for holding liquids and forming a continuous vent passage, substantially as and for the purposes specified.

5th. In a ventilating system, the two main conduits, one A for the discharge of the waste fluid and solid products, and the other E for the discharge of the foul gases, and a receptacle for receiving the liquids, the main conduit being composed of sections, one of the sections having opening L, and diaphragmatic partition P, located in the latter section and beginning below the opening L, and at the side of the main conduit, forming a separate vent passage way for the ventage of foul gas from the liquid receptacle, as far as the top of partition P, the latter being higher than the point in the liquid receptacle above which the liquids cannot rise, a liquid discharge pipe connecting the liquid receptacle with the main discharge conduit, and provided with trap B¹, and vent passage H connected at one end to the trap at the upper bend thereof, and at the other end connected to opening L, below the top of the receptacle for holding liquids and forming a continuous vent passage, the diaphragmatic partition P being cast in one piece to its section L, substantially as and for the purposes specified.

No. 49,561. Multi-Colour Printing.

(Appareil à imprimer différentes couleurs.)



Theodore Jones Turley, Nashville, Tennessee, U.S.A., 25th July, 1895; 6 years.

Claim.—1st. A chromatic printing device consisting of a frame to be located within the main form of a printing press, a supplemental form-holder vertically and horizontally movable within the frame, a side bar attached to the frame, a dog fulcrumed in a slot in the side bar, a bell crank lever fulcrumed upon the frame and having one of its arms connected to the form-holder, and the other arm positively connected to the dog, a connection between the side bar and dog for normally holding the supplemental form-holder below type-high, and means for causing said form-holder to move vertically within the frame, substantially as set forth. 2nd. In a chromatic printing device, the combination with the frame and the form-holder vertically and horizontally movable therein, and means for causing the form-holder to move vertically within the frame, of the side bar having a roller journalled in one end of a slot therein, a dog fulcrumed in the slot and having an inclined front end engaging the roller, a spring between the side bar and the dog tending to press the said dog forward upon the roller, and a bell crank lever positively connecting the form holder with said dog, substantially as and for the purposes set forth. 3rd. The combination with the

impression cylinder, of the frame, the supplemental form normally held below type-high and vertically and horizontally movable within the frame, the rock shaft having a sliding connection with the form and extending transversely of the frame, the side bar, the lever fulcrumed upon said bar and adapted to be engaged by the impression cylinder at type-high, whereby the rock shaft may be turned and the supplemental form raised to type-high, substantially as described. 4th. In a printing press, the combination with the impression cylinder and bed of the press, of the main ink rollers upon one side of the impression cylinder, the separate colour ink rollers upon the opposite side of the impression cylinder normally held above type-high, each of said rollers having a separate ink supply and separate ink distributing rollers, the form from which a plurality of colours is to be printed, strips of standard lengths secured to the bed of the press by the usual furniture and arranged to positively throw the colour ink rollers into contact with the type in the form at predetermined points in the travel of the bed, and springs for holding the colour ink rollers normally above type-high, whereby various colours may be printed from ordinary type at one impression, substantially as described. 5th. In a printing press, the combination with the bed and form thereon of the frames attached to a transverse bar, a main ink roller journalled in said frames, means for feeding and distributing ink on said roller, a supplementary hanger or frame attached to the transverse bar outside of the inkers, a colour ink roller normally held in contact with the main ink roller, and above type-high, a rock shaft journalled in bearings in the supplementary hanger and frames of the inking apparatus, connections between said rock shaft and colour ink roller, and connections between the bed of the press and the rock shaft, whereby the latter may be vibrated at predetermined points in the travel of the bed to cause the colour ink roller to ink the form, substantially as described. 6th. The combination with the bed and impression cylinder of a printing press, of an auxiliary ink table detachably secured to one end of the bed, a supplemental frame located on one side of the impression cylinder, form rollers mounted in bearings on the frame of the press having their lower surfaces at or slightly below type-high, distributing rollers journalled in the supplemental frame, a form on the bed of the press aligning with said rollers, a second set of form rollers on the other side of the impression cylinder receiving ink from the ordinary ink table, a second form in line with the first form and receiving ink from the latter rollers, substantially as described. 7th. In a printing press, the combination with the ink table, the form and form rollers, of a chromatic printing attachment consisting of an ink table removably secured to the press parallel to and above the ordinary ink table of the press, a supplementary set of form rollers whose line of travel bears a fixed relation to the planes of the ink tables and arranged to take ink from the upper table, with means for raising said rollers into contact with the upper table and out of contact with the lower table, substantially as described. 8th. In a printing press, a tinting mechanism consisting of a rotative part, a colour inking apparatus adjacent to the frame of the press, a lever fulcrumed on said apparatus and having an inking roller journalled on one arm thereof, normally held out of contact with the rotative part, and cams located upon said rotative part, adapted to engage the other arm of the said lever to raise the same and depress the colour ink roller, at predetermined points, substantially as described. 9th. The combination with the impression cylinder of a printing press, of a flanged wheel secured to a shaft above and rotating with said cylinder, a segmental curved plate mounted on the wheel and provided with one or more raised surfaces for receiving ink, and one or more corresponding cam projections thereon, one or more inking apparatus supported around the periphery of said wheel, a lever fulcrumed on each of said inking apparatus, an inking roller journalled on one arm of each lever, the other arm of each lever adapted to be raised by its corresponding cam projection on the segmental plate so as to depress the roller into contact with its corresponding ink receiving surface, substantially as described. 10th. The herein described improvement in the art of multi-colour printing which consists in arranging two or more forms in line upon the bed of the press, causing the one form to be inked by a single inking device or a plurality of inking devices, and causing the other forms to be inked by a plurality of inking devices, printing simultaneously from all the forms on a single sheet of paper, shifting the sheet and again printing so that each impression made at one passage through the press receives a complementary impression on the next passage therethrough, substantially as set forth.

