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The Canadian Patent Office RECORD

Vol. XXVIII.—No. 9. SEPTEMBER 30th, 1900.

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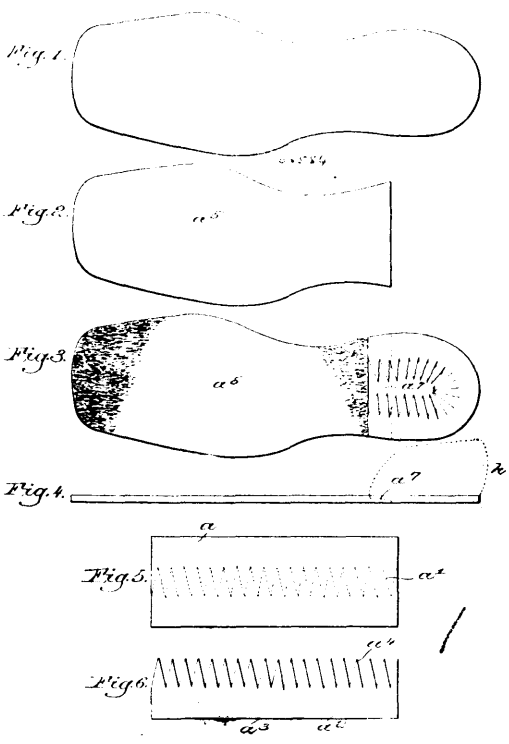
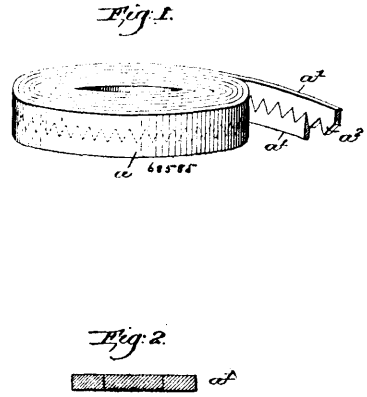
No. 68,584. Shoe Sole. *(Semelles de chaussures.)*



William Bennett Arnold, North Abington, Massachussets, U.S.A., 4th September, 1900; 6 years. (Filed 20th August, 1900.)

Claim.—1st. A sole for boots and shoes, comprising a front portion of sole leather and a heel end, said heel end having a smooth outer edge, and all about the rear portion thereof a toothed inner edge with a solid strip of considerable width between said edges, the teeth of the inner edge extending approximately toward the middle of the heel a sufficient distance to support the shoe, substantially as described. 2nd. A sole for boots and shoes, comprising a front portion of sole leather and a heel end, said heel end having a smooth outer edge and an indented inner edge with a solid strip of considerable width between said edges, the teeth formed by said indentations of the inner edge extending approximately toward the middle of the heel a sufficient distance to support the shoe, said front portion having its grain side down and said heel end having its grain side up, substantially as described. 3rd. A heel end for a boot or shoe sole consisting of a strip having one edge substantially smooth and the other edge toothed substantially throughout its length leaving a considerable width of uncut material adjacent said smooth edge and between it and said teeth, said strip being bent or curved to cause its outer smooth edge to conform approximately to the form of a heel, the inwardly extending teeth around the sharply bent portion of said heel end being compacted to form a substantially solid support, the teeth adjacent the ends of the said strip remaining more or less separated, substantially as described. 4th. A shoe, having a sole made up of a plurality of parts, including a heel end consisting of a strip provided with cuts or indentations forming teeth along one edge and bent to the contour of the heel with said teeth compacted all about the sharp bend at the rear end of the heel, the teeth of the heel end extending inwardly to approximately the middle part of the heel and affording a substantial support for the weight of the wearer, substantially as described.

No. 68,585. Boot and Shoe Welt. *(Bordure de chassures.)*

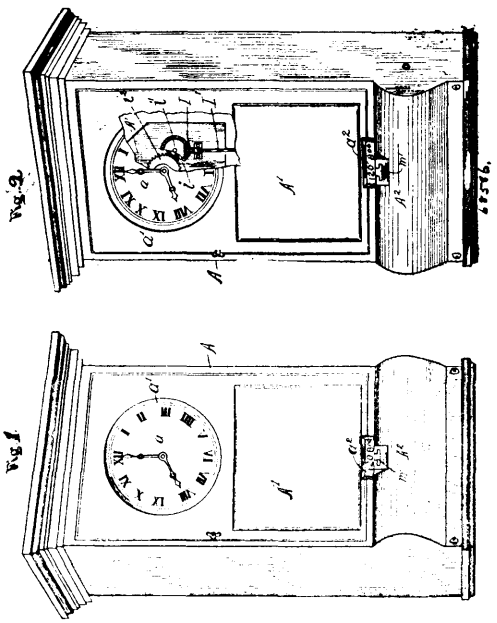


William Bennett Arnold, North Abington, Massachusetts, U.S.A., 4th September, 1900; 6 years. (Filed 20th August, 1900.)

Claim.—1st. As an article of manufacture, a welt of indeterminate length for boots and shoes, said welt having a uniformly toothed longitudinal edge adapted to be severed into sections of suitable lengths in use. 2nd. As an article of manufacture, a welt of indeterminate length for boots and shoes, said welt having a uniformly toothed longitudinal edge adapted to be severed into sections of suitable lengths in use, said welt having one side thereof provided with a coating of cement. 3rd. As an article of manufacture, a welt for boots and shoes, said welt having substantially the same thickness throughout its width from edge to edge, one edge thereof having a series of teeth extending along the same. 4th. As an article of

manufacture, welting for boots and shoes, said welting being adapted to be wound in a roll and being formed in two strips or welts having smooth outer edges, and their inner edges being serrated, the serrations thereof interlocking, the two welts not being quite severed from each other, whereby sufficient leather remains joining them together to retain the two welts together without preventing their being readily pulled apart in use.

No. 68,586. Time Recorder. (*Registre horaire.*)



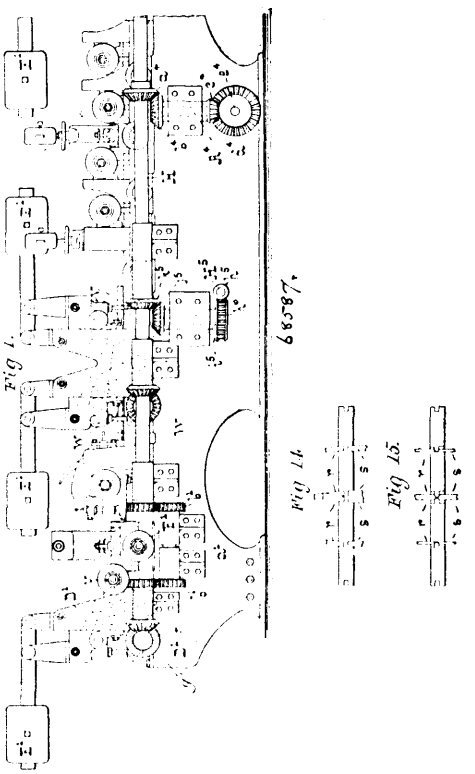
John W. Duebner, Chicago, Illinois, U.S.A., 4th September, 1900; 6 years. (Filed 21st December, 1899.)

Claim.—1st. In a time recorder, the combination with the casing, and the clock controlled printing mechanism and recording sheet therein, of a key adapted to operate said printing mechanism to take an impression therefrom upon the recording sheet, and a sight opening through which the said impression may be viewed, whereby the individual is enabled to inspect for verification the record which he has effected through the medium of the key. 2nd. In a time recorder, the combination with the casing, and the clock controlled printing mechanism and recording sheet therein, and a plurality of keys provided with individual indentification characters and each adapted to operate the said printing mechanism to take an impression therefrom and from the characters of the key upon the recording sheet, and a sight opening in the casing through which the said impression may be viewed, whereby the individual is enabled to inspect for verification the record which he has effected through the medium of the key. 3rd. In a time recorder, the combination with the casing, and the clock controlled printing mechanism and recording sheet therein, of a key adapted to operate said printing mechanism to take an impression therefrom and from the characters of the key upon the recording sheet, means operating automatically upon the withdrawal of the key to feed the recording sheet forward a step, and a sight opening opposite which the said impression is exposed to view after the recording sheet has been thus fed forward. 4th. In a time recorder, the combination with the casing, and the clock controlled printing mechanism and recording sheet therein, of a spring pressed printing hammer, a sheet feeding mechanism, a push key and operative connections, whereby the printing hammer will be operated upon the insertion of the key and the sheet feeding mechanism operated upon its withdrawal. 5th. In a time recorder, the combination with the casing, and the clock controlled printing mechanism and recording sheet therein, of a spring actuated sheet feeding mechanism, a key, and operative connections, whereby the insertion of the key charges the spring of the sheet feeding mechanism and its withdrawal permits the spring to feed the record sheet forward a step.

No. 68,587. Machine for Making Tongue and Groove Flooring. (*Machine pour preparer le bois de plancher.*)

Greenleaf Johnson, jr., Baltimore, Maryland, U.S.A., 4th September, 1900; 6 years. (Filed 28th December, 1899.)

Claim.—1st. In a machine for making tongue and groove flooring, the combination of a frame, stationary bars extending from one side of the frame to the other and attached thereto, a laterally moving carriage adapted to slide on the said bars, carrying the upper and lower channelling and separating cutter heads, an arm on an revoluable shaft, a pin on the carriage, a link to connect the pin on the carriage with the end of the arm, and means to revolve or partially



revolve the said revoluble shaft, substantially as specified. 2nd. In a machine for making tongue and groove flooring, the combination of two sets of upper and lower feed rolls to carry boards, and a rapidly revolving polishing roll placed above the boards and situated between the two sets of feed rolls, substantially as specified. 3rd. A machine for making tongue and groove flooring, which consists of a first section or part embodying a bed, edging and grooving cutter heads, channelling and separating heads, and dressing cutter heads, combined with a secondary section or part embodying grooving cutter heads, the said sections or parts being placed side by side, and a transferring apparatus situated between them whereby certain of the boards are carried from the first to the secondary section, substantially as specified. 4th. A machine for making tongue and groove flooring, consisting of a first section or part embodying a bed, edging and grooving cutter heads, channelling and separating cutter heads, and dressing cutter heads, combined with a secondary section or part, embodying grooving cutter heads, mechanism to separate the boards unprovided with grooves from the others and convey them laterally to the secondary section of the machine, a table to receive the boards grooved by the secondary machine having a portion of its length inclined and provided with endless chain belts in slots whereby the finished boards are carried back over one of the feed rolls of the secondary section, substantially as specified. 5th. In an apparatus for the lateral conveyance of certain boards delivered thereto, from the others, a table having plates with means to drop them below the surface of the table, combined with laterally moving endless chain bolts to receive the boards as dropped and carry them from beneath the table, substantially as specified. 6th. In an apparatus to receive boards from a machine for making tongue and groove flooring, and to separate certain of the boards from the others, and move them laterally away, the combination of a table to which all the said boards are conveyed, having dropping plates which form parts of said table, means to yieldingly support the said movable sections or plates locking devices to temporarily hold the movable plates in alignment with the remaining portion of the table, triggers to disengage the locking devices, and moving endless chain belts to receive and carry off laterally, the boards delivered to the said chains by the yielding plates, substantially as specified.

No. 68,588. Watch Case Protector.
(*Protecteur pour boîte de montre.*)

Morris Dixon Fletcher, Springfield, Massachusetts, U.S.A., 4th September, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. A watch case protector, comprising a cup shell A, composed of the circular base a and upstanding marginal wall a^2, and the section B, composed of annular top portion b^2, and depending marginal wall b^4, to fit aforesaid marginal wall a^2, both said

walls being constructed with the apertures a^3 and b^3 adapted to register one with the other, and provided, when the parts are fitted

Fig. 1.

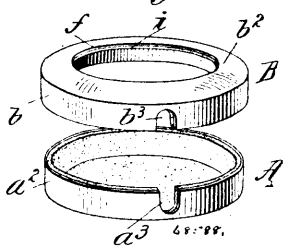
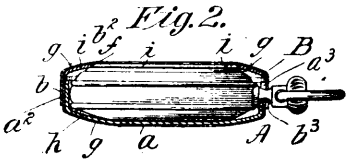


Fig. 2.



together about a watch, a hole through which the pendant will protrude, substantially as described. 2nd. A watch case protector, comprising the cup shell A, composed of the circular base a and upstanding marginal wall a^2, and the section B, composed of annular top portion b^2, and depending marginal wall b^4, to fit aforesaid marginal wall a^2, both said walls being constructed with the apertures a^3 and b^3 adapted to register one with the other, and provided, when the parts are fitted together about a watch, a hole through which the pendant will protrude, the section A having the lining h and the section B having the ring lining i of soft material, as velvet, chamois skin or felt, substantially as described. 3rd. A watch case protector, comprising the cup shell A, composed of the circular base a and upstanding marginal wall a^2, and the section B, composed of annular top portion b^2, and depending marginal wall b^4, to fit aforesaid marginal wall a^2, both said walls being constructed with the apertures a^3 and b^3 adapted to register one with the other, and provided, when the parts are fitted together about a watch, a hole through which the pendant will protrude, the section A having the lining h and the section B having the ring lining i of soft material, as velvet, chamois skin or felt, and said lining having incorporated therein the metal polishing material, substantially as described.

No. 68,589. Time Indicating Dial. *(Cadran indicateur.)*

Fig. 1.

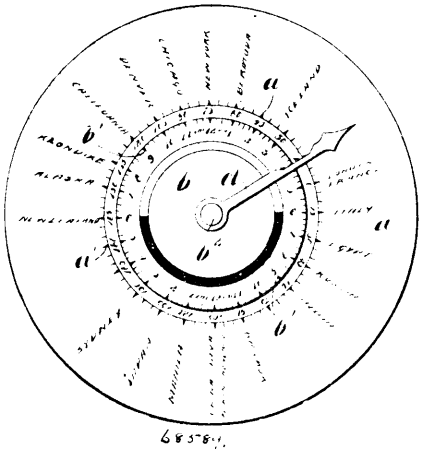


Fig. 2.

William Converse Egerton, New York City, New York, U.S.A., 4th September, 1900; 6 years. (Filed 31st March, 1900.)

Claim.—1st. The combination in a time indicator, embodying a dial a provided with suitable markings representing localities throughout the world, a secondary dial b concentrically mounted upon the said dial and provided with numerical markings representing time, of an indicating arm b, mounted concentrically with said dial, and a rivet b^2 formed with the flange b^3 and adapted to hold the dials and arms in position in such a manner so that the secondary dial b does not set directly upon the dial a, substantially as described. 2nd. The combination with a clock movement, of a time indicator consisting of a dial a provided with suitable markings representing localities throughout the world and adapted to be fastened to and revolved with the hour hand of the clock, a secondary dial b concentrically mounted with the said dial a and adapted to be held stationary, and provided with numerical markings representing time, the clock mechanism being adapted to give one complete revolution to the dial a and the hour hand attached thereto in every twenty-four hours, substantially as described. 3rd. The combination with a clock movement, of a time indicator, consisting of a dial a provided with suitable markings representing localities throughout the world and adapted to be fastened to and revolved with the hour hand of the clock, a secondary dial b concentrically mounted with the said dial a and adapted to be held stationary, a ring having a shaded portion indicating the hours between sunset and sunrise marked upon the said dial b and suitable mechanism in the said clock adapted to give the dial a and the hour hand of the clock one complete revolution in twenty-four hours, substantially as described.

No. 68,590. Cultivator. *(Cultivateur.)*

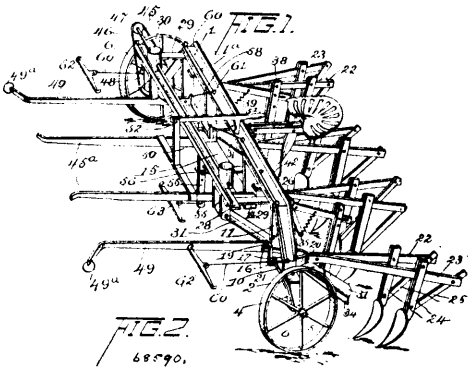


Fig. 2.

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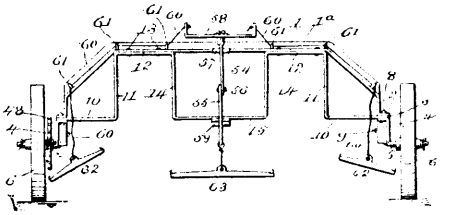
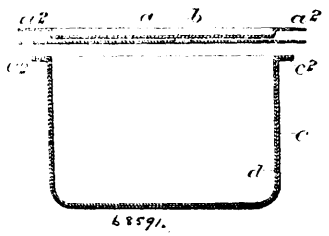


Matthes Zöllner and Carl Zöllner, both of Fate, Texas, U.S.A., 4th September, 1900; 6 years. Filed 13th August, 1900.)

Claim.—1st. A cultivator frame composed of two parts, the top part having ends terminating in angles, and the bottom part being formed into vertical and horizontal portions which terminate at and are secured to the said angles, said top part having downwardly slanting members which form braces between certain of the said vertical and horizontal portions. 2nd. A cultivator beam having a forked front end, one of the forks being longer than the other, and diverging rear wings adapted to carry a plough or other cultivator. 3rd. The combination with the cultivator frame, of the cultivator beams having a forked front end pivoted to the frame, a spring attached to the extended end of the fork forward of said pivot and connected to the said frame to give the beams flexibility, and the stops engaged by said extended forks ends to control the downward movement of the beams. 4th. The combination with the cultivator frame, and the axles attached thereto to form a tilting pivot for the frame, of means for holding the frame tilted, comprising the shafts having an upward projection, a hand lever pivoted to the said projection, and a hook on the said lever adapted to engage the top of the frame, as set forth. 5th. The combination with the frame, and the pivoted plates adjustably secured to the frame and provided with stop projections, of the cultivator beams having rear diverging wings, and a front fork pivoted to said plates to move vertically, one member of the said fork being extended under the said stops to control the downward movement of the beams, and a spiral spring having one end attached to the end of the extended fork member and the other end secured to the frame to control the upward movement of the beams. 6th. The combination with the frame, the seat post secured to the frame, and the seat having a forward extension to which the top end of the post is pivoted, of a vertical projection having one end secured to the frame and other end adjustably pivoted to the said extension, substantially as set forth.

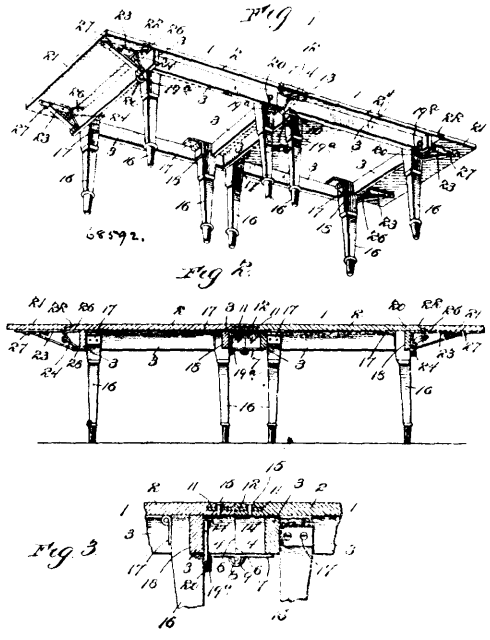
No. 68,591. Manufacture of Tins. (*Vaissaux en fer-blanc.*)



Archibald White Maconochie, 131 Leadenhall Street, London, England, 4th September, 1900; 6 years. (Filed 15th August, 1900.)

Claim.—1st. A tin or container for enclosing preserved foods, provisions or the like, the said tin or container consisting of a lid or cover, with a flange, a sheet or disc of paper covering the whole of the underside of the lid or cover and its flange, and a body part made by drawing or stamping from one piece of tin plate, and with a flange around its upper edge somewhat less than the flange around the lid or cover, the flanges of the lid or cover and of the body part and the edge of the paper sheet or disc being turned over or spun together so as to form a solderless joint, substantially as hereinbefore described. 2nd. A tin or container for enclosing preserved foods, provisions or the like, the said tin or container consisting of a lid or cover with a flange, a sheet or disc of paper covering the whole of the underside of the lid or cover and its flange, and a body part made by drawing or stamping from one piece of tin plate, and with a flange around its upper edge somewhat less than the flange around the lid or cover, and a paper lining for the body part with a flange to cover the flange of the body part, the flanges of the lid or cover and of the body part and the edges of the paper under the lid or cover and of the paper forming the lining of the body part being turned over or spun together so as to form solderless joint, substantially as hereinbefore described.

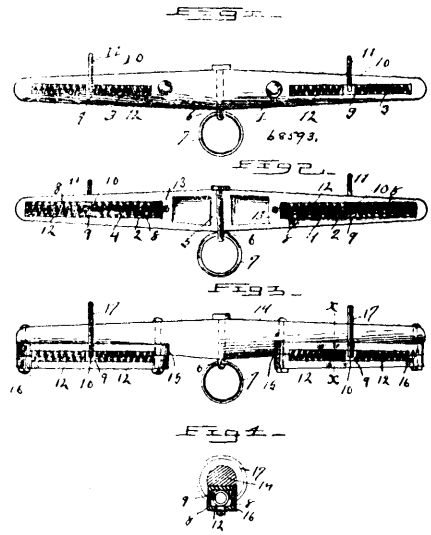
No. 68,592. Folding Table. (*Table pliant.*)



Adam T. Smith, Danville, Virginia, U.S.A., 4th September, 1900; 6 years. (Filed 20th August, 1900.)

Claim.—1st. A table comprising a top and hinged legs having their hinges located to dispose the legs at right angles when folded and to bring the free end of each leg behind, and in co-operative relation to, the extremity of the hinged end of the next adjacent leg when the legs are folded. 2nd. A table comprising a top and four hinged legs having their hinges located to dispose the legs at right angles when folded and to bring the free end of each leg behind, and in contact with, the extremity of the hinged end of the next adjacent leg when said legs are folded. 3rd. A folding table comprising a top, frame strips and a plurality of legs, means foldably connecting the legs, to the table top, said means being located at the side of the legs opposite that adjacent frame strip which is disposed transverse to the legs when folded, whereby when the legs are folded their free ends will be located between a frame strip and the upper end of an adjacent leg. 4th. In a folding table, the combination with a top and a frame comprising a number of frame strips, of a set of four hinged legs, each leg being recessed for engagement with the frame, a keeper on the outer face of the frame in operative relation to each leg when the latter is in its unfolded position, the hinge of each leg located parallel with a frame strip and at the side of the leg opposite said strip whereby when the legs are folded the free end of each leg will be retained between the upper end of another leg and the adjacent frame strip. 5th. A folding table, comprising the hinged and separable sections designed to be folded one upon the other, each section having a top, a frame comprising strips, and a set of four legs, a hinge connecting each leg to the table tops said hinge being located parallel with a frame strip, and at the side of the leg opposite said strip whereby when the legs of each section are folded they will lie against the under side of the table top within the frame and with the free end of each leg retained between the upper end of another leg and the adjacent frame strip. 6th. In a table, the combination with separable sections having the independent abutting tops grooved in their contiguous edges of a locking strip engaging at its opposite edges with the grooved contiguous edges of the tops of said sections and confining the latter in aligned relation, said strip being withdrawable endwise from the side of the table, substantially as described. 7th. In a foldable table, the combination of the separable sections each having a top, the adjacent edges of said tops of the table section having registering grooves, and a locking strip slidable endwise into and out of engagement with the grooved edges of the tops of said sections one end of said locking strip being provided with an exposed handpiece, substantially as described. 8th. In a foldable table, the combination of the separable sections each having a frame and a top, the frames of the sections being separably hinged and the tops being provided with coincident grooves in their contiguous edges, and a locking strip insertible endwise in said grooved edges of the tops and withdrawable from one side of the table and without disturbing the hinge joints between the frames, substantially as described. 9th. In a foldable table, the combination of the table tops arranged to abut at their contiguous edges and provided in said abutting edges with coincident grooves, and a locking strip engaging at its opposite edge portions with the grooved edges of the tops, said strip being insertible and withdrawable by an endwise movement to be entirely disconnected from the table, substantially as described. 10th. In a foldable table, the combination of the separate sections each having a frame, the separate hinges each having leaves thereof secured to the frames of the respective table sections and each hinge provided with a headed pintle connecting the leaves thereof, and stops pivoted to a table frame and engaging the headed pintles to confine the latter in place, substantially as described. 11th. A sectional table, comprising abutting sections having oppositely arranged grooves in their meeting edges and provided with openings, in combination with a removable locking strip inserted lengthwise within said grooves and provided with openings and pins inserted through the openings in the table sections and said locking strip, substantially as and for the purpose specified.

No. 68,593. Neck Yoke (*Polée d'avant.*)

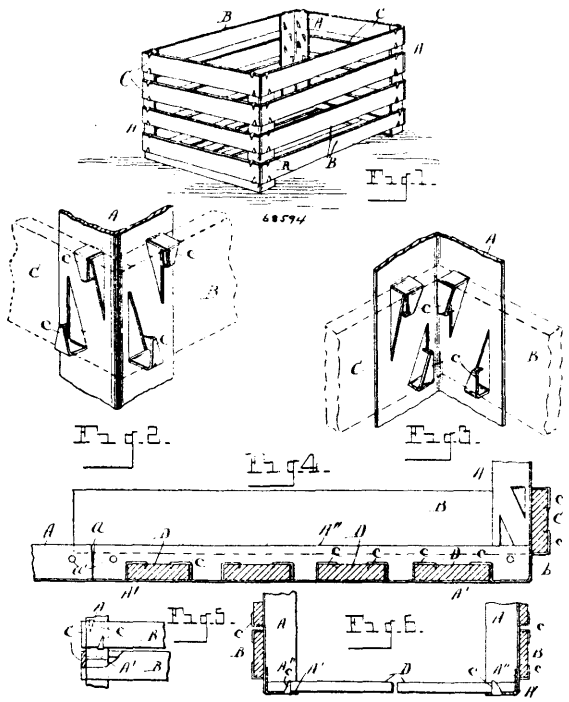


Elisha H. Shephard, Boyne City, Michigan, U.S.A., 4th September, 1900; 6 years. (Filed 20th June, 1900.)

Claim.—The combination with the neck yoke having seats at opposite ends, closed at each end, and formed with slots in the lower sides and with opposite longitudinal springs of the slides centrally located in said seats, the rings passing therethrough and

working in said openings and the coiled springs bearing against opposite ends of said slides, substantially as described.

No. 68,594. Crate. (*Caisse.*)



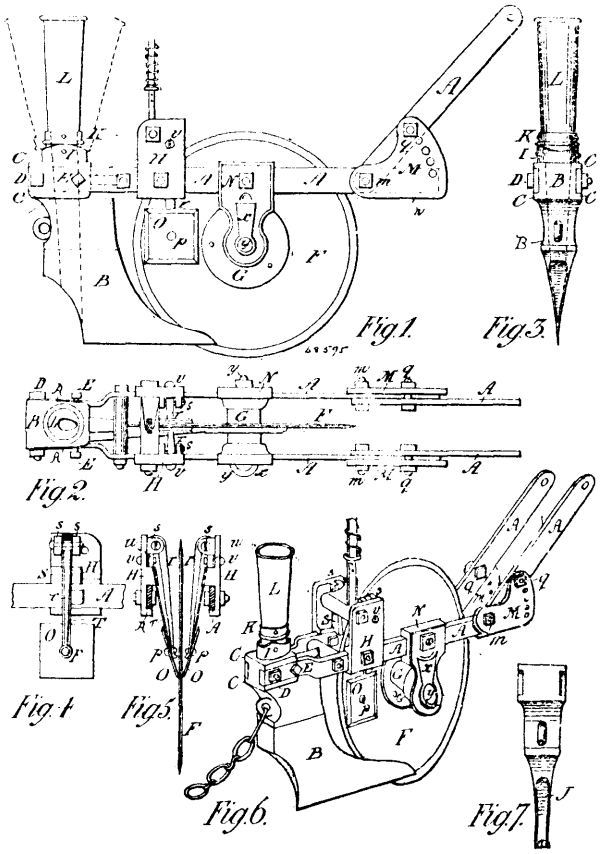
Frederick B. Baugh, Brighton, Michigan, U.S.A., 4th September, 1900; 6 years. (Filed 18th August, 1900.)

Claim.—1st. In a crate, the vertical metallic strips provided with malleable engaging tongues, the slats of the crate engaged and supported by said tongues which are folded upon and driven into said slats, the horizontal metallic strips also having engaging tongues, and the bottom slats of the crate supported on said horizontal strips and engaged by the tongues thereof. 2nd. In a crate, the combination of the slats forming the sides and bottom, a continuous metallic strip crossing the slats of the sides and bottom, said strip having the integral tongues struck therefrom, said tongues being adapted to be folded upon and secured to said slats to support and maintain said slats in their proper relative positions. 3rd. In a crate, the combination of the corner pieces rectangular in cross section, said corner pieces having tongues upon the opposed sides thereof, the slats forming the sides and ends of the crate embraced by the tongues of said corner pieces which are folded upon and driven into said slats to maintain them in place. 4th. In a crate, the combination with the slats of the crate, a metallic strip crossing said slats, said strip having integral tongues struck therefrom, said tongues being formed with acuminated points and so positioned as to fold over the opposite edges of the slats and lap onto the face thereof, the acuminated ends of said tongues entering the slats to maintain them in place. 5th. In a crate, the combination of the continuous angle-strip forming the corners and crossing the bottom of the crate at the ends, said strips having the engaging tongues upon the right angled faces thereof, the slats forming the sides and ends of the crate engaged by said tongues, the slats of the bottom of the crate lying on the horizontal portion of said strips and engaged by the tongues thereof.

No. 68,595. Seed Drill. (*Semoir.*)

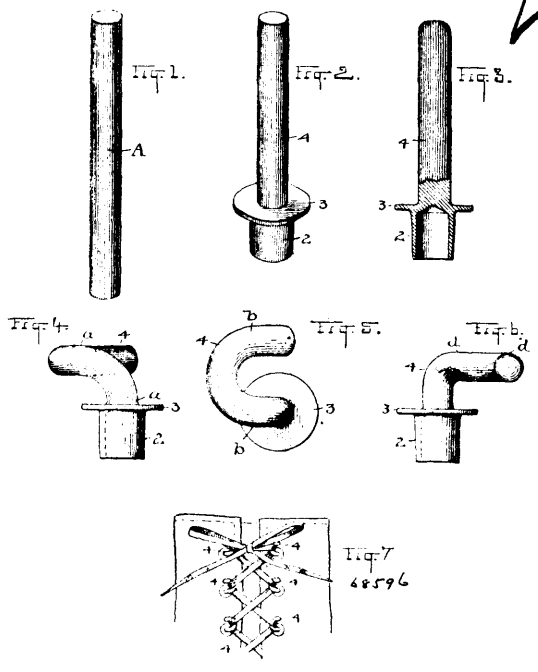
James Steep, Clinton, Ontario, Canada, 4th September, 1900; 6 years. (Filed 17th August, 1900.)

Claim.—1st. The combination in a seed drill or similar machine, of the pointed knife edged fixed shoe B or hoe J, overlapping the knife edged revolving coulter F, kept close to it by means of the adjusting set screws E, and retained always in the same relative position to the coulter F, substantfally as set forth. 2nd. The loose rivetted four sided scraper O, substantially as shown. 3rd The adjustable sheet metal boot L, attached to upper part of sho B, in socket I, by the collar K, for the purpose specified. 4th. The adjustable hinged drag bars A, A, as set forth for the purpose



specified. 5th. The hollow hub of coulter F, as an oil or lubricant reservoir, substantially as set forth for the purpose specified.

No. 68,596. Lacing Hook. (*Agrafe pour lacer.*)

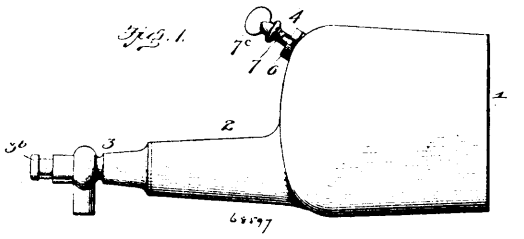


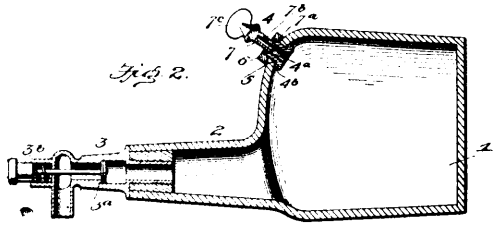
Harrison Henry Eaton, Cleveland, Ohio, U.S.A., 4th September, 1900; 6 years. (Filed 17th August, 1900.)

Claim.—A lacing hook for boots and shoes, gloves and the like struck up from a single piece of wire and having a tubular shank

open at the bottom, a disc shaped collar about the top of the shank and a hook springing centrally out of the collar and extending outward and upward in compound curvature to a position which brings the hook proper mostly outside the collar and in a parallel plane therewith and above the same.

No. 68,597. Bottle. (*Bouteille.*)





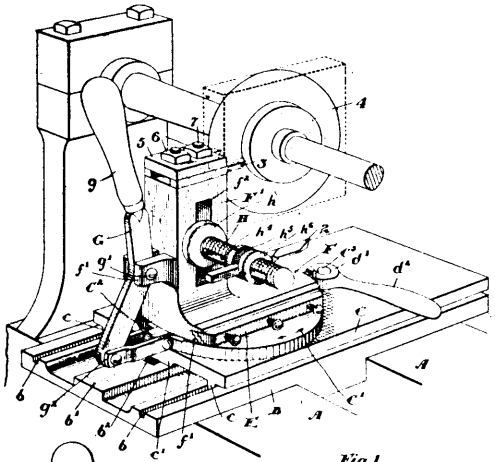
John Henry Louch, Lithia Springs, Georgia, U.S.A., 4th September, 1900; 6 years. (Filed 20th August, 1900.)

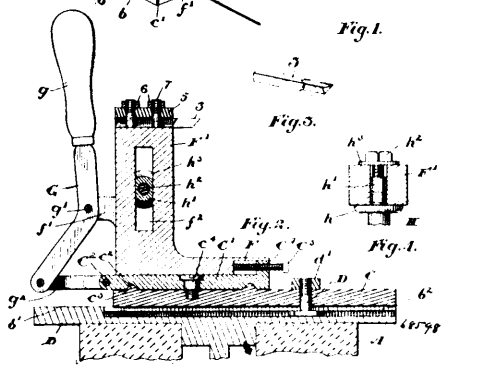
Claim.—A bottle having a neck projecting longitudinally therefrom substantially in the plane of one of its sides and provided with a draw-off faucet or cock, said bottle having a hole in its body, an internally and externally threaded sleeve projecting through said hole and provided with a collar on its inner end, a nut screwed upon the external threads to lock said sleeve in position, and an externally screw threaded plug adapted to the internal threads of said sleeve and provided with a longitudinal bore intersected by a transverse aperture which is adapted to establish communication between the atmosphere and the interior of the bottle to vent the same, substantially as set forth.

No. 68,598. Lathe. (*Four.*)

William Charles Phillips, assignee of George Reynolds, both of Toronto, Ontario, Canada, 4th September, 1900; 6 years. (Filed 6th October, 1899.)

Claim.—1st. The combination with the mandrels, of the bed plate adjustably supported, the annular guiding ring on the same, the circular plate provided with a groove to fit the ring and guiding ribs on the bed plate, the standard plate and standard fitting within ribs on the circular plate, the tools supported in the plate and the lever pivoted to lugs in the standard and connected by links to a lug on the central plate, as and for the purpose specified. 2nd. In a machine of the class described, the combination with the standard, of the holding spindle extending through a vertical opening thereof and suitably secured in position and provided with a longitudinal slot and threaded outer end and the collars fitting on the threaded end of the spindle and designed to hold the tool in position, as and for the purpose specified. 3rd. In a machine of the class described, the combination with the standard and vertical opening therein, of the spindle provided with a flange intermediate of its length and a threaded end provided with a slot and a reduced end extending into the opening, a bolt extending through the opposite side of the opening into the reduced end, and the tool extending through a slot and the adjustable collars, all arranged as and for the purpose specified. 4th. The combination with the standard and two tools extending one on each side of the block and suitably held on the standard, of the circular plate provided with guiding ribs and a circular groove at the bottom, and the bed plate provided with a circular projection fitting the aforesaid groove, and





the lever suitably connected to the standard and designed to rotate and move the same longitudinally, as and for the purpose specified.

No. 68,599. Electrolytic Bath. (*Bain Electrolytique.*)

Bernhard Hoffman, Luxembourg, Belgium, assignee of Quintin Marino, Brussels, 4th September, 1900; 6 years. (Filed 14th August, 1899.)

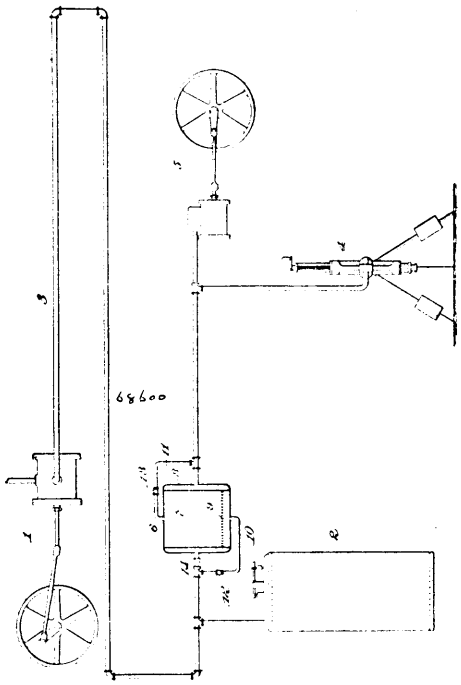
Claim.—1st. The use of glycerine, wholly in place of water, in electrolytic baths, substantially as described. 2nd. Electrolytic baths characterized by glycerine being employed instead of water in the case of salts directly soluble in glycerine, or by mixture of glycerine with other solvent in which salts slightly or not at all soluble in glycerine have been previously dissolved, said liquid not being decomposable by the electric current owing to the presence of glycerine, substantially as and for the purpose described.

No. 68,600. Method of Re-heating Compressed Air.
(*Method pour rechauffer l'air comprime.*)

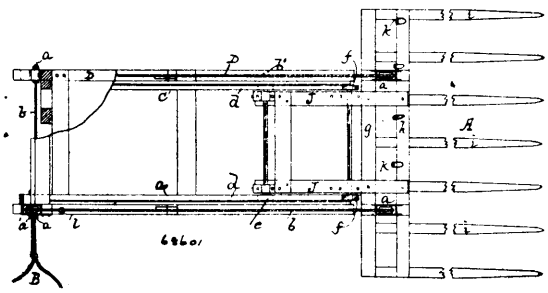
Thomas Alva Edison, Llewellyn Park, New Jersey, U.S.A., 4th September, 1900; 6 years. (Filed 16th May, 1899.)

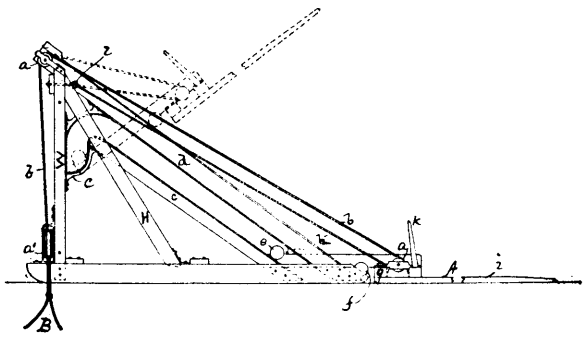
Claim.—1st. The method of re-heating compressed air for industrial purposes, which consists in effecting a reduction in pressure in the air between the source of heat and the point of use, and of causing a portion of the air to flow by reason of such reduction of pressure through a source of burning combustible to absorb heat directly therefrom and to support combustion thereof, substantially as set forth. 2nd. The method of re-heating compressed air for industrial purposes, which consists in directing a portion of the air into intimate proximity with a source of burning combustible, in effecting a reduction in pressure of the air between the source of heat and the point of use, and in causing a portion of the air to flow, by reason of such reduction of pressure, through the burning combustible to absorb heat directly therefrom and to support combustion thereof, substantially as set forth. 3rd. The method of re-heating compressed air for industrial purposes, which consists in directing a portion of the air into intimate proximity with a source of burning combustible, in effecting a reduction in pressure of the air between the source of heat and the point of use, in causing a portion of the

air to flow, by reason of such reduction of pressure, through the burning combustible to absorb heat directly therefrom and to support combustion thereof, and in mixing the directly heated portion of air with the indirectly heated portion of air, to use substantially as set forth.



No. 68,601. Machine for Stacking Hay and Grain.
(*Machine pour mettre le foin en meule.*)

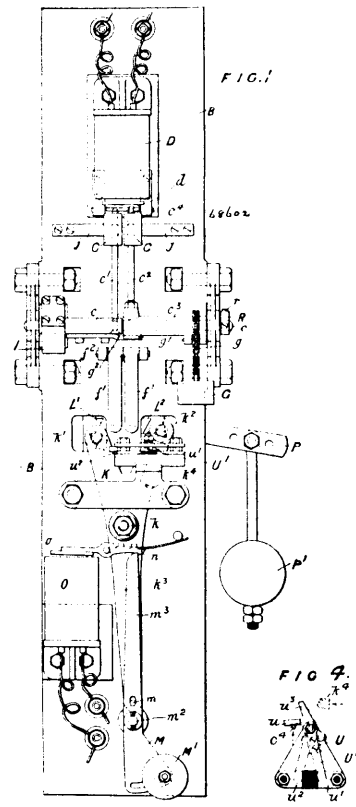




Robert Davis McKee, Olds, Alberta, North West Territory, 4th September, 1900 ; 6 years. (Filed 25th June, 1900.)

Claim.—1st. Fork A, comprising cross bars G H, tines I, handles J, trucks E F, and pins K, all formed and combined, substantially as and for the purpose hereinbefore set forth. 2nd. A fork frame comprising a sled D, uprights W, braces H, inclines trucks *c* and *d*, and pulleys, all formed and combined, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the fork, frame, trucks, pulleys and rope for operating the same, substantially as and for the purpose set forth.

No. 68,602. Explosive Signalling Apparatus for Railways. (*Appareil de signal explosif.*)



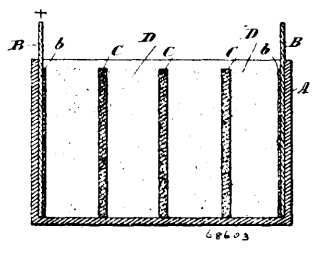
The Electric Fog Signal Syndicate, assignee of William Robert Sykes, Station Road, Clapham, all of London, S.W., England, 4th September, 1900 ; 6 years. (Filed 28th December, 1899.)

Claim.—1st. An explosive signaling apparatus for railways, consisting of a gravity operated cartridge holder or magaine, an escapement adapted to permit of the movement of the magazine for bringing the cartridges successively into firing position, a gravity operated firing hammer which is normally held in the raised position and is adapted to be automatically reset by the force of the explosion, means for releasing the hammer on the passage of a train, consisting of an electro magnet, a circuit closer, and a treadle mechanism actuated by the train, means of rendering the operation of the escapement dependent on the passage of a train, consisting of a gravity operated lever adapted to release the escapement, a latch which normally prevents such action of the lever, an electro magnet adapted to withdraw the latch from engagement with the lever, and a second treadle operated circuit closer, and a switch so constructed as to be acted on by the hammer and by the escapement to alternately switch the one electro magnet out of, and the other electro magnet into, circuit, the whole combined and arranged for operation, substantially as specified. 2nd. In an explosive signaling apparatus for railways, the combination with a gravity operated magazine having a series of separate chambers to contain cartridges and provided with racks, one having upwardly directed teeth and the other with downwardly directed teeth, and a hammer for exploding said cartridges controlled by the train, of electrically controlled train operated escapement mechanism adapted to permit of the cartridges being brought successively into position to be exploded, such mechanism consisting of an anchor escapement one of whose pallets normally engages the downward directed teeth of a rack on the magazine so as to sustain the latter, while the other pallet is adapted to be engaged by the upwardly directed teeth of a second rack when the first is withdrawn so as to effect the return of the escapement to its normal position, a gravity operated lever coupled to the ancthor lever so as to tend to release the escapement, a latch which normally prevents such action, an electro magnet whose armature when actuated withdraws the latch from engagement with said lever, and a treadle operated circuit closer actuated by the train, substantially as specified. 3rd. In an explosive signaling apparatus for railways, the combination with a gravity operated cartridge magazine, and means for bringing the magazine into position to permit the cart-

ridges to be successively fired, of a pivotally mounted gravity operated firing hammer normally held in the "set" or operative position, means for releasing the hammer to allow it to fall and explode the cartridge, and means for automatically resetting the hammer, consisting of a lever rotatable about its fulcrum by the impact of the charge when exploded, pulleys on the axes of the lever and hammer respectively, and a band attached to the pulleys for transmitting the motion of the lever to the hammer, substantially as specified. 4th. In an explosive signaling apparatus for railways, the combination with a gravity operated cartridge magazine, and means for bringing the magazine into position to permit the cartridges to be successively fired, of a pivotally mounted gravity operated firing hammer normally held in the "set" or operative position, means for releasing the hammer to allow it to fall and explode the cartridge, and means for rendering such action of the hammer dependent on the passage of a train, said means consisting of a treadle operated circuit closer in proximity to the rails and in circuit with an electro magnet adapted, when excited, to release the hammer, substantially as specified. 5th. In an explosive signaling apparatus for railways, the combination with a cartridge magazine, a firing hammer, and an escapement mechanism for the magazine, whereby cartridges are permitted to be successively brought, by step-by-step movement into position to be exploded by the firing hammer, of means whereby the action of said escapement is rendered dependent upon the passage of a train, said means consisting of an electro magnet, a treadle operated circuit closer in proximity to the rails and in circuit with the electro magnet, a gravity operated lever, and a latch in engagement with the said lever and operated by the electro magnet, whereby the escapement is withdrawn from engagement with the magazine, substantially as specified. 6th. An explosive signaling apparatus for railways, comprising a gravity operated cartridge holder or magazine, an escapement adapted to permit of the cartridges being brought successively into firing position, means of rendering the release of the escapement dependent on the passage of a train, consisting of an electro magnet, a latch which normally retains the escapement in engagement with the magazine but is retracted by the electro magnet, and a treadle operated circuit closer, a pivotally supported and gravity operated firing hammer normally held in position to act when released, on the passage of a train, by the action of an electro magnet in circuit with said treadle operated circuit closer, electrically controlled releasing mechanisms for the escapement and the firing hammer respectively, and means for electrically co-ordinating the action of said mechanisms, consisting of a switch adapted to be actuated in the one direction by the hammer in its fall so as to switch a current to the electro magnet controlling the operation of the escapement, and to be actuated by the escapement in the other direction so as to switch the current to the electro magnet controlling the operation of the firing hammer, substantially as specified. 7th. In an explosive signaling apparatus for railways, the combination with a gravity operated cartridge holder or magazine, and a hammer for exploding the cartridges, both the magazine and hammer being controlled by the train, of a weighted lever adapted to bear against one side of the magazine so as to hold the same steady in its guides while permitting freedom of downward movement, substantially as and for the purpose specified. 8th. In an explosive signaling apparatus for railways, the combination with a gravity operated magazine, and means for bringing the magazine into position to permit the cartridges to be successively exploded, of a pivotally mounted gravity operated firing hammer, means as described, whereby the force of the explosion is utilized for resetting the hammer to the operative or "set" position, and means whereby an audible signal is given in the signal cabin, consisting of a switch in circuit with an electrical bell, and a cam for operating the switch, said cam being fixed on the axis about which the hammer rotates in its fall, substantially as and for the purpose specified.

No. 68,603. Storage Battery and Electrode.

(*Accumulateur électrique.*)

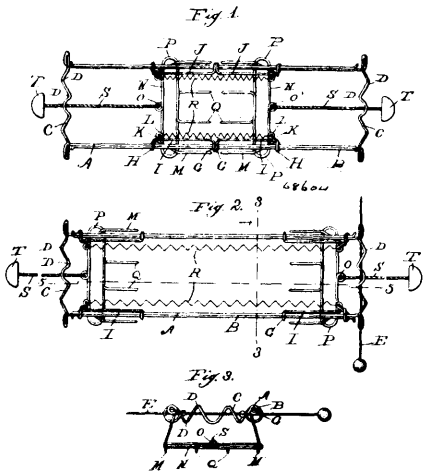


The Knickerbocker Trust Company, assignee of Leonard Paget, New York City, New York, U.S.A., 4th September, 1900; 6 years. (Filed 9th March, 1900.)

Claim.—1st. A storage battery element in which the active material or material adapted to become active consists of finely divided lead compressed to a density approximately that of sheet lead, substantially as and for the purpose set forth. 2nd. A storage battery element in which the active material or material adapted to become active consists of finely divided lead compressed to a density approximately that of sheet lead with the density increasing from the surface inward, substantially as and for the purpose set forth. 3rd. A storage battery element in which the active material or material adapted to become active consists of a body of finely divided lead formed of successive thin layers or films compressed to a density approximately that of sheet lead, substantially as and for the purpose set forth. 4th. A storage battery element in which the active material or material adapted to become active consists of a body of finely divided lead formed of successive thin layers or films compressed to a density approximately that of sheet leadand increasing in density from the surface of the element inward, substanially as and for the purpose set forth. 5th. An intermediate bi-polar electrode for storage batteries having the sole electrical connection between opposite sides of the electrode formed by finely divided lead compressed to a density approximately that of sheet lead, substantially as and for the purpose set forth. 6th. An intermediate bi-polar electrode for storage batteries having the sole electrical conducting connection between opposite sides of the electrode formed by finely divided lead compressed to density increasing from the surface inward, substantially as and for the purpose set forth. 7th. A storage battery element consisting solely of a mass of finely divided lead compressed to a density approximately that of sheet lead, substantially as and for the purpose set forth. 8th. A storage battery element consisting solely of a mass of finely divided lead formed of successive thin layers or films compressed to a density approximately that of sheet lead, substantially as and for the purpose set forth. 9th. A storage battery having end electrodes of different polarity and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having finely divided lead, before forming or charging, compressed to a density substantially that of sheet lead and consituting the sole conducting connection between opposite sides of the electrode, substantially as and for the purpose set forth. 10th. A storage battery having end electrodes of different polarity and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having finely divided lead, before forming or charging, compressed in successive thin layers or films to a density substantially that of sheet lead and constituting the sole conducting connection between opposite sides of the electrode, substantially as and for the purpose set forth. 11th. A storage battery having end electrodes of different polarity and one or more bi-polar intermediates electrodes, each of said bi-polar intermediate electrodes having finely divided lead, before forming or charging, compressed to a density substantially that of sheet lead with the density increasing from the surface of the electrode inward and constituting the sole conducting connection between opposite sides of the electrode, substantially as and for the purpose set forth. 12th. The method of producing active material for storage batteries, which consists in compressing finely divided lead to approximately the density of sheet lead, substantially as and for purpose set forth. 13th. The method of producing active material for storage batteries, which consists in compressing finely divided lead to a density approximately that of sheet lead with the density of the compressed material increasing from the surface inward, substantially as and for the purpose set forth. 14th. The method of producing active material for storage batteries, which consists in compressing finely divided lead in successive thin layers or films to approximately the density of the sheet lead, substantially as and for the purpose set forth. 15th. The method of producing active material for storage batteries, which consists in compressing finely divided lead in successive thin layers or films to a density approximately that of sheet lead with the density of the compressed material increasing from the surface inward, substantially as and for the purpose set forth. 16th. The method of preparing a bi-polar storage battery electrode, which consists in compressing finely divided lead to a density approximately that of sheet lead and passing a forming or charging current from one face to the other through the plate thus formed, and a suitable electrolyte on the opposite faces of the plate with said compressed finely divided lead constituting the sole conducting connection between the opposite sides of the electrode, substantially as and for the purpose set forth. 17th. The method of preparing a bi-polar storage battery electrode which consists in compressing finely divided lead to a density approximately that of sheet lead with a density of the material increasing from the surface inward and passing a forming or charging current from one face to the other through the plate thus formed and a suitable electrolyte on the opposite faces of the plate with said compressed finely divided material constituting the sole conducting connection between the opposite sides of the electrode, substantially as and for the purpose set forth. 18th. The method of preparing a bi-polar storage battery electrode, which consists in compressing finely divided lead in successive thin layers or films to a density substantially that of sheet lead with the density of the material increasing from the surface inward and passing a forming or charging current from one face to the other through the plate thus formed and a suitable electrolyte on the opposite faces of the plate with said compressed finely divided material constituting the sole conducting connection between the opposite sides of the electrode, substantially as and for the purpose set forth. 19th. A storage battery, having an absorbent material for the electrolyte consisting of a tufa. 20th. A storage battery, in which sulphuric acid forms the electrolyte of the battery and is contained in a body of tufa. 21st. In a storage battery, the combination with a battery electrode, of a body of tufa containing the battery electrolyte therein and forming a support for the face of the

active material, substantially as described. 22nd. Tufa containing a battery electrolyte or material adapted to form a battery electrolyte, substantially as described.

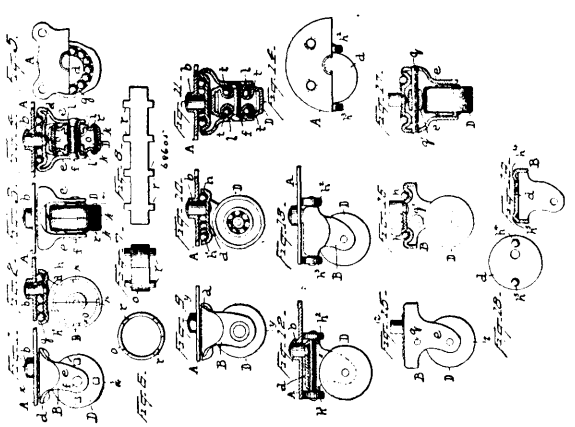
No. 68,604, Ladies' Hat Fastener.
(*Attache pour chapeaux de dames.*)



Henry De Tamble, Aurora, Illinois, U.S.A., 4th September, 1900; 6 years. (Filed 20th August, 1900.)

Claim.—1st. In a ladies hat fastener, the combination with two U-shaped members adapted to form a longitudinally adjustable frame, of two combs slidingly mounted upon the free ends of said members and adapted to hold the same in position relative to each other. 2nd. In a ladies hat fastener, the combination with two U-shaped members adapted to form a longitudinally adjustable frame, of two combs slidingly mounted upon the free ends of said members and adapted to hold the same in position relative to each other, and elastic connection between said combs for holding the latter normally at the inner limit of their movement. 3rd. In a ladies hat fastener, the combination with two U-shaped members adapted to form a longitudinally adjustable frame, of two combs slidingly mounted upon the free ends of said members and adapted to hold the same in position relative to each other, elastic connection between said combs for holding the latter normally at the inner limits of their movement, and devices connected with said combs for moving same toward the outer limits of their movement against the action of said elastic connection.

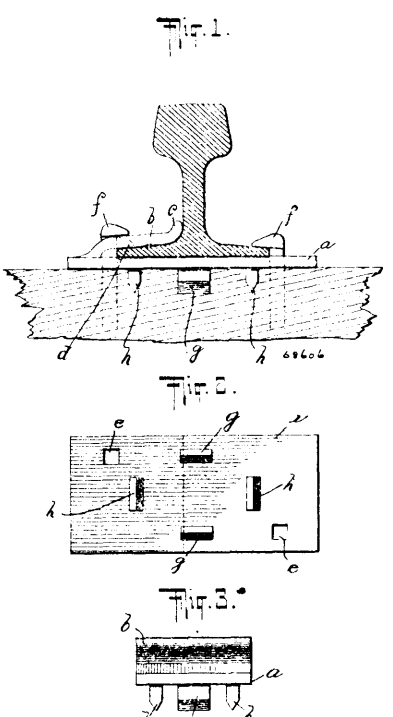
No. 68,605. Furniture Caster. (*Roulettes pour meubles.*)



William Livingstone, Flushing, New York, and Walter M. Taussig, New York City, New York, both in the U.S.A., and Charles F. Wiebusch, Berlin, Germany, 4th September, 1900; 6 years. (Filed 16th August, 1900.)

Claim.—1st. In a furniture caster, a horn having its top hung on a swivel pin at a point removed from the true centre of the top, and bearing points in the same horizontal plane between the horn and the swivel plate, equally distant from the true centre of the top of the horn but unequally distant from the swivel pin, the most forward of said bearing points and the swivel pin lying at two angles of an imaginary triangle, the vortex of the third angle of the said triangle being located at the axis of the caster wheel, substantially as specified. 2nd. In a furniture caster, the combination with the caster wheel and its pin, of a caster horn or wheel hanger having perforated projections on the inner sides of and integral with the shanks, through which the centre wheel pin is passed and its end riveted therein on the outside, substantially as specified. 3rd. In a furniture caster, the combination with the caster wheel, of a caster horn or wheel hanger having perforated projections on the inner sides of and integral with the shanks thereof, a tube having counterbored ends to fit over the said conical projections, and a pin passing through the perforated conical projections of the shanks and the tube and riveted on the outside of the shanks, substantially as described. 4th. In a furniture caster, the combination of a swivel plate, a swivel pin, a caster wheel, a caster wheel horn hung on the swivel pin at a point removed from the true centre thereof, bearing points between the top of the horn and the swivel plate, one of the said bearing points and the swivel pin being on opposite sides of a perpendicular line drawn through the axis of the caster wheel pin, and a bearing mounted on a shaft within the horn, the axes of the said bearing wheel and the caster wheel being in the same vertical plane, substantially as specified. 5th. A caster or hanger wheel, consisting of two half shells with perforations in their sides and a strengthening ring provided with prongs in such position and of such dimensions as to correspond with and pass through and extend beyond the perforations of the half shell to permit the same to be clinched and riveted against the sides of the half shells and hold the same firmly together. 6th. As a new and useful article of manufacture, a hollow caster or hanger wheel, consisting of two cup-shaped half shells having their peripheral edges towards each other and having central eyes or hubs projecting inwardly, the outer ends of which eyes or hubs are conically enlarged, a central tube T passing through the eyes or hubs and having its ends inwardly tapered at the place where the eyes or hubs taper for a sufficient distance to form conical bearings adapted to receive projections on the horns of a caster, and a cylindrical portion intervening between the conical enlargements, whereby there will be provided conical enlargements at the ends of the tube conformably to and corresponding with the conical projections of the caster horn, thereby providing conical end bearings for the wheel directly upon the projections of the horn without strain upon the wheel pin. 7th. A hollow caster or hanger wheel, consisting of two half shells with their peripheral edges in contact and having inwardly extending eyes or hubs with tapering pores adapted to receive and retain the cylindrical tube T having tapered ends, each of the said half shells having perforations in their sides to receive lugs, and a lugged strengthening member R located within the caster wheel and having its lugs pass through the apertures in the sides of the half shells and upset against the outer faces thereof.

No. 68,606. Railway Wear Plate and Brace.
(*Plaque de chemin de fer.*)

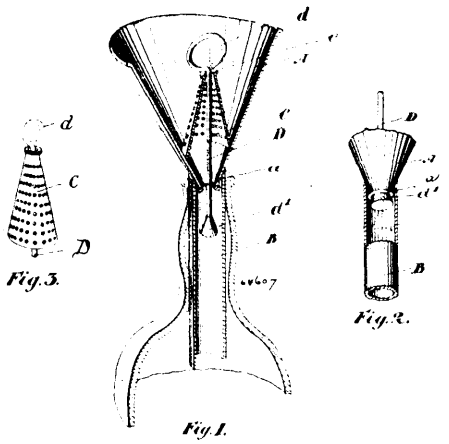


Calvin David Paxson, Limaville, Ohio, U.S.A., 4th September, 1900; 6 years. (Filed 17th August, 1900.)

Claim.—1st. A railway wear plate provided on its under surface with prongs or projections angular in form, and provided with

bevelled cutting edges, said prongs or projections being arranged both transversely and longitudinally of the plate, substantially as shown and described. 2nd. A railway wear plate provided on its under surface with prongs or projections angular in form, and provided with bevelled cutting edges, said prongs or projections being arranged both transversely and longitudinally of the plate, and said plate being provided on its upper surface and transversely of one end thereof with an upwardly and inwardly directed shoulder, substantially as shown and described. 3rd. A railway wear plate provided on its under surface with prongs or projections angular in form, and provided with bevelled cutting edges, said prongs or projections being arranged both transversely and longitudinally of the plate, and said plate being provided on its upper surface and transversely of one end thereof with an upwardly and inwardly directed shoulder, and in the opposite ends thereof with spike holes, substantially as shown and described.

No. 68,607. Funnel. (*Entonnoir.*)



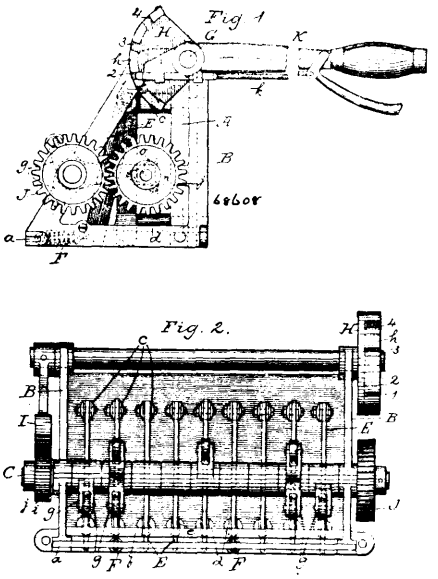
Andrew Peter Johnson, assignee of John B. J. Layton, both of Lachine, Quebec, Canada, 4th September, 1900; 6 years. (Filed 18th August, 1900.)

Claim.—1st. The combination of the funnel and stem thereof having a valve seat formed at the bottom of the funnel within the stem, of a valve designed to be brought against the valve seat and a suitable supporting device for such valve, as and for the purpose specified. 2nd. The combination of the funnel and stem thereof having a valve seat formed at the bottom of the funnel within the stem of a perforated diaphragm supported in the funnel and a valve having a stem extending through the perforated diaphragm, said valve being designed to be brought against the valve seat as and for the purpose specified. 3rd. The combination of the funnel and stem thereof having a valve seat formed at the bottom of the funnel, within the stem, of a conical perforated diaphragm having the base supported near the bottom of the funnel and an enlarged aperture at the centre of the top, the valve and the valve stem extending through the aforesaid aperture and provided with a suitable handle, of a valve designed to be brought against the valve seat and a suitable supporting device for such valve, as and for the purpose specified.

No. 68,608. Controller Switch. (*Contrôleur électrique.*)

The Hewitt Lindstrom Motor Company, assignee of C. A. Lindstrom, all of Chicago, Illinois, U.S.A., 4th September, 1900; 6 years. (Filed 2nd June, 1900.)

Claim.—1st. In an electric switch, the combination of opposite contact points or posts, a device for establishing electrical communication therebetween, rotary means for throwing this device into position to close the circuit, and means positively actuated for throwing this device into position to open the circuit when permitted by the rotary means, substantially as and for the purpose described. 2nd. In an electric controller, the combination with a series of positive posts, and a corresponding series of companion negative posts, of a series of blades pivotally connected at one end to each of the posts of one of said series, a series of differently adjusted devices arranged in front of said blades, certain groups of which successively push certain co-operating blades into sliding contact with the companion posts of the other of said series, and a series of differently adjusted devices back of said blades, respective groups of which are arranged with reference to the several groups of pushing devices to thrust the closed blades out of contact according as the pushing devices withdraw therefrom. 3rd. In an electric switch, the combination of opposite contact points or posts, a device for establishing electrical communication therebetween, rotary means for throwing this device into position to close the circuit, and opposing rotary means for throwing this device into position to open the circuit, said rotary devices acting in opposition and alternation with each other, substantially as described. 4th. In an electric controller, the combination with a positive, and a negative binding post, and a blade for making and breaking the circuit thereof, of a shaft in front of the



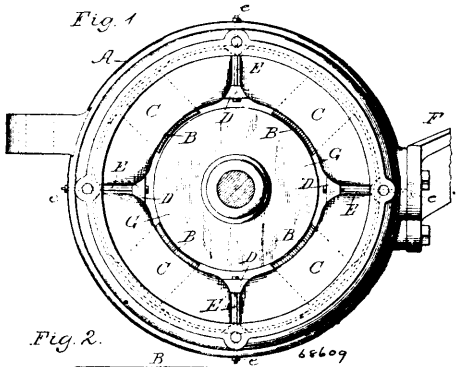
same and an arm projecting therefrom, and having a non-electrical engagement therewith to make a sliding contact between said posts, means arranged back of said blade for moving the same forward to break said contact upon the withdrawal therefrom of said arm, and springs connected to said blade for quickly breaking the circuit between the same and co-operating posts. 5th. In an electric controller, the combination with a series of positive posts, and a corresponding series of companion negative posts, and blades for closing the circuit between the same, of means for closing different groups of said shunt blades at different times, and a transverse shaft extending back of said blades, and a series of arms projecting therefrom at different angles and adapted to be moved against the rear of said blades to force them out of contact with one of said series of posts. 6th. In a multiple switch, the combination of opposite series of contacts or binding posts, devices adapted to establish electrical communication between pairs of opposite posts in the series, a rotary shaft provided with a series of arms adapted to cause said devices to close the circuits between two or more pairs of posts during the rotation of the shaft, an opposite rotary shaft carrying series of arms adapted to throw the devices out of contact and open the circuits as the devices are released by the arms on the other shaft, and means for operating said shafts, all substantially as and for the purpose described. 7th. In an electric controller the combination with a series of positive posts, a corresponding series of companion negative posts, and a series of blades pivotally connected at one end to each post of one of said series, and adapted to have sliding contact with the electrically co-operating independent posts of the other series, of a transverse shaft extending in the front of said blades, a series of arms on said shaft projecting therefrom at several certain angles adapted to successively push certain co-operating blades into sliding contact with the companion independent posts, a transverse shaft extending back of said blades, and a series of arms projecting therefrom at several certain angles, whereby they are adapted to bear against and move said blades out of contact with said independent posts upon the withdrawal of said contact actuating arms.

No. 68,609. Dynamo Apparatus.
(*Dynamos moteurs électriques.*)

The Hewitt Linstrom Motor Company, assignee of C. A. Linstrom, all of Chicago, Illinois, U.S.A., 4th September, 1900; 6 years. (Filed 2nd June, 1900.)

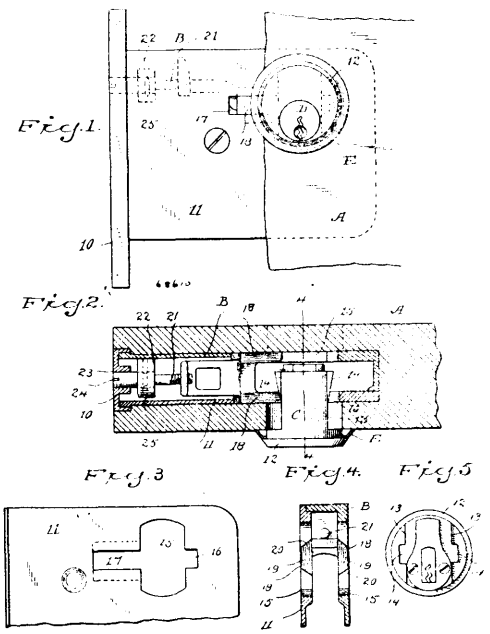
Claim.—1st. In an electric motor or dynamo, the combination with the field ring, field magnets thereof, and field magnet coils, of radially disposed devices bearing outward against the ends of said coils. 2nd. In an electric motor or dynamo, the combination with the field ring, field magnets thereof, and field magnet coils, of radially disposed and adjustable devices placed between and bearing outward against the ends of said coils. 3rd. In an electric multipolar motor or dynamo, the combination with the field ring, field magnets thereof, and field magnet coils, of blocks placed between the adjacent ends of said coils, and a radially disposed non-magnetic members adjustably connecting said blocks to said field ring. 4th. In an electric multipolar motor or dynamo, the combination with

the field ring, field magnetic thereof, and field magnet coils, of longitudinally elongated wedge-shaped wooden blocks placed between



the adjacent ends of said coils, and radially disposed brass bolts adjustably connecting said block to said field rings.

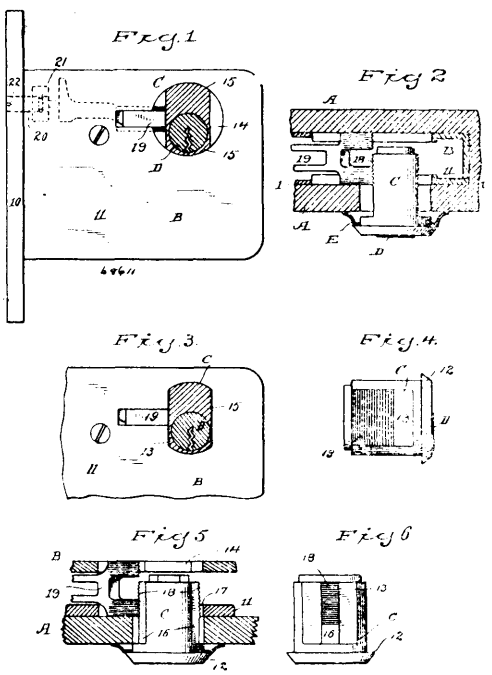
No. 68,610. Cylinder Lock. (*Serrure.*)



Henry S. Lockwood, South Norwalk, Connecticut, U.S.A., 6th September, 1900 ; 6 years. (Filed 23rd August, 1900.)

Claim.—1st. In a lock, the combination with a tumbler case of other form circular in cross section and having an incline highest at the inner end and running out in the side thereof, of a lock case having an opening corresponding in shape with the tumbler case so as to prevent the latter from turning and a retaining slide adapted to engage the incline to lock the tumbler case against withdrawal. 2nd. In a lock, the combination with a tumbler case of other form than circular in cross section and having an incline highest at the inner end and running out in the side thereof, of a lock case having an opening with a slot leading therefrom which receives the incline and a retaining slide adapted to engage the incline, substantially as and for the purposes set forth. 3rd. The lock case B having tumbler case opening 15 and slots 16 and 17 leading therefrom, said slot 17 being undercut as at 20, substantially as shown for the purpose specified.

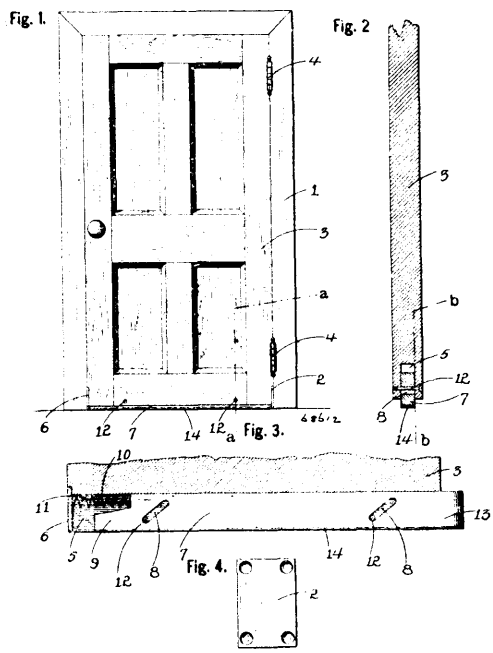
No. 68,611. Cylinder Lock. (*Serrure.*)



Henry S. Lockwood, South Norwalk, Connecticut, U.S.A., 6th September, 1900 ; 6 years. (Filed 23rd August, 1900.)

Claim.—In a lock, the combination with a tumbler case irregular or non-circular in cross section to form a bearing surface, said bearing surface having transverse grooves, of a lock case having an opening, free from internal projections or threads, adapted to receive the tumbler case, and a retaining slide adapted to directly engage the said bearing surface of the tumbler case and having grooves corresponding with the grooves in the said bearing surface, whereby the tumbler case may be locked both against rotation and withdrawal by means of the single slide.

No. 68,612. Door. (*Porte.*)

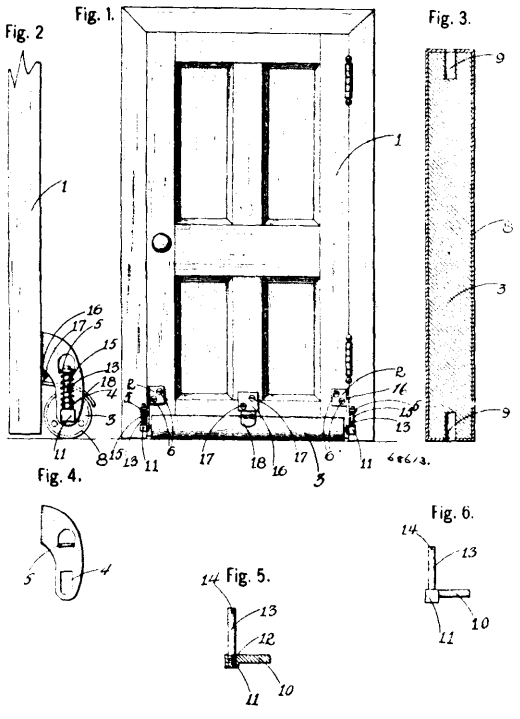


George John Winter, Buffalo, New York, U.S.A , 6th September, 1900 ; 6 years. (Filed 23rd August, 1900.)

Claim.—The combination with a door casing having a shallow depression in the lower portion of one of its sides, of a door mounted therein and having a central longitudinal slot extending throughout

its bottom edge, a metal plate, closing the outer end of said slot, and having its interior flush with the side edge of the door, a weather strip shaped to fit and operate in said slot and having the upper portion of its outer end cut away, and elongated openings having straight sides and extending diagonally with respect to said strip, a horizontal rod extending from the inner wall of the cut away portion of the outer end, a spiral spring mounted on said rod and adapted to bear against the outer metal plate, pins or bolts passed through the sides of the door and the diagonal openings, an inner metal plate set flush in the depression in the casing side against which the inner end of the strip presses, and a strip of flexible material attached to the lower surface of the weather strip and extending throughout its length, as set forth.

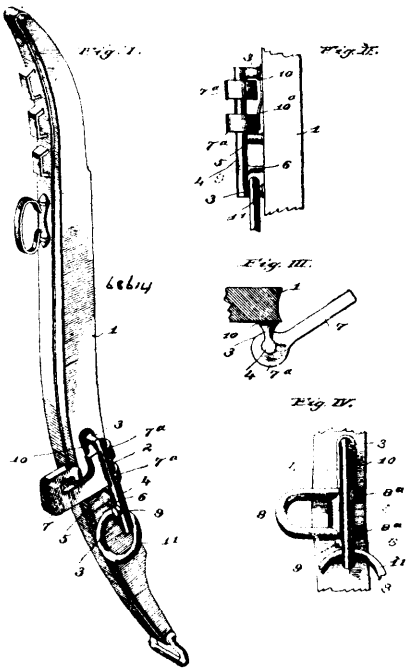
No. 68,613. Door. (*Porte.*)



George John Winter, Buffalo, New York, U.S.A., 6th September 1900; 6 years. (Filed 23rd August, 1900.)

Claim.—1st. An attachment for doors, comprising two plates having their upper portions bent at an angle and adapted to be secured to the lower portion of a door, and each having a vertical slot in their lower portion and a bent part vertically above said slot forming a horizontal ear, a roller interposed between said plates and having end openings, shafts journalled in said openings and passing through and extending beyond the vertical slots and having vertical extensions on the exterior of the slots passing through openings in the ears and spiral springs loosely mounted on said vertical extensions with their upper ends resting against the ears and their lower ends against the shafts, as set forth. 2nd. An attachment for doors, comprising two plates adapted to be secured to the lower portion of a door, and each having a vertical slot and an integral outwardly extending ear, a roller interposed between said plates and having shafts passing through the slots and provided with vertical openings, vertical extensions forming spring supporting rods having their upper ends supported in the ears and their lower ends detachably secured in the shaft openings, springs supported upon said rods and a curved arm attached to the door and extending over the roller to limit its upward movement, as set forth. 3rd. An attachment for doors, comprising two plates each having a portion bent at substantially a right angle and adapted to be secured to the lower portion of a door, and a main portion provided with an integrally formed horizontal ear and a vertical slot directly below said ear, a roller interposed between said plates and having shafts projecting through said slots, said shafts having vertical openings in their outer extremes exterior to the slots, vertical rods having their upper ends supported in the ears and their lower ends supported in the shaft openings, springs mounted upon said rods for maintaining said roller in its lower position with a spring force, and a stop device for limiting the upward movement, as set forth. 4th. An attachment for doors, comprising two plates adapted to be secured to the lower portion of a door, and each having a vertical slot and a horizontal ear, a roller interposed between said plates and having end openings, shafts journalled in said openings and having enlarged outer ends provided with screw threaded openings, spring supporting rods having their screw threaded lower ends screwing into the openings in the enlarged ends of the shafts and their upper ends passing through openings in the ears and springs supported on said rods, as set forth. 5th. An attachment for doors, comprising two plates adapted to be secured to the lower portion of a door, and each having a vertical slot and a horizontal ear, a roller interposed between said plates and having end openings, shafts journalled in said openings and having enlarged outer ends provided with screw threaded openings, spring supporting rods having their screw threaded lower ends screwing into the openings of the enlarged ends of the shafts and their upper ends passing through the ears, springs supported upon said rods, and a curved arm attached to the door and extending over the roller to limit its upward movement, as set forth.

No. 68,614. Hame and Trace Fasteners.
(*Boucle d'attelle.*)



Roy Dodson, Dallas, Texas, U.S.A., 6th September, 1900; 6 years. (Filed 24th August, 1900.)

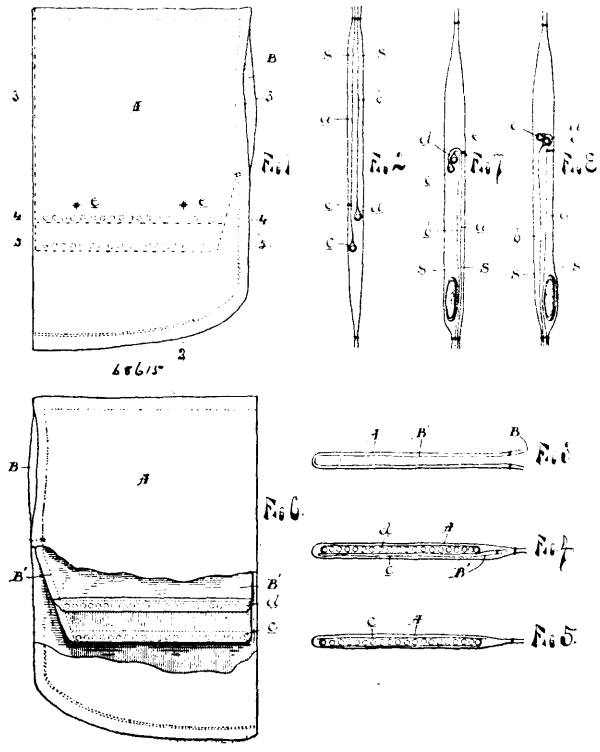
Claim.—A trace fastener for hames, comprising a staple formed with a rounded body, and with upper, lower and partition legs, a trace connection having curved tongues fitting the rounded body, and adapted to rest upon or embrace the partition leg in its upper or lower adjusted position respectively, and the spring having one end mounted on the shank of the upper leg, adapted to be held to the face of the hame body by the upper leg, and extending down beneath the upper leg into close proximity to the partition leg, so as to adapt it to bear against the back of a curved tongue in either the upper or lower position of the trace connection, substantially as described.

No. 68,615. Safety Pocket. (*Gousset de sureté.*)

Louis Vineberg, Detroit, Michigan, U.S.A., 6th September, 1900; 6 years. (Filed 24th August, 1900.)

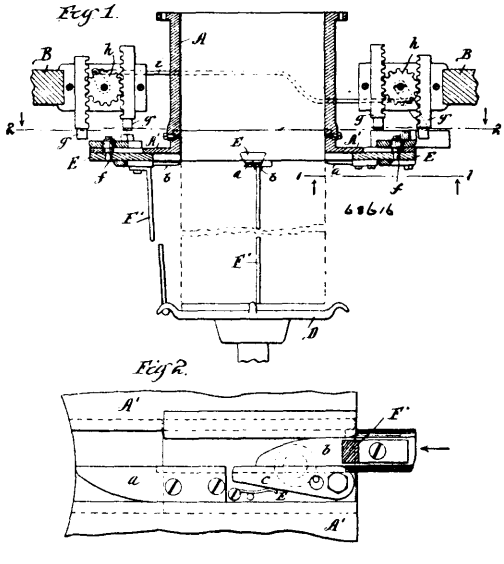
Claim.—1st. In a safety pocket, the combination with a pocket complete in itself, of a false pocket forming an inner lining of the upper portion of said pocket and opening in the lower portion thereof, and weighted flaps at the lower end thereof adapted to form a gravity closure for the same on inverting the pocket. 2nd. In a safety pocket, the combination with a pocket complete in itself, of a false pocket forming an inner lining of the upper portion of said pocket and opening into the lower portion thereof, said false pocket provided at its lower end with shotted flaps, one overlapping the other and co-operating with each other to form a gravity closure for the false pocket on inverting the pocket. 3rd. As a new article of manufacture, a safety pocket formed of two thicknesses of cloth, the outer one forming an outer pocket complete in itself and

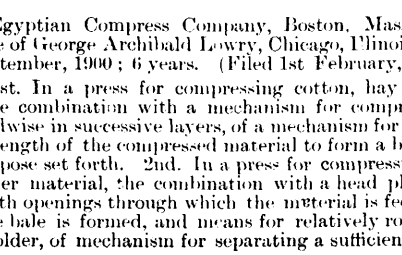
the inner one forming a lining or false pocket in the upper portion of the outer pocket and opening into the lower portion thereof, the



lower end of said false pocket secured in position within the outer pocket and terminating in the two pendant flaps, one overlapping the other and each flexibly weighted along the lower edge.

No. 68,616. Cotton Compressor. (*Pressoir pour coton.*)





The Indo-Egyptian Compress Company, Boston, Massachusetts, assignee of George Archibald Lowry, Chicago, Illinois, U.S.A. 6th September, 1900; 6 years. (Filed 1st February, 1900.)