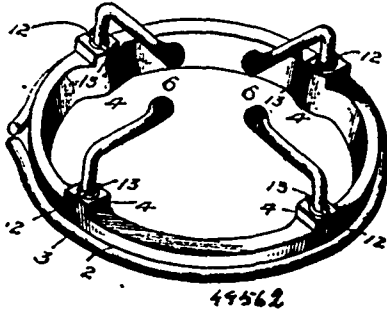
No. 49,562. Darning or Embroidering Frames.

(Cadre à raccomoder ou broder.)

George Powell Hill, Richmond, Virginia, U.S.A., 25th July, 1895; 6 years.

Claim.—1st. A darning device comprising an open frame, means for clamping the stocking or other article to be darned in place thereon, a series of fingers adapted to be thrown inward over the open centre of said frame or outward therefrom, and means for holding said fingers in either their inward or outward adjustment, substantially as described. 2nd. A darning device, comprising an open frame, a clamping ring surrounding the same and adapted to hold the fabric or other material stretched across the open centre of

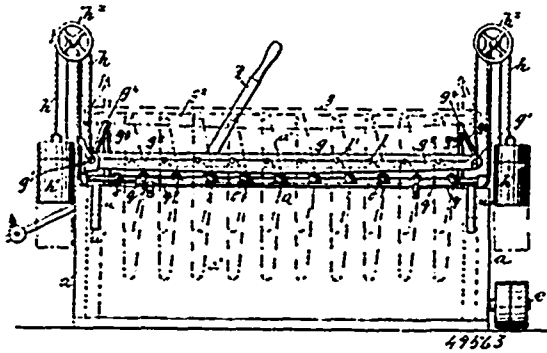
said frame, and a series of pivoted and swinging fingers adapted to hold the surplus material of the article being darned, out of the



way, substantially as described. 3rd. In a darning device, an open frame provided with a groove extending around the outer face thereof, in combination with a clamping ring adapted to rest within said groove and hold the material stretched across the open centre of the frame, substantially as and for the purpose specified. 4th. The combination with a darning frame, circular, oval or octagonal in shape, of four or more revoluble fingers pivotally mounted in said frame and held in predetermined positions by spiral springs encircling the lower ends or shanks of said fingers and arranged within sockets in said frame, said fingers having each a pin or projection just above the upper surface of said frame, said pin or projection being adapted to engage a groove or slot in the frame and to be held in position when extended outward or inward, substantially as described.

No. 49,563. Machine for Washing Yarn, etc.