Claim.—1st. In a press for compressing cotton, hay and other material, the combination with a mechanism for compressing the material endwise in successive layers, of a mechanism for separating a sufficient length of the compressed material to form a bale, as and for the purpose set forth. 2nd. In a press for compressing cotton, hay and other material, the combination with a head plate or cap provided with openings through which the material is fed, a holder in which the bale is formed, and means for relatively rotating the head and holder, of mechanism for separating a sufficient length of the compressed material to form a bale, as and for the purpose set forth. 3rd. In a press for compressing cotton, hay and other material, the combination with a head provided with openings through which the material is fed, means adapted to receive the compressed material, and means for relatively rotating such head and receiving means, whereby the material is compressed, of detatching devices adapted to be projected into the compressed material to separate a sufficient length to form a bale, as and for the purpose set forth. 4th. In a press for compressing cotton, hay and other material, the combination with the compressing mechanism, of detaching devices, and means for projecting the same into the column of compressed material to detach a portion therefrom of sufficient length to form a bale, as and for the purpose set forth. 5th. In a press for compressing cotton, hay and other material, the combination with a head provided with openings through which the material is fed, a holder in which the bale is formed, and means for relatively rotating such head and holder, of severing blades for separating a bale from such compressed material, and mechanism for operating such blades, said mechanism actuated by the relative rotation of the head and holder, as and for the purpose set forth. 6th. In a press for compressing cotton, hay and other material, the combination with a head provided with openings through which the material is fed, a holder in which the bale is formed, means for relatively rotating such head and holder, of severing blades for separating a sufficient length of the compressed material to form a bale, and mechanism actuated by the rotating part for actuating the severing blades, as and for the purpose set forth. 7th. In a machine for compressing fibrous material, the combination with a holder in which the material may be compressed into a column, means for condensing the material in layers endwise upon each other to form such column, of means for separating a portion of such column of sufficient length to form a bale, as and for the purpose set forth. 8th. In a machine for compressing fibrous material, the combination with the holder and means for compressing the material in superposed layers into a column in such holder, of severing blades arranged to operate transversely of the length of such column between the layers thereof, and means for advancing such blades into a column to separate a bale therefrom, as and for the purpose set forth. 9th. In a machine for compressing fibrous material, a holder, means for compressing the material in superposed layers in said holder and advancing such compressed material therein, whereby a column of the same is produced, of a yieldingly-resisting support for the lower end of such column, and means for severing a sufficient length of said column to form a bale, as and for the purpose set forth. 10th. In a machine for compressing fibrous material, including means for compressing fibrous material, the combination with a holder, means for compressing the material endwise in superposed layers in such holder, of means for severing a sufficient length of material to form the bale, and preventing endwise expansion of such bale after separation, as and for the purpose set forth. 11th. In a machine for compressing the material endwise, in combination with means for separating a sufficient length of compressed material to form a bale, and for holding or supporting the material remaining in the press, and for preventing endwise expansion of the latter, as and for the purpose set forth. 12th. In a machine for compressing fibrous material, including means for compressing the material endwise, in combination with means for separating a sufficient length of compressed material to form a bale, and for preventing endwise expansion of the severed bale, as and for the purpose set forth. 13th. In a machine for compressing fibrous material, including means for compressing the material endwise, in combination with means for severing a sufficient length of compressed material to form a bale, and for preventing endwise expansion of the bale and the material left in the press, as and for the purpose set forth. 14th. In a machine for compressing fibrous material, including a holder, and means for compressing such material endwise in said holder, in combination with severing blades carried by such holder, and means for operating them to separate a bale, as and for the purpose set forth. 15th. In a machine for compressing fibrous material, including a head with openings therethrough, a holder, and means for relatively rotating such head and holder, in combination with means for severing a bale from the compressed material, a pivoted arm for each severing mechanism, and a stop adapted to be engaged with such pivoted arm when one of these two parts is connected with a rotating part of the machine, as and for the purpose set forth. 16th. In a machine for compressing fibrous material, including a head having openings, and a holder in which the bale is to be formed, and a number of severing blades for separating the bale, in combination with a series of movable arms, the number of such arms corresponding with the number of the severing mechanisms, and a corresponding number of stops adapted to be engaged with the movable arms when either the arms or the stops are connected with a rotating part of the machine, as and for the purpose set forth. 17th. In a machine for compressing fibrous material, including a head with openings, and a holder in which the bale is formed, and a set of severing mechanisms for separating the bale, and mechanism for relatively rotating the head and holder, in combination with a set of pivoted arms and a set of stops for these arms adapted to engage the same, and either the arms or stops being connected with the rotating part of the machine, and connecting means for joining all of the arms or all of the stops, whereby the set may be operated simultaneously, as and for the purpose set forth. 18th. In a machine for compressing

fibrous material, including a head with openings, and a holder in which the material being compressed is formed, and a series of severing blades adapted to separate the bale, and a mechanism for relatively rotating the head and holder, in combination with a series of pivoted arms mounted on the holder, and a series of stops corresponding in number to the series of pivoted arms, and connected together so as to be simultaneously actuated, and a means for throwing the stops into and out of engagement with the arms, whereby the latter are actuated and caused to operate the severing mechanism, as and for the purpose set forth. 19th. In a machine for compressing fibrous material, including a slotted cap plate, and a chamber or holder in which to form a column of compressed material, a mechanism for rotating such chamber or holder, and severing blades carried by such chamber or holder, in combination with mechanism for operating such blades to sever a length of compressed material sufficient to form a bale after such length has emerged from the chamber or holder, as and for the purpose set forth. 20th. In a machine for compressing fibrous material, a holder, means for compressing the material in said holder, and correspondingly advancing the compressed material therethrough, whereby the material emerges from such holder in a compressed column, in combination with means for severing a length of such column to form a bale, and means for engaging the ends of such severed bale to hold the same against endwise expansion, as and for the purpose set forth. 21st. In a machine for compressing fibrous material, a holder, means for compressing the material in said holder, and correspondingly advancing the same through such holder, whereby the material emerges from the holder in a compressed column, in combination with means for severing a length of such column to form a bale, and means arranged to engage the end of the column from which the bale is formed and hold the same against expansion, as and for the purpose set forth. 22nd. In a machine for compressing fibrous material, a holder, means for compressing the material in, and correspondingly advancing the same through said holder, whereby the material emerges from the holder in a compressed column, severing blades adapted to be projected into the column below the holder to sever a sufficient length thereof to form a bale, and to sustain the remaining portion of the column in the holder and prevent expansion thereof endwise, as and for the purpose set forth. 23rd. In a machine for compressing fibrous material, a holder, means for compressing the material in, and correspondingly advancing the same through, said holder, whereby the material emerges from such holder in a compressed column, a resisting support arranged to receive the end of the column as it emerges from the holder, and support the same against expansion, in combination with blades adapted to be projected into the column at the point to form the top of the bale, and intermediately connected with the support for the lower end of such bale, whereby when the said bale is separated said blades and support will prevent endwise expansion, as and for the purpose set forth. 24th. In a machine for compressing fibrous material, a holder, means for compressing the material in, and correspondingly advancing the same through and beyond, such holder, whereby the material emerges from the holder in a compressed column, a resisting support arranged to receive the lower end of the compressed column as it emerges from the holder, and adapted to support the same against expansion, in combination with a set of severing mechanisms connected to the holder and adapted to be projected into the column below the holder, and another set of severing mechanisms adapted to be projected into the column below the holder but capable of being detached from said holder with the bale, and connected to the bale base or support, as and for the purpose set forth. 25th. In a machine for compressing fibrous material, the combination with a holder in which the material is compressed, a mechanism for advancing the compressed material through and beyond such holder, of two independent sets of blades adapted to be projected into the column of compressed material, and guided by ways in the holder, one set permanently connected with the holder and serving to prevent expansion of the material in such holder after the portion to form the bale has been detached, and the other set adapted to clear the guiding ways after the blades thereof are projected into the column of compressed material, and connected to the bale base or support independently of the holder, whereby such set is adapted to prevent the expansion of the bale endwise, as and for the purpose set forth. 26th. In a machine for compressing fibrous material, the combination with a compressing mechanism, including a slotted head and holder underneath the same, a mechanism for relatively rotating the head and holder, with a bale base or support, and a yieldingly resisting means opposing the movements of such bale base or support away from the compressing mechanism but free from the bale support, as and for the purpose set forth. 27th. In a machine for compressing fibrous material, the combination with a compressing mechanism, including a slotted head, and a bale base or support, and mechanism for yieldingly opposing the receding action of such bale base or support, but loosely connected to, and freely removable from, the said base or support, as and for the purpose set forth. 28th. In a machine for compressing fibrous material, the combination with the compressing mechanism, of a bale base or support provided with a central aperture, and a number of slots radiating therefrom, as and for the purpose set forth. 29th. In a machine for compressing fibrous material, the combination with the base plate or support upon which the material being compressed rests, provided with a projection for attachment to a bale stay, of severing blades adapted to be projected into a column of compressed material, and bearing upon the upper end of the bale that is severed, and bale stays connecting such severing blades to the bale base or support, as and for the purpose set forth. 30th. In a press for compressed cotton, hay and other materials, the combination with the compressing mechanism, of a removable holder in which the bale is formed, normally carrying at its upper end the clamping mechanism for grasping the bale and preventing endwise expansion of the same while it is awaiting the wiring operation, as and for the purpose set forth. 31st. In a press for compressing cotton, hay and other materials, the combination with the compressing mechanism, of a removable holder in which the bale is formed, normally carrying a clamping mechanism, independent of the compressing mechanism, which serves to grasp the upper end of the bale and prevent endwise expansion thereof after it is compressed, as and for the purpose set forth. 32nd. In a press for compressing cotton, hay and other materials, the combination with the compressing mechanism, of a removable holder in which the bale is formed, composed of a base and side stays having their lower ends normally adapted to be hooked upon such base and in-turned upper ends adapted to engage the upper end of the bale, whereby such bale is prevented from endwise expansion while awaiting the wiring operation, and the parts of the holder may be separated so as to permit the removal of the bale after the wiring operation, as and for the purpose set forth. 33rd. In a press for compressing cotton, hay and other materials, the combination with the compressing mechanism, of a set of detaching blades, serving also to grasp and prevent endwise expansion at the upper end of the compressed bale, and connected with means for grasping the lower end of such bale and preventing expansion thereof, as and for the purpose set forth. 34th. In a press for compressing cotton, hay and other materials, the combination with a rotatable head having guide slots, and mechanism for rotating such head, of a holder carrying a clamping mechanism for a bale, which is adapted to move through the slots for effecting such clamping action, and below the slots to enable the holder to be removed with the bale, as and for the purpose set forth. 35th. In a press for compressing cotton, hay and other materials, the combination with a rotatable head provided with guide slots, a holder having a bale base or support, and side walls detachably secured to said bale base, and adapted to move through the guide slots to clamp the bale, or below the same to permit the holder to be removed from the machine, as and for the purpose set forth. 36th. In a press for compressing cotton, hay and other materials, the combination with a rotatable head provided with guide slots, of a holder having clamping means adapted to move in such guide slots to clamp the bale, and below the same to permit the removal of the bale, and a plunger, offering a resistance during the formation of the bale, and capable of being retracted when the bale is completed, so as to admit of its separation from the incoming material and removal from the press, as and for the purpose set forth. 37th. In a press for compressing cotton, hay and other materials, the combination with a rotatable head provided with guide slots, of a holder comprising a bale base or support, and stays loosely connected to such bale base and having inturned upper ends, and adapted to move into the guide slots or below the same, whereby the holder is adapted to form a chamber, in which the bale may be formed, and with its stays to prevent endwise expansion of the bale in either direction after it is separated from the incoming material, as and for the purpose set forth. 38th. In a press for compressing cotton, hay and other materials, the combination with a rotatable head, of a holder carrying a set of clamping knives adapted to sever the bale and then to clamp it, at the upper end of such bale, and a bale base at the lower end of such holder adapted to freely move within the holder, but limited in its downward movement, whereby it will serve to prevent the lower end of such bale from expansion after such bale has acquired its proper length, as and for the purpose set forth. 39th. In a press for compressing cotton, hay and other materials, the combination with a rotatable head, of a holder carrying at its upper end mechanism adapted to sever and clamp the corresponding end of the bale, and at its lower end a freely movable bale base upon which the bale may rest and be prevented from expansion at its lower end when the desired length of bale has been produced, and a resisting plunger adapted to oppose the downward movement of the bale base until such base has reached its limit in the holder, and then to be retracted below the holder so that such holder may be removed with the bale, as and for the purpose set forth. 40th. In a press for compressing cotton, hay and other materials, the combination with a slotted head, and mechanism for revolving the same, of a ring secured to such head and provided with vertical openings through its walls, and off-sets or ledges formed in such walls, and detaching devices having heels adapted to be supported on the off-sets of the walls, and mechanism for projecting such severing blades inwardly through the vertical slots in the ring, and so as to cause the ends of such blades to sever the compressed material, and the heels thereof to clear the offsets, as and for the purpose set forth. 41st. In a press for compressing cotton, hay and other materials, the combination with a slotted head plate, and mechanism for revolving the same, of a ring provided with vertical apertures through the walls of the same, and horizontal off-sets from such walls, and detaching devices normally resting within the apertures with the heels thereof over the ledges of the off-sets, and means for adjusting the height of such detaching devices, as and for the purpose set forth. 42nd. In a press for compressing cotton, hay and other materials, the combination with a slotted head, and mechanism for revolving the same, of

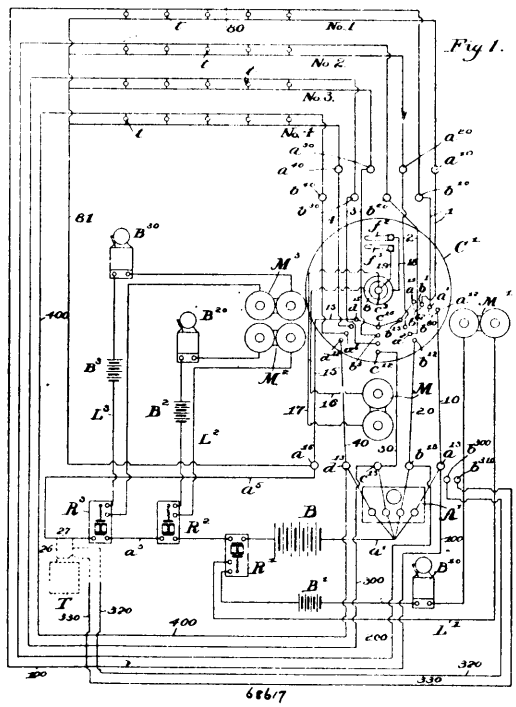
a ring provided with vertical apertures in its walls, and horizontal off-sets, and severing blades having the heels thereof projecting over the ledges of such off-sets, and means for simultaneously adjusting vertically the detaching devices, comprising a circular plate and adjusting screws, as and for the purpose set forth. 43rd. In a press for compressing cotton, hay and other material, the combination with a slotted head, and mechanism for revolving the same, of a ring provided with vertical apertures through its walls, and severing blades adapted to be supported within such apertures and provided with projections, and mechanism for engaging such projections and projecting the severing blades into the compressed material, as and for the purpose set forth. 44th. In a press for compressing cotton, hay and other materials, the combination with a slotted head, and mechanism for revolving said head, of a ring provided with vertical apertures, severing blades adapted to normally lie within such apertures, and provided with upwardly projecting pins, of a series of pivoted arms adapted to engage the projecting pins, and links connecting such arms, whereby they will all be operated simultaneously, as and for the purpose set forth. 45th. In a press for compressing cotton, hay and other materials, the combination with a slotted head, and mechanism for rotating the same, of a ring provided with supports and guides for severing mechanism, a bale base or support, and severing mechanism supported and guided by the ring, as and for the purpose set forth. 46th. In a press for compressing cotton, hay and other materials, the combination with a compressing mechanism, of a bale base or support adapted to revolve or rotate about its own vertical axis, a carrier or support for such bale base arranged to support the same below the compressing mechanism, whereby the bale may be readily revolved upon the bale base in such a manner as to facilitate the wiring thereof, as and for the purpose set forth. 47th. In a press for compressing cotton, hay and other materials, the combination with a compressing mechanism, of a movable carrier adapted to remove the bale from the compressing mechanism, and a bale base mounted to revolve about its own vertical axis upon such carrier, as and for the purpose set forth. 48th. In a press for compressing cotton, hay and other materials, the combination with the compressing mechanism, of a holder in which the bale is formed, having a bale base, and a removable carrier for supporting such bale base and bale, and provided with means adapted to permit the bale base to revolve about its own vertical axis upon such carrier, whereby the wiring of the bale is facilitated, as and for the purpose set forth. 49th. In a press for compressing cotton, hay and other materials the combination with a compressing mechanism, of a turntable provided with a circular track, and a bale base or support carrying rollers, adapted to revolve about its own vertical axis on said track, to facilitate the wiring of the bale, as and for the purpose set forth. 50th. In a press for compressing cotton, hay and other materials, the combination with the compressing mechanism, of a turntable or carrier provided with a plurality of circular tracks, and a plurality of bale bases or supports adapted to revolve upon such tracks about their own vertical axes, as for the purpose set forth.

No. 68,617. Electric Alarm System.

(*Système d'alarme électrique.*)

Edward Francis Woodman, Boston, and Henry Anthony Fiske, Newton, both in Massachusetts, U.S.A., 6th September, 1900; 6 years. (Filed 18th April, 1900.)

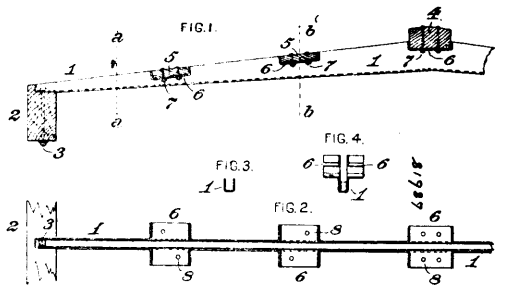
Claim.—1st. A protective system comprising a main alarm circuit including one or more devices to change said circuit under abnormal conditions, a test indicating device therefor, one or more local circuits each having an indicating device responsive to a change in the main circuit, and a testing apparatus adapted upon operation to connect said test indicating device with the main circuit, and through the latter to effect the operation of the local circuit indicating device, whereby the condition of said main and local circuits will be indicated. 2nd. A protective system comprising a duplex, open, main alarm circuit, a test indicating device therefor, one or more local circuits each having an indicating device responsive to a change in the main circuit, and a testing apparatus adapted upon operation to connect said test indicating device with the main circuit, to be actuated thereby, the operation of each local circuit indicating device being also effected by or through the main circuit when a test is made. 3rd. A protective system comprising a plurality of duplex normally open alarm circuits provided with thermostats to close the same upon an undue rise of temperature, a test indicating device for said alarm circuits, one or more local circuits each having an indicating device responsive to a change in any alarm circuit, and a testing apparatus adapted upon operation to successively connect said test indicating device with the several alarm circuits to be actuated thereby, the operation of each local circuit indicating device being also effected by or through each alarm circuit when a test is made. 4th. A protective system, comprising a plurality of duplex, normally open alarm circuits provided with thermostats to close the same upon an undue rise of temperature, a test indicating device for said alarm circuits, one or more local circuits, each having an indicating device responsive to a change in any alarm circuit, and a testing apparatus including a recording dial, said testing apparatus upon its operation successively connecting the test indicating device with the several alarm circuits to be actuated thereby, the said device and the indicating device of each local circuit co-operating with the dial to indicate thereupon the condition of the alarm and local circuits when a test is made of the system. 5th. A protective system, comprising a main alarm circuit, including one or more devices to change said circuit under



abnormal conditions, a test indicating device therefor, one or more local circuits, each having an indicating device responsive to a change in the main circuit, and a testing apparatus, including a recording dial, adjacent to which the several indicating devices are located, said testing apparatus being adapted upon operation to connect the test indicating device with the main circuit, and by or through the latter to effect the operation of the local circuit indicating device, the said indicating devices by their co-operation with the dial of the testing apparatus recording separately the condition of the several circuits comprised in the system when a test is made. 6th. A protective system, comprising a main alarm circuit, including one or more devices to change said circuit under abnormal conditions, a test indicating device therefor, one or more local circuits having each an indicating device to automatically and separately indicate the operation of a local circuit when an alarm is given by or through the main circuit, and a testing apparatus adapted upon operation to connect said test indicating device with the main circuit, and through the latter to also effect a test operation of each local circuit and its indicating device, whereby the condition of the circuits comprised in the system will be indicated. 7th. A protective system, comprising a main alarm circuit, including one or more devices to change said circuit under abnormal conditions, a test indicating device therefor, including a recording member, one or more local circuits, each having a vibrating bell and an indicating device responsive to a change in the main circuit, said indicating device including a recording member vibratable in unison with the bell, and a testing apparatus having a rotatable dial, the operation of said testing apparatus connecting said test indicating device with the main circuit, and through the latter also effecting the operation of the local circuit indicating device, whereby the recording members of said indicating devices will denote upon the dial the operative condition of the several circuits and the operation of the local circuit bell when a test is made. 8th. A protective system, comprising a plurality of duplex, normally open alarm circuits, a common test indicating device for said alarm circuits, one or more local circuits, each having an indicating device responsive to a change in any alarm circuit, and a testing apparatus, comprising a rotatable disc, actuating means therefor, circuit closers on said disc in circuit with the test indicating device and adapted to contact successively with the terminals of the several alarm circuits and thereby effect a test operation of said indicating device for each circuit, circuit breakers on said disc to open the alarm circuits in advance of the movement of the circuit closers, and a dial to co-operate with the test and local circuit indicating device and record the condition of the several circuits in the system. 9th. A protective system, comprising a plurality of duplex, normally open alarm circuits, a common test indicating device for said alarm circuits, one or more local circuits, each having an indicating device responsive to a change in any alarm circuit, and a testing apparatus adapted upon operation to successively connect said test indicating device with the several alarm circuits to be actuated thereby, the operation of each local

circuit being also effected by or through each alarm circuit when a test is made, a fire alarm system, and means controlled by the testing apparatus to automatically cut out the fire alarm system during the operation of said apparatus. 10th. A protective system, comprising a plurality of duplex, normally open alarm circuits, a common test indicating device for said alarm circuits, one or more local circuits, each having an indicating device responsive to a change in any alarm circuit, and a testing apparatus adapted upon operation to successively connect said test indicating device with the several alarm circuits to be actuated thereby, and to also effect the operation of each local circuit indicating device, said testing apparatus including a rotatable disc and a recording dial, about which said several indicating devices are grouped, to produce by their co-operation with the dial a separate record of the condition of each local circuit simultaneously with the test record of each alarm circuit. 11th. A protective system, comprising a plurality of duplex, normally open alarm circuits, a common test indicating device for said alarm circuits, including a recording member, one or more local circuits, each having a vibrating bell and an indicating device responsive to a change in any alarm circuit, each indicating device including a recording stylus vibratable in unison with the bell, and a testing apparatus having a rotatable disc provided with a recording dial, adjacent to which the recording members of the several indicating devices are located, a fire alarm system, and means controlled by rotation of the disc to cut out the fire alarm system during a test, operation of the testing apparatus connecting said test indicating device successively with the alarm circuits to effect the operation of its recording member, the styli us of each operative local circuit indicating device recording upon the dial the vibrations of its corresponding bell for each test of an alarm circuit.

No. 68,618. Roof Carline. *(Toiture.)*



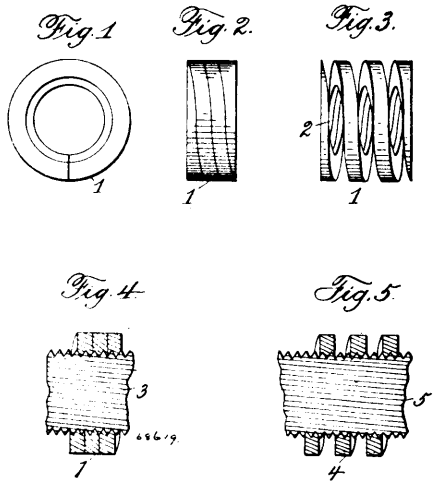
George Beecher Maltby and William T. Roush, both of Saginaw, Michigan, U.S.A., 6th September, 1900; 6 years. (Filed 3rd August, 1900.)

Claim.—1st. A sheet or plate metal roof carline, having a body of U or channel section, the side members of which gradually diminish in depth from its middle toward its ends, and having closed ends constituting bearing faces. 2nd. A sheet or plate metal carline, having a body of U or channel section, the top of which is open and the side members of which gradually diminish in depth from its middle towards its ends and are provided with recessed seats for longitudinal roof members. 3rd. A sheet or plate metal roof carline, having an open topped body of U or channel section, and having outwardly extending lateral wings, of channel section, for the support and connection of longitudinal roof members. 4th. A sheet or plate metal roof carline, having an open topped body of U or channel section, and having the metal of its side members turned outwardly at top, at its middle and at points between its middle and ends, so as to present pairs of lateral wings, of channel section, for the support and connection of a ridge pole and purlins. 5th. In a car frame, the combination of recessed side plates, plate metal roof carlines, pressed into channel section with closed ends, and having their ends fitting in and abutting against the ends of the recesses of the side plates, bolts passing through the bottom members of the carlines and securing them to the side plates, and a ridge pole and purlins fitting in recessed seats integral with the side members of the roof carlines.

No. 68,619. Nut. *(Ecrou.)*

Charles H. Smith, Oregon, Illinois, Charles Rystrom, Rockford, Illinois, Edwin Rystrom, Denver, Colorado, James C. Fesler, Oregon, Illinois, and Ross M. Vickers, Owatonna, Minnesota, all in the U.S.A., 6th September, 1900; 6 years. (Filed 7th August, 1900.)

Claim.—1st. A nut, composed of a series of coils of spring material having a threaded opening, the threads of which lie in the same plane with and exceed in diameter the threads of a co-operating bolt when the coils have been sprung into a position to be placed upon said bolt, but when released thereon are adapted to exert a pressure against the threads of the bolt. 2nd. A nut, composed of a series of coils of spring material having a threaded opening, the threads of which lie in the same plane with and exceed in diameter the threads of a co-operating bolt when the coils have been sprung into a position to be placed upon said bolt, and when released



thereon are adapted to exert lengthwise pressure against and also contract upon the threads of the bolt.

No. 68,620. Bag Holder. *(Accroche sac.)*

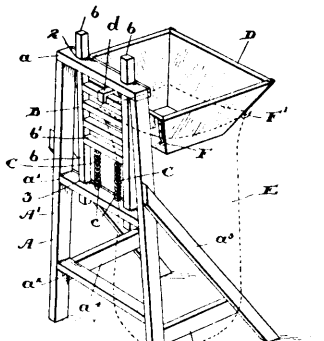


Fig. 1.

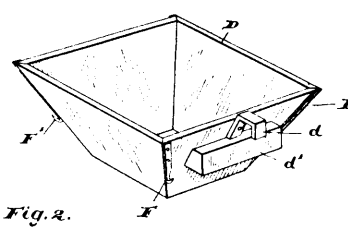


Fig. 2.

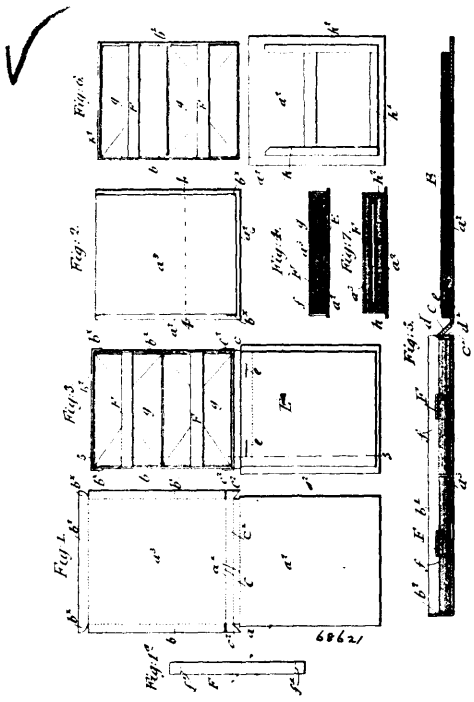
Charles Kenney, Chepstow, Ontario, Canada, 6th September, 1900; 6 years. (Filed 23rd August, 1900.)

Claim.—1st. In a bag holder, a hopper formed with a series of blunt hooks having their points on the same level and a sharp hook also on the same level for securing the top edge of the bag to the hopper and outside of the same, as and for the purpose specified. 2nd. In a bag holder, the combination with the standard having suitable rungs or cross bars, of the hopper provided with a hook designed to straddle one of such rungs as and for the purpose specified. 3rd. In a bag holder, the combination with the standard having suitable rungs or cross bars, of the hopper provided with a hook designed to straddle one of such rungs and a block having the outer face substantially vertical, so as to abut the side face of the standard, as and for the purpose specified. 4th. In a bag holder, the combination with the standard having suitable cross bars and the ladder frame provided with suitable rungs, of the hopper provided with a hook designed to be placed in a rung, and means for securing the bag to the hopper as and for the purpose specified. 5th. In a bag holder, the combination with the standard having suitable cross bars and the ladder frame comprising suitable side bars and rungs supported in suitable guide ways in the cross bars, of the rods extending between the bottom rung and central cross bar of the frame and

the springs encircling the rods and extending between the bottom rung of the ladder frame and the central cross bar of the standard, as and for the purpose specified. 6th. In a bag holder, the combination with the standards and hopper suitably held to one end thereof, of the inclined braces and ties connecting them to the standard, as shown and for the purpose specified.

No. 68,621. Box for Paper and Envelopes.

(Boîte pour papier.)



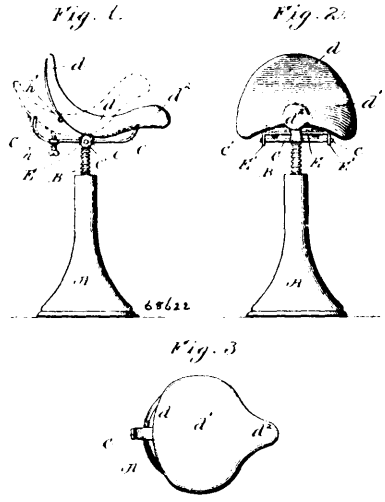
Charles E. Weyand, New York City, New York, U.S.A., 6th September, 1900; 6 years. (Filed 22nd August, 1900.)

Claim.—1st. A blank for a box body, said blank comprising an oblong main body, three central, transverse scoring lines, dividing said body into two rectangular sections, stays projecting from the side edges of said main body, at the ends of the scoring lines, and arranged between two adjoining scoring lines, and side and end flaps projecting from but one of said sections, as set forth. 2nd. A box, consisting of a box body having a wall at one end lower than the wall at the opposite end, a transverse strap secured at its ends to the side walls of said body and arranged at the same height as said low wall, whereby the latter and the strap provide means for retaining a pack of envelopes, and from which the envelopes can be readily withdrawn, a transverse strip flexibly joined to said strip and adapted to support sheets of paper, which fit into the box body against said fixed strap, substantially as set forth. 3rd. A box, consisting of a box body having a wall at one end lower than the wall at the opposite end, transverse straps secured at their ends to the side walls of said body and arranged at the same height as said low wall, whereby the latter and the straps provide means for retaining a pack of envelopes, and from which the envelopes can be readily withdrawn, a transverse strip flexibly joined to said low wall, a closing section flexibly joined to said strip, and a pad of paper carried by said closing section, and adapted to fit into the box body, substantially as set forth.

No. 68,622. Stool Seat. (*Banc.*)

George Hubert Chance, Portland, Oregon, U.S.A., 6th September, 1900; 6 years. (Filed 28th July, 1900.)

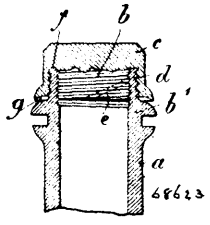
Claim.—1st. The combination with a base or support, and a rearwardly extending frame carried thereby, and having the upwardly arched or bowed termination forming a seat-stop, of a seat pivoted to said frame, and having the upturned back portion engaging said stop when the seat is in tilted position, together with a supplemental seat-stop for relieving said rear stop from undue strain, substantially as specified. 2nd. The combination with a base or support, an adjustable standard carried thereby, a frame carried by said standard, and seat-stops carried by said frame, of a tiltable seat, having an upturned back portion and pivotally connected with said frame, said upturned back portion being adapted to engage one of said seat-stops when the seat is in tilted position, together with a supplemental adjustable seat-stop carried by said frame, substantially as specified. 3rd. The combination of a base or support, a seat pivoted thereto, having an upturned back portion adapted to support the weight of an occupant when the seat it in tilted position, and a seat-stop carried by said base or support and extending rearwardly of said upturned portion and upwardly from, and above the plane of the



seat pivots to engage about midway of its height, the rear side of said upturned portion of the seat, when the seat is in tilted position, substantially as specified. 4th. The combination with a base or support, and a seat-stop of yielding character carried thereby, of a seat pivotally mounted upon said support, together with a supplemental seat-stop for relieving said main seat-stop from undue strain, substantially as specified. 5th. The combination with the base or support, and the cruciform frame carried thereby, said frame having its longitudinal extremities bent upwardly into seat-stop, of yielding character, of the seat pivotally connected to said frame, and having the upturned back portion engaging the rear of said stops when the seat is in tilted position, substantially as specified.

No. 68, 23. Means of Closing Receptacles.

(Methode de fermer les vaisseaux.)



Claus Sühl, Marne, Holstein, Prussia, German Empire, 6th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. Improved means for closing receptacles consisting of the combination of a stopper *c* having an internal thread and male portion having an external thread, and a cylindrical part *b* having a screw thread on both the inner and outer surface to fit the internal and external screw threads respectively of the stopper, the said stopper and cylindrical part being screwed together to close the receptacle, constructed and arranged, substantially as hereinbefore described. 2nd. Improved means for closing receptacles consisting of the combination of a stopper *c* having an internal thread and male portion having an external thread, a cylindrical part *b* having a screw thread on both the inner and outer surface to fit the internal and external screw threads respectively of the stopper, and a packing ring *g* of suitable material between the stopper and the flange b^1, said stopper and cylindrical part being screwed together to close the receptacle, the said ring *g* assisting in preventing the escape of the contents, constructed and arranged, substantially as hereinbefore described. 3rd. Improved means for closing receptacles consisting of the combination of a stopper having an internal thread and male portion having an external thread, a cylindrical part *b* having a screw thread on both the inner and outer surface to fit the internal and external screw threads respectively of the stopper and a packing ring of suitable material between the stopper and the cylindrical part *b* at *f*, said stopper and cylindrical part being screwed together to close the receptacle, the said ring assisting in preventing the escape of the contents, constructed and arranged, substantially as hereinbefore described. 4th. Improved means for closing receptacles consisting of the combination of a stopper having an internal thread and male portion having an external thread, a cylindrical part *b* having a screw thread on both the inner and outer surface to fit the internal and external screw threads respectively of the stopper, a

packing ring g of suitable material between the stopper and the flange b^1, and a packing ring of suitable material between the stopper and the cylindrical part b at f. said stopper and cylindrical part being screwed together to close the receptacle, the said packing rings assisting in preventing the escape of the contents, constructed and arranged, substantially as hereinbefore described. 5th. Improved means for closing receptacles consisting of the combination of a stopper c having an internal thread and male portion having an external thread, a cylindrical part b having a screw thread on both the inner and outer surface to fit the internal and external screw threads respectively of the stopper and a hole e to allow of the escape of the contents when the pressure becomes too high, constructed and arranged, substantially as hereinbefore described. 6th. Improved means for closing receptacles consisting of the combination of a stopper c having an internal thread and male portion having an external thread, a cylindrical part b having a screw thread on both the inner and outer surface to fit the internal and external screw threads respectively of the stopper, a packing ring of suitable material between the stopper and the cylindrical part b at f, and a hole e to allow of the escape of the contents when the pressure becomes too high, constructed and arranged, substantially as hereinbefore described.

No. 68,624. Regulator for Incubators, Brooders, etc.

(Incubateur.)

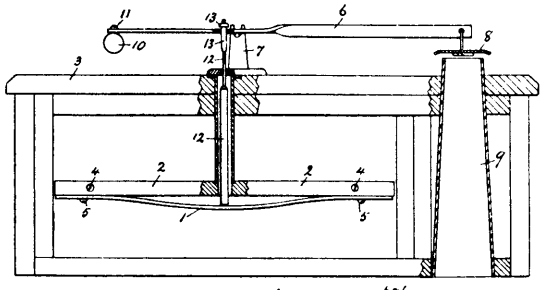


Fig 1

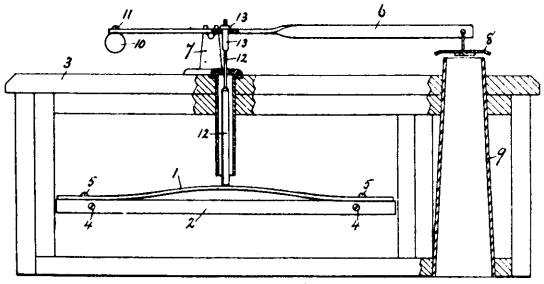
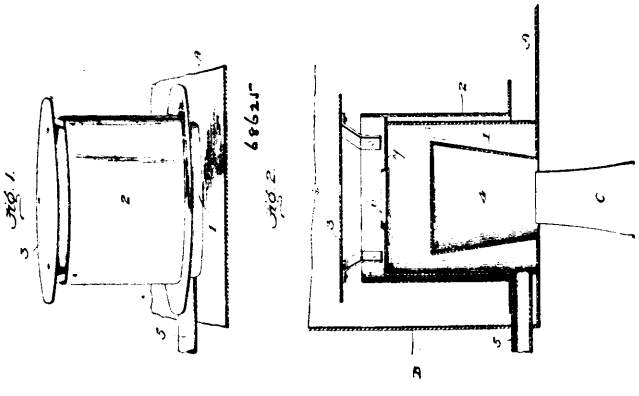


Fig 2.

Andrew J. Morgan, London, Ontario, Canada, 6th September, 1900; 6 years. (Filed 11th July, 1899.)

Claim.—1st. A rod, and an adjusting nut on said rod, in combination with a lever, and a valve attached to one end of said lever, substantially as and for the purpose set forth. 2nd. A rod, and an adjusting nut on said rod, in combination with a lever, a valve attached to one end and an adjustable weight to the other end of said lever, substantially as and for the purpose set forth. 3rd. A rod, and an adjusting nut on said rod, in combination with a lever, one end of which is slightly the heaviest, and a valve attached to said end, substantially as and for the purpose set forth. 4th. A rod, and an adjusting nut on said rod, in combination with a lever, one end of which is slightly the lightest, and a valve attached to said end, substantially as and for the purpose set forth. 5th. A rod, and an adjusting nut on said rod, in combination with a lever, one end of which is slightly heaviest, a valve attached to said end and an adjustable weight to the other end of said lever, substantially as and for the purpose set forth. 6th. A rod, and an adjusting nut on said rod, in combination with a lever, one end of which is slightly the lightest, a valve attached to said end, and an adjustable weight to the other end of said lever, substantially as and for the purpose set forth. 7th. A thermostat, in combination with a rod, an adjusting nut on said rod, a lever, one end of which is slightly the heaviest and a valve attached to said end, and so arranged that as the thermostat lowers, the weight of the rod will rest on and overbalance the lever to open the valve and as the thermostat raises, the weight of the rod will be removed from the lever, thus allowing the valve end of the lever to lower and close the valve, substantially as and for the purpose set forth. 8th. A thermostat, in combination with a rod, an adjusting nut on said rod, a lever, one end of which is slightly the lightest and a valve attached to said end, and so arranged that as the thermostat lowers, the weight of the rod will rest on and overbalance the lever to close the valve and as the thermostat raises the weight of the rod will be removed from the lever, thus allowing the weighted end of the lever to lower and the opposite valve end to raise and open the valve, substantially as and for the purpose set forth. 9th. A thermostat, in combination with a rod, an adjusting nut on said rod, a lever, one end of which is slightly the heaviest, a valve attached to said end and an adjustable weight to the other end of said lever, and so arranged that as the thermostat lowers, the weight of the rod will rest on and overbalance the lever to open the valve and as the thermostat raises, the weight of the rod will be removed from the lever thus allowing the valve end of the lever to lower and close the valve, substantially as and for the purpose set forth. 10th. A thermostat, in combination with a rod, an adjusting nut on said rod, a lever, one end of which is slightly the lightest, a valve attached to said end, and an adju-table weight on the other end of said lever, and so arranged that as the thermostat lowers the weight of the rod will rest on and overbalance the lever to close the valve, and as the thermostat raises the weight of the rod will be removed from the lever thus allowing the weighted end of the lever to lower and the opposite valve end to raise, and open the valve, substantially as and for the purpose set forth. 11th. A thermostat fastened to a stationary support, in combination with a rod engaging with and operated by but not fastened to said thermostat, and provided with an adjusting nut, a lever with which said rod engages, one end of which is slightly the heaviest, and a valve attached to said end and so arranged that as the thermostat lowers, the weight of this rod will rest on and overbalance the lever to open the valve and as the thermostat raises, the weight of the rod will be removed from the lever, thus allowing the valve end of the lever to lower and close the valve, substantially as and for the purpose set forth. 12th. A thermostat fastened to a stationary support, in combination with a rod, engaging with and operated by but not fastened to said thermostat, and provided with an adjusting nut, a lever with which said rod engages, one end of which is silghtly the lightest, and a valve attached to said end, and so arranged that as the thermostat lowers the weight of the rod will rest on and overbalance the lever to close the valve, and as the thermostat raises, the weight of the rod will be removed from the lever thus allowing the weighted end of the lever to lower and the opposite valve end to raise, and open the valve, substantially as and for the purpose set forth. 13th. A thermostat fastened to a stationary support, in combination with a rod, engaging with and operated by but not fastened to said thermostat, and provided with an adjusting nut, a lever with which said rod engages, one end of which lever is slightly the heaviest, a valve attached to said end, and an adjustable weight to the other end of said lever, and so arranged that as the thermostat lowers the weight of the rod will rest on and overbalance the lever to open the valve and as the thermostat raises, the weight of the rod will be removed from the lever, thus allowing the valve end of the lever to lower and close the valve, substantially as and for the purpose set forth. 14th. A thermostat fastened to a stationary support, in combination with a rod engaging with and operated by but not fastened to said thermostat, and provided with an adjusting nut, a lever with which said rod engages, one end of which lever is slightly the lightest, a valve attached to one end, and an adjustable weight to the other end of said lever, and so arranged that as the thermostat lowers, the weight of the rod will rest on and overbalance the lever to close the valve, and as the thermostat raises, the weight of the rod will be removed from the lever, thus allowing the weighted end of the lever to lower and the opposite valve end to raise and open the valve, substantially as and for the purpose set forth.

No. 68,625. Brooder Heater. *(Chauffeur pour incubateur.)*

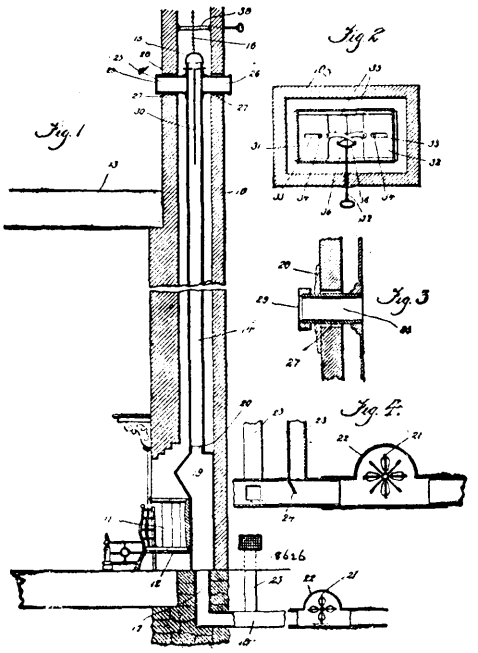


Howard Van Sickle, Lebanon, New Jersey, U.S.A., 6th September, 1900; 6 years. (Filed 20th August, 1900.)

Claim.—In a brooder heater. the combination of the brooder floor provided with a centrally disposed orifice for the admission of heated air, the inverted cone-shaped hood fixed concentrically within the heater drum and encompassing said centrally disposed admission orifice and extending upwardly from said brooder floor, the heater drum 1 encompassing the inverted cone-shaped hood and provided with a centrally disposed orifice 6 in its top plate 7, the heater dome surrounding said heater drum and forming a heat retaining dead air space therebetween and provided with the raised heat deflecting top 3, and the fresh air flue 5 leading from the outside of the brooder heater into said heater drum, substantially as and for the purpose set forth.

No. 68,926. House Ventilating System.

(Système de ventilation.)



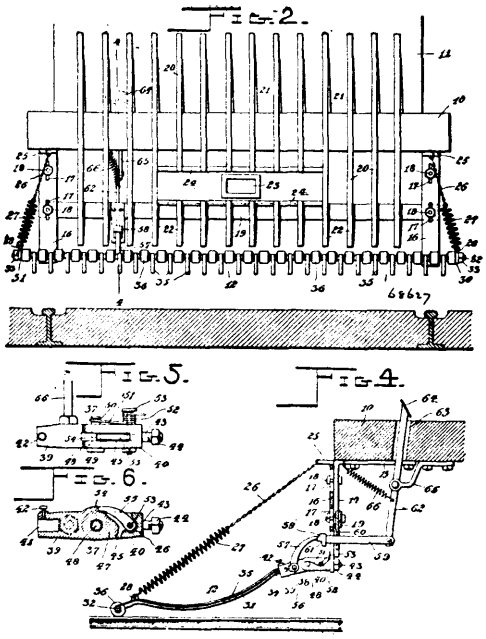
Albert Almon, Sydney, Cape Breton, Canada, 6th September, 1900; 6 years. (Filed 18th August, 1900.)

Claim.—1st. The combination with a chimney, of a suspended air pipe, register tubes removably coupled to said air pipe, and provided with registers at their outer ends, and collars engaging with the chimney and said register tubes, substantially as described. 2nd. The combination with a chimney, of a suspended air pipe, the valve plates fitted to said pipe, means for simultaneously operating said valve plates, and registering tubes connected with said air pipe at a point below the valve plates, substantially as described. 3rd. The combination with a chimney, of a heating drum having a cold air inlet at its lower portion, a pipe connected removably to the upper portion of said drum, a bail at the upper end of said pipe, and a suspension cable attached to the bail for suspending the pipe removably within the chimney, substantially as described. 4th. The combination of a main air pipe, a drum connected therewith, a cold air pipe also connected with the drum, and a fan or blower in operative relation to the cold air pipe and having independent distributing branches, substantially as described. 5th. In a heating and ventilating system, the combination of a heating drum arranged at the back of a fire place, a cold air pipe connected to said drum, a forcing fan in operative relation thereto, a main air pipe suspended in a chimney and connected removably to the heating drum, a valve mechanism for said main air pipe, and register tubes coupled to the main air pipe and clamped against a chimney, substantially as described.

No. 68,627. Car Fender. *(Garde de char.)*

Edmund Conway, Quebec, Canada, 6th September, 1900; 6 years. (Filed 18th August, 1900.)

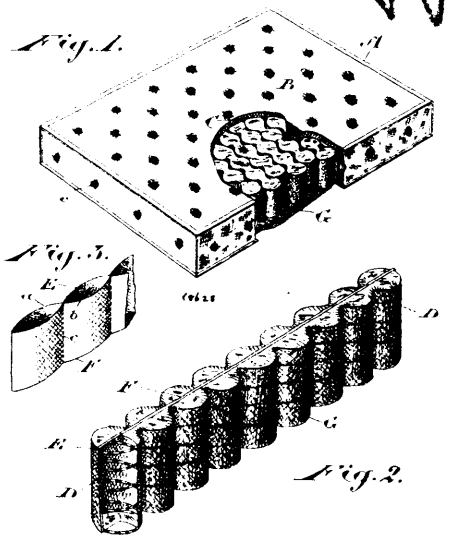
Claim.—1st. In a car fender, the combination of a pivoted basket and elastic suspension devices connected to said pivoted basket, substantially as described. 2nd. In a car fender, the combination of a fender basket pivoted at its rear portion, expansible suspension springs connected to the front portion of the basket, and a tripping mechanism in operative relation to said basket, substantially as described. 3rd. In a car fender, the combination with a pivoted fender basket and suspension devices therefor, of means for positively locking said pivoted basket against upward movement from the normal position in which it is suspended, substantially as described. 4th. In a car fender, the combination with a pivoted basket and a yieldable suspension device therefor, of a manually operable trip mechanism adapted to normally maintain said basket in a raised



position, and a detent mechanism for positively locking said pivoted fender basket against upward movement from its normal suspended position, substantially as described. 5th. In a car fender, the combination with a fender basket, of adjustable supporting devices therefor, and suspension devices attached to the fender basket, and certain elements of the supporting devices, substantially as described. 6th. In a car fender, the combination of two part brackets, each having one member adjustable with respect to the other member, and a fender basket suspended from the adjustable members of said brackets, substantially as described. 7th. In a car fender, the combination of two part brackets, each having vertically adjustable members, a fender basket hung at its rear portion on said adjustable members of the bracket, and yieldable suspension devices connected with the front portion of said fender basket and with said adjustable members of the brackets, substantially as described. 8th. In a car fender, the combination with suitable brackets, and a fender basket, of knuckle joint connections between said parts and provided with detents arranged and adapted for service, as set forth. 9th. In a car fender, the combination with suitable supporting brackets, and a fender basket, of knuckle joints having separable members attached to said brackets and the fender basket, substantially as described. 10th. In a car fender, the combination with supporting brackets, and a fender basket, of knuckle joints having members attached to the brackets and the fender basket respectively, and removable pins for pivotally connecting said separable members of the knuckle joints, substantially as described. 11th. In a car fender, the combination with supporting brackets, and a fender basket, of knuckle joints, each having separable members, and fastened to one bracket and a portion of the fender basket, the pivotal pins connecting said members of the knuckle joints, and yieldable latches engaging with said pins, substantially as described. 12th. In a car fender, the combination with a basket, and knuckle joints therefor, of a detent connected to one member of the knuckle and having interlocking engagement with the other member of said knuckle joint, substantially as described. 13th. In a car fender, the combination with a fender basket, of knuckle joints therefor, each having one member formed with a shoulder, and a detent pivoted to a part of the knuckle joint and engaging with the shoulder of said member thereof, substantially as described. 14th. In a car fender, the combination with suitable brackets, and a basket, of the knuckle joints having the separable members pivoted together, and each joint having one member fastened to a bracket and another member fastened to the fender basket, said joint member which is adapted to the fender basket being provided with a shoulder, and a detent pivoted to each joint member which is attached to the bracket and engaging with the shoulder of the other joint member, substantially as described. 15th. In a car fender, the combination with suitable brackets, and a fender basket having hinged connection therewith, of a trip bar, an arm movable with the basket and arranged for engagement with the trip bar, and means for releasing the trip bar from said arm, substantially as described. 16th. In a car fender, the combination with suitable brackets, and a fender basket having hinged connection therewith, of a horizontally slidable trip bar provided with a notched head, a curved arm movable with said bracket and arranged for engagement with said notched

head, means f r supporting the trip bar, a releasing lever, and a retractor for said lever, substantially as described. 17th. In a car fender, the combination with suitable supporting brackets, of a bar connecting said brackets, a series of bowed buffer springs attached to said bar and disposed in front of a portion of a car, certain of said springs being divided and connected to form an opening for the draw bar, and a fender hung on said brackets, substantially as described.

No. 68,628. Mattress. (*Matelas.*)



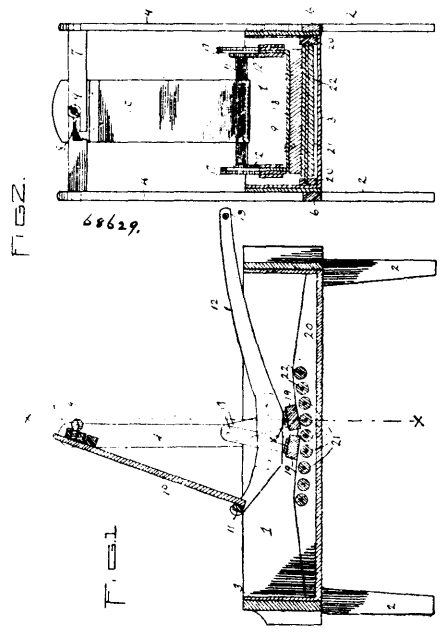
James Marshall, Toronto, Ontario, Canada, 6th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. A mattress provided with a filling composed of a plurality of coil springs each enclosed in a pocket formed of a suitable flexible material, substantially as and for the purpose specified. 2nd. A mattress comprising a cover, a filling composed of a plurality of coil springs each enclosed in a pocket formed of a suitable flexible material and a lining between the cover and filling of curled hair, wool, cotton or other suitable material, substantially as and for the purpose specified. 3rd. A filling for mattresses comprising a series of coil springs each enclosed in a pocket formed of a suitable flexible material, each pocket being connected to the pockets immediately in contact with it in the series, substantially as and for the purpose specified. 4th. A filling for mattresses comprising a series of coil springs each enclosed in one of a series of integrally connected pockets formed of a suitable flexible material, substantially as and for the purpose specified. 5th. A filling for mattresses comprising a plurality of series of integrally connected pockets formed of a suitable flexible material and a plurality of series of coil springs located one in each pocket, each series of pockets being connected at suitable points with the next, so that the coil springs break joint with one another, substantially as and for the purpose specified. 6th. A mattress comprising a cover, a filling composed of a plurality of coil springs each enclosed in a pocket formed of a suitable flexible material and a lining between the cover and filling of curled hair, wool, cotton or other suitable material, holes being formed in a side of the mattress for the exit and entry of air, substantially as and for the purpose specified. 7th. A mattress comprising a cover, a filling comprising a plurality of series of integrally connected pockets formed of a suitable flexible material and a plurality of series of coil springs located one in each pocket, each series of pockets being connected at suitable points with the next, so that the coil springs break joint with one another, and a lining between the cover and filling of curled hair, wool, cotton or other suitable material, substantially as and for the purpose specified.

No. 68,629. Washing Machine. (*Machine a laver.*)

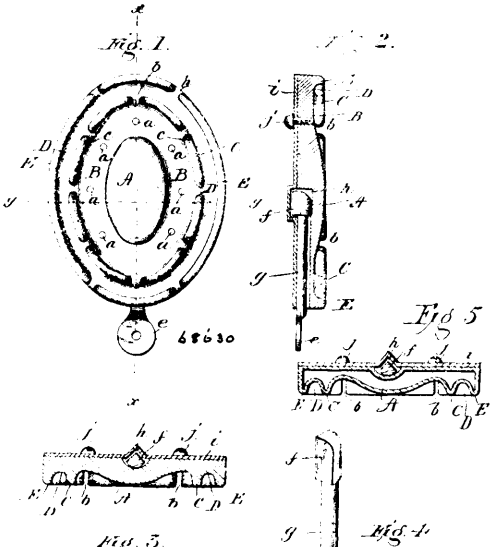
John Ambrose Gallagher, Stockton, California, U.S.A., 6th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. In a washing machine, the combination of a body having a roller bed therein, standards secured to the said body carrying a reciprocating frame, the said frame having slotted levers connected therewith and a clothes clamp working in the slotted levers, substantially as set forth. 2nd. In a washing machine, the combination of a body having a roller bed therein, standards secured to the body carrying a reciprocating frame having connected therewith curved levers with slots therein, and a clothed clamping device consisting of clamping members provided with upwardly extending arms pivotally connected at there upper ends and slidably working in the said slots, substantially as set forth. 3rd. In a washing machine, the combination of a body, uprights or standards pivotally secured to the sides thereof, a rocking shaft having its ends journalled in said standards and provided with a bayonet slot, an as cellating



frame, provieed with a bolt that engages said bayonet slot, and a rubber connected to said oscillating frame, substantially as set forth.

No. 68,630. Truss Pad.

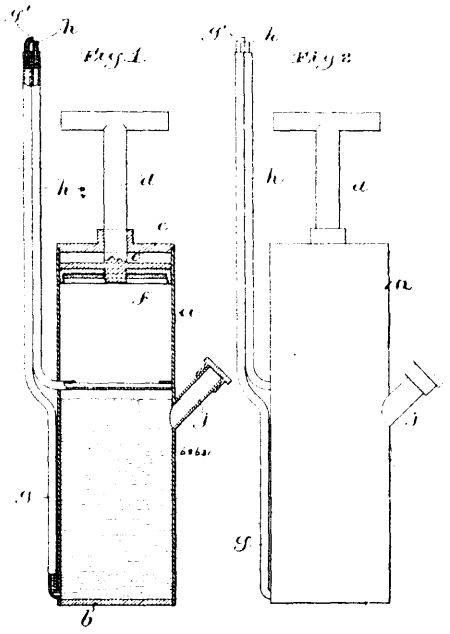


Rollo W. Browne, assignee of Robert R. Roberts, both of Washington, Columbia, U.S.A., 7th September, 1900; 6 years. (Filed 14th February, 1900.)

Claim.—1st. A truss pad, oval in shape, in the centre of whose face there is a raised oval disc, and near the periphery of said pad are small ridges, arranged annularly with spaces between them, said pad being provided with perforations from front to back, substantially as shown and described and for the purposes set forth. 2nd. A truss pad, oval in shape, in the centre of whose face there is a raised, hollow oval disc, and near the periphery of said pad are small ridges. arranged annularly, with spaces between them, said pad being provided with perforations from front to back, substantially as shown and described and for the purpose set forth. 3rd. The combination of the pad, having in the centre of its rear face a depression, the rear metal plate having a raised angular part, form-

ing with the depression a socket, substantially triangular in shape, the rod perforated in one end and having a head, substantially triangular in shape, adapted to fit loosely in said socket, thus allowing a tilting or side motion of the pad, substantially as shown and described and for the purposes set forth. 4th. The combination of the hollow pad, having in the centre of its rear face depression, the rear metal plate having a raised angular part forming with the depression a socket, triangular in shape, the rod having on one end a head, substantially triangular in shape, adapted to fit loosely in the socket, allowing a tilting or side motion of the pad one-eighth of an inch and no more, substantially as shown and described and for the purposes set forth.

No. 68,631. Atomizer. *Autvérisateur.*



Henry Tolman, assignee of Thomas Kenney, both of Boston, Massachusetts, U.S.A., 7th September, 1900; 6 years. (Filed 15th February, 1900.)

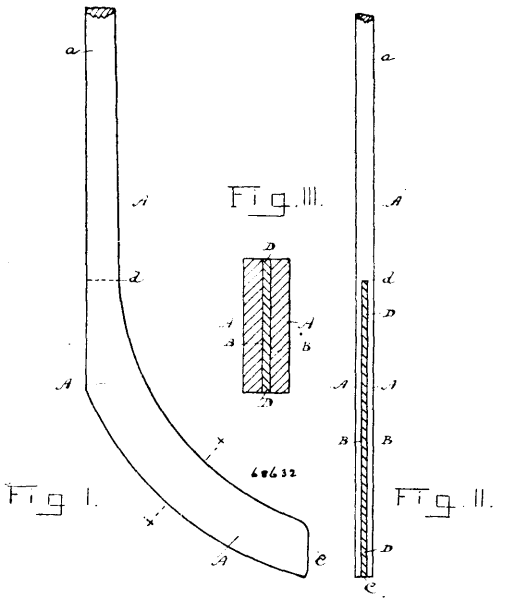
Claim.—1st. An atomizer comprising a cylindrical casing, an air discharge tube extending outwardly from a point below the top of the receptacle and having an air discharge nozzle at its outer end, the portion of the receptacle above the receiving end of said air discharge tube constituting an air cylinder having a cap or cover at its upper end formed to guide a piston rod, while the portion below the said receiving end constitutes a liquid reservoir, a liquid inlet communicating with the upper portion of the liquid receptacle at a point below the air discharge tube, whereby the liquid is prevented from rising above the receiving end of the said tube, a liquid outlet extending outwardly from the lower portion of the liquid reservoir and terminating in a nozzle in operative proximity to the nozzle of the air discharge tube, a piston fitting the said air cylinder, and an operating rod for said piston passing through and guided by the said cap or cover, the said air cylinder being integral with the liquid reservoir, so that there is no joint between the two for leakage of air, whereby the entire air pressure caused by the descent of the piston is caused to force air and liquid through the said discharge tubes and nozzles.

No. 68,632. Hockey Stick.

James A. Leggatt, Hamilton, Ontario, Canada, 7th September, 1900; 6 years. (Filed 19th December, 1899.)

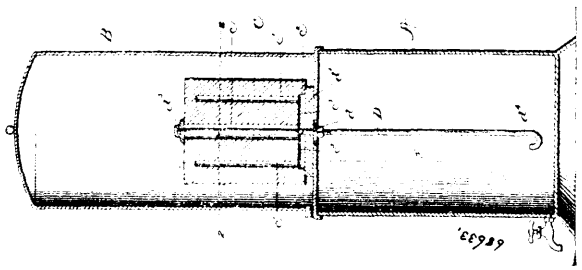
Claim.—1st. A hockey stick with a mortise through the lower and curved part thereof and a tenon cemented in said mortise, the grain of the tenon running obliquely to the grain of the stick, as described.

2nd. In a hockey stick, a mortise through the lower and curved part of said stick, and a tenon inserted in said mortise and cemented



therein, the grain of the tenon running obliquely to the grain of the stick, as described.

No. 68,633. Water Filter. *Filtre à eau.*



Dwight Joel Bliss, Carthage, Missouri, U.S.A., 7th September, 1900; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. The porous stone filter block C, formed with the vertical parallel pockets c^1 c^1, the continuous gutter c^2, the radial gutters c^3, and the central orifice c, in combination with the outlet pipe D formed with the trap d^4, substantially as and for the purpose set forth. 2nd. The combination with the reservoir A, the superimposed filter chamber B, and the filter block C, provided with the central orifice c, of the pipe D terminating in the trap d^3, the collar d, and the cover plate d^1, substantially as and for the purpose set forth.

No. 68,634. Surgical Splint.

Robert White Barton, Marion, Arkansas, U.S.A., 7th September, 1900; 6 years. (Filed 17th February, 1900.)

Claim.—1st. A surgical splint, consisting of separated pads arranged for attachment to a limb by bandages, and an angular rigid bridge piece having two vertical members, and a horizontal member connecting said vertical members, the latter being rigidly attached at their lower ends to each pad whereby to hold the horizontal member above the outer face of the pads, as and for the purpose set forth. 2nd. A surgical splint, consisting of separated pads arranged for attachment to a limb by bandages, and an angular rigid bridge piece having two vertical members and an extensible horizontal member connecting said vertical members, the said vertical members being rigidly attached at their lower ends to each pad, whereby to hold the horizontal member above the outer face of the pads, as and for the purpose set forth. 3rd. A surgical splint, consisting of a pair of juxtaposed and separated pads arranged for attachment to a limb by bandages, said pads being formed with slots in their adjacent edges, and angular bridge pieces provided with outwardly extending ends by which they are attached to the inner face of said pads in the rear of said slots, vertical members extending through said slots to and beyond the opposite face of the pads, and a horizontal member supported by said vertical members

above the last named face of the pads, as and for the purpose set forth. 4th. A surgical splint, consisting of a pair of juxtaposed and

Fig. 1.

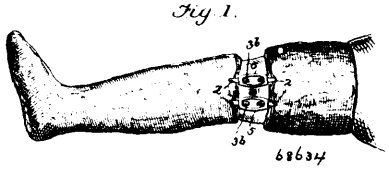


Fig. 2.

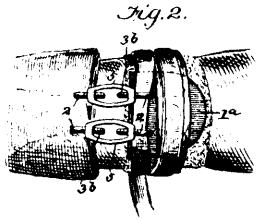


Fig. 3.

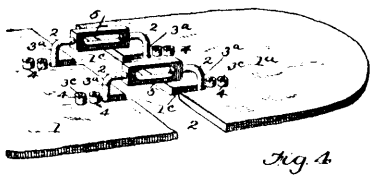
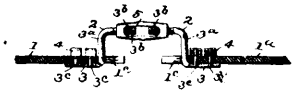


Fig. 4.



separated pads formed with slots in their adjacent edges, angular bridge pieces provided with outwardly extending ends by which they are attached to the inner face of said pads in the rear of said slots, vertical members extending through said slots contiguous to the rear wall thereof to and beyond the opposite face of said pads, and horizontal members supported by said vertical members, the said latter members being separated between its ends and the adjacent end being oppositely screw threaded, and a turn buckle connecting said ends, as and for the purpose set forth.

No. 68,635. Box *Boite.*

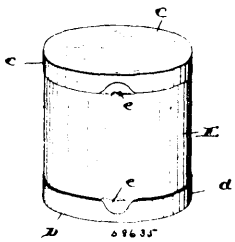


Fig. 1.

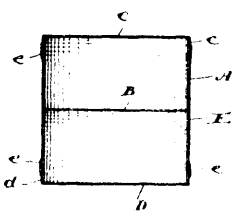


Fig. 2.

Arthur Wellesley Mayelle, Toronto, Ontario, Canada, 7th September, 1900; 6 years. (Filed 25th August, 1900.)

Claim.—1st. As a new article of manufacture, a box divided into two compartments designed to contain the ingredients and a suitable cover for each compartment, as and for the purpose specified. 2nd. As a new article of manufacture, a box provided with a central partition and a cover lid for each portion provided with a depending flange extending outside the body, as and for the purpose specified. 3rd. As a new article of manufacture, a box provided with a central partition and a cover lid for each portion provided with a depending flange extending outside the body, and a label having tabs secured to the flanges of the lids or covers, as and for the purpose specified.

No. 68,636. Stump Puller. *Arrache souche.*

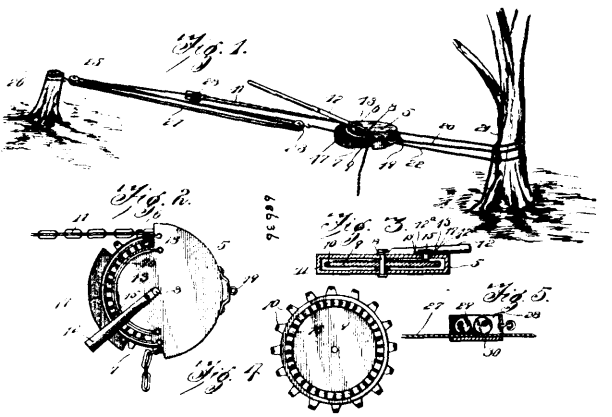


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Theodore H. McCain, Bothell, Washington, U.S.A., 7th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. In a stump puller, the combination with a casing having a slot therein, of a drum mounted in the casing, a rack upon the drum, a lever mounted upon the casing, a dog carried by the lever and adapted for engagement with the rack through the slot of the casing, and a dog mounted upon the casing and adapted for engagement with the rack to hold the drum when the first-named dog is disengaged. 2nd. A stump puller comprising a casing having a slot therein, a drum mounted in the casing, a rack upon the drum, a lever mounted on the casing, a dog carried by the lever adapted to enter the slot and engage the rack, a second dog pivoted to the casing and adapted to enter the slot and engage the rack, and a guide-plate fixed to the casing and adapted to hold the lever against outward displacement, said casing also having openings leading to the drum. 3rd. In a stump puller, the combinaton with a casing having a slot, of guide ribs upon the casing adjacent the slot, a drum mounted in the casing, a rack upon the drum, a lever mounted upon the casing and having slots which receive the guide ribs, a dog carried by the lever and adapted for engagement with the rack through the slot of the casing, and a dog mounted upon the casing and adapted for engagement with the rack to hold the drum when the first-named rack is disengaged. 4th. In a stump puller, the combination with a casing having a slot therein, of a drum mounted in the casing, a rack upon the drum, a lever mounted upon the casing, a dog carried by the lever and adapted for engagement with the rack through the slot of the casing, a dog mounted upon the casing and adapted for engagement with the rack to hold the drum when the first-named dog is disengaged, means for the attachment of a rope to the casing, a chain engaged with the drum, a block connected with the chain, and additional blocks adapted for connection with the stump to be pulled and with a suitable support.

No. 68,637. Box or Crate. *Boite ou gril.*

John E. Davidson, Toronto, Ontario, Canada, 7th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. A packing case, box or crate, consisting of top bottom side and end panels of veneer, the edges of the side and end panels provided with protecting frames the outer faces of which are flush, the top and bottom panels being secured to the protecting frames of the side and end panels, substantially as specified. 2nd. A packing case, box or crate, consisting of top, bottom, side and end panels of veneer the edges of which are provided with protecting frames, the outer faces of which are flush and means for fastening the panels together, substantially as specified. 3rd. A packing case, box or crate, consisting of top, bottom, side and end panels of veneer, the edges of which are provided with protecting frames the outer faces of which are flush with each other, the ends of the side panels overlapping the side edges of the end panels and substantially flush with the outer faces of the protecting frames of the same, the side and end edges of the top and bottom panels overlapping the top and bottom edges of the side and end panels the edges of which are substantially flush with the outer faces of the protecting frames of the same, substantially as specified. 4th. A packing case, box or crate, consisting of top, bottom, side and end panels of veneer, the edges of which are provided with protecting frames the outer faces of which are flush with each other, the ends of the side panels overlapping the side edges of the end panels and substantially flush with the outer faces of the protecting frames of the same, the side and

end edges of the top and bottom panels overlapping the top and bottom edges of the side and end panels the edges of which are sub-

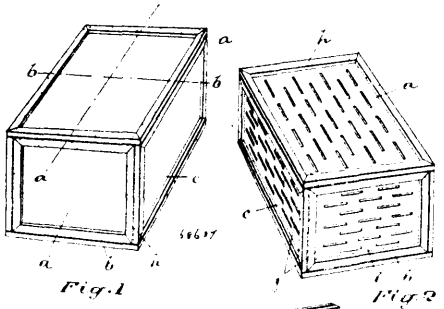


Fig. 1

Fig. 2

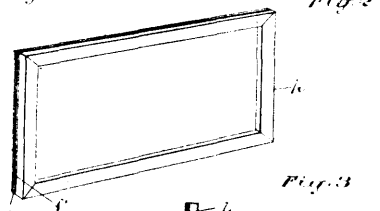


Fig. 3

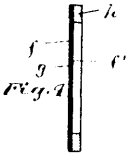


Fig. 4

stantially flush with the outer faces of the protecting frames of the same, and perforations formed in the panels to provide a circulation of the air through the packing case, substantially as specified.

No. 68,638. Railway Dumping Car. *(Char à bascule.)*

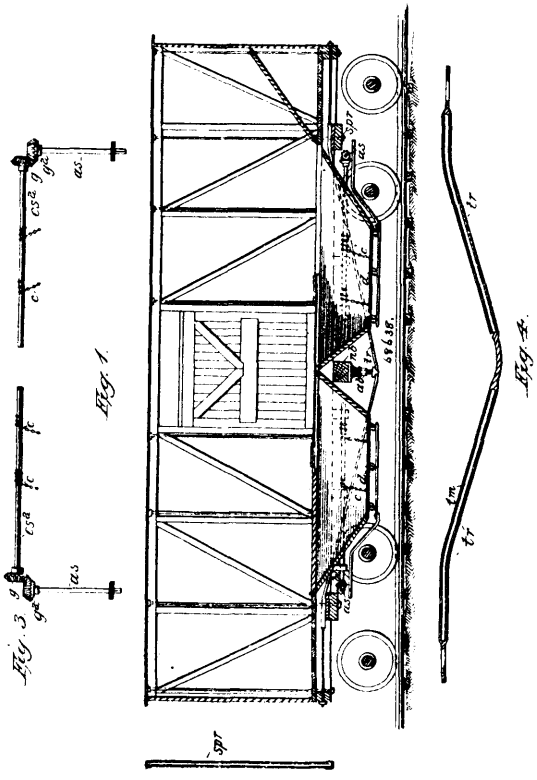


Fig. 1

Fig. 3

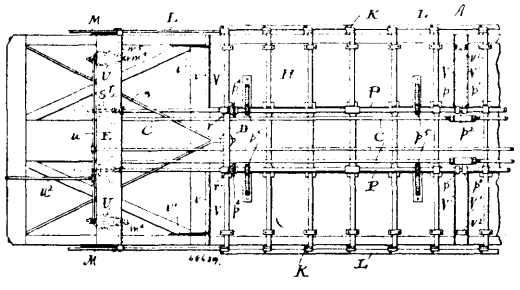
Fig. 2

Jacob James Souder, Washington, District of Columbia, U.S.A., 7th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. In a dumping railway car, the combination with the centre sills of the car, of the intermediate longitudinal sill carrying the winding shaft, and the endless bracing and supporting frame bearing outwardly against the fixed inwardly bearing portions of the hoppers, substantially as described. 2nd. In a dumping car, the combination with the three-part built up centre and intermediate sill, and with the oppositely placed or coincident hoppers, of the described bracing frame, bolted to the center sills and to the fixed inner portions of the hoppers, substantially as specified. 3rd. In a dumping car, the combination with the three-part built up centre and intermediate sill, and with oppositely placed or coincident hoppers, of the described bracing frame, bolted to the centre sills and to the fixed inner portions of the hopper, and provided with the swivel pin, the swivel bar and the bar supporting lugs, substantially as described and shown. 4th. In a dumping car, the combination with the center sills of the car, of the described bracing frame, and the transversely extending bearing bar or chute iron, having hooked ends to engage the outer sills, and having also, at its mid-length, the upwardly extending recess to receive the bracing frame, the bracing frame and the chute iron being secured together and to the adjacent portions of the hopper, substantially as set forth. 5th. In a dumping car, central longitudinal sills, central endless bracing frames, secured to the bottom surface of such sills, oppositely placed hoppers abutting such bracing frames, and a winding mechanism and a locking mechanism, connected to and enclosed within the bracing frames, in combination, substantially as described. 6th. In a dumping car, the combination with the centre sills, each having a recess, as described, along its outer and lower extremity, of the inclined body of the inner portion of the hopper, bevelled at the upper extremity of such body, as shown, to adapt it to the longitudinal recess in the corner of the sill, substantially as specified. 7th. In a dumping car, the combination with the hopper, having in its bottom surface, along the margin of the discharging openings of such hopper, and from end to end of each side thereof, a recess or continuous groove, of a pivoted drop door or dumping section, hinged at its upper extremity, as shown, and having along the entire margin or boundary of the supporting face of the same, an upwardly projecting flange which is adapted to the recess or groove in the bottom or exterior face of the hopper, substantially as set forth. 8th. In a dumping car, the combination with central longitudinal sills, of oppositely placed hoppers having between them a continuous longitudinal open space, and a winding shaft for closing the hopper doors, the shaft being supported by the central sills, and the open space being adapted to receive the air brake mechanism substantially as described. 9th. In a dumping car, the combination with the centre sills *c s*, *c s*, each resting upon a longitudinal truss rod *t r*, and an intermediate longitudinal sill *l s*, the three being united as one, of a winding shaft, supported in bearings of the intermediate sill, oppositely placed hopper doors, and chains connecting each door with the winding shaft, the shaft operating to open, or to close the doors simultaneously, and the operating mechanism being wholly outside of the body of the car. 10th. In a dumping car, the combination with the centre sills, and with the outer sills thereof, of longitudinal truss rods, each of which in its central or mid-length portion, is solid, and each of which in its remaining portions is tubular, substantially as described.

No. 68,639. Dump Car. *(Char à bascule.)*

Fig. 1



The Ingoldsby Automatic Car Company, St. Louis, Missouri, assignee of Frank S. Ingoldsby, of St. Louis, aforesaid, 7th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. In a dump car, in combination, a trap door, a lever, a connecting mechanism whereby the lever may release the trap door, a lock preventing the operation of the lever, an air cylinder, a connecting mechanism between the same and the lock and between the same and the lever, said cylinder adapted to first release the lock, and then move the lever, substantially as described. 2nd. The combination in a dump car trap door, a hand lever, connecting mechanism between the hand lever and the door whereby the hand lever may release the door, an air cylinder, a connection between the cylinder and the trap door, whereby the air cylinder may release the trap door, a lock preventing such releasing operation, and means whereby the air cylinder throws off such lock, substantially as described. 3rd. The combination of a trap door, means for closing the same, means for latching it when closed, a lever for operating said last mentioned means, a connection between said lever and the closing means whereby the lever in its movement disengages said closing means, substantially as described. 4th. In

a dump car, in combination, a trap door, a crank, connecting mechanism between tht crank and the trap door whereby the rotation of the crank may raise the trap door, means for locking said trap door in its closed position, and mechanism operated by said means and adapted to interrupt the connection between the crank and the door, substantially as described. 5th. The combination in a dump car, of a trap door having tongues projecting from it, hooks on the side of the car adapted to engage therewith, a lever adapted to operate said hooks, a rock shaft to which said lever is secured, an air cylinder, a piston therein and a suitable connection between the piston and the rock shaft, substantially as described. 6th. The combination in a dump car, a trap door having tongues projecting from it, hooks on the side of the car adapted to engage therewith, a lever adapted to operate said hooks, mechanism for raising said trap door, means, operated by said lever in its movement after it has caused the hooks to engage the tongues, for disengaging the raising connection, substantially as described. 7th. In a dump car, in combination, a trap door, tongues extending therefrom, hooks secured to the side of the car, and adapted to engage with said tongues, an operating lever, connection between the same and said hooks, a rod adapted to be shifted by said lever as it moves into position to cause the hooks to engage the tongues, a crank, mechanism between the same and the trap door whereby the rotation of the crank may raise the door, and means operated by said rod for disengaging such connection, substantially as described. 8th. The combination, in a dump car, of a hinge trap door, a shaft, a suitable mechanism between the same and the trap door whereby the rotation of the shaft elevates the door, said shaft being a gear r, a pinion adapted to mesh with said gear r, means for latching said trap door in its elevated position, and means whereby the operation of said latching means releases the pinion from the gear r, substantially as described. 9th. In a dump cart, a combination, a trap door, a shaft R, adapted to elevate the same, a gear r on said shaft R, a shaft S, a pinion s on said shaft, means for rotating said shaft S, a pawl for holding said shaft in position where its pinion engages the gear r, means for latching said trap door when elevated, and means whereby the operation of said last mentioned means may release said pawl, substantially as described. 10th. The combination with a shaft R, a trap door, connecting mechanism between said shaft and trap door whereby the rotation of the shaft may raise the door, a shaft S, a pivoted sleeves s^2 s^2 in which said shaft bears, a pinion s on said shaft, means for rotating said shaft, a pawl adapted to hold it in such position that the pinions s engages the gear r, and means for withdrawing said pawl to release the shaft, substantially as described. 11th. The combination in a dump car, of a rock-shaft, a hand lever secured thereto, a rock arm secured to said shaft, an air cylinder, a rod operated thereby and connected with said rock arm, a dumping door and connection between said rock shaft and door whereby the actuation of the shaft may release the door, substantially as described. 12th. The combination of an air cylinder, a piston, a double piston rod, one of which may have a movement before the movement of the other begins, a trap door, a lever, a connection between the lever and the door whereby the lever may release the door, a lock for said lever, a connection between the piston rod which is first operated and the lock and between the other piston rod and the lever, substantially as described. 13th. In combination a cylinder, a piston therein, a tubular rod extending from said piston to the outside of the cylinder, a rod within said tubular rod but normally out of engagement with the piston head, a trap door, mechanism for releasing the same, a connection between the inner piston rod and the releasing mechanism, a lock preventing the operation of such releasing mechanism, and a connection between the outer piston rod and lock, substantially as described. 14th. In a dump car, in combination a trap door, a lever M for releasing the same, a lock bar T adapted to prevent its operation, a link n^{10} adapted to throw aside the said lock bar, a lever n^9 connected with said link, a cylinder U, means operated by said cylinder for operating the lever n^9 and for operating the releasing mechanism, substantially as described. 15th. In a dump car, in combination a trap door, a lever M for releasing the same, a lock bar T adapted to prevent the operation of the lever, a lever n^9 adapted in its operation to throw aside said lock bar, a cylinder U, a piston head within the same, a tubular piston extending out of the cylinder, said tubular piston being adapted in its advancement to move said lever n^9, a rod m^8 within the tubular rod adapted to be acted upon by the advancing piston later than the tubular rod, and a connection between said rod m^8 and the releasing mechanism, substantially as described. 16th. In a dump car, in combination, a central beam, a trap door pivoted at said beam and adapted to swing downward on its outer edge at the side of the car, a shield extending transversely to the car opposite the end of said trap door, and adapted to form a chute or trough therewith when the same is discharging outside of the rail on which the car stands, substantially as described. 17th. In a dump car, in combination a central beam B, a trap door H pivoted along the edge of the central beam and swinging with its outer edge downward parallel with the track, a sector-shaped shield depending from the bottom of the car at the end of the trap door and flaring from the central beam outward and adapted to form an end wall for the trap door, preventing material passing off of it onto the rail when the trap door is lowered to discharge material outside of the rail, substantially as described. 18th. In a dump car, the combination of a dumping door, a flexible shaft and connecting mechanism between the shaft and door, whereby the shaft is operated notwithstanding a deflexion of the car, substantially as described. 19th. The combination of a dumping car and a flexible shaft for operating it, the flexion being given said shaft by a flexible joint composed of two heads, one of which carries a stud projecting into recess in the other, substantially as described. 20th. In a dump car, in combination, two shafts being placed end to end p p^1 on the meeting ends of said shafts, one of said heads having extended from it a pair of studs p^2 having ball-shaped ends, and the other of said heads having a pair of recesses which receive said studs, and mechanism for operating the dump car connected with such flexible shaft, whereby the sagging of the car does not bind the shaft, substantially as described.

No. 68,640. Railway Switch. *(Aiguille de chemin de fer.)*

Fig 1

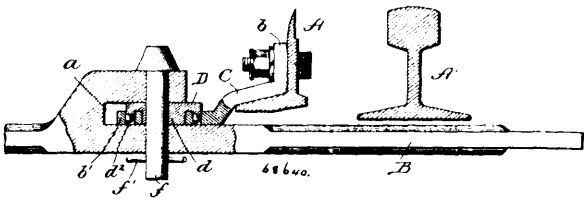


Fig 2

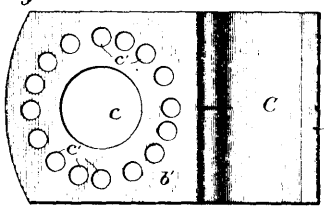


Fig 3

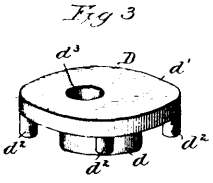
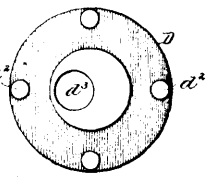


Fig 4



Pettibone, Mulliken and Company, Chicago, assignee of Axel A. Strom, Austin, Illinois, U.S.A., 7th September, 1900; 6 years. (Filed 10th August, 1900.)