(Machine à laver, etc.)



Samuel Spencer, Joseph Spencer Lord, and George Spencer Lord, all of Whitefield, England, 25th July, 1895; 6 years.

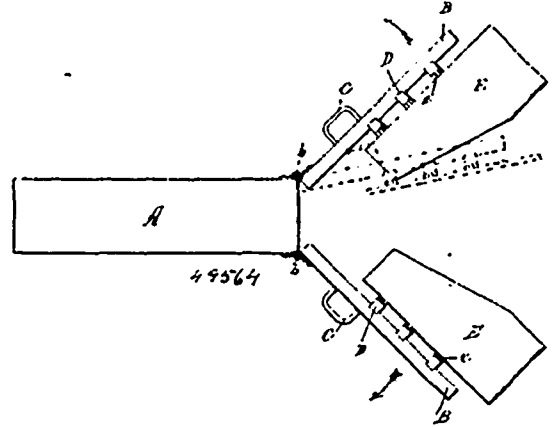
Claim.—1st. In combination with a hank frame adapted to be raised and lowered by crank studs or bowls, the employment of right and left hand threaded worms *d* in pairs in connection with correspondingly toothed worm-wheels *e*, carrying the said crank studs or bowls, in such a manner that the latter will revolve in opposite directions, substantially as and for the purpose set forth. 2nd. In combination with a raising and falling hank frame carrying rods *l*, laterally movable rods *a* adapted to impart a partial turn to the hanks, substantially as and for the purpose set forth. 3rd. In combination with laterally movable rods *g*, a corresponding number of stationary rods *r* between which the hanks are nipped so as to have imparted a second partial turn during the rise of the hank frame, substantially as and for the purpose set forth. 4th. The rod rail *u* adapted to partially turn in its bearing so as to enable to raise the front end of the rods *o*, all substantially as and for the purpose set forth.

No. 49,564. Swimming Appliance. (Appareil à nager.)

Jules Marie Turcotte, Quebec City, Quebec, Canada, 25th July, 1895; 6 years.

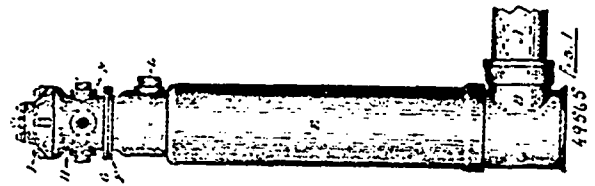
Claim.—1st. In swimming appliances, the combination with the body piece, of the limbs pivotally connected to the lower end thereof and provided with loops for the feet of the swimmer, and the feathering paddles carried by the said limbs, substantially as set forth. 2nd. In swimming appliances, the combination, with the body piece,

of the limbs pivotally connected to the lower end thereof and provided with loops for the feet of the swimmer, the vertical cross-pieces



secured to the said limbs, and the paddles having their upper edges pivoted to the upper ends of the said cross-pieces above the said limbs, substantially as set forth.

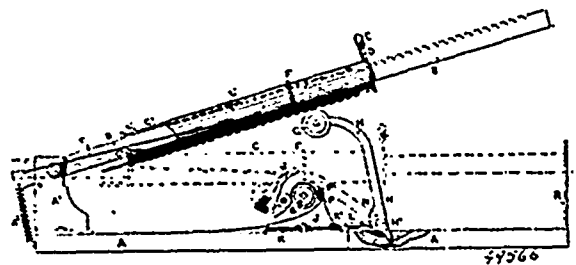
No. 49,565. Hydrants. (Borne-fontains.)



Edward Lyman Perkins, Ottawa, Ontario, Canada, 25th July, 1895; 6 years.

Claim.—1st. In a hydrant the cylindrical form of the body herein shown, in which the sectional area of the top end of the body is equal to that of its lower end above the foot valve seat. 2nd. A hydrant, in which the hose nozzles are provided with a flange fitted to lie closely against the interior face of the hydrant head, and a nut screwed on the outward projecting part of the nozzle against the exterior face of the head, and hold the nozzle rigidly in place. 3rd. A hydrant in which the head or top portion which contains the hose nozzles is made separable from the main pipe or body of the hydrant, and secured to said body by bolts passing through flanges formed on both parts. 4th. A hydrant in which the main or foot-valve is made in two sections, one working within the other, the smaller section fixed to the valve rod, and the larger section sliding freely on said rod, substantially as herein shown and described. 5th. The combination, in a hydrant having a cylindrical body of the nozzles *K* having the flanges *M*, and nuts *N*, the cross-head *W*, a foot valve composed of the two sections *S* and *T*, and a valve rod having a collar *a'*, all substantially as herein shown and described.