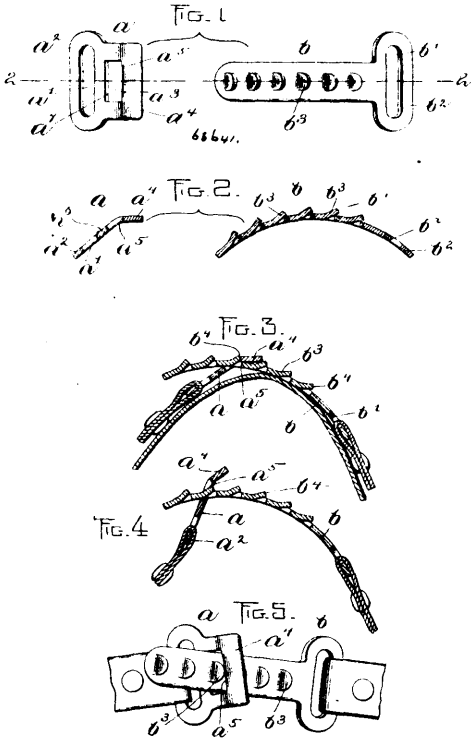
Claim.—1st. The combination with a switch rail and its tie bar, of means for adjustably connecting the rail and bar comprising a clip having an opening and provided about said opening with a series of holes, and an eccentric adjustably seated in said opening and pivotally connected with the tie bar and carrying one or more studs for engaging said holes to lock the eccentric in its position of adjustment within said opening. 2nd. The combination with a switch rail and a tie bar therefor provided with a jaw, of means for adjustably connecting the rail and bar comprising a clip having an opening and provided about said opening with a series of holes, a flanges eccentric adjustably seated in said clip opening and confined therein by being embraced by said jaw and having pivotal connection with the tie bar, and studs depending at internals from the flange of the eccentric to enter said holes in the clip and lock the eccentric in its position of adjustment within said clip opening.

No 68,641. Fastener or Clasp. *(Boucle ou attache.)*

The Crane Buckle Company, Maine, assignee of Newton Crane, Massachusetts, U.S.A., 7th September, 1900; 6 years. (Filed 24th August, 1900.)

Claim.—1st. A clasp or fastener comprising two independent rigid complemental members, each adapted for attachment to the parts to be secured together, one of said members having an aperture with an engaging edge, and the other member having an elongated portion or strip adapted to enter said aperture, and having tongues or lips cut from the body thereof which project beyond the plane of the strip and whose ends constitute engaging portions for the engaging edge of the aforesaid member, substantially as described. 2nd. A clasp or fastener comprising two independent rigid complemental members, each adapted for attachment to the parts to be secured together, one of said members having an aperture with an engaging edge, and the other member having an elongated portion or strip adapted to enter said aperture, and having tongues or lips cut from the body thereof which project beyond the plane of the strip and whose ends constitute engaging portions for the engaging edge of the aforesaid member, said tongues being rounded on the engaging ends, substantially as described. 3rd. A clasp or fastener compris-

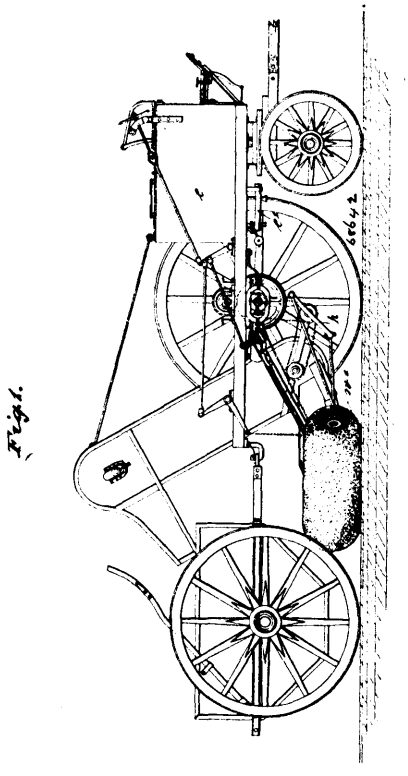
ing two independent rigid complemental members, each adapted for attachment to the parts to be secured together, one of said members having an aperture with an engaging edge, and the other member having an elongated portion or strip adapted to enter said aperture and having tongues or lips cut from the body thereof between its edges which project beyond the plane of the strip and whose ends constitute engaging portions for the engaging edge of the aforesaid member, substantially as described. 4th. A clasp or fastener comprising two independent rigid complemental members, each adapted for attachment to the parts to be secured together, one of said members having an aperture with an engaging edge, and having a transverse bend or angle coincident with said engaging edge as described, and the other member having an elongated portion or strip adapted to enter said aperture, curved in the direction of its length, and having engaging portions projecting beyond the plane of the strip for the engagement of the engaging edge of the aforesaid member, substantially as described. 5th. A clasp or fastener comprising two independent rigid complemental members of which one is apertured to receive the other whereby the walls of the aperture engage both faces of said other member, the second said member having a plurality of tongues or lips cut from the body thereof and projecting from its surface whereby their ends engage one of the walls of the said aperture in the said first mentioned member, said parts being constructed as thus described whereby they are held in engagement when they approach parallelism and are detachable when they approach a rigid angle to each other.



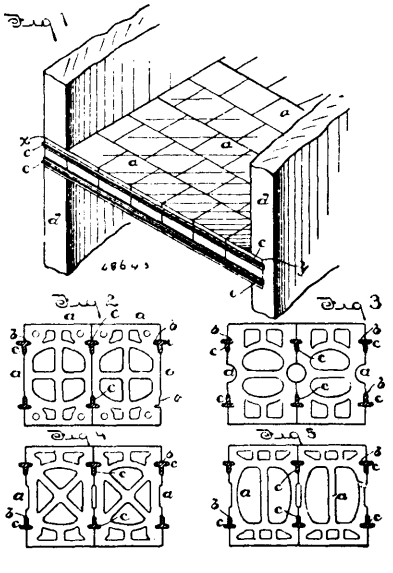
No. 68,642. Street Sweeping Machine. *(Balayeuse à rue.)*

Johann Schopp, 274 Kolnerstrasse, Rhineland, Germany, 7th September, 1900; 6 years. (Filed 25th August, 1900.)

Claim.—1st. In a street sweeping machine, in which the brush is rotated by the wheels of the vehicle, a bow-shaped brush, consisting of a flexible shaft or core, to which the bristles are secured. 2nd. In a street sweeping machine, in which the brush is rotated by the wheels of the vehicle, a bow-shaped brush consisting of rigid side and central cores, to which the bristles are attached, and means for hinging said rigid parts together to allow them to turn freely, and adapt themselves to the inequalities of the road. 3rd. In a street sweeping machine, in which the brush is rotated by the wheels of the vehicle, a bow-shaped brush consisting of a flexible shaft or core, to which the bristles are secured, an apparatus for raising the dirt, distinguished by a rake or scraper, situated above the dirt receiving plate, and which rises at the backward movement, and sinks before the commencement of the upward movement. 4th. In a street sweeping machine, in which the brush is rotated by the wheels of the vehicle, a bow-shaped brush consisting of a flexible shaft or core, to which the bristles are secured, an apparatus for raising the dirt, distinguished by a rake or scraper situated above the dirt receiving plate, rotary bars *i* which upon the forward movement taking place, are raised by the scraper but upon the backward movement occuring, cause the scraper to be raised opposite the dirt receiving plate *p*, until the scraper falls on to the latter, after coming over the guide bars. 5th. In a street sweeping machine, in which the brush is rotated by the wheels of the vehicle, a bow-shaped brush consisting of a flexible shaft or core to which the bristles are secured, an apparatus for raising the dirt consisting of a rake or scraper, a movable plate *p* below the scraper, and means for operating the plate in an opposite direction to the motion of the scraper, so that upon the backward movement of the plate taking place, the dirt brought on to the plate, is held back by the scraper and moved upwards.



No. 68,643. Fireproof Floor and Ceiling.
(Plancher et plafond à l'épreuve de feu.)

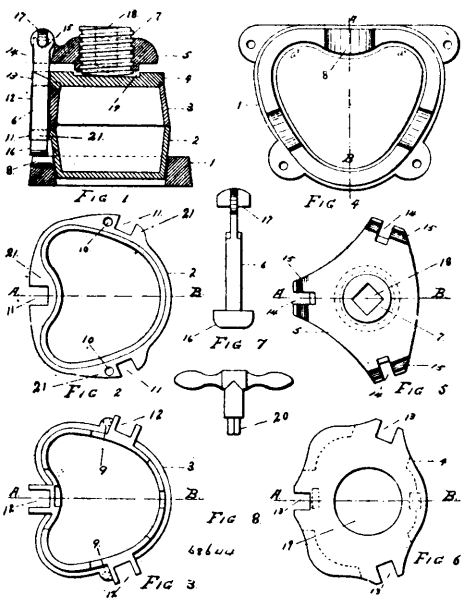


Gustav Liebau, Jersey City, New Jersey, U.S.A., 7th September, 1900; 6 years. (Filed 25th August, 1900.)

Claim.—1st. In a floor or ceiling, the combination with suitable end supports, of bricks or tiles having formed in their adjoining faces coinciding grooves, forming channels substantially above and

below the centre thereof and in the same vertical plane, and within the boundary of said tiles or bricks, and metallic rods or strips located within the channels formed by the said coinciding grooves, whereby the said tiles or bricks are locked together at a point both above and below the centre, substantially as and for the purposes set forth. 2nd. In a floor or ceiling, the combination with suitable end supports, of bricks or tiles, having formed in the adjoining faces coinciding grooves forming channels one above and one below the centre thereof, and a metallic T-iron located within the upper channel, and an inverted T-iron located within the lower channel and in the same vertical plane as the upper T-iron, thereby forming in effect I-beams between the adjoining courses of bricks or tiles, substantially as and for the purposes set forth. 3rd. In a floor or ceiling, the combination with supporting or end walls, of bricks or tiles having a plurality of appropriately-shaped side grooves, coinciding with opposite grooves in the bricks or tiles of the next course, and T-iron strips, the lower of which are inverted, located within channels thus formed in the same vertical plane, substantially as described. 4th. In a floor or ceiling, the combination with supporting or end walls, of bricks or tiles having a plurality of appropriately-shaped side grooves in each side coinciding with the opposite grooves in the bricks or tiles of the next course, and a metal tie rod or strip located within each of said channels thus formed, substantially as described.

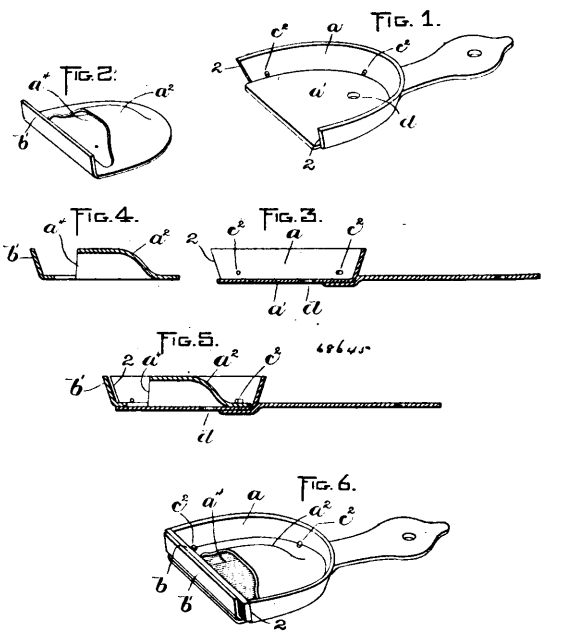
No. 68,644. Dental Flask. *(Flacon de dentiste.)*



Thomas G. Donaldson, Baltimore, Maryland, U.S.A., 7th September, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. The combination with a dental flask, of an equalizing compressor plate provided with an equalizing compressor screw and connecting links securable to the bottom section of said flask, substantially as described. 2nd. The combination in a dental flask, comprising a flask holder, an equalizing compressor plate, flask sections, and connecting links with means for compressing said flask sections, substantially as described. 3rd. An equalizing compressor plate for compressing the dental flask, provided with an equalizing compressor screw having a socket for receiving the wrench, said equalizing compressor plate being also provided with grooved lugs for receiving securing links, and means for tightening the flask parts, substantially as described. 4th. The combination in a dental flask, comprising a flask holder, a wrench, an equalizing compressor plate provided with an equalizing compressor screw and grooved for receiving the upper jaws of the links, and links with means for connecting and tightening the parts of the flask, substantially as described. 5th. The combination of a dental flask with a compressor comprising a flask holder, a wrench, an equalizing compressor plate, a top section, a middle section, a bottom section and connecting links, the said equalizing compressor plate being provided with equalizing compressor screw with socket for receiving the wrench and with grooved lugs for receiving the upper jaws of the connecting links, and the said bottom section being provided with lugs for receiving the enlarged lower ends of the links for compressing and tightening the flask sections, substantially as described.

No. 68,645. Dental Impression Cup.
(Vaisseau de dentiste.)



Herman Dagett Osgood, Concord, Massachusetts, U.S.A., 7th September, 1900; 6 years. (Filed 8th March, 1900.)

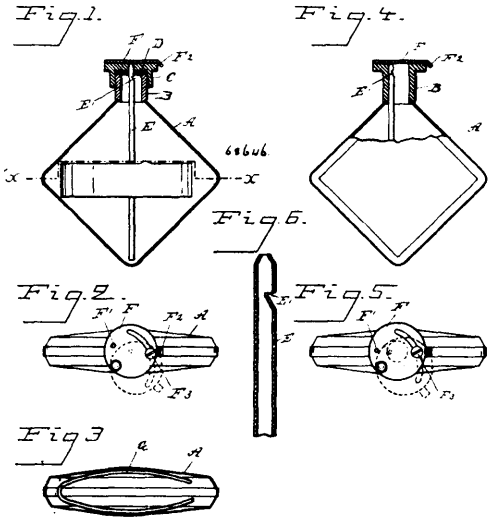
Claim.—1st. A dental impression cup having a hollow protuberance, the upper surface of which forms the usual arch between the side walls of the cup, said protuberance having a bottom and an open end adjacent to the wider end of the cup, whereby the protuberance is adapted to receive and retain the surplus plaster that is displaced during the operation of taking an impression. 2nd. A dental impression cup having a hollow protuberance, the upper surface of which forms the usual arch between the side walls of the cup, said protuberance having a bottom and an open end adjacent to the wider end of the cup, whereby the protuberance is adapted to receive and retain the surplus plaster that is displaced during the operation of taking an impression, the said protuberance having also a vent opening for the escape of air. 3rd. A dental impression cup having a hollow protuberance opening toward the larger end of the cup, and a barrier adjacent to and extending across the opening or mouth of the protuberance and adapted to deflect displaced plaster into the said mouth. 4th. A dental impression cup having a U-shaped retaining wall, the ends of which are formed as dam-supporting shoulders, and a flange projecting upwardly from the bottom of the cup between the said shoulders as a support for the outer side of the dam. 5th. A dental impression cup having a U-shaped retaining wall, the ends of which are formed as dam-supporting shoulders, a flange projecting upwardly from the bottom of the cup between said shoulders, and a dam held by said shoulders and flange, across the space between the shoulders.

No. 68,646. Pocket Atomizer. *Antévertisateur.*

Sol Heiman, Little Falls, New York, U.S.A., 7th September, 1900; 6 years. (Filed 20th March, 1900.)

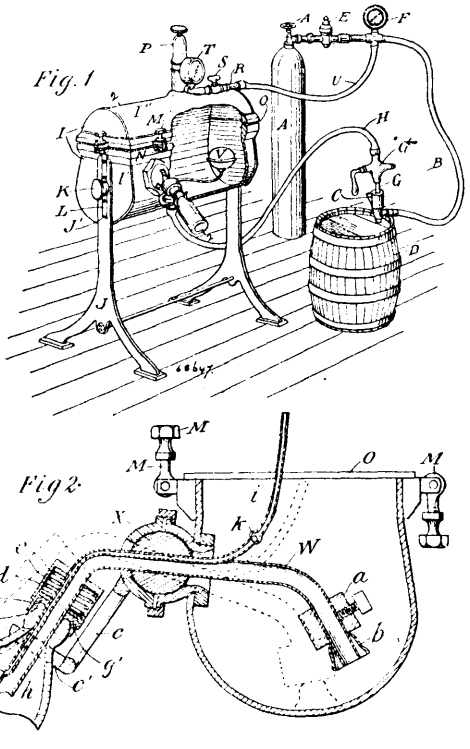
Claim.—1st. In an atomizer, a compressible body having an exteriorly threaded neck, an interiorly threaded cap for the neck, a delivery tube having a contracted end portion which is rigidly secured to the central portion of the cap and extending through the top thereof, said delivery tube being provided with a slit or opening forming an air duct adjacent to its upper end portion combined with pivoted cover having an opening adapted to register with the upper end of the delivery tube, substantially as described. 2nd. In an atomizer, the combination with a compressible body and a suitable neck, a removable cover for said neck, a delivery tube secured to said cover, said delivery tube having a slit or opening adjacent to its upper end portion, substantially as described. 3rd. In an atomizer, a compressible body and a delivery tube having its upper end portion provided with an air opening and secured rigidly within the neck of the body, combined with a perforated top or cover, substantially as described. 4th. In an atomizer, a compressible body, a suitable neck for said a delivery tube permanently secured to the inner side of said neck, said tube being provided at its upper portion with a slit or opening forming an air duct, combined with a pivoted cover for the neck, said cover having a hole adapted to

register with the upper end of the said delivery tube, substantially as described. 5th. A delivery tube for an atomizer having a con-



tracted end portion and a slit or opening forming an air duct adjacent to said end portion, substantially as described.

No. 68,647. Bottling Machine. (*Machine à embouteiller*).



Adolph Schneider, Trinidad, Colorado, U.S.A., 8th September, 1900; 6 years. (Filed 16th May, 1900.)

Claim.—1st. A machine for bottling malt liquors, comprising suitable means to supply air under pressure, a pipe connecting such air supply with a tapping bung, a tapping bung adapted to be driven into a receptacle for holding malt liquor, and to permit air to pass therethrough on the top of the liquor, a pipe extending through said tapping bung to the bottom of the liquor holding receptacle, a cock on the upper end of the pipe extending through said bung, a pipe connecting said cock with a liquor distributing tank, a liquor distributing tank, spherical pivots connected to said tank by the casing thereof, siphon tubes extending through said sperical pivots in air tight connection therewith, partly within and partly without said tank, and having a vertical movement, a flexible cup packing on the inner ends of said siphon tubes, a weight on the inner ends of said siphon tubes adapted to hold the packing thereon in contact with the bottom of said tank when there is no bottle on the outer end of the tube, a bar having a bifurcated end, attached to the casing of the spherical pivots, adapted to receive and hold a bottle while being filled, a chamber on the outer end of the siphon tube intermediate the spherical pivots and the arms of the bottle holding bar, a gasket in said chamber adapted to form an air tight joint between the bottle and tube, a spring in said chamber above said gasket adapted to force the gasket onto the mouth of the bottle when held in the arms of the bottle holding bar, and make an air tight joint between the bottle and the siphon tube, and an air vent tube, partly within the siphon tube and partly in the distributing tank, adapted to permit the air in the liquor space in the bottle to pass into the distributing tank, substantially as described herein. 2nd. In a machine for bottling malt liquors, the combination of a suitable means to supply air under pressure, a pipe connecting such air supply with a tapping bung, a tapping bung adapted to be driven into a receptacle for holding malt liquor, a pipe extending through said tapping bung to the bottom receptacle holding the liquor, a cock on the upper end of the pipe extending through said bung, a pipe connecting said cock with a liquor distributing tank, a liquor distributing tank, spherical pivots connected to said tank by the casing thereof, siphon tubes extending through said spherical pivots in air tight contact therewith, partly within and partly without said tank, and having a vertical movement, a flexible cup packing on the inner end of said siphon tubes, a weight on the inner ends of said siphon tubes adapted to hold the packing thereon in contact with the bottom of said tank when there is no bottle on the outer end of the tube, a bar having a bifurcated end attached to the casing of the spherical pivots, adapted to receive and hold a bottle while being filled, a chamber on the outer end of the siphon tube intermediate the spherical pivots and the arms of the bottle holding bar, a gasket in said chamber, a spring in said chamber above said gasket, adapted to force the gasket onto the mouth of the bottle when held in the arms of the bottle holding bar, and make an air tight joint between the bottle and the siphon tube, and an air vent tube partly within the siphon tube and partly in the distributing tank, adapted to permit the air in the liquor space in the bottle to pass into the distributing tank with bottles and malt liquor in a receptacle, substantially as described herein. 3rd. A bottling machine for bottling malt liquors, comprising drum A, pipe B, connecting said drum with bung C, bung C adapted to be driven into barrel D to permit the air to be discharged therethrough on the top of the liquor in said barrel, barrel D, pipe C adapted to pass through bung C and into barrel D to the bottom thereof, cock G^1 attached to pipes G and H, pipe H attached to cock G^1 and distributing tank I, spherical pivots X in bearings affixed to the casing of said tank, siphon tubes, partly within and partly without said tank, passing through said pivots, weight *a* and cup *b* on the inner end of snid siphon tubes, and chambers *d*, springs *e*, gaskets *g* surrounding said siphon tubes exterior said tank, tubes *i* partly within and partly without said siphon tubes, check valves *k* on tubes *i*, and bottle holding bar *c* having arms c^1, and distributing tank I. 4th. In a machine for bottling malt liquors, the combination of a distributing tank, a spherical pivot connected thereto and a bottle holding arm affixed to the casing of said spherical pivot, a siphon tube passing through said spherical pivot, an air vent tube partly within and partly without said siphon tube, a check valve on said vent tube, a weight and a flexible packing on the inner end of said siphon tube, a gasket adapted to surround and move on said siphon tube, a spring on said siphon tube adapted to cause the gasket to produce an air tight joint between the bottle and siphon tube, with a bottle and a suitable liquor supply, and means to apply pressure thereto to force the liquor into the bottle.

No. 68,648. Bottling machine. (*Machine à embouteiller.*)

Adolph Schneider, Trinidad, Colorado, U.S.A., 8th September, 1900; 6 years. (Filed 16th May, 1900.)

Claim.—1st. A machine for bottling malt liquors, comprising suitable means to supply means under pressure, a pipe connecting such air supply with a tapping bung, a tapping bung adapted to be driven into a receptacle for holding malt liquor, and to permit air to be discharged upon the top of the liquor, a pipe extending through said tapping bung to the bottom of the receptacle holding the liquor, a cock on the upper end of the pipe, extending through said bung, adapted to shut off the flow of liquor therethrough when desired, a pipe connecting said cock with a liquor distributing tank, a liquor distributing tank, rotary valves screwed into the bottom of said tank, and having a casing provided with two orifices opening into said tank, and a slot opposite thereto, an air vent tube in one of said orifices, adapted to extend upward above the liquor in said tank, a filling tube, divided into two channels for a portion of its length, each channel having an independent mouth exterior the valve, the inner end of which is adapted to fill the port in said valve, and on a certain movement of the valve to cause the channels therein to register with the orifices in the casing opening into the tank, and at other times to shut off said channels from said orifices, a gasket on said tube, exterior said valve, adapted to make an air tight contact between the bottle and said tube when a bottle is in place to be filled, a resilient bar affixed to the casing of said valve, a yoke affixed to the end of said bar, said bar and yoke adapted to hold the bottle in contact with the gasket and make an air tight connection between the bottle and tube. 2nd. In a machine for bottling malt liquors, the combination of suitable means to supply air under pressure, a pipe connecting such air supply with a tapping bung, a tap-

ping bung adapted to be driven into a receptacle for holding malt liquor, and to permit air to be discharged upon the top of the liquor,

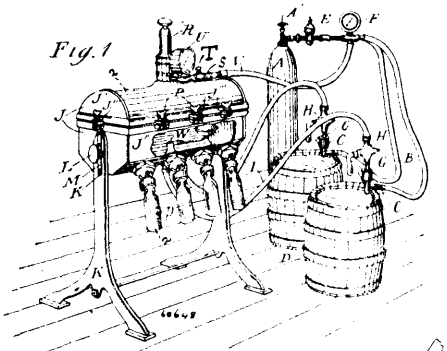


Fig. 1

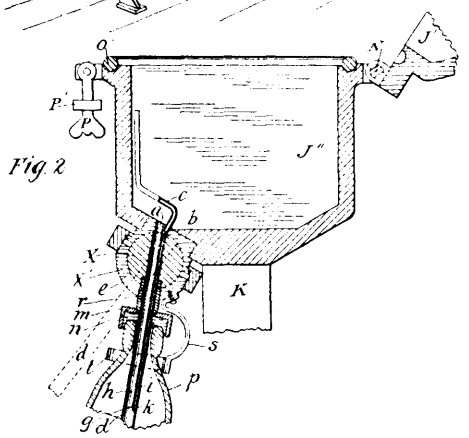


Fig. 2

a pipe extending through said tapping bung to the bottom of the liquor holding receptacle, a cock on the upper end of the pipe, extending through said bung, adapted to shut off the flow of liquor therethrough when desired, a pipe connecting said cock with a liquor distributing tank, a liquor distributing tank, ball valves screwed into the bottom of said tank, and having a casing provided with two orifices opening into said tank, and a slot opposite thereto, an air vent tube in one of said orifices, adapted to extend upward above the liquor in said tank, a filling tube divided into two channels for a portion of its length, each channel having an independent mouth exterior the valve, the inner end of which is adapted to fill the port in said valve, and on a certain movement of the valve to cause the channels therein to register with the orifices in the casing opening into the tank, and at other times to shut off said channels from said orifices, a gasket on said tube, exterior said valve, adapted to make an air tight contact between the bottle and said tube when a bottle is in place to be filled, a resilient bar affixed to the casing of said valve, a yoke affixed to the end of said bar, said bar and yoke adapted to hold the bottle in contact with the gasket and make an air tight connection between the bottle and tube, with bottles and malt liquor in a receptacle, substantially as described herein. 3rd. A machine for bottling malt liquors, comprising drum A, pipe B, connecting said drum with bung C, bung C adapted to be driven into barrel D, and to permit the air to be discharged therethrough on the top of the liquor in said barrel, barrel D, pipe C, adapted to pass through bung C, and into barrel D, to the bottom thereof, cock H, attached to pipes G and I, pipe I attached to cock H, and to distributing tank J, distributing tank J, ball valves X in casing X^1, casing X^1, affixed to tank J, orifices *a* and *b*, in said casing, opening into tank J, and slot *c*, opposite said orifices, vent tube *e*, in orifice *b*, filling tube *d*, filling port in valve X, and passing through slot *c*, and divided into channels *h* and *i*, gasket *n*, on said filling tube, resilient bar *s*, affixed to valve casing X^1, yoke *t*, affixed to said bar, said bar and yoke being adapted to hold a bottle on the filling tube in air tight contact with gasket *n*. 4th. In a machine for bottling malt liquors, the combination of a distributing tank, a ball cock in said tank to govern the height of the liquor therein, a rotary valve connected thereto by the casing thereof, orifices in said casing opening into said tank, a slot in said casing opposite the orifices, a vent tube in one of the orifices opening into the tank, adapted to extend above the liquor therein, a filling tube divided for a portion of its length into two independent channels having separate mouths extending through the slot in the casing, the inner end of which filling tube fills the port in said valve, a gasket on said tube, adapted to enter the mouth of the bottle to be filled, a resilient bar affixed to the casing of the valve, a yoke affixed to the end of said bar, said bar and yoke adapted to hold the bottle in contact with the gasket and produce an air tight joint between the bottle and tube with a bottle and a suitable liquor supply, and means to supply pressure thereto to force the liquor into the bottle.

No. 68,649. Machine for Making Wire Fences.

(Machine pour faire les clôtures en fil de fer.)

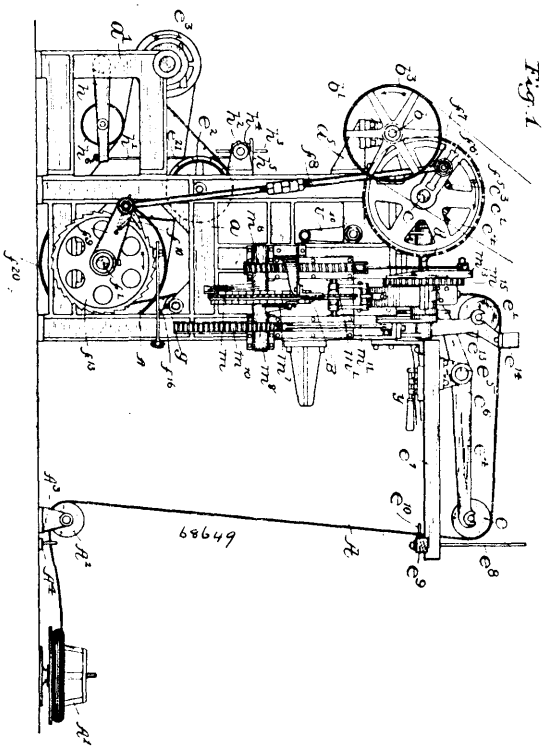


Fig. 1

John Cranston Perry, Clinton, Massachusetts, U.S.A., 8th September, 1900; 6 years. (Filed 12th May, 1899.)

Claim.—1st. A machine of the character specified comprising means for holding the strand and the stay wires, and means for electrically welding said wires at their point of contact consisting of electrodes, an automatic circuit closer, and an independent automatic circuit breaker. 2nd. A machine of the character specified comprising means for holding the strand and stay wires, and means for electrically welding said wires at their point of contact, consisting of electrodes of which one is movable, and a device controlled by said movable electrode for closing and opening the circuit. 3rd. A machine of the character specified comprising means for holding the strand and the stay wires, and means for electrically welding said wires at their point of contact consisting of electrodes of which one is movable, and an electrical circuit having two switches in series, means for automatically operating said switches in succession to close the circuit, and a device controlled by the movable electrode for automatically moving the first closed switch to break the circuit at the completion of the weld. 4th. A machine of the character specified comprising a plurality of welding devices, each consisting of two electrodes of which one is movable, an automatically movable plunger rail, and operative connections between the movable electrodes and the plunger rail. 5th. A machine of the character specified comprising a plurality of welding devices, each consisting of two electrodes of which one is movable, an automatically movable plunger rail and operative yielding connections between the movable electrodes and the plunger rail, whereby the electrodes can accommodate themselves to the wires. 6th. A machine of the character specified comprising a plurality of welding devices, adjustable mechanism for feeding wires to said welding devices, and a support on which said welding devices are mounted adjustably with relation to each other. 7th. A machine of the character specified comprising a plurality of electrical welding devices, each including electrodes and a transformer, a main circuit in which said welding devices are arranged in multiple arc, and a circuit controller for each welding device. 8th. A machine of the character specified comprising a plurality of electrical welding devices divided into groups, a main electrical circuit having a branch for each group, and a circuit controller for each branch circuit. 9th. A machine of the character specified comprising a plurality of automatic electrical welding devices divided into groups, a main electrical circuit having a branch for each group, a circuit controller for each branch circuit, and an auxiliary circuit controller for each welding device. 10th. A machine of the character specified comprising a plurality of electrical welding devices divided into groups, a main electrical circuit having a branch for each group, a circuit controller for each branch circuit, and means for automatically operating said controllers in succession. 11th. A machine of the character specified

comprising welding electrodes of which one is movable towards and from the other, and a guide on the stationary electrode for one of the wires. 12th. In a machine of the character specified electrical welding means, including electrodes, and a closed guide for the strand wire on one of the electrodes. 13th. A machine of the character specified comprising means for electrically welding the strand and the stay wires together, and a holder for the stay wire, said holder consisting of a shaft and a plurality of rolls on said shaft, each roll being formed in separable sections adjustably secured to said shaft. 14th. A machine of the character specified comprising means for electrically welding a strand and a stay wire, an automatic cutter for severing the stay wire, and means for securing said cutter at any adjustment to vary the length of the stay wire. 15th. A machine of the character specified comprising means for electrically welding the strand and the stay wires, means for feeding the stay wire from a suitable source of supply, and means for equalizing the stress of the feeding means on the wire. 16th. A machine of the character specified comprising means for electrically welding the strand and the stay wires, means for feeding the stay wire from a suitable source of supply, and a yielding equalizing the roll for the stay wire. 17th. A machine of the character specified comprising means for electrically welding the strand and the stay wires, a feeding wheel for said stay wire, a pawl and ratchet for rotating said wheel, an arm carrying said pawl, and a rack and pinion for oscillating said arm. 18th. A machine of the character specified comprising means for electrically welding the strand and the stay wires, a feeding wheel for said stay wires, double cranks and operative connections between said cranks and said wheel. 19th. A machine of the character specified comprising means for electrically welding the strand and the stay wires, a pair of automatically driven pawls, and a feeding wheel for said stay wire actuated by pawls alternately. 20th. A machine of the character specified comprising means for electrically welding the strand and the stay wires, feed wheels for said stay wires, and a spring pressed handle for holding said wheels in frictional engagement with the stay wire. 21st. A machine of the character specified comprising means for electrically welding the strand and the stay wires at the points of intersection, means for intermittingly feeding the strand wire, and means for equalizing the stress upon the strand wire, whereby said wire is drawn evenly from its reel. 22nd. A machine of the character specified comprising means for electrically welding the strand and the stay wires at their points of intersection, means for intermittingly feeding the strand wire, and devices between the feeding means and the supply reel for intermittingly unwinding the wire from its reel. 23rd. A machine of the character specified comprising means for electrically welding the strand and the stay wires at their points of intersection, means for intermittingly feeding the strand wire, and devices between the feeding means and the supply reel for intermittingly unwinding the wire from its reel, when the feeding means are quiescent, whereby the wire is drawn evenly from its reel. 24th. A machine of the character specified comprising means for welding the strand and the the stay wires at their points of intersection, and one or more circumferentially grooved toothed wheels for feeding said strand wire or wires, the teeth on said wheels being arranged to engage the stay wires while the strand wires lie in said grooves. 25th. A machine of the character specified comprising means for welding the strand and the stay wires at the points in intersection, and a feeding wheel for the strand wire, said wheel being constructed and arranged to engage the stay wire which is welded on the strand wire. 26th. A machine of the character specified comprising electrodes for welding the strand and the stay wires at the points of intersection, and means for guiding the strand wires between said electrodes, said means comprising two or more rolls for said strand wires, one roll being adjustable transversely of its axis and of the line of feed of said strand wire. 27th. In a machine of the character specified, means for feeding the strand wires, means for electrically welding stay wires to said strand wires, and mechanism for coiling the projecting ends of the stay wires around the outer or selvage strand wire. 28th. In a machine of the character specified, means for feeding the strand wires, means for electrically welding stay wires to said strand wires, mechanism for coiling the projecting ends of the stay wires around the outer or selvage strand wire, and an adjustable support for said coiling mechanism. 29th. A machine of the character specified comprising holders for the strand and the stay wires, and means for electrically welding said wires at their points of contact, said welding means consisting of supports having slots or recesses in their ends, and dies or electrodes fitting in the recesses in the said supports. 30th. A machine of the character specified comprising means for electrically welding the strand and the stay wires together, said means including a stationary electrode, a movable electrode, and a rail for operating said movable electrode, and means for regulating the electrical current, inluding a switch operated by the movement of said rail. 31st. A machine of the character specified comprising means for electrically welding the strand and the stay wires together, said means including a stationary electrode, a movable electrode and means for operating the last-mentioned electrode, and current controlling means including a switch, and mechanical connections between the switch and the electrode operating means, whereby the circuit is broken when the movable electrode is moved in one direction, and is closed when it is moved in the opposite direction. 32nd. A machine for making wire fence, comprising means for feeding a strand wire, means for feeding a stay wire, and means for welding said wires at their points of contact or intersection. 33rd. A machine for making wire fence, comprising means for feeding the strand wires, means for feeding the stay wires transversely thereof, and means for electrically welding said wires at their points of contact. 34th. A machine for making fence comprising means for feeding a strand wire or wires, a holder for a cross or stay wire, and means for electrically welding said wires together. 35th. A machine for making fence wire comprising means for feeding forward a wire, a holder for a cross-wire, and means for electrically welding said wires together. 36th. A wire welding machine, comprising means for supporting a plurality of intersecting wires, and means for automatically welding said wires at their intersections, said means including a plurality of transformers, and electrodes, and one or more circuit breakers. 37th. A wire welding machine, comprising means for supporting a plurality of intersecting wires, a plurality of electrodes for electrodes for contacting withsaid wires at their intersections, a plurality of transformers for said electrodss, automatically acting circuit breakers, and power devices for actuating said eclectrodes. 38th. In a wire welding machine, comprising electrodes for supporting two intersecting wires, mechanism for actuating the electrodes to clamp the wires at their intersections between them, a transformer for the electrodes, and an automatically operated circuit breaker for cutting off the current through the transformer. 39th. An electric welding machine, comprising co-acting electrodes, mechanism for operating said electrodes to grasp crossed wires and to upset them at the time of welding, means for effecting a regular forward movement of the longitudinal wires and an automatic circuit breaker to regulate the welding current. 40th. A machine of the character specified, comprising a plurality of electrical welding devices, each including electrodes and a transformer, a main electrical circuit having a branch leading to each of said welding devices, a circuit closer for each branch circuit and means for automatically operating said closers in succession. 41st. In a machine of the character specified, means for applying pressure to the parts to be welded, comprising a positively actuated member, an electrode yieldingly connected to said member, means for applying a current of electricity to said parts comprising a circuit closer, means for operating the same to close the circuit at the time of weld, an independent circuit breaker arranged to be operated by the final forward movement of the electrode, whereby the parts to be welded are softened at their point of contact and the electrode automatically forced forward to complete the weld and operate the circuit breaker to break the circuit. 42nd. A machine of the character described, comprising automatically operated welding devices, and a holder operable automatically to place a cross wire in position on a strand wire. 43rd. A wire holding and positioning device for wire fence making machines, comprising a rotatory shaft, a series of longitudinally grooved rolls on the shaft, and a guide for retaining the wire in the grooves. 44th. A wire positioning device for electric fence making machines, comprising a rotary grooved member and a guide for retaining the wire in the groove, said guide being constructed to allow said wire to pass out of the groove at the completion of the weld. 45th. In a machine of the character specified, means for applying pressure to the ports to be welded at their point of contact, comprising a positively actuated member, an electrode yieldingly connected to said member, means for applying a current of electricity to said parts at their point of contact, comprising a circuit closer, means for operating same to close the circuit at the time of the weld, an independent circuit breaker arranged to be operated to break the circuit by the final forward movement of the electrode, whereby when the parts are not in a position for welding, the electrode is given its full movement by said member, and the circuit is opened by the circuit breaker before it is closed by the circuit closer. 46th. In a machine of the character specified, means for simultaneously applying to the parts to be welded at their point of contact a yielding mechanical pressure nearly equal to the crushing strength of the material, and a current of electricity of relatively large volume, said means including a yieldingly mounted electrode and a circuit breaker arranged to be operated thereby. 47th. In a machine of the character specified, means for simultaneously applying to the parts to be welded at their point of contact, a yielding mechanical pressure nearly equal to the crushing strength of the material, and a current of electricity of relatively large volume, said first-mentioned means being arranged to automatically further force said parts together when the material softens and automatically break the circuit.

No. 68,650. Art of Impregnating Paper.

Friederich Gustav Julius Post, Hamburg, German Empire, 8th September, 1900; 6 years. (Filed 12th May, 1899.)

Claim.—1st. The mode of preparing tissue paper for copying purposes, which consists in compactly winding a web of said paper into a roll, placing said roll in contact with water until a given quantity thereof has been absorbed, removing the roll from contact with water and allowing the inner convolutions of tissue paper to absorb the excess of water in the outer convolutions, for the purpose set forth. 2nd. The mode of preparing tissue paper for copying purposes, which consists in compactly winding a plurality of webs of said paper simultaneously into a roll, placing the latter in contact with water until a given quantity thereof has been absorbed, removing the roll from the water and allowing the inner convolutions of tissue to absorb the excess of water in the outer convolutions, for the pur-

pose set forth. 3rd. The mode of preparing tissue paper for copying purposes, which consists in winding a web of said paper into a compact roll, enveloping the latter in an absorbent fabric and placing the roll in contact with water until a suitable quantity thereof has been absorbed by said fabric and tissue, for the purpose set forth. 4th. The mode of preparing tissue paper for copying purposes, which consists in winding a web of said paper into a compact roll, placing the same in a body of water so that when a given quantity thereof has been absorbed its level will be so changed as no longer to be in contact with roll, and allowing the inner convolutions of tissue paper to absorb the excess of water in the outer convolutions, for purpose set forth.

Fig 1.

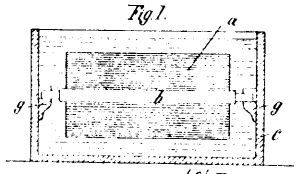


Fig 2.

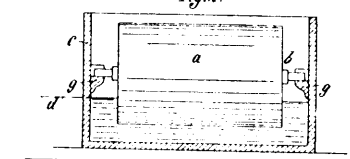
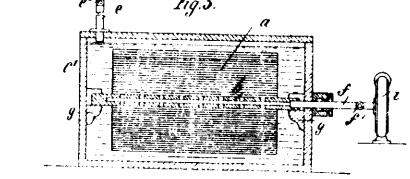


Fig 3.



No. 68,651. Wood Preserving Compound.

(*Composé preservatif pour le bois.*)

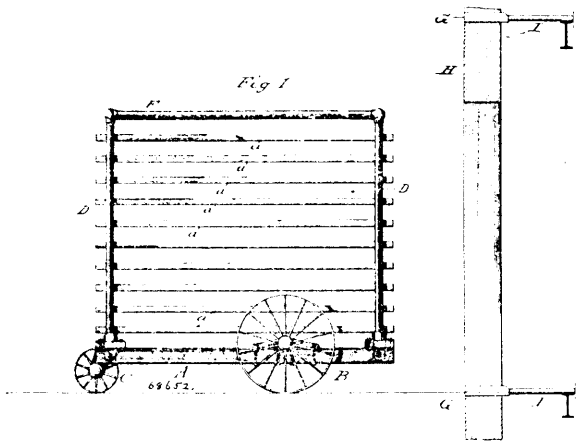
Edward Gold, Vancouver, British Columbia, Canada, 8th September, 1900; 6 years. (Filed 14th June, 1900.)

Claim.—The composition formed by adding an intimate mixture of a silicate sand, cement slaked lime, crushed brimstone, and powdered asbestos, to a melted mixture of asphaltum and crude creosote, all in the approximate proportions set forth, and the whole, being thoroughly mixed while hot, its application while in that condition to a band of suitable texture, and in wrapping the same while still hot round that portion of the timber which it is desired to protect, substantially as and for the purposes set forth.

No. 68,652. Meat Smoking Machine.

(*Machine à fumer la viande.*)

Fig 1

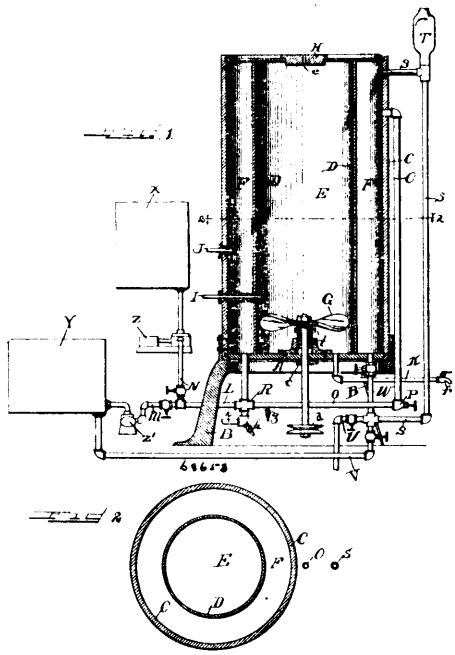


Albert F. Nathan, Kansas City, Missouri, U.S.A., 8th September, 1900; 6 years. (Filed 24th August, 1899.)

Claim. 1st. In combination with a reticulated or perforated meat shelf, a detachable or movable design or character, such as described, for producing marks upon the meat during smoking or curing. 2nd. In combination with a reticulated or perforated shelf, a plurality of designs or characters such as described, said designs or characters being removable and capable of application at different points on the shelf, whereby various designs may be used, and their relative position or arrangement on the shelf may be varied at will. 3rd. The herein described apparatus for handling and marking meat during the process of smoking, consisting of a truck, a series of reticulated or perforated shelves carried by said truck, and raised characters or designs detachably secured to said shelves, substantially as described.

No. 68,653. Pasteurizing Apparatus.

(*Appareil à pasteurizeur.*)

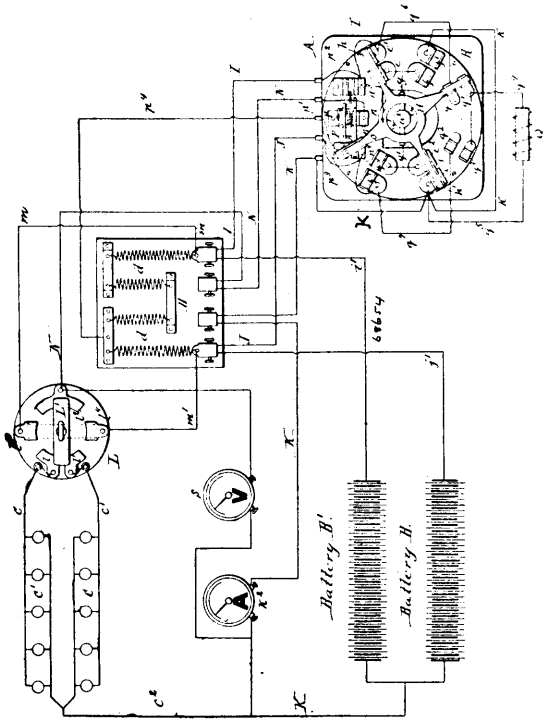


Nelse D. Nelson, Ann Arbor, Michigan, U.S.A., 8th September, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. The combination with the inner receptacle, and the outer surrounding casing, of a supply pipe extending from the outer casing to a source for supplying a fluid under ordinary temperature, and provided with a steam jet, whereby the contents of the receptacle can be first heated by filling the casing with such fluid, and then heating the same, and can then be cooled by shutting off the jet and admitting more of such fluid, and a second supply pipe leading from a source for supplying a cooling fluid at a relatively cooler temperature, whereby the contents of the receptacle can be further cooled by admitting such relatively cooler fluid to the casing. 2nd. In a pasteurizing apparatus, the combination with the receptacle for the fluid to be pasteurized and the casing providing a chamber for the fluid to vary the temperature of the contents of said receptacle, of a couple of fluid supply sources, one for supplying fluid under ordinary temperature, and the other for supplying fluid at a very low temperature, and pipes for connecting both of said fluid supply sources with said casing, whereby the temperature of the contents of the receptacle can be first reduced to a desired extent by fluid from the first-mentioned source, and can then be further reduced by fluid from the second-mentioned one. 3rd. The combination with the casing providing a chamber for the heating and cooling fluids, a hot water inlet having a steam jet or the like, and connected to the lower end of said casing, a circulation pipe connected to said casing at or near its upper and lower ends, and a second inlet pipe leading from a source for supplying a cooling fluid, and having a connection with said casing near its upper end, whereby both the heating and cooling fluids can be circulated in the casing. 4th. In a pasteurizing apparatus, the combination with the receptacle for the fluid to be pasteurized, and a casing for the fluid for varying the temperature of the contents of said receptacle, of an inlet pipe having an inlet portion leading to the bottom of said chamber and containing a steam jet, a circulation pipe which extends downwardly from the upper portion of said chamber and connects with said steam jet portion, a couple of branches to said inlet pipe, one for connecting with the source for supplying water or the like, and the other with the source for supplying brine or the like, an overflow pipe extending downwardly from the top of said chamber and having a waste outlet, and also having a branch for connection with the source for supplying brine or the like, and a drain pipe extending from the bottom of said chamber. 5th. In a pasteurizing apparatus, the combination

of a vertically arranged interior casing and a vertically arranged exterior casing surrounding the inner one, a circulation pipe arranged below and upward along one side of the exterior casing, and having its upper and lower ends connected with the upper and lower ends of said casing, a steam jet in the connection to the lower end, and a supply pipe connected with said circulation pipe, whereby the fluid can be caused to circulate out of the top of the casing and downwardly through the circulation pipe when the steam jet is in operation, and to flow upwardly through said pipe and then circulate first downwardly and then upwardly within the casing, when the steam jet is not in operation. 6th. In a pasteurizing apparatus, the combination of a vertically arranged smooth walled interior casing, and a vertically arranged exterior casing, pipe connections for supplying fluid to the exterior casing for varying the temperature of the contents of the interior casing, and a rotary screw at the bottom of the interior casing arranged to draw the contents of said casing downward in the middle, and to turn or rotate the same throughout the casing. 7th. The combination with the receptacle, and a casing providing a fluid chamber therefor, of means for supplying said chamber with a heating fluid, and a couple of supply pipes extending respectively from sources for supplying cooling fluids under different temperatures. 8th. A pasteurizing apparatus comprising a receptacle for the fluid to be pasteurized, a casing providing a chamber for fluids to be at and cool the contents of the receptacle, an inlet pipe provided with a steam jet and having branches extending to sources for supplying fluid under ordinary temperature and fluid at a low temperature, a circulation pipe connected with said inlet pipe, and also connected with said casing near the top thereof, and an overflow pipe extending from the upper portion of the casing.

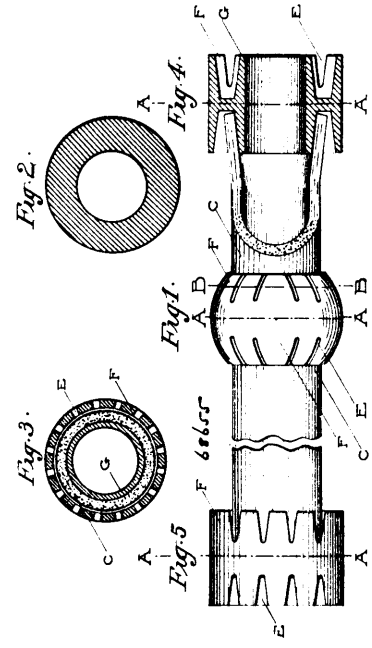
No. 68,654. Electric Lighting Apparatus for Railway Cars. (*Eclairage électrique pour char de chemin de fer.*



J. Stone & Company, Deptford, assignee of E. J. Preston, Kelsey Cottage, Beckenham, and Arthur B. Gill, Glencot, Blackheath Park, London, England, 8th September, 1900; 6 years. (Filed 9th May, 1900.)

Claim.—1st. The combination with the dynamo, two storage batteries, a translating device, and a resistance interposed between the dynamo and the translating device, of a hand switch interposed between the translating device and the resistance and provided with connections arranged to cut out the resistance and connect the dynamo with both batteries when the translating device is cut out, substantially as set forth. 2nd. The combination with the dynamo, two storage batteries, a translating device, and a resistance interposed between the dynamo and the translating device, of a hand switch interposed between the translating device and the resistance and provided with a resistance contact connected with the dynamo through the resistance, a translating device contact, two battery contacts connected with the batteries directly without the intervention of the resistance, and a switch lever which in one position connects the resistance contact with the translating device contact and in the other position breaks this connection and connects both battery contacts, substantially as set forth. 3rd. The combination with the dynamo, two storage batteries, a translating device, and a resistance interposed between the dynamo and the translating device, of a switch current connecting the batteries with the resistance at a point between the ends thereof, and a switch arranged in said circuit, which switch is closed when the dynamo is rendered inoperative, thereby cutting out part of the resistance and leaving the remaining part included in the connection extending from one battery to the other, substantially as set forth. 4th. The combination with the dynamo, two storage batteries, a translating device, and a resistance interposed between the dynamo and the translating device, of a hand switch interposed between the translating device and the resistance and provided with contacts and connections arranged to cut out the resistance and connect the dynamo with both batteries when the translating device is cut out, and a switch circuit connecting the batteries with the resistance at a point between the ends thereof, and a switch arranged in said circuit and arranged to be closed when the dynamo is rendered inoperative, substantially as set forth.

No. 68,655. Hose Connections. (*Joint de boyau.*)



Frank H. Paradice, Dewer, Colorado, U.S.A., 8th September, 1900; 6 years. (Filed 25th April, 1900.)

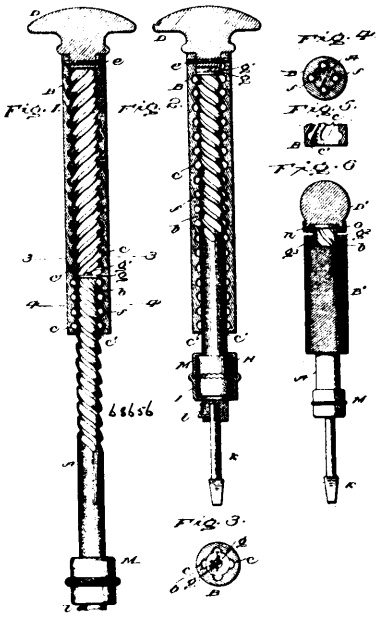
Claim.—1st. A hose pipe or tube joiner, made complete in one piece, having an inner tube for insertion into the tube to be joined, and an outer portion or shell which will surround the tube to be joined, said outer portion having its edges longitudinally slotted, substantially as shown. 2nd. A hose clamp or band in the shape of a cylinder having its edges slotted longitudinally.

No. 68,656. Spiral Tool Driver. (*Moteur pour outil.*)

Henry Minor Stevenson, Perry, Iowa, U.S.A., 8th September, 1900; 6 years. (Filed 27th April, 1900.)

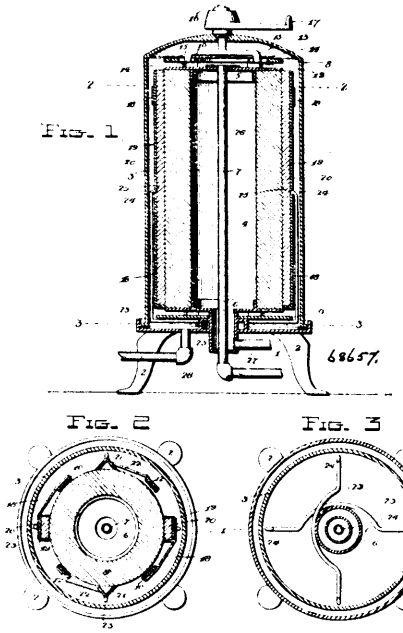
Claim.—1st. The combination of a shaft or spindle, provided with external spiral grooves, a reciprocating sleeve provided with internal spiral grooves extending on the same pitch as the grooves in the spindle, and a series of balls loosely fitting partly within the grooves in the spindle and partly within the grooves in the sleeve, said series of balls being shorter than said grooves and free to travel therein when the sleeve is reciprocated, substantially as described. 2nd. In a spiral tool driver, the combination of a spindle provided with a series of external spiral grooves, a reciprocating sleeve provided with a series of internal spiral grooves equal in number to those in the spindle, and a series of balls loosely fitting partly within the grooves in the spindle and partly within the grooves in the sleeve, said series of balls being shorter than the grooves arranged normally at the inner end of said sleeve and adapted to traverse the grooves toward the inner end of the spindle and outer end of the sleeve when said sleeve is reciprocated, substantially as described. 3rd. In a spiral tool driver, the combination of a revoluble spindle provided with a series of external spiral grooves, a reciprocating sleeve provided with internal grooves and having a detachable handle or knob closing the outer end thereof, a series of balls in said grooves and free to traverse the same toward and from the outer end of the

spindle and inner end of the sleeve, said series of balls being shorter than each of the grooves by an amount equal to one-half of the



stroke, and a plate or cap detachably secured to the said outer end of the spindle to hold the balls confined, substantially as described. 4th. The combination of a shaft or spindle provided with external spiral grooves, a reciprocating sleeve provided with internal spiral grooves, a series of balls shorter than said grooves by an amount approximately equal to one-half the stroke and fitted loosely to travel therein when the sleeve is reciprocated, means at the inner end of the sleeve to prevent the balls from escaping at that point, and a plate or cap to prevent the escape of the balls at the outer end of said sleeve, substantially as described.

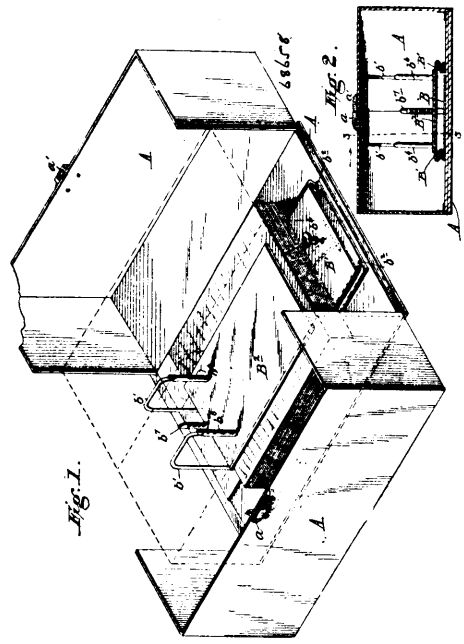
No. 68,657. Filter. *(Filtre.)*



Dwight Joel Bliss and Edward James Richmond, both of Carthage, Missouri, U.S.A., 8th September, 1900; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. The combination with the fixed filter cylinder, of the rotating cage encompassing said cylinder, the friction slabs and the scrapers formed with retaining orifices and carried by said cage and having a bearing against said cylinder, and the U-shaped spring yokes having their free ends engaging the retaining orifices in said slabs and scrapers, substantially as and for the purpose set forth. 2nd. The combination with the fixed filter cylinder, of the rotating cage having its upper end formed with retaining recesses and the yoke adapted to engage said recesses and rotate the cage, substantially as shown and described.

No. 68,658. Letter File. *(Enfile-lettres.)*



Henry S. Culver, London, Ontario, Canada, 8th September, 1900; 6 years. (Filed 12th May, 1900.)

Claim.—1st. In a letter file, the combination of the main base having the curved uprights b^1 fixedly secured near its forward end, and having ways b^2 extending longitudinally along its top surface, a second base B^1 removably mounted on the top of said main base, being mounted to slide thereon by means of flanges on its edges formed to engage said ways b^2, the uprights b^6 fixedly mounted on the front end of said base B^1 and arranged to meet and form a continuation of the downwardly extending portion of the curved uprights b^1 when in its forward position, and a spring catch secured on the underside of said sliding base near its rear end and adapted to engage a keeper correspondingly located on the main base, substantially as set forth. 2nd. In a letter file, the combination of the main base carrying the curved uprights, a second base carrying the straight uprights and of an area to form a support for the letters filed thereon, said second base being mounted to slide on the top surface of said main base and be removed therefrom with the letters carried thereby, substantially as set forth.

No. 68,659. Process of Preparing and Preserving Potatoes. *(Preparation et conservation des patates.)*

John Richard Payne, Ferdinand E. Libenon and Randall H. W. Vickers, all of New Westminster, British Columbia, Canada, 8th September, 1900; 6 years. (Filed 4th May, 1900.)

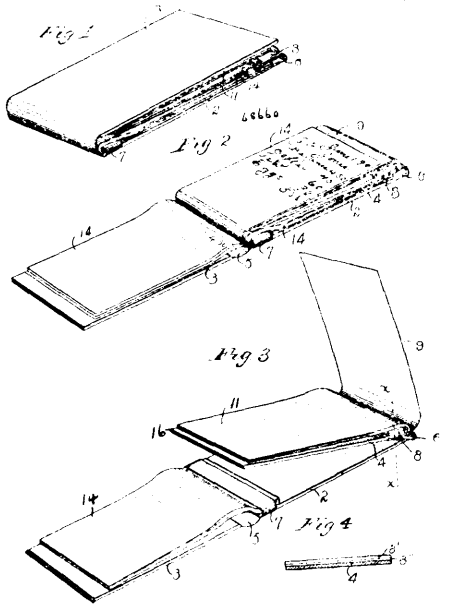
Claim.—1st. The process of preparing potatoes for food, consisting of first peeling, cleaning and reducing the raw article to a convenient size, adding pepper and salt sufficient to season, adding approximately one fourth part milk, mixing same together, placing in vessels, hermetically sealing and subjecting same to a moist heat of approximately 235 Fahrenheit until cooked, and the cans kept in agitation while cooking. 2nd. A process of preparing potatoes for use in remote regions, consisting of first cleaning and reducing the potatoes, then adding pepper and salt for seasoning, then adding sufficient milk or cream to furnish liquid while cooking, then filling the prepared article into cans, which are hermeticaliy sealed and cooked.

No. 68,660. Manifolding Book. *(Livre multiple.)*

John Bigelow Beavis, Minneapolis, Minnesota, U.S.A., 8th September, 1900; 6 years. (Filed 19th May, 1900.)

Claim.—1st. A manifold account, order and sales book comprising, in combination, a foldable cover or binder, a series of loose original or record leaves or slips, each sheet or slip of said series adapted to be withdrawn bodily and intact and transferred from said cover or binder to another cover or binder, a series of manifold slips or sheets

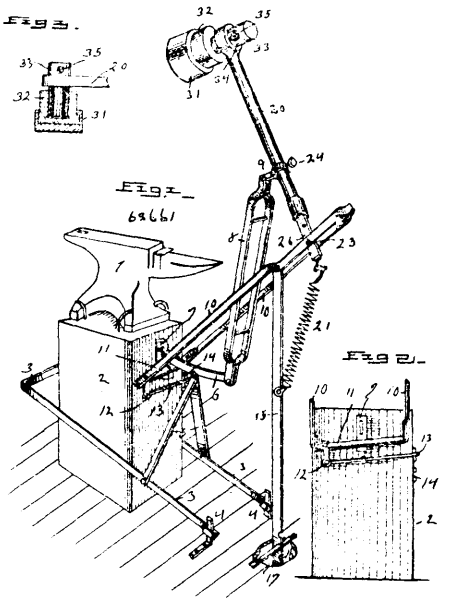
retained on said cover, and sheet of carbon paper retained on said cover or binder in a position with relation to said original and manifold slips to be interposed between respective original and manifold sheets, substantially as described. 2nd. A manifolding account, sales and order book, comprising in combination, a foldable cover or binder, a series of loose original or record leaves or slips retained on said cover but adapted to be readily withdrawn intact from said cover independent of the withdrawal from or retention by said cover or binder of the other leaves or sheets of said series, a series of manifold leaves or slips retained by said cover, and a sheet of carbon paper provided in position with respect to said respective slips to be interposed between respective original and manifold slips, substantially as described. 3rd. In a manifolding account, sales and order book, the combination, of a foldable cover or binder, a retaining loop or device thereon, a series of loose leaves or slips adapted to be slipped under and retained in position on said cover by said loop, a second series of leaves, a second loop or device whereby said second series of leaves is held in position on said cover, and a sheet of carbon paper provided in connection therewith in position to be interposed between respective original and duplicate or manifold sheets, substantially as described. 4th. The combination, in a manifold account, sales and order book, of a foldable cover, a loop 7 provided thereon, a series of loose leaves or slips 14, a loop 8, a series of leaves 11, a semi-carbon-sheet, and a loop for said carbon sheet, substantially as described. 5th. The combination, in a manifold account, sales and order book, of a three part foldable cover or binder, a loop 7 provided thereon, a series of loose leaves or slips 14 adapted to be retained on said binder thereby, a second loop, a series of loose duplicate leaves or slips adapted to be retained on said binder thereby, and a semi-carbon sheet adapted to be retained by said binder in position to be interposed between said original and duplicate sheets, substantially as described.



No. 68,661. Foot-power Hammer. *(Marteau.)*

William N. Burgett, Danville, Illinois, U.S.A., 8th September, 1900; 6 years. (Filed 29th May, 1900.)

Claim.—1st. In a machine of the character described, the U-shaped treadle, bars connected to each side thereof and to an intermediate lever pivoted to the anvil support, the pivotally supported hammer, and a blank connecting the intermediate lever to the hammer treadle, all combined with an anvil, substantially as described. 2nd. In a striking machine of the character described, a treadle lever at each side of the anvil support, draw bars connected thereof, intermediate lever adjustably connected to the treadle bars, and pivoted to the anvil support, a pitman connected to such intermediate lever and adjustably connected to the hammer handle, and a pivotal support on which the hammer swings, combined with an anvil, substantially as described. 3rd. In a machine of the character described, the handle supporting bars having a swivel connection to the anvil support, the hammer having its handle pivoted between said bars, means for operating the hammer, a lever pivoted to the anvil support and connected to the handle supporting bars, and stops on the anvil support by which said lever may be held in adjusted position to maintain the supporting bars in adjusted position, all combined, substantially as described. 4th. In a foot-power hammer, the combination of the anvil and its support, the hammer supporting bars swiveled to the anvil supports, the hammer pivoted between said bars and means for operating said hammer, and adjusting mechanism substantially as described connected to the hammer bars and to the anvil support, by which the hammer supporting bars may be turned in an angular direction and held while the hammer strikes an oblique blow, substantially as described. 5th. In a machine of the class described, the hammer supporting bars pivotally connected to the anvil support, the hammer pivoted to said bars, and a foot lever and connections for operating said hammer, and the standard notched near its lower end and pivotally connected to the hammer supporting bars, said standard having its notches in position to engage a catch at the floor for vertical adjustment, substantially as described. 6th. In a power hammer, the anvil support, and hammer supporting bars pivotally connected to the anvil support, the hammer pivoted between said hammer supporting bars and means for operating said hammer, the standard pivoted to said hammer supporting bars and having notches near its lower end in position to engage a catch attached to the floor, and a spring connected to the hammer handle and to the standard, adapted to lift the hammer and to draw a notch of the standard into engagement with the floor catch, all combined, substantially as described. 7th. The hammer having a head with a recess therein, an elastic cushion in said recess, a spindle embedded in said cushion and passing through a socket in the handle, and the handle support and connections therefrom extending to the foot lever whereby the shock of operating the foot lever is reduced by the elastic cushion, all substantially as described.

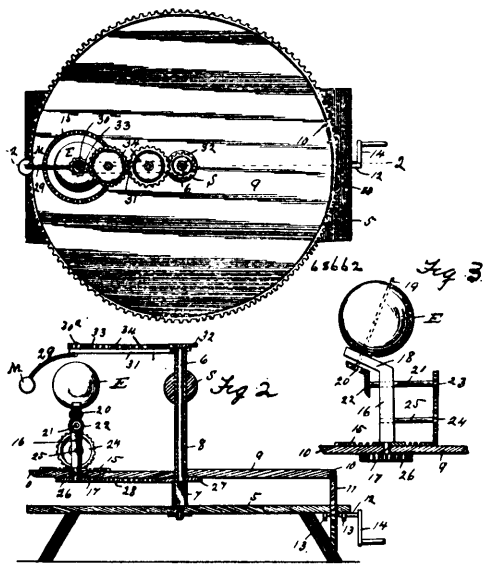


No. 68,662. Tellurian. *(Globe.)*

James P. McDaniels and John L. Swan, both of Hodunk, Michigan, U.S.A., 8th September, 1900; 6 years. (Filed 6th June, 1900.)

Claim.—1st. A tellurian comprising a non-revoluble spindle, a hollow column fitted loosely on the spindle, an emblem representative of the sun on the said column, a sphere emblematical of the earth and having an orbital path around the sun emblem, a carrying arm fast with the upper end of the hollow column and normally overhanging the earth sphere, an arm journalled on the carrying arm and supporting an emblem representing the moon adapted to pursue an orbital path around the earth sphere for the purpose described, substantially as set forth. 2nd. A tellurian comprising a non-revoluble spindle, a hollow column fitted loosely thereon, a table fast with the column, means for rotating said table, a sphere mounted on the table to travel therewith and having means for rotating the same on its axis, a horizontal arm fast with the column, a curved arm journalled in the horizontal arm and carrying an emblem indicating the moon, a stationary gear fast with the spindle, and other gears between the stationary gear and the curved arm, substantially as described. 3rd. A tellurian, comprising a base, a vertically disposed fixed spindle supported thereby, a hollow column fitted loosely on the spindle, an emblem representing the sun carried by said column, a circular table fixed to the hollow column, and having a pherical series of gear teeth, a master gear mounted upon the base, means for operating the master gear, a gear fixed to the fixed spindle, an inclined spindle mounted upon the table, located eccentric with respect to the fixed spindle and travelling with the table about the sun emblem, an earth emblem independently revoluble upon the inclined spindle, a train of gears between the inclined spindle and the fixed gear, and also carried by the table, a carrying

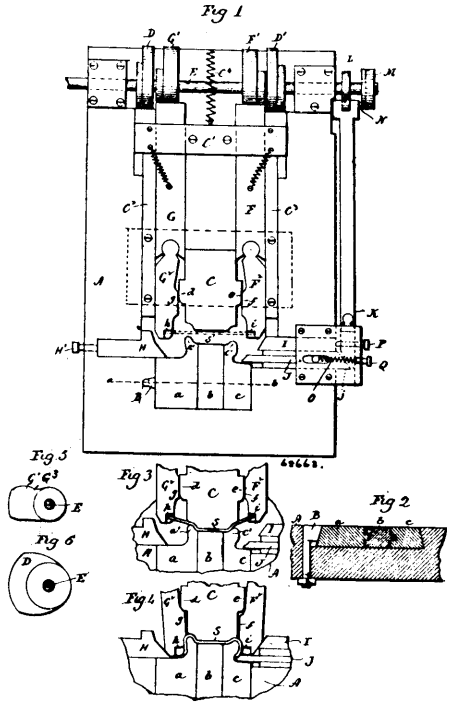
arm fixed to the hollow column and aligned normally above the sun and earth emblems, a bowed arm loosely journalled in the carrying



arm and having an orbital path around the earth emblem, a moon emblem fixed to the latter arm, a fixed gear carried by the fixed spindle, and a train of gears between the said fixed gear and the moon arm, and mounted upon the carrying arm.

No. 68,663. Machine for Forming Wire Hooks.

(*Machine pour faire des crochets.*)

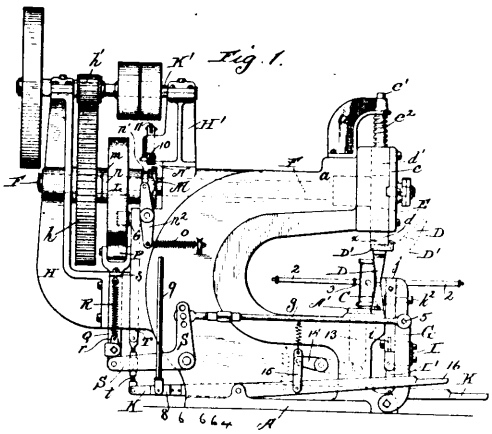


Thomas Harris, Lachine Locks, Quebec, Canada, 8th September, 1900; 6 years. (Filed 12th May, 1899.)

Claim.—1st. A machine for forming wire hooks, comprising a sectional forming die, a clamping die and slides on opposite sides thereof, arms swivelled in the ends of said slides and co-acting with transverse cams, and means for moving said die and slides, substantially as described. 2nd. A machine for forming wire hooks, comprising a forming die made in sections, adapted to be interlocked with each other, and with the bed of the machine, a clamping die adapted to be moved toward said forming die, and formed on opposite sides with shoulders, slides on opposite sides of said clamping die, and arms swivelled to the outer ends thereof, said arms formed with shoulders adapted to co-act with the shoulders on the clamping die, said arms formed at their outer ends with cam surfaces adapted to co-act with transverse cam slides in the bed in forming the hook and eye portion of the hook, substantially as described. 3rd. A machine for forming wire hooks, comprising a forming die, a clamping die adapted to be moved toward the forming die, slides on opposite sides of said clamping die and adapted to be moved forward to bend the blank around the forming die, and cams permitting said slides to move backward during the first bending of the blank and thence forward to bend the ends of the blank, substantially as described. 4th. A machine for forming wire hooks, comprising a forming die, a clamping die adapted to force a blank against the forming die, slides on opposite sides of said clamping die, adapted to bend the ends of the blank, a transverse bending die adapted to force the end of the eye portion of the wire inward, said transverse slide formed at its outer end with an inclined surface, a slide having an inclined surface adapted to co-act therewith, and cams for moving said slide backward and forward, substantially as described.

No. 68,664. Machine for Making Metal Wheels.

(*Machine pour faire des roues.*)

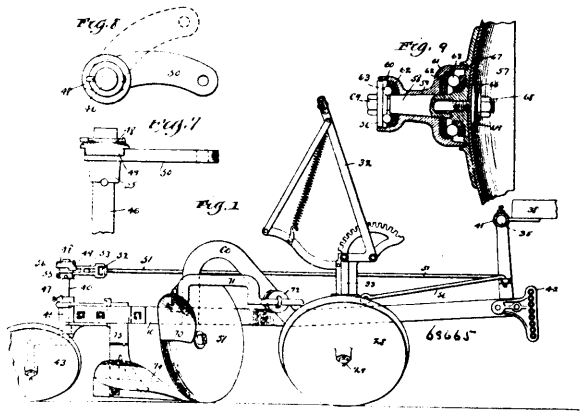


Joseph William Bettendorf, Davenport, Iowa, U.S.A., 10th September, 1900; 6 years. (Filed 3rd August, 1899.)

Claim.—1st. In a machine for manufacturing metal wheels, a standard for holding metal hubs, in combination with compressing dies contiguous to and operating in a plane substantially parallel with the sides of said standard. 2nd. In a machine for manufacturing metal wheels, a vertically movable standard for holding metal hubs, in combination with compressing dies contiguous to and operating in a plane substantially parallel with the sides of said standard. 3rd. In a machine for manufacturing metal wheels, a standard for holding metal hubs, in combination with a stationary lower die and a vertical reciprocal upper die arranged contiguous and operating in a plane substantially parallel with the sides of said standard. 4th. In a machine for manufacturing metal wheels, a standard for holding metal hubs, in combination with an upper and lower compression die contiguous to and operating in a plane substantially parallel with the sides of said standard, said upper die being hinged to its support and movable out of alignment with said lower die. 5th. In a machine for manufacturing metal wheels, a standard for holding metal hubs, the combination with spoke inserting devices movable radially thereto, and compressing dies operating between said devices and said standard in a plane contiguous to and substantially parallel with the sides of the latter. 6th. In a machine for manufacturing metal wheels, a vertically movable standard for holding metal hubs, in combination with spoke inserting devices movable radially thereto, and compressing dies operating between said devices and said standard in a plane contiguous to and substantially parallel with the sides of the latter. 7th. In a machine for manufacturing metal wheels, a standard for holding metal hubs, in combination with spoke inserting devices movable radially thereto, a stationary lower compression die and a vertically reciprocal upper compression die operating between said devices and said standard in a plane contiguous to and substantially parallel with the sides of the latter. 8th. In a machine for manufacturing metal wheels, a standard for holding metal hubs, in combination with spoke inserting devices movable radially thereto, and an upper and a lower compression die operating between said devices and said standard in a plane contiguous to and substantially parallel with the sides of the latter, one of said dies being hinged to its support and movable out of alignment with the other. 9th. In a machine for manufacturing metal wheels, a standard for holding metal hubs, a vertically movable bed plate in which said standard is longitudinally adjustable and removable, in combination with compressing dies contiguous to

and operating in a plane substantially parallel with the sides of said standard. 10th. In a machine for manufacturing metal wheels, means for holding metal hubs, in combination with spoke holding clamps consisting of two corresponding jaws reciprocal in a radial plane to said hub holding means and clamping the spoke in a plane at right angles thereto, and compressing dies operating between said clamps and said hub holding means in a plane substantially parallel with the sides of the hub placed thereon. 11th. In a machine for manufactdring metal wheels, a hub holding device in combination with an oscillatory frame moving in a radial plane to said hub holding device, a clamp consisting of two corresponding jaws fulcrumed to said oscillatory frame and clamping the spoke at right angles to the movement thereof, and compressing dies operating between said clamp and said hub holding device in a plane substantially parallel with the sides of the hub placed thereon. 12th. In a machine for manufacturing metal wheels, a hub holding device, in combination with an oscillatory frame moving in a radial plane to said hub holding device, a clamp consisting of two corresponding jaws fulcrumed to said oscillatory frame having downwardly outwardly inclined extensions, links *i i*, a block I reciprocal in a vertically elongated slot in said oscillating frame to which said links connect said extensions, and a foot lever for operating said block, and compression dies operating between said clamp and said hub holding device in a plane substantially parallel with the sides of the hub placed thereon. 13th. In a machine for manufacturing metal wheels, a hub holding device, in combination with an oscillatory frame moving in a radial plane to said hub holding devices, a clamp for holding the spoke carried by said oscillatory frame, connecting rods *g*, bell cranks S, reciprocal bars Q, cam L, and means for controlling the revolutions of the same, and compression dies operating between said clamp and said hub holding device in a plane substantially parallel with the side of the hub placed thereon. 14th. In a machine for manufacturing metal wheels, a hub holding device, in combination with an oscillatory frame moving in a radial plane to said hub holding device a clamp for holding the spokes fed to the hub which is carried by said oscillatory frame, connecting rods *g*, bell cranks S connected thereby to said frame, reciprocal bar Q having lateral arms projecting from its lower end, links *r* connecting said bell cranks to said bar, suspended contraction springs R to which the upper ends of said links are connected, a cam L and means for controlling the revolutions thereof, and compression dies operating between said clamp and said hub holding device in a plane substantially parallel with the sides of the hub placed therein. 15th. In a machine for manufacturing metal wheels, a hub holding device, in combination with an oscillatory frame moving in a radial plane to said hub holding device, a clamp for holding the spokes fed to the hub which is carried by said oscillatory frame, the foot lever K indirectly actuating said clamp, cam L and sleeve *n* therefor, gear *h* and means connected to said foot lever and operated thereby to engage said sleeve to release the same from the clutch of said loose gear once during each revolution thereof, and devices connecting said cam with and oscillating said oscillatory frame once during each revolution thereof. 16th. In a machine for manufacturing metal wheels, a hub holding device, and spoke inserting devices movable radially thereto, in combination with a lower stationary compression die between said hub holding device and spoke inserting devices, an upper die engaging with said lower die in a vertical plane substantially parallel with the sides of the hub, a vertically reciprocal carrier to the lower end of which said upper die is suitably secured, and means for actuating said carrier. 17th. In a machine for manufacturing metal wheels, a hub holding device, and spoke inserting devices movable radially thereto, in combination with a lower stationary die between said hub holding device and said spoke inserting devices, an upper die engaging said lower die in a plane substantially parallel to the sides of the hub operated upon, a vertically reciprocal carrier to the lower end of which said upper die is hinged, a contraction spring *x* connecting said upper die to said carrier to keep the same in engaging position. 18th. In a machine for manufacturing metal wheels, a hub holding device, and spoke inserting devices movable radially thereto, in combination with a lower stationary die between said hub holding device and said spoke inserting devices, an upper die engaging said lower die in a plane substantially parallel to the sides of the hub operated upon, a vertically reciprocal carrier to the lower end of which said upper die is secured, having an opening for the reception of a cam therein, said cam E and horizontal shaft to which the same is secured. 19th. In a machine for manufacturing metal wheels, a hub holding device, and spoke inserting devices movable radially thereto, in combination with a lower stationary die between said hub and holding device and said spoke inserting devices, an upper die engaging said lower die in a plane substantially parallel to the sides of the hub operated upon, a spring depressed carrier, to the lower end of which said upper die is secured, having an opening therein for the reception of an actuating cam, a metal shoe inserted in the lower edge of said opening, said cam E and shaft to which the same is secured. 20th. In a machine for manufacturing metal wheels, a hub holding device, an oscillatory frame moving in a radial to the same, and a clamp fulcrumed to and supported by said oscillatory frame, in combination with a stationary lower die between said hub holding device and clamp, an upper die engaging said lower die in a vertical plane substantially parallel to the sides of the hub operated upon, a vertically reciprocal carrier, to the lower end of which said upper die is secured, a cam E for reciprocating said carrier, shaft F to which said cam E is secured, cam L, reciprocal sleeve *n* therefor, and loose gear *h* with the hub clutch of which said sleeve engages, and devices connecting said cam L to said oscillatory frame, whereby the same is actuated to insert the spoke in the hub just prior to the operation of the compression dies, as and for the purpose set forth.

No. 68,665. Plough. (*Charrue.*)



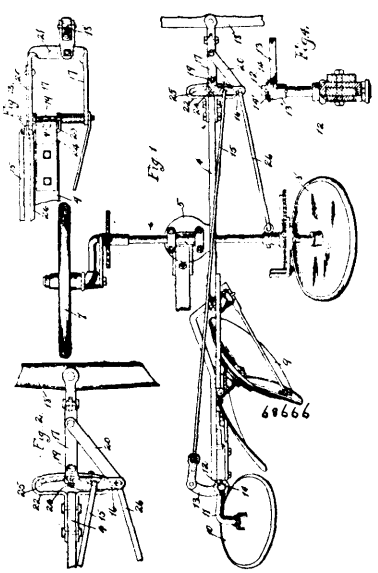
William Thomas MacBrunnemer, Bradley, Illinois, U.S.A., 10th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. A plough having a furrow opener supporting frame or beam, land and furrow wheels supporting said frame and angularly adjustable with reference to said supporting frame to change the line of travel of the plough, and means for automatically controlling the angular position of said wheels so as to counteract to a greater or less extent the side pressure upon the furrow opener, substantially as described. 2nd. A plough having a furrow opener supporting frame or beam, a furrow opener carried thereby, a wheel axle extending transversely of said frame and arranged to swing about a vertical pivot, land and furrow wheels mounted upon said axle, and means operated by side pressure upon the furrow opener for adjusting the angular position of said axle so as to cause the machine to run away from the land side and counteract to a greater or less extent the pressure upon the furrow opener, substantially as described. 3rd. A plough having a furrow opener support or beam, a furrow opener carried thereby, an axle extending transversely of said beam and arranged to swing about a vertical pivot, land and furrow wheels mounted thereupon, a caster wheel back of the furrow opener and arranged to swing about a substantially vertical axis, said caster wheel being set normally so as to run out from the land side, and means operated by the swinging of the caster wheel upon its vertical axis for adjusting the land and furrow wheels, substantially as and for the purpose specified. 4th. A plough having a furrow opener support or beam, a furrow opener carried thereby, an axle extending transversely of said beam and arranged to swing about a vertical pivot, land and furrow wheels carried by said axle, and a controlling device arranged back of the furrow opener, said controlling device being operated by the side pressure upon the furrow opener to control the angular position of the land and furrow wheel axle with reference to the furrow opener beam, substantially as and for the purpose specified. 5th. In a plough, the combination of a furrow opener carried thereby, an axle extending transversely thereof and pivoted to swing about a vertical axis, land and furrow wheels carried by said axle, a caster wheel at the rear of the furrow opener, said caster wheel being arranged to swing about a substantially vertical axis and having a laterally projecting lever, a horizontal arm pivoted near the front end of the beam, a connecting device connecting said lever and arm, and a connecting rod connecting said arm with the furrow wheel side of the plough, substantially as described. 6th. In a plough, the combination of a furrow opener support or beam, a furrow opener carried thereby, an axle extending transversely thereof and pivoted to swing about a vertical axis, land and furrow wheels carried by said axle, a caster wheel being arranged to swing about a substantially vertical axis and having a laterally projecting lever, a horizontal arm pivoted near the front end of the beam, a connecting rod connecting said arm with the furrow wheel axle at the furrow wheel side of the plough, and a tongue connected with said arm, substantially as described. 7th. The combination of a machine frame, a caster wheel adapted to swing about a substantially vertical axis, a laterally extending lever loosely connected with said caster wheel, means limiting the independent movement of said lever and caster wheel when in operative position a substantially horizontal arm or crank, and a tie rod for connecting said lever and arm, substantially as described. 8th. In an agricultural implement, the continuation of a machine frame, a caster wheel pivoted to swing about a substantially vertical axis, and having a laterally extend-

ing arm, means limiting the independent movement of said arm and caster wheel, and a tie rod or connecting device which operates normally to hold said caster wheel in operative position and permits angular adjustment thereof when the line of travel of the implement is altered, substantially as described. 9th. In an agricultural implement, the combination of a machine frame, a caster wheel pivoted to swing about a substantially vertical axis, a furrow opener, an arm connected with said caster wheel and extending laterally toward the landside of the machine, means connected to said arm for automatically preventing backward movement thereof except when the line of travel is altered, and connecting mechanism between said arm and the caster wheel, for limiting their independent movement, substantially as described. 10th. An agricultural implement, consisting of suitable supporting devices, and a furrow opener comprising a cutting disc and a mould board co-acting therewith to remove the dirt therefrom, the lower edge of said mould board being in close proximity to the disc surface and extending substantially radially in a substantially horizontal position from the axis of the disc to or near the outer edge thereof, the upper portion of said mould board being curved outward, substantially as described. 11th. An agricultural implement, consisting of suitable supporting devices, and a furrow opener comprising a cutting disc and ploughing mechanism arranged back of said disc acting to square the furrow, substantially as and for the purpose specified. 12th. In a plough, the combination with furrow opener supporting devices, and a landside plough arranged back of said disc and arranged to square the furrow, substantially as and for the purpose specified. 13th. The combination with a furrow opener supporting device, of a rotary spindle carried thereby, a ball bearing therefor, means holding the parts of said bearing together, independently of the disc, and means for attaching a disc to one end of said spindle, substantially as described. 14th. The combination with supporting devices, of a sleeve, a spindle in said sleeve, balls supporting said spindle in said sleeve and forming bearings therefor, said spindle having a face at one end to form a seat for a furrow opener disc, a bolt uniting the parts of the bearing, and means for detachably securing a disc to said spindle, substantially as described. 15th. The combination with supporting devices, of a sleeve 59 having concave recesses at its ends, a spindle fitted in said sleeve, cones carried by said spindle, balls between said cones and the ends of the sleeve, a bolt extending through said spindle for holding the parts together, said bolt having a screw threaded engagement with the spindle, a disc mounted upon the end of said bolt, and a nut upon the end of said bolt securing said disc thereupon, substantially as described. 16th. A bearing for the discs of disc machines, consisting of a sleeve having concave recesses at its ends, chilled rings in said recesses, said rings having concave bearing faces forming cups to receive ball bearings, a spindle extending through said sleeve, cones at the inner and outer ends of said spindle, a bolt extending through said spindle and detachably connected thereto, and a plate at the inner end of said spindle adapted to form a seat for the disc, substantially as described.

No. 68,666. Agricultural Implement.

(*Instruments d'agriculture.*)



William Thomas MacBrunnemer, Bradley, Illinois, U.S.A., 10th September, 1900; 6 years. (Filed 21st August, 1900.)

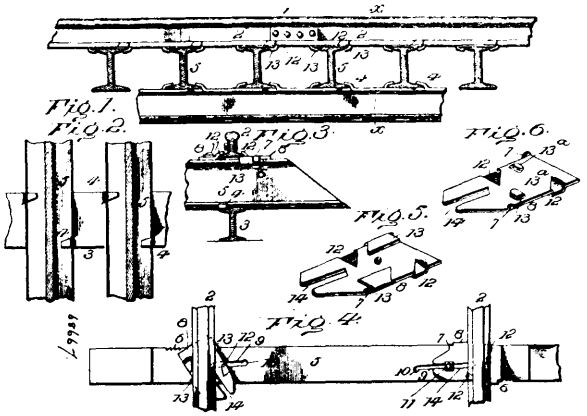
Claim.—1st. In an agricultural implement, the combination of a frame, a furrow opener, a caster wheel back of the furrow opener, a draft device which receives the draft of the team, and means connected with said draft device for holding said caster wheel normally in operative position and for releasing said caster wheel so that it may turn independently when the line of draft is altered, substantially as described. 2nd. In an agricultural implement, the combination of a frame, a furrow opener, a caster wheel back of the furrow opener, a draft device which receives the draft of the team, said draft device being pivotally supported, and means connecting said draft device and caster wheel for holding said caster wheel normally in operative position, and adapted to permit said caster wheel to turn when the direction of the draft is varied, substantially as described. 3rd. In an agricultural implement, the combination of a beam, a draft bracket at the forward end thereof pivoted to swing in a horizontal plane, an arm carried by said bracket and projecting at an angle thereto, a furrow opener, a caster wheel back of the furrow opener, said caster wheel having a laterally extending arm, and a connection between the caster wheel arm and said bracket arm, whereby the position of the caster wheel arm is controlled by the position of the bracket arm, substantially as described. 4th. In an agricultural implement, the combination of a beam, a transversely adjustable bracket at the forward end thereof pivoted to swing in a horizontal plane, an arm carried by said bracket and projecting at an angle thereto, a furrow opener, a caster wheel back of the furrow opener, said caster wheel having a laterally extended arm, and a connection between the caster wheel arm and said bracket arm whereby the position of the caster wheel arm is controlled by the position of the bracket arm, substantially as described. 5th. In an agricultural implement, the combination a frame, a furrow opener, an axle pivoted to said frame, land and furrow wheels mounted on said axle, a caster wheel back of the furrow opener, a draft device, and means connecting said draft device and said axle, means connecting said draft device and said caster wheel, said connecting means being arranged to vary the position of said axle and caster wheel when the line of draft is altered, substantially as described. 6th. In an agricultural implement, the combination of a frame, a furrow opener, an axle pivoted to said frame, land and furrow wheels carried by said axle, a caster wheel back of the furrow opener, a draft bracket at the forward end of said frame pivoted to swing in a horizontal plane, an arm carried by said bracket and projecting at an angle thereto, a laterally projecting arm carried by the caster wheel, a connection between the caster wheel arm and said bracket arm, and a connection between said bracket arm and said axle whereby the position of said caster wheel and of the land and furrow wheels is controlled by the position of said draft bracket, substantially as described. 7th. In an agricultural implement, the combination of a machine frame, three wheels supporting said frame, a pivoted draft device, a laterally extending arm connected therewith, and means operated by the swinging of said draft device for controlling the position of said wheels, substantially as described. 8th. In an agricultural implement, the combination of a machine frame, three wheels supporting said frame, a pivoted draft device which receives the draft of the team, a laterally extending arm rigidly connected therewith, and means operated by the swinging of said draft device for controlling the position of said wheels, substantially as described. 9th. In an agricultural implement, the combination of a machine frame, land and furrow wheels and a rear caster wheel supporting said frame, an ajustable draft device which receives the draft of the team, and means operated by change of position of the draft device for adjusting the position of said land and furrow wheels, and for releasing said caster wheel to permit it to turn in either direction, substantially as described. 10th. In an agricultural implement, the combination of a frame, an axle pivoted to said frame, land and furrow wheels mounted on said axle, a draft device extending normally substantially in the line of draft, and means connecting said draft device and axle and operating to control the position of said axle, substantially as described. 11th. In an agricultural implement, the combination of a frame, an axle pivoted to said frame, land and furrow wheels mounted on said axle, a caster wheel, means normally holding the caster wheel in operative position, and means operated by the team for adjusting the position of said axle when the line of draft is altered, and for releasing the caster wheel, substantially as described. 12th. In an agricultural implement, the combination of a frame, angularly adjustable land and furrow wheels supporting said frame, a draft device which receives the draft of the team and normally lies in the line of draft, said draft device having a rigid laterally extending arm, and means operated by variations of the line of draft for angularly adjusting said wheels, substantially as described.

No. 68,667. Railway Tie. (*Dormant de chemin à rails.*)

John Wesley Cooper, Park Ridge, New Jersey, U.S.A., 10th September, 1900; 6 years. (Filed 29th August, 1900.)

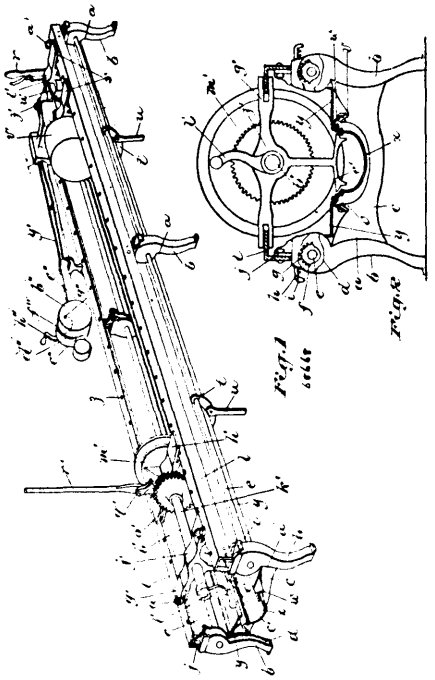
Claim.—1st. In combination with a tie, having a head flange and a rail, a chair provided at diagonally opposite points with clips to engage opposite edge portions of the head flange of the tie, and means for securing the rail to the chair, substantially as set forth. 2nd. In combination with a tie, having a head flange and a longitudinal slot, a chair provided at diagonally opposite points with clips to engage the opposite edge portions of the head flange of the tie and having a slot to register with the slot in the head portion of the said tie, and a fastening to enter the slots of the chair of head portion of the tie, substantially as set forth. 3rd. In combination

with a ti. having its head portion formed with a longitudinal slot and a chair having diagonally disposed clips to engage with the head



portion of the tie and having a longitudinal slot to register with the longitudinal slot of the tie, one of the said slots being straight and the other inclined, and a fastening to enter the said slots, substantially as and for the purpose set forth. 4th. In combination with a tie having teeth in opposite edges of its head portion at diagonally opposite points, a chair having diagonally disposed cogs to make positive engagement with the said teeth and having clips adjacent to the respective cogs to engage with the edge portions of the tie, and means for preventing displacement of the chair when properly positioned, substantially as set forth. 5th. In combination with a tie, having its edge portions toothed at diagonally opposite points, a chair provided with diagonally arranged cogs to co-operate with said teeth and having clips adjacent to the cogs to engage positively with edge portions of the tie and also provided with diagonally arranged rail clips, and means for securing the chair to the tie, substantially as set forth.

No. 68,668. Cheese Press. (*Presse à fromage.*)



Arthur O. Brunette, Gananoque, Ontario, Canada, 10th September, 1900; 6 years. (Filed 28th August, 1900.)

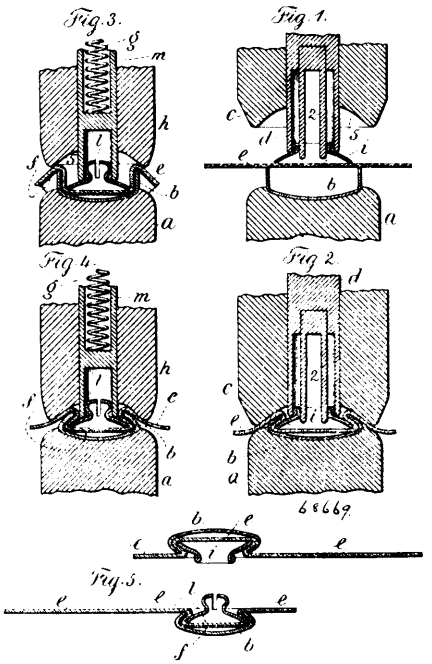
Claim.—1st. A cheese press, embracing in its construction a frame, laterally adjustable side rails mounted on the frame, and an adjusting lever for adjusting the side rails laterally, substantially as specified. 2nd. A cheese press, embracing in its construction a frame, a longitudinal shaft journalled at each side of the frame, toothed segments rigidly mounted on the shaft, laterally adjustable side rails mounted on the frame fitted with racks engaging the toothed segments, and an adjusting lever to actuate the shafts to laterally adjust the side rails, substantially as specified. 3rd. A cheese press, embracing in its construction a frame, consisting of opposed legs rigidly united by a lateral brace. the inner faces of the legs provided with upwardly directed channels extending to the top, shafts journalled in the legs, toothed segements located in the channels and rigidly mounted on the shafts, the teeth of which project above the top of the legs, racks loosely mounted on the top of the legs engaging the teeth of the segments, side rails connected to and laterally movable with the racks, a crank for each shaft, a lever pivoted to the frame and links connected the cranks and lever, substantially as specified. 4th. A cheese press, embracing in its construction a frame, consisting of opposed legs rigidly un ted by a lateral brace, the inner faces of the legs provided with upwardly directed channels extending to the top, shafts journalled in the legs, toothed segments located in the channels and rigidly mounted on the shafts, the teeth of which project above the top of the legs, racks loosely mounted on the top of the legs engaging the teeth of the segments, side rails connected to and laterally movable with the racks, a crank for each shaft, a lever pivoted to the frame, links connected to the cranks and lever, upwardly directed lugs for the braces, longitudinal braces connected to the lugs, and drip plates connected to the longitudinal braces, substantially as specified. 5th. A cheese press, embracing in its construction a frame, consisting of opposed legs rigidly united by a lateral brace, the inner faces of the legs provided with upwardly directed channels extending to the top, shafts journalled in the legs, toothed segments located in the channels and rigidly mounted on the shafts, the teeth of which project above the top of the legs, racks loosely mounted on the top of the legs engaging the teeth of the segments, upwardly directed lugs for the racks, side rails connected to and laterally movaole with the racks, a crank for each shaft, a lever pivoted to the frame, links connected to the cranks and lever, and a removable trough supported on the lateral braces, substantially as specified. 6th. A cheese press, embracing in its construction a frame, consisting of opposed legs rigidly united by a brace, the inner faces of the legs provided with upwardly directed channels extending to the top, shafts journalled in the legs, toothed segments located in the channels and rigidly mounted on the shafts, the teeth of which project above the top of the legs, racks loosely mounted on the top of the legs engaging the teeth of the segments, upwardly directed lugs for the racks, side rails connected to the lugs and laterally movable with the racks, a crank for each shaft, a lever pivoted to the frame, links connected to the cranks and lever, upwardly directed lugs for the braces, longitudinal braces connected to the lugs, drip plates connected to the longitudinal brace and a removable trough supported on the lateral braces, substantially as specified. 7th. A cheese press, embracing in its construction a pressure head, consisting of standards, a shaft longitudinally movable in the standards, a pin projecting from the sides of the shaft, a pressure lever, a shaft for the presser lever at right angles to the movable shaft, a cam connected to the shaft of the pressure lever engaging the pin of the movable shaft, an adjustable wright for the pressure lever, and pressure plate for the movable shaft, substantially as specified. 8th. A cheese press, embracing in its construction a pressure head, consisting of standards provided at their upper ends with cross bars, in the side edges of which are grooves for the side rails of the press, a horizontal bore through the standards, a longitudinally movable shaft mounted in the bore, a pressure plate rigidly connected to the inner end ot the shaft, a pin projecting laterally through the shaft, a pressure lever, a shaft for the pressure lever at right angles to the movable shaft, a cam mounted on the pressure lever shaft engaging the pin of the movable shaft, an adjustable weight for the pressure lever and a key to lock the adjustable weight in position, substantially as specified. 9th. A cheese press, embracing in its construction a pressure head, consisting of standards provided at their upper ends with cross bars, in the side edges of which are grooves for the side rails of the press, a horizontal bore through the standards, a longitudinally movable shaft mounted in the bore, a pressure plate rigidly connected to the inner end of the shaft, a pin projecting laterally through the shaft, a pressure lever, a shaft for the pressure lever at right angles to the movable shaft, a cam mounted on the pressure lever shaft engaging the pin of the movable shaft, an adjustable weight for the pressure lever, a key to lock the adjustable weight in position, in combination with a movable pressure head, consisting of standards provided at their upper ends with cross bars, the side edges of which are grooved to receive the side rails of the press, bores formed in the standards, screw threaded to receive a screw threaded shaft, a pressure plate at the inner end of the shaft, a ratchet wheel rigidly mounted on the shaft in rear of the pressure plate, and a lever and dog for the ratchet wheel, substantially as specified. 10th. A cheese press, embracing in its construction a pressure lever, a weight for the pressure lever provided with a slot through which the lever passes, a roller within the slot moving on the pressure lever, a shaft for the roller projecting beyond the weight, a crank for the shaft and a key to lock the weight in its adjusted position, ssubstantially as specified.

No. 68,669. Fastener for Gloves and Garments.
(*Attache pour gants, etc.*)

James Vernon Washburne, Waterbury, Connecticut, U.S.A., 10th September, 1900; 6 years. (Filed 28th August, 1900.)

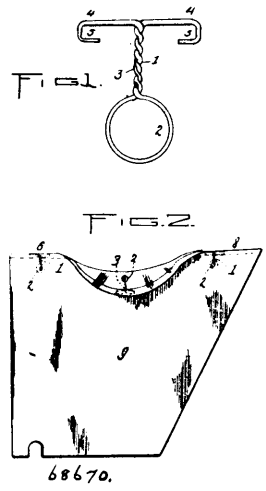
Claim.—1st. A garment fastener comprising two members adapted to be snapped together to connect the parts of a garment, each

member being composed of two similar parts, the one a metallic cup shaped attaching part with a rim forming the head, and the



other part having a flange to fit down into the attaching part with the material of the garment between the two parts, the said rim being adapted to be pressed over the edge of said flange and material for connecting the parts together and to the intervening fabric, substantially as specified. 2nd. A fastener member composed of a metallic cup shaped attaching part and an inner part having a flange that is within the inturned edge of the attaching part, the material of the garment or covering passing across between the two parts and beyond the edge of the same, and a layer of paper between said material and the metal of one of the parts of the fastener member, substantially as set forth. 3rd. A metallic fastener member composed of a cup shaped attaching part, an inner part having a conical flange that is within the inturned edge of the attaching part, the material of the garment lying across between the two parts and extending beyond the edges, and a layer of paper passing across between the material and the inturned edge of the cup shaped attaching part of the fastener member, substantially as set forth. 4th. In a garment fastener, a flanged stud part and an attaching part having side walls of a relative depth and size to adapt it to receive the flange of the stud part together with the material of the glove or garment so as to allow the side walls of the attaching part to be rolled or folded with the intervening material over the edge of the flange of the said stud part for connecting the parts of the stud member, in combination with a socket member adapted to co-act with the complete stud member, substantially as specified. 5th. In a garment fastener, a flanged socket part and an attaching part having side walls, of a relative depth and size to adapt it to receive the flange of the socket part together with the material of the glove or garment so as to allow the side walls of the attaching part to be rolled or folded with the intervening material over the edge of the flange of the said socket part for connecting the parts of the socket member, in combination with a stud member adapted to co-act with the complete socket member, substantially as described. 6th. In a stud and socket fastening device for garments and coverings, the combination with the flexible material, of an attaching part having side portions and a receiving angle, and an inner part having a base received with a flexible material into the attaching part with the flexible material intervening and extending beyond and with the side portions of the attaching part turned inwardly over the flexible material and base of the inner part, substantially as specified. 7th. In a stud and socket fastening device for garments and coverings, the combination with the imperforate flexible material, of an attaching part having side portions and a receiving angle, and an inner part having a base received with the flexible material intervening and extending beyond and with the free edge of the attaching part turned inwardly over the flexible material and base of the inner part, substantially as specified.

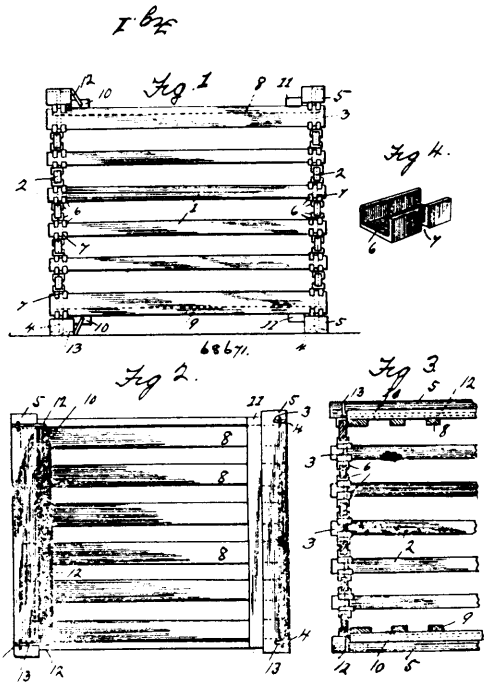
No. 68,670. Curtain Support. *(Support pour rideau.)*



Edwin G. Smith, Machias, New York, U.S.A., 10th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—As an improved article of manufacture, a curtain stay formed of a single piece of wire, and comprising the ring 2, the stem 1 formed by twisting the portions 3, the integral oppositely projecting arms 4 4 and the inwardly turned hooks 5 5 at their ends, substantially as set forth.

No. 68,671. Folding Crate. *(Boîte pliante.)*

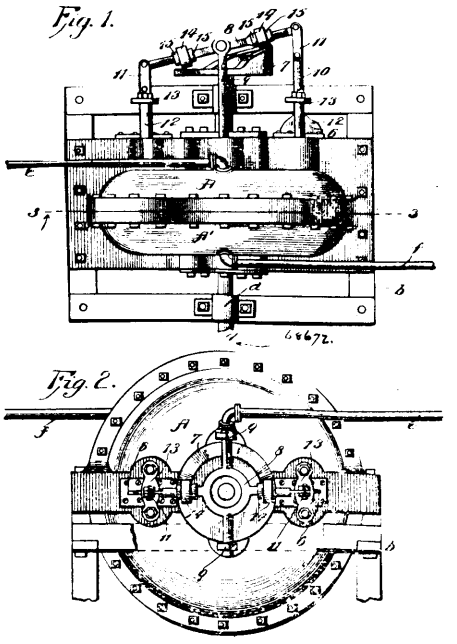


Mack E. Polhemus, Eaton Rapids, Michigan, U.S.A., 10th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—1st. In a crate, a series of intersecting side end bars having transverse grooves, binding wires in the grooves binding wires in and means for retaining the wires and bars in their proper relative positions. 2nd. In a crate, a series of intersecting end and side bars, a wire engaging the surfaces of the bars at the corners retaining plates having slots to receive the wires, said plates being wider than the slats to which they are applied whereby they overlap the edges of the bars and protect the same. 3rd. In a crate, a series of intersecting side and end slats having coinciding grooves at their point of meeting, a binding wire in the grooves, retaining and antifriction plates between the meeting edges of the bars, said plates having slots to receive the wires and being of such width as

to overlap the edges of the bars. 4th. In a crate, top and bottom comprising cleats and bars projecting beyond the cleats, one cleat being longer than the width of the crate and the other cleat shorter than the width thereof, hooks pivoted to the shorter cleats and adapted to support one end while the bars of the top or bottom bear against the strips and the protruding ends of the cleat engage the bars of the side.

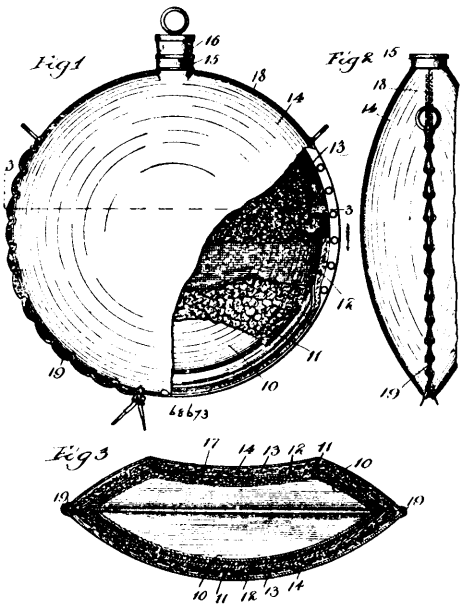
No. 68,672. Rotary Engine. (*Engin rotatoire.*)



John Eastburgh, Mount Jewett, Pennsylvania, U.S.A., 10th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. In a rotary engine, two cylinder heads having annular recesses forming a cylinder when the parts are assembled, a steam supply and exhaust pipe connected to the said cylinder heads and communicating with the interior of the cylinder, said cylinder heads having central apertures, combined packing boxes and steam chests adapted to fit in said apertures, the combined packing boxes and steam chests consisting of a cylindrical casing having a central aperture and a series of ports, a partition between the central aperture and ports forming a space between the partition and outer wall, a flange projecting beyond the head of the combined packing box and steam chest, a plate to regulate the pressure of the packing, a a power shaft fitting in the central aperture of the cylinder heads, a piston on the shaft, a piston head having recesses in its ends and ports connecting the recesses with the ports of the cylinder heads, valves, and valve shipping mechanism, as and for the purpose described. 2nd. In a rotary engine, two cylinder heads having annular recesses forming a cylinder when assembled, a steam supply and exhaust pipe connected to the cylinder head and communicating with the interior of the cylinder, the said cylinder having central apertures, combined packing boxes and steam chests adapted to fit in said apertures consisting of a cylindrical casing provided near the end with a head having a central aperture and a series of ports, a partition between the central aperture and ports, a flange projecting beyond the head of the combined packing box and steam chest, a plate to regulate the pressure of the packing, a power shaft fitting in the central apertures of the cylinder heads, a piston on the shaft, said piston having a radial inlet port terminating in a curved portion opening on the side next to the supply pipe and also having a radial exhaust port oppositely disposed with relation to the inlet port, a piston head adapted to fit within the chamber of the cylinder, having a recess in its ends and having ports registering with the inlet and exhaust port of the cylinder head and terminating in the recesses of the piston head, said piston head being secured to the piston by bolts, straps looped around and embedded in the piston head with the ends projecting to the piston collar, the straps adapted to exert an outward pressure, and pins forming a rigid connection between the piston and piston head, valve blades operating through slots in the cylinder head and valve shipping mechanism, as and for the purpose described. 3rd. In a rotary engine, two cylinder heads having annular recesses forming a cylinder when assembled, a steam supply and exhaust pipe connected to said cylinder heads and communicating with the interior of the cylinder, the said cylinder heads having central apertures, combined packing and steam chests adapted to fit in said apertures consisting of a cylindrical casing having a central aperture and a series of ports, a partition between the central opening and ports forming a space between the partition and outer wall, an annular flange projecting beyond the head of the combined packing box and steam chest, a plate to regulate the pressure of the packing, a power shaft fitting in the central aperture of the cylinder heads, a piston on the shaft, a piston on the shaft, a piston head having recesses in its ends and ports connecting the recesses with ports of the cylinder heads, valve blades operating through slots in the cylinder heads and shipping mechanism comprising a cam mounted on the engine shaft, a lever suitably pivoted, valve rods, links connecting the valve rods and lever, guides for the valve rods and antifriction rollers adapted to engage the cam, as and for the purpose described.

No. 68,673. Canteen. (*Cantine.*)



William Lanz, Chicago, Illinois, U.S.A., 10th September, 1900; 6 years. (Filed 27th August, 1900.)

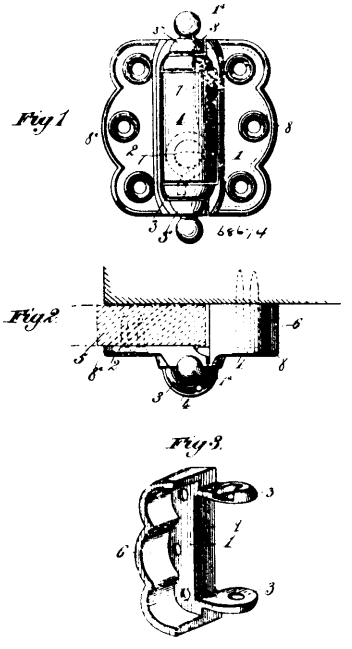
Claim.—1st. In a canteen, in combination, a flask, a layer of material of low heat conducting character covering the flask, a waterproof envelope for such covering, a jacket of fibrous material superimposed upon the envelope, and an openable cover of close woven textile fabric for the jacket. 2nd. In a canteen, in combination, a flask, a layer of granular cork covering the flask, a waterproof envelope for such covering, a jacket of fibrous material superimposed upon the envelope, and a canvas cover for the jacket, such cover being composed of two sections joined together by lacing. 3rd. In a canteen, in combination, a flask, a jacket of uninterrupted absorbent material therefor, and an openable cover for the jacket made of close woven fabric.

No. 68,674. Hinge. (*Gond.*)

George Washington Clum, Columbus, Ohio, U.S.A., 10th September 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. A spring hinge for a screen door, consisting of two leaves normally lying in the same plane and having overlapping ears at the ends of their inner edges through which a pintle passes, one leaf formed integral with a flange offstanding from its outer edge and extending continuously along said outer edge to provide a practically hollow leaf member, the screw holes of the flanged leaf lying between its inner edge and the said flange at its outer edge, the flange being constructed of a depth or width the same as the thickness of the door to be hung, substantially as described. 2nd. A spring hinge for a screen door, consisting of two pivoted leaves normally lying in the same plane, one formed integral with a flange offstanding from its outer edge and around its opposite ends, whereby a hollow leaf member is formed, and the other formed at its inner edge with an arched spring housing, said flange constructed of a depth or width the same as the thickness of the door to be hung, substantially as described. 3rd. A screen door hinge, consisting of two leaves having scalloped outer edges and each provided at the upper and lower ends of its inner edge with two perforated ears through which the pintle passes, one leaf having its scalloped outer edge formed integral with a scalloped flange extending continuously along said outer edge and around the opposite ends of said leaf to provide a practically hollow leaf member, and constructed of a depth or width the same as the thickness of the door to bear at its inner edge against the door frame while the other leaf bears against the door and the outer surfaces of both leaves lying normally in the

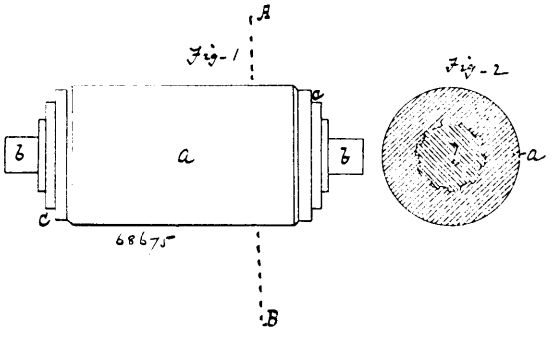
same plane, substantially as described. 4th. A hinge for screen doors, consisting of two pivoted leaves, the outer faces of which



normally lie in substantially the same plane, and one of said leaves being formed with an integral offstanding flange extending along the outer edge and the opposite ends thereof to provide a practically hollow leaf body, the said flange being constructed of a depth or thickness the same as the thickness of the door to be hung, substantially as described.

No. 68,675. Roller for Calendering Machines.

(Machine à calandrage.)



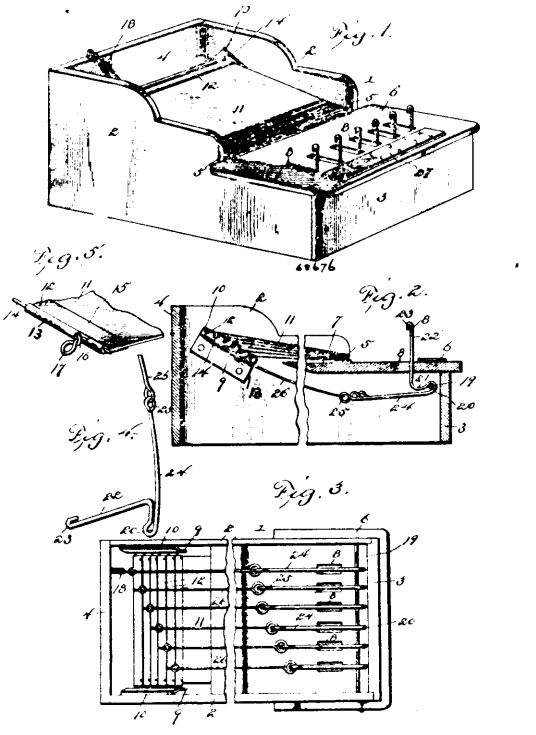
Joseph Eck, Düsseldorf, Prussia, German Empire, 10th September, 1900; 6 years. (Filed 23rd November, 1899.)

Claim.—1st. In an elastic calendering roller for polishing and pressing purposes, the combination with a solid core, of an elastic mantle covering, consisting of asbestos, substantially as described. 2nd. In an elastic calendering roller for polishing and pressing purposes, the combination with a solid core, of an elastic mantle covering, consisting of an asbestos preparation, substantially as described.. 3rd. In an elastic calendering roller for polishing and pressing purposes, the combination with a solid core, of an elastic mantle covering, consisting essentially of asbestos, the mantle surface of the core having projections and the neighbouring surface of the elastic covering being correspondingly shaped, substantially as and for the purpose hereinbefore set forth.

No. 68,676. Index. (*Index.*)

Christopher Christiansen, Fairhaven, Washington, U.S.A., 10th September, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a device of the character set forth, the combination of a plurality of hinged tablets normally disposed in a substantially horizontal position, a similar number of combined bell crank levers and keys having portions extending upwardly in normally vertical position and remaining parts disposed horizontally, said combined levers and keys having eyes or loops at their angles, a bearing rod extending transversely to the horizontal portions of the combined levers and keys, and on which the eyes or loops of the



latter have loose bearing, the horizontal members of the combined levers and keys being gradually shortened in regular progression toward one side of the device, and a series of connectors, all of equal length, loosely attached to the rear extremities of the horizontal portions of the combined levers and keys, and individually to the hinged portions of the tablets. 2nd. In a device of the character set forth, the combination with a casing, of a series of tablets normally disposed in substantially horizontal planes and overlapped and having pintles at their rear edges, each provided with an eye at a right angle thereto, and the ends movably bearing in oppositely situated, angularly disposed plates, said tablets being successively projected toward the rear a greater distance, combined bell crank levers and keys loosely mounted in the front of the casing for movement in the arc of a circle, and having substantially horizontal members of gradually decreasing length toward one side of the casing, a rod extending transversely across the front portion of the casing on which the said combined levers and keys are loosely mounted, and a series of connectors, all of equal length, loosely attached directly to the rear terminals of said horizontal members and the eyes of the pintles. 3rd. In a device of the character set forth, the combination of a casing having vertical sides and a front horizontal plate, bearing plates arranged at a downward angle of inclination on the inner opposing faces of the rear portions of the sides, a plurality of tablets confined between the sides of the casing and normally arranged in a vertical stack, each tablet from the bottom uppermost projecting rearwardly a greater distance than the one next below, a metallic binding on the rear edge of each tablet having a tubular portion, pintles located in the said tubular portions of the bindings, and each provided with an angularly disposed eye, the opposite ends of the pintles projecting beyond the metallic bindings and extending into the bearing plates, a yielding resisting device connected to the uppermost tablet, a series of combined bell crank levers and keys movably mounted in the front portion of the casing and comprising rearwardly projecting horizontal arms gradually decreasing in length toward one side of the casing and also having upwardly extending arms movable in the horizontal plate at the front of the casing, a transversely extending rod at the front of the casing on which the combined levers and keys are loosely mounted, and a series of connectors of equal length extending from the rear terminals of the horizontal arms of the levers and keys to the eyes of the pintles, one connector being attached to each pintle.

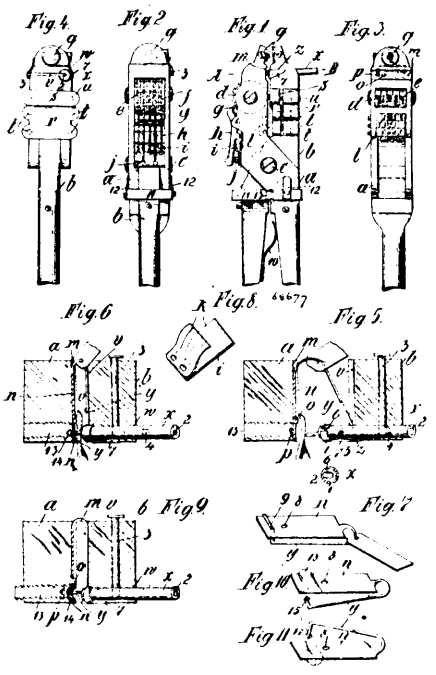
No. 68,677. Pincers for Labelling and Marking.

(Pinces pour marquer.)

Friedrich Porip Göddingen, Bleckede, Hanover, Germany, 10th September, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—1st. Improved pincers for labelling and marking animals, plants and other objects comprising in combination a pair of heads

pivoted together and provided with shanks, a movable case in connection with one of the heads adapted to receive the front end of the



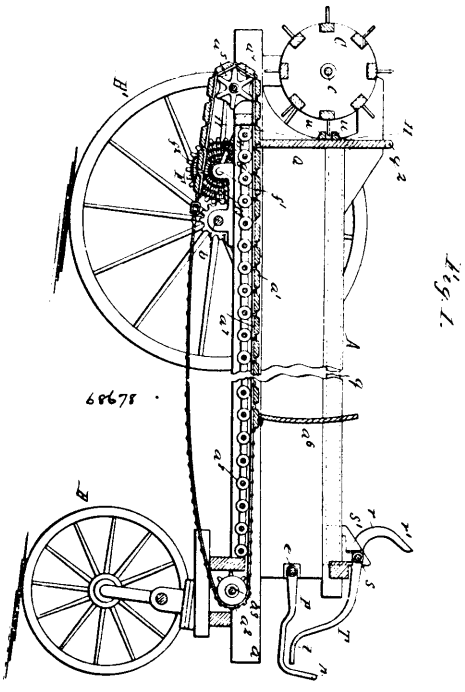
pin of the distinguishing mark, a recess in the other head adapted to receive the plate of the mark, a stud in said recess to ensure the position of the place, adjustable screw spindle located in a bore beneath the retaining stud, said screw spindle fitted with a curved groove for the reception and bending of the point of the pin of the distinguishing mark on closing the pincers and means for automatically opening the groove in the pin reception case for the removal of the pin therefrom, substantially as and for the purpose set forth. 2nd. In combination with pincers for labelling or marking animals, plants and other objects of the kind described, a cylindrical case movable in a bore in one of the two heads, a groove provided in said case for the reception of the front end of the pin of the marking label, a stud in said groove for limiting the movement of the case in the head, an annular groove near the front end of the case, a slotted ring located in an annular groove and fitted with an extension, a curved groove in the exterior face of the head adapted to receive said extension and on closing the pincers to force same to follow the curvature so as to rotate the slotted ring, and a spring stud in the head body adapted to project into the groove in the case, substantially as and for the purpose set forth. 3rd. In combination with pincers for labelling or marking animals, plants and other objects of the kind described a number of rotatable type or sign wheels mounted on an axle located in one of the heads of the pincers, an adjustable bearing plate in connection with the second head and means for rotating the type or sign wheels in their respective position, substantially as and for the purpose set forth. 4th. In combination with pincers for labelling or marking animals, plants and other objects of the kind described, interchangeable stamp plates or types in connection with one head, and an adjustable bearing plate in connection with the second head ensuring the independent or combined action of the type wheels and stamp plates, substantially as and for the purpose set forth. 5th. In combination with pincers for labelling or marking animals, plants and other objects of the kind described a distinguishing mark consisting of a plate with long pin attached thereto, a hole for the passage of the pin point, and a second hole for the passage of a retaining stud in the pincers, substantially as and for the purpose set forth. 6th. In combination with pincers for labelling or marking animals, plants and other objects of the kind described and in combination with the distinguishing mark, a cup secured to the plate, a cross double cut beneath the cup, and a pointed head on the pin, adapted to pass the double cut and to enter the cup, substantially as and for the purpose set forth.

No. 68,678. Manure Spreader. *(Distributeur d'engrais.)*

Joseph Sargent Kemp, Newark Valley, New York, U.S.A., 10th September, 1900; 6 years. (Filed 28th August, 1900.)

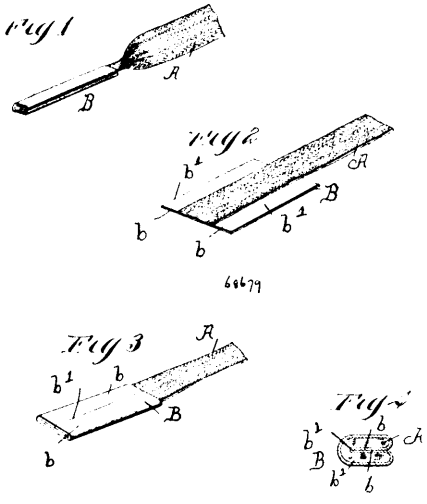
Claim.—1st. In a manure spreader, the combination with the box having a movable bottom and the rotary beater arranged over the rear portion of said bottom, of a safety board or gate arranged over said bottom adjacent to the front side of said beater and capable of vertical movement bodily toward and from said bottom, and mechanism whereby said board can be raised to expose the front side of the beater and lowered to cover the same, substantially as set forth. 2nd. In a manure spreader, the combination with the box having a movable bottom and the rotary beater arranged over the rear portion of said bottom, to a safety board or gate arranged over said bottom adjacent to the front side of said beater and capable of vertical movement bodily toward and from said bottom, side levers pivoted to the sides of the box to swing vertically and connected at their rear ends to said board or gate, and means whereby the front ends of said levers are depressed to raise said board or gate, substantially as set forth. 3rd. The combination with the box having a movable bottom, and the beater, of a vertically movable safety board or gate arranged adjacent to the beater, side levers connected at their rear ends with said board or gate, and rocking cam arms bearing upon the front ends of said side levers, substantially as set forth. 4th. The combination with the box having a movable bottom and the beater, of a vertically movable safety board or gate arranged adjacent to the beater, side levers connected at their rear ends with said board or gate, and rocking cam arms bearing upon the front ends of said side levers, and having curved lifting faces and straight locking faces, substantially as set forth. 5th. The combination with a box having a movable bottom the beater, and the bottom actuating mechanism, of a movable safety board or gate arranged adjacent to the beater, and a stop device which prevents the bottom actuating mechanism from being thrown into gear before the safety board or gate has been raised, substantially as set forth. 6th. The combination with the box having a movable bottom, the beater and the beater actuating mechanism, of a movable safety board or gate arranged adjacent to the heater, and a stop device which prevents the beater actuating mechanism from being thrown into gear before the safety board or gate has been raised, substantially as set forth. 7th. The combination with the box having a movable bottom, the bottom actuating mechanism and its clutch, and the shifting mechanism whereby said clutch is engaged or disengaged, of a vertically movable safety board or gate arranged adjacent to the beater, mechanism whereby said board or gate can be raised or lowered, and a stop device which prevents said clutch from being engaged before the safety board or gate has been raised, substantially as set forth. 8th. The combination with the box having a movable bottom, the beater, the bottom actuating mechanism and its clutch, the beater actuating mechanism and its clutch, and the shifting mechanism whereby said clutches are simultaneously engaged or disengaged, of a vertically movable safety board or gate arranged adjacent to the beater, mechanism whereby said board or gate can be raised or lowered, and a stop device which prevents the clutches from being engaged before the safeiy board or gate has been raised, substantially as set forth. 9th. The combination with the box having a movable bottom, the beater, the bottom actuating mechanism and its clutch the rock shaft by which said clutch is shifted and a hand lever secured to said shaft and provided with a projecting stop, of a vertically movable safety board or gate arranged adjacent to the beater, a rock shaft whereby said board or gate can be raised or lowered, and a hagd lever arranged on said rock shaft in the path of said step, substantially as set forth. 10th. The combination with the box having a movable bottom, the beater, the bottom actuating mechanism and its clutch, and the shifting mechanism whereby said clutch is engaged or disengaged, of a vertically movable safety board or gate arranged adjacent to the beater, mechanism whereby said board or gate can be raised or lowered, a stop device which prevents said clutch from being engaged, before the safety board or gate has been raised, and a stop device which prevents the safety board or gate from being lowered before said clutch has been disengaged, substantially as set forth. 11th. The combination with the box having a movable bottom, the beater, the bottom actuating mechanism and its clutch, the rock shaft by which said clutch is shifted, and a hand lever secured to said shaft and provided with a projecting stop, of a vertically movable safety board or gate arranged adjacent to the beator, a rock shaft whereby said board can be raised or lowered, and a hand lever arranged on said rock shaft in the path of said stop and provided with a stop which stands in line with the hand lever by which the bottom clutch is actuated, substantially as set forth. 12th. The combination with the body frame, the beater, and the vertically movable safety board arranged in front of the beater, of depending arms which are secured to said board, and overlap the side pieces of the body frame and confine the same against spreading when the board is lowered, substantially as set forth. 13th. The combination with the body frame of the beater, of the vertically movable safety board arranged in front of the beater, the side levers, and the depending arms which connect the safety board to the side levers and project downwardly on the outer sides of the side pieces of the body frame, whereby said side pieces are confined against spreading when the board is lowered, and released when the board is raised, substantially as set forth. 14th. The combination with the box, its movable bottom, the transverse shaft by which said bottom is actuated and the worm wheel secured thereto, of the longitudinal vertically movable worm shaft, the worm mounted loosely on the rear end thereof and provided at its front end with a clutch member, the movable clutch member splined on said worm shaft, shifting mechanism connected with said movable clutch member, and lifting mechanism connected with the worm shaft, substantially as set forth. 15th. The combination with the worm shaft, of the worm mounted loosely on the rear end thereof, a clutch member arranged against the front end of the worm and

coupled thereto by longitudinal coupling pins held in place by a washer surrounding the worm shaft and a pin secured to said shaft,



and a movable clutch member arranged on the worm shaft, substantially as set forth. 16th. The combination with the driving gear wheel provided with several concentric gear rims and the round worm shaft, of an adjustable pinion arranged on said worm-shaft and having the round bore of its hub provided with a longitudinal groove, coupling pins arranged on the worm shaft and adapted to project into said groove, and a stop pin which confines the pinion against rearward movement beyond its rearmost position, substantially as set forth. 17th. The combination with the body frame having two series of supporting rollers arranged along its sides, of a movable slat bottom having its slats connected along each side of the bottom by guide links running on said rollers and each provided with a depending side flange on one side only, while the opposite side of the link is unobstructed, and having the slats connected at the middle by driving links which have smooth under sides, and a central driving sprocket wheel engaging with said central links, substantially as set forth. 18th. The combination with the body frame and the beater arranged at the rear end of the same, of a side wing secured to the body frame and projecting upwardly and rearwardly beyond the beater, thereby acting as a wind break at the rear end of the machine, substantially as set forth.

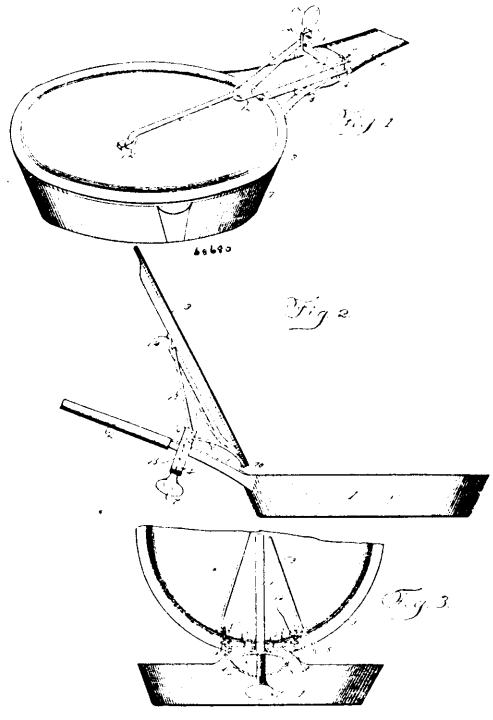
No. 68,679. Lacing String. (*Lacet.*)



George T. Kelly, Des Moines, Iowa, U.S.A., 10th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—The combination with a flat lacing string, of a folded metal plate embracing the end of the string and bent inwardly at its side margins over the side edges of the string, said plate and the string having a central longitudinal fold and the side margins of the plate being located between the folded parts of the string and being parallel, and in contact with each other.

No. 68,680. Cooking Utensil. (*Ustensile de cuisine.*)

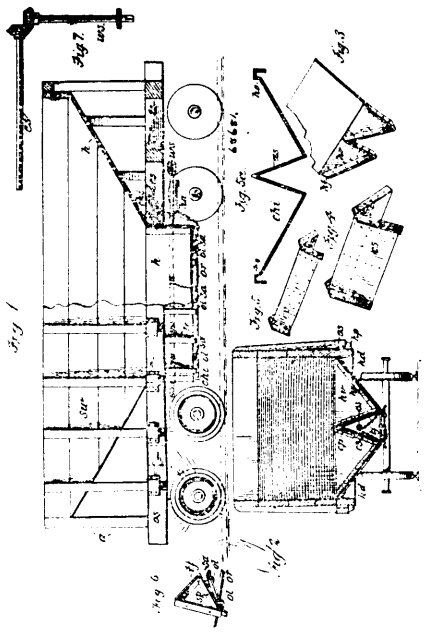


Edward A. Hulett and John Holmes, both of Armada, Michigan, U.S.A., 10th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. The combination with a cooking utensil having a rigid substantially radial handle, and a lid hinged at or adjacent to the handle, of an operating link hingedly supported upon the handle, and also having a sliding and pivotal connection with the lid, and a rocking finger piece connected with the link and arranged for operation by the hand which grasps the handle. 2nd. An attachment for cooking utensils, comprising an attaching bracket for application to the handle of the utensil, a lid, a link hingedly connecting the lid to the bracket, a second link arranged above the first-mentioned link, hingedly connected to the bracket, and also having a radially slidable and pivotal connection with the lid, and a rocking finger piece connected to the second link and arranged externally at one side of the bracket. 3rd. An attachment for cooking utensils, comprising an attaching bracket, a lid or cover hinged thereto provided upon its outer side with a radial guide rod or strap, which is spaced outwardly from the lid, a substantially U-shaped link having its closed end slidably and pivotally embracing the guide strap or rod, and its opposite end being hingedly connected to the bracket, and a rocking finger piece connected to the link and arranged at one side of the bracket. 4th. An attachment for cooking utensils, comprising an attaching bracket, having opposite bearing ears provided with corresponding perforations, a lid or cover hinged to the bracket, and a substantially U-shaped link formed of wire, the closed end of the link having a slidable and pivotal connection with the lid, and the opposite ends of the wire being bent into transverse pivots, which are pivotally received within the respective perforations of the bearing ears, and a finger piece connected to the link and arranged at one side of the bracket. 5th. An attachment for cooking utensils, comprising an attaching bracket, having a pair of opposite upstanding bearing ears, provided with pairs of corresponding perforations, a lid or cover, a substantially U-shaped link formed of wire, the opposite ends of the latter being hooked into corresponding perforations in the ears, a sleeve or eye connected to the outer side of the lid, and pivotally embracing the closed end of the link, a second substantially U-shaped wire link, having the opposite ends of the wire bent into transverse pivot pins, which are pivotally received within corresponding perforations in the bearing ears, one side of the link being twisted into a finger piece, and a guide rod or strap, having opposite feet connected to the outer side of the lid, and the closed end of the second link slidably embracing the guide rod or strap. 6th. An attachment for cooking utensils,

comprising a yoke-shaped attaching bracket, formed from a single metal strap which is bowed intermediate of its ends, the opposite sides thereof being bent inwardly across the concaved side of the bracket to form opposite flanges, and the opposite ends of the strap being bent into upstanding bearing ears, a set screw carried by the bowed portion of the bracket and extending inwardly towards the flanges, a lid or cover hingedly connected to the ears, and an operating link hinged to the ears and slidably connected to the lid, and a finger piece for the link.

No. 68,681. Dumping Car. (*Chariot à bascule.*)



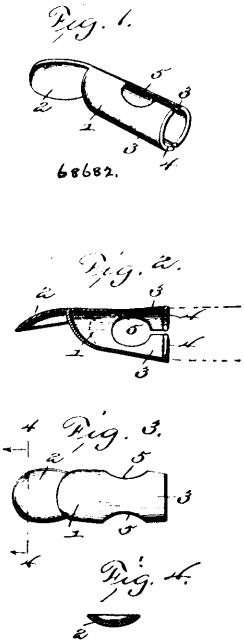
Jacob James Souder, Washington, District of Columbia, U.S.A., 10th September, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. In a dumping car, the combination with a bed frame of the car, of the oppositely placed metallic end sections having inclined and vertical portions as described, the chute irons resting upon opposite parts of the bed frame, and placed in coincidence with the vertical ends, to support the same, and the compound girder, flanged as specified, engaged with the flanges upon the end sections, and extending from end to end of the discharge opening of the hopper, substantially as set forth. 2nd. In a dumping car, the combination with the bed frame and with the vertical frame of the car, of the hopper, embracing oppositely placed end sections, each comprising an inclined and a vertical portion facing the centre of the car, the vertical portion having outstanding flanges as described, a transversely extending supporting bar or chute iron, adapted to be united to the flanges of the end section and the described girder, A-shaped in transverse section, having end flanges as shown, extending from end to end of the vertical portion of the hopper, bestriding the central portion of the chute iron and the superposed outstanding flange, and united to the flange and to the vertical portion of the end section, substantially as shown. 3rd. In a dumping car, a hopper which in its discharging portion is provided with a central support or girder which is composed of metallic plates, and is of A-shape in transverse section, and is rigidly attached to the end walls of such discharging portion. 4th. In a dumping car, a hopper which in its discharging opening has a metallic transversely A-shaped girder which is in plane with the centre sill of the car, and which is composed of two sections, one of which is received within the other, and each of which is secured to the vertical end portion of the discharging opening of the hopper.

No. 68,682. Curette. (*Curette.*)

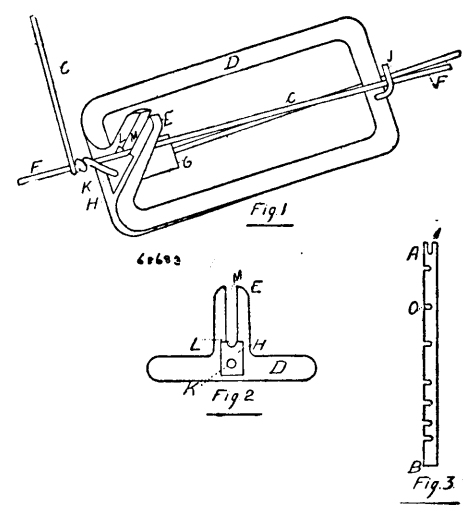
Emory Willis Peery, Rural Retreat, Virginia, U.S.A., 10th September, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. A curette comprising a thimble closed at its distal end to completely envelop the end of the finger, and having its proximal end portion provided with spring jaws, the distal end portion of the palmar side curving toward the outer side and effecting a junction therewith, and a spoon-shaped blade forming a continuation of the outer side of the thimble and projecting outward from the closed end thereof and curving toward the palmar side at its outer end, substantially as described. 2nd. A curette comprising a thimble closed at its distal end to completely envelop the end of the finger, and having its proximal end portion split longitudinally forming spring jaws, inwardly projecting ribs at the free end of the



spring jaws, and a spoon-shaped blade forming a continuation of the outer side of the thimble and inclining toward the palmar side of its outer extremity, substantially as described.

No. 68,683. Machine for Making Wire Fencing.
(*Machine pour faire la cloture en broche.*)



Henry Martin, Amherstburg, Ontario, Canada, 10th September, 1900; 6 years. (Filed 30th May, 1900.)

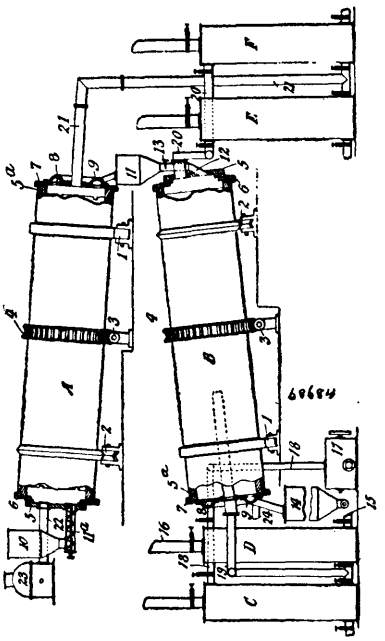
Claim.—Suitable rectangular frame, perforated through its centre, having a hub and slotted dog on the one side and in said slotted dog space for an interchangeable metallic die perforated below and grooved on top for different gauges of wire, and finally secured in said dog and frame, on the other side a suitable block.

No. 68,684. Apparatus for Decomposing Solids.
(Decomposition des solides.)

Paul Naef, Ph. D, New York City, New York, U.S.A., 12th September, 1900; 6 years. (Filed 8th January, 1900.)

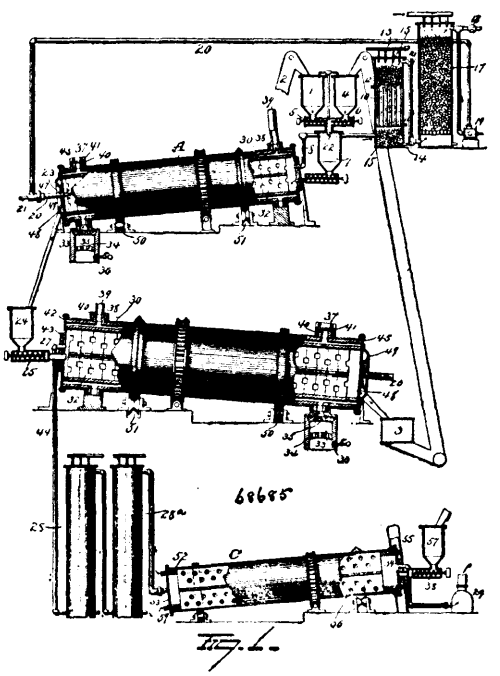
Claim.—1st. A method of treating solid material with a gas or gases, consisting in bringing the heated gas in contact with the material and reheating and bringing the gas and gaseous product in contact with fresh material one or more times, substan

described. 2nd. A continuous process consisting in bringing a solid material into intimate contact with a hot gas by passing both simul-



taneously and preferably in opposite directions through a suitable apparatus and reheating the gaseous products one or more times during the progress of the re-action by conducting them through separate gas heaters. 3rd. A continuous process for producing reactions between solid and gaseous bodies, consisting in bringing a solid material and a gas into intimate contact by passing them simultaneously, successively, and in opposite directions through a series of furnaces, and heating the gas before it enters the first furnace and re-heating the gaseous products as they pass from one furnace to the next, substantially as described. 4th. A continuous process for producing re-action between solid and gaseous bodies consisting in bringing such bodies into intimate contact by passing them simultaneously and successively through a series of superposed furnaces, the solid body travelling in a downward direction by gravity and the gaseous body travelling in an upward direction, and heating the gaseous body before it enters the lowest furnace and re-heating the gaseous products as they pass from each furnace to the next, substantially as described and for the purpose specified. 5th. A continuous process of producing chlorine consisting in bringing hot air into intimate contact with magnesium chloride by passing said bodies successively and in opposite directions through a series of furnaces, and heating the air before it enters the first furnace and also heating the gaseous products of the re-action as they pass from each furnace to the next succeeding furnace. 6th. A continuous process of producing chlorine, consisting in bringing a mixture of magnesium chloride and magnesium oxide into intimate contact with hot air by passing the mixture successively through a series of furnaces and simultaneously conducting air successively through the series in the opposite direction, and heating said air before it enters the first furnace and also heating the dilute chlorine gas as it passes from each furnace to the next succeeding furnace. 7th. An apparatus for effecting the treatment of solid bodies with gaseous bodies, comprising a series of furnaces through which the said bodies can pass continuously and a system of one or more heaters arranged in the path of the gas to the first furnace and another system of heaters arranged in the path of the gaseous products from one furnace to another of the series. 8th. An apparatus for effecting the treatment of solid bodies with gaseous bodies comprising a series of furnaces through which the material and the gas pass successively, gas heaters arranged between the source of supply of gas and the first furnace and between each furnace and the next succeeding one, and means for conducting hot gaseous fluid successively and conttnuously through the heaters and furnaces. 9th. An apparatus for effecting the treatment of solid bodies with gaseous bodies comprising a series of furnaces through which said bodies can pass continuously, a heater for heating the gas before it enters the first furnace, heaters for heating the gas and gaseous products as they pass from one furnace to another, and means for reducing the pressure within said furnaces and heaters, substantially as described. 10th. An apparatus for effecting the treatment of solid bodies with gaseous bodies, comprising a series of superposed revolving furnaces through which the solid body can pass successively by gravitation and through which the gaseous body can pass successively, a heater or heaters communicating with that end of the lower or lowest furnace from which the solid body is discharged, other heaters communicating with the charging end of one furnace and with the discharging end of the next higher furnace throughout the series of furnaces and means for conducting gas continuously and successively through the heaters and furnaces, substantially as described.

No. 68,685. Process of and Apparatus for the Manufacture of Chlorine. *(Manufacture du chlore.)*

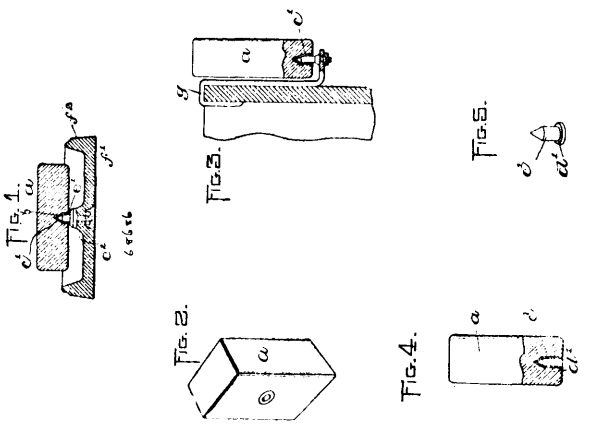


Paul Naef, New York City, New York, U.S.A., 12th September, 1900; 6 years. (Filed 8th May, 1900.)

Claim.—1st. In the process of obtaining chlorine, the herein described sub-process, consisting in passing chloride of ammonium and oxide of magnesium in a finely divided condition through a container, heating the compound, passing gas through the container in the opposite direction to drive off the ammonia, separating the ammonia from said gas and then again passing said gas through the container to drive off ammonia, substantially as set forth. 2nd. In the process of obtaining chlorine, the herein described sub-process, which consists in agitating chloride of ammonium and oxide of magnesium, simultaneously heating the same at a constant temperature, conducting gas through the same, subsequently subjecting the resultant compound at a constant, but higher temperature to the action of air, the operations being carried on continuously and simultaneously. 3rd. In a process of obtaining chlorine, the herein described sub-process consisting in passing chloride of ammonium and oxide of magnesium in a finely divided condition through a heated container, driving off the ammonia, discharging the resultant mixture of chloride and oxide of magnesium into another heated container and injecting air into said last-mentioned container to decompose said chloride of magnesium and drive off the chlorine, the operation being carried on continuously, substantially as set forth. 4th. In the process of obtaining chlorine, the herein described sub-process consisting in passing chloride of ammonium and oxide of magnesium in a finely divided condition through a heated container, driving off the ammonia, discharging the resultant mixture of chloride and oxide of magnesium into another container, injecting air into said second cylinder to decompose said chloride of magnesium therein and drive off the chlorine, and again passing the resultant oxide of magnesium with chloride of ammonium through the first container the operation being carried on continuously, substantially as set forth. 5th. The herein described process consisting in passing chloride of ammonium and oxide of magnesium in a finely divided condition through a heated container, driving off the ammonia, discharging the resultant mixture of chloride and oxide of magnesium into a second heated container, decomposing the chloride of magnesium in the second container to drive off the chlorine and creating a partial vacuum in the apparatus the operation being carried on continuously, substantially as set forth. 6th. The herein described process consisting in passing chloride of ammonium and oxide of magnesium in a finely divided condition through a heated container, driving off the ammonia, discharging the resultant mixture of chloride and oxide of magnesium into a second heated container, decomposing the chloride of magnesium in the second container to drive off the chlorine gas, and passing the

chlorine gas through an absorber, the operations being carried on continuously, substantially as set forth. 7th. In the process of obtaining chlorine, the herein described sub-process consisting in passing a mixture of chloride and oxide of magnesium in a finely divided condition continuously through a container and injecting continuously heated air into said container to decompose the chloride of magnesium and drive off the chloride, substantially as set forth. 8th. In a process for obtaining chlorine, the sub-process of evolving ammonia from ammonium chloride, which consists in gradually heating a mixture of said chloride and magnesium oxide in contact with steam and afterwards heating mixture further without contact of steam. 9th. The combination with a furnace, of a hopper communicating therewith, two hoppers communicating with said first-mentioned hopper, a gas outlet at one end of said furnace, a discharge pipe communicating with the other end of said furnace, and means for injecting a gas into the outlet end of said furnace, substantially as set forth. 10th. The combination with a furnace, of two hoppers for containing chloride of ammonium and oxide of magnesium respectively, a third hopper adapted to receive said chemicals from the first-mentioned hoppers and discharge them into the furnace, means for driving ammonia from said furnace, a pipe for conducting ammonia from the furnace and pipes connected with said ammonia pipe and communicating with the hoppers so as to receive ammonia from the latter, substantially as set orth. 11th. The combination with a furnace and means for mixing chloride of ammonium and oxide of magnesium and discharging the same into said furnace, of means for driving off the ammonia, a pipe for conducting ammonia from the furnace, and a washer with which said pipe communicates, said washer comprising a cylinder, a series of pipes therein, and absorbent material in the cylinder above and below said pipes, substantially as set forth. 12th. The combination with a revoluble cylinder having a number of independent longitudinal peripheral flues or passages, an annular flue or passage encircling said cylinder and communicating with the longitudinal flues or passages, a furnace communicating with said annular flue or passage, another annular flue or passage encircling the other end of the cylinder and communicating with said independent longitudinal flues, and a stack communicating with said last mentioned annular flue or passage, substantially as set forth. 13th. The combination with a revoluble cylinder having a number of independent, longitudinal peripheral flues, a series of rings secured together and encircling one end of said cylinder and forming an annular flue communicating with the longitudinal flues, a furnace communicating with said annular flue, another series of rings secured together and encircling the other end of the cylinder and forming another annular flue communicating with said last-mentioned annular flue, substantially as set forth. 14th. The combination with a revoluble furnace, of a ring secured to and partially closing one end thereof so as to leave a small opening, a small fixed plate abutting against said ring supported independendently of the furnace and co-operating with said ring to close the small opening in the end of the furnace, and inlet and outlet devices communicating with the furnace through said small fixed plate, substantially as set forth. 15th. The combination with a revoluble furnace, of two hoppers for conducting chloride of ammonium and oxide of magnesium respectively, a third hopper communicating with the first two and with the furnace, a pipe for discharging gas into the discharge end of the furnace, a pipe for conducting ammonia from the inlet end of the furnace, a second furnace, a hopper communicating therewith, means for conducting the mixture of chloride and oxide of magnesium from the first furnace to said last mentioned hopper, means for injecting air into said furnace, a hopper communicating with said second furnace to receive oxide of magnesium therefrom, an elevator for conveying oxide of magnesium from said last mentioned hopper to one of the first mentioned hoppers chlorine absorber and a pipe for conducting chlorine from said second furnace to said absorber, substantially as set forth. 16th. The combination with a revoluble furnace and a pipe communicating with the discharge end thereof, of two hoppers for containing chloride of ammonium and oxide of magnesium respectively, a third hopper, two conveyers for conducting the chemicals from the first mentioned hoppers into the third hopper, and a conveyor for conducting the mixed chemicals from the third hopper to the furnace. 17th. The combination of a revolving cylinder and a stationary, hollow ring closing against the end plate and communicating with the interior of the cylinder by means of openings in said end plate. 18th. In combination with a revolving cylinder, a washer, consisting of a column containing several layers of material for bringing gas and liquid into intimate contact and a system of cooling pipes between said layers. 19th. An absorber, consisting of a revoluble cylinder and fixed pipes enclosed within said cylinder and extending through the ends thereof, said pipes open at both ends and constituting coolers and agitators. 20th. An absorber, consisting of a revoluble cylinder, a series of pipes fixed in said cylinder and adapted for the passage of cooling fluid and radial agitators fixed in the cylinder and adapted to shower the absorbent on said pipes. 21st. An absorber, consisting of a revoluble cylinder, agitators therein, a ring secured to one end of said cylinder, a stationary plate supported independently of the cylinder and co-operating with said ring to close the end of the cylinder and a hopper communicating with the cylinder through said fixed plate, substantially as set forth. 22nd. The combination of a revolving cylinder, pipes running longitudinally through the same and devices for lifting and showering the material.

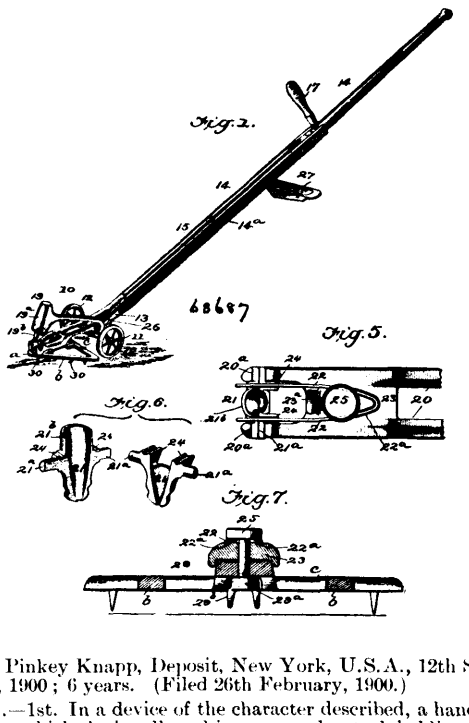
No. 68,686. Soap and Soap Holder. (*Porte-savon.*)



Charles Wesley Howe, Waltham, Massachusetts, U.S.A., 12th September, 1900; 6 years. (Filed 8th May, 1900.)

Claim.—1st. As an article of manufacture, a cake of soap having a socket or bushing of harder material than the soap, said socket having an open end or mouth and forming a bearing for a supporting rod or spindle. 2nd. A cake of soap having a bushing of relatively hard material embedded in the cake, said bushing being shorter than the thickness of the cake, so that it can be pushed into the cake from time to time as the surface of the cake wears away. 3rd. A soap holder comprising a drip receptacle and a single rod or pin projecting upwardly therefrom and adapted to engage and support a recessed cake of soap. 4th. A soap holder comprising a single upwardly projecting rod or pin surrounded by a drip receptacle, combined with a cake of soap having a recess formed to engage said rod or pin.

No. 68,687. Carpet Stretcher and Tacker.
(*Machine pour poser les tapis.*)

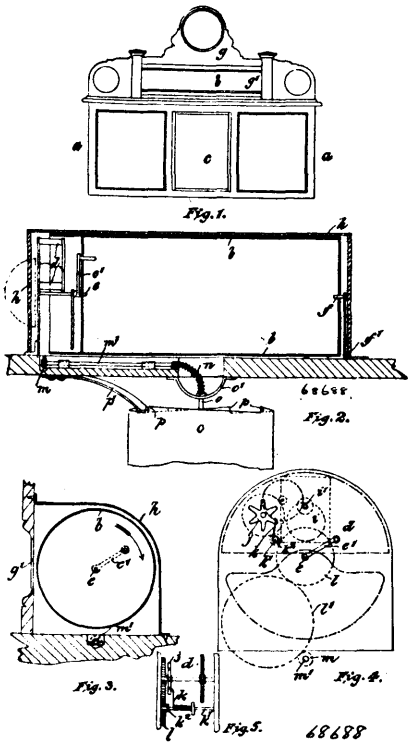


Charles Pinkey Knapp, Deposit, New York, U.S.A., 12th September, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. In a device of the character described, a handle rod, a head to which the handle rod is connected, a tack holding device, and a hammer pivotally mounted on said head, and having means mounted on the handle rod, whereby to operate it, and said hammer being provided with a weighted head and a driving finger projecting from said head, said finger being turned inward at a slight angle to the head, whereby it will lie in a true vertical plane when the hammer is in its lowermost position, as and for the purpose set forth. 2nd. In a device of the character described, a handle rod, a head to which the rod is connected said head having supporting arms

extending beyond the rod in a forward direction and formed with bearing sockets, tack holding jaws held to swing in said sockets and having oppositely extending lugs, a spring bearing downwardly upon said lugs, whereby to hold the jaws normally closed, and means for driving a tack out of said jaws, as set forth. 3rd. In a device of the character described, a handle rod, a wheel supported head to which said rod is connected, a hammer having a curved rear end pivotally connected to said head and having apertures in said curved portion, a slidable rod mounted on the handle rod and having a hooked forward end arranged to enter one of said apertures, a hand lever fulcrumed in said handle rod and connected to said slidable rod, and tack holding jaws located in line with the hammer, as set forth. 4th. In a device of the character described, a handle rod, a tack chute mounted thereon, tack holding jaws located at the discharge end of said chute, one of said jaws being formed with an extension serving to direct a tack from the chute into the jaws, and means for driving the tack out of said jaws, as set forth. 5th. In a device of the character described, the combination with the head, of the supporting arms extending forward therefrom, and formed with bearing sockets and a grooved web in the rear of sockets, tack holding jaws having pintles, whereby they are mounted to swing in said sockets, said jaws being formed with lugs extending on each side of said pintles, and a U-shaped spring held in the groove of the web and having free ends passing downwardly on said lugs, as set forth. 6th. In a device of the character described, a handle rod, a tack receptacle mounted to swing underneath said rod, and a spring catch arranged for engagement with the free end of said receptacle, whereby to hold the latter in closed position, as set forth. 7th. In a device of the character described, the combination with a supporting member, of a triangular stretching plate adapted for attachment thereto, and arranged to be reversed in position, as and for the purpose set forth. 8th. In a device of the character described, the combination with a supporting member, of a reversable stretching plate, as set forth. 9th. In a device of the character described, the combination with a supporting member having a bolt thereon, of a stretching plate arranged for connection to said bolt and formed with prongs, and a thumb nut for holding said plate and having prongs arranged to act in conjunction with the prongs on the plate, as set forth. 10th. In a device of the character described, a stretcher plate of triangular shape formed on two of its sides with prongs bent in one direction, and also formed on its third side with prongs bent in the opposite direction, and whose points terminate in a slightly higher plane than the first-named prongs, as set forth.

No. 68,688. Advertising Device. *(Appareil d'annonce.)*



William Blaker, 97 Queen Victoria St., London, England, 12th September, 1900; 6 years. (Filed 20th January, 1900.)

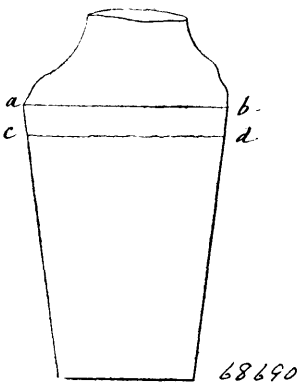
Claim.—1st. In a device of the class described, the combination with a motor, of a horizontal roller adapted to receive advertisements on the periphery, a perpendicular roller of the same construction, and gearing connecting the rollers with the motor, whereby the rollers will be simultaneously intermittently rotated so as to bring the different advertisements successively to view, substantially as shown and described. 2nd. In a device of the class described, the combination with a motor, of a plurality of revolubly mounted rollers with axles at an angle to one another, and gearing connecting the rollers with one another and the motor so as to bring about intermittent rotation of such rollers, substantially as shown and described.

No. 68,689. Method of Utilizing Acetylene Gas.
(Utilisation du gaz acétylène.)

Oesterr, Carbid and Carbon-Aeten Gesellschaft Gurovits and Co., assignee of Eugen Gurovits, all of Vienna, Austria, 12th September, 1900; 6 years. (Filed 28th April, 1898.)

Claim.—1st. The mode of utilizing acetylene gas as an illuminant, which consists in oxidizing the acetylene by the addition thereto of an oxidizing gas in the proportions of about 0·4 per cent to 1 per cent, for the purpose set forth. 2nd. An illuminant consisting of acetylene gas and from 0·4 per cent to 1 per cent of an oxidizing gas, as and for the purposes specified.

No. 68,690. New Process for the Total or Partial Hardening of glass. *(Procédé pour durcir l verre.)*



La Société Anonyme des Verreries de Bruxelles, assignee of Nestor Geille, Brussels, Belgium, 12th September, 1900; 6 years. (Filed 20th September, 1899.)

Claim.—1st. A process for the manufacture of hardened glass, more particularly adapted to goblet ware cast or pressed, smooth or cut, characterized by the annealing, prior to hardening, of the partially completed articles, the hardening being effected after the cut has been roughed out on the iron wheel, substantially as described. 2nd. The application of the above specified process to the hardening of the edges only of the glass ware, whereby the edges of the articles, after preliminary annealing, are subjected to reheating and then dipping, the article being held and moved forward horizontally into a saturated spongy mass the bath for which is heated by the waste heat of the blowpipe or reheating furnace, a suitable treadle or other device being provided for enabling the workman to raise the spongy mass from the vessel at the desired moment, without moving, thus avoiding loss of time which would cause a cooling of the article, substantially as and for the purpose hereinbefore described.

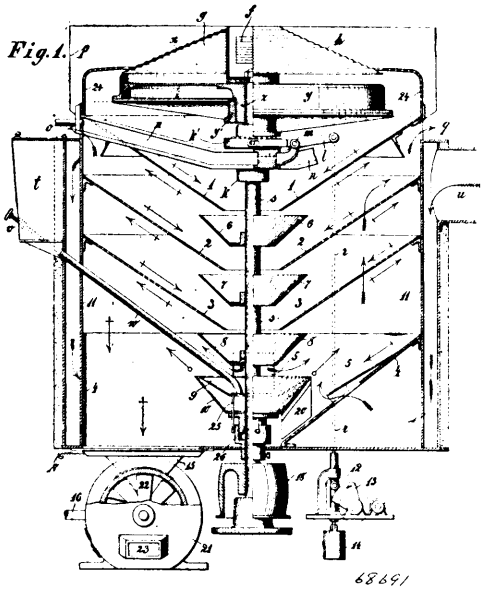
No. 68,691. Apparatus for Separating, Drying, Impregnating and Moulding. *(Appareil pour séparer, sécher et mouler.)*

Nicolaus Reif, Hanover, Prussia, 12th September, 1900; 6 years. (Filed 13th September, 1899.)

Claim.—1st. Process for centrifuging, drying and impregnating of various materials and the further preparation thereof for plastic purposes characterized by the arrangement that the material to be operated is prepared by pressing or cleansing by means of centrifugal force with continuous access and exit of the material and is then subjected to further application of centrifugal force and to a progressive drying whereby the material with constant alteration of form and position is moved towards the exit in such a manner that the drying currents steam, gas or the like, passing in the opposite direction come into intimate contact with the goods to be dried and at the same time there is obtained an intimate mixture of any binding or impregnating material also introduced by centrifugal force in the opposite direction to that of the material, constructed and arranged, substantially as hereinbefore described. 2nd. In the process for centrifuging, drying and impregnating various materials and the further preparation thereof for plastic purposes subjecting said materials to, or concentrating same by, the action of gases, hot air or solvent in the gaseous form before and during the assumption of its ultimate shape in a mixing of kneading apparatus, or a press, as

described. 3rd. In apparatus for centrifuging, drying and impregnating various materials, as described, a centrifugal apparatus for pressing out, cleaning and drying the material to be further treated, characterized by the arrangement that the expressed fluid driven out by the centrifugals in the drying process is passed through outlets *c x* which are placed in the course of the contents of the centrifugal, whilst the material is constantly removed through passages narrowing towards the periphery and thereby experiences a considerable pressure and a closing of the exits for the further prolongation of the preliminary process is effected independently by means of an adjustable ring *y* by aid of the cam 13 operated in connection with a shaft *r*, *l*, constructed and arranged, substantially as hereinbefore described. 4th. In apparatus for centrifuging, drying and impregnating various materials, as described, a centrifugal device for the further treatment of the material in which the latter is repeatedly conducted over conical revolving plates 6, 7, 8 separated by perforated walls 1, 2, 3 placed parallel to one another and lying in a sloping direction, said plates effecting a throwing forward and deformation and elevation of the material, whereby a more effective action of the current of dry air passing through in the opposite direction can result, constructed and arranged, substantially as hereinbefore described. 5th. In apparatus for centrifuging, drying and impregnating various materials, as described, an apparatus for the introduction of liquid or powdery impregnating or binding material passes from a container properly heated by the drying current to the lowermost funnel-shaped revolving plate 10 and is thrown by it amongst the dry material cutting or surrounding the particles thereof so that the regulation of the admission of the material in question can take place by means of an adjustable cover placed opposite the revolving plate 10 forming an adjustable outlet, constructed and arranged, substantially as hereinbefore described. 6th. In apparatus for centrifuging, drying and impregnating various materials, as described, a mixing and kneading device or press, characterized by an annular channel 29 placed therein and formed of plates lying over one another like scales in the direction of movement of the material, which channels admit, in combination with a pipe 16 and connecting pipe 30, hot air or solvent in a gaseous form to the material in order in this manner to effect the direct melting or to dissolve the impregnating or binding agent during the assumption of the ultimate form.

Fig. 1.



68691

No. 68,692. Manufacture of Cyanide of Sodium.

(Cyanure de sodium.)

Fritz Roessler, Frankfort on Maine, German Empire, 12th September, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. The manufacture from a mixtue of sodium carbonate and sodium cyanide, a sodium cyanide lye very nearly free from sodium carbonate, by systematic extraction at a moderate temperature (about 33° C) using the second lye from the previous operation being poor in cyanide and rich in carbonate, for the purpose of extracting a fresh charge, whereby the sodium carbonate is displaced from solution by the sodium cyanide. 2nd. In a process according to the preceding claim, extracting the whole mass with just sufficient water to dissolve the salts, and precipitating from this lye, comparatively rich in carbonate, the carbonate, by adding sodium cyanide at about 33° C. 3rd. In the process according to the preceding claim, evaporating in a vacuum the lye rich in carbonate, until it reaches a concentration at which only carbonate, and no sodium cyanide, separates. 4th. In a process according to the preceding claims, cooling the lye obtained in such process, and allowing the hydrated sodium cyanide crystals which separate to effloresce in a vacuum at ordinary temperatures over sulphuric acid or calcium chloride, thus obtaining the cyanide in the pure, anhydrous, marketable form. 5th. In the process according to the preceding claims 1, 2 and 3, cooling the lye obtained in such process and fusing the hydrated salt in its water of crystalization so as to obtain sodium cyanide in the anhydrous condition. 6th. In the process according to the preceding claims 1, 2 and 3, further evaporating in a vacuum the lye obtained to obtain a deposit of anhydrous sodium cyanide. 7th. The preparation of anhydrous sodium cyanide as hereinbefore described by passing hydrogen cyanide or gases containing hydrogen cyanide into concentrated caustic soda heated to above 33° C, when the salt is deposited in the anhydrous state of in the process hereinbefore described.