No. 49,566. Type-Writing Machine. (Clavigraphie.)

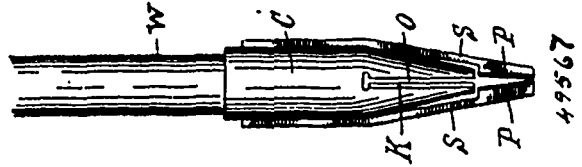


Edward Augustus Jeffreys, and William Edwards, both of Hatton Garden, London, England, 25th July, 1895; 6 years.

Claim.—1st. In a type-writing machine, a cylinder having indicating letters or characters arranged on its upper surface and type on

the under face thereof, the cylinder being carried and capable of being slid on a bar or lever fulcrumed at one end and provided with an index bridge for setting the position of the cylinder, in combination with an inking roller, beneath the type, carried by an arm fulcrumed to the base and a paper carrier below the type cylinder moved as required by suitable means, whereby upon the cylinder being depressed it comes in contact with the inking roller which inks the type and passes over and beyond the paper carrier upon which the type then prints, substantially as set forth. 2nd. In a type-writing machine, the combination with a cylinder, having indicating letters or characters arranged on the upper face and type on the under face, carried and capable of being slid on a bar fulcrumed at one end to the base and provided with an index bridge for setting the position of the cylinder, of an inking roller carried by an arm fulcrumed to the base and located beneath the type, a paper carrier over which the inking roller passes after inking the type upon the depression of the cylinder for printing, together with mechanism such as a cam surface on the ink-roller arm acting on levers, and a pawl to traverse the paper carrier when the type cylinder is depressed and before the type meets the paper, substantially as set forth. 3rd. A type-writer wherein the letters of the alphabet or other characters are arranged on one side of a cylinder visible to the operator with the types below or on the opposite side of same, the cylinder being mounted so as to be capable of being rotated on a frame and free to slide on a strip to suit the letters that are required to be written, the position of the letters and the type being indicated by the position of the bridge on the surface of the cylinder, together with an inking roller carried by a bracket working on a fulcrum at the base of the bracket having a cam projection for operating on a bell crank lever to actuate a pawl for operating a ratchet on a frame arranged at right angles to the type carrier together with paper carrying roller and the rods P¹ and Q, whereby type-writing is with facility effected.

No. 49,567. Pencil Sharpener. (Taille-crayon.)



William Duffield, London, Ontario, Canada, 30th July, 1895; 6 years.

Claim.—1st. In a pencil sharpener, the combination with a tubular cutter, of an arm pivotally connected to said cutter and provided with an abrading surface on its free end in front of the tubular cutter, substantially as described. 2nd. In a pencil sharpener, the combination with a tubular cutter, of a spring arm connected to said cutter and provided with an abrading surface on its free end in front of the cutter, substantially as and for the purpose specified. 3rd. In a pencil sharpener, the combination with a tubular cutter, of a spring arm pivotally connected to said cutter, and provided with an abrading surface on its free end in front of the cutter, substantially as and for the purpose specified. 4th. In a pencil sharpener, the combination with a tubular cutter, of a frame supported thereon, and a spring arm pivoted to said frame and provided with an abrading surface on its free end in front of the tubular cutter, substantially as and for the purpose specified. 5th. In a pencil sharpener, the combination with a tubular cutter, of a collar on said cutter, flanges extending from said collar, a frame pivoted to said flanges and an arm secured at one end to said frame and provided with an abrading surface on its free end in front of the tubular cutter, substantially as described.

CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO THE FOLLOWING PATENTS.