No. 68,693. Camera. *(Caméra.)*

Fig. 1

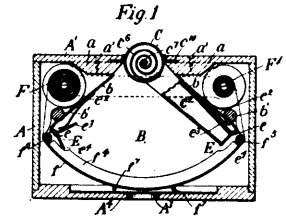


Fig. 2

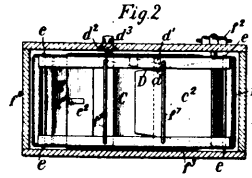


Fig. 3

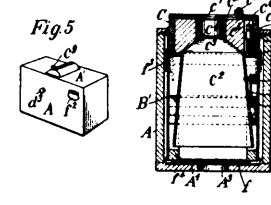


Fig. 5

Fig. 4

68693

Chas. H. Shaw, Brooklyn, New York, U.S.A., 12th September, 1900; 6 years. (Filed 7th May, 1900.)

Claim.—1st. In a camera, the combination of a len, means for moving said lens in an arc from one position to another, a light shaft through which the lens projects light rays onto a sensitized surface, said light shaft adapted to be moved with said lens, an L-shaped shutter supported lengthwise and independent of the light shaft and lens for closing the end of said light shaft in one position, and a second L-shaped shutter supported lengthwise and also independent of the light shaft and lens for closing the end of the light shaft in its other position. 2nd. In a camera, the combination of a lens, means for moving said lens from one position to another, a light shaft moving with said lens through which the lens projects light rays onto a sensitized surface, and means independent of the light shaft and lens that are operated by the light shaft engaging therewith for closing the end of said light shaft at the limit of its movement in each position. 3rd. In a camera, the combination of a lens, means for moving said lens from one position to another, a light shaft moving the said lens through which light rays are projected onto a sensitized surface, and a shutter independent of the light shaft and lens for closing the end of said light shaft in each of its positions, said shutter being L-shaped, and arranged to have the light shaft engage with one arm thereof to bring the other arm in position to close the end of the light shaft, substantially as described. 4th. In a camera, the combination of a suitable casing, a cylinder provided in a wall of said casing and mounted therein so as to be vertical, diametrically opposed openings in the wall of said cylinder, a lens located within the cylinder and in the line of said openings, and a light shaft connected with said cylinder through which the light rays are projected by the lens onto a sensitized surface, substantially as described. 5th. In a camera, the combination of a suitable casing a cylinder provided in a wall of said casing and mounted therein so as to be vertical, means for excluding light between the wall of said cylinder and the wall in which it is mounted diametrically opposed openings provided in the wall of said cylinder, a lens within said cylinder, and in the line of said openings, and a light shaft carried by said cylinder through which light rays are

projected onto a sensitized surface, substantially as described. 6th. In a camera, the combination of a casing, a cylinder provided in the wall of said casing and mounted therein so as to be vertical, and to be oscillated, means for oscillating said cylinder, diametrically opposed openings provided in the wall of said cylinder, a lens within the cylinder located in the line of said openings, and a light shaft carried by said cylinder through which light rays are projected onto a sensitized surface, substantially as described. 7th. In a camera, the combination of a casing, a cylinder provided in a wall of said casing and mounted therein so as to be vertical and to be oscillated, a spring for oscillating said cylinder in one direction, diametrically opposed openings provided in the wall of said cylinder, a lens located within the cylinder and in the line of said openings, and a light shaft connected with said cylinder through which light rays are projected onto a sensitized surface, substantially as described. 8th. In a camera, the combination of a casing, a cylinder provided in wall of said casing and mounted therein so as to be vertical and to be oscillated from one position to another, diametrically opposed openings in the wall of said cylinder, a lens located within the cylinder and in the line of the openings, a shutter for said lens, a light shaft connected with said cylinder so as to move with it through which light rays are projected onto a sensitized surface, and a shutter independent of the light shaft and cylinder for closing the end of said light shaft in each of its positions, substantially as described. 9th. In a camera, the combination of a casing, having one wall detachable therefrom, which wall is provided with an opening, plates secured to said wall and extending outwardly therefrom, a cylinder arranged vertically in the opening in said wall and having diametrically opposed openings in its wall, means for journalling said cylinder at its ends so that it can be oscillated from one position to another, means for oscillating it from one position to another, a device for holding the cylinder against the action of said means and releasing it, a lens located within said cylinder and in the lines of the openings in the wall thereof, a shutter for said lens, a light shaft connected to and moving with said cylinder from one position to another through which light rays are projected onto a sensitized surface, and shutters mounted between said plates, independent of the light shaft for closing the end of the light shaft in each of its positions, said shutters being adapted to be operated by the light shaft engaging therewith, substantially as described. 10th. In a camera, the combination of a casing having one wall detachable therefrom, which wall is provided an opening, plates secured to said wall and extending outwardly therefrom, a cylinder having diametrically opposite openings in its wall arranged vertically in said opening and journalled at its ends in said plates so as to be oscillated from one position to another, a lens within said cylinder and in line with said openings, side walls between said plates, a light shaft secured to said cylinder and moving with it through which light rays are projected onto a sensitized surface, and means for closing the ends of said light shaft in each of its positions, substantially as described. 11th. In a camera, the combination of a casing having one wall detachable therefrom, said wall being provided with an opening, plates secured to said wall and extending outwardly therefrom, a cylinder having diametrically opposite openings in its wall arranged vertically in said opening, and journalled at its ends in said plate so as to be oscillated from one positon to another, a lens located within said cylinder and in line with the openings in the wall thereof a light shaft secured to said cylinder and moving with it, means independent of the light shaft for closing the end thereof in each of its positions, side walls supported between said plates between which the light shaft moves, a spool carrying a sensitized surface which is adapted to be transferred to another spool, and spring plates, secured to the outside of the plates secured to the detachable wall, between which the spools are removably held, substantially as described. 12th. In a camera, the combination of a casing having one wall detachable therefrom, said wall being provided with an opening, plates secured to said wall and extending outwardly therefrom, a cylinder having diametrically opposite openings in its wall arranged vertically within the opening in said detachable wall and adapted to be oscillated from one limited position to another limited position, means for oscillating said cylinder, a lens located within said cylinder and in line with the opposite openings, a shutter for said lens, a light shaft secured to and moving with said cylinder through which light rays are projected onto a sensitized surface, and shutters mounted between said plates and arranged to close the end of the light shaft in each of its positions, substantially as described. 13th. In a camera, the combination of a casing, having one wall detachable therefrom, which wall is provided with an opening, a cylinder arranged vertically at the openings in said wall, and having diametrically opposed openings in its walls, means for journalling said cylinder at its ends so that it can be oscillated from one position to another, a device for holding the cylinder against the action of said means and releasing it, and the lens located within said cylinder and in the lines of the openings at the wall thereof, substantially as described. 14th. In a camera, the combination of a casing, having one wall detachable therefrom, which wall is provided with an opening, a cylinder arranged vertically within said opening and provided with a lens, means for oscillating said cylinder from one position to another, a light shaft moving with said cylinder, and a shutter adapted to be operated by the light shaft to close its end, substantially as described. 15th. In a camera, the combination of a casing, having one wall detachable therefrom, which wall is provided with an opening, a cylinder arranged vertically within said opening, and provided with a lens, means for oscillating said cylinder from one position to another, a light shaft moving with said cylinder, a shutter adapted to be operated by the light shaft to close its end, and a spring for holding said shutter in position to be operated by the light shaft, substantially as described. 16th. In a camera, the combination of a casing, having one wall detachable therefrom, which is provided with an opening, a cylinder arranged within said opening and provided with a lens, means for oscillating said cylinder from one position to another, a light shaft moving with said cylinder, and an L-shaped shutter supported lengthwise and adapted to be operated by the light shaft to close its end, substantially as described. 17th. In a camera, the combination of a casing having an opening in one of its walls, a cylinder arranged vertically in said opening, and having opposite openings in its wall, means for oscillating said cylinder in its vertical position, and a lens located in the line of said casing. 18th. In a camera, the combination of a casing having an opening in one of its walls, a cylinder arranged vertically in said opening, and having opposite openings in its wall, means for oscillating said cylinder in its vertical position, a lens located in the line of said openings, and a shutter for said lens. 19th. In a camera, the combination of a casing having an opening in one of its walls, a cylinder arranged vertically in said opening, and having opposite openings in its wall, means for oscillating said cylinder in its vertical position, and a light shaft connected to and moving with said cylinder, and a lens located in the line of the openings in the walls of the cylinder.

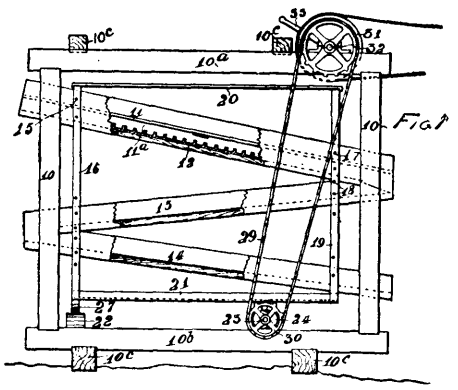
No. 68,694. Egg Preserving Process.

(*Conservation des œufs.*)

Michael E. McNeil, Little Glace Bay, Nova Scotia, Canada, 13th September, 1900; 6 years. (Filed 13th June, 1900.)

Claim.—1st. A composition for preserving eggs, consisting of borax, shellac and water, in substantially the proportions specified. 2nd. The method of preserving eggs, which consists in dipping the same in a preservative composition of shellac and borax dissolved in hot water, and subsequently drying the dipped eggs to secure an impervious coating or film thereon, substantially as described.

No. 68,695. Gold Washer. (*Machine à laver le minerai d'or.*)



Charles Garrett Garrison, Vancouver, British Columbia, Canada, 13th September, 1900; 6 years. (Filed 4th December, 1899.)

Claim.—1st. A gold washing machine having a grizzly, riffles, and amalgam plates placed on a movable frame arranged within a rigid frame, in combination with a convex bar 22 arranged across one end of the fixed frame, and a like bar fixed to the bottom of the movable frames resting on the bar 22, and a stud or pin 28 for holding the convexed faces of such bars together, a shaft 23 arranged to turn in suitable bearings towards the opposite end of the rigid frame,

eccentric cam wheels 24 on such shaft, brackets secured on the bottom of the movable frame, rollers in such brackets designed to engage the inner sides and peripheries of the wheels and means for imparting movement to the shaft 23, substantially as and for the purposes set forth. 2nd. Means for providing an oscillatory, a rocking and a vertical movement to a gol washer, consisting of convexed surfaces fixed to a suitable support frame and to the washer to be agitated with their convexes facing, and providing the support for one end of the gold washer, in combination with eccentric cam wheels secured to a shaft with their major axes placed on opposite sides thereof, rolls mounted in brackets on the gold washer and resting on the peripheries and the inner sides of the eccentric cam wheels, these forming an oscillatory support for the opposite end of the said washer, substantially as specified.

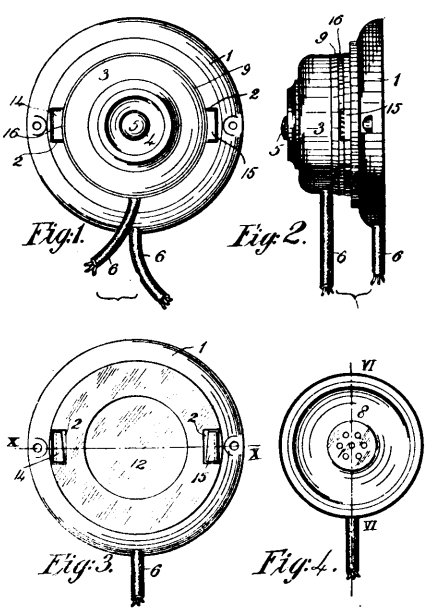
No. 68,696. Oil Refining Process.

(Procédé pour purifier l'huile.)

Thomas Macalpine, Cheswick, England, 13th September, 1900; 6 years. (Filed 28th August, 1899.)

Claim.—1st. The process for refining mineral and petroleum oils consisting in aiding an acetylene preparation of manganese to the crude oil in the following proportions: To 100 gallons of crude oil, 5 lbs. of the preparation of manganese, allowing the whole to rest with occasional agitation, and after allowing the whole to settle removing the oil and submitting it to distillation, all as hereinbefore described. 2nd. In a process for refining mineral and petroleum oils in conjunction with the acetylene preparation of manganese, the process for preparing such preparation, consisting in first saturating with acetylene gas a solution of the oxides, hydrates or carbonates of calcium, barium, magnesium, sodium, potassium or ammonium, adding to the solution, a solution of the permanganates or manganates of limes, barium, maganesium, sodium or potassium, afterwards a solution of permanganat of potash and then further saturation with acetylene gas, and extracting the precipitated preparation of manganese, all as hereinbefore described. 3rd. In a process for refining impure mineral and petroleum oils in conjunction with an acetylene preparation of manganese assisting the action of the manganese on the oil by adding to the manganese and oil and alkali, or mineral acid in the following proportions; To 5 lbs. of the preparation of manganese from 2 to 2½ lbs. of caustic soda or caustic potash, or to 5 lbs. of the prepared manganese from 2 to 2½ lbs. of concentrated sulphuric acid diluted with seven times its weight of water, and when the action of the acid on the manganese has ceased wash out the acid with water, and then add sufficient alkali, to remove the the traces of acid then wash out the alkaii and distill off the oil, substantially as set forth.

No. 68,697. Telephonic Apparatus. (*Téléphone.*)

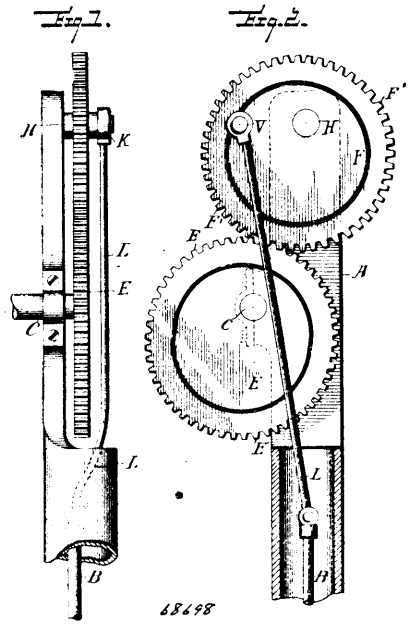


68697

George Lee Anders, 35 Walbrook, London, England, 13th September, 1900; 6 years. (Filed 13th February, 1900.)

Claim.—1st. In a telephonic installation, the combination of a fixed transmitter having projecting metallic horns or clips connected to the line, a receiver provided with a metallic rim adapted to engage with said horns or clips, and a ringing key located in the receiver, one terminal of which key is permanently connected to the rim of said receiver, the other terminal being connected through a flexible lead to the transmitter, substantially as described. 2nd. The combination of a fixed transmitter having projecting horns or clips, a spring secured to said transmitter and in electrical connection with the line and adapted normally to make contact with the edge of the transmitter diaphragm, and a receiver the rim of which is adapted to be engaged between said clips and when so engaged to press said spring away from the edge of the diaphragm, substantially as and for the purpose specified. 3rd. In a telephonic receiver, the combination of a circular magnet, a bell terminal, a a ringing key, a line terminal, a battery terminal, and receiver coils, all secured to said circular magnet, substantially as and for the purpose specified. 4th. In a telephone receiver, the combination of the casing, a push button projected through said casing, a ringing key operated by said push button, a circular magnet, said ringing key, the battery terminal, the line terminal and receiver coils being carried by said circular magnet. 5th. In a telephone receiver, the combination of a circular magnet, a ringing key for closing the bell circuit secured to said magnet, one of the terminals of same being insulated therefrom, receiver coils secured to said magnet and a key for the talking circuit carried by said magnet, one terminal being connected with one terminal of the receiver coils, and the other terminal being connected with the terminal of the ringing key, substantially as described. 6th. In a telephone receiver, the combination of a circular casing having at the centre thereof an orifice, a push button passing through said orifice, a ringing key adapted to be operated by said push button, a second push button passing through a second orifice in the casing, and a key for the talking circuit adapted to be operated by the second push button. 7th. In a telephone transmiter, the combination of an insulation ring enclosing the microphone, a pair of horns or clips secured to said ring and adapted to support the telephone receiver, and a spring secured to one of said horns adapted normally to make contact with the edge of the microphone diaphragm, substantially as and for the purpose specified. 8th. In a telephone transmitter, the combination of an insulating box containing the microphone granules and diaphragm, a pair of horns or clips secured to said box adapted to support and make contact with the telephonic receiver case, and suitable terminals for line, bell and battery wires also attached to said box, substantially as and for the purpose set forth.

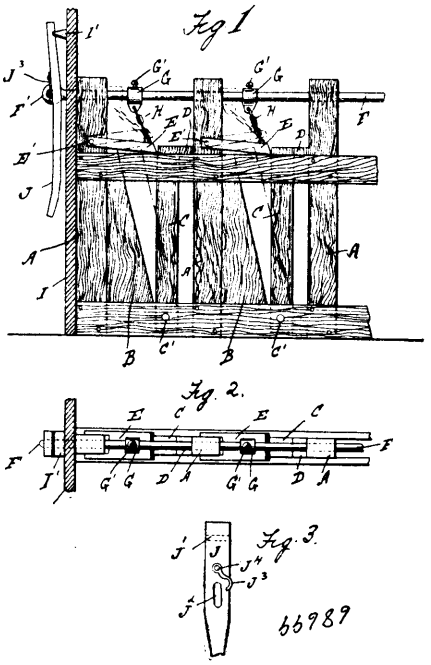
No. 68,698. Wind Mill. (*Moulin à vent.*)



Charles Sinclair Beggs, Ashland, Illinois, U.S.A., 13th September, 1900; 6 years. (Filed 28th June, 1900.)

Claim.—A gearing for windmills, comprising the hollow standard having a solid projecting portion, the inner and outer faces of the latter being flush respectively with the outer and inner surfaces of said hollow standard, combined with the stud H secured to the upper end of said projection, a gear wheel F eccentrically journalled thereon, the pin K carried by the latter, the operating shaft journalled on the edge of the standard, the gear wheel rotating with said shaft and meshing with said wheel F, and the pitman pivoted to said pin K, and connected to the pump rod, as shown and described.

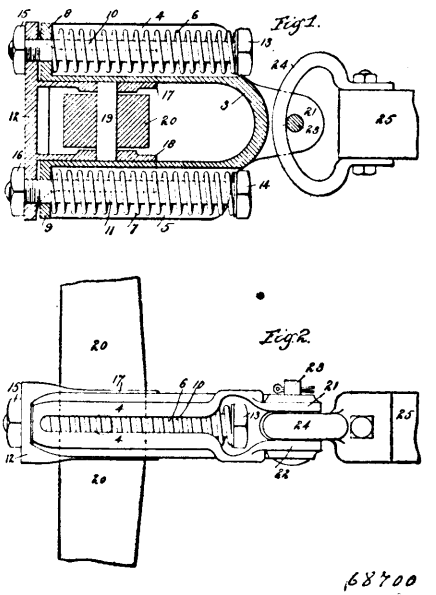
No. 68,699. Cattle Stanchion. *(Etançon pour bétail.)*



Adolph Joost, Kankakee, Illinois, U.S.A., 13th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—In a cattle stanchion, the combination of the stationary stanchions, the swinging posts co-operating therewith, the catches for holding the swinging posts in their active position, a slide rod extending longitudinally over the posts, flexible connections extending from the slide rod to each of the catches, the outer catches, the outer end of the rod being formed with an eye, ane passing through a wall, a knife edge located on said wall above the rod, a lever having a groove in one end adapted to engage said knife edge, and an elongated aperture between its ends for the passage of the eye at the end of the rod, and a hook pivoted to the lever and adapted to be swung into engagement with said eye.

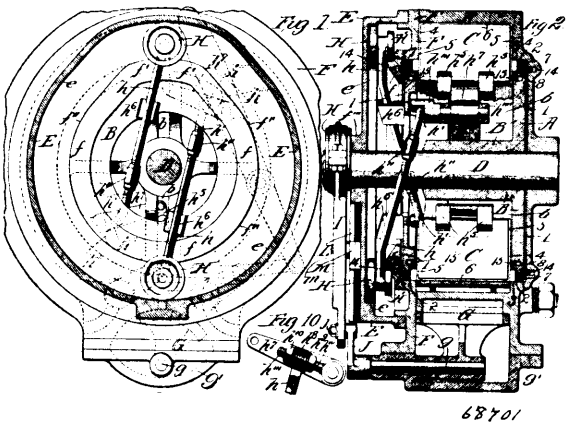
No. 68,700. Draft Device for Agricultural Implements.
(Appareil de tirage.)



William Thomas MacBrunnemer, Bradley, Illinois, U.S.A., 13th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. In a draft device, the combination with a yoke having spring holding pockets, and springs in said pockets, of a cross head outside said pockets, means connected with said cross head movable longitudinally with reference to said yoke putting said springs under tension, and means for connecting the team to said cross head, substantially as described. 2nd. In a draft device, the combination with a U-shaped yoke having spring pockets at opposite sides thereof, and springs in said pockets, of a cross head movable longitudinally with reference to said yoke, bolts connected to said cross head and extending through said springs, said bolts carrying seats for the rear ends of said springs, and means for connecting the team to said cross head between the branches of said yoke, substantially as described. 3rd. In a draft device, the combination with a Ushaped yoke having spring pockets at opposite sides thereof, and springs in said pockets, of a cross head movable longitudinally with reference to said yoke, bolts adjustably connected to said cross head and extending through said springs, said bolts carrying seats for the rear ends of said springs, and means for connecting the team to said cross head between the branches of said yoke, substantially as described. 4th. In a draft device, the combination with a U-shaped yoke having spring pockets at opposite sides thereof, and springs in said pockets, of a cross head movable longitudinally with reference to said yoke, guide plates arranged perpendicularly to said cross head, and bearing against the inner faces of said yoke, bolts connecting said cross head to the rear ends of said springs, and a draft device connected to said guide plates, substantially as described.

No. 68,701. Rotary Engine. *(Machine rotatoire.)*



John Wilkerson Pickel, Crystal City, Missouri, U.S.A., 13th September, 1900; 6 years. (Filed 20th August, 1900.)

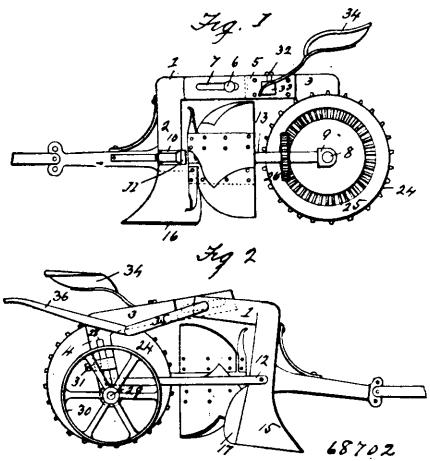
Claim.—1st. The combination with a cylinder and its shouldered head, of a piston which extends beyond said shoulder in the head, peripheral packing in the piston co-operating with said shoulder in the cylinder head, and packing in the cylinder head which bears laterally against the piston, substantially as described. 2nd. The combination with a cylinder and cylinder head, the latter being provided with a recess 3, of a piston arranged therein and carrying packing 7 on its periphery, said cylinder head being provided with packing 14 to co-operate with the piston, a sliding piston head mounted in the piston, and packing 13 and 15 co-operating with said piston head, substantially as described. 3rd. In a rotary engine, the combination with a cylinder and its shouldered head, of a piston which extends beyond said shoulder, said piston being of smaller diameter than the diameter of shoulder beyond which said piston extends, said piston also being of shorter length than the internal length of the cylinder and its shouldered head, and packing rings or strips which are interposed between said cylinder and piston to co-operate with the latter and maintain the balance thereof, substantially as described. 4th. In a rotary engine, the combination with a cylinder and piston, of piston heads slidingly mounted in said piston, tracks arranged to one side only of the cylinder, rollers co-operating with said tracks, and means interposed between said rollers and said piston heads for operating the latter, substantially as described. 5th. The combination with a cylinder and a piston, of piston heads movably carried by said piston, cam tracks arranged on one side only of the cylinder, rollers co-operating with said cam tracks, connections between said rollers and said piston heads, and means for adjusting and regulating the movement received by the piston heads from the rollers, substantially as described. 6th. The combination with a cylinder and piston, of cam tracks arranged on one side only of the cylinder, a lever mounted in the piston so as to rotate therewith, a rod mounted on said lever, a roller carried on the end of said rod for co-operating with said cam tracks, means for adjusting the length of said rod, and a slidable piston head which is operated by said lever, substantially as described. 7th. The combination with a cylinder and its rotatable piston, of cam tracks arranged on the cylinder, a rock shaft mounted in the piston, a rod mounted in guides on the piston and connected to said rock shaft, a roller

mounted in the end of the rod for co-operating with said cam tracks, a rock arm extending from said rock shaft, a slidable piston head, and a link connection with said rock arm and said piston head, substantially as described. 8th. The combination with a cylinder and its head, of a cap piece arranged on said head, cam tracks arranged on said cap piece and on said cylinder, rollers co-operating with said tracks, slidable piston heads mounted in the piston, and connections between said rollers and said piston heads for moving the latter, substantially as described. 9th. In a rotary engine, the combination with a cylinder, cylinder head, cap piece, shaft, piston and piston heads, of a cam track formed on said cap piece, a corresponding track formed on said cylinder head, rollers which are arranged to co-operate with said tracks, rods upon which said rollers are mounted, means for adjusting the lengths of said rods, and levers or cranks to which the inner ends of said rods are connected, lugs which are formed on the piston to which said levers are pivotally connected, and means for independently operating the piston heads from said levers, substantially as described. 10th. The combination with a cylinder formed with an abutment, of a piston and a piston head, and means extending partly outside the cylinder for positively withdrawing the piston head to escape contact with said abutment, substantially as described. 11th. In a rotary engine, the combination with a cylinder, its piston and piston heads, said cylinder being provided with ports for admitting and exhausting motive fluid, of an automatic variable cut-off, an eccentric loosely mounted on the main shaft of the engine, means for permitting said eccentric to have lost motion relative to the shaft when the direction of rotation of the latter is reversed, an eccentric rod for operating the cut-off valve, and a movable fulcrum for said rod, substantially as described. 12th. In a rotary engine, the combination with a cylinder, its piston and piston head, said cylinder being provided with ports for admitting and exhausting motive fluid, of an automatic variable cut-off, an eccentric loosely mounted on the main shaft of the engine, means for permitting said eccentric to have lost motion relative to the shaft when the direction of rotation of the latter is reversed, an eccentric rod for operating the cut-off valve, a movable fulcrum for said rod, and means for moving said fulcrum, substantially as described. 13th. The combination with a cylinder, its piston and piston head, of a cut-off valve, an eccentric driven by the main shaft of the engine, an eccentric rod for vibrating said cut-off valve, and a movable fulcrum for said eccentric rod, substantially as described. 14th. The combination with a cylinder, its piston and piston head, of a cut-off valve, an eccentric driven by the main shaft of the engine, an eccentric rod for vibrating said cut-off valve, a movable fulcrum for said eccentric rod, means for permitting lost motion between the fulcrum and the eccentric rod, when said fulcrum is in certrin of its positions, substantially as described. 15th. The combination with a cylinder, its piston and piston head, of a cut-off valve, an eccentric driven by the main shaft of the engine, an eccentric rod for vibrating said cut-off valve, said rod being provided with a slot, a yoke pivotally arranged in said slot, and a movable fulcrum for said rod which co-operates with said yoke, substantially as described. 16th. The combination with a cylinder, its piston and piston head, of a cut-off valve, an eccentric driven by the main shaft of the engine, an eccentric rod for vibrating said cut-off valve, guideways arranged in juxtaposition to said rod, a block slidingly mounted in said ways, a yoke pivotally mounted on said eccentric rod, and a stud carried by said block and co-operating with said yoke to form a fulcrum therefor, substantially as described. 17th. The combination with a cylinder, its piston and piston head, of a cut-off valve, an eccentric driven by the main shaft of the engine, an eccentric rod for vibrating said cut-off valve, a movable fulcrum for said eccentric rod, and means for correcting the throw of the eccentric when the fulcrum is adjusted, substantially as described.

No. 68,702. Plough. *(Charrue.)*

John I. De Witt, Bluffton, Indiana, U.S.A., 13th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—1st. In a plough, the combination with the plough frame and a plough carried thereby, of a rotary sweep arranged in the rear of the plough and provided with a series of radial blades arranged to pulverize the ploughed soil and thrust it laterally out of and to one side of the furrow, and mechanism actuated by the forward movement of the plough for rotating said sweep, substantially as described. 2nd. In a plough, the combination with the plough frame and a plough carried thereby, of a rotary sweep arranged in the rear of the plough-mould-board and provided with a series of radial blades arranged to pulverize the ploughed soil and thrust it laterally out of and to one side of the furrow, mechanism actuated by the forward movement of the plough for rotating the sweep, and radial cutters and breakers fixed on the axis of the rotary sweep in front of the latter and operating to cut and break up the earth as it leaves the plough-mould-board and before it is acted on by said sweep, substantially as described. 3rd. In a plough, the combination with the plough frame and a plough carried thereby, of a rotary sweep arranged in the rear of the plough and provided with a series of radial blades each rolled or curved laterally to one side at its outer edge from its front towards its rear, and mechanism actuated by the forward movement of the plough for rotating said sweep, whereby the latter operates to pulverize the soil and thrust it out of and to one side of the furrow, substantially as described. 4th. In a plough, the combination with the plough frame and a plough carried thereby, of a rotary sweep arranged in the rear of the plough-mould-



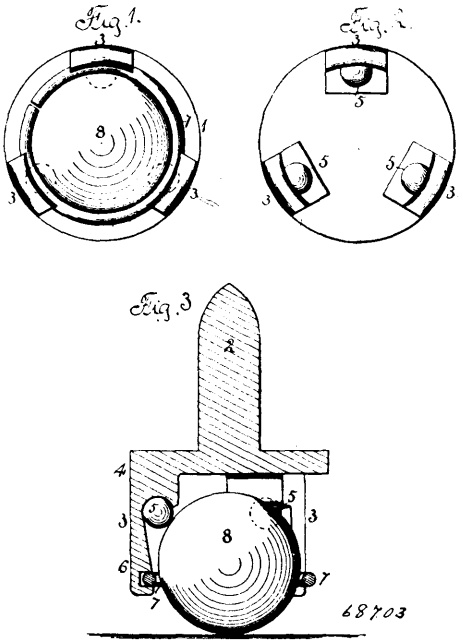
board and provided with a series of radial blades each curved at its outer edge laterally to one side in a direction opposite to that in which the sweep is arranged to rotate, said curvature increasing from the rear to the forward edges of the blades, and mechanism actuated by the forward movement of the plough for rotating said sweep, substantially as described. 5th. In a plough, the combination with a plough frame and the plough carried thereby, of a shaft rotably mounted in rear of the plough and parallel with the line of draft, radial, sweeps carried by the shaft and each comprising a rectangular blade curved at its outer edge laterally to one side in a direction opposite to that in which the sweep is arranged to rotate, the curvature gradually increasing from the rear to the forward edge of the blade, a furrow wheel journalled on the rear end of the plough frame and gearing connecting said wheel and shaft and operating to rotate the latter to cause the sweeps to thrust the soil laterally out of and to one side of the furrow, substantially as described. 6th. In a plough, the combination with the plough frame and a plough carried thereby, of a shaft rotably mounted in rear of the plough and parallel with the line of draft, radial ribs carried by the shaft, sweeps attached to said ribs and each comprising a rectangular blade curved at its outer edge laterally to one side in a direction opposite to that in which the sweep is arranged to rotate, the curvature gradually increasing from the rear to the forward edge of the blade, a furrow wheel journalled in the rear end of the plough frame, and gearing connecting said wheels and draft and operating to rotate the latter to cause the sweep to thrust the soil laterally out of and to one side of the furrow, substantially as described. 7th. In a plough, the combination with the plough frame and a plough carried thereby, of a shaft rotably mounted in rear of the plough and parallel with the line of the draft, radial ribs carried by the shaft, cutters and breakers attached to said ribs and each comprising a flat metallic strip or blade bent torsionally and curved forward at its outer end, said cutters and breakers being arranged to rotate in close proximity to the rear edge of the mould-board of the plough, and mechanism actuated by the forward movement of the plough for rotating the said shaft, substantially as described. 8th. In a plough, the combination with the plough frame and a plough carried thereby, of a shaft rotably mounted in rear of the plough and parallel with the line of draft, radial ribs carried by the shaft, cutters and breakers attached to said ribs and each comprising a flat metallic strip or blade bent torsionally and curved forward at its outer end, said blades being provided with cutting edges, said cutters and breakers being arranged to rotate at their outer curved ends in close proximity to and parallel with the rear edge of the mould-board of the plough for rotating the said shaft, substantially as described. 9th. In a plough, the combination with the frame comprising two plough beams arranged end to end and loosely coupled together at their adjacent ends, of a plough carried by the forward beam, ground wheels carried by the rear beam, a link pivoted at its forward end to the rear of the forward beam, and a hand lever pivoted at one end to the rear end of the rear beam and intermediate its ends to the rear of said links, substantially as described.

No. 68,703. Caster. *(Roulettes pour meubles.)*

Barney Asbery Manley, Rockford, Illinois, U.S.A., 13th September, 1900; 6 years. (Filed 27th August, 1900.)

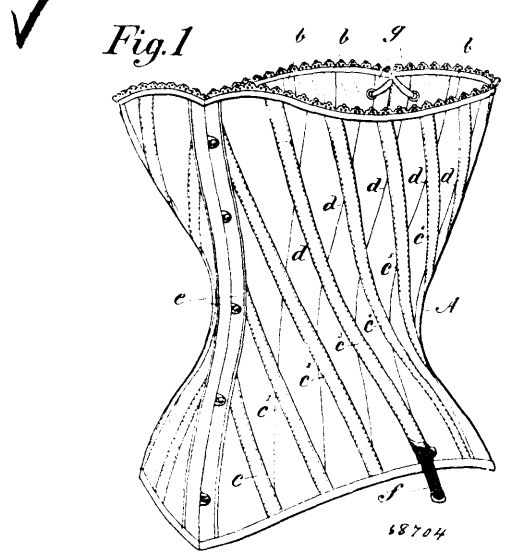
Claim.—A ball caster composed of a circular base, three arms depending from the base having enlargements at the base and semi-sperical recesses formed in the enlargement, each arm having a

groove near its outer end, balls located in the recesses, an open ring located in the grooves of the arms and a larger ball capable of rolling



in connection with the balls and adapted to pass through the ring after the ring is in position in the arms.

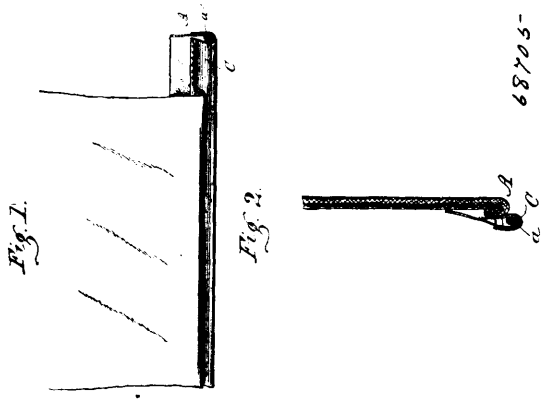
No. 68,704. Corset. (*Corset.*)



John Downing Belcher, Toronto, Ontario, Canada, 13th September, 1900; 6 years. (Filed 25th August, 1900.)

Claim.—1st. A corset having a plurality of bones or steels secured therein and each set on the bias, substantially as and for the purpose specified. 2nd. A corset having a plurality of bones or steels secured therein each running on the bias in a downward and rearward direction in each half of the garment, substantially as and for the purpose specified. 3rd. A corset having seams turned inward and taped, exterior bias strips forming oblique casings intersecting the said seams, and bones or steels inserted in the said casings, substantially as and for the purpose specified. 4th. A corset having a plurality of bones or steels secured therein, each set on the bias, the bones or steels being arranged to approach closer together at the waist portion, substantially as and for the purpose specified. 5th. A corset having in each half substantially vertical seams turned inward and tapped, exterior bias straps forming oblong casings running in a downward and rearward direction and intersecting the said seams, and bones or steels inserted in the said casings, substantially as and for the purpose specified. 6th. A corset having a plurality of bones or steels secured therein and each having a spiral twist, substantially as and for the purpose specified.

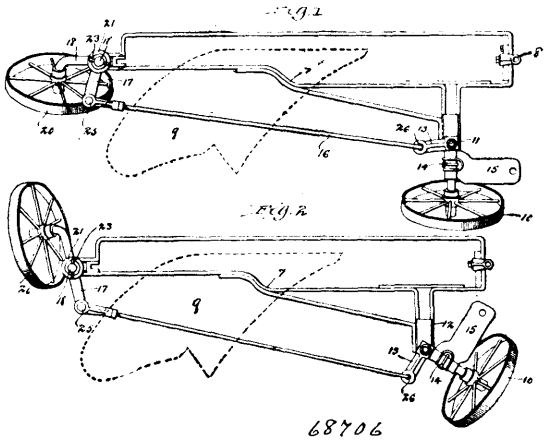
No. 68,705. Dress Bindings and Facings.
(*Bordure de robes.*)



Aaron Moses Weber, Oshkosh, Wisconsin, U.S.A., 13th September, 1900; 6 years. (Filed 16th August, 1900.)

Claim.—As a new article of manufacture, a binding for garments and the like, comprising a strip of material adapted to be secured to the garment, and provided on its lower inner edge with a fold or roll, and a second strip of material enclosing the fold or roll of the first strip and secured to the first strip above the fold line, whereby the outer binding may be removed when worn, and yet leave a new binding at the bottom of the garment, substantially as described.

No. 68,706. Plough. (*Charrue.*)



William Thomas MacBrunnemer, Bradley, Illinois, U.S.A., 13th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. In a plough, the combination with a machine frame, of a furrow wheel pivoted to swing about a substantially vertical axis, a crank connected to the pivot of said furrow wheel, a caster wheel pivoted to swing about a substantially vertical axis, a lever connected to the pivot of said caster wheel and normally extending at an angle to the line of travel, and a rigid connecting device connecting said lever and crank, said connecting device being arranged to lie slightly outside of a line drawn through the point of its connection with said lever and the pivot of the furrow wheel, substantially as described. 2nd. In a plough, the combination with a machine frame, of a furrow wheel pivoted to swing about a substantially vertical axis, a crank connected to the pivot of said furrow wheel, a caster wheel, and means for transmitting power derived from the tendency of said caster wheel to rotate to said crank in a line lying outside of the pivot of said furrow wheel, substantially as and for the purpose specified. 3rd. In a plough, the combination with a machine frame, of a furrow wheel pivoted to swing about a substantially vertical axis, a caster wheel also pivoted to swing about a substantially vertical axis, and means operating normally to hold said furrow wheel slightly inclined inwardly toward the furrow, substantially as described. 4th. In a plough, the combination with a machine frame, of a furrow wheel pivoted to swing about a substantially vertical axis, a caster wheel also pivoted to swing about a substantially vertical axis, and means operating to hold said caster wheel normally in a position inclined slightly out

from the furrow, substantially as and for the purpose specified. 5th. In a plough, the combination with a machine frame, of a furrow wheel having a vertically pivoted axle 11, a crank 13 connected to said axle, a caster wheel having a vercically pivoted axle, 18, a lever 17 mounted upon said axle, and a rigid adjustable connecting rod 16 connecting said crank and lever, the point of connection of said rod and crank lying normally outside of a line drawn from the point of connection of said rod and lever and the pivot of the axle 11, substantially as described. 6th. In a plough, the combination with a machine frame, of a furrow wheel pivoted to swing about a substantially vertical axis, a caster wheel also pivoted to swing about a substantially vertical axis, a crank 13 connected to the axle of the furrow wheel a lever 17 connected to the axle of said caster wheel, said lever being adapted to rotate partially independently of the axle of the caster wheel, and a stop limiting the extent to which said lever may rotate independently of said axle, substantially as described. 7th. In a plough, the combination with a machine frame, of a furrow wheel pivoted to swing about a substantially vertical axis, a caster wheel also pivoted to swing about a substantially vertical axis, a crank 13 connected to the axle of the furrow wheel, a lever 17 connected to the axle of said caster wheel, said lever being adapted to rotate partially independently of the axle of the caster wheel, and a disc 21 mounted upon said axle and keyed thereto, said disc having a segment 22 adapted to engage said lever, substantially as described. 8th. In a plough, the combination with a machine frame, of a furrow wheel pivoted to swing about a substantially vertical axis, a caster, wheel also pivoted to swing about a substantially vertical axis, and means operating normally to hold said furrow wheel inclined slightly toward the furrow and to hold said caster wheel normally inclined slightly out from the furrow, substantially as and for the purpose specified. 9th. In a plough, the combination of a machine frame, a caster wheel pivoted to swing about a substantially vertical axis, and means operating to hold said caster wheel normally at an angle outwardly inclined to the line of draft, substantially as and for the purpose specified. 10th. A plough having a furrow opener, adjustable traction mechanism arranged back of the furrow opener, which acts normally to exert outward pressure upon the furrow opener, and means operated by the team for controlling the action of said traction mechanism, substantially as and for the purpose specified. 11th. The combination of a machine frame, a caster wheel adapted to swing about a substantially vertical axis, a laterally extending lever loosely connected with said caster wheel, means limiting the independent movement of said lever and caster wheel when in operative position, a substantially horizontal arm or crank, and means connecting said lever and arm, substantially as described. 12th. The combination of a machine frame, a caster wheel having a vertically extending axle arranged to rotate in a suitable bearing, a lever loosely mounted on said axle and extending laterally, means carried by said axle adapted to engage said lever to limit the independent movement of said lever and axle, a substantially horizontal arm or crank, and means connecting said lever and arm, substantially as described.

No. 68,707. Method of Rendering Wood Fireproof.

(*Méthode pour mettre le bois à l'épreuve du feu.*)

Henry Valentine Simpson, 2 Army and Navy Mansions, Victoria Street, Westminster, London, England, 13th September, 1900; 6 years. (Filed 11th August, 1899.)

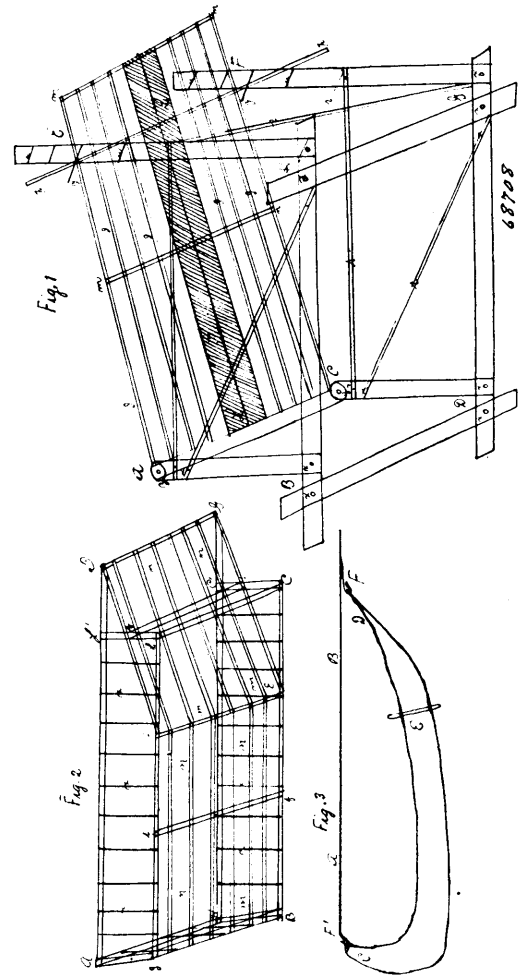
Claim.—1st. The method of treating wood to render it non-flamable and to preserve it, which consists in impregnating the wood with a single solution of ammoniacal and metallic salts, which salts are completely soluble at the strength at which the solution is applied to the wood, but which are precipitated and also re-act to produce an insoluble precipitate when the strength of the solution is increased by evaporation, and then drying the impregnated wood, substantially as described. 2nd. The method of treating wood to render it non-flamable and to preserve it, which consists in impregnating the wood prior to the application of heat with a single solution of ammoniacal and metallic salts, which salts are completely soluble at the strength at which the solution is applied to the wood, but which are precipitated and also re-act to produce an insoluble precipitate when the strength of the solution is increased by evaporation, then subjecting the wood to the action of steam either with or without a vacuum, then further impregnating the wood with the same solution, and then drying the wood, substantially as described. 3rd. A solution for impregnating wood to render it non-flamable and to preserve it, which consists of a sixteen per cent. aqueous solution of a mixture of six parts of phosphate of ammonia, six parts of sulphate of ammonia, and two parts of sulphate of zinc, substantially as described.

No. 68,708. Machine for Unloading and Stacking Hay.

(*Machine pour décharger, et mettre le foin en meule.*)

Louis C. Levasseur, Pincher Creek, Alberta, North-West Territory, Canada, 13th September, 1900; 6 years. (Filed 7th August, 1900.)

Claim.—1st. The convenience in a machine for unloading and stacking hay, of a slide or chute fixed at one end on a roller and the other end movable by means of iron pins and a cross piece, this chute being supported by upright pieces which rest on a frame and the whole braced together, substantially as set forth. 2nd. In an



unloading and stacking machine, the combination of a rack, the front part of which is made into a slope, capable of being adjusted to a chute and out of which the load may be drawn over the sloped end onto the chute, all substantially as described. 3rd. The combination in an unloading and stacking machine, of a net, made of a double rope, with spliced loops at the ends and a cross piece attached, such net being adjustable to the hooks on a cable, and capable of drawing the load out of the rack and over the chute, all substantially as set forth.

No. 68,709. Nut Lock. (*Ecrou.*)

Ernest John Schindehutte, McKees Rocks, Pennsylvania, U.S.A., 13th September, 1900; 6 years. (Filed 23rd August, 1900.)

Claim.—1st. In a nut lock, the combination of a bolt having one portion of greater diameter than the other, a nut mounted on the said portion of greater diameter having its outer face formed with a circular cut-away portion, a nut mounted on the smaller portion of the said bolt having its inner face formed with a circular cut-away portion, a washer or locking plate mounted on the said bolt having an opening arranged therein adapted to register with the cut-away portions, and a spring mounted on the said bolt arranged within the cut-away portions adapted to bear against the outer face of one and the inner face of the other nut to prevent rattling, substantially as set forth. 2nd. In a nut lock, the combination of a bolt having a portion thereof of greater diameter, a nut mounted on this portion of greater diameter having its outer face formed with a circular cut-away portion and its edges formed with recesses, a nut mounted on the smaller portion of the said bolt having its inner face formed with a circular cut-away portion and its edges formed with recesses, a washer mounted on the said bolt having an opening therein adapted

to register with the cut-away portions, and adapted to have the ends thereof bent to engage the recesses formed in the sides of the

Fig. 1.

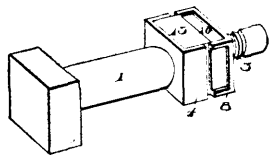


Fig. 2.

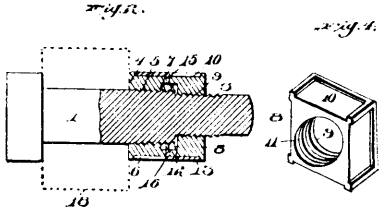


Fig. 4.

Fig. 3.

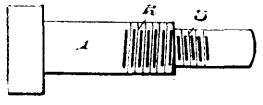
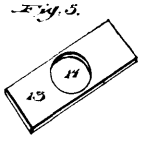


Fig. 5.

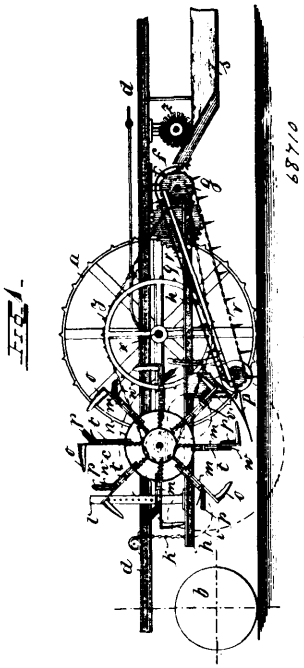


6870c

nuts, and a spring mounted on the said bolt arranged within the cut-away portion adapted to bear against the outer face of one and inner face of the other nut to prevent rattling, substantially as set forth.

No. 68,710. Potato Digger. (*Arrache-patates.*)

Fig. 1.

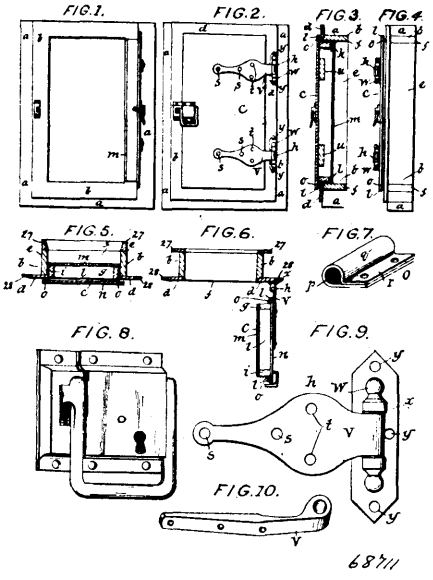


6871o

Anton Dambacher, Munich, Bavaria, Germany, 13th September, 1900; 6 years. (Filed 11th September, 1899.)

Claim.—1st. An implement for digging and gathering potatoes, comprising a suitable framework *d* mounted on wheels *a*, *b*, and carrying a frame *h* suspended at its front end by means of chains *k* operated by a locking crank *i* and having guide and adjustments posts *l*, and a potato lifter wheel *c* mounted on an axis carried by the said frame *h*, consisting of central cases *n* carrying sliding double arms *m* pressed outwards by springs and peripheral lifters *o*, and having slides *t* operating hinged flaps *p* having spring backs *w*, said slides being operated by levers *u* moved by rollers discs *r* attached to the frame *h* of the implement, and a sieve *b* and elevator rake device *r* passing through said sieve, and a roller bush *z* mounted on said frame work, above a collector box *s*, in combination with suitable chains and chain wheels and toothed gears for driving said lifter wheel *c*, and elevator rake device *r*, and roller brush *z* from the main axle *x*, and a mechanism *e*, *e*[1] for disengaging said gearing, all substantially as and for the purposes hereinbefore set forth. 2nd. In an implement for digging and gathering potatoes, the combination of a lifter wheel *c* capable of being vertically raised and lowered, mounted on an axis and consisting of central cases *n* carrying sliding double arms *m* pressed outwards by springs and peripherial lifters *o*, and having slides *t* operating hinged flaps *p* having spring backs *w*, said slides being operated by levers *u* moved by roller discs *v*, and of a sieve *q* and elevator rake device *r* passing through said sieve, and a roller brush *z* and collector box *s*, and means for driving said lifter wheel and elevator device and roller brush from the axle of the running wheels of the implement, and gear for disengaging said parts from operation, substantially as and for the purposes hereinbefore set forth. 3rd. In an implement for digging and gathering potatoes, a wheel *c* for lifting the soil and potatoes contained therein, comprising central cases *n* mounted on an axis and carrying sliding double arms *m* pressed outwards by springs and peripheral lifters *o*, and having slides *t* operating hinged flaps *p* having spring backs *w*, said slides being operated by levers *u* capable of being moved by roller discs, all substantially as and for the purposes hereinbefore set forth.

No. 68,711. Door and Fastening. (*Porte et arrête-porte.*)



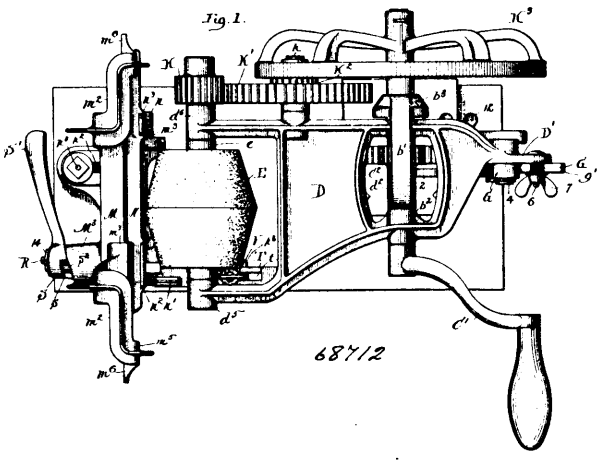
6871l

S. Price Stevenson, Chester, Pennsylvania, U.S.A., 13th September, 1900; 6 years. (Filed 19th September, 1899.)

Claim.—1st. A door for air tight compartments consisting of rigid stiles united by rails susceptible of torsion, a flexible inner sheathing, a flexible outer sheating having a rim projecting beyond the stiles and rails, and a compressible gasket secured to said projecting rim, in combination with elastic hinges and a latch so proportioned as to exert equal pressure upon the gasket in all parts between the rim of the door and a casing surrounding the door opening as set forth 2nd. A combined frame and casing for the door openings of refrigerating chambers, consisting of stiles and rails rigid in the direction on their breadth and length, and susceptible of torsional flexture, in combination with a front casing secured thereto, adapted to contact with the gasket of the door opposed thereto, the whole arranged and adapted to be adjustably applied thereto, substantially as set forth. 3rd. In a door for air tight compartments, rigid stiles united by rails susceptible of torsion, and a flexible inner sheathing attached to said frame, in combination with a flexible outer sheathing, also secured to said stiles and rails, and provided with a rim projecting beyond the stiles and rails, adapted to overlap and by flexure apply closely to the casing of the door opening, substantially as set forth. 4th. In a frame for doors of air tight compartments, stiles and a in combination with a torsionally flexible lintel and a sill rigid in lengthwise direction, and torsionally flexible casing attached to the front of said frame, and adapted to be adjusted by torsion to fit the deviations from a flat plane of a door applied thereto, substantially as set forth. 5th. In a combined air tight door and frame for refrigating and like chambers, a door having rigid stiles, rails connecting with said stiles susceptible of torsional

flexure, an inner sheathing susceptible of torsional flexure, an outer sheathing projecting beyond the stiles and rails, also torsionally flexible, and a frame having all parts rigid in the direction of their depth, a casing secured to said frame, a gasket applied to said outer sheathing to contact with said casing, in combination with elastic hinges and a latch, proportioned and arranged to press said door upon said gasket uniformly in all parts against said casing, with continuous pressure, as and for the purpose set forth. 6th. Doors having rigid edges and torsionally flexible faces in combination with elastic hinges and fastenings, arranged and adapted to apply the edges to contact with casings liable to variably deviate from flat planes, as and for the purpose set forth. 7th. A door in combination with hinges, and fasteners, arranged to convert the momentum of the door in closing into a constant elastic force, to maintain pressure upon a gasket applied between the door and the margin of the door opening, as set forth. 8th. In a door for air tight enclosures, a doorway frame, a flexible door fitted to overlop the front margin of said frame, elastic hinges applied to the edge of said door an automatic fastening applied to the opposite edge of the door, and arranged to elastically enforce contact between the margin of the frame, and the margin of the door, substantially as set forth. 9th. In a door for air tight apartments, a torsionally flexible frame formed of rigid stiles and rails, an inner and outer torsionally flexibje sheathing secured thereto, said outer sheathing projecting as a rim beyond the frame and provided with a compressible gasket adapted to contact closely with the casing of a door frame, substantially as set forth.

No. 68,712. Grinding Machine. (*Machine à aiguiser.*)



The Clizbe Brothers Manufacturing Company, Plymouth, Indiana assignee of A. R. Clizbe, Chicago, Illinois, U.S.A., 13th September, 1900; 6 years. (Filed 5th September, 1899.)

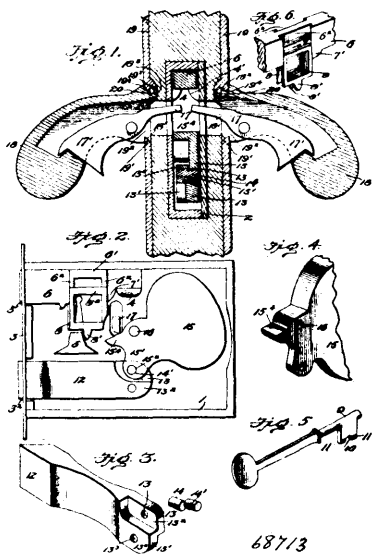
Claim.—1st. In a grinding machine of the character described, the combination with a suitable standard or support, of a grinding wheel frame pivoted thereto and having a part extending rearwardly beyond its pivotal point, suitable means for vibrating said frame and adjustably connecting mechanism between the rearward extension of said frame and the means whereby said frame is vibrated. 2nd. In a grinding machine of the character described, the combination with a suitable standard or support and with a vibratory frame for the grinding wheel and with suitable gearing for operating said wheel and said vibratory frame, of a connection between said frame and its operating mechanism and an adjusting lever for varying the vibratory movement of said frame. 3rd. In a grinding machine of the character described, the combination with a suitable standard or support and with a vibratory frame for the grinding wheel and with suitable gearing for driving said wheel and vibrating said frame, of a connection between said frame and its operating mechanism, an adjusting lever for varying the vibratory movement of said frame and means for locking said lever in different positions. 4th. In a grinding machine of the character described, the combination with a suitable standard or support and with a vibratory frame for the grinding wheel and with suitable gearing for driving said wheel and vibrating said frame, of a pitman rod adjustably connected to the gearing whereby the vibrating frame is operated, a pivoted lever interposed between said pitman rod and the vibratory frame and adjusting mechanism connected to said lever. 5th. In a grinding machine of the character described, the combination with a suitable standard or support and with a vibratory frame for the grinding wheel, of a gear wheel and pinion for operating said vibratory frame, a pitman rod connected to said gear wheel, an adjusting lever pivotally connected to said vibrating frame and an adjusting screw bolt between said adjusting lever and the vibratory frame whereby said lever may be set in different positions. 6th. In a grinding machine of the character described, the combination of a standard or support having a journal bearing near its upper end and having a laterally extended arm or portion also provided with a journal bearing, of a shaft extending through said journal bearings of the standard, a driving pinion mounted upon said shaft, a vibratory frame also mounted upon said shaft, a gear wheel engaging said driving pinion and a pitman rod connecting said vibratory frame and said gear wheel. 7th. In a grinding machine of the character described, the combination with a suitable support or standard, of a vibratory frame for the grinding wheel pivoted to said support or standard and provided at its front with arms and a shaft passing through said arms and carrying the grinding wheel and provided at the opposite side of its pivotal point with a rearward extension, a drive shaft whereon said vibratory frame is pivotally mounted, a drive pinion on said drive shaft, a gear wheel connected to said pinion, a pitman rod connected to said gear wheel and also connected with the rear end of the vibratory frame and a train of gearing leading from said drive shaft to the grinding wheel shaft. 8th. In a grinding machine of the character described, the combination with a suitable support or standard and with a vibratory frame for the grinding wheel, of a gear mechanism for operating said vibratory frame comprising a vertically movable gear wheel whereby said frame may be thrown into or out of action. 9th. In a grinding machine of the character described, the combination with a suitable support or standard, of a vibratory frame for the grinding wheel, gear mechanism for operating said vibratory frame comprising a movable gear wheel and a shifting arm or lever whereby said gear wheel may be moved to throw the gearing that operates the vibratory frame into and out of action. 10th. In a grinding machine of the character described, the combination with a suitable support or standard and with a vibratory frame for the grinding wheel, of gear mechanism for imparting movement to said vibratory frame comprising a vertically movable gear wheel, a shifting lever or arm whereby said gear wheel is supported and means for holding said shifting lever or arm in different positions. 11th. In a grinding machine of the character described, the combination with a suitable support or standard, of a vibratory frame for the grinding wheel, a drive pinion and gear wheel for imparting movement to the vibratory frame, said gear wheel being shiftable to permit it to be thrown into and out of engagement with said pinion, a shifting arm or lever whereby said gear wheel is carried and a screw bolt whereby said shifting lever may be held in raised position when said gear wheel and pinion are to be engaged. 12th. In a grinding machine of the character described, the combination with a standard or support having a drive shaft journalled in its upper end and having a vibratory frame for the grinding wheel mounted upon said drive shaft, of a driving pinion and gear wheel for operating said vibratory frame, a shifting lever pivoted to said standard or support and carrying said gear wheel and means whereby said pivoted shifting lever may be clamped to the standard or support in order to hold said gear wheel and driving pinion in engagement. 13th. In a grinding machine of the character described, the combination with a suitable standard or support and with a vibratory frame for the grinding wheel pivoted thereto, of gearing for imparting movement to said vibratory frame comprising a vertically movable gear wheel and means whereby said gear wheel may be thrown into and out of action and a stop at the base of the machine with which said gear wheel will engage when it is thrown out of action. 14th. In a grinding machine of the character described, a knife holder comprising clamping sections formed with interlocking pivot lugs and bearings and a base having bearing seats to receive said pivot lugs and bearings. 15th. In a grinding machine of the character described, a knife holder comprising clamping sections formed with interlocking pivot lugs and bearings having open sided bearings adapted to admit said bearing lugs and seats and thus hold the sections of the knife holder together while allowing them to turn in forward and backward direction. 16th. In a grinding machine of the character described, a knife holder formed of two clamping sections, one of said sections having bearing lugs cast integral therewith and the other of said sections having bearing seats cast integral therewith, and a bolt and clamp for drawing said knife holder sections together. 17th. In a grinding machine of the character described, a knife holder comprising two clamping sections formed respectively with interlocking pivot lugs and bearing seats and with forwardly and rearwardly extending feet and suitable clamping mechanism for drawing said sections together. 18th. In a grinding machine of the character described, a knife holder comprising separate sections between which the knife will be clamped, a bolt extending from one of said sections and provided with a cam faced end to engage said clamp. 19th. In a grinding machine of the character described, a knife holder provided with one or more rearward feet or extensions and an adjustable stop block adapted to be moved more or less under one of said feet or extensions in order to limit the tilting movement of the knife holder.

No. 68,713. Lock. (*Serrure.*)

Charles E. Yeager, Prairie Creek, Indiana, U.S.A., 14th September, 1900; 6 years. (Filed 29th August, 1900.)

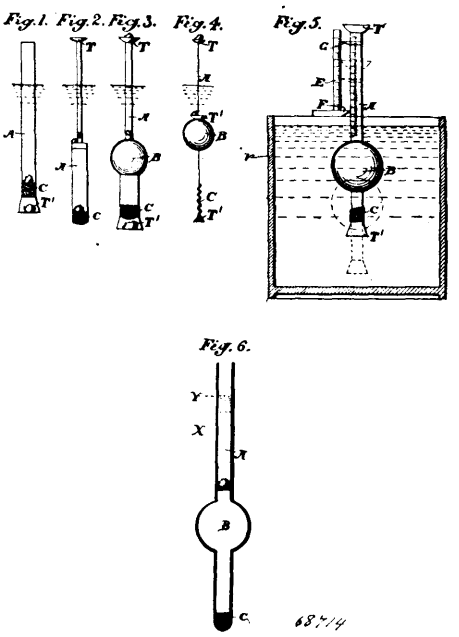
Claim.—In combination, the lock case 1 provided with the bolt orifice 3^1, integral guide guard 4 and ward 5, the bolt 6 having a

sliding engagement with said case and formed with the attenuated rib 6^1 and vertical dovetailed grooves 6^2, the tumblers 8-8 having a



sliding engagement with said grooved bolt, and terminating at their lower ends in the tits 8^1, substantially as and for the purpose set forth.

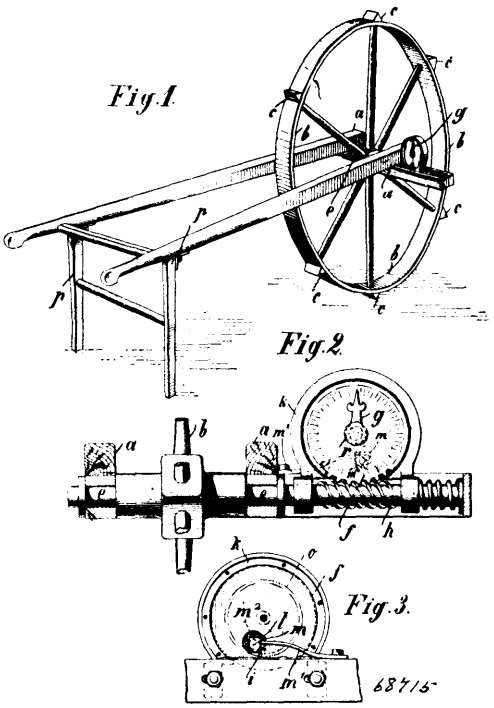
No. 68,714. Liquid Balance. (*Hydromètres.*)



John W. Gray, Oakland, California, U.S.A., 14th September, 1900; 6 years. (Filed 25th April, 1898.)

Claim.—1st. In instrument for determining weights, volumes, etc., consisting of a hollow tube to receive a liquid adapted to rise in the tube when the object to be weighed is placed within the latter, means for causing the tube to float erect in a liquid and means for determining depths of floatation and rise of liquid within the instrument. 2nd. The combination in an instrument for determining weights, volumes, and the like, of a float having a tube or stem of uniform cross-sectional area throughout its length extending vertically and freely from the top, a counter weight by which the float is submerged and the stem projected above the surface of a liquid in which it floats, means carried by the tube or stem, to receive the object to be determined, and a scale and pointer, one movable with relation to the other, whereby the required information is indicated.

No. 68,715. Land Measuring Device.
(*Appareil pour mesurer.*)



Johann Stadel, Raab, and Emerich Torkos, Liczko, both in Hungary, 14th September, 1900; 6 years. (Filed 2nd June, 1899.)

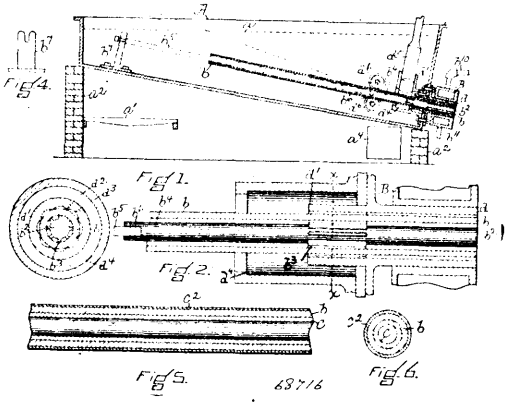
Claim – 1st. In a measuring device of the character described, the combination of a wheel *b*, of definite circumferential dimensions having projections *c* on its periphery to enable the reading of the fractional parts of the distance transversed and prevent the wheel from slipping on the surface being measured, and a worm on the spindle of the wheel *b*, with a counting device comprising a rotary dial provided with teeth on its periphery which mesh with said worm and a stationary indicating hand or pointer, substantially as and for the purpose specified. 2nd. In a measuring device of the character described, the combination of a wheel *b*, a worm *h*, a counting device comprising a rotary dial *f* provided with teeth on its periphery in mesh with the worm *h*, and a stationary indicating hand or pointer *g*, substantially as and for the purpose specified. 3rd. In a measuring device of the character described, the combination of a wheel *b*, a worm *h*, a counting device comprising a rotary dial *f* provided with teeth on its periphery in mesh with the mesh *h*, a lug *i* on said dial *f*, a stationary indicating hand or pointer *g*, a bell, a hammer *m* mounted upon a spring arm m^1 and adapted to strike the bell, and a pin m^2 connected to and projecting from the hammer *m* and adapted to be engaged by the lug *i*, substantially and for the purpose specified. 4th. In a measuring device of the character described, the combination of a wheel *b*, a worm *h*, a counting device comprising frame *k*, pin *t*, a dial provided with teeth on its periphery rotatably mounted upon said pin and said mesh with the worm *h*, a stationary indicating hand or pointer, an expanding spring *n* interposed between the dial and the frame adapted to throw the dial out of engagement with the worm, a nut rotatably mounted upon the pin and adapted to hold the dial in operative position, substantially as and for the purpose specified.

No. 68,716. Composite Pipes. (*Tuyau.*)

Edward Irving Braddock, Medford, Massachusetts, U.S.A., 14th September, 1900; 6 years. (Filed 19th August, 1899.)

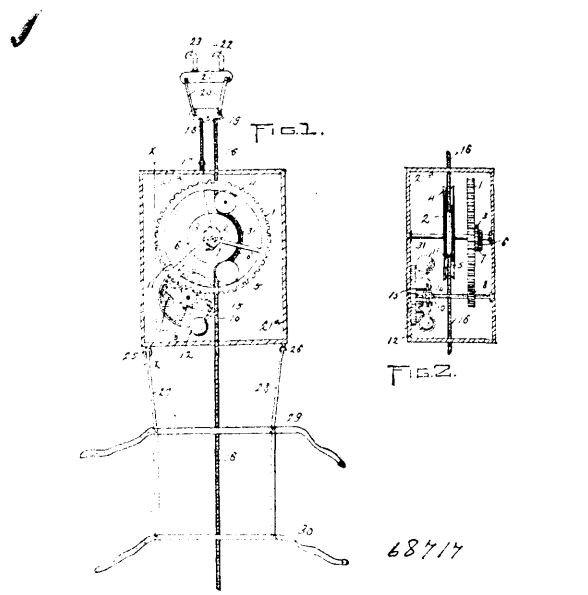
Claim—1st. In an apparatus for the manufacture of composite non-corrodible pipe, from a tube of iron of steel and a non corrodible metal of lower melting point, the combination of a tank to contain the non-corrodible metal and means to keep it in a molten condition, an outlet pipe which extends into and outside of said tank, and has devices within the inwardly extending portion to centre the iron tube, and a chilling jacket around the outwardly extending portion of the outlet pipe, a mandrel extending through said outlet pipe to determine the bore of the composite pipe, and devices upon said mandrel to centre it within the said iron tube, substantially as described. 2nd. In an apparatus for making composite pipe of a primary tube of iron or steel and an axially concentric tube of metal having a substantially lower melting point than that of the primary tube, the combination of a vessel to hold and maintain in a molten state the lower melting point, means for heating said vessel, an

opening in one end of said vessel to receive the primary tube, a mandrel with devices to centre it in the primary tube, yet to permit



the passage of molten metal, a chilling chamber outside of the said vessel adjacent to the said opening therein, mechanism to maintain the said mandrel within the primary tube at the location of the chilling chamber, and means to feed the primary tube through the openings in said vessel and chilling chamber and over the said mandrel, substantially as described. 3rd. In an apparatus for making composite pipe of two axially concentric metal tubes, the outer one of which is of metal having a substantially lower melting point than that of the inner one constituting the primary tube the combination of a vessel to hold the metal of the lower melting point, means to heat it and maintain the metal of lower melting point in a molten state, a forming die opening into said vessel and provided with means projecting inwardly to centre the primary tube therein and yet permit the flow of molten metal, a chilling jacket around the outer end of said forming die, and mechanism to feed the primary tube through said vessel and die, substantially as described. 4th. In an apparatus for making composite pipe by uniting to both the interior and exterior surfaces of a primary metal tube, axially concentric secondary tubes of metal having a substantially lower melting point than that of the primary tube, the combination of a vessel to hold the metal of the lower melting point, means to heat said vessel, a forming die which opens into said vessel and has devices to centre the primary tube therein yet to permit the flow of metal, a mandrel within devices to centre it in the primary tube and to maintain it within the forming die yet to permit the flow of metal, a chilling jacket around the forming die outside of the vessel, and mechanism to move the primary tube through said vessel and die and over the mandrel. 5th. In an apparatus for the manufacture of composite pipe of corrodible and non-corrodible metal, the combination of the following instrumentalities, viz:—a tank or vessel having and inclined bottom and provided with an outlet pipe for the flow of molten metal therefrom, means to heat said vessel, a mandrel to determine the bore of the composite pipe inserted into said outlet pipe and extended into said tank and upon which the corrodible pipe is placed, and a forming and chilling die into which said mandrel is extended to form a space between it and the corrodible pipe within the said die, into which the molten metal flows and wherein it is solidified, substantially as described. 6th. In an apparatus for the manufacture of composite non-corrodible pipe, the combination of the following instrumentalities, viz:—a tank or vessel for containing a bath of molten non-corrodible metal provided with an opening for the insertion of a corrodible pipe into said vessel, an outlet pipe for said tank or vessel, means to heat said vessel, a chilling die axially in line with said outlet pipe, and a mandrel anchored at one end and having its other end extended from within the tank through said outlet pipe into said chilling die, substantially as described. 7th. In an apparatus for the manufacture of composite pipe of corrodible and non-corrodible metals, the combination of the following instrumentalities, viz:—a tank or vessel to contain a bath of molten non-corrodible metal provided with an opening for the insertion of a corrodible pipe into said vessel, means to heat said vessel, an outlet pipe in said vessel, which pipe is adapted to receive the corrodible tube and is provided upon its interior with one or more longitudinal channels or grooves for the passage of non-corrodible metal, a die to form the exterior of the opposite pipe having a chilling jacket and located axially in line with said outlet pipe, and a mandrel extended from within said tank through the outlet pipe and into the said chilling die, and upon which the corrodible pipe is placed, substantially as described. 8th. In an apparatus for the manufacture of composite pipe of corrodible and non-corrodible metals, the combination of the following instrumentalities, viz:—a tank or vessel to contain a bath of molten non-corrodible metal, means to heat said tank, an outlet pipe for said tank, a forming and chilling die axially in line with said outlet pipe, a mandrel within said outlet pipe and die, and a device to retain the mandrel in position, which device is normally in line with the mandrel within the said tank and is constructed and arranged to be raised from the tank independent of the mandrel, substantially as described. 9th. In an apparatus for the manufacture of composite non-corrodible pipe, the combination of the following instrumentalities, viz:—a tank or vessel to contain a bath of molten non-corrodible metal provided with an opening for the insertion of a corridable pipe into said vessel, means to heat said vessel, an outlet pipe for said tank, a chilling die located outside of the tank axially in line with the said outlet pipe, a mandrel located in said outlet pipe and extended from within the tank into said chilling die and removable therefrom, and means to close the said outlet when the mandrel is removed. 10th. In an apparatus for the manufacture of composite pipe of corrodible and non-corrodible metals, the combination of the following instrumentalities:—a tank or vessel to contain a bath of molten non-corrodible metal, means to heat said tank, an outlet from said tank of the size of the external diameter of the corrodible tube, and having one or more grooves or channels extended longitudinally through said outlet, a die for forming the non-corrodible tube, which is of larger diameter than the said outlet, and is located side of said tank, a chilling jacket upon the said die, and a mandrel of less diameter than said outlet and extended through the outlet and into said die, substantially as described 11th. In an apparatus for the manufacture of composite pipe of corrodible and non corrodible metals, the combination of the following instrumentalities, viz:—a tank or vessel to contain the non-corrodible metal and maintain it in molten condition, provided with an opening for the insertion of a corrodible pipe into said vessel and with an outlet for said metal and corrodible pipe, means to heat said vessel, a chilling die located axially in line with and beyond said outlet, and a mandrel within the tank extended through the outlet and into said chilling die, and of a diameter within the die equal to the bore desired of the non-corrodible tube to permit the composite pipe to be moved from within the tank over the mandrel and through the chilling die, substantially as described. 12th. In an apparatus for the manufacture of composite pipe of corrodible and non-corrodible metals, the combination of the following instrumentalities, viz:—a tank or vessel to contain a bath of molten non-corrodible metal, provided with an opening for the insertion of a corrodible pipe into said vessel and with an outlet for the passage of a corrodible tube and said molten metal, means to heat said vessel, a chilling die located axially in line with said outlet, a mandrel extended from within the tank through said outlet and corrodible tube into said chilling die, and of a diameter within the die equal to the bore desired of the non-corrodible tube, devices to render the mandrel stationary, and means thereon to centre it within the tube of corrodible metal, substantially as described. 13th. In an apparatus for the manufacture of composite pipe of corrodible and non-corrodible metals, the combination of the following instrumentalities, viz:—a tank or vessel to contain a bath of molten non-corrodible metal, provided with an inlet opening for the insertion into the tank or vessel of the corrodible tube and with an outlet opening for the passage of the corrodible tube and said molten metal out of said tank, means to heat said tank or vessel, a chilling die located axially in line with said outlet opening, a mandrel extended from within the tank through said outlet opening and corrodible tube into said chilling die, and of a diameter within the die equal to the bore desired of the non-corrodible tube, and means on said mandrel to centre it within the tube or corrodible metal, substantially as described.

No. 68,717. Fire Escape. *(Sauveteur d'incendie.)*

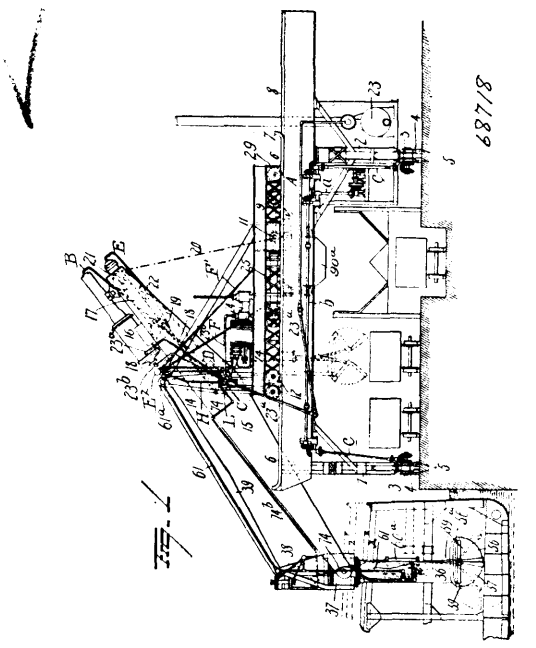


Daniel B. Rees, Union, Oregon, U.S.A., 14th September, 1900; 6 years. (Filed 29th August, 1900.)

Claim.—1st. In a fire escape, the combination of a frame, a support on a structure, a pulley rotatably mounted in said frame, a rope attached to said frame passing over said support and down over said pulley and extending below the frame, a governor, and mechanism operated by said pulley for actuating the governor, substantially as described. 2nd. In a fire escape, the combination of a frame, a support on a structure, a pulley rotatably mounted on the frame, a rope secured to said frame and passing over said support and back over said pulley and extending below the frame, mechanism adapted to be operated by said pulley, and a governor actuated by said mechanism, said pulley adapted to turn in one direction without operating said mechanism, substantially as described. 3rd. In a fire escape, the combination of a frame, a support on a structure, a pulley rotatably mounted in said frame, a rope attached to said frame and passing over said support and back over said pulley, a gear operated by said pulley, and a governor operated by said gear, substantially as described. 4th. In a fire escape, the combination of a frame, a support on a structure, a pulley rotatably mounted on the frame, a rope attached to the frame and passing over the said support and back over said pulley, a rotatable shaft on which said pulley is fixed, a gear loose on said shaft, a ratchet wheel loose on said shaft, a pawl lever fixed on said shaft, a pawl carried by said lever, and a governor operated by said gear, substantially as described.

No. 68,718. Ore Removing Apparatus.

(Appareil pour transporter les minerais.)