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| <p>3968. THE GOODYEAR SHOE SEWING MACHINE ASSOCIATION, 3rd five years of No. 21,849, from 10th June, 1895. Solq Sewing Machine, 3rd June, 1895.</p> | <p>3978. ELLIAH UPSON SCOVILLE, 3rd five years of No. 22,040, from 9th July, 1895. Faucet, 10th June, 1895.</p> |
| <p>3969. THE GOODYEAR SHOE SEWING MACHINE ASSOCIATION, 3rd five years of No. 21,850, from 10th June, 1895. Solo Sewing Machine, 3rd June, 1895.</p> | <p>3979. HENRY A. A. DOMBRAIN and OLIVER TRUMPER, 2nd five years of No. 34,527, from 13th June, 1895. Apparatus for Extracting Fatty and Other Matters from Substances by Means of Volatile Solvents, 11th June, 1895.</p> |
| <p>3970. CHARLES ENOCH PARKS, 2nd five years of No. 34,926, from 28th August, 1895. Box or Crate, 3rd June, 1895.</p> | <p>3980. WILLIAM BECK, 2nd five years of No. 34,511, from 12th June, 1895. Cigar Box, 11th June, 1895.</p> |
| <p>3971. HIRAM DAVID BINKLEY, 2nd five years of No. 34,482, from 7th June, 1895. Potato Digger, 4th June, 1895.</p> | <p>3991. DAVID W. CURTIS, 2nd five years of No. 34,519, from 13th June, 1895. Milk Vat, 13th June, 1895.</p> |
| <p>3972. THE WESTERN ELECTRIC COMPANY, 2nd five years of No. 34,500, from 9th June, 1895. Telephone Exchange System, 7th June, 1895.</p> | <p>3982. THE LINOTYPE COMPANY (assignee), 3rd five years of No. 21,918, from 17th June, 1895. Machine for Producing Stereotype Matrices, etc., 13th June, 1895.</p> |
| <p>3973. HERMANN BRUNGGER, 2nd five years of No. 34,582, from 27th June, 1895. Process of Lining Boilers and Digesters, 7th June, 1895.</p> | <p>3983. THE UNION SPECIAL SEWING MACHINE CO. (assignee), 3rd five years of No. 21,913, from 17th June, 1895. Sewing Machine, 15th June, 1895.</p> |
| <p>3974. FRANKLIN W. MANN and CLARENCE H. FARRINGTON, 2nd five years of No. 34,506, from 10th June, 1895. Machine for Grinding Bones, 7th June, 1895.</p> | <p>3984. THE UNION SPECIAL SEWING MACHINE CO. (assignee), 3rd five years of No. 21,914, from 17th June, 1895. Sewing Machine, 15th June, 1895.</p> |
| <p>3975. THE CHAMPION FLUE SCRAPER CO., 2nd five years of No. 34,498, from 20th June, 1895. Flue Scraper, 8th June, 1895.</p> | <p>3985. THE PATENT CORK PAVEMENT CO. (assignee), 2nd five years of No. 34,591, from 28th June, 1890. Composition for Paving, 18th June, 1895.</p> |
| <p>3976. SILAS VERNON, 3rd five years of No. 21,840, from 9th June, 1895. Electro Medical Battery, 8th June, 1895.</p> | <p>3986. EARL G. WATROUS, 2nd five years of No. 34,622, from 5th July, 1890. Harvester, 21st June, 1895.</p> |
| <p>3977. NAHUM E. THOMAS, 2nd five years of No. 34,550, from 19th June, 1895. Nut Wrench, 10th June, 1895.</p> | <p>3987. ROBERT WESLEY AFRICA, 2nd five years of No. 34,668, from 10th July, 1895. Car Replacer, 27th June, 1895.</p> |
| | <p>3988. THOMAS HODGSON, 2nd five years of No. 34,635, from 8th July, 1795. Pump Head and Handle, 29th June, 1895.</p> |

TRADE-MARKS

Registered during the month of July, 1895, at the Department of Agriculture—
Copyright and Trade-Mark Branch.