George Henry Hulett and the Webster Camp and the Lane Machine Company, all of Akron, Ohio, U.S.A., 14th September, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. In an unloading apparatus, the combination with a leg, a motor for moving the same vertically, and a bucket on the lower end of said leg, of devices located within said leg for controlling said motor. 2nd. In an unloading apparatus, the combination with a beam movable outwardly from its support, a leg depending from said beam, the said leg adapted to move vertically, a scoop connected with and operated from the lower end of the leg and a motor for each movable part, of controlling mechanisms for the several motors located within the leg. 3rd. In an unloading apparatus, the combination with a beam movable outwardly from its support, a leg carried on the end of said beam and adapted to move vertically and a scoop on the end of said leg, of motors adjacent to the several movable parts and controlling devices for the several motors within the leg. 4th. In an unloading apparatus, the combination with a bridge, a trolley on the bridge and a walking beam carried by the trolley, of a leg pivoted to the walking beam at one end, means connected to the other end for rocking the beam and a scoop on the lower end of the leg. 5th. In an unloading apparatus, the combination with a bridge, a trolley thereon, a walking beam on the trolley and means connected to one end of the beam for rocking same, of a leg depending from the other end of the beam and a scoop at the lower end of the leg and adapted to reach out laterally from the leg. 6th. In an unloading apparatus, the combination with a support and a movable trolley thereon, of a beam on the trolley, a leg depending from the outer end of the beam, a scoop at the lower end of the leg adapted to reach out laterally from the leg, means for rotating the leg, motors for actuating the several parts and controlling devices located within the leg for the several motors. 7th. In an unloading apparatus, the combination with a support and a movable trolley on said support, of beam on the trolley, a leg depending from said beam, a scoop on the lower end of the leg, a motor and connection for tilting the beam, a motor and connection for actuating the scoop and devices located within the leg for controlling the several motors. 8th. In an unloading apparatus, the combination with a beam movable outwardly from its support, of a leg depending from said beam, the said leg being hollow and constituting the operators cage, a sc op on the lower end of the leg, motors for actuating the several parts and devices located within the leg for controlling the several motors. 9th. In an unloading machine, the combination with a tilting beam adapted to move outwardly, a leg carried by the outer end of said tilting beam, a scoop on the lower end of said leg, a motor for tilting the beam, a motor for rotating the leg, a motor for actuating the scoop and devices located within the leg for controlling the several motors. 10th. In an unloading machine, the combination with a support, a trolley thereon, a walking beam on the trolley and a leg depending from one end of the walking beam and carrying a scoop, of a motor for actuating the trolley, a motor for tilting the walking beam, a motor for actuating the scoop and devices located within the leg for controlling the several motors. In an unloading apparatus, the combination with a travelling bridge, a trolley thereon, a walking beam on the trolley, a leg depending from the walking beam and a scoop at the lower end of the leg, of motors for actuating the several parts, a source of power common to all the motors, means for conveying the energy from the source of power to the several motors an operators cage and devices located within the operators cage for controlling the several motors. 12th. In an unloading apparatus, the combination with a travelling trolley, a walking beam thereon, a depending leg carried by the walking beam, and a scoop on the lower end of the leg, of a pump, an accumulator, a pipe connecting the pump and accumulator, hydraulic motors for actuating the trolley, tilting the beam and opening and closing the scoop, pipes connecting the several motors with the accumulator and exhaust pipes leading from the several motors to the pump tank. 13th. In an unloading apparatus, the combination with a travelling trolley, a walking beam thereon, a depending leg at one end of said walking beam, an accumulator on the other end thereof for counterbalancing the leg, and a scoop at the lower end of the leg, of motors for imparting movements to the several parts and pipes leading from the accumulator to the several motors. 14th. In an unloading apparatus, the combination with a bridge, a trolley thereon, and a car mounted on the bridge below the trolley and adapted to travel independently of the trolley, of a walking beam on the trolley, a leg carried by the walking beam and a scoop on the end of the leg, the said scoop adapted to be elevated so as to discharge its contents into a car. 15th. In an unloading apparatus, the combination with a bridge, a trolley thereon, a walking beam carried by the trolley and a scoop carrying leg depending from the walking beam, of a pump on the trolley, an accumulator on the inner end of the walking beam, motors adjacent to the several parts to be operated, and pipes connecting the several motors and the accumulator, and the several motors and the pump tank, and motor controlling devices. 16th. In an unloading apparatus, the combination with a walking beam, a support therefor and a leg loosely mounted at one end of the walking beam, of a motor and devices for rotating the leg in the beam. 17th. In an unloading apparatus, the combination with a walking beam, and a support therefor, of a device connecting the support and the inner end of the walking beam and support for rocking the beam, a leg revolubly mounted in a seat at the outer end of the beam, a scoop on the lower end of said leg and means carried by and adjacent to the outer end of the beam for turning the leg. 18th. In an unloading apparatus, the combination with a bridge open at one end, of a trolley on the bridge, a walking beam pivoted to the trolley, means engaging the inner end of said beam for rocking same, and a scoop carrying leg depending from the outer end of the beam adjacent to the open end of the bridge. 19th. In an unloading apparatus, the combination with a trolley, a walking beam thereon and a scoop carrying leg depending from the outer end of the beam, of a beam tilting cable secured at one end to the trolley, and a motor on the inner end of the beam for actuating the cable. 20th. In an unloading apparatus, the combination with a bridge thereon, of hydraulic ram carried by the trolley, the piston rod of said ram projecting from both ends of the cylinder, and cables extending from each end of the piston rod to the opposite ends of the bridge for propelling the trolley on the bridge. 21st. In an unloading apparatus, the combination with a trolley and a walking beam pivoted thereto at a point to one side of its centre, of a scoop carrying leg carried by the longer end of the beam and means connected with the shorter end for raising the longer end of said beam. 22nd. In an apparatus for handling ore or coal, the combination of a hollow leg, a scoop at the lower end thereof, a motor and means for moving the leg vertically, a motor for opening and closing the scoop, and devices located within said leg for controlling the motors. 23rd. In an apparatus for handling ore, the combination with a trolley, of a beam extending outwardly therefrom, a leg depending from the outer end of the beam, a scoop on the lower end of the leg, a motor for moving the beam, a motor for actuating the scoop, a support located within the leg, a series of

actuating rods movably mounted on said supports, devices connecting said rods with the motors, valves and a lever for each actuating rod. 24th. In an apparatus for handling ore, the combination with a trolley, a walking beam thereon, a cylindrical seat carried by the outer end of the walking beam, a tower secured to said seat and an equalizing bar pivoted to the upper end of the tower and to the beam supporting frame on the trolley, of a leg mounted to turn in the cylindrical seat, a scoop carried by the lower end of the leg, a motor for opening and closing the scoop, a motor for rotating the leg and a motor for tilting the beam, a series of actuating rods located within the leg, devices connecting said rods with the valves of the several motors and levers for actuating said rods. 25th. The combination with a travelling trolley provided with a tower, a walking beam pivoted to said tower, a cylindrical seat pivotally supported at the outer end of the beam, a tower secured to said seat, an equalizing bar pivotally connecting the top of said tower and the top of the beam supporting tower, and a scoop carrying leg mounted in said seat, of a motor for rotating the leg, a motor for tilting the beam, a source of power travelling with the trolley, pipes connecting said source of power and the several motors, actuating rods mounted upon a support within the leg, means connecting the several rods with the valves of the several motors and levers for actuating the rods. 26th. In an apparatus for handling ore, the combination with a travelling trolley, a walking beam thereon and a scoop carrying leg on the outer end of said walking beam, of means for tilting the beam, a pump on the trolley, an accumulator on the beam, a walking pipe connecting the steam generator and accumulator, fluid pipes connecting the accumulator and pump. 27th. In an unloading apparatus, the combination with a travelling trolley, a tilting beam carried by said trolley, a leg depending from and mounted to turn on the outer end of said beam, and a scoop carried by the lower end of the leg, of a motor carried by the leg and adjacent to the scoop for operating the latter, a source of power remote from the scoop actuating motor and a jointed supply pipe between said motor and source of power. 28th. In an apparatus for handling ore, the combination with a travelling trolley, a walking beam thereon and a scoop carrying leg carried by the walking beam, of a steam accumulator carried by the beam, a pump carried by the trolley, a steam pipe leading from the accumulator to the pump, and fluid pipes leading from the accumulator to the several motors. 29th. In an ore handling apparatus, the combination with a rotating leg and a fluid pressure pipe passing centrally into said leg, of an exhaust pipe carried by the leg and extending to a support above, an intermediate section of said exhaust pipe being flexible to permit it to pass or wind around the central pressure pipe. 30th. In an unloading apparatus, the combination with a leg mounted in a vertically movable support and carrying a bucket and a motor for rotating said leg, of devices located within said leg for controlling the motor.

No. 68,719. Glass Faced Brick. (*Brique.*)

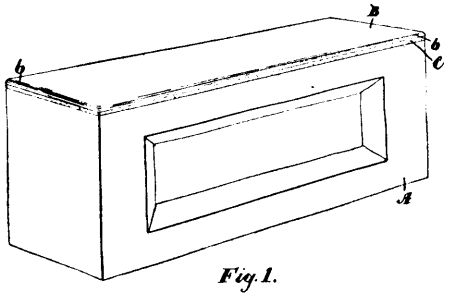


Fig. 1.

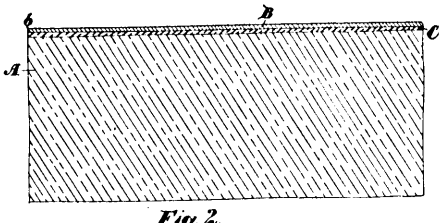


Fig. 2.

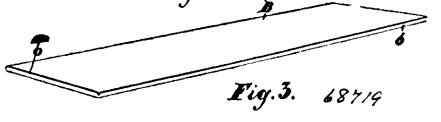


Fig. 3. 68719

Alice Hill, assignee of Edwin Hill, Toronto, Ontario, Canada, 14th September, 1900; 6 years. (Filed 19th September, 1898.)

Claim.—As an article of manufacture, in combination an ordinary brick or packing, a binding medium superimposed thereupon, consisting of a boiled composition of plaster of paris, glue and boiled oil and a plate of glass superimposed upon the binding medium, so as to practically form one mass, as and for the purpose specified.

No. 68,720. Ball or Roller Bearings.

(*Coussinet à roulettes.*)

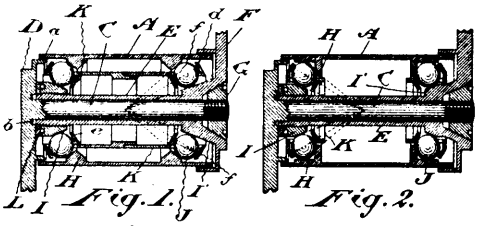


Fig. 1.

Fig. 2.

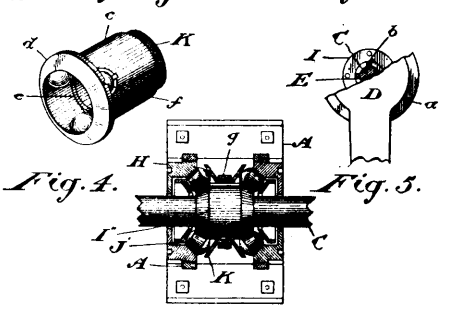


Fig. 4. *Fig. 5.*

Fig. 3. 68720

Archibald William Ponton, Ottawa, Ontario, Canada, 14th September, 1900; 6 years. (Filed 19th June, 1900.)

Claim.—1st. In a ball bearing, an axle provided at each end with a ball cone, and a casing or hub provided with opposed ball cups to form ball races, in combination with a set of balls for each race, and a ball retainer located in each race in which each ball is journalled on an axial line coinciding with the axis on which contact with the cup and cone tends to rotate the ball, substantially as and for the purpose specified. 2nd. In a ball bearing an axle, a hub or casing provided at each end with opposed cups and cones forming ball races, in combination with a set of balls for each race, and a ball retainer located in each race in which the said balls are journalled, each on an axial line coinciding with the axis on which contact with the cup and cone tends to rotate the ball, substantially as and for the purpose specified. 3rd. In a bearing, an axle and a hub or casing provided between them at each end with opposed cups and cones forming races, in combination with a retainer located in each race, and three or more rollers for each race, each provided with an axle or gudgeons, the retainer being provided with radial grooves to receive each of the said axles or gudgeons, the said grooves being extended down to a suitable point to give each axle or gudgeon a bearing on an axial line substantially identical with the axis on which contact with the cup and cone tends to rotate the roller, substantially as and for the purpose specified. 4th. In a bearing, an axle and a hub or casing provided between them at each end with opposed cups and cones forming races in combination with a retainer located in each race, three or more rollers for each race, each provided with an axle or gudgeon, the retainer being provided with radial grooves to receive each of the said axles or gudgeons, the said grooves being extended down to a suitable point to give each axle or gudgeon a bearing on an axial line substantially identical with the axis on which contact with the cup and cone tends to rotate the roller, and a sleeve rigidly connecting the retainers, substantially as and for the purpose specified. 5th. In a bearing, an axle provided at each end with a cone, and a casing or hub provided with cups opposed to the said cones to form races, the cup and cone at each end being the frustrums of cones having a common apex in the axis of the axle, in combination with a set of rollers for each race, a retainer located in each race in which each roller is journalled by means of a suitable axle or gudgeons so that it is held out of contact with the retainer, and so that its axial line intersects the common apex of the cones, of which the cup and cone of the said race are frustrums, and a sleeve connecting the said retainers, substantially as and for the purpose specified. 6th. In a bearing, a retainer, comprising a sleeve with openings therein for rollers, an external flange formed thereon at one side of the openings, and an internal flange at the other side of the said opening, in combination with a series of rollers each provided with gudgeons, one of which is journalled in the external flange and the other in the internal flange, substantially as and for the purpose specified. 7th. In a bearing, a retainer, comprising a sleeve with openings therein for the rollers, an external flange formed thereon at one side of the openings, and an internal flange at the other side of the said openings in combi-

nation with a series of rollers, each provided with gudgeons, grooves being cut in the said flanges down to a point desired for the bearings for the said axle or gudgeons, substantially as and for the purpose specified. 8th. In a bearing, a retainer, comprising a sleeve with openings therein for the rollers, an external flange formed thereon at one side of the openings, and an internal flange at the other side of the said openings, in combination with a series of rollers, each provided with gudgeons with rounded ends, grooves being cut in the said flanges down to suitable bearings, the axle ends or gudgeons being sufficiently long to prevent the rollers touching the flanges, substantially as and for the purpose specified.

No. 68,721. Telephone Station. (*Station de téléphone.*)

Fig 1

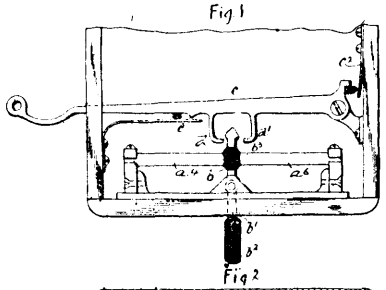


Fig 2

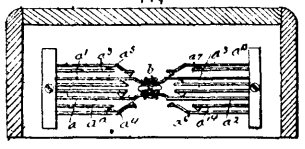
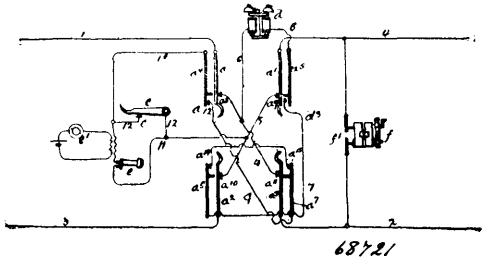


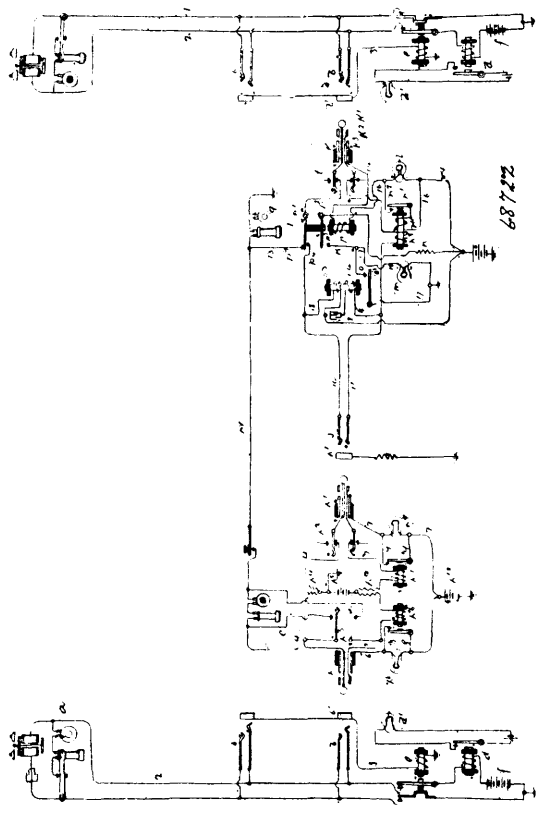
Fig 3



The Bell Telephone Company of Canada, Montreal, Quebec Canada, assignee of Charles Ezra Scribner, Chicago, Illinois U.S.A., 14th September, 1900; 6 years. (Filed 14th September 1898.)

Claim.—1st. The combination with line conductors of a multiple-station line, a bridge of the line, a telephone and call bell included serially in the bridge, and a line switch and circuit connections therefor adapted to sever the bridge and the line conductors and connect the terminals of the telephone with one of said severed portions of the line and the bell with the other portion, as described. 2nd. The combination with a line conductor of a multiple-station telephone line, of a bridge of the line circuit, a telephone and call bell included serially in the bridge, and a line switch, adapted to sever the line conductor and break to the connection between the telephone and the bell and connect the telephone with one of said severed portions of the line conductor and the bell with the other portion, as described. 3rd. The combination with the line conductors of a multiple station telephone line, of a telephone and a bell, one terminal of the telephone being connected with one of the line conductors, one terminal of the bell being connected with the other line conductor, a line switch normally connecting the remaining terminal of the telephone with the remaining terminal of the bell, switch contacts of the said switch adapted to sever the line conductor, and alternate contacts of the switch lever adapted to connect the terminal of the telephone with one extremity of the line conductor and the terminal of the bell with the other extremity thereof, when the said terminals of the telephone and bell are disconnected from each other, as described. 4th. The combination with the line conductors of a multiple-station telephone line, of the switch springs a and a^3, with their resting anvils and the conductor 4, normally maintaining the continuity of one line conductor, the switch springs a^1 and a^2, with their resting anvils and the wire 5 normally maintaining the continuity of the other line conductor, the normal bridge conductor between the wires 4 and 5, and the call bell and telephone included therein, the contact spring a^4 forming a terminal of the telephone, the contact spring a^5 forming a terminal of the bell, means for operating the springs a, a^1 and the springs a^2, a^3, respectively, and means actuated in the use of the key for severing the connection between the telephone and the bell, substantially as described. 5th. The combination with the line conductors of a multiple-station telephone line, of the switch springs a and a^3, with their resting anvils and the conductor 4, normally maintaining the continuity of one line conductor, the switch springs a^1 and a^2, with their resting anvils and the wire 5 normally maintaining the continuity of the other line conductor, the normal bridge conductor between the wires 4 and 5, and the call bell and telephone included therein, the contact spring a^4 forming a terminal of the telephone, the contact spring a^5 forming a terminal of the bell, means for operating the springs a, a^1 and the springs a^2, a^3, respectively, and means actuated in the use of the key for severing the connection between the telephone and the bell, a telephone switch, and a short circuit of the telephone normally closed thereby, as described. 6th. The combination with the line conductors of a multiple-station telephone line, a normal bridge of the line, a call bell, and a telephone, of a line switch comprising two groups of switch springs and an operating lever for actuating either group of switch springs, having a position intermediate of the switch springs, said switch being adapted to sever the conductors of the line and connect the telephone with the severed terminals of one portion of the line and the bell with the severed terminals of the other portion, means for retaining the switch lever in position to actuate either pair of springs, a telephone switch, and a device controlled thereby for rendering said means inoperative, whereby the switch may be placed in position to connect the telephone with one portion of the line and the bell with the other portion, while the telephone is in use, but said switch is returned to its normal position when the telephone is replaced on its switch, as described. 7th. The combination with the line conductors 1, 2 and 3, 4, of the switch springs a, a^3, a^2 and a^1, respectively, forming the terminals thereof, the resting anvils of the springs and the wires 4 and 5 uniting the anvils in pairs, the normal resting anvils for the switch springs a^4 and a^7, and a^6 and a^5, the normal bridge between wires 4 and 5, the call bell and the telephone included serially therein, circuit between the telephone and the bell being closed through the switch springs a^4, a^7, a^6 and a^5, with their anvils serially, and means for actuating either pair of switch springs a^1 or a^2, a^3, substantially as described.

No. 68,722. Telephone Signal. (*Signal de téléphone.*)

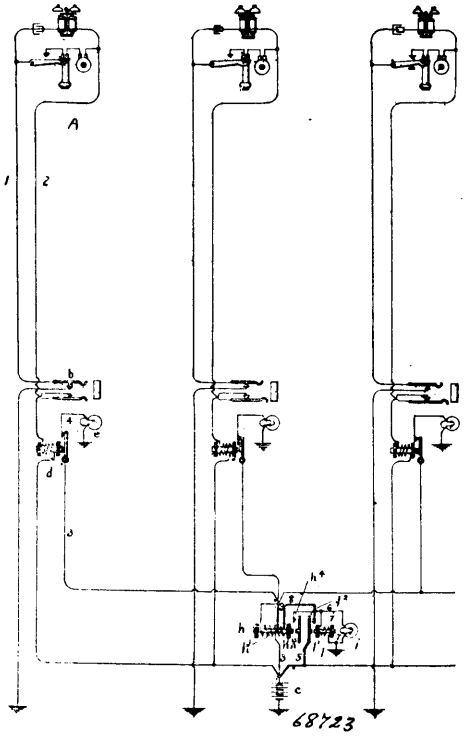


The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 14th September, 1900; 6 years. (Filed 14th September, 1898.)

Claim.—1st. The combination with two telephone lines, each provided with means at its station for controlling a current in the line automatically in the use of the telephone, said lines terminating in

different offices, of a trunk line between the offices uniting the said subscribers' lines, a source of current at one of the offices in a bridge of the united circuits, an electro magnet at the other offices in the path of current therefrom to the line entering the said office, and a supervisory signal controlled by the magnet, as described. 2nd. In combination with telephone lines, each having at its station a switch for controlling a current in the line in the use of the telephone, said lines entering different offices, of a trunk line uniting the telephone lines; a bridge of the united circuits and a source of current therein at the originating office, an electo magnet in the path of current therefrom to the called line at each of said offices, one of said magnets being located at each office, and a supervisory signal controlled by each of said electro magnets, as described. 3rd. The combination with telephone lines having telephone switches at their substations controlling currents in the line in the use of the telephones, said lines entering different offices, of a trunk line uniting the said lines, a bridge of the united circuits at the originating office and a source of current therein, an electro magnet in the path of current therefrom to the calling line, two electro magnets in the paths of current therefrom to the called line, said last mentioned magnets being located at the different offices, and supervisory signals controlled by each of the electro magnets, as described. 4th. The combination with telephone lines and means at the stations thereof for controlling currents in the lines in the use of the telephone, said lines entering different offices, of a trunk line uniting the lines, a bridge of the completed circuit and a source of current therein, an electro magnet in the path of current to the calling line, two electro magnets, located at the different offices, in the path of current to the called line, a local circuit of the electro magnet at the B terminal of the trunk line including a winding of the electro magnet there, together with switch contacts closed by the said magnet when excited, means for closing the local circuit at another point in the use of the trunk line, and supervisory signals controlled by the magnets at the different offices, whereby the supervisory signals at the A office indicate at all times the position of the telephones at the substations, while the supervisory signal at the B office is controlled from the called substation only when the telephone is brought into use, as described. 5th. The combination with a trunk line for uniting telephone lines entering different offices, of an electro magnet having two windings connected in a bridge of the trunk line, a condenser interposed between the said windings, a source of current connected to one of the uniting and a clearing outsignal controlled by the electro magnet, whereby the balance of the line as respects inductive disturbances is maintained, as described.

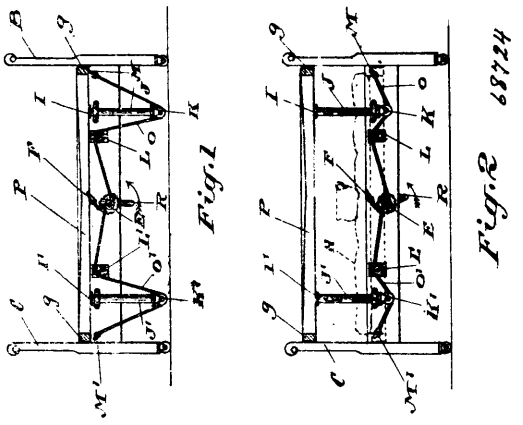
No. 68,723. Telephone Switchboard Signal.
(Signal de téléphone)



The Bell Telephone Company of Canada, Montreal, Quebec assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 14th September, 1900; 6 years. (Filed 9th December, 1898,)

Claim.—The combination with telephone lines and means for producing current in the lines in the use of the telephones, a line relay for each line responsive to such current, a local circuit controlled by each relay, and a secondary line signal therein, of a relay having a high resistance winding in a conductor common to said local circuits, a second local circuit and a pilot signal included therein controlled by said relay, a low resistance winding of the said relay connected with the local circuit of the secondary signals, and a relay in the local circuit with the pilot signal controlling the continuity of the circuit through said low resistance winding, substantially as described.

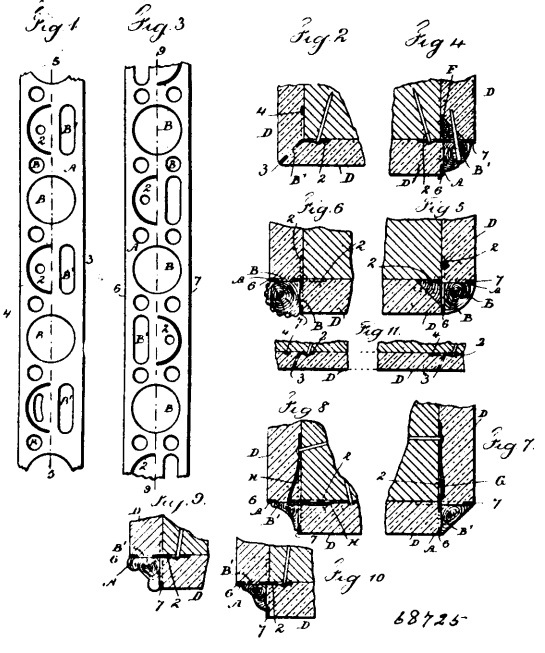
No. 68,724. Hospital Bed. *(Lit d'hopital.)*



Harry L. Piper and William H. Fox, both of Toronto, Ontario, Canada, 14th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—A hospital bed embracing in its construction a substantially rectangular bed frame, a substantially rectangular stretcher frame contained within the bed frame and vertically movable, a bottom for the stretcher frame having a central opening, standards depending from the corners of the stretcher frame, a horizontal shaft journalled in the sides of the bed frame intermediate its ends, cords connected to the ends of the bed frame supporting the standards of the stretcher frame, and adapted to be wound on the shaft, substantially as specified.

No. 68,725. Metallic Angle piece for Walls.
(Angle en métal pour murs.)

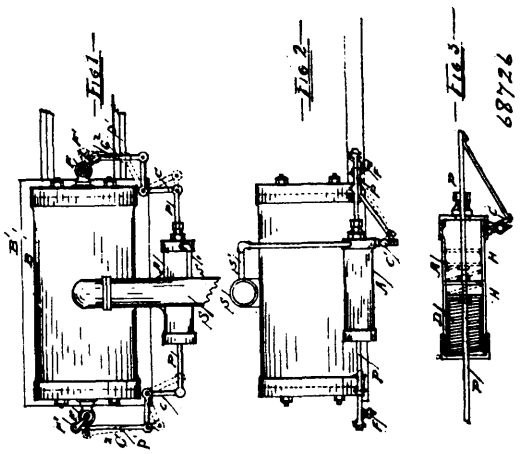


Lewis Henry Broome, Jersey City, New Jersey, U.S.A., 14th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—1st. A metallic angle strip having two continuou straight edges and the intermediate body portion bent into

angular shape, and projections cut from the sheet metal and adapted to set against the wall and be nailed or secured thereto, substantially as set forth. 2nd. A metal angle strip for a wall having two straight edges and perforations for the passage of the plaster and flanges or tongues cut from the metal of the strip and bent backward and adapted to rest against the wall adjacent to the angle for holding the angle strip in position, substantially as set forth. 3rd. A metal angle strip for walls bent in a central longitudinal line to form a double metallic corner strip for the plastering upon the two surfaces of the wall to coincide with the edges of the strip and flanges or tongues formed by incisions in the angle strip and extending backward to rest upon and be connected with the wall at the angle, substantially as set forth. 4th. A metal angle strip for walls bent in a central longitudinal line to form a double metallic corner strip for the plastering upon the two surfaces of the wall to coincide with the edges of the strip and flanges or tongues formed by incisions in the angle strip and extending backward to rest upon and be connected with the wall at the angle, and a filling into the angle of the strip and between the straight edges thereof forming an ornamental corner to the plastering, substantially as set forth.

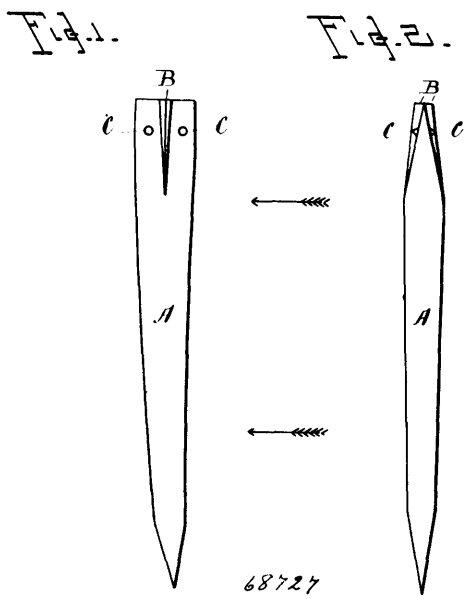
No. 68,726. Steam Engine. (*Machine à vapeur.*)



Oscar Weitzel and Joseph Dent, both of Thamesville, Kent, Ontario, Canada, 14th September, 1900; 6 years. (Filed 8th August, 1900.)

Claim.—The combination of the cylinder cock opener and closer A with the engine cylinder B, having piston rod P attached to cranks C C and provided with a follower H, spring D all connected with the lever handles F^1, substantially as and for the purpose herein set forth.

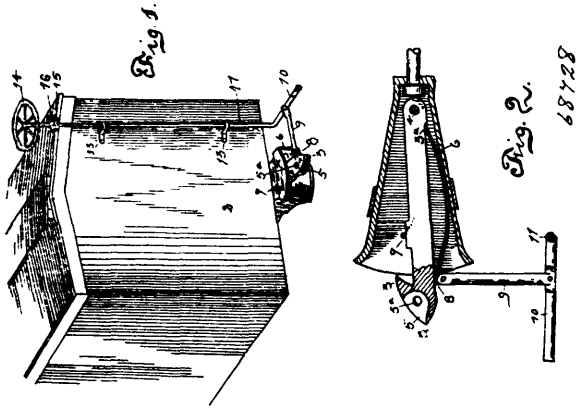
No. 68,727. Pick Point. (*Pointe de marteau à piquer.*)



Jacob Aegerter, San Francisco, California, U.S.A., 14th September, 1900; 6 years. (Filed 28th December, 1899.)

Claim.—1st. As an article of manufacture a pick point adapted to be welded to the body of an ordinary pick, consisting of an elongated steel or other metallic piece having a downward pointed end and bevelled or wedge-shaped upper end, provided with rib formed upon its bevelled faces, substantially as set forth and for the purpose specified. 2nd. As an article of manufacture a supplemental pick point, having a downward pointed end and wedge-shaped upper end, provided with ribs B and projection C, substantially as set forth and for the purpose specified.

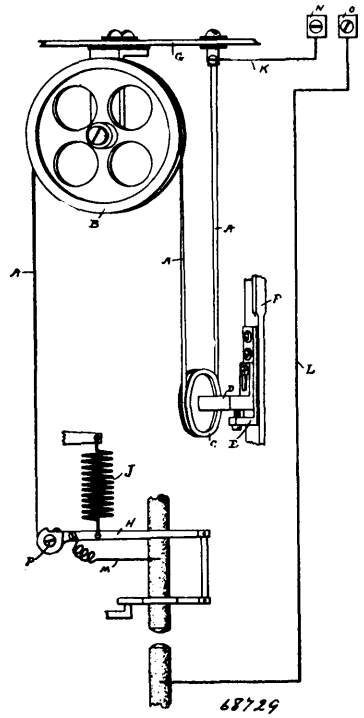
No. 68,728. Car Coupler. (*Accoupler de char.*)



Iven J. Hoyt, Watseka, Illinois, U.S.A., 14th September, 1900; 6 years. (Filed 29th August, 1900.)

Claim.—The combination with a car, of a drawhead, a laterally movable hook pivotally mounted within the drawhead and provided at one side with an engaging portion and having a perforated ear at the other side, a transverse link bar 9 pivoted at its inner end to the perforated ear and extending therefrom to one side of the car, the rotary vertical shaft 11 journalled in suitable bearings of the car and extending from the top to the bottom thereof, the horizontal arm 10 located at a point below the car body and extending from the lower end of the shaft 11 and connected near its inner end to the outer end of the link bar, the outer portion of the arm 10 constituting a handle, a hand wheel mounted on the upper end of the shaft 11, a ratchet wheel carried by the shaft and arranged at the top of the car, and a pawl mounted on the latter and engaging the ratchet wheel, substantially as described.

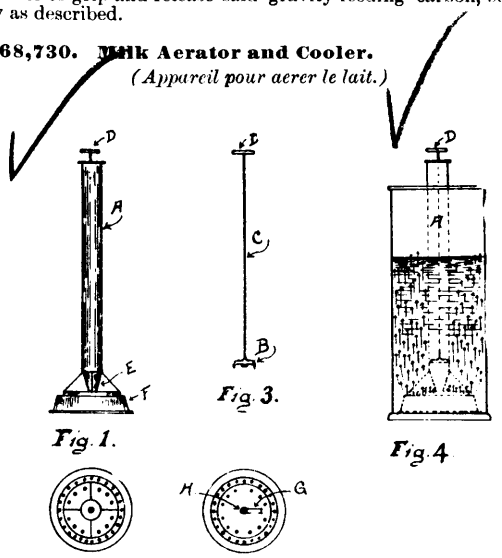
No. 68,729. Electric Lamp. (*Lampe électrique.*)



The C. P. Company, St. Catharines, assignee of William A. Turbayne, Hamilton, both in Ontario, Canada, 14th September, 1900; 6 years. (Filed 25th November, 1899.)

Claim.—In an electric arc lamp, the combination with a gravity feeding carbon, a gripping device and lever adapted to move said gripping device to clamp and lift said gravity feeding carbon, of a thermo expansive strip of metal in the main circuit of the lamp, pulleys or sheaves for supporting said thermo expansive strip, and means, consisting of a suitable mechanical connection between the said thermo expansive strip and the lever whereby the expansion and contraction of said thermo expansive strip is utilized to actuate said lever to grip and release said gravity feeding carbon, substantially as described.

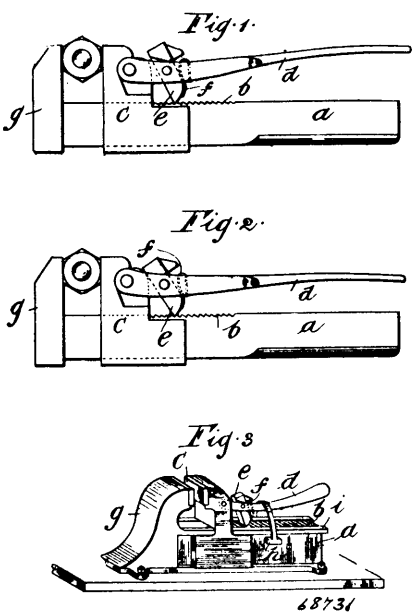
No. 68,730. Milk Aerator and Cooler.
(Appareil pour aerer le lait.)



James Irvine, Dalkeith, Ontario, Canada, 14th September, 1900; 6 years. (Filed 1st September, 1900.)

Claim.—A milk aerator comprising a tube with a close piston, rod and handle, a conical bottom provided with a straight spring valve, and a perforated flaring base, as shown and described for the purposes set forth.

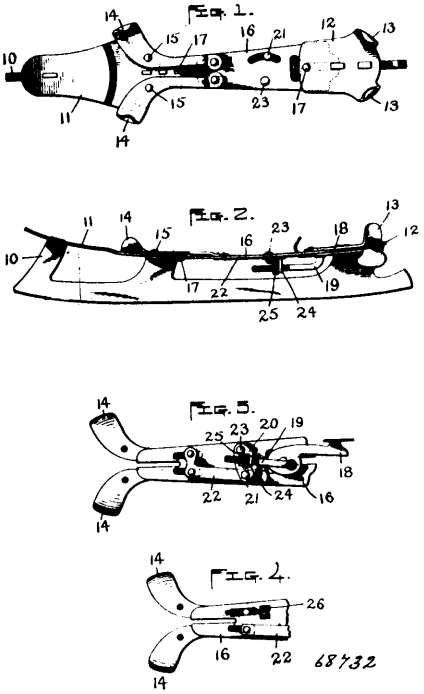
No. 68,731. Spanner, Vice or Pipe Wrench.
(Clé à écrou.)



Walter Joseph Lees Guest, Alphington, near Melbourne, Victoria, Australia, 14th September, 1900; 6 years. (Filed 30th September, 1899.)

Claim.—In a spanner, vice, pipe wrench or similar tool, in combination a stationary jaw, an adjustable jaw having a lever pivotally connected thereto at one end, a pawl pivotally and directly held on the lever and provided with inner teeth designed to engage with the serrated surface of the body, said pawl being arranged so as to force said adjustable jaw forward to provide a positive grip when the lever is depressed, as and for the purpose specified.

No. 68,732. Skate. *(Patins.)*



The Samuel Winslow Skate Manufacturing Company, Worcester, Massachusetts, assignee of Stephen S. Black, Passadena, California, U.S.A., 14th September, 1900; 6 years. (Filed 22nd Novemb r, 1899.)

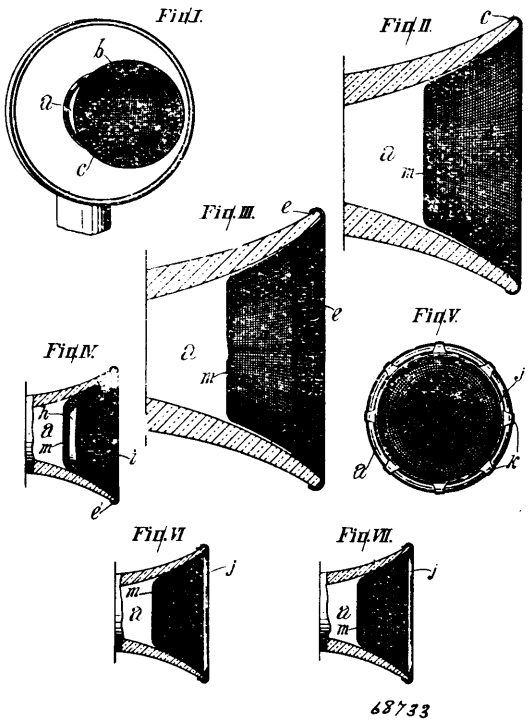
Claim.—1st. In a skate the combination of fixed back heel stops, rearwardly closing toe clamps, a rearwardly closing heel clamp, a clamping lever, and a strain dividing connection arranged to divide the strain of the clamping lever between the rearwardly closing toe clamps and the rearwardly closing heel clamp, substantially as described. 2nd. In a skate, the combination of the fixed back heel stops, the rewardly closing toe clamps, the rearwardly closing heel clamp, a clamping lever, and a lever for dividing the strain of the clamping lever between the rearwardly closing toe clamps and the rearwardly closing heel clamp, said lever having a central connection to the clamping lever, a connection from one end to operate the rearwardly closing toe clamps, and a connection from the opposite end to operate the rearwardly closing heel clamp, substantially as described.

No. 68,733. Antiseptic Device for Mouthpieces.
(Appareil anticeptique.)

The Antiseptic Appliance Company, Los Angeles, California, U.S.A., assignee of George Van Alstine, of the same place, 17th September, 1900; 6 years. (Filed 17th July, 1900.)

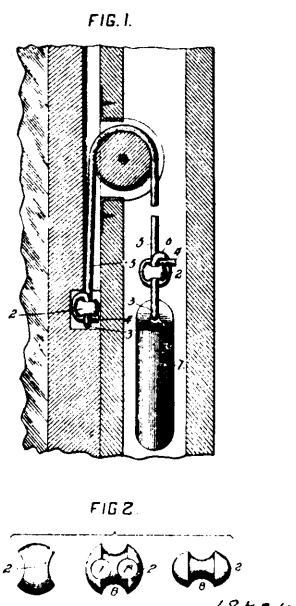
Claim.—1st. In a sound transmitter mouthpiece, a detachable cup formed of antiseptic gauze and inserted into the mouthpiece to form a receptacle in the mouthpiece with its bottom transverse said mouthpiece and forming a shield inside the same. 2nd. In a sound transmitter mouthpiece, a detachable cup formed of antiseptic gauze and inserted into the mouthpiece to form a receptacle in the mouthpiece with its bottom transverse the mouthpiece and forming a shield inside the same, and a ring of felt at the bottom of said cup. 3rd. A detachable lining for a sound transmitter mouthpiece, consisting of a cup formed of antiseptic gauze, a ring of porous material saturated with a suitable antiseptic substance inserted in the cup, and a retainer of antiseptic gauze over the ring. 4th. An antisep ic device for sound transmitter mouthpieces, comprising a cup formed of antiseptic gauze returned upon itself at the edge of said cup to form a channel to fit upon and chamber the rim of the mouthpiece. 5th. An antiseptic device for

sound transmiter mouthpieces, comprising a cup formed of antiseptic gauze with reinforcement at the edge of said cup and said cup being



returned upon itself at the edge to chamber the rim of the mouthpiece, substantially as and for the purpose set forth.

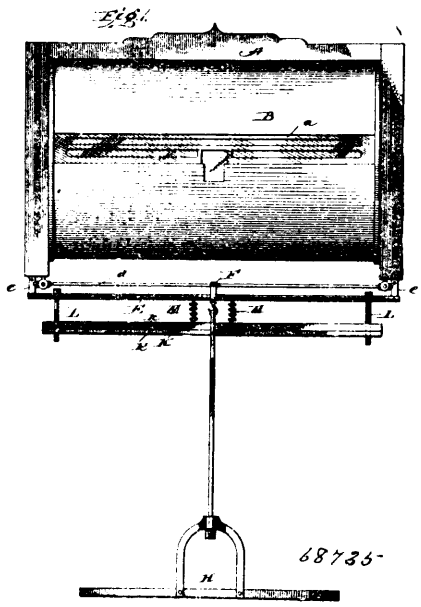
No. 68,734. Cord Fastening Device.
(Appareil pour attacher les cordes.)



Otto Wallman and Charles Wesley Geib, both of Spokane, Washington, U.S.A., 17th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—A fastening device for fastening cords, consisting of a block having a peripheral groove of a width approximately equal to the diameter of the cord to be used, and having parallel holes therethrough, said holes being of a diameter approximately equal to the diameter of the cord and extending into opposite sides of the groove substantially as set forth.

No. 68,735. Spring Balance Scales. *(Balance à ressort.)*



The Computing Scale Company, Dayton, Ohio, U.S.A., assignee of Albert Newton, Ozias, Minneapolis, Minnesota, U.S.A., 17th September, 1900; 6 years. (Filed 3rd July, 1900.)

Claim.—1st. In a scale, the combination with a load support, and counterbalancing springs for said load support and load carried thereby, of a thermostatic compensating mechanism for equalizing the effective action of the spring under variations in temperature, substantially as described. 2nd. In a scale, the combination with indicating mechanism, a load support and counterbalancing springs for the load support and load carried thereby, of a theremostatic regulator so mounted as to neutralize the variation in the effective action of the springs on the indicator due to changes in temperature of the surrounding atmosphere, but as to be uninfluenced in such action by the force exerted upon the spring, substantially as described. 3rd. In a scale, the combination of the following instrumentalities, to wit: an indicating mechanism, a load support, and counterbalancing springs for the load support and load carried thereby, and a thermostatic regulator so mounted as to neutralize the effect of expansion and contraction of the springs on the indicator due to changes in atmospheric temperature, but so as to be uninfluenced in such action by the force exerted upon the spring, substantially as described. 4th. In a scale, the combination with an indicating mechanism, a load support, counterbalancing springs for the load support and load carried thereby, and connections between said counterbalancing springs and indicating mechanism, of a thermostatic regulator co-operating with said connections to neutralize the differential effective action of the spring due to variation in atmospheric temperature, substantially as described. 5th. In a scale, the combination of the following instrumentalities, to wit: an indicating mechanism, a load support, counterbalancing springs for the load support and load carried thereby, and a compensating mechanism interposed between the indicating mechanism and counterbalancing springs and operating in opposition to the variations in the effective action of said springs due to changes in atmospheric temperature, whereby the operation of the indicating mechanism is made uniform at all temperatures, substantially as described. 6th. In a scale, the combination with an indicating mechanism, counterbalancing springs, a horizontal bar connecting said springs, and connections between said bar and indicating mechanism located centrally of the bar, of a thermostatic regulator for deflecting said bar to compensate for variations in the length of the springs due to changes in atmospheric temperature, substantially as described. 7th. In a scale, the combination with an indicating mechanism, counterbalancing springs, a horizontal bar interposed between said springs, a load support connected with the centre of said bar and connections between said bar and indicating mechabism, of a thermostatic regulator connected with said bar and operating to deflect the same under variations in atmmospheric temperature, whereby the effective action of the counterbalancing springs is made uniform at different temperatures, substantially as deseribed. 8th. In a scale, the combination with an indicating mechanism, counterbalancing springs, a horizontal bar interposed between said springs and connected centrally with the indicating mechanism of a thermortatic regulator connected with the opposite ends of said bar and connections interposed between the centre of said bar and the thermostatic regulator, substantially as described. 9th. In a scale, the combination with an indicating mechanism, counterbalancing springs, a horizontal bar interposed between said

springs, connections between the centre of said bar and indicating mechanism, and a load support applied to said bar, of a thermostatic regulator, connections between the ends of said bar and thermostat and centrally arranged springs interposed between said bar and thermostat, substantially as described. 10th. In a scale, the combination with an indicating mechanism, counterbalancing springs, a horizontal bar interposed between said springs, connections between the centre of said bar and indicating mechanism and the load support, of a thermostatic regulator and adjustable connections between said thermostatic regulator and bar, substantially as described. 11th. In a scale, the combination with an indicating mechanism, counterbalancing springs, a horizontal bar interposed between said springs, connections between the centre of said bar and indicating mechanism and a load support, of a thermostat regulator, adjustable connections between the end of said thermostat and bar and springs interposed between the centre of said bar and and thermostat, substantially as described. 12th. In a scale, the combination of the following instrumentalities, to wit: a load support, an indicator, a counterbalancing spring for said load support, and a thermostatic regulator co-operating with the spring, substantially as described. 13th. In a scale, the combination of the following instrumalities, to wit: a load support, an indicator controlled thereby, the counterbalancing spring for the load support, a hanger for supporting the spring and a thermostatic regulator co-operating with the spring to vary its position with relation to its hanger whereby the spring is elongated or shortened in accordance with variations in temperature, substantially as described. 14th. In a scale, the combination with a load support, an indicator controlled thereby, and a counterbalancing spring, of a hanger for supporting said spring and a thermostatic regulator carried by said hanger and co-operating with the spring to vary the effective length of the spring in accordance with variations of temperature, substantially as described. 15th. In a scale, the combination with a load support, an indicator controlled thereby, and a counterbalancing spring for said lead support, of a hanger with which the spring co-operates and a thermostatic regulator carried by the hanger and co-operating with the spring to adjust the same in its bearing, substantially as described. 16th. In a scale, the combination with a load support, and an indicator controlled thereby, of a counterbalancing spring connected at one end with the load support, and adjustably connected with a relatively fixed support at the opposite end and a thermostatic regulator controlling the connections between the spring and its fixed support, substantially as described. 17th. In a scale, the combination with a load support, an indicator controlled thereby and a couuterbalancing spring for said load support, of a hanger, a bearing in said hanger with which the spring co-operates and a thermostatic regulator connected with the end of said spring for adjusting the same in its bearings, substantially as described.

No. 68,736. Rocking Chair. *(Chaise à berceaux.)*

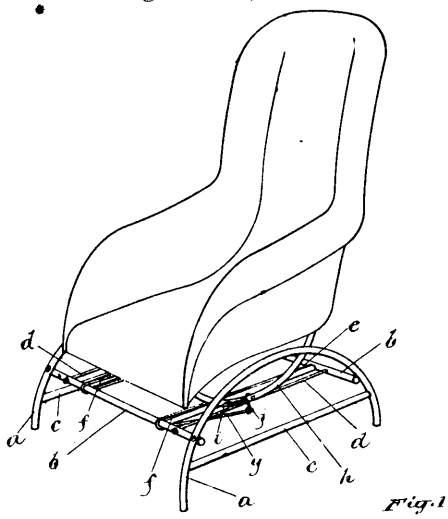


Fig. 1

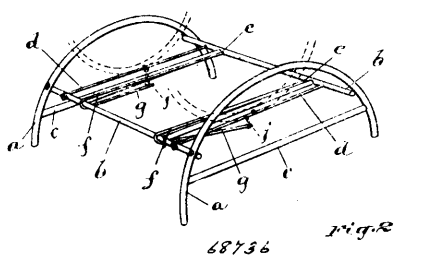


Fig. 2

68736

John Craig, Toronto, Ontario, Canada, 17th September, 1900; 6 years. (Filed 1st September, 1900.)

Claim.—1st. In a rocking chair, a base provided with supporting bars *d* and curved springs *f*, in combination with the rockers *h* and fasteners *j* for securing the rockers to the curved springs, substantially as specified. 2nd. In a rocking chair, a base provided with side bars *b*, supporting bars *d* connected to the side bars, springs *f* connected at one end to the side bars and having their other ends bent back under the bodies of the springs, in combination with the rockers *h* connected to the chair bottom, grooves in the outer face of the rockers to receive the supporting bars and fasteners *j* for securing the rockers to the springs, substantially as specified.

No. 68,737. Rail. *(Rail.)*

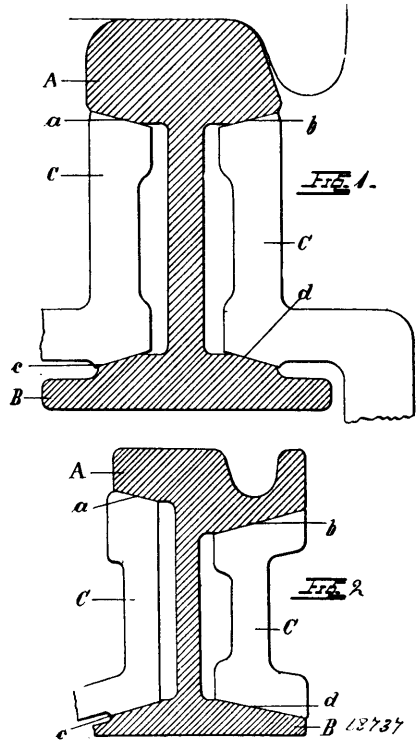


Fig. 1.

Fig. 2.

68737

Ernst Schubert, Sorau, Bradenburg, Prussia, 17th September, 1900; 6 years. (Filed 4th September, 1900.)

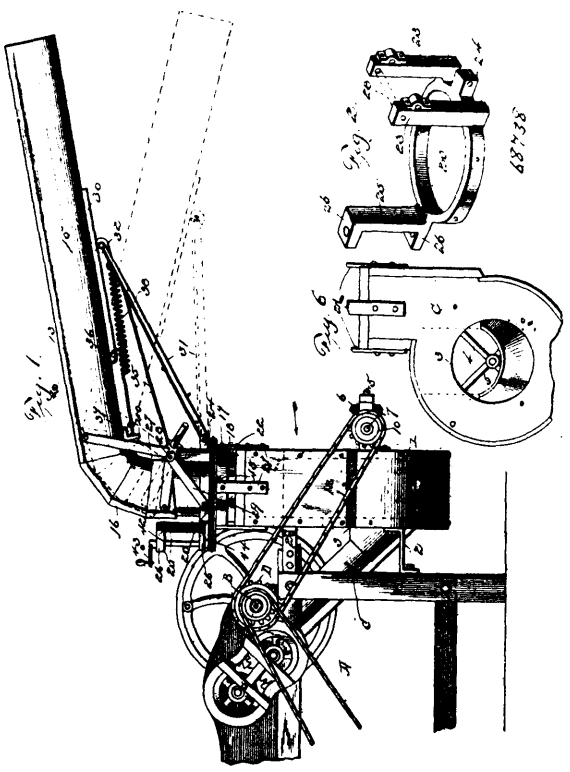
Claim.—A rail having raised surfaces *a*, *b*, *c*, *d* on the lower face of the head and on the upper face of the foot, for the purpose of providing a regular abutment for the fish-plates and of affording play to enable subsequent adjustment of the latter when required, substantially as described.

No. 68,738. Pneumatic Feed Conveyer for Feed Cutters. *(Conduit pneumatique pour coupe nourriture.)*

Edward C. Wilharms and Adolph J. Wilharms, both of Greenleaf, Wisconsin, U.S.A., 17th September, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. In a pneumatic tube of the class described, the combination of the upper and lower sections flexibly connected together and adapted to be turned laterally in unison, a supporting arm connected to one section and having a trolley sheave operating in a guideway with which the other section is provided, a winch connected to one section and a rope connecting the said winch with the other section, said rope operating on said trolley sheave, substantially as described. 2nd. In a pneumatic tube of the class described, the combination of the lower section mounted on a suitable support and adapted for revolution, the upper section flexibly connected at its inner end to the upper end of the lower section, a supporting arm pivotally connected to the lower section and having a trolley sheave at its upper end, a guideway on the upper section in which said trolley sheave operates, a cord or rope attached to the upper section and passed over said trolley sheave and a supporting spring connecting said supporting arm to said upper section, substantially as described. 3rd. The combination of the lower pneumatic conveying tube section, the supporting sprocket ring in which the same turns, the turning ring secured to said lower section and bearing on said sprocket ring, a shaft carried by said turning ring and having a sprocket pinion, an endless sprocket chain connecting said sprocket pinion and ring, the upper pneumatic tube section flexibly connected to the lower tube section, the supporting arm pivotally connected to the turning ring and carrying a trolley

sheave which operates under the upper tube section, a rope attached to said upper tube section and passing over said trolley sheave, and

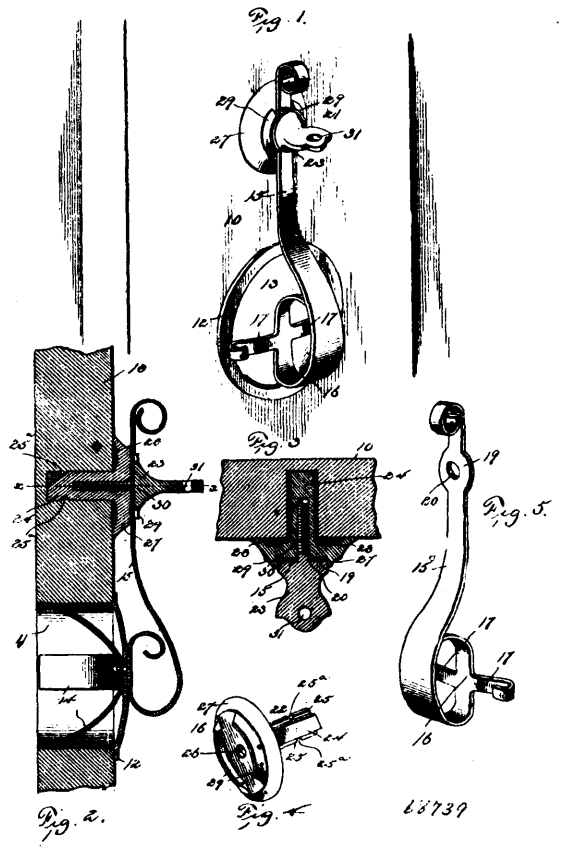


means to operate said rope, for the purpose set forth, substantially as described. 4th. The combination of a feed cutter with a pneumatic feed conveyer, substantially as described. 5th. The combination of a feed cutter with a pneumatic feed conveyer and means connected to and operated in unison with the feed cutter to create a blast of air through the pneumatic feed conveyer, substantially as described.

No. 68,739. Thimble Lid Holder. *(Porte-dé de couvercle.)*

Herman Kling, Larned, Kansas, U.S.A, 17th September, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. The combination with a chimney flue closure, of locking means for said closure arranged exterior of the chimney, substantially as described. 2nd. The combination with a chimney flue closure, of an arm engaging said closure and means for securing said arm to the exterior wall of a chimney, substantially as described. 3rd. A flue closure lock independent of the closure and comprising an arm adapted to engage the closure, and means for securing said arm to a fixed point of support, substantially as described. 4th. A flue closure lock independent of the closure and comprising an arm arranged to press against the closure and means for detachably securing said arm to a fixed point of support, substantially as described. 5th. A flue closure lock comprising an arm arranged to rest against the exterior face of the closure, substantially as described. 6th. A flue closure lock comprising a spring arm arranged to rest against the exterior face of the closure, substantially as described. 7th. A chimney flue closure comprising an arm, one portion of which engages the closure, a plug secured in the chimney, and means for securing said arm to the plug, substantially as described. 8th. A chimney flue closure comprising an arm, one portion of which engages the closure, a plug secured in the chimney, and means for detachably securing said arm to the plug, substanas described. 9th. A chimney flue closure comprising an arm, one portion of which engages the closure, a hollow plug secured to the chimney, a clamp screw arranged to screw into said plug and thereby secure the arm in place, substantially as described. 10th. A chimney flue closure lock comprising a spring arm, one portion of which is bent backwardly and arranged to bear against the closure, a pair of oppositely projecting arms also arranged to bear against said closure, a plug secured to the chimney contiguous to the flue



opening, and a clamp screw adapted to screw into said plug and clamp the spring arm in place, substantially as described.

No. 68,740. Imitation Gutta Percha and India Rubber
(Gutta percha artificiel.)

Ferrar Fenton, London, Middlesex, England, 17th September, 1900; 6 years. (Filed 25th February, 1899.)

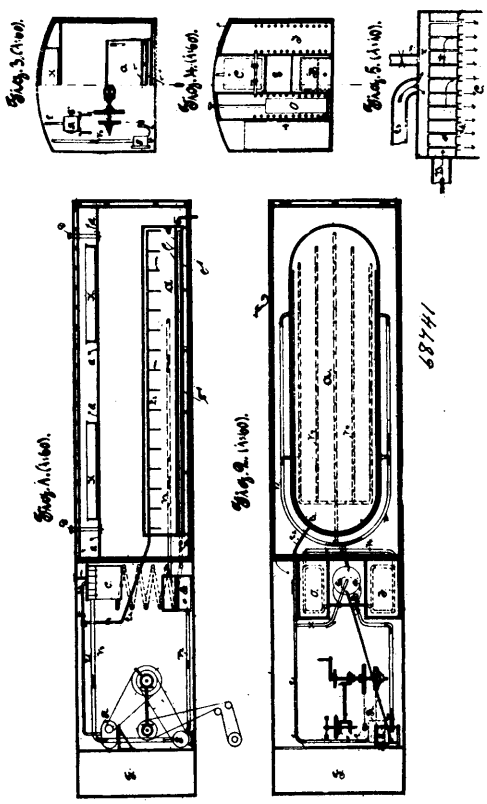
Claim.—1st. The herein described process for manufacturing artificial gutta percha, caoutchouc and like substances, said process consisting in taking an oxydizable vegetable oil either in the raw state, or more or less oxydized, and mixing therewith tar or other pyroligneous substances, and then placing the produce in a bath of diluted nitric acid to form a magma or base, substantially as described. 2nd. The herein described process for manufacturing artificial gutta percha, caoutchouc and like substances, said process consisting in taking and oxydizable vegetable oil either in the raw state, or more or less oxydized, and mixing therewith tar or other pyroligneous substances, and then placing the product in a bath of nitric acid as before described, or a dilution thereof.

No. 68,741. Fish Transporting Means.
(Apparcil pour transporter le poisson.)

August S. Ludt, No. 31 Intedgade, Copenhagen, Denmark, 17th September, 1900; 6 years. (Filed 4th April, 1899.)

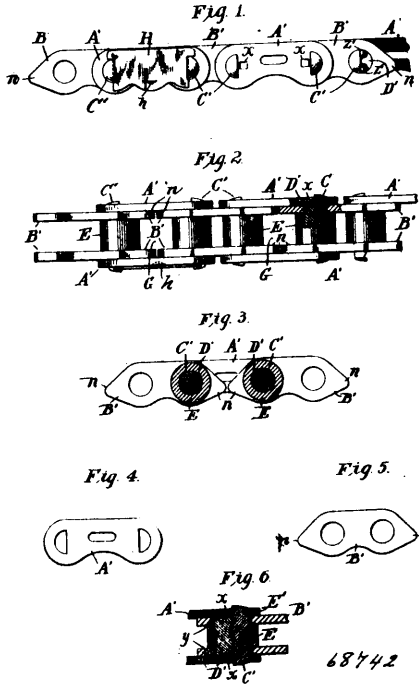
Claim.—1st. In means for transporting live fish, the combination of a fish tank, a filtering device and an ærating apparatus, pipe connections between said tank, filtering device and ærating apparatus by means of which fresh air and water may be conducted to said tank, a pump for raising the water to the ærating apparatus, a ventilator to supply air to the ærating apparatus and to the interior of the fish tank, means for driving said pumps, and for returning the purified and ærated water to the fish tank, substantially as described, 2nd. In means for transporting live fish, the combination of an ærating apparatus, consisting of a chamber divided into compartments by horizontal partitions, a plurality of air tubes depending from the upper partition, a plurality of water openings under the air tubes in the lower partition and into which said air tubes extend,

and means for conducting air to the upper chamber, and means for conducting water to the middle chamber, substantially as set forth.



3rd. In means for transporting live fish, the combination with a fish tank, of a pipe for supplying air thereto, said pipe extending throughout the length of the tank and having a plurality of depending arms the lower ends of which dip into the water in the tank, substantially as set forth.

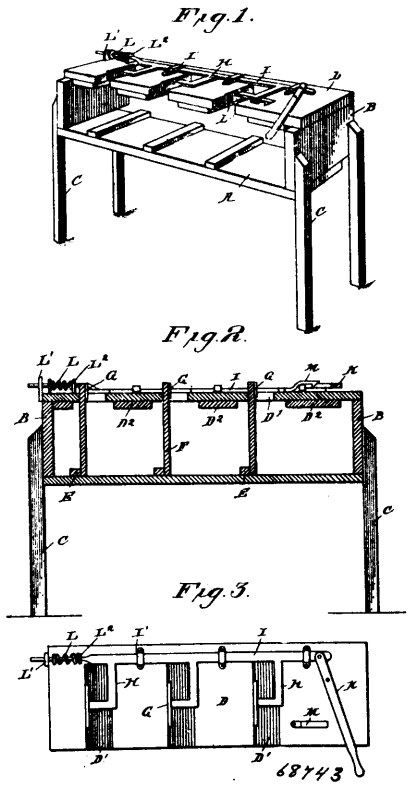
No. 68,742. Drive Chain. (*Chaine.*)



Everett F, Morse, Trumansberg, New York, U.S.A., 17th September, 1900; 6 years. (Filed 29th June, 1899.)

Claim.—1st. The combination with the outside links and the seat pins securing the links together at their ends of the inside links through which the seat pins pass, the rocking pins bearing against the seat pins and confined at their ends in the inside links, and sleeves or rollers surrounding the seat and rocking pins. 2nd. The combination with the outside links and the seat pins securing the links together at their ends, of the inside links having triangularly pointed ends for the purpose set forth and having apertures near the ends through which the seat pins pass, the rocking pins bearing against the seat pins and confined at their ends in the apertures in inside links, and sleeves or rollers surrounding the seat and rocking pins, 3rd. The combination with that portion of the chain which rests between adjacent sprocket teeth and consists of the outside links held together by the seat pins and the sleeves surrounding said pins, of the inside links through the ends of which the seat pins pass, and the rocking pins passing through the sleeves and confined in a medial position in the end of the inside links.

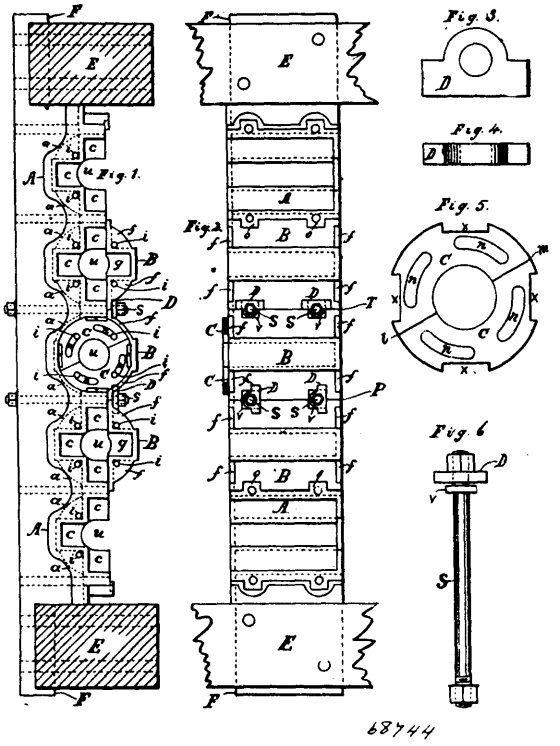
No. 68,743. Box Making Machine.
(*Machine pour faire les bôites.*)



Nicholas L. Perry, St. Lucas, Iowa, U.S.A., 17th September, 1900; 6 years. (Filed 1st September, 1899.)

Claim.—1st. In a box making machine of the kind described, the combination with the lower board or table, of the upper board or table having a series of transverse openings adapted to receive the ends and partitions of a box to be made, and the presser blocks adapted to engage the said ends and partitions, and means for moving the said presser blocks into contact, substantially as shown and described. 2nd. In a device of the kind described, the combination with the bottom table, of the table having transverse openings, the presser blocks adapted to engage the ends and partitions arranged in said transverse openings, the arms for carrying the said presser blocks and the rod for operating all of the arms and presser blocks in unisons, substantially as described. 3rd. In a machine of the kind described, the combination with the lower table having transverse cleats, of the upper table having transverse openings, the presser blocks and arms for carrying the said presser blocks, the operating rod and lever and the spring for returning the said parts to their normal position, substantially as described. 4th. In a machine of the kind described, the combination with the lower table having transverse cleats, of the end supports and legs, the upper table having transverse openings said table having re-enforced strips or blocks upon the under side, the presser blocks and the arms carrying said blocks, the reciprocating rod to which the arms are attached, said rod working in guides upon the top of the table, the operating lever and catch for holding the same, and the spring surrounding the end of the rod adapted to return the parts to their normal position, substantially as described.

No. 68,744. Stamp Guide Box. (*Boite pour guides-étampe.*)



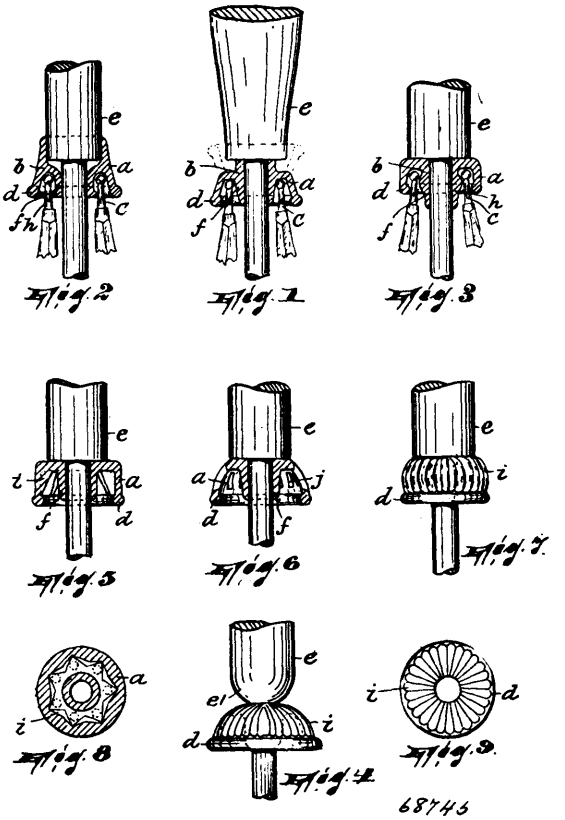
Edmond H. Horne, Nelson, British Columbia, Canada, 17th September, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. A stamp guide box with the base occupying about two-thirds of the entire thickness of the box, and having recesses to hold three linings or guides, a cap occupying about one-third of the entire thickness of the box, and having a recess for one lining or guide, bolts with collars resting on the highest part of the base, and having a nut on each end, washers adapted to rest on and hold either on one or two caps, a divided circular cover having a limited rotary movement, a base cast entire with the base or bases of one or more boxes of the same description, substantially as described and set forth. 2nd. In a stamp guide box, the combination of the cap B, with one of the bases of A A, substantially as set forth and described. 3rd. In a stamp guide box, the combination of the washers D D D D, and the bolts *s s* with the cap B, and one of the bases A A, substantially as described and set forth. 4th. A stamp guide box comprising the circular cover C C, in combination with the cap B, and one of the bases of A A, substantially as described and set forth. 5th. A stamp guide box comprising a circular cover C C, the washers D D D D, and the bolts *s s*, in combination with the cap B, and one of the bases of A A, substantially as described and set forth. 6th. In a stamp guide box, the washers D D D D, substantially as and for the purpose hereinbefore described and set forth.

No. 68,745. Umbrella Tip Cup. (*Parapluie.*)

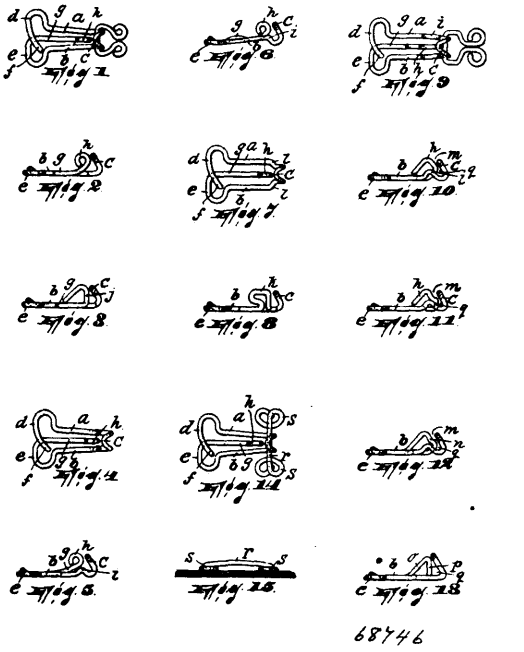
Edwin Wright Groeschel, Jersey City, New Jersey, U.S.A., 17th September, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. As an improved article of manufacture, an umbrella tip cup composed of elastic material and adapted to snugly encompass the umbrella stick or staff, substantially as described. 2nd. As an improved article of manufacture, an umbrella tip cup composed of elastic rubber and comprising, integrally formed, a cup proper and a sleeve portion, the latter being adapted to snugly encompass the umbrella stick or staff, substantially as described. 3rd. As an improved article of manufacture, an umbrella tip cup composed of elastic rubber and comprising, integrally formed, a cup proper, a sleeve portion surrounded by said cup and adapted to snugly encompass the umbrella stick or staff, and an annular enlargement disposed at the free edge of said cup, substantially as described. 4th. As an improved article of manufacture, an umbrella tip cup composed of elastic rubber and comprising, integrally formed, a cup proper, a sleeve portion surrounded by said cup and adapted to snugly encompass the umbrella stick or staff, and an annular



enlargement disposed at the free edge of said cup, said cup having radial ribs, substantially as described.

No. 68,746. Hook and Eye. (*Crochet et oeillet.*)

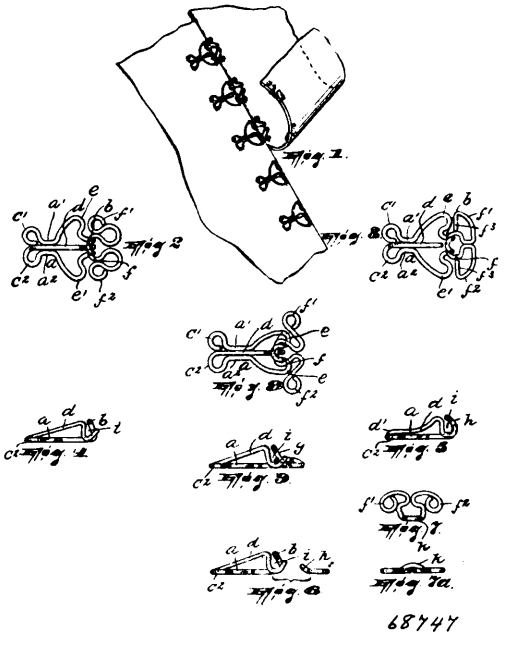


Edwin Wright Groeschel, Jersey City, New Jersey, U.S.A., 17th September, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. A hook for a hook and eye, consisting of the eyelets, bill and shank, the latter comprising two spaced members, and a

tongue projecting toward said bill from the eyelet end of the hook and being disposed between said shank members, said tongue having its free end portion in approximate contact with the tip of the bill and having its body portion disposed substantially in the plane of the shank members, substantially as described. 2nd. A hook for a hook and eye, consisting of the eyelets, bill and shank, the latter comprising two spaced members, and a tongue projecting toward said bill from the eyelet end of the hook and being disposed between and spaced from said shank members, said tongue having its free end portion bent back upon itself and approximately contacting with the tip of the bill and the body portion of said tongue being disposed substantially in the plane of the shank members, substantially as described. 3rd. A hook for a hook and eye, consisting of a piece of wire bent to form the eye consisting of a piece of wire bent to form the eyelets, bill and shank, and a tongue constituting one end portion of the wire and projecting from said eyelet end of the hook towards the bill, the other end portion of said wire constituting one of said eyes and having its tip crossing the tongue, substantially as described. 4th. A hook for a hook and eye, consisting of a piece of wire bent to form the eyelets, bill and shank, and a tongue constituting one end portion of the hook towards the bill, the other end portion of said wire constituting one of said eyes and having its tip extending over the tongue, substantially as described. 5th. An eye for a hook and eye, consisting of a bar and a pair of eyelets disposed at the ends of said bar and integrally formed therewith, the end portions of said bar extending over the eyelets and meeting the same at the outer sides thereof, substantially as described. 6th. A hook for a hook and eye, consisting of a piece of wire bent to form the eyelets, bill, shank and a tongue, the latter extending from the eyelet end toward the bill end of the hook, said tongue having an elevation adjacent but spaced from, the tip of the bill, the portion of said elevation adjacent the eyelet end of the hook being inclined, substantially as described. 7th. A hook for a hook and eye, consisting of a piece of wire bent to form the eyelets, bill, shank and tongue, the latter extending from the eyelet end toward the bill end of the hook, said tongue having an elevation adjacent, but spaced from, the tip of the bill, the portion of said elevation adjacent the eyelet end of the hook being inclined and the portion of said elevation adjacent the bill end of the hook being disposed perpendicularly, substantially as described. 8th. A hook for a hook and eye, consisting of a piece of wire bent to form the eyelets, bill, shank and tongue, the latter extending from the eyelet end toward the bill end of the hook, said tongue having an elevation adjacent, bnt spaced from, the tip of the bill, the portion of said elevation adjacent the eyelet end of the hook being inclined and the portion of said elevation adjacent the bill end of the hook being inclined first forwardly and then rearwardly, substantially as described.

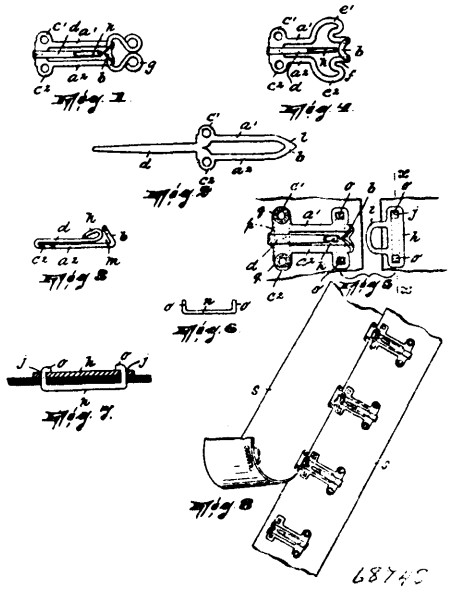
No. 68,747. Hook and Eye. (*Crochet et oeillet.*)



Edwin Wright Groeschel, Jersey City, New Jersey, U.S.A., 17th September, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. In a garment fastener, the combination of a hook member and an eye member, said hook member having laterally disposed anchorages situated appreciably remote from each other and projecting into approximate transverse alignment with the point or points where said members are adapted to engage each other, substantially as described. 2nd. In a garment fastener, the combination of a hook member and an eye member, said eye member having laterally disposed anchorages situated appreciably remote from each other and projecting into approximate transverse alignment with the point or points where said members are adapted to engage each other, substantially as described. 3rd. In a garment fastener, the combination of a hook member and an eye member, said members each having laterally disposed anchorages situated appreciably remote from each other and projecting into approximate transverse alignment with the point or points where said members are adapted to engage each other, substantially as described. 4th. In a garment fastener, the combination of a hook member having a short bill and a tongue approaching from the rear end of said member into approximate contact with the tip of said bill, and an eye member, said members each having laterally disposed anchorages situated appreciably remote from each other and projecting into approximate transverse alignment with the point or points where said members are adapted to engage each other, substantially as described. 5th. A hook for a hook and eye consisting of the eyelets, bill and shank, said hook also having a tongue or guard projecting towards its bill from its eyelet end and being therebetween disposed out of the plane of said shank, substantially as described. 6th. A hook for a hook and eye consisting of a piece of wire bent to form the eyelets, bill, shank and a tongue or guard, said tongue or guard being an extension of one of the eyes and rising first abruptly therefrom and then projecting toward the tip of the bill clear of said shank, substantially as described. 7th. A hook for a hook and eye consisting of a piece of wire bent to form the eyelets, bill, shank and a tongue or guard projecting from the eyelet end of said hook into approximate contact with the tip of the bill, said bill being appreciably short and extending first vertically and then inclined rearwardly and having a rounded tip, substantially as described.

No. 68,748. Hook and Eye. (*Crochet et oeillet.*)

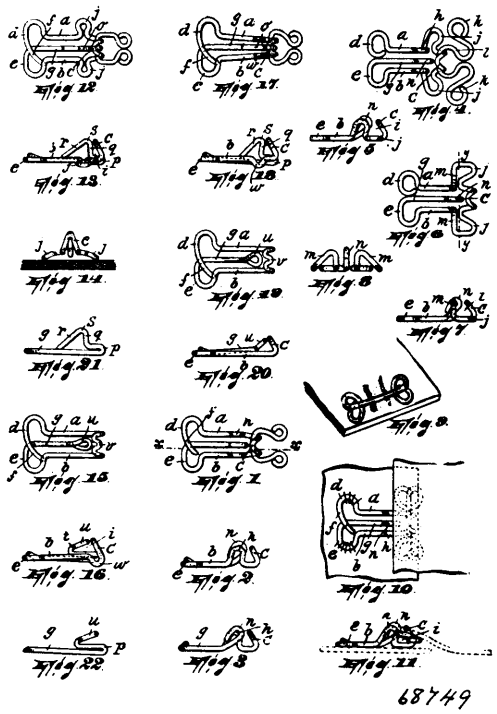


Edwin Wright Groeschel, Jersey City, New Jersey, U.S.A., 17th September, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. A hook for a hook and eye, comprising eyelets, bill and shank, said hook being formed of sheet metal, substantially as described. 2nd. An eye for a hook and eye, comprising a loop portion and a body portion, said eye being formed of sheet metal, substantially as described. 3rd. A hook for a hook and eye, comprising eyelets, bill and shank, said hook being formed of sheet metal and having an integral tongue extending from its eyelet and being bent back upon itself, substantially as described. 4th. A hook for a hook and eye, comprising eyelets, bill and shank, said hook being formed of sheet metal and having an integral tongue extending from the eyelet end of said hook, being bent back upon itself, and approximately contacting with the bill, substantially as described. 5th. The combination with the hook member of a hook and eye, of means for securing said member in place, consisting of a metallic bar having claws adapted to be bent over in engagement with said member, substantially as described. 6th. The combination with the eye member of a hook and eye, of means for securing said member in place, consisting of a metallic bar having claws adapted to be bent over in engagement with said member, substantially as described. 7th. The combination with textile or other flexible strips adapted to be stitched to a garment, of hook members secured

to one of said strips, and corresponding eye members secured to the other of said strips, substantially as described. 8th. The combination with textile or other flexible strips adapted to be stitched to a garment, of hook members mounted on one of said strips, corresponding eye members mounted on the other of said strips, and means for securing said members to the strips, said means consisting of a series of bars having bent claws penetrating the strips and engaging the members, substantially as described.

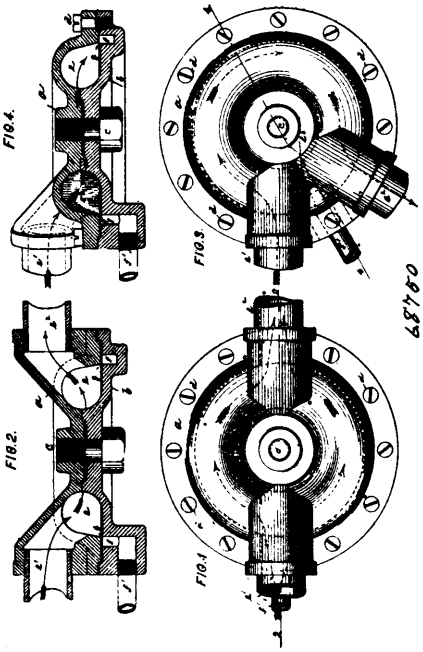
No. 68,749. Hook and Eye. *(Crochet et oeillet.)*



Edwin Wright Groeschel, Jersey City, New Jersey, U.S.A., 17th September, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. A hook for a hook and eye, consisting of the eyelets, bill and shank, the latter comprising two spaced members and a tongue projecting toward said bill from the eyelet end of the hook and into approximate contact therewith, and humps or projections extending upwardly from said shank members and disposed in proximity to the bill end of the hook, substantially as described. 2nd. A hook for a hook and eye, consisting of a piece of wire bent to form eyelets, bill and shank, the latter comprising two spaced members, and a tongue projecting toward said bill from the eyelet end of the hook and into approximate contact therewith, and upwardly extending humps or projections formed in the wire both sides of the bill and disposed in proximity to the bill end of the hook, substantially as described. 3rd. A hook for a hook and eye, consisting of the eyelets, bill and shank, the latter comprising two spaced members, and a tongue projecting toward said bill from the eyelet end of the hook and into approximate contact therewith, and humps or projections extending upwardly from said shank members and disposed in proximity to the bill end of the hook, said hook having laterally disposed anchorages situated appreciably remote from each other and projecting into approximate transverse alignment with its point or points of engagement with the eye member, substantially as described. 4th. A hook for a hook and eye, consisting of the eyelets, bill, shank and tongue, said tongue having an elevated portion approximately contacting with the tip of the bill and also having a projection extending forwardly from said elevated portion, substantially as described. 5th. A hook for a hook and eye, consisting of the eyelets bill, shank and tongue, said tongue having an elevated portion approximately contacting with the tip of the bill and also having a re-bent projection extending forwardly from said elevated portion in substantially the plane of the shank, substantially as described. 6th. A hook for a hook and eye, consisting of the eyelets, bill, shank and tongue, said tongue having a loop which approximately contacts with the tip of the bill and which comprises a re-bend extending forwardly from said loop in substantially the plane of the shank, substantially as described. 7th. A hook for a hook and eye, consisting of the eyelets, bill and shank, the latter comprising two spaced members, a tongue extending from the eyelet end of said hook between said members and approximately contacting with the tip of the bill, and projections extending from said shank members into a plane beneath that of said shank members, substantially as described. 8th. A hook for a hook and eye, consisting of the eyelets, bill and shank, the latter comprising two spaced members, a tongue extending from the eyelet end of said hook between said members, said tongue comprising a loop approximately contacting with the tip of the bill, a re-bend extending forwardly from said loop in substantially the plane of the shank members, and projections extending from said shank members into the plane beneath that of said shank members, substantially as described.

No. 68,750. Steam and Water Separator.
(Appareil pour separer l'eau et la vapeur.)



Theodore Miller, New York City, New York, U.S.A., 17th September, 1900; 6 years. (Filed 31st August, 1900.)