5352. } THE FAULTLESS CHEMICAL COMPANY, Baltimore, Maryland, U.S.
5353. } A. Chewing Gum, 3rd July, 1895.
5354. }
5355. SARAH A. LAUCKNER, St. John, N.B. A Medical Preparation, 4th July, 1895.
5356. LÉON LARUE, JUNIOR, Montreal, Que. Tobacco Pipes, Cigar and Cigarette Holders, 4th July, 1895.
5357. F. L. SMITH & COMPANY, Copenhagen, Denmark. Cement, 6th July, 1895.
5358. CHRISTIE, BROWN & COMPANY, Toronto, Ont. Biscuits, 6th July, 1895.
5359. THE BIRMINGHAM SMALL ARMS AND METAL COMPANY, LIMITED, Small Heath, near Birmingham, England. Velocipedes and other wheeled vehicles and parts of velocipedes, 10th July, 1895.
5360. THE ONTARIO PURE FOOD COMPANY, LIMITED, St. Catharines, Ont. Preserved and Canned Goods, 10th July, 1895.
5361. SPALDING & STEWART, Perth, Ont. Whisky, 10th July, 1895.
5362. LOUIS OVIDE GROTHÉ, Montreal, Que. Cigars, 10th July, 1895.
5363. H. MCKAY & COMPANY, London, Ont. Cigars, 11th July, 1895.
5364. THE MALTO-PEPTONE COMPANY, Needham Market, County of Suffolk, England. Malto-Peptide Yeast Food and Malt Extract Preparations, 11th July, 1895.
5365. JAMES LUMBERS, Toronto, Ont. Teas, 11th July, 1895.
5366. THE FAULTLESS CHEMICAL COMPANY, Baltimore, Maryland, U.S. A. Chewing Gum, 12th July, 1895.
5367. FRASER & STIRTON, London, Ont. Cigars, 12th July, 1895.
5368. B. GOLDSTEIN & COMPANY, Montreal, Que. Cigars, Cigarettes and Tobaccos, 12th July, 1895.
5369. BRIGGS PRIESTLEY & WILLIAM E. BRIGGS PRIESTLEY, Bradford, England, trading as BRIGGS PRIESTLEY & SONS. Cloths and Stuffs composed of wool, silk, cotton, linen, worsted, hair or other materials, 12th July, 1895.
5370. BRIGGS PRIESTLEY & WILLIAM E. BRIGGS PRIESTLEY, Bradford, England, trading as BRIGGS PRIESTLEY & SONS. General Trade Mark, 12th July, 1895.
5371. ABEL EDGAR MORRALL, Priory Mills, Studley, Warwickshire, England. Haberdashery, Smallwares, Notions, Needles, &c., 15th July, 1895.
7372. LLOYD THOMAS MEWBURN, Hamilton, Ont. Coffee, 15th July, 1895.
5373. JOSIAH BRUCE PAYNE, Granby, Que. Cigars, 15th July, 1895.
5374. ANDREW McNAB & COMPANY, Leith, Edinburgh Co., Scotland. Scotch Whiskey, 16th July, 1895.
5375. SHURLEY & DIETRICH, Galt, Ont. Saws, 17th July, 1895.
5376. R. H. SMITH COMPANY, LIMITED, St. Catharines, Ont. Saws, 17th July, 1895.
5377. HENRY BENNEY BRANDRETH, 18 Hamilton Square, Birkenhead, Cheshire, England. General Trade Mark, 22nd July, 1895.
5378. TURNER, BEETON & COMPANY, Victoria, B.C. Preserved Fruit, 22nd July, 1895.
5379. PUGSLEY, DINGMAN & COMPANY, Toronto, Ont. Soap, 22nd July, 1895.
5380. ROBERT BURNETT & COMPANY, Vauxhall Distillery, London, England. Gin, 22nd July, 1895.

5381. FRANÇOIS XAVIER LANGELIER, Montréal, Qué., faisant affaires sous la raison sociale. THE NATIONAL PHARMACY COMPANY. Produit Pharmaceutique (Peptone), 22 juillet, 1895.
5382. WILLIAM FREDERICK JACKSON, Brockville, Ont. Medicines and Medicated Preparations for Infants and Children, 23rd July, 1895.
5383. } CLARK & COMPANY, Paisley, Scotland. Threads of all kinds, particularly
5384. } Machine Cotton, 23rd July, 1895.
5385. JAMES SPALDING, JUNIOR, and ROBERT STEWART, Perth, Ont., trading as SPALDING & STEWART. Whisky, 24th July, 1895.
5386. THE CELLULOID COMPANY, Newark, N.J., U.S.A. Collars, Cuffs, Shirtfronts, &c., 25th July, 1895.
5387. WILLIAM JOSEPH PENDRAY, Victoria, B.C. Soap, 26th July, 1895.
5388. BRYAN & LEE, Winnipeg, Man. Cigars, 27th July, 1895.
5389. THE N. K. FAIRBANK COMPANY, Chicago, Illinois, U.S.A. Soap, 27th July, 1895.
5390. CANCELLED.
5391. THE CELLULOID COMPANY, Newark, N.J., U.S.A. Plastic Material and articles manufactured therefrom of every kind, 27th July, 1895.
5392. THE VICTORIA CANNING COMPANY OF BRITISH COLUMBIA, LIMITED LIABILITY, Victoria, B.C., also trading as the DELTA CANNING COMPANY. Canned Salmon, 30th July, 1895.

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Copyright and Trade-Mark Branch.

8000. SONG OF THE U. E. LOYALIST AND YORK PIONEER. Henry Harrington Date, Montreal, Quebec, 2nd July, 1895.
8001. THE BELL TELEPHONE COMPANY OF CANADA. (LIMITED). OTTAWA EXCHANGE, SUBSCRIBER'S DIRECTORY, JULY, 1895. The Bell Telephone Company of Canada, Limited, Montreal, Quebec, 2nd July, 1895.
8002. STORIES OF THE PROMISES AND OTHER TALES. By Mrs. M. A. Sadlier and her Daughters. D. & J. Sadlier & Co., Montreal, Quebec, 2nd July, 1895.
8003. HOW CANADA IS GOVERNED. By J. G. Bourinot, C. M. G., L. L. D., D. C. L., D. L. The Copp, Clark Company, Limited, Toronto, Ont., 2nd July, 1895.
8004. ONLY A LABORING MAN. Song. Written by James Fax. Arranged by Arthur Blakeley. Whaley, Royce & Co., Toronto, Ontario, 3rd July, 1895.
8005. CANADA'S THREE SIR JOHN'S. Lithograph. Hall Bros., Toronto, Ont., 3rd July, 1895.
8006. THE SAFEGUARD CASH BOOK. Thomas Martin, Toronto, Ont., 3rd July, 1895.
8007. THE SAFEGUARD INSTALMENT LEDGER. Thomas Martin, Toronto, Ontario, 3rd July, 1895.
8008. OMETTA WALTZES. Frank Wesley Bull, Belleville, Ont., 4th July, 1895.
8009. REVUE CANADIENNE. Juillet 1895. C. A. Beauchemin & fils, Montréal, Quebec, 4 juillet, 1895.
8010. A MIDNIGHT DREAM. Waltz for piano. C. Hascal Carey, Montreal, Quebec, 4th July, 1895.
8011. THE CURSE OF BALAGARED. Drama. Thomas P. Murphy, Ottawa, Ontario, 6th July, 1895.
8012. THE MANITOBA REPORTS. Volume IX. Editor: George Paterson; Reporter: W. S. Taylor. The Law Society of Manitoba, Winnipeg, Man., 6th July, 1895.
8013. CONVERSATIONAL METHOD IN FRENCH. For the use of Colleges, Academies and Advanced Pupils. Part II. Jean Victor Plotton, Halifax, N.S., 8th July, 1895.
8014. KEY, TAG AND SAFÉ Advertising card. Lansing & Co., Halifax, N.S., 8th July, 1895.
8015. THE PRACTICE OF THE EXCHEQUER COURT OF CANADA. Louis Arthur Audette, Ottawa, Ont., 9th July, 1895.
8016. LOVING WHILE WE MAY. Words and music by Beatrice Glen Moore. John H. Parker, Montreal, Quebec, 9th July, 1895.
8017. BOUTEILLE KIOSQUE JOCKEY CLUB—CARTE OR, V. S. O. P. Photographic. Archambeaud Frères, Bordeaux, France, 9 juillet 1895.
8018. BELL TELEPHONE COMPANY OF CANADA, Limited, HAMILTON, AND DUNDAS EXCHANGES, SUBSCRIBER'S DIRECTORY, ONTARIO DEPARTMENT, JULY, 1895. The Bell Telephone Company of Canada, Limited, Montreal, Que., 15th July, 1895.
8019. LE FORT ET LE CHATEAU ST-LOUIS, QUEBEC. Par Ernest Gagnon, Québec, Qué., 15 juillet, 1895.
8020. VIE DE LA VÉNÉRABLE MARIE-CRESCENCE HOSS. Religieuse du Tiers-Ordre de St-Francois au Couvent de Kaufbeuren. Par J. Camille Pouliot, Fraserville, Qué., 15 juillet, 1895.
8021. McALPINE'S HALIFAX CITY DIRECTORY, 1895-96. Hezekiah M. McAlpine, Halifax, N. S., 15th July, 1895.
8022. SIXTY YEARS OF CANADIAN CRICKET. By John E. Hall and Robert O. McCulloch, Toronto, Ont., 15th July, 1895.