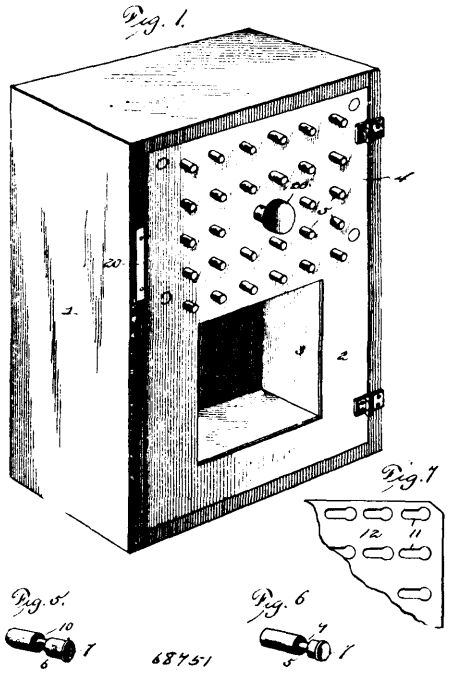
Claim.—1st. A steam and water separator composed of an annular steam chamber, a curved concentric water pocket arranged below and beyond the steam chamber, and of a curved slot that connects the outer circumference of the steam chamber with the inner circumference of the water pocket, substantially as specified. 2nd. A steam and water separator composed of an upper section provided with an annular steam chamber, a lower section provided with a concentric water pocket arranged below and beyond the steam chamber, a curved slot between the sections that connects the outer circumference of the steam chamber with the inner circumference of the water pocket, and means for connecting the sections, substantially as specified. 3rd. A steam and water separator composed of an annular steam chamber having in cross section a curved inner side and tangential outer sides, a curved concentric water pocket arranged below and beyond the steam chamber, and of a curved slot that connects the outer circumference of the steam chamber with the inner circumference of the water pocket, substantially as specified. 4th. A steam and water separator composed of an annular steam chamber having a steam inlet and outlet, a curved concentric water pocket having a water outlet and arranged below and beyond the steam chamber, and of a curved slot that connects the outer circumference of the steam chamber with the inner circumference of the water pocket, substantially as specified.

No. 68,751. Permutation Lock. *(Serrure.)*

Hans A. Alm, Hankinson, North Dakota, U.S.A., 17th September, 1900; 6 years. (Filed 31st August, 1900.

Claim.—1st. In a permutation lock for the purpose set forth, the combination of a support therefor, a sliding tumbler plate having a plurality of slots therein in regular arrangement, a latch carried by and movable with said plate, a plurality of pins movable in said plate, a portion only operating to release the plate, a movable plate back of the pins, and a rotatable repressible spindle for moving the tumbler plate to an unlocking position. 2nd. In a permutation lock of the character set forth, the combination of a support, a sliding tumbler plate, a latch carried by and movable with said plate, a plurality of pins extending freely through the said plate, a portion only of the said pins being operable to release the plate, a resetting plate in rear of the pins and movable by and with the latter, and

means for moving the tumbler plate when the latter is free. 3rd. In a permutation lock on the character set forth, the combination

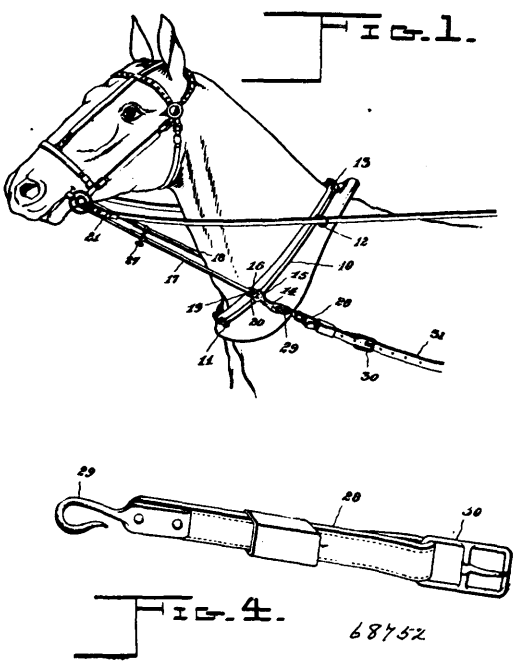


of a support, a sliding tumbler plate having a locking device movable therewith, a plurality of pins movably extending through the plate, a portion of said pins being used for solving the combination, a resetting plate in rear of the pins and the tumbler plate, and a repressible spindle for moving the said resetting plate and having a projection to engage the tumbler plate. 4th. In a permutation lock of the character set forth, the combination of a support, a sliding tumbler plate having a locking device movable therewith and provided with a series of slots, a plurality of pins movably extending through the plate and having grooves, the grooves of a part of the pins being in a different position from those of the others, a movable resetting plate at the back of the support against which the rear ends of the pins contact, and means for shifting the said tumbler plate when the latter is free to be so operated. 5th. In a permutation lock of the character set forth, the combination of a support, a tumbler plate carrying a locking device, said plate having a plurality of slots therethrough, a plurality of grooved pins movable in the slots of said plate, the grooves of some of the pins being in a different position relatively to those of the others, and a movable resetting plate engaging the rear ends of the pins and operated to restore the pins to normal position. 6th. In a permutation lock for the purpose set forth, the combination of a spring actuated tumbler plate with a plurality of slots therein having enlargements, a plurality of grooved pins movable through said plate, the grooves in a part of the pins being in a position different from that of the others, a movable resetting plate engaging the rear ends of the pins, and means for sliding said tumbler plate on the pins when the latter is free to be so operated. 7th. In a permutation lock, the combination of a slidable tumbler plate having a plurality of slots therein and a central opening, a latch arm slidable on the said plate and also shiftable with the latter, a plurality of grooved pins freely movable in the said plate, the grooves of a part of the pins being in a position different from that of the others, a rotatable repressible spindle extending through the plate and having a movable resetting plate connected to the rear thereof, and also provided with a projection to operate the tumbler plate, and means for returning the parts to normal position.

No. 68,752. Harness. (*Attelage.*)

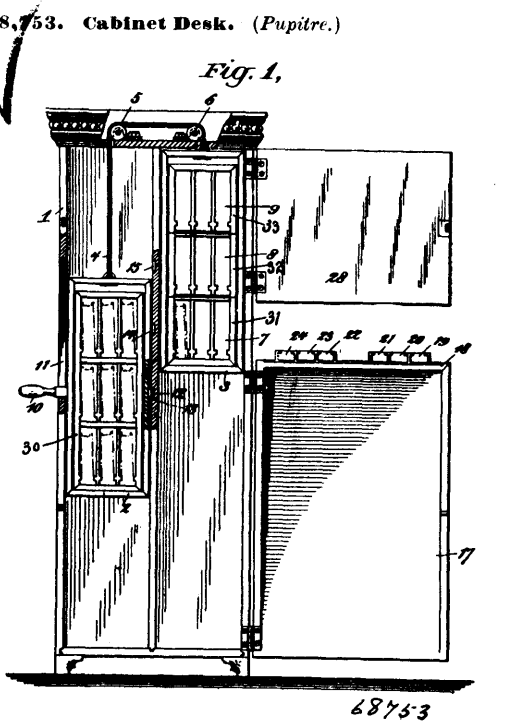
David Holford, Cranbrook, British Columbia, Canada, 17th September, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. In a device for upholding horses' heads, the combination with the hames, of the tubular members attached to said hames, an extensible member slidably fitted in said tubular members, and repressing springs housed within said tubular members and acting against the extensible member to normally project the latter beyond the ends of the tubular members, substantially as and for the purposes described. 2nd. In a device for upholding horses' heads, the combination with the hames, of ferrules fixed to said hames and provided with lugs, the tubular members pivoted in said lugs and adapted to be held by the same and the ferrule against lateral swaying and to be limited by the ferrules in one direction, the extensible member having the shanks slidably fitted in the tubular members and provided with the loops at its sides, the



representing springs housed in and seated at one end against the shanks of the extensible member, and clamps carried by the tubular members for engagement with the slidable member, substantially as described. 3rd. The combination with the hames having the trace irons and the traces, of the short trace lengths, each provided at one end with a hook at its other end with a buckle, whereby each trace length may be connected detachably to the trace irons and the trace may be adjustably and detachably fastened to the trace length, substantially as described.

No. 68,753. Cabinet Desk. (*Pupitre.*)

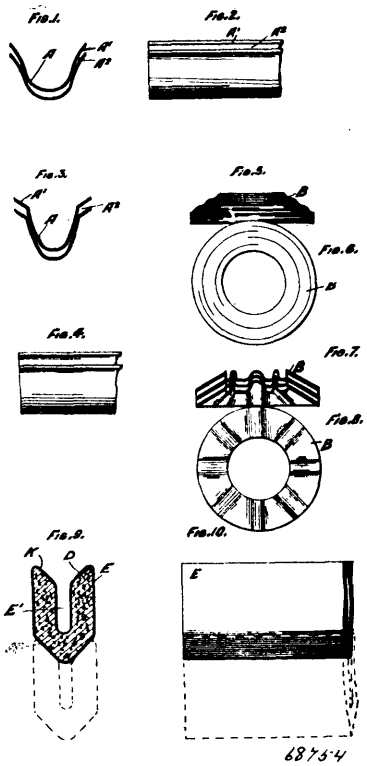


Robert James Copeland, Toronto, Ontario, Canada, 17th September, 1900; 6 years. (Filed 30th August, 1900.)

Claim.—1st. A cabinet desk comprising one or more movable cases adapted to hold one or more books, and a desk top adapted to

engage the books when withdrawn from the case, the arrangement being such that when a book is withdrawn from the case it must be made to engage the desk top whereby the unauthorized removal of a book from the desk is prevented. 2nd. A desk top having one or more ways in which a book may move back and forth, and having means constructed to engage such book to prevent it from being lifted from the desk top. 3rd. A cabinet desk comprising a desk top having one or more ways constructed to engage such book to prevent it from lifted from the desk top and a moving book case having a seres of book compartments, the desk top and book case may be moved so as to bring its compartments on a level with the desk top and in line with the ways therein, whereby the books of the different compartments may be removed from their compartments directly to a way of the desk top or the reverse. 4th. The combination of one or more book cases having book compartments, and a desk top adapted to engage a book when withdrawn from its compartment, a compartment and the desk top being arranged for changing their relative positions so that when it is desired to withdraw a book from its compartment the compartment and desk top may be brought into proper position and the book be withdrawn into engagement with the desk top and so that the removal of a book from its compartment is at other times prevented. 5th. In a cabinet desk, the combination of two vertically moving book cases suspended on opposite ends of a cord and each having a series of book compartments, with a desk top adapted to engage the books when withdraw from their compartments, the arrangement being such that when a book is withdrawn from the case it must be made to engage the desk top whereby the unauthorized removal of a book from the desk is prevented.

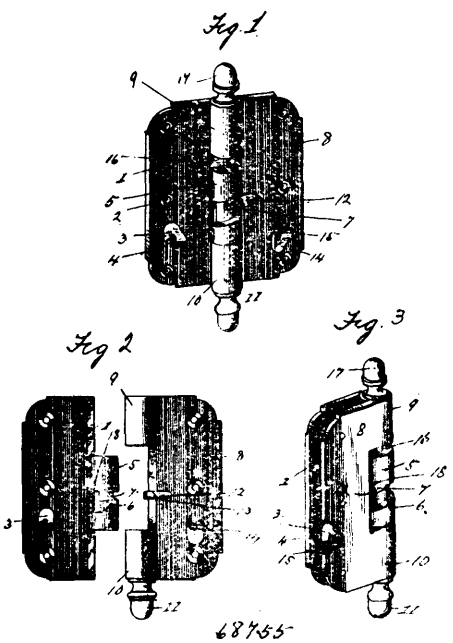
No. 68,754. Gland Packing. (*Garniture.*)



James Walker, Poplar, London E., England, 17th September, 1900; 6 years. (Filed 16th May, 1900.)

Claim.—1st. Packing consisting of a number of layers, each layer being of substantially cup-shape in cross section, and forming an annular pressure space, said layers being superposed one above the other, the bottom of one resting in the annular space of the other, the circumferential edges of each of the layers making contact with the rod and gland respectively, for the purpose and substantially as described. 2nd. Packing consisting of a number of layers, each layer being of substantially cup-shape in cross section, and being constituted of metal shavings encased in a wire cover, each layer also forming an annular pressure space, said layers being superposed one above the other, the bottom of one resting in the annular space of the other, the circumferential edges of each of the layers making contact with the rod and gland respectively, for the purposes and substantially as described. 3rd. Packing consisting of a number of layers, each layer being of substantially cup-shape in cross section, the bottom of each layer being of angular form, and each layer forming an annular pressure space, said layers being superposed one above the other, the bottom of one resting in the annular space of the other, the circumferential edges of each of the layers making contact with the rod and gland respectively, for the purposes and substantially as described.

No. 68,755. Hinge. (*Gond.*)



Henry Meyer, Atlanta, Georgia, U.S.A., 18th September, 1900; 6 years. (Filed 5th September, 1900.)

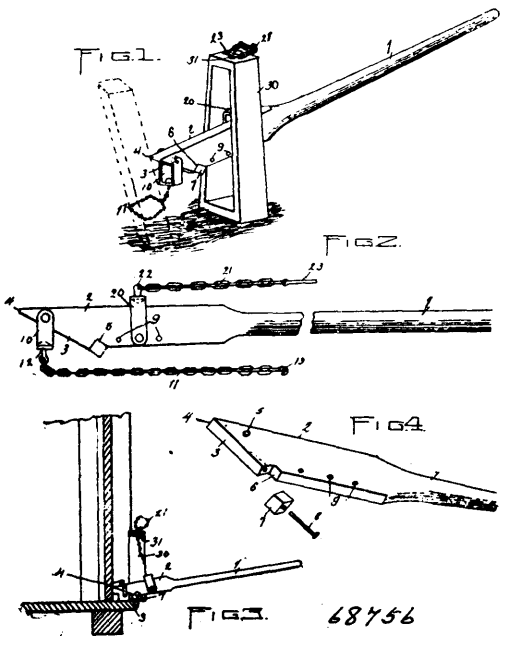
Claim.—1st. A hinge comprising two members and a pintle, one of the members having a pintle lug at each end and a lug in the centre, the end of the central lug being curved, and the other member being provided with a pintle lug at the centre, said pintle lug being of less length than the distance between the pintle lugs of the other member, and being provided intermediate its ends with a cam groove, the upper edge of which is provided with an inclined depending lug in position to engage with the curved end of the central lug on the other member and move two members longitudinally of each other, the outer edges of the members being provided with hooked lugs in position to engage with each other and lock the members together.

No. 68,756. Post Extractor. (*Arrache poteau.*)

William L. Hull, Alpha, Minnesota, U.S.A., 18th September, 1900; 6 years. (Filed 5th September, 1900.)

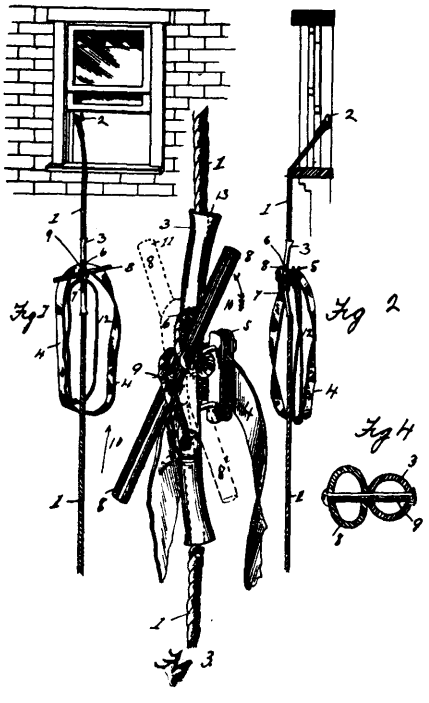
Claim.—1st. The combination with an open support having a hole in its top bar, of a bar passing through the support for carrying the load at one end and having a handle at the other, a clevis pivoted to the bar, a chain swivelled to this clevis and leading loosely through this hole in the support, and a pin at the remote end of the chain passing through a link thereof just above the support, substantially as described. 2nd. The combination with the support, a chain pendant therefrom, a clevis connected with the chain, and a bar to which the clevis is pivotally attached, of a second clevis pivoted to the bar near the first, a chain swivelled to this clevis, and a hook at the other end of the chain, as and for the purpose set forth. 3rd. The combination with a bar provided with the usual fulcrum point and nose, and having a series of holes passing through it near that edge which has the fulcrum and a single hole near its other edge

and adjacent its nose, of two clevises passed astride the bar from different edges, one pivoted in one of said series, the other in the



single hole, and independent chains leading from the bends of said clevises, one to the load and the other to an overhead support, as and for the purpose set forth.

No. 68,757. Fire Escape. (*Appareil de sauvetage d'incendie.*)



John H. Clinton, Ball...dvale, Massachusetts, U.S.A., 18th September, 1900; 6 years. (Filed 5th September, 1900.)

Claim.—In a fire escape, the combination with a rope, of a slide mounted thereof provided with holes, a lever pivoted to the slide between the holes, the rope passing out one hole over the lever, around the slide, back over the lever, and into the other hole, substantially as described.

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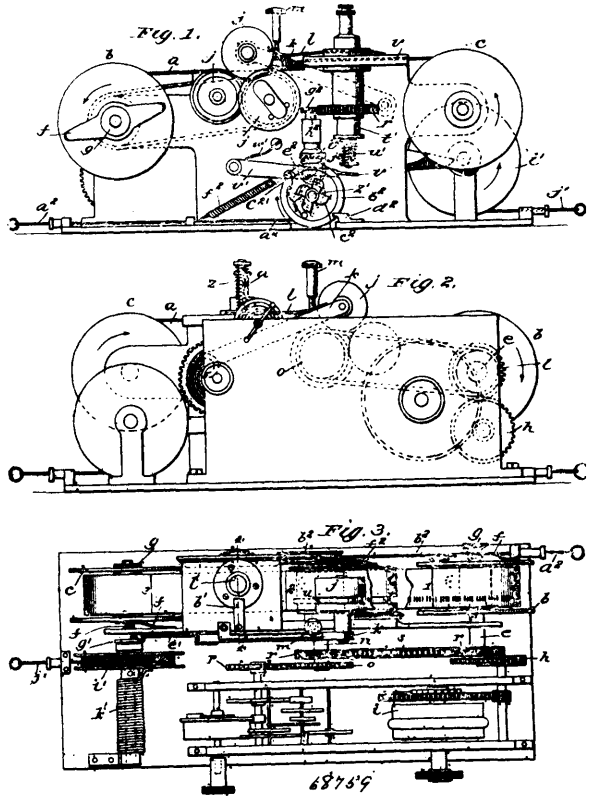
No. 68,758. Battery Compound.
(*Composition pour pile électrique.*)

Henry Blumbenberg, jr., Wakefield, New York, U.S.A., 18th September, 1900; 6 years. (Filed 30th June, 1900.)

Claim.—1st. A battery compound, composed of a chloride of the metals of the alkalies or alkali earth metals, a sulphate of aluminum and a chlorate of the metals of the alkalies or alkali earth metals, substantially as set forth. 2nd. A battery compound composed of chloride of sodium, sulphate of aluminum and chlorate of sodium, substantially as specified. 3rd. A battery solution, consisting of water twenty to twenty-four ounces, sodium chloride two and one-half ounces, sulphate of aluminum two ounces, and sodium chlorate one ounce, substantially as specified.

No. 68,759. Railway Chronograph. (*Registre horaire.*)



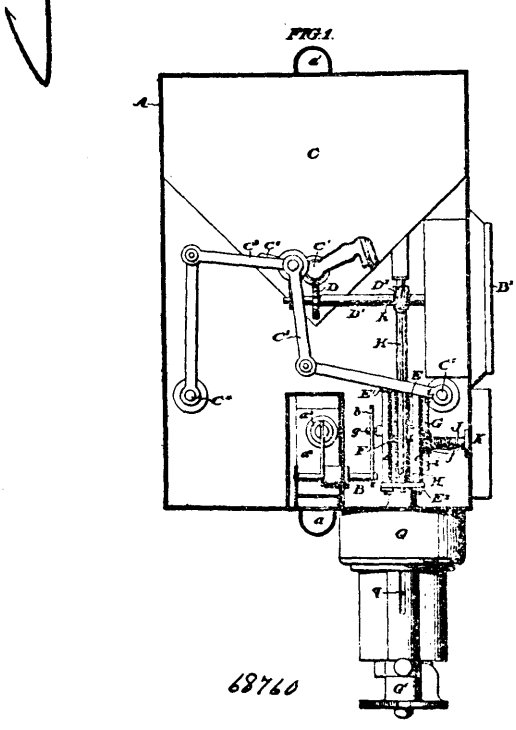
Hiram G. Sedwick, New York City, New York, U.S.A., 18th September, 1900; 6 years. (Filed 21st April, 1900.)

Claim.—1st. In a time recording apparatus, the combination of a series of feed rolls adapted to grasp a record tape, one of said rolls being provided with a series of puncturing teeth adapted to automatically record upon the tape a continuous series of time divisions, clock mechanism operating and controlling said feed rolls, other recording devices adapted to be operated manually and at the will of the operator and independently of the clock mechanism, these latter recording devices consisting of two recording points and means for operating them simultaneously, and means whereby one of said points will record the time and the other the number of times the manually operated recording device are operated. 2nd. In a time recording apparatus, the combination of mechanism for feeding a record tape, means for continuously marking time divisions upon said tape, clock mechanism for feeding said tape, a recording punch adapted to be brought into operation at intervals, said punch having two puncturing points, and means whereby one of the points will punch the time and the other the number of times the punch is operated, as and for the purposes set forth. 3rd. In a time recording device, the combination of means controlled by clock mechanism for moving a record sheet, a puncturing device consisting of two puncturing points, and means for forcing said puncturing points into the record sheet and rotating them at each operation, whereby the time the puncturing device is operated and the number of times will be recorded. 4th. The combination of mechanism controlled by clock-works for moving a record sheet, means for recording upon the tape a continuous series of time divisions, said means being also controlled by the clock works, and a punching device consisting of a rotary part carrying a central punch and a non central punch, and means for rotating said part and forcing the punches into the sheet. 5th. The combination of a record tape, means for supporting the same, means for feeding the tape, means for continuously recording

the time divisions upon the tape, clock mechanism for operating the feed devices and continuously recording devices, and additional recording devices adapted to be brought into action at intervals, as and for the purposes set forth. 6th. The combination of feed rolls adapted to feed a record tape and clock works for controlling the same, a punching device consisting essentially of a die supported upon one side of the tape and a rotary reciprocating punch carrying rod upon the other side of the tape, and means for operating said rod, said punch carrying rod being provided with means for punching the paper at a new place at each reciprocation, as and for the purposes set forth.

No. 68,760. Prepayment Mechanism.

(*Balance actionnée par une pièce de monnaie.*)



John Gribbel, Wyncote, Pennsylvania, U.S.A., 18th September, 1900; 6 years. (Filed 31st May, 1900.)

Claim.—1st. In a coin controlled sale and delivery apparatus for fluids, devices adapted to enable the withdrawal of the fluid in predetermined quantity, a valve controlling the flow of the fluid, valve closing mechanism automatically operated by the passage of the fluid, including a pinion bar and a gear in mesh with said pinion bar and adapted to rotate in unison with it and to travel along it, said bar being provided with a reduced area which is reached by the gear in its travel if the valve closing movement is ineffective, substantially as set forth. 2nd. In a coin controlled sale and delivery apparatus for fluids, devices adapted to enable the withdrawal of the fluid in pre-arranged quantity, mechanism automatically operated by the passage of the fluid to close the apparatus against the exit of more than the pre-arranged quantity, including two members, which when the fluid continues to flow after the closing movement of the parts become automatically disengaged, substantially as set forth. 3rd. In a coin controlled sale and delivery mechanism for fluid, in combination, a screw shaft, a follower gear mounted on said shaft, a guide mounted in parallelism with said shaft, a follower yoke structurally independent of the gear but mounted as a saddle on said gear, and also structurally independent of the guiding device, but guided by said guiding device, a pinion bar in mesh with said follower gear, mechanism connective of said pinion bar and a moving part of the sale and delivery mechanism, a valve controlling arm and a connection between said follower yoke and said arm, substantially as set forth. 4th. In a coin controlled sale and delivery mechanism for fluids, in combination, a screw shaft, a follower gear mounted on said shaft and having a circumferential recess, a pair of guide bars mounted in parallelism with said shaft, a follower yoke, the body of which rests in the recess of the said follower gear, and the extremities of which extend beneath the respective guide bars, an elongated pinion bar in mesh with said follower gear, mechanism connective of said pinion bar and a moving part of the meter, a valve controlling arm and a connection between said follower yoke and said arm, substantially as set forth. 5th. In a controlled sale and delivery mechanism for fluids, in combination, a screw shaft, a follower gear mounted on said shaft and having a hub embodying a circumferential recess, a pair of guide bars mounted in parallelism with said shaft, a follower yoke carried in the recess of the hub of the follower gear, mechanism connective of said pinion bar and a moving part of the meter, a slotted valve controlling arm, and a finger carried by the follower yoke engaged in the slot of said arm, substantially as set forth. 6th. In a coin controlled sale and delivery mechanism for fluids, in combination, a screw shaft, a follower gear mounted on said shaft, and having a laterally extending hub, guide bars mounted in parallelism with said shaft, a follower yoke structurally independent of the follower gear but mounted as a saddle on the hub of said gear, said yoke and hub being held in operative relation by means of a transversely extending groove or recess formed in one into which recess the other projects, said follower yoke being also structurally independent of the guide bars but extending transversely past them, a pinion bar in mesh with said follower gear, mechanism connective of said pinion bar and a moving part of the sale and delivery mechanism, a valve controlling arm, and a connection between said follower yoke and said arm, substantially as set forth. 7th. In a coin controlled sale and delivery mechanism for fluids, in combination, a meter, a valve and valve controlling devices, including a screw shaft, a following gear and yoke mounted upon and adapted to have longitudinal movement with relation to said screw shaft, means for manually occasioning the movement of said follower gear and yoke in one direction along said shaft, mechanism connective of a moving part of the meter and said follower gear and yoke to occasion their movement in the opposite direction, one of the parts or members of the apparatus in gear or mesh with another, being so arranged as to pass out of engagement with the teeth of the member with which it is in mesh when the follower and gear reach a point near the exhaust end of the shaft, substantially as set forth. 8th. In a coin controlled sale and delivery mechanism for fluids, in combination, a screw shaft, a follower gear, a follower yoke, and a pinion bar in mesh with said gear and having at one end teeth of dimished height, substantially as set forth. 9th. In a coin controlled sale and delivery mechanism for fluids, in combination, supporting plates, a screw shaft, a follower gear, a follower yoke, a pinion bar having a reduced end of tapered outlme, means for rotating the pinion bar, and means for rotating the screw shaft, substantially as set forth. 10th. In a coin controlled sale and delivery mechanism for fluids, in combination, a screw shaft, a follower gear, a follower yoke, a pinion bar having a reduced end of tapered outline, the teeth of which at their reduced ends have inclined faces, means for rotating the pinion bar, and means for rotating the screw shaft, substantially as set forth. 11th. In a coin controlled sale and delivery mechanism for fluids, in combination, a screw shaft, a follower gear, a follower yoke, a pinion bar having teeth of diminished height at one end, a buffer spring arranged in adjacency to the diminished portions of the teeth of the pinion bar and adapted to bear against the follower gear, substantially as set forth. 12th. In combination, the meter having an inlet controlled by a valve, a valve arm connected to said valve, a pinion bar rotated by the operation of the ordinary moving parts of the meter and having an end or portion of reduced diameter, a screw shaft, a follower gear on said shaft and normally engaged with said pinion bar, a follower yoke engaged with the valve arm, and means for manually rotating said screw shaft, substantially as set forth. 13th. In combination, the meter having an inlet controlled by a valve, a valve arm connected to said valve, a pinion bar rotated by the operation of the ordinary moving parts of the meter and having an end or portion of reduced diameter, a screw shaft, a follower gear on said shaft and normally engaged with said pinion bar, a follower yoke engaged with the valve arm, and a buffer spring in the vicinity of the reduced diameter of the pinion bar, substantially as set forth. 14th. In a prepayment sale and delivery apparatus, in combination with the screw shaft, follower gear and follower yoke, the pinion bar having a reduced portion, and the buffer spring, substantially as set forth.

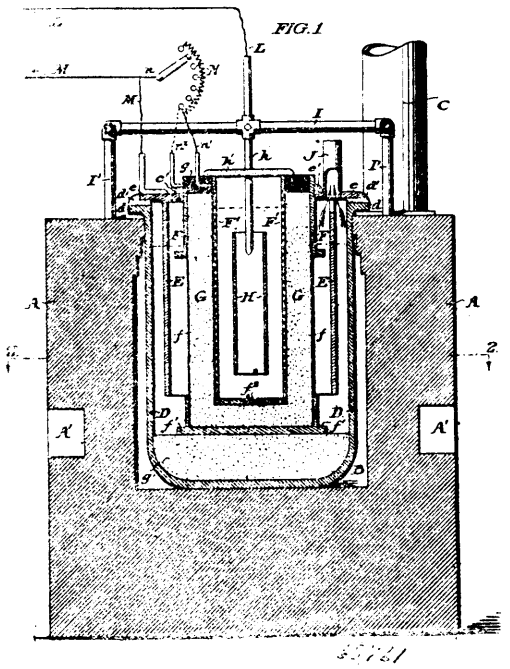
No. 68,761. Electrolytic Apparatus.

(*Appareil électrolitique.*)

Harrison Bros. & Co., assignee of James Douglas Darling, all of Philadelphia, Pennsylvania, U.S.A., 18th September, 1900; 6 years. (Filed 25th April, 1900.)

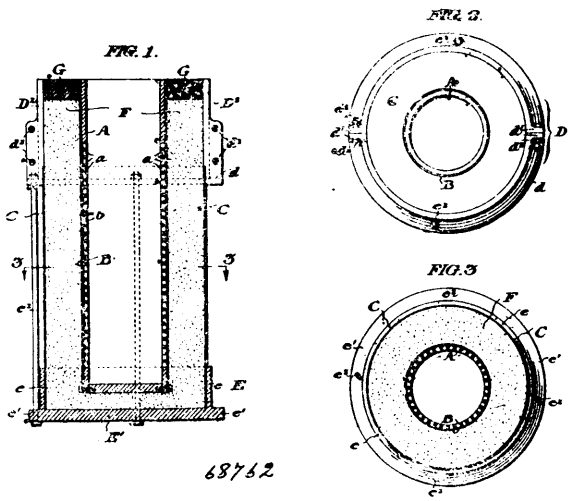
Claim.—1st. In an electrolytic apparatus, the combination with the anode and cathode, of an intervening porous diaphragm having a metallic wall, said wall being electrolytically connected with the positive pole of the source of electricity, substantially as described. 2nd. In an electrolytic apparatus, the combination of a furnace wall with an exterior vessel mounted in said wall, a downwardly depending annular anode having an overhanging flange and supported thereby upon the top of said vessel, a porous diaphragm composing inner and outer metallic walls with an intermediate filling of porous

material, the outer wall being indirectly supported by the flange of the anode, an intervening packing of insulating material between



said flanges and said wall, a cathode arranged within said porous cup, and an escape pipe leading from an opening in the flange of the anode, substantially as and for the purposes described.

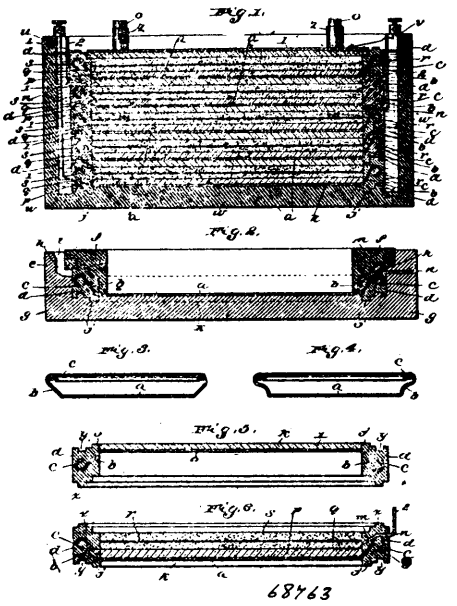
No. 68,762. Porous Diaphragms for Cells Employing Fused Electrolytes. (*Batterie électrique.*)



Harrison Bros. & Co., James Douglas Darling, all of Philadelphia, Pennsylvania, U.S.A., 18th September, 1900; 6 years. (Filed 25th April, 1900.)

Claim.—1st. The combination of a vessel adapted to withstand the action of a molten electrolyte, means for maintaining the electrolyte in a molten condition, electrodes, and a diaphragm, consisting of Portland cement and powdered oxide, substantially resistant to combination or fluxing by the fused electrolyte interposed between the electrodes, substantially as described. 2nd. The combination of a vessel adapted to withstand the action of a molten electrolyte, means for maintaining the electrolyte in a molten condition, electrodes, and a diaphragm, consisting of Portland cement and ground burned magnesite interposed between the electrodes, substantially as described. 3rd. The combination of an enclosed shell, consisting of an inner peforated tube, a cylindrical covering of wire gauze having smaller perforations, an exterior perforated shell, a porous filling arranged between said shells, and removable top and bottom pieces provided with projecting flanges and with bolts engaging said flanges, substantially as set forth.

No. 68,763. Electric Storage Battery. (*Accumulateur électrique.*)

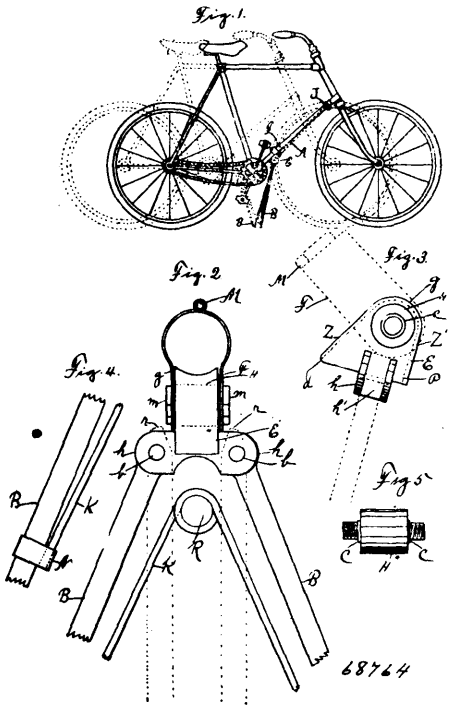


S. Lloyd Wiegand, Philadelphia, Pennsylvania, U.S.A., 18th September, 1900; 6 years. (Filed 5th June, 1900.)

Claim.—1st. In a storage battery, metallic flat bottomed pans or like receptacles for holding active material, or material adapted to become active, each of said pans having an annular rim integrally formed therewith of hook-shaped cross section and non-conducting rings cast or formed in and on said rims to envelope the same, as set forth. 2nd. In a secondary or storage battery, flat bottomed metallic pans or receptacles adapted in horizontal position to retain strata of active material, having upwardly projecting sides and a hooked-shaped rim on said sides adapted to retain non-conducting material, and a downwardly projecting rim enclosing the edges of a cavity on the under side of said pans adapted to receive active material, said sides, rims and pan bottoms being integrally formed, as set forth. 3rd. In a secondary or storage battery, a series of flat bottomed pans, each having sides formed integrally therewith, rings of insulating material formed thereon enclosing cavities, each charged with strata of active material with an interposed stratum of absorbent material, in combination with an enclosed case, tubes leading from each cavity to the top of said case, and an envelope of non-conducting material surrounding said pans and rims enclosed in said case, as set forth. 4th. A secondary or storage battery, consisting of a case, flat bottomed pans with rims integrally formed therewith having fusible insulating rings formed therein, adapted to fit upon each other and having cavities containing strata of active material and intermediate absorbent strata, vents connected with said cavities, tubes leading from each cavity to the top of the battery case, and an envelope of non-conducting material in said case more fusible than the insulating rings and surrounding said pans and rings, in combination with means of pressing said pans, rings and enclosed strata upon each other, as set forth. 5th. A secondary battery, consisting of a series of superposed flat bottomed pans, having each an annular rim of hook-shaped cross section adapted to laterally confine active material or material adapted to become active, and an electrolytic liquid, in combination with insulating coverings in and on the hooked rim of said pans, layers of active material in said pans, separated by one or more layers of absorbent material charged with a liquid electrolyte and terminal conductors connected with the top and bottom pans of the series, as set forth. 6th. In a secondary battery, a series of horizontal imperforated flat bottomed pans, having rims formed integrally therewith, one side of said bottom being of positive and the other of negative polarity, a cement ring surrounding a stratum of active material upon each side of the pans, and a stratum of absorbent material charged with an electrolytic liquid between the strata of active material in adjacent pans, said pans being arranged to form conductors between the said strata of active material when piled upon each other, as set forth. 7th. The combination in a storage battery, of a pan having a flat imperforated bottom forming a conducting plate, and an annular rim hook shaped in cross section formed integrally with the pan bottom, and a ring of fusible non conducting material cast or moulded around said hooked rim, substantially as set forth. 8th. An improved conducting plate for tension storage batteries, consisting of an integrally formed flat bottomed metallic pan, having upwardly and outwardly inclined sides, said sides terminating in an

annular rim of hook-shaped cross-section and enclosing a rim of greater diameter than the space between the edge of the rim and the side of the pan and retaining a ring of non-conducting material in the grove, and the flat bottom of the pan, adapted to support horizontal strata of active material and an absorbent material charged with electrolytic liquid as set forth.

No. 68,764. Bicycle Support. *(Support de bicycle.)*



James Polk Taylor, Fort Worth, Texas, U.S.A., 18th September, 1900; 6 years. (Filed 20th June, 1900.)

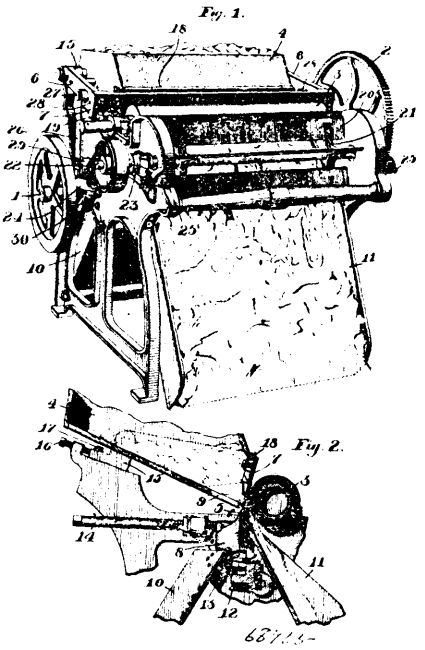
Claim.—1st. A bicycle support, consisting of a hinged clip mounted on the lower front tube of a bicycle, a rock shaft supported by said clip, a triangular block mounted on said rock shaft having one corner round and a groove on the upper and front sides extending over said round corner adapted to conform to the contour of said tube, two legs pivotally attached to said block and having a limited lateral swing, and a spring for automatically spreading said legs, said block being adapted to limit both the lateral and the backward swing of said legs whereby backward and forward motion of the bicycle is prevented and the bicycle is braced on each side. 2nd. A bicycle support, consisting of a triangular block having ears on each side of and integral therewith and slots therein, a pair of legs pivoted in said slots and having upward extensions adapted to rest against the back walls of said slots to limit the outward swing of said legs, a spring attached to said legs for automatically spreading the same, a rock shaft mounted in said block, and a hinged clip for mounting said support on the bicycle frame, said shaft having shoulders to prevent said clip from binding said block, said block having a round corner and having the sides adjacent to said corner curved and adapted to conform to the contour of the tubular frame piece of the bicycle, the rear side of said block limiting the backward swing of said legs.

No. 68,765. Machine for Burring Wool.

(Machine pour laver la laine.)

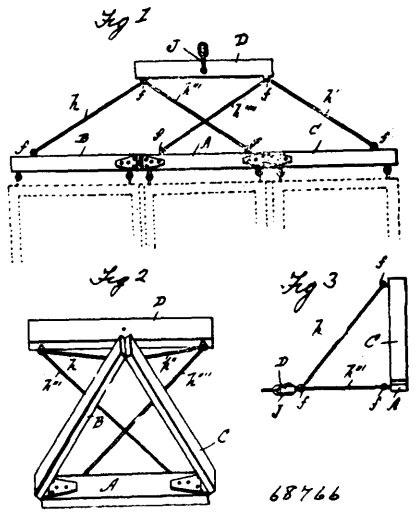
Grabel Epluribus Unum Huckaby, Malden, Massachusetts, U.S.A., 18th September, 1900; 6 years. (Filed 26th September, 1899.)

Claim.—1st. A machine for burring and cleaning wool and similarly treating other textile fibers embodying in its construction the roll, the stationary blade and its supporting bar, and the reciprocating blade being constructed to move in the arc of a circle, and the inner face of the stationary blade and its supporting bar having a form conforming to the path of movement of the efficient edge of the reciprocating blade, substantially as and for the purpose hereinbefore set forth and explained. 2nd. A machine for burring and cleaning wool and similarly treating other textile fibers embodying in its construction the roll, the stationary blade and its supporting bar, and the reciprocating blade and hopper, the latter blade being constructed to move in the arc of a circle, and the inner face of th stationary blade and its supporting bar having a form conforming to the path of movement of the efficient edge of the reciprocating



blade, combined with means for adjusting the several elements or parts relatively to each other, substantially as and for the purpose hereinbefore set forth and explained.

No. 68,766. Draw Bar for Harrows. *(Herses.)*



Robert Delmont Taylor, Strand, Iowa, U.S.A., 18th September 1900; 6 years. (Filed 5th September, 1900.)

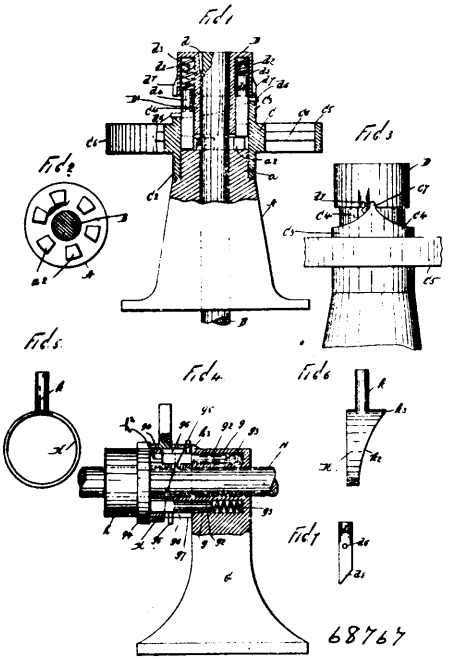
Claim.—1st. A folding draw bar for harrows comprising three straight bars hinged together to extend in a straight line and a fourth straight bar, corresponding in length with the other bars, flexibly connected with the three distinct hinged bars by means of four rods in the manner set forth for the purposes stated. 2nd. A jointed draw bar for harrow comprising three straight bars A, B and C, hinged together and a corresponding bar D, flexibly connected with said three bars by four rods h, h^{11}, h^{111}, and h^{1111}, and eyebolts f, fixed to the bars and arranged and combined as shown and described to operate in the manner set forth for the purposes stated.

No. 68,767. Lock. *(Serrure.)*

Andrew Scoble Brown, Brooklyn, New York, U.S.A., 18th September, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. In a device of the class described, a support, a shaft passing therethrough and provided with a head, said support and

said head being provided one with a plurality of spring operated locking bolts, and the other with lugs or projections in connection



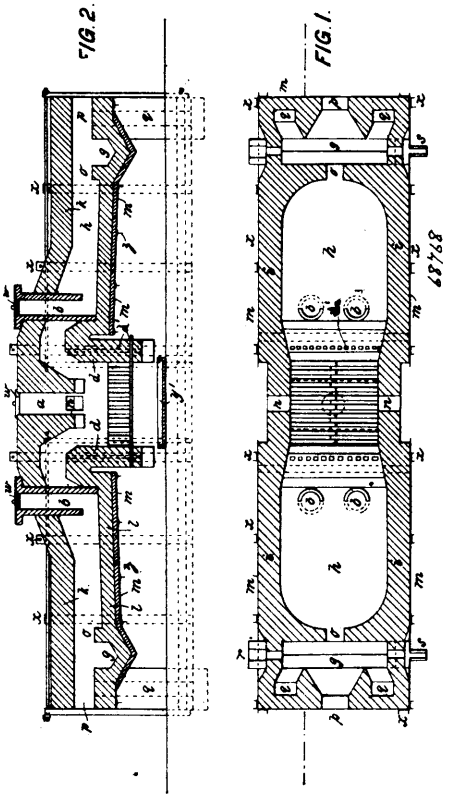
with which said bolts operate, and a cam ring adapted to turn on said support and to move said bolts against the tension of the springs by which they are operated, substantially as shown and described. 2nd. In a device of the class, a support, a shaft passing therethrough and provided with a cylindrical head, said support and said head being provided one with lugs or projections, and the other with spring operated bolts which operate in connection with said lugs or projections, the ends of said bolts which operate in connection with said lugs or projections being bevelled on opposite sides, and means for moving said bolts against the tension of the springs by which they are operated, substantially as shown and described. 3rd. In a device of the class described, a support, a shaft passing therethrough and provided with a cylindrical head, said support and said head being provided one with lugs or projections, and the other with spring operated bolts which operate in connection with said lugs or projections, the ends of said bolts which operate in connection with said lugs or projections being bevelled on opposite sides, and means for moving said bolts against the tension of the springs by which they are operated, consisting of a cam ring mounted on said support and adapted to turn thereon, substantially as shown and described.

No. 68,768. Method of Reducing Ores.

(Methode pour fondre les minérais.)

John Armstrong, Eden Hall, Montpelier Road, Ealing, Middlesex, England, 20th September, 1900; 6 years. (Filed 21st November, 1899.)

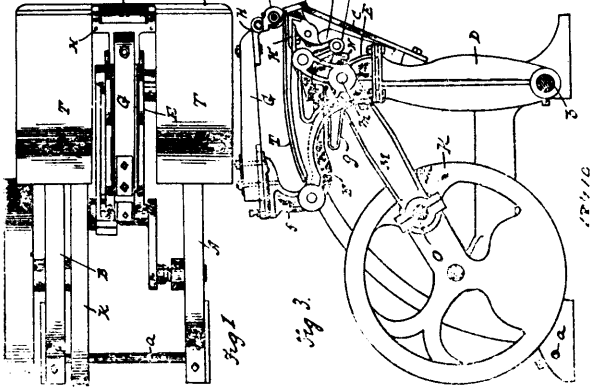
Claim.—1st. In a reverberatory furnace the combination of a grate capable of holding a considerable thickness of fuel, a bridge, a well guarded entrance beyond the bridge for the admission of small fuel with the smallest practical quantity of air, a working hearth, a sump beyond the working hearth, draught flues beyond the sump and the working door between and beyond the draught flues whereby the air is prevented from entering either at the sump or working hole in deleterious quantities as any air seeking to enter escapes through the draught flues, instead of entering the furnace in a direction contrary to the draught, substantially as described. 2nd. In a reverberatory furnace working with a reducing flame, a grate having fire bars supported alternately at each side and supported on and sloping downwards to a central longitudinal bar or support, whereby the end of each individual bar can be shaken, or the entire set dropped, substantially as described. 3rd. In a reverberatory furnace a grate having sloping fire bars supported at their lower ends by two longitudinal bars and a series of removable horizontal transverse bars also supported by said longitudinal bars substantially as described. 4th. The combination with a reverberatory furnace of a furnace grate between deep sides capable of holding a large amount of fuel, a charging hopper to said furnace from dipping down towards the grate below the level of the top of the sides of said grate and to the normal level of the fuel surface on the grate and of such depth and provided with a lid, that little or no air can pass down it when charged with fuel. 5th. In combination with a reducing flame, a grate charged from above, a deep and closed charging hopper, a bridge rising above the level of the bottom of the charging hopper, and a tube beyond the bridge



admitting fine fuel, whereby very little oxygen can pass from the grate to the bed of the furnace, and what does pass is at once taken up by the fine fuel. 6th. In a reverberatory furnace the deep hopper tubes B having opening at bottom close to the hearth, and a lid closing the top, substantially as and for the purposes described. 7th. In a reverberatory furnace the combination of the hearth H, the bridge I with opening O and the sump G beyond, substantially as described. 8th. In a reverberatory furnace the combination of the grate E, bridge D, hearth H, bridge I, sump beyond that, G, draught openings Q, and beyond that and in line with the centre line of the hearth the working hole P, substantially as described.

No. 68,769. Leather Staking Machine.

(Machine pour traiter le cuire.)

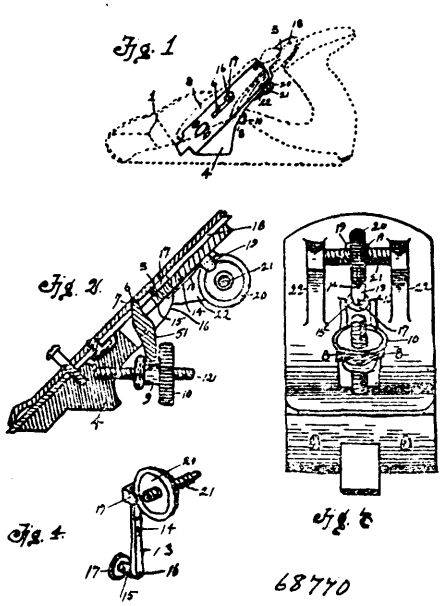


Charles F. Stackpole, Lynn, Massachusetts, U.S.A., 20th September, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—1st. In a staking machine, a jacket jaw composed of a cylinder of stiff elastic sheet material and an elastic roll as a backing, in combination with a scraping jaw and means for operating said jaws, substantially as described. 2nd. In a stacking machine, a jacket jaw composed of a cylinder of stiff elastic sheet material and a pneumatic roll as a backing, in combination with a scraping

jaw and means for operating said jaws, substantially as described. 3rd. In a staking machine, levers carrying staking jaws, mechanism for actuating the jaw carrying levers and a rocking support which serves as a carriage for the jaw carrying levers and the actuating mechanism, all combined substantially as described. 4th. In a staking machine, the combination of a cam, a lever actuated by the cam in one direction, a second lever actuated by the first, and a spring actuating the second, and through the second actuating the first in a direction opposed to that given to the first by the cam, all substantially as described.

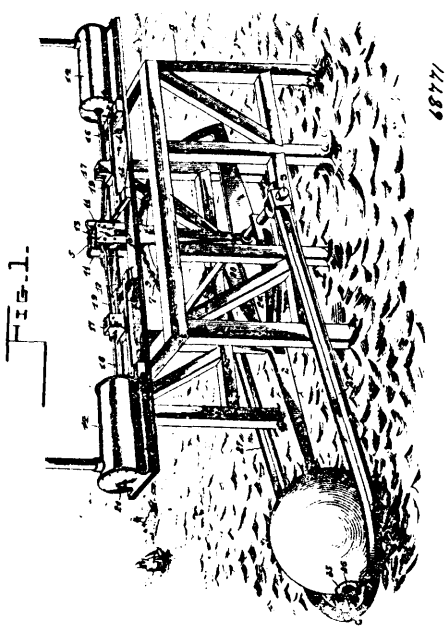
No. 68,770. Hand Plane. *(Rabot.)*



Philo F. Dresser, Glenwood, Iowa, U.S.A., 20th September, 1900; 6 years. (Filed 3rd April, 1900.)

Claim.—In a hand or bench plane having a laterally adjustable plane iron, the bed piece 4 fixed to the stock and the transverse screw 21 rigidly fixed thereto, the milled nut irremovably traversing said screw, the lever 13 fulcrumed on said bed piece, with its upper end encompassing the contiguous edge of the milled nut, and the friction roller 17 journalled on the lower end of said lever to engage the slotted plane iron, substantially as and for the purpose set forth.

No. 68,771. Wave Motor. *(Moteur hydraulique.)*



Henry C. Essington, Philadelphia, Pennsylvania, U.S.A., 20th September, 1900; 6 years. (Filed 21st April, 1900.)

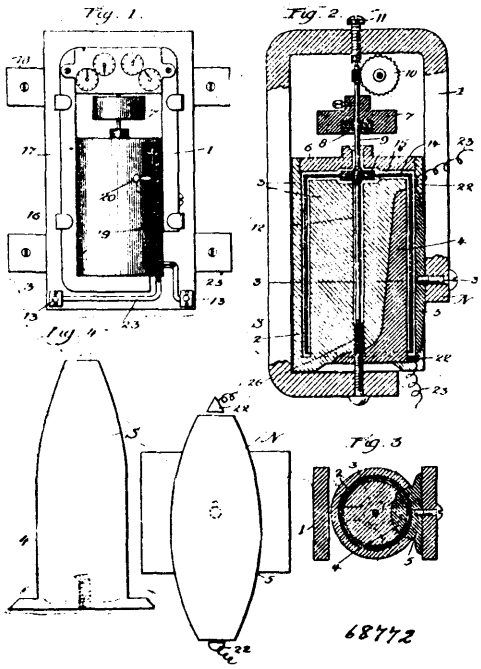
Claim.—1st. A wave motor consisting of driving and driven elements, respectively having variable and fixed paths of movement, connections including a clutch, between said elements, trip mechanism for disengaging the clutch to release the driving element, at the limits of movement of the driven element, and cushioning devices for the driven element, consisting of opposite cylinders and operating pistons connected with the driven element, substantially as specified. 2nd. A wave motor consisting of oscillatory driving and driven elements, respectively having variable and fixed paths of movement, and provided with interlocking clutch faces of which one is constructed to form a plurality of engaging points in a series concentric with the axis of its movement, and means for disengaging said interlocked faces at the limits of movement of the driven element, substantially as specified. 3rd. A wave motor consisting of driving and driven elements, respectively having variable and fixed paths of movement, connections between said elements, consisting of an oscillatory segment carried by one of the elements, and a detent or pawl carried by the other element, to engage one of the seats in said segment, and trip mechanism to disengage the detent from its seat when the driven element reaches the limits of its path of movement, substantially as specified. 4th. A wave motor consisting of a driving element having an oscillatory float carrying arm, and capable of a variable path of movement, and a driven element having a terminally fixed path of movement, a segment actuated by said float carrying arm and provided with spaced seats, a yielding detent carried by the driven element for engagement with one of said seats, and trip mechanism for disengaging the detent from its seat at the limits of the path of movement of the driven element, substantially as specified. 5th. In a wave motor, the combination with a driven element, of a movable driving element consisting of an arm and a spherical float having a diametrical bearing sleeve revolubly mounted upon said arm, and connections between said driving and driven elements, substantially as specified. 6th. In a wave motor, the combination with a driven element, of a movable driving element consisting of an arm having spaced bearing collars, and a superficially rounded float having bearings for the reception of said collars, and connections between said driving and driven elements, substantially as specified. 7th. In a wave motor, the combination with a driven element, of a driving element having a movable arm, relatively adjustable collars carried by said arm, and a spherical float having an axial sleeve mounted upon said collars for revoluble movement, and connections between the driving and driven elements, substantially as specified. 8th. In a wave motor, the combination with a driven element, of a driving element having a movable arm, relatively adjustable collars carried by said arm, and a spherical float having an axial bore terminally counterbore to form seats to receive said collars, and connections between the driving and driven elements, substantially as specified. 9th. A wave motor consisting of a driving element having an oscillatory float carrying arm, a driven element having a limited path of movement and provided with an arm mounted co-axially with the float carrying arm, a clutch connection between the float carrying arm and the driven element, and trip mechanism for disengaging the clutch to release the float carrying arm at the limits of movement of the driven element, substantially as specified. 10th. A wave motor consisting of a driving element having a float carrying arm, a driven element having an arm mounted co-axially with the float carrying arm, a segment carried by the float carrying arm and provided with peripheral seats, a yielding pawl carried by the driven element for engagement with one of said seats, and trip mechanism for disengaging said pawl, to release the float carrying arm, at the limits of movement of the driven element, substantially as specified. 11th. A wave motor consisting of a driving element having an oscillatory float carrying arm, a swinging yoke connected with the free end of said arm and mounted co-axially therewith, a driven element having a limited path of movement, a clutch connection between the float carrying arm and said driven element, and trip mechanism for disengaging the clutch to release the float carrying arm, substantially as specified. 12th. A wave motor consisting of a driving element having an oscillatory float carrying arm provided with a toothed segment, a spindle, mounted in suitable bearings, and lateral braces connecting the body portion of said arm with the spindle, a yoke terminally connected to said spindle and centrally connected to the extremity of the float carrying arm, a driving element having a limited path of movement and provided with an oscillatory arm mounted upon said spindle, a pawl carried by said driven element for engaging the toothed segment, and a trip mechanism for disengaging the pawl from the segment at the limits of movement of the driven element, substantially as specified.

No. 68,772. Electric Meter. *(Mètre électrique.)*

Edward S. Halsey, Chicago, Illinois, U.S.A., 20th September, 1900; 6 years. (Filed 1st June, 1900.)

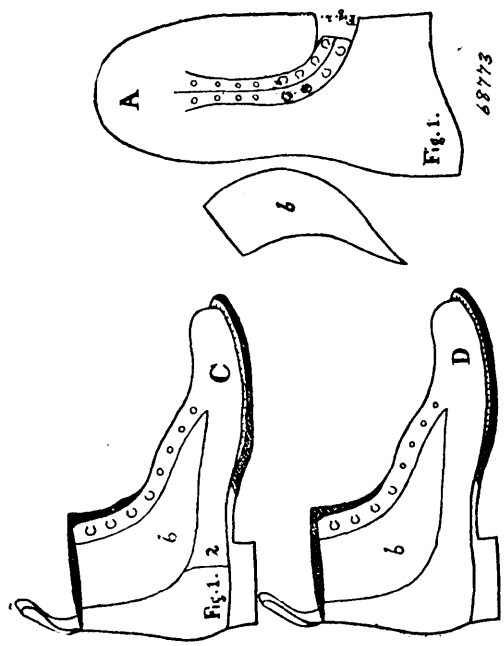
Claim.—1st. In a mercurial electric current meter, a body of non-magnetic material containing the mercury and armature and having moulded or formed into its walls pole pieces N and S in combination with a constant, concentrated and powerful magnetic field so proportioned and applied as to determine to the armature a speed of rotation practically in direct proportion to the current passing at various loads, in spite of deterring influences of the mercury and unavoidable friction, regardless of any compensating device or influence, substantially shown and specified. 2nd. The combination

in a mercurial electric current meter, a mercury chamber being a narrow slot in a body made of non-magnetic material, in greater



part, magnetic poles N and S entering to said chamber by its walls being fixed therein and defining thereby a magnetic field in said slot of small area compared to the area of the chamber of which it is a part, electrodes 22 and 22 entering to said chamber through its walls by which they are held in position, being one at each end of said field centrally located thereto and of small area so as to direct the current between said poles and through the centre of said field, an armature of sheet metal adapted to fit said chamber in which it rotates submerged in mercury and is propelled by the current led to it by said electrodes and is retarded by the magnetic field in which it rotates, substantially as shown and specified. 3rd. In a mercurial electric current meter, pole pieces presenting to each other surfaces widest at their centres and tapering toward the ends so as to establish in the slot between them a magnetic field broadest at the centre and narrowing toward the ends, said pole pieces being of small area compared to armature 2, rotating between them and small electrodes centrally located at each end of said pole pieces, as shown and for the purposes specified. 4th. In a mercurial electric current meter, a body or receptacle containing and enveloping the submerged rotating armature and being formed or pressed from non-magnetic material embracing and holding in their fixed position the magnetic pole pieces S and N and electrodes 22 and 22, the top portion 6 of the body having at its centre an opening for the introduction of the armature shaft. 5th. In a mercurial electric current meter, a body or receptacle 3 being of insulating material pressed or moulded around the pole pieces 4 and 5 and the electrodes 22 and 22 holding them in their respective places. 6th. In a mercurial electric current meter, a body or receptacle of non-magnetic material consisting of the part 3, and the upper part 6 adapted to fit each other with a mercury tight joint, and embracing the pole pieces N and S, and electrodes 22 and 22, and adapted to a stopper to close mercury tight the opening around the shaft in the top, when transported. 7th. In a mercurial current meter, a receptacle 3 containing the mercury and surrounding the armature in combination with the magnet 1 so formed and placed that it shall enclose the receptacle and armature directing its lines of force through them, for the purposes as shown and specified. 8th. In a mercurial electric current meter, an armature circuit consisting of an armature submerged in mercury, conductors leading the current to and from the mercury and armature so that it will pass through the armature in going from one said conductor to the other, said armature to be connected in shunt to another circuit containing an adjustable resistance, by means of which the speed of the meter shall be corrected. 9th. In a mercurial electric current meter means of adjusting the speed of rotation consisting of the shunt 19 and the sliding jumper 20 of so high a resistance as to take from the armature but sufficient current for means of correction, substantially as specified. 10th. The ballast weight 7, carried by the shaft 9, and serving to submerge the armature when released and being adapted to be lowered locking and closing mercury tight the opening in the cover 6 when required for transportation. 11th. In a mercurial electic current meter, a part 7 carried by the shaft 9 when in operation and being threaded at its lower end so as to be screwed to the threaded neck on cover 6, thereby effectually sealing locking meter for transportation. 12th. In a recording electric meter having a rotating armature, a deferential gear driving a recording mechanism always in a given direction regardless of the direction or rotation of the driving shaft, and consisting of the driven ratchet wheel 33, spur wheels 37 and 38 having a common shaft and palls 34 and 34 and driven in directions opposite to each other by the pinion wheels 35 and 36 respectively as shown and specified. 13th. The combination in a housing for a recording electric meter of the part 17 serving at once as a back of housing and support for meter, with the cover 29 covering all other sides and being adapted to back, by being lowered a short distance whereby they shall become engaged at the top, then in turn the bottom of cover 29 after being thrown back square with the back part 17 will be locked at bottom to it, substantially as shown and specified. 14th. In a recording electric meter, the bolt 21 held by bottom portion of meter back and being adapted to drop through an opening in bottom of cover thereby locking cover in place, substantially as specified.

No. 68,773. Shoe. *(Chaussures.)*



Samuel C. Crowe, Halifax, Nova Scotia, Canada, 20th September, 1900; 6 years. (Filed 2nd June, 1900.)

Claim.—1st. A shoe, having an upper, said upper cut in the form, substantially as described. 2nd. The combination with a shoe, having an upper with the lace stays and the vamp part of said upper in a single piece. 3rd. Said lace stays, having no seam across the lower parts to join them to the vamp or lower parts of the instep, substantially as described. 4th. A piece cut in the form shown in letter B, which forms the side parts of said upper of the shoe, substantially as described.

No. 68,774. Automatic Time Stamp. *(Estampe horaire.)*

The Gamewell Fire Alarm Telegraph Company, New York City, New York, assignee of Nathan Harry Suren, Newton, Massachusetts, both in the U.S.A., 20th September, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. In a time stamp, the combination of a number of printing wheels, releasing devices therefor, a spring-impelled shaft, a number of driving gears loosely mounted on said shaft and adapted to operate said printing wheels, and devices independently connecting said gears with said shaft, substantially as described. 2nd. In a time stamp, the combination of a number of printing wheels, releasing devices therefor, a number of driving gears for said printing wheels, a spring-impelled shaft on which said driving gears are mounted and by which they are independently operated when their respective printing wheels are released, substantially as described. 3rd. In a time stamp, the combination of a number of printing wheels, an escape wheel and pallet for each printing wheel, and pallet operating devices, and means for moving the said wheels forward, consisting of a rotatable shaft, an impaling spring therefor, and means operatively connecting said rotating shaft with each of said printing wheels independently, substantially as described. 4th. In a time stamp, the combination of a number of printing wheels, an escape wheel and pallet for each of said printing wheels, periodically operated releasing devices for said pallets, a rotating

shaft, an impelling spring therefor, and devices operatively connecting each of the printing wheels with said rotating shaft, whereby

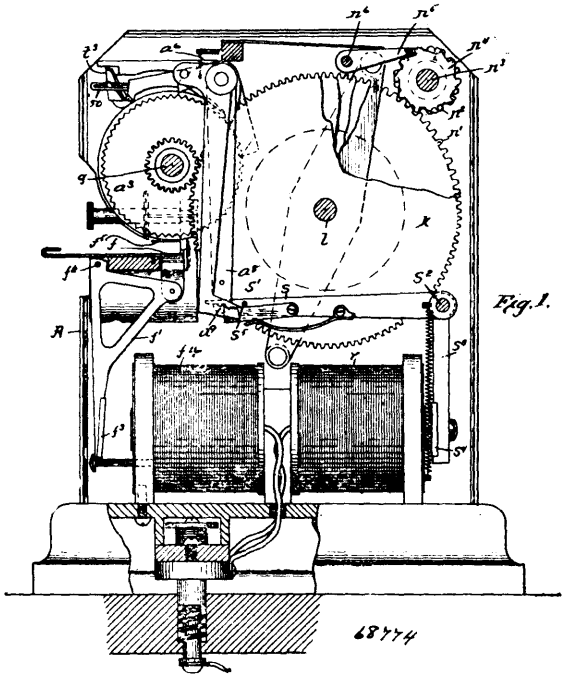
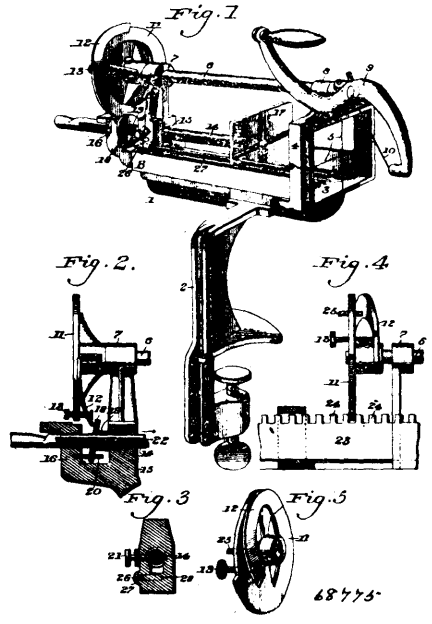


Fig. 1.

they may be rotated independently when released, substantially as described. 5th. In a time stamp, the combination of a number of printing wheels, escape wheels and pallets therefor, and pallet operating cams moving in unison with said printing wheels for operating the pallets of the adjacent printing wheels, a periodically operated releasing device for one of said cam-bearing printing wheels, and means for moving said printing wheels forward, consisting of a rotatable driving shaft, main actuating spring therefor, and means operatively connecting said rotating shaft with each of said printing wheels, independently, substantially as described. 6th. The combination with a spring-actuated printing wheel, its escape wheel and pallet having an arm connected thereto provided with a laterally projecting stud, a pivoted arm formed with a shoulder adapted to be moved out of and back into the path of movement of said stud, a spring-pressed finger pivoted to said arm having its end projecting slightly beyond said shoulder, and an electromagnet armature for operating said arm, substantially as described. 7th. In a time stamp, the combination of a spring-actuated printing wheel, an escape wheel moved by it, a pallet for said escape wheel, and an arm secured to and operated by said pallet, a relesing lever for it, and means for periodically operating said releasing lever, substantially as described. 8th. In a time stamp, the combination of a spring-actuated printing wheel, escape wheel moved by it, a pallet for said escape wheel, an arm secured to and operated by said pallet, a stud projecting from said arm, a releasing lever formed with a shoulder adapted to be engaged by said stud, a spring pressed finger pivotally mounted on said releasing device, and an electric magnet for operating said releasing lever, substantially as described. 9th. In a time stamp, the combination of a series of printing wheels one of which has on it thirty-one printing characters, means for operating it step by step to present the printing characters thereon successively to printing position, an auxiliary device for controlling the operating mechanism for said printing wheel, and automatic means for conlrolling the operation of said auxiliary device, having as a co-operative part of it a rotating cam having twelve divisions corresponding to the twelve months of the year, means for adjusting one of said divisions, and a controlling lever operated by said cam, substantially as described. 10th. In a time stamp, the combination of a series of printing wheels, one of which has on it thirty-one printing characters for the days of the month, and one of which has on it printing characters representing the months of the year, means for operating said printing wheels step by step, an auxiliary device for controlling the mechanism for operating said day printing wheel, which is operated by said day printing wheel, and means for controlling the operation of said auxiliary device which is operated by said month printing wheel, substantially as described. 11th. In a time stamp, the combination of a series of printing wheels comprising a day, a month and a year printing wheel, means for operating said wheels, an auxiliary device for controlling the mechanism for operating the day printing wheel operated by said printing wheel and controlled by said month and year wheels whereby to automatically provide for variations in the number of days in the different months of a number of years, substantially as described. 12th. In a time stamp, the combination of a day printing wheel, escape wheel and pallet therefor, means for operating said pallet, a pivoted lever operatively connected with said pallet, pivoted bell crank levers of different lengths, means for moving said pivoted lever into and out of co-operative relation with one or more of said bell crank levers, and means for successively operating said bell crank levers, substantially as described. 13th. In a time stamp, the combination of a series of printing wheels, escape wheels and pallets therefor, and pallet operating cams moving in unison with the printing wheels for operating the pallet of adjacent wheels, means operatively connected with and controlled by the month and year wheels operated by the cam of the day wheel for automatically presenting a different number of printing characters of the day wheel at the printing point to correspond with the printing character presented by the month and year wheels, substantially as described. 14th. In a time stamp, the combination of the day printing wheel, actuating device therefor, a bell crank lever t, having an extension t^3 pivoted thereto, and operatively connected with the actuating device of said day printing wheel, and means for controlling and operating said bell crank lever and its extension, substantially as described. 15th. In a time stamp, the combination of the day printing wheel, actuating device therefor, the bell crank lever t having an extension t^3 pivoted thereto, and operatively connected with the releasing device of said day printing wheel, means for moving said bell crank lever t on its pivot, and devices operated by said printing wheel for operating the extension t^3, substantially as described. 16th. In a time stamp, the combination of the day printing wheel, actuating device therefor, the bell crank lever t having an extension t^3 pivoted thereto, and operatively connected with the releasing device of said day printing wheel, three bell crank levers having arms of different length adapted to engage said extension t^3, a cam moving in unison with said day printing wheel, for successively operating said bell crank levers, and means for moving the extension of the lever t into and out of co-operative relation with the arms of said bell crank levers, substantially as described.

No. 68,775. Cutter. *(Couteau)*



Frank Hardart, John Anderson and Joseph Vitus Horn, all of Philadelphia, Pennsylvania, U.S.A., 20th September, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. In a cutter, a suitable bed, a cutter, means for operating the same, a traveller suitably supported, and means operated simultaneously with the knife for moving the said traveller so that the latter is free to move in either direction when said means are not operated. 2nd. In a cutter, a bed, a wheel operated simultaneously with said knife, a cam on said wheel, a traveller, and a plate or disc adapted to be operated by said cam, to engage said traveller and operate the same. 3rd. In a cutter, a bed, a knife suitably supported, a cam suitably supported and operated simultaneously with said cutter, a traveller, a disc or plate adapted to be operated by said cam to move said traveller, and a spring adapted to return said plate to its normal position. 4th. In a cutter, a bed, a frame, dividing wires carried thereby, a knife or cutter, a wheel operated simultaneously with said cutter, a cam on said wheel, means for adjusting said cam, a traveller, guides therefor, a plate or disc operated by said cam for moving said traveller, a guide for said disc,

and a spring adapted to return said disc to its normal position after it has been operated. 5th. In a cutter, a bed, a cutter, means for feeding the material to be cut, and means for holding said material in proper position. 6th. In a cutter, a bed, a wheel operated simultaneously with the knife, a cam on said wheel, a traveller and means whereby said traveller is operated by said wheel. 7th. In a cutter, a bed, a knife suitably supported, a wheel suitably supported, and a rack the teeth of which are adapted to be engaged by said wheel whereby the same is operated.

No. 68,776. Electric Meter. (*Mètre électrique.*)

Fig. 3.

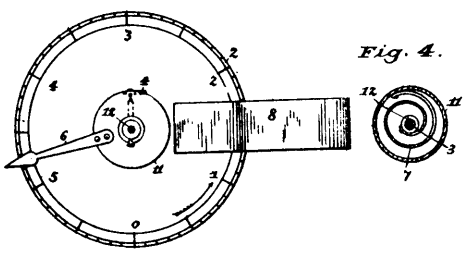


Fig. 4.

Fig. 2.

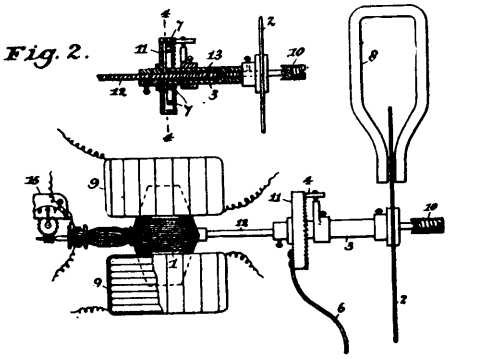


Fig. 1.

68776

The General Electric Company, Schenectady, New York, assignee of Edward S. Halsey, Chicago, Illinois, U.S.A., 20th September, 1890; 6 years. (Filed 27th April, 1900.)

Claim.—1st. In a combined maximum and integrating electric meter a rotating motor, a counting mechanism, a maximum indicator being a pointer and scale, a suitable device for preserving the maximum indication, the armature or rotating part of said motor being revolved in a given direction by, and at a velocity in proportion to, the measured current, simultaneously operating said counting mechanism, and by its force raising the indication on said maximum scale to the maximum amount passed through the meter. 2nd. In a maximum recording electric meter, a motor rotated in a given direction by the measured current, a breaking or drag mechanism for said motor being a closed conductor cutting the lines of force of a magnetic field, an indicator being a suitable pointer and scale to show the maximum effect of the current passed through the meter, a device to preserve the maximum indication of said indicator, the force of said motor pulling against the drag between the said closed conductor and said magnetic field, forcing a relative movement or indication on said scale, thereby establishing a maximum indication. 3rd. In a maximum recording electric meter, in combination a pointer and scale pivoted in movable relation to one another to indicate the maximum, a device forcing an indication by the power of the current being measured, a device for preserving the said maximum indication, a part or surface revolving opposite another surface or part and dragging through the medium of an interposed viscous material upon said opposite surface or part, one of said parts or surfaces being fixed with the said pointer and the other of said surfaces being fixed in its relation with said scale, thereby making any movement of indication slow or sluggish, substantially as shown and specified. 9th. In a maximum electric recorder a rotating armature 1, a rotating drag part 2, a suitable indicator set rotating with said parts, one portion of said indicator set lagging in its circuit behind another part thereof, in correspondence to the load, thus establishing a maximum indication. 5th. A maximum electric current or energy indicator, consisting of a rotating motor part 1, a lagging part 2, an elastic coupling connecting the two said parts, an indicator 6 carried by one of said parts, and an index carried by the other said part, whereby the maximum current that may pass can be determined. 6th. In a combined maximum and integrating electric meter, a motor part 1, a drag part 2, an elastic coupling 3, a mechanical clutch or detent 4 and an indicator 6. 7th. In combination with an integrating electric meter, an armature shaft being of two separate parts of sections, a sleeve coupling 3 joining together the two said parts of shaft, and fixed to one of them, a dressing of viscous material on the interior of said sleeve, a spring 7 forming part of the coupling, and index 5, an indicator 6, and a detent or clutch 4, all for the purposes specified. 8th. In an electric meter a revolving armature 1, a revolving drag part, and a flexible coupling joining the two said parts together. 9th. In a electric meter, a revolving armature shaft having a flexible joint and bearing intermediate between the end bearings, as shown and specified. 10th. In a maximum electric meter an armature shaft being of two severed parts, combined with an elastic coupling and a suitable detent preventing one part of said shaft from returning in its relation to the other part thereof, as specified. 11th. In a maximum electric meter, the following combination, a sleeve socket, a stem or spindle movable in said socket, a viscous material in said sleeve, and in contact with said stem retarding any motion between them. 12th. In a mechanical escapement, a receptacle socket, a spindle loose in said socket, viscous material in said socket in contact with said spindle, acting as a retarding agent to a rotative movement in said apparatus. 13th. In an electric measuring instrument a socket bearing, a shaft spindle rotated in said socket, a dense viscous material in said socket in contact with said spindle so as to retard the movement thereof, as described. 14th. In a maximum recording instrument, a shaft bearing formed by sleeve or socket, a dense viscous dressing in said bearing for the purpose of preventing any but sluggish motion thereof. 15th. In a maximum recording meter, an index 5, and indicator 6, a suitable detent, retaining the said parts at a maximum relation to one another, a rotating armature 1, a drag magnet 8, a rotating metallic disc 2, dragging through eddy currents generated therein upon said magnet's field, all combined with a suitable retarding device to cause a sluggish indication. 16th. In a combined maximum and integrating electric meter, an index 5, a radial indicator 6, a rotating armature 1, a drag magnet 8, a drag disc 2 acting through its foucault currents upon said magnet, and a retarding device, suitable to permit only a sluggish indication of said indicator. 17th. In a combined maximum and integrating electric meter an armature 1, and indicator 6, a ratchet wheel 11, a pawl 4, a spring 7, a drag magnet 8, a drag disc 2 acting through its foucault currents upon said magnet, and viscous material as a retarding agent for said indicator. 18th. In a combined maximum, and integrating electric meter an armature 1, an indicator 6, a a spring 7, a drag magnet 8, a drag disc 2, dragging through its foucault currents upon said magnet, and viscous material as a retarding agent for said indicator. 19th. In a maximum recording meter, an armature 1, a vertical shaft 12, a cap shaped ratchet wheel 11, on said shaft, a pawl engaging the vertical teeth on the flange of said wheel, a spring coupling 7, an indicator 6, and a drag part 2. 20th. In a maximum recording electric meter, a motor rotated in a given direction by the measured current, a breaking or drag mechanism for said motor being a closed conductor cutting the lines of force of a magnetic field, an indicator being a suitable pointer and scale to show the maximum effect of the current passed through the meter, a device to preserve the maximum indication of said indicator, a suitable retarding device to permit only a sluggish movement of indication, the force of said motor pulling against the drag between the said closed conductor and said magnet field forcing a relative movement or indication on said scale thereby establishing a maximum indication. 21st. In a combined maximum, and integrating electric meter an index 5, a radial indicator 6, a spring 7, a rotating armature 1, a detent 4, a drag magnet 8, a drag part 2, acting through its foucault currents upon said magnet thereby producing a maximum indication on said index.

No. 68,777. Process of Producing Calcium Carbide.
(*Procédé pour faire le carbure de calcium.*)

Fig. I

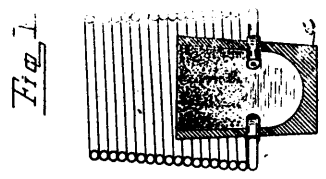


Fig. IV

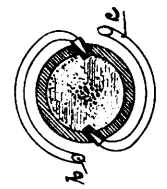


Fig. I

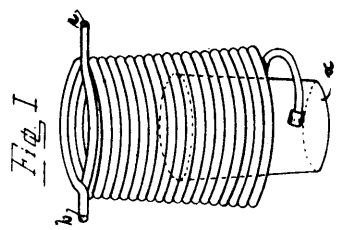
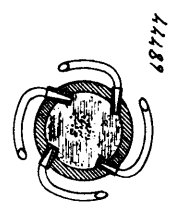


Fig. II



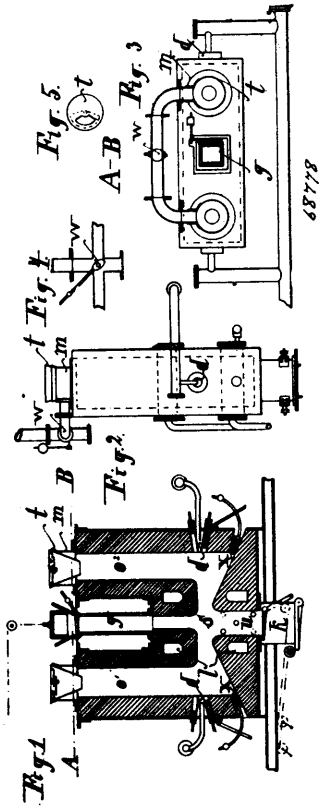
68777

Wilhelm Borchers, Aachen, Germany, 20th September, 1900; 6 years. (Filed 6th May, 1899.)

Claim.—Process of producing calcium carbide in a furnace or crucible of ordinary construction, which consists of placing therein a body of mixed lime and carbon, surrounding the same with a mass of carbonaceous material constituting the fuel, and blowing into said furnace or crucible air enriched with from 30 to 50 per cent of oxygen and heated to about 400°C, the air blast being so directed that it will first strike the layer of fuel directly and the body of lime and carbon tangentially, whereby the combustion may be so regulated that the carbon of said fuel will burn directly to oxide of carbon and the access of free oxygen to the mixture of lime and carbon will be avoided, substantially as described.

No. 68,778. Method of Smelting Metals.

(Méthode pour fonder les métaux.)



Wilhelm Borchers, Aachen, Germany, 20th September, 1900; 6 years. (Filed 6th May, 1899.)

Claim.—1st. A high temperature smelting furnace, having two opposite fuel shafts o^1, o^2, alternately serving as combustion and heat accumulator chambers, the horizontal passage s connecting the lower end portions of the fuel shafts, a smelting chamber or shaft g, arranged centrally between the fuel shafts and opening at its lower end into said horizontal passage, means for feeding fuel to and for closing the upper end of said fuel shafts, nozzles at the lower ends of said fuel shafts opposite said passage s, for delivering air or oxygen into the lower part only of the fuel in said shafts, a gas escape pipe b^2 independent of the air supply nozzles, having branches b^1, b, communicating respectively with the upper ends of said fuel shafts for carrying off the gases therefrom, a valve at the intersection of said pipes for closing either branch discharge pipe while the other remains open to discharge the gases from its fuel shaft, and a collecting box k located below said smelting shaft and having opening and closing devices, substantially as described. 2nd. A high temperature smelting furnace, having two opposite, vertical fuel shafts serving alternately as combustion and heat accumulator chambers, holes at the bases of the fuel shafts for lighting the fuel therein and discharging the ashes therefrom, devices for closing said holes after the fuel is lighted, nozzle arranged to deliver air or oxygen into the lower portions of said fuel shafts, opposite said horizontal passage, a smelting shaft arranged centrally between the fuel shafts, opening at the lower end into said horizontal passage and provided with devices for closing its upper end, opening and closing devices for feeding fuel into and for closing the upper ends of said fuel shafts, a collecting box arranged below and adapted to communicate with the central smelting shaft through said horizontal passage and having opening and closing valves, a gas escape pipe independant of said nozzles arranged at the rear of the fuel shafts and having branch pipes communicating respectively with the upper portions of said fuel shafts, and a valve controlling the communication between said branch pipes and the gas escape pipe, for closing either branch pipe and leaving the other in communication with the gas escape pipe and its fuel shaft, substantially as described. 3rd. A high temperature smelting furnace, having two opposite vertical fuel shafts serving alternately as combustion and heat accumulator chambers, a horizontal passage connecting the lower ends of said fuel shafts, a vertical smelting shaft arranged centrally between the fuel shafts and opening at its lower end into said horizontal connecting passage, holes in the sides of the fuel shafts for lighting the fuel therein and discharging the ashes therefrom, plugs for closing said openings, pivotally mounted bails, presser rods pivoted to said bails for holding said plugs in position, air injector nozzles entering the lowe, portions of the fuel shafts opposite said horizontal passage, valve devices for feeding fuel into, and for closing the upper ends of said fuel shafts, a gas escape pipe independent of said nozzles arranged in rear of the fuel shafts and having branch pipes connected respec- tively with the top portions of said fuel shafts, and a valve for controlling communication of either branch pipe with the gas escape pipe, substantially as described. 4th. A high temperature smelting furnace, having two opposite vertically arranged fuel shafts serving alternately as combustion and heat accumulator chambers, a horizontal passage connecting the lower ends of the fuel shafts, a smelting shaft located vertically between the latter and at its lower end communicating with said horizontal passage, a cover plate over all of said shafts constructed with fuel hoppers communicating with the shafts, register plates for closing said hoppers, a collecting box located below and constructed to communicate with the smelting shaft through said horizontal passage to receive the finished product therefrom, openings in the sides of the fuel shafts for igniting the fuel therein and dischrrging the ashes therefrom, closing plugs for said openings, pivotally mounted bails, presser rods pivoted to said bails for holding said plugs in position, injectors for supplying air to either fuel shaft entering the lower ends of said fuel shafts opposite said horizontal passage, gas discharge branch pipes communicating, respectively, with the upper ends of said fuel shafts, a gas escape pipe, and a valve for controlling communication between either gas discharge pipe and the escape pipe, substantially as described.