8023. BELL TELEPHONE COMPANY OF CANADA, Limited, QUEBEC EXCHANGE, SUBSCRIBERS' DIRECTORY, JULY, 1895. The Bell Telephone Company of Canada, Limited, Montreal, Quebec, 16th July, 1895.
8024. THE BEAUTY SPOTS OF CANADA. Illustrated. Official Guide 1895 of the Richelieu and Ontario Navigation Company. William A. Desbarats, Montreal, Que., 16th July, 1895.
8025. THIS NEW LAND OF OURS. Words and Music by Harry M. Blight, Toronto, Ont., 18th July, 1895.
8026. SAINT-ANTOINE DE PADOUE. D'après les meilleurs auteurs. Cadieux et Derome, Montréal, Qué., 18 juillet, 1895.
8027. LOCAL TIME TABLE, PRINCE EDWARD ISLAND RAILWAY AND STEAMERS—SUMMER ARRANGEMENT, 1895. Horace Haszard, Charlottetown, P.E.I., 19th July, 1895.
8028. MRS. TODD'S NATIVE GINGER BEER. Circular. William Thomas Atkinson, Toronto, Ont., 19th July, 1895.
8029. HIGH SCHOOL CHEMISTRY. By A. P. Knight, M.A., M.D., and W. S. Ellis, B.A., B.Sc. The Copp, Clark Company, Limited, Toronto, Ont., 20th July, 1895.
8030. WITH CHRIST IN THE SCHOOL OF PRAYER. By Rev. Andrew Murray, Capetown, Africa, 22nd July, 1895.
8031. LIKE CHRIST. By Rev. Andrew Murray, Capetown, Africa, 22nd July, 1895.
8032. LOVELL'S MONTREAL DIRECTORY, 1895-96. John Lovell & Son, Montreal, Que., 22nd July, 1895.
8033. CLASSIFIED BUSINESS DIRECTORY OF THE CITIES OF HAMILTON, LONDON, MONTREAL, OTTAWA AND TORONTO, 1895. The Night Directory Company of Toronto, Limited, Toronto, Ont., 22nd July, 1895.
8034. TANTUM ERGO. Chœur à trois voix, par George McNeil. F. X. Bernard, Québec, Qué., 22 juillet 1895.
8035. LEAD, KINDLY LIGHT. Anthem for mixed Voices. Music by Charles A. E. Harriss. Whaley, Royce, & Co., Toronto, Ont., 23rd July, 1895.
8036. ABIDE IN CHRIST. By Rev. Andrew Murray, Capetown, Africa, 27th July, 1895.
8037. HOW TWO DOCUMENTS MAY BE FOUND IN ONE. A Monograph in Connection with the Higher Criticism. By James Carmichael, D.D., D.C.L., Dean of Montreal, 29th July, 1895.
8038. BELL TELEPHONE COMPANY OF CANADA, LIMITED, MONTREAL EXCHANGE, SUBSCRIBERS' DIRECTORY, JULY, 1895. The Bell Telephone Company of Canada, Limited, Montreal, Que., 29th July, 1895.
8039. TORONTO TAX TABLE FOR 1895. Robert Frank Spence, Toronto, Ont., 30th July, 1895.
8040. COOKERY. By Amy G. Richards. E. M. Renouf, Montreal, Que., 31st July, 1895.