No. 68,779. Paving Composition. (*Composition pour pavé.*

Charles Alfred Carles de Candensberg, Nice, France, 20th September, 1900; 6 years. (Filed 30th April, 1900.)

Claim.—The manufacture and production of a new composition especially suitable for paving roads, foot ways and the like, and consisting of bituminous matter and rubber combined as hereinbefore described and substantially in the porportions set forth.

No. 68,780. Apparatus for Casting Cement Pipes.

(*Appareil pour mouler les tuyaux de ciment.*)

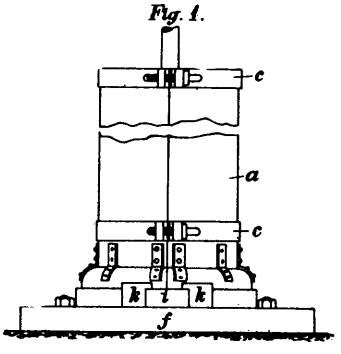
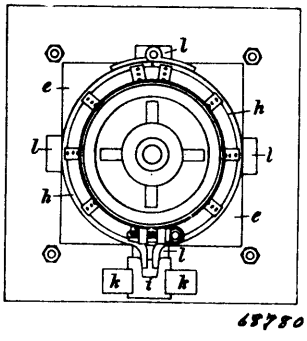


Fig. 2



Carl Johan Kielberg, 14 Helmershus, Denmark, 24th September, 1900; 6 years. (Filed 16th November, 1899.)

Claim.—1st. Apparatus for casting cement pipes characterized by a drum placed in the mould, the said drum forming the core of the mould and having on the outside projections, mainly screw-shaped, by which the drum is screwed up during the casting through the mortar, compressing this and shaping the pipe, substantially as described. 2nd. In the apparatus for casting cement pipes as described the spiral or screw shaped projection horizontal at its lower portion in order to smooth off the pipe, substantially as described. 3rd. The process of casting cement pipes with the apparatus described characterized by the mould being filled with cement mortar, while the drum is being turned round and gradually working itself up through the mortar until the pipe is formed, substantially as described.

No. 68,781. Voltaic Battery. (*Pile voltaique.*)

Fig. 1.

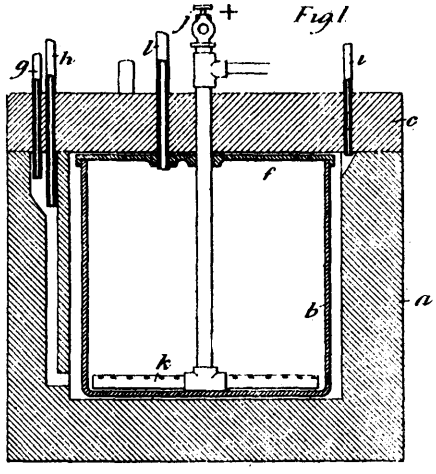
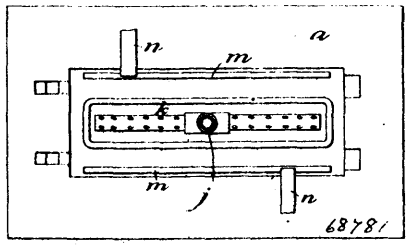


Fig. 2.



William Stepney Rawson, 21 Greycoat Gardens, Westminster, London, England, 24th September, 1900; 6 years. (Filed 21st November, 1899.)

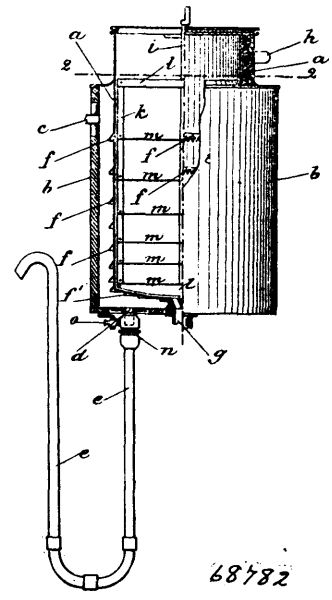
Claim.—1st. A voltaic battery for operating with fused materials consisting of a cell built of refractory material having within it a porous pot or diaphragm, the cell being charged with suitable molten metal such as lead, the pot being charged with suitable fused salt, pipes for supplying air and combustible gas to the molten metal and for supplying air to the fused salt, outlet pipes for products of combustion and air, and suitable electrodes immersed in the molten metal, substantially as described. 2nd. A group of cells such as described arranged in one structure, substantially as and for the purpose set forth. 3rd. The herein described method of heating the contents of a battery cell of the kind set forth by combustion of gas forced through the molten metal with a regulated quantity of air or oxygen. 4th. The herein described method of economizing fuel in a generator of gas for a battery of the kind set forth by forcing part of the products of combustion through the hot fuel of the generator.

No. 68,782. Liquid Pasteurizing Apparatus.
(*Appareil à pasteuriser.*)

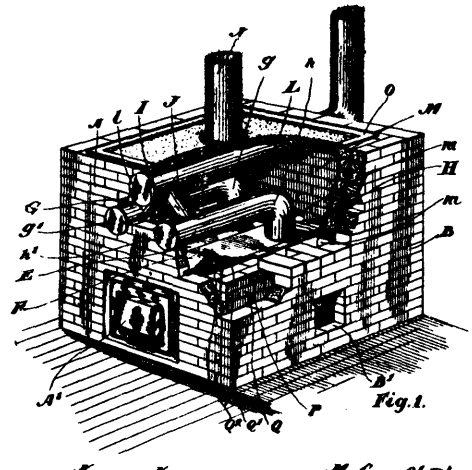
Lars C. Nielsen and Peter V. F Petersen, both of Copenhagen, Denmark, 24th September, 1900; 6 years. (Filed 22nd December, 1899.)

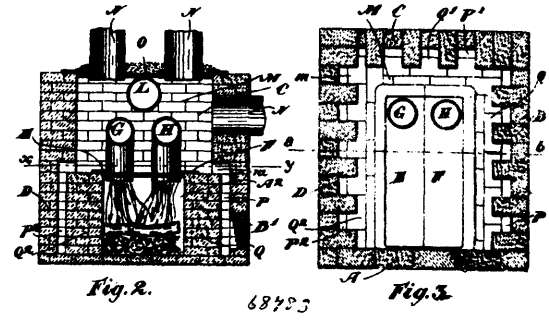
Claim.—1st. The arrangement of drip-rings on the outside of the reservoir (i. e. in the steam chamber) for the purpose of leading the condense-water from narrow zones of the heating surface. 2nd. The arrangement of plates on the stirrer across its axis these plates extending almost to the side of the reservoir and serving to separate the fluid in layers, so that mixing of the fluid particles in a direction parallel with the stirrer-axis is virtually hindered. 3rd. The plates *m* having holes *r*, these holes serving as outlet *s* for the air disengaged during the foam-removing process. 4th. The arrangement of a vent-cock on the waste pipe or in the bottom of the steam chamber through which the air carried along by the steam and disengaged by the condensation of the steam, is forced.

Fig. 1.



No. 68,783. Furnace. (*Fournaise.*)





George Manning Knowles, Newport Landing, Nova Scotia, Canada, 24th September, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. In a furnace, the combination with the fire box and wall thereof of a wall surrounding and overtopping the wall of the fire box, a hot air chamber immediately over the fire box and suitably separated therefrom, suitable pipes through the said hot air

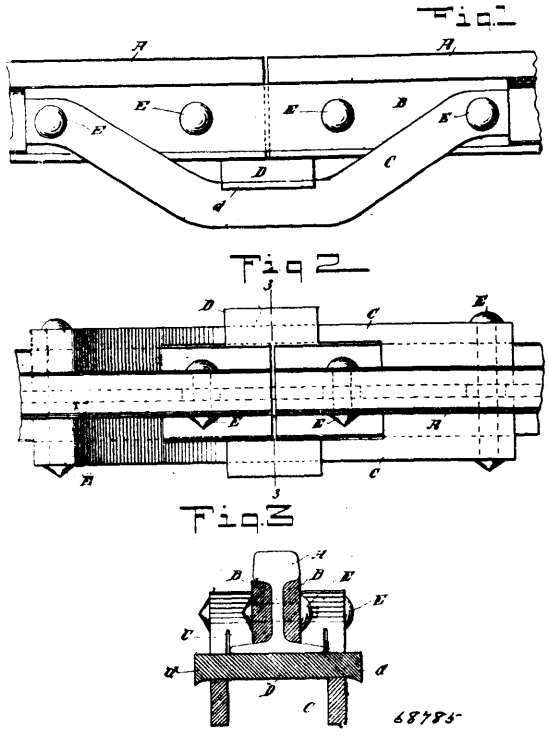
chamber from the fire box, and an inlet and an outlet for the cold and hot air respectively, as and for the purpose specified. 2nd. In a furnace, the combination with the fire box and wall thereof of a wall surrounding and overtopping the wall of the fire box, a hot air chamber immediately over the fire box and suitably separated therefrom by a metal plate in two parts, suitable pipes through the said hot air chamber from the fire box, and an outlet for the cold and hot air respectively, as and for the purpose specified. 3rd. In a furnace, the combination with the fire box and walls thereof, of a plurality of horizontal pipes within the hot air chamber, two of which lead directly from the fire box and are connected with third located above the space between the lower and parallel pipes, of removable covers for the ends of the said pipes at the front of the furnace, as and for ths purpose specified. 4th. In a furnace having its air chamber immediately over the fire box and enclosed by brick walls, and a sand or asbestos protected covering, of air spaces between the outer walls and the walls of the fire box, and an aperature through one of the outer walls communicating with the said air space, as and for the purpose specified.

No. 68,784. Incandescible Materials and Mantles.
(Manteaux incandescents.)

The Canadian Sterling Light Company, Camden, assignee of William Lawrence Voelker, Elizabeth, both of New Jersey, U.S.A., 24th September, 1900; 6 years. (Filed 23rd August, 1897.)

Claim.—1st. In the manufacture of incandescing mantles from skeletons prepared by saturating a combustible fabric with a solution of a decomposed salt of thorium and then burning out the fabric, the herein described improvement consisting in immersing the skeleton in a solution of the combined nitrates of magnesium and calcium, again burning out, and thus producing a mantle composed of a thorium oxide body coated with a magnesium calcium oxide covering. 2nd. A mantle for incandescing gas or oil lighting, consisting of a body or core of thorium oxide covered with a coating of magnesium calcium oxide.

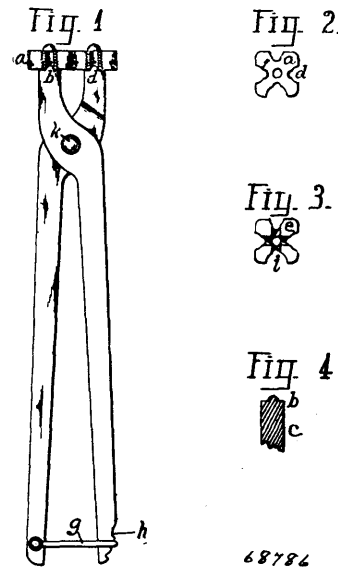
No. 68,785. Rail Joint. *(Joint de rails.)*



German Levi Baxter, Lexington, Kentucky, U.S.A., 24th September, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—A rail joint, comprising two parts each consisting of a bar member adapted to lie between the base and head of the rail, and a suspension member having its ends engaging the ends of the bar member and with its centre dropping below and outside of the rail base, rivets or bolts passing through bar and suspension members and the rail, securing them rigidly together, and a key entering between the central parts of the suspension members and the rail base, substantially as described.

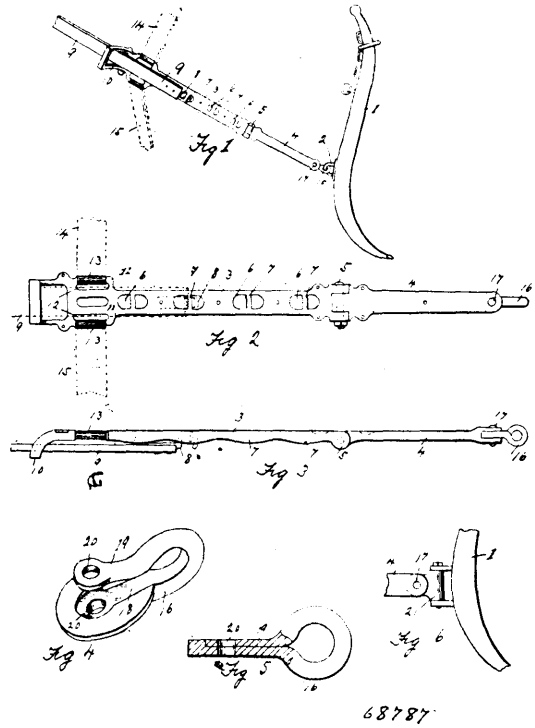
No. 68,786. Thread Cutter for Preparing Bolts. *(Filière.)*



John W. Lane, Guthrie, Oklahoma, U.S.A., 24th September, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. A thread cutter comprising two levers pivoted together, a locking clasp pivoted to the end of one arm and engaging the adjacent end of the other arm, rotatable die blocks adjustably pivoted on the opposite adjacent ends of said levers, said die blocks having corresponding halves of screw cutting apertures in their peripheries adapted to register, and grooves on the under side adapted to engage ribs on the ends of said levers to hold the die blocks in locked registering position.

No. 68,787. Hame Tug. *(Attelles.)*

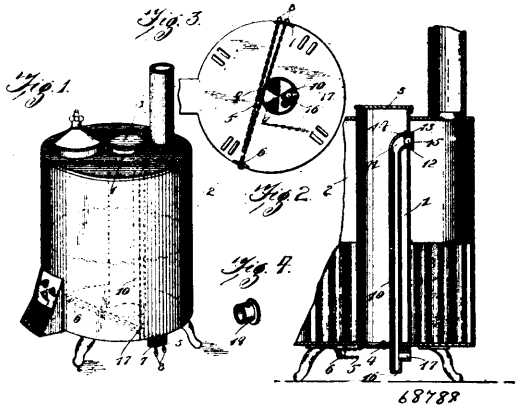


Charles R. Rapson, Bad Axe, Michigan, U.S.A., 24th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—1st. In a metallic hame tug, comprising two members united by a joint which permits said members to swing horizontally, an eye or hook adapted to engage the hame staple ring, said eye or hook being jointedly attached to the forward member of the hame

tug in a manner to permit of a vertical movement of said part upon said joint. 2nd. A metallic hame tug, comprising a body member united to the body member by a joint permitting a horizontal movement of said parts upon said joint, an eye or hook attached to the forward end of the forward member of said tug by means of a joint permitting of a vertical movement of said parts upon said joint, said eye or hook being adapted to engage the staple of the hame. 3rd. A metallic hame tug, comprising a body member adapted to be supported by the harness, a forward member united to the body member by a joint permitting of a vertical movement of the parts upon said joint, the eye or hook pivoted to the forward member and adapted to engage the staple of the hame. 4th. In a metallic hame tug, the combination of the two metallic members united by a joint to swing horizontally, the forward member having a hook pivoted in the forward end thereof, the hook comprising a recess body portion and a curved hook adapted to be forced into the recess in the body portion to lie flush with the face thereof, said hook and body portion lying in an aperture, a slot in the end of the forward member and pivoted with an aperture adapted to receive the pin, which effects the pivotal union between said hook and tug. 5th. In a metallic hame tug, the combination of the metallic parts united by a horizontal hinge, the forward part having in its forward end a vertically pivoted eye or hook, adapted to be attached to the hame, the rear part having at its rear end rotary sleeves for attachment of the straps of the harness and having broad apertures in the body portion thereof for attachment of the hook of the trace.

No. 68,788. Heating Stove. (*Poêle.*)



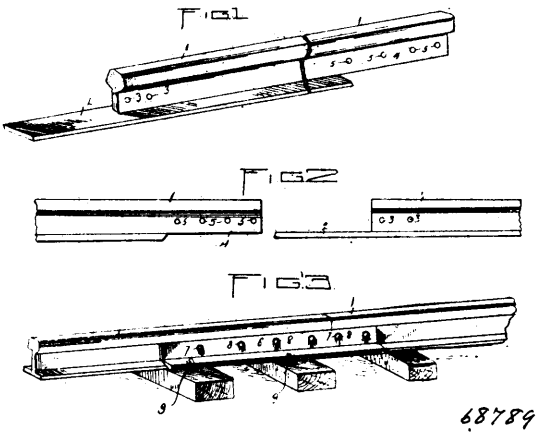
Charles H. Seaman, St. Joseph, Missouri, U.S.A., 24th September, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. The combination of a stove, a hot air tube or conductor passing upward through the same and having its upper end or exit at the top of the stove, a cover located at the top of the stove and arranged over the upper end of the tube or conductor, and a ventilator tube arrranged for a portion of its length within the hot tube or conductor and terminating at its upper end short of the top of the same and communicating thereat with the interior of the stove, the lower portion of the ventilator tube being extended beyond the hot air tube or conductor and arranged on the exterior of the stove, substantially as described. 2nd. The combination with a stove, of a pipe or conductor extending through the stove from the bottom to the top thereof and provided at one side with an aperture, a ventilator tube arranged within the pipe or conductor with its upper end regtstering with the said aperture, and a thimble having a diapbragm and detachably secured to the ventilator tuhe and connecting the same to the pipe or conductor, said diaphragm being provided with openings, substantially as described. 3rd. The combination with a stove, of a tube or conductor extending through the same, and a ventilator tube located within the said tube or conductor and having its upper end communicating with the interior of the stove, said ventilator tube being closed at its lower end and provided above the same with an arm or branch, substantially as described. 4th. The combination with a stove, of a hot air tube arranged in the stove and extending to the top thereof and provided at its upper end with a cover, and a ventilator tube located partly without the stove and extending from the upper portion of the stove to a point beneath the same and having its upper portion arranged within the hot air tube, said ventilator tube and terminating near the floor, substantially as described.

No. 68,789. Rail Joint. (*Joint de rail.*)

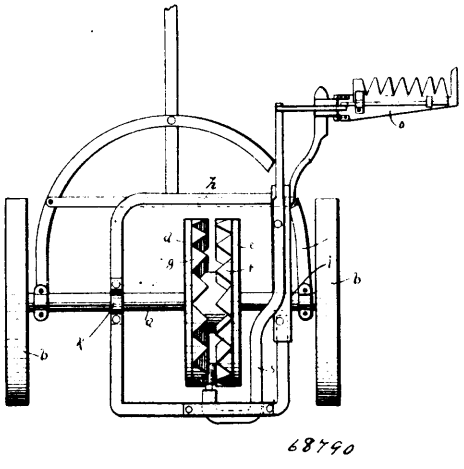
Samuel Miller Hopping, Galveston, Texas, U.S.A., 24th September, 1900; 6 years. (Filed 11th September, 1900.)

Claim.—A rail having a plain, flat base flange, of equal thickness from end to end thereof, said flange extending beyond one end of the rail, the opposite end of said rail having the base flange omitted for a distance equal to the length of the extended flange, in combination with a companion rail of like construction, the joint between the two rails being formed by placing the extending flange on one rail under that end of the companion rail which has the flange



omitted, and a fish plate of equal thickness throughout secured to the sides of said rail by through bolts, said fish plate covering both the rail joint and the flange joint, and having a downwardly extending flange, bearing on the ties, substantially as described.

No. 68,790. Mowing Machine. (*Faucheuse.*)



Samuel Shull and John D. Shull, both of Toston, Montana, U.S.A., 24th September, 1900; 6 years. (Filed 8th May, 1900.)

Claim.—1st. In a device of the class described, the combination with the axle and wheels secured thereon of a lever adapted to be reciprocated thereby, a cutter bar and sickle and a link connection between said lever and sickle to reciprocate the latter. 2nd. A device of the class described comprising an axle having wheels secured thereto, a frame on the axle, a lever pivoted to the frame, an extension of the frame having a cutter bar hinged thereto, a sickle on cutter bar, a link connection between the sickle and the lever and means for reciprocating the lever. 3rd. A device of the class described comprising an axle having wheels secured thereto, a frame on the axle, a lever pivoted to the frame and having a cutter bar hinged thereto, and having one end bent upon itself, an extension of the frame having cutter bar hinged thereto, a sickle on the cutter bar, a link connection between the sickle and the lever, and a worm wheel on the axle in engagement with the bent end of the lever to reciprocate it.

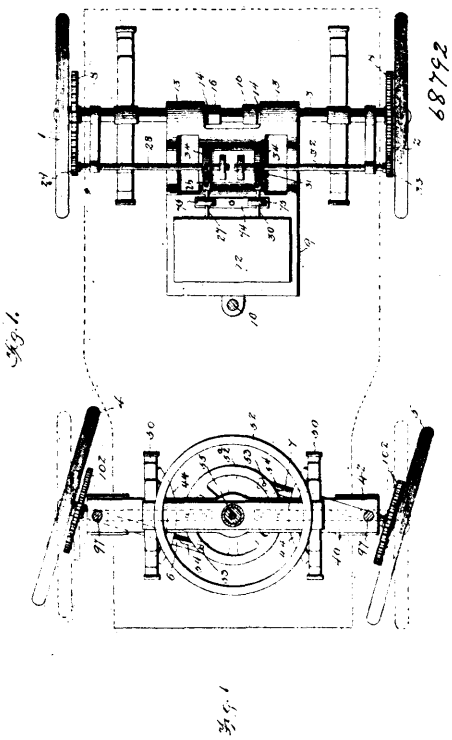
No. 68,791. Peat Treatment.
(*Methode pour préparer la tourbe.*)

Edouard Rischgitz, Cambridge Lodge, Linden Gardens, London, W., England, 24th September, 1900; 6 years. (Filed 9th June, 1900.)

Claim.—1st. Method of treating peat for the purpose of increasing its density without application of mechanical means, characterized by treating the peat with a solution of hydrate of barium or of strontia or a mixture of both whereupon the peat is allowed to dry, substantially as described. 2nd. The herein described method of treating impure peat consisting in subjecting it first to treatment with an aqueous solution of carbonate of calcium and carbonic acid

subsequently with a solution of hydrate of barium or of strontia or a mixture of both, and finally permitting said peat to dry, substantially as described.

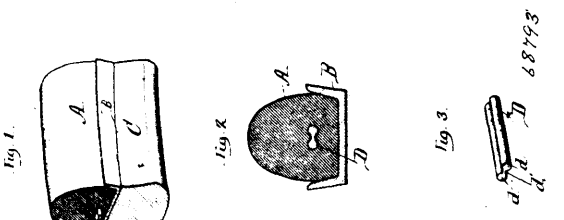
No. 68,792. Motor Vehicle. *(Automobile.)*



Patrick J. Collins, Scranton, Pennsylvania, U.S.A., 24th September, 1900; 6 years. (Filed 9th May, 1900.)

Claim.—1st. In an electrically operated motor vehicle, the combination with the fixed axle having a pair of independent driving wheels journalled thereon, of a support suspended beneath the body of the vehicle and hinged at one end to said shaft, a pair of worm wheels and independent shafts therefor mounted upon said support, said shaft being geared to the driving wheels, and independent armatures upon the support for operating said worm wheels. 2nd. In an electrically propelled motor vehicle, the combination with a fixed axle having a pair of independent driving wheels journalled thereon, of a support suspended beneath the body of the vehicle and hinged at one end to said shaft, a pair of worm wheels and independent shafts therefor mounted upon said support, said shafts being geared to the driving wheels, and a motor having two independent armatures, the shafts of which are arranged to operate said worm wheels. 3rd. In a motor vehicle, the combination with the body and an axle casing by which said body is supported, said casing being movable relatively to the body, of a pair of wheels having their axles pivoted to the casing and movable relatively thereto, a steering post for moving said axles, a sleeve fixed to the casing and surrounding the steering post, said sleeve being adapted to turn the casing, and means for locking said sleeve to the body of the carriage. 4th. In a motor vehicle, the combination with the forward wheels mounted upon independent axles and a casing for said axles pivoted beneath the body of the vehicle, of motors arranged to operate said wheels, means for automatically connecting the motors operatively to the wheels when said motors are running and for disengaging the motors from the wheels when said motors are stopped. 5th. In a motor vehicle, the combination with a wheel journalled upon an axle, and a motor arranged to operate said wheel, of means for automatically connecting said motor to said wheel when the motor is in operation and for disconnecting said motor from said wheel when the motor stops. 6th. In a motor vehicle, the combination with the axle casing supported by the axles of the forward wheels, of a body supported above said casing, a hand wheel connected to said casing and adapted to move said casing relatively to the body, and motors arranged to operate the forward wheels. 7th. The combination with the independently driven rear wheels, of the forward wheels mounted upon independent axles, a casing for said axles pivoted beneath the body and motors for operating said forward wheels. 8th. In an electrically propelled vehicle, the combination with the independent axles having the forward wheels journalled thereon, and a casing within which said axles are pivoted, of a hollow steering post arranged to swing said axles upon their pivots, a sleeve attached to the axle casing and surrounding said steering post, said sleeve being adapted to turn the casing, a handle pivoted at the upper end of said post, a rod extending through the post and connected to said handle, a controller operated by the vertical movement of said rod, and a steering switch operated by the rotary movement of the rod. 9th. In an electrically propelled motor vehicle, the combination with the rear wheels and independent armatures arranged to operate the same, of the forward wheels mounted upon independent pivoted axles, a rotatable steering post operatively connected with said axles, a steering head upon said post, a vertically movable handle connected to said steering head, a rod extending through the post and connected with said handle, a controller operated by the vertical movement of said rod, and a steering switch operated by the rotary movement of said rod and adapted to vary the speeds of said armatures relatively to each other. 10th. In an electrically propelled motor vehicle, the combination with the rear wheels and independent armatures arranged to operate the same, of the forward wheels mounted upon independent axles, a rotatable steering post operatively connected with said axles, a vertically movable handle upon said post, a rod extending through the post and connected with said handle, a controller and brake shoe operated by the vertical movement of said rod, and a steering switch operated by the rotary movement of said rod and adapted to vary the speed of said armatures relatively to each other. 11th. In an electrically propelled vehicle, the combination with the forward wheels mounted upon pivoted axles, and a steering post arranged to turn said axles about their pivotal points to steer the vehicle, of the rear wheels journalled upon a fixed axle, an armature geared to each rear wheel, field windings for each armature, and a suitably connected steering switch arranged to be operated by the movement of the steering post to vary the speeds of said armatures relatively to each other when said steering post is moved to turn the forward axles. 12th. In an electrically propelled motor vehicle, a pair of wheels independently mounted upon the opposite sides of the vehicle, a pair of independent armatures the shafts of which are geared to said wheels, separate sectional field windings for each armature, a graduated resistance arranged in shunt to each field winding, a switch and connections leading therefrom to successive points in said windings and resistances, said switch and connections being so arranged that when the switch arm is turned in either direction from the neutral point, the resistance in shunt to one field winding will be decreased, and the resistance of the other field winding will be decreased. 13th. In an electrically propelled motor vehicle, the combination with the rear wheels and independent armatures arranged to operate the same, of the forward wheels mounted upon independent pivoted axles, a rotatable steering post arranged to turn said axles about their pivotal points, a vertically movable handle connected to said post, a controller operated by the vertical movement of the handle, and a switch operated by the rotary movement of the post to vary the speeds of the armature relatively to each other. 14th. In a motor vehicle, the combination with a vehicle wheel and a motor arranged to operate said wheel, of means for automatically disconnecting said motor from the wheel when power is shut off from the motor. 15th. In a motor vehicle, the combination with a vehicle wheel, a motor adapted to operate said wheel, and worm gearing interposed between said motor and wheel, of means for automatically disconnecting said gearing from said wheel when power is shut off from the motor.

No. 68,793. Elastic Tires for Vehicles.
(Bandages élastiques pour roues.)



Frank Wilbur Kinney, Chicago, Illinois, U.S.A., 24th September 1900; 6 years. (Filed 8th June, 1900.)

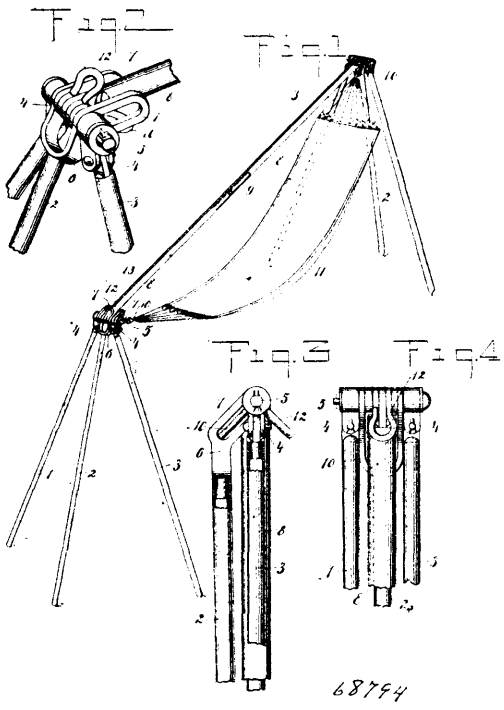
Claim.—A tire for vehicles comprising an annular channel *b*, an annular elastic body *a*, compressed in the direction of its length and moulded with a continuous closed chamber throughout its length, and a retaining ring embedded within and filling said chamber and having its end joined together, said ring consisting of the central web d^1, having the solid thickened edges *d*, substantially as described.

No. 68,794. Hammock Support. *(Support de hamac.)*

George R. Taitt, Homer R. Wood, both of Prescott, Arizona, U.S.A., 24th September, 1900; 6 years. (Filed 13th August, 1900.)

Claim.—1st. A hammock support, comprising two tripods, each tripod consisting of outer legs, a pin on which said legs are mounted

to swing, a center leg and arms extending at an angle to the length of the centre leg and having slots through which the pin passes,

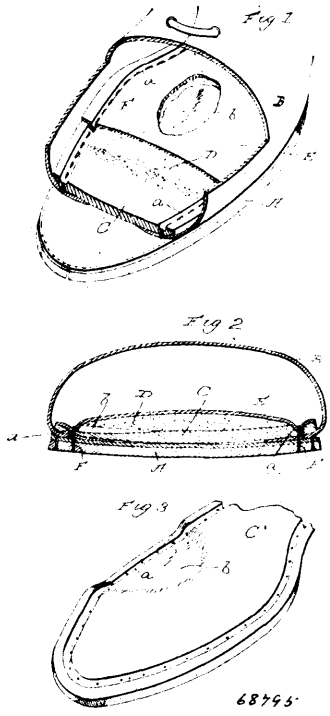


substantially as specified. 2nd. A hammock support, comprising two tripods, each tripod consisting of outer legs, clips pivotally connected to said legs, a cross pin on which the clips are mounted, a centre leg, a yoke on the centre leg, arms extended at an angle from the yoke and having slots through which the pin passes, and a spreader section having pivotal connection with the cross pin, substantially as specified. 3rd. In a hammock support, a cross pin, clips mounted on the pin, legs pivoted to the clips, a centre leg having swinging and sliding connection with the pin, a spreader section mounted to swing on the pin, and a clevis on the pin below the spreader section, substantially as specified. 4th. In a hammock support, a tripod comprising outer legs, clips to which the legs are pivoted, a pin on which the clips are mounted, a centre leg having swinging and sliding connection with the pin, a spreader section mounted on the pin, a clevis mounted on the pin and extended below the spreader section, and a clevis on the pin and extended above the spreader section, substantially as specified. 5th. A hammock supporting tripod, comprising outer legs, a pin on which said legs are mounted to swing and a centre leg having swinging and sliding connection with the pin, substantially as specified. 6th. A hammock support, comprising tripods, each tripod consisting of outer legs, a cross pin on which said legs are mounted to swing, a centre leg, a yoke on the upper end of the centre leg, slotted arms extended upward and forward from said yoke and through which the pin passes and tubular spreader sections pivoted on the cross pin of each tripod, one spreader section having a reduced portion to engage in the other spreader section, substantially as specified.

No. 68,795. Cushion Shoe. (*Chaussure.*)

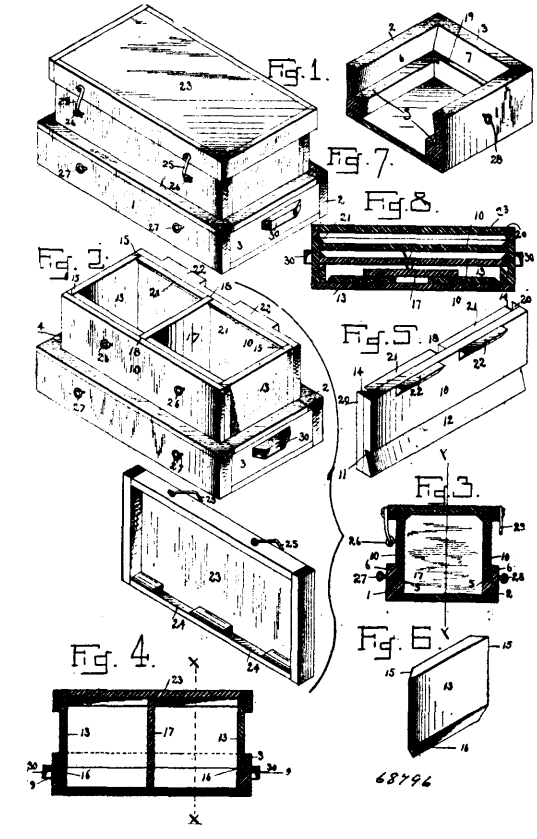
Adam Reed, St. Joseph, Missouri, U.S.A., 24th September, 1900; 6 years. (Filed 8th September, 1900.)

Claim.—The herein described shoe, comprising the leather insole having the groove in its upper side adjacent to its edge, the cushion arranged on the insole within the groove, the cushion covering arranged on the cushion and insole and extending down into and beyond the groove in the latter, the tap sole, the upper or vamp having its edges interposed between the insole and the tap sole, and stitches extending through and connecting the cushion covering, the insole, the vamp or upper and the tap sole, and resting in the



groove in the insole, whereby the cushion covering is drawn down into said groove, substantially as specified.

No. 68,796. Egg Crate. (*Boîte à œufs.*)



Bradley M. Barnes, Wantoma, Wisconsin, U.S.A., 24th September, 1900; 6 years. (Filed 6th September, 1900.)

Claim.—The herein described shipping crate, comprising a base having the interior inclined faces 6, upper side walls co-operating with said base, and having a shoulder and an inclined face 12, the latter designed to co-operate with the face 6 upon said base, and walls having bevelled edges designed to fit corresponding recesses provided in said base and upper side walls, brackets or ears 22 formed upon the edge of one of said upper side walls and a co-operating lid having recesses designed to receive said ears and suitable means to secure said lid in a hooked position, all combined in the manner specified and for the purpose set forth.

No. 68,797. Means of Securing Rubber Tires to Vehicle Wheels. (*Méthode d'attacher les bandages de caoutchouc aux roues.*)

Fig. 1.

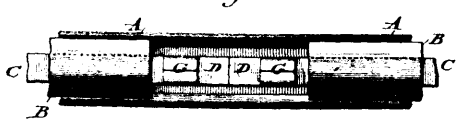


Fig. 2.

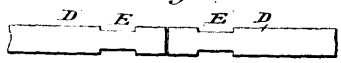
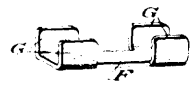


Fig. 3.

Fig. 4.



68797

Richard A. Brine, Revere, Massachusetts, U.S.A., 24th September, 1900; 6 years. (Filed 7th June, 1900.)

Claim.—1st. The combination with a wheel, of a rubber tire, a metallic tape having recesses adjacent the free ends, and a joint plate engaging the recesses of the tape. 2nd. The combination with a wheel, of a rubber tire, a metallic tape, and a joint plate, the ends of the tape and joint plate being provided with interlocking means. 3rd. The combination with a wheel, of a rubber tire, a metallic tape, and a joint plate, the ends of the said metallic tape and the joint plate interlocking through the medium of the lips and recesses. 4th. The combination with a wheel, of a rubber tire, a metallic tape having recesses E E, and a joint plate having lips G G, for engaging the recesses in the tape.

No. 68,798. Handle Bar. (*Barre de poignee de bicycle.*)

Ebenezer W. Rider, Detroit, Michigan, U.S.A., 24th September 1900; 6 years. (Filed 3rd July, 1900.)

Claim.—1st. In an adjustable handle bar, the combination with a steering post having a head at its upper end, of two handle bar sections pivoted to said head, and having adjacent peripheral segments, and a flexible band connected to said segments upon opposite sides of the pivots, whereby a movement of one of said handle bar sections will correspondingly move the other. 2nd. In an adjustable handle bar, the combination with a steering post having a head at its upper end, of two handle bar sections pivoted to said head and having adjacent peripheral segments and flexible bands cross connected to said segments, whereby a movement of one handle bar section will correspondingly move the other. 3rd. The combination with the steering post and two handle bar sections, of conne tions therebetween comprising a head at the upper end of said post to the rear of the central plane thereof, adjacent rounded he ds respectively at the inner end of said handle bar section and forward of said central plane, interlocking teeth upon said handle and post heads, parallel pivot pins passing through central apertures in said handle bar heads and aligned apertures in said post head, a cam lever having its head engaging a recess in the rear face of said post head between said pivot pins and having eccentric pins engaging with sockets on the adjacent faces of said pivot pins, springs located in complementary recesses in said post and handle bar heads and surrounding said pivot pins and adjustable nuts engaging a threaded

Fig. 1.

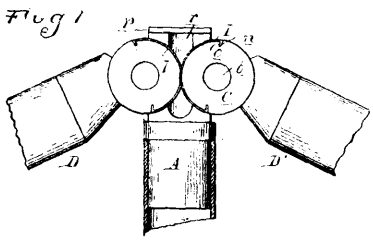


Fig. 2.

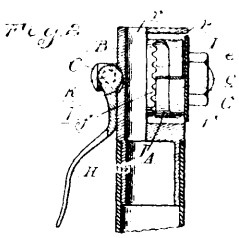


Fig. 3.

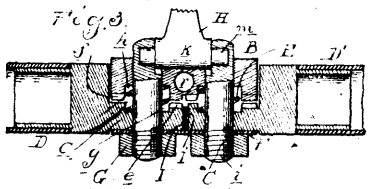
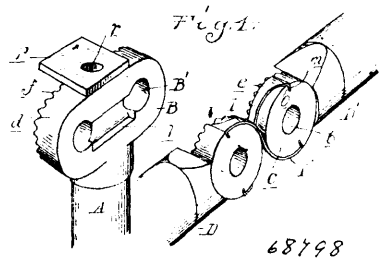


Fig. 4.

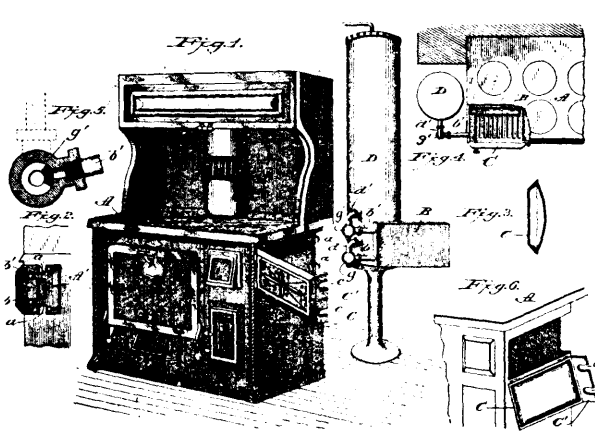


68798

portion of said pivot pin and bearing against said handle bar heads.

No. 68,799. Water Back for Stoves and Ranges. (*Ratelier à eau pour poêle.*)

Fig. 1.



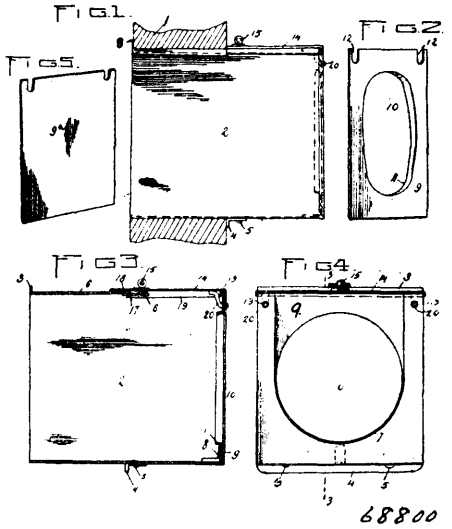
68799

Walter J. Wood, Atlanta, Georgia, U.S.A., 24th September, 1900; 6 years. (Filed 8th September, 1900.)

Claim.—1st. In combination with a stove or range having an opening through one of the side walls thereof, a door for closing the opening, a stand boiler having a water back connected thereto so that it may be moved into the firepot of the stove, the door being adapted to close the opening through the wall of the stove and when the water back is removed from the firepot to form one of the walls thereof, substantially as set forth. 2nd. The combination with a stove or range and its firepot, of a water back, stand boiler, and means for connecting the water back to the stand boiler, said means comprising pipes and interposed swing couplings, and opening through an exterior wall of the stove of a size to admit the entrance of the water back to the firepot, a door secured to the stove adjacent to the opening, said door serving to hold the water back in the firepot and from one of the walls of the firepot when the water back is swung beyond the stove, substantially as shown. 3rd. In combination with a stove or range having an opening through one of the outer walls thereof, a door attached to the stove to close the opening and serve as one of the walls of the firepot, of a water back

having pipes and swing couplings, the pipes being of such a length and the couplings being so positioned with respect to the firepot and the opening through the wall of the stove that the water back may be swung into the firepot or entirely beyond the stove, substantially as shown. 4th. In combination with a stove or range, having an opening through one of the exposed walls thereof which opening is adjacent to the firepot, a door for closing said opening and when closed providing a wall for the firepot, of a stand boiler and water back connected to each other by pipes and swing couplings as shown, the length of the pipes and position of the swing couplings being such that the water back may be swung horizontally into the firepot or entirely beyond the stove or range, for the purpose set forth. 5th. The combination with a stove or range, having an opening through one of its exposed walls, a door therefor hinged to the stove, said door having a fire wall, of a stand boiler, water back, pipes and swing couplings with cut-offs for connecting the water back with the boiler, the swing couplings being so positioned that the water back may be swung horizontally into the firepot of the stove and be retained therein when the door is closed or swung beyond the stove, one position of the water back when beyond the stove cutting off the water supply, the other position permitting a circulation of the water between the stand boiler and water back, substantially as set forth. 6th. In combination with a stove or range having an opening through one of the side walls thereof, a door hinged to the stove for closing the opening, said door having a projecting portion with recesses, a stand boiler having a water back connected thereto by swinging couplings the door being adapted to close the opening through the wall of the stove and retain the water back in the stove, substantially as shown and for the purpose set forth. 7th. The combination with a stove or range having an opening through the side wall thereof which leads to the firepot, a stand boiler and water back, pipes connecting the stand boiler with the water back, of a telescopic coupling comprising tubes having packings at one end which tubes are maintained parallel to each other and receive smaller pipes which extend from the water back, substantially as shown. 8th. In combination with a stove or range having an opening through one of the side walls thereof and a door for closing the opening, of a water back having parallel inlet and outlet pipes, of a stand boiler having pipes with swinging joints, parallel tubes connected to the swing joints, said tubes being of a larger diameter than the pipes which project from the water back and a packing through which the pipes pass, which packing is carried by the ends of the tubes, substantially as shown, whereby the water back may be positioned in or removed from the firepot without disconnecting the water supply pipes. 9th. In a stove or range, the combination with a water back having parallel pipes, which project therefrom, of a stand boiler provided with parallel tubes connected at one end to the boiler by pipes provided with interposed swinging couplings the other ends of said tubes being provided with packings through the pipes from the water back enter the tubes, the pipes and tubes being of greater length than the length of the water back, and means attached to the water back, for effecting the withdrawal of the water back from the stove or range, substantially as shown.

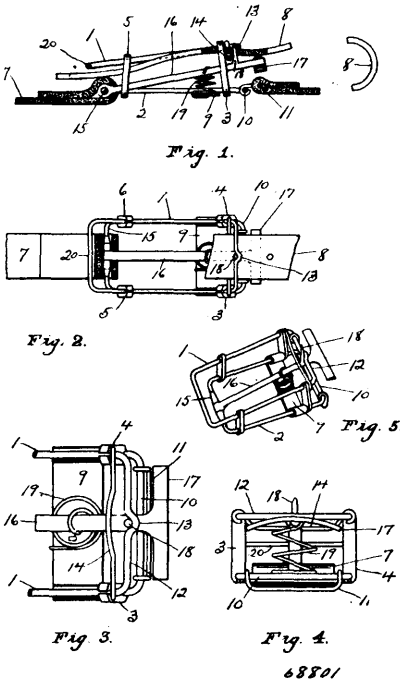
No. 68,800. Stove Pipe Holder. *(Porte-tuyau de poêle.)*



Horace D. Wade, Greene, New York, U.S.A., 24th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. In a device of the character described, the combination with the receptacle, having an opening in the front thereof, of a pipe encircling plate adapted to fit within said receptacle back of the opening and means for securing said plate in said receptacle. 2nd. In a device of the character described, the combination with the receptacle having an opening in the front thereof, of a pipe encircling plate adapted to fit within said receptacle back of the opening and a cover or lid adapted to fit on said receptacle, and means connected with said cover or lid to secure said plate in said receptacle. 3rd. The combination with the receptacle, of an upwardly extending flange integral with the upper edge of the receptacle, and an L-shaped piece extending across the bottom of the receptacle about midway. 4th. A receptacle of the character described having a closed top extending about half way, in combination with a pipe encircling plate adapted to fit in the front of said receptacle, a lug secured to the bottom of the receptacle adapted to hold said plate against lateral displacement, of a cover or lid adapted to close the top of the receptacle and hooks extending from said lid to engage and secure the top of the encircling plate against lateral and upward movement. 5th. A stove pipe holder comprising the receptacle having the top cut away and a crimp formed in the forward edge of said cut-away, the upwardly extending lug integral with the top of the receptacle and the L-shaped piece, secured to the bottom of the receptacle, the lug secured to the bottom of the receptacle near the front thereof, the pipe encircling plate having a central opening surrounded by a backwardly extending flange, U-shaped slots formed in the tops of said plate, and a lid having a downwardly extending flange adapted to fit snugly against the sides of the receptacle, a handle pivotally mounted in said lid and a latch firmly secured to said handle adapted to engage the crimped edge of the top of the receptacle openings in the front wall of the receptacle, and hooks secured to and extending from said lid and adapted to pass through the U-shaped slots in the encircling plate and the openings in the front wall of the receptacle.

No. 68,801. Buckle. *(Boucle.)*



Carl R. Horne, Williamsburg, Kansas, U.S.A., 24th September, 1900; 6 years. (Filed 23rd August, 1900.)

Claim.—1st. A buckle comprising an upper and lower frame, posts rigidly connecting said frames, a cross rod connecting the sides of the inner frame near the front end bar thereof, a tongue carrier pivoted to the rear end bar of the lower frame and projecting forwardly under and beyond the front end bar of the upper frame, a tongue fixed on said carrier and normally projecting upward between said front end bar and said cross rod, and a spring bearing against said carrier and tending to force it upward toward said end bar, substantially as set forth. 2nd. A buckle comprising an upper and lower frame, posts rigidly connecting said frames, a cross rod connecting the sides of the upper frame near the front end bar thereof, a curved off-set formed centrally in said front end bar, a tongue carrier pivoted to the rear end bar of the lower frame, and projecting forwardly under and beyond said front end bar, a tongue fixed on said carrier and normally projecting upward between said front end bar and said cross rod, and into the recess formed by said curved off-set, and a spring bearing against said carrier and tending to force it upward and toward said front end bar, substantially as set forth. 3rd. A buckle comprising an upper and lower frame, posts rigidly connecting said frames, a cross rod connecting the sides of the upper frame near the front end bar thereof, a tongue carrier pivoted to the rear end bar of the lower frame and projecting forwardly under and

beyond the front end bar of the upper frame, a cross head on the front end of said carrier, a tongue fixed on said carrier and normally projecting upward between said front end bar and said cross rod, and a spring bearing against said carrier and tending to force it upward toward said front end bar, substantially as set forth. 4th. A buckle comprising an upper and lower frame, posts rigidly connecting said frames, a cross rod connecting the sides of the upper frame near the front end bar thereof, a curving off-set formed centrally in said front end bar, a tongue carrier pivoted to the rear end bar of the lower frame, and projecting forwardly under and beyond said front end bar, a cross head on the front end of said carrier, a tongue fixed on said carrier and normally projecting upward between said front end bar and said cross rod, and into the recess formed by said curved off-set, and a spring bearing against said carrier and tending to force it upward toward said front end bar, substantially as set forth.

No. 68,802. Check Hook and Hanger. (*Crochet pour renes.*)

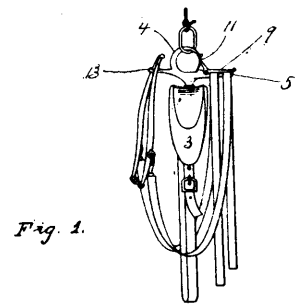


Fig. 1.

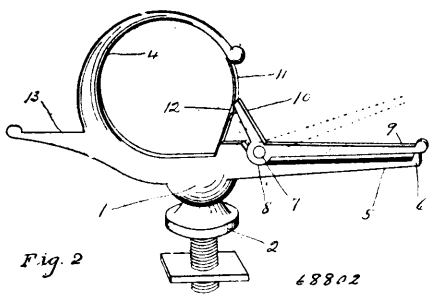


Fig. 2

68802

George J. H. Henrici, Overbrook, Kansas, U.S.A., 24th September, 1900; 6 years. (Filed 23rd August, 1900.)

Claim.—A combined check hook and harness hanger comprising a body portion having a shank to engage the saddle, an upwardly projecting hook, a spring mounted in the opening of said hook, and forwardly and rearwardly projecting arms, in combination with a pivoted lever mounted on said rearward arm and forming therewith a pair of gripping jaws, and having a forward projection bearing against said spring, to hold said jaws in engagement, substantially as set forth.

No. 68,803. Fire Escape. (*Appareil de sauvetage.*)

C. L. Buddenbohn and William Speer, both of Baltimore, Maryland, U.S.A., 24th September, 1900; 6 years. (Filed 10th September, 1900.)

Claim.—1st. In a fire escape, a rotatable drum, a lowering rope or cable wound in a plurality of coils thereon, and means embracing and engaging said coils for preventing the progressive lateral movement of said rope or cable as a whole along said drum. 2nd. In a fire escape, a rotatable drum, a lowering rope or cable wound in a plurality of coils thereon, and a rope guide embracing and engaging said coils for preventing the progressive lateral movement of said rope or cable as a whole along said drum. 3rd. In a fire escape, a rotatable drum, a lowering rope or cable wound thereon, and a rope guide embracing said drum and provided with a spiral groove on the inner surface thereof, as and for the purpose set forth. 4th. In a fire escape, a rotatable drum, a lowering rope or cable wound thereon, and a rope guide for preventing the progressive lateral movement of said rope or cable as a whole along said drum, the same consisting of a fixed sleeve or ring surrounding said drum, provided with a spiral groove on the inner surface thereof and having openings for the passage of the lowering rope at the opposite ends of said groove. 5th. In a fire escape, a rotatable drum, a lowering rope or cable wound thereon, a sleeve surrounding said drum, and rope pressor extending through said sleeve and engaging said rope or cable for maintaining the latter in contact with said drum. 6th. In a fire escape, a rotatable drum, a lowering rope or cable wound thereon, a rope guide surrounding said drum and provided with a spiral groove on its inner surface in which said rope fits, and rope pressure for holding said rope in contact with said drum, the same consisting of inwardly spring pressed pins extending through openings in said guide and engaging the outer surface of said rope. 7th. In a fire escape, the combination with a shaft or spindle, a rotatable drum

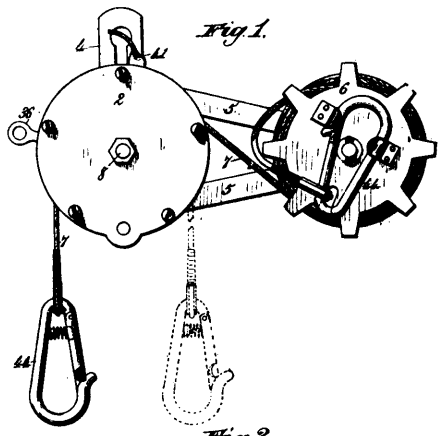


Fig. 1.

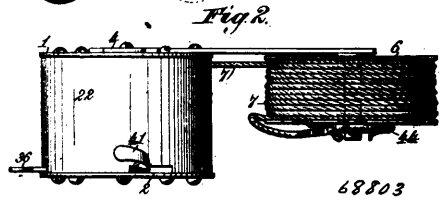


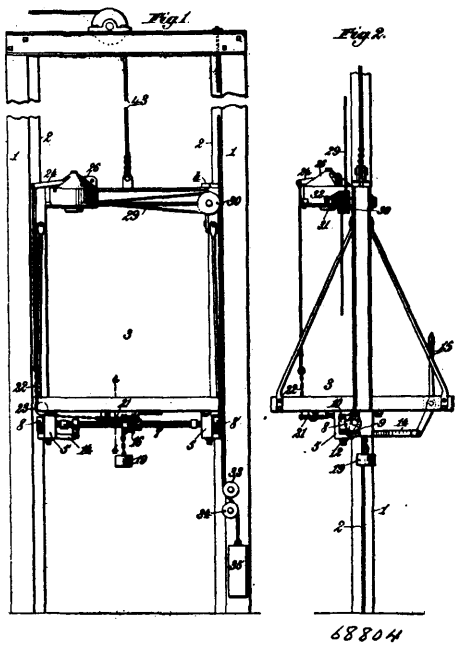
Fig. 2.

68803

mounted thereon and a lowering rope or cable wound upon said drum, of a brake longitudinally movable on said shaft or spindle for controlling the speed of rotation of said drum, a sleeve or pinion driven from said drum for throwing said brake into operation, and means for permitting the longitudinal movement of said sleeve on said shaft or spindle, whereby the degree of pressure of said brake on said drum may be controlled. 8th. In a fire escape, the combination with a shaft or spindle, a drum mounted to turn thereon, and a lowering rope or cable wound on said drum, of an automatic governor for controlling the speed or rotation of said drum, the same consisting of a brake shoe longitudinally movable on said shaft or spindle and adapted to engage said drum. inclined engaging portions on said shoe, a sleeve loosely mounted on said shaft or spindle and driven through intermediate gearing from said drum, means on said sleeve actuated by contrifugal force for throwing said brake into operation, and means for changing the position of said sleeve on said shaft or spindle, as and for the purpose set forth. 9th. In a fire escape, the combination with a shaft or spindle, a rotatable drum mounted thereon and a lowering rope or cable wound upon said drum, of a brake longitudinally movable on said shaft or spindle for controlling the speed of rotation of said drum, a sleeve or pinion driven from said drum for throwing said brake into operation, a lever mounted to turn on said shaft or spindle and engaging said sleeve at one end, and means actuated by the turning movement of said lever for moving the same longitudinally on said shaft or spindle, and thereby causing a similar movement of said sleeve on said shaft or spindle for carrying the speed of said drum. 10th. In a fire escape, the combination with a shaft or spindle, a rotatable drum mounted thereon and a lowering rope or cable wound upon said drum, of a governor for controlling the speed of rotation of said drum, the same comprising a brake shoe longitudinally movable on said shaft or spindle and adapted to engage one face of said drum, inclined engaging surfaces on said shoe, a toother sleeve or pinion loosely mounted on said shaft or spindle and driven from the said drum, radially movable brake actuating blocks carried by said sleeve, the same adapted to be thrown outwardly by centrifugal force and to bear against the inclined engaging surfaces on said brake shoe, inwardly projecting cams on a fixed part of the frame adjacent to said shaft or spindle, and a lever mounted to turn on said shaft a spindle, normally engaging one end of said toothed sleeve or pinion and provided with correlative devices for said cams whereby upon the turning movement of said lever, said sleeve is moved in the other direction, as and for the purpose set forth. 11th. A friction device for a drum and a cable or rope winding thereon, said device consisting of a fixed casing surrounding the drum and having an interal thread for the passage of the cable or rope, the thread terminating near its ends in apertures for the passsage of the cable or rope to the outside of the casing, substantially as shown and described. 12th. A friction device for a drum and a cable or rope winding thereon, said device consisting of a fixed casing surrounding the drum and having an internal thread for the passage of the cable or rope, the thread terminating near its ends in apertures for the passage of the cable or rope to the outside of the casing, said apertures being located on opposite sides of the casing, substantially as shown and described. 13th. A friction device for a drum and a cable or rope winging thereon, said device consisting of a fixed

casing surrounding the drum and having an internal thread for the passage of the cable or rope, the thread terminating near its ends in apertures for the passage of the cable or rope to the outside of the casing, the walls of the thread being arranged to separate the coils of the rope or cable from each other, as set forth. 14th. A friction device for a drum and cable or rope winding thereon, said device consisting of a fixed casing surrounding the drum and having an internal thread for the passage of the cable or rope, the thread terminating near its ends in apertures for the passage of the cable or rope to the outside of the casing, said thread separating the coils of the rope or cable from each other, and holding the cable or rope in frictional contact with the peripheral surface of the drum, substantially as shown and described.

No. 68,804. Elevator. (*Elévateur.*)



Charles L. Buddenbohn and William Speer, both of Baltimore, Maryland, U.S.A., 24th September, 1900; 6 years. (Filed 11th September, 1900.)

Claim.—1st. The combination with an elevator shaft and guide rails located on opposite sides thereof, of a car movable in said shaft, a rock shaft mounted on said car, cams on said rock shaft adapted to engage said guide rails, a governor for continuously vibrating said rock shaft during the movement of the car and for rocking said shaft and throwing said cams in locking engagement with said guide rails, the same including a rotary shaft having radially extending arms thereon, and slide blocks on said arms adapted to be thrown outwardly by centrifugal force during the rotation of said rotary shaft, a pulley on said car, a cord passing around said pulley and said rotary shaft, and a constant connection between said blocks and said rock shaft for operating the latter from the former, as and for the purpose set forth. 2nd. The combination with an elevator car and locking devices therefor, of a governor mounted on said car for throwing said locking devices into operation, the same comprising a lever connected with said locking devices, a rotary shaft having radially extending arms thereon, slide blocks on said arms adapted to be thrown outwardly by centrifugal force during the rotation of said rotary shaft, and a slide on said shaft adapted to be thrown into engagement with said lever by said blocks, and connections between said shaft and said car, whereby said shaft will be rotated therefrom and the speed thereof will be controlled by the speed of movement of said car. 3rd. The combination with an elevator and locking devices therefor, of a governor mounted on said car for throwing said locking devices into operation, the same comprising a lever connected with said locking devices, a rotary shaft having a pulley thereon, radial arms on said shaft, slide blocks on said arms adapted to be moved outwardly by centrifugal force during the rotation of said shaft and provided with recesses having inclined bottom walls, springs surrounding said arms for resisting the outward movements of said blocks, a slide loosely mounted on said shaft having wings or extensions lying within said recesses and provided with inclined walls adapted to be engaged by the inclined bottom walls of said recesses, the said slide being adapted to be moved into engagment with said lever when said slide blocks are moved outwardly, a pulley on said car, and a cord secured at one end passing around the pulleys on said car and on said shaft and having a weight at its free end, whereby said shaft will be controlled by the speed of movement of said car. 4th. The combination with an elevator shaft and guide rails located on opposite sides thereof, of a car movable in said shaft, a rock shaft mounted on said car, cams upon the ends of said shaft adapted to engage said guide rails, and an automatic governor in constant connection with said shaft for continuously vibrating the latter during the movement of the car and for locking said shaft and throwing said cams into locking engagement with said guide rails when the speed of the car increases beyond a certain predetermined limit. 5th. The combination with an elevator shaft and guide rails on opposite sides thereof, of a car, a rock shaft mounted thereon, cams on the ends of said shaft adapted to be moved into locking engagement with said guide rails, means for normally holding said shaft at the limit of its movement in one direction and for maintaining said cams out of locking engagement with said guide rails, a governor in constant connection with said shaft for continuously vibrating the latter during the movement of the car and for moving the latter in opposition to said holding means and thereby throwing said cams into locking engagement with said guide rails when the speed of the car increases beyond a certain predetermined limit. 8th. The combination with an elevator shaft and guide rails on opposite sides thereof, of a car movable in said shaft, a rock shaft mounted on said car, cams on the ends of said shaft adapted to engage said guide rails, a weight connected with said shaft for normally maintaining it at the limit of its movement in one direction and for holding said cams out of engagment with said guide rails, a pulley on said shaft, a bell crank lever on said car, flexible connections between one arm of said bell crank lever and said pulley, a governor and connections between said governor and the other arm of said bell crank lever, whereby said shaft will be moved by said governor in opposition to said weight for throwing said cams into locking engagement with said guide rails when the speed of movement of the car increases beyond a certain predetermined limit. 7th. The combination with an elevator shaft and guide rails on the opposite sides thereof, of a car movable in said shaft, a rock shaft mounted on said car, cams upon the ends of said shaft adapted to engage said guide rails, a governor in constant connection with said rock shaft for continuously vibrating the latter during the movement of the car and for moving said cams into locking engagement with said guide rails when the speed of the car increases beyond a certain predetermined limit, and a lever connected with said shaft and extending up into the car, the said lever being vibrated by said shaft and serving as an indicator and as means for rotating said shaft and throwing said cams into locking engagement with said guide rails by hand. 8th. The combination with an elevator shaft and guide rails on opposite sides thereof, of a car movable in said shaft, a flexible rock shaft mounted on said car, cams on the ends of said rock shaft adapted to engage said guide rails, a governor, connections between said governor and said shaft for automatically rocking the latter and throwing said cams into locking engagement with said guide rails, and a lever connected with a flexible portion of said shaft and extending up into the car, as and for the purpose set forth. 9th. The combination with an elevator shaft having guide rails on opposite sides thereof, of a car movable in said shaft, a rock shaft on said car, cams on said rock shaft adapted to be moved into locking engagement with said guide rails, and means for shifting said rock shaft bodily to move said cams away from said guide rails when they are in locking engagement therewith. 10th. The combination with an elevator shaft having guide rails on opposite sides thereof, of a car movable in said shaft, boxes secured to said car having elongated slots therein, a rock shaft extending through said slots and mounted in bearings in said boxes, cams on the ends of said rock shaft adapted to be moved into locking engagement with said guide rails, wedges engaging the bearings of said shaft, and means for moving said wedges to change the position of said bearings, as and and for the purpose set forth. 11th. The combination with an elevator car and braking mechanism therefor, of a rock shaft for throwing into operation said braking mechanism, and means for imparting to said rock shaft a vibratory or back and forth rocking movement during the movement of the car. 12th. The combination with an elevator car and braking mechanism therefor, of a rock shaft for operating said mechanism, a governor for rocking said shaft to throw said braking mechanism into operation, and means thrown into operation by said governor for imparting to said shaft a constant vibratory or back and forth rocking movement during the movement of the car.

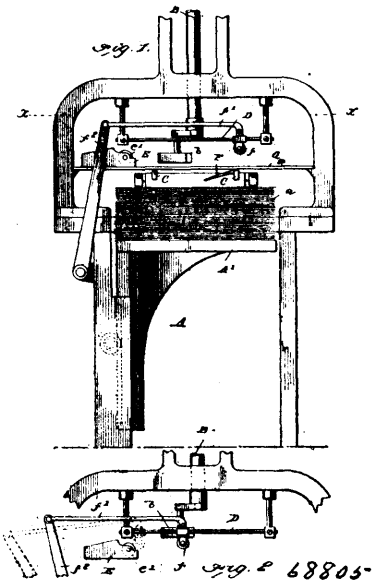
No. 68,805. Envelope Gumming Machine.

(Machine à humecter les envelopes.)

The Neostyle Envelope Company, New York City, New York, U.S.A., 24th September, 1900; 6 years. (Filed 27th January, 1900.)

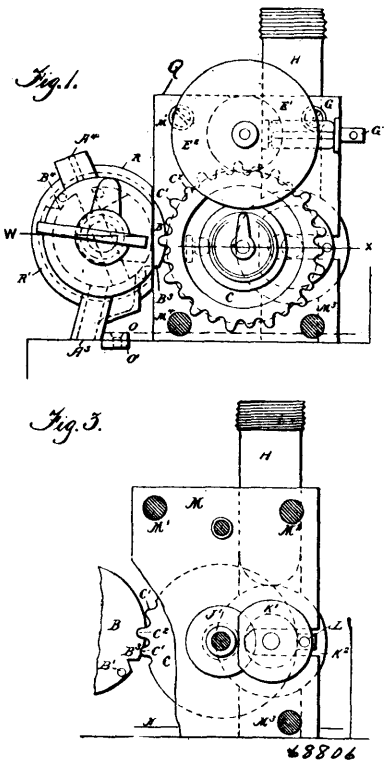
Claim.—1st. In an envelope machine, the combination with means for applying adhesive material to an envelope blank on one side only of the center thereof, and for elevating the blank, of a reciprocating carrier and means on the carrier for elevating the ungummed end of the blank, substantially as described. 2nd. In an envelope machine, the combination with the gumming and picking instrumentalities, of a reciprocating carrier, and means for elevating the ungummed portion of the envelope blank upon the movement of the carrier, substantially as described. 3rd. In an envelope machine, the combination with gumming and elevating instrumentalities arrangen eccentrically of the blanks, means for removing the blanks after gumming and elevating, and means for elevating the ungummed end of the blanks, independent of the said other elevating means

substantially as described. 4th. In an envelope machine, the combination with gumming and elevating instrumentalities, of a reci-



procating carrier arranged to project below the elevated blanks and an inclined projection on the carrier for engaging and elevating the ungummed portion of the blanks, substantially as described. 5th. In an envelope machine, the combination with gumming and picking instrumentalities, of a reciprocating carrier and the inwardly extending inclined finger carried by the carrier in line with the ungummed portion of the blank, for the purpose specified, substantially as described.

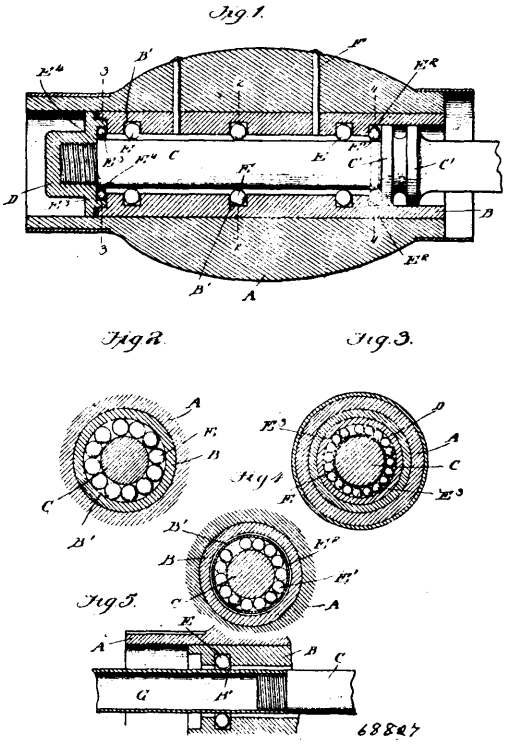
No. 68,806. Coin Freed Gas Meter. (*Compteur à gaz.*)



Meters Limited, Manchester, assignee of Alfred Stanfield, both in England, 24th September, 1900; 6 years. (Filed 26th May, 1900.)

Claim.—1st. In a coin freed. prepayment mechanism for gas meters, the combination of a disc adapted to be rotated from a coin receiver through the medium of an interposed coin, a measuring wheel, a reciprocal spindle arranged to be moved longitudinally by said measuring wheel, and an independent valve spindle in operative relation to said reciprocal spindle, as set forth. 2nd. In coin freed prepayment mechanism for gas meters, the combination with a coin receiver, of a disc arranged to be rotated by the coin receiver, on the deposit of a coin in the latter, and a measuring wheel mounted to have rotary and shifting movement relative to the disc, said disc and measuring wheel being operatively connected, substantialy as described. 3rd. In a coin freed prepayment mechanism, the combination with a reciprocatory spindle and coin actuated means for imparting longitudinal movement thereto, of a valve spindle, and operative connection between the two spindles, whereby the longitudinal movement of the reciprocatory spindle is communicated to the valve spindle, substantially as described. 4th. In coin freed prepayment mechanism, the combination with a coin actuated mechanism, of a reciprocatory spindle in operative relation to said mechanism, a cam course carried by said spindle, a relatively stationary runner engaging with said cam course, and a valve spindle operatively related to the reciprocatory spindle, substantially as described. 5th. In a coin freed prepayment mechanism, the combination of a coin receiver, a disc adapted to be rotated thereby, a revoluble and shiftable measuring wheel, a reciprocatory spindle carrying a cam course, a runner engaging said cam course, and a valve spindle operatively related to said reciprocatory spindle, substantially as described.

No. 68,807. Vehicle Hub and Spindle.
(*Moyeu et essieu de voiture.*)



John P. Byne, Blythe, and Rodolphus N. Williams, Register, both of Georgia, U.S.A., 24th September, 1900; 6 years. (Filed 18th June, 1900.)

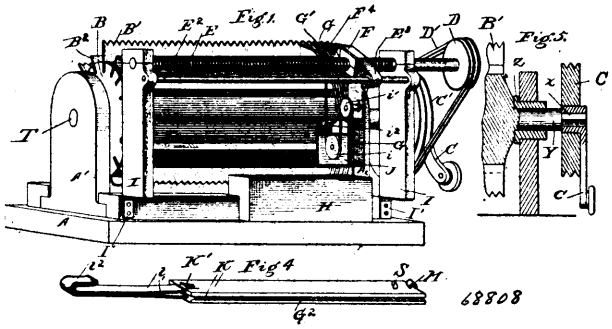
Claim.—The combination with an axle of uniform diameter throughout its length and provided at one end with a shoulder and at the opposite end with a removable nut of a hub thereon, the boxing of which is recessed at each end to fit over said shoulder and the intermediate portion is provided with internal annular grooves, the distance between the recessed portions at the ends being less than the distance between the shoulder and nut of the axle, a series of balls within each of said recessed portions in contact with the ends of the recessed portions of the boxing and the nut and shoulder of the axle, respectively, a band for engaging with each of said series of balls, and a series of balls, in each annular groove in the boxing.

No. 68,808. Match Making Machine.
(*Machine à faire les allumettes.*)

Addie M. Scott, assignee of Israel Hogeland, both of Chicago, Illinois, U.S.A., 24th September, 1900; 6 years. (Filed 15th November, 1899.)

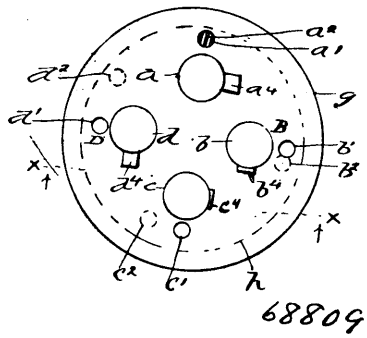
Claim.—1st. In a machine for making match stems, substantially as described, the combination of a suitable support of a reel journalled in said support and comprising a body carrying serrated blades

extending radially from and lengthwise of said body at intervals thereon determining the length of said stems and travelling holder



for the stiffening material, through which the match stem material is passed to the reel, substantially as set forth. 2nd. In a machine for making match stems, substantially as described, the combination of a suitable support of a reel journalled in said support and comprising a body carrying serrated blades extending radially from and lengthwise of said body at intervals thereon determining the length of said stems, a holder for the stiffening material through which the match stem material passes to the reel, and a travelling feed for controlling the winding on the reel of the twine forming the match stem material, substantially as set forth. 3rd. In a machine for making match stems, substantially as described, the combination with a suitable support of a reel journalled in said support and comprising a body carrying serrated blades extending radially from and lengthwise of said body at intervals thereon determining the length of said stems, a rotary threaded rod extending parallel with and geared to said reel, a nut on said rod and a holder for the stiffening material connected with said nut to travel with it and through which is passed to the reel the twine, forming the match stem material, substantially as set forth. 4th. In a machine for making match stems, substantially as described, the combination with a suitable support of a reel journalled in said support and comprising a body carrying serrated blades extending radially from and lengthwise of said body at intervals thereon determining the length of said stems, a rotary threaded rod extending parallel with and geared to said reel, a divided nut on said rod confined in a two part frame hinged together at one end and provided with a hook at its opposite end, a guide rod extending parallel with said threaded rod and engaged by said hook, and a holder for the stiffening material connected with said nut to travel with it and through which is passed to the reel, the twine forming the match stem material, substantially as set forth. 5th. In a machine for making match stems, substantially as described, the combination with a base A, carrying the uprights A^1, and A^2, of a reel B, journalled in said uprights and comprising a body carrying serrated blades B^1, at intervals thereon determining the length of said stems, a rotary threaded rod E, journalled in uprights I, hinged to said base and a rod E^2, extending between said uprights, said threaded rod being geared to said reel, a divided nut F, on said threaded rod confined in a frame F, having an eyelet and a hook E^3, engaging said rod E^2, a holder J, suspended from said nut to travel with it and carrying the guide pulleys i and i^1, and a box H, for the ball of twine forming the match stem material passing about said pulleys through said eyelet to the reel, substantially as set forth. 6th. In a machine for making match stems, substantially as described, the combination with a suitable support of a reel journalled in said support and comprising a body carrying serrated blades extending radially from and lengthwise of said body at intervals thereon determining the length of said stems and a clamping holder adjustable to extend between a pair of said blades and grip between its jaws, the lengths of twine forming the match stem material wound upon said reel, substantially as and for the purpose set forth. 7th. In a machine for making match stems, substantially as described, the combination with a suitable support of a reel journalled in said support and comprising a body carrying serrated blades B^1 at intervals thereon determining the length of said stems, and clamping holders K to extend between said blades, each of said holders comprising a pair of jaws having a spring l^1 at one end and a catch M at the opposite end, substantially as and for the purpose set forth. 8th. In a machine for making match stems, substantially as described, the combination with a suitable support, of a reel journalled in said support and comprising a body carrying serrated blades B^1 at intervals thereon determining the length of said stems, and intermediate blades B^2 and clamping holders K to extend between said serrated blades, each of said holders comprising a pair of jaws having a spring l^1 at one end, a catch M at the opposite end and a guide lug S and a raising lug K^1 on the lower jaw, substantially as and for the purpose set forth. 9th. In a machine for making match stems, substantially as described, the combination with a suitable support, of a reel journalled in said support and comprising a body carrying serrated blades B^1 at intervals thereon determining the length of said stems, a ring l surrounding a hub fitting one of the journals of said reel, clamping holders K to extend between said serrated blades, each of said holders comprising a pair of jaws having a hooked spring at one end at which it engages said ring, and a catch M at the opposite end, and a ring R for encircling said holders about the reel, substantially as and for the purpose set forth. 10th. In a machine for making match stems, substantially as described, the combination of reel B comprising a body carrying serrated blades B^1 at intervals thereon determining the length of said stems, clamping holders K adjustable to extend between said blades, and a severing device for twine wound upon said reel comprising a stationary ring N carrying cutters n to engage the twine along said blades, a bar P supported at the opposite ends in bearings, and a head O^1 supported to slide on said bar and carrying a bearing O for a journal end of said reel, the whole being constructed to operate, substantially as set forth. 11th. In a machine for making match stems, the combination with a body provided at intervals with projections, of means for applying thereto a length or lengths of match stem material, a series of independent portable clamping devices adapted to be applied to the match stem material between the projections, and means for severing the match stem material at opposite sides of the respective clamping devices whereby the clamping devices with the match stem lengths may be handled independently or jointly for dipping. 12th In a machine for making match stems, the combination with a body provided at intervals with projections, of means for winding thereon a continuous length of match stem material, a series of independent portable clamps adapted to be applied to the match stem material extending between the projections, and means for severing the match stem material at opposite sides of the clamps while on the body, whereby the clamps with the match stem lengths may be handled independently or jointly for dipping.

No. 68,809. Telephone Signal. *(Signal de téléphone.)*



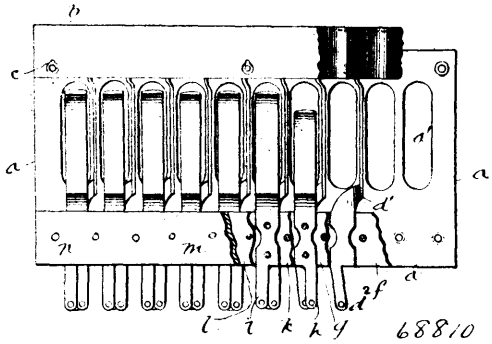
The Bell Telephone Company of Canada, Montreal, Quebec, assignee of Frank Robert McBirty, Evanston, Illinois, U.S.A., 24th September, 1900; 6 years. (Filed 5th November, 1896.)

Claim.—1st. The combination with a system of instruments adapted for selective operation, and a group of appliances, one for each such instrument, each adapted to determine the operation of a particular instrument, of a movable part h adapted to display a distinctive target or indicator for each of said appliances, and mechanism actuated in the use of any one of said appliances adapted to move said part to display the corresponding indicator and to conceal the indicators of the other appliances, as described. 2nd. The combination with a system of instruments adapted for selective operation, and a group of appliances, one for each such instrument, each adapted to determine the operation of a particular instrument, a rotatable disc adapted to display a target or indicator corresponding to each of said appliances, openings in said disc, and wedges, one associated with each of said appliances, for engaging with the said openings to rotate the disc, each of said wedges being adapted to rotate the disc through a different and characteristic arc, whereby the actuation of any said appliances causes the display of the corresponding indicator and the concealment of the indicators of the other appliances, as described. 3rd. The combination with a group of pushers, or plungers of wedges carried by the plungers, a rotatable target disc having perforations or openings adapted to register with the wedges, each wedge being adapted to move a target disc to a distinctive position, and each target being adapted to be displaced when a corresponding wedge is operated, as described. 4th. The combination with an electric circuit and a plurality of responsive instruments connected with said circuit and adapted for selective operation by electric currents of distinctive character, a group of keys, each adapted to transmit over said circuit current adapted to actuate a particular one of said responsive instruments, a movable part associated with said keys and carrying a number of targets, one for each key, target openings or windows wherein said targets are adapted to be displayed, and mechanism associated with each of said keys for moving the part through a distinctive and characteristic arc, whereby the target of a particular key is displayed at its window when such a key is actuated, and the targets of the other keys concealed, substantially as set forth. 5th. The combination with a telephone line connected with a plurality of subscriber's stations and terminating at the

switchboard of a central office, responsive instruments connected with the telephone line at each of said subscribers' stations, each of said instruments being adapted to respond to electric currents of a distinctive character, a plug and cord circuit at the central office adapted for connection with the telephone line, a group of ringing keys associated with said cord circuit, one for each substation, means, controlled by said ringing keys, for transmitting over the telephone line electric currents of a character to operate any one of said responsive instruments according to the key operated, a rotatable disc, means associated with each of said keys for rotating the disc a characteristic distance, and indicators, one for each key, adapted to be set by the rotation of said disc, whereby the actuation of any key causes the display of a corresponding indicator and the concealment of the other indicators, substantially as set forth.

No. 68,810. Springjack for Telephone Switchboards.

(Commutateur de téléphones.)



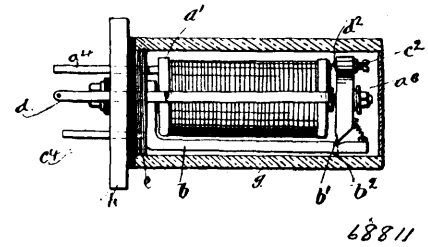
The Bell Telephone Company of Canada, Montreal, Quebec, Canada, 24th April, 1900; 6 years. (Filed 26th February, 1898.)

Claim.—1st. A test piece d for a switch provided with the extension, consisting of the flat portions d^1 and d^2, the said flat extension d^2 being adapted to be secured or clamped in position, said extension being twisted about ninety degrees between said portions, whereby said flat portions are brought into planes, substantially at right angles to one another, as and for the purpose specified. 2nd. The bank of switches, consisting in the combination with the metal frame a, of the strip b secured thereto and provided with openings, the test pieces d fitting in said openings, the extensions for said test pieces and the line springs, said extensions lying at right angles to the free or movable parts of their respective line springs, but bent or twisted at the rear to bring the flat portions d^2 of said extensions into a plane substantially parallel with the said line springs, and means for securing said extensions d^2 and said line springs in place upon the said metal frame but insulated therefrom, substantially as and for the purpose specified. 3rd. The bank of switches, consisting in the combination with the frame a, of the strip b secured thereto and provided with openings, the test pieces d fitting in said openings, the extensions for said test pieces, line springs and the metal clamping pieces m, the said extensions lying at right angles to the free or movable parts of their respective line springs, but bent or twisted at the rear to bring the portions d^2 of said extensions into a plane substantially parallel with the said line springs, and the continuous strips, separating and insulating the said springs and extensions. 4th. A bank of switches consisting of a metallic frame a, the thick strip b of insulating material secured to the outer edge or portion of said frame and carrying the test pieces d of the jacks, said test pieces fitting tightly in openings formed in said strip, line springs h and i and the extensions formed in said test pieces, the extensions having portions d^1 thereof respectively in a plane substantially at right angles to the portions d^2 thereof, the said portifns d^2 and the springs h and i of the different jacks being superimposed in parallel planes but separated from one another by strips of insulating material extending between corresponding parts of all the jacks, and the metal plate m secured to the plate a to clamp the said strips and springs together, as described.

No. 68,811. Telephone Relay. *(Relais téléphonique.)*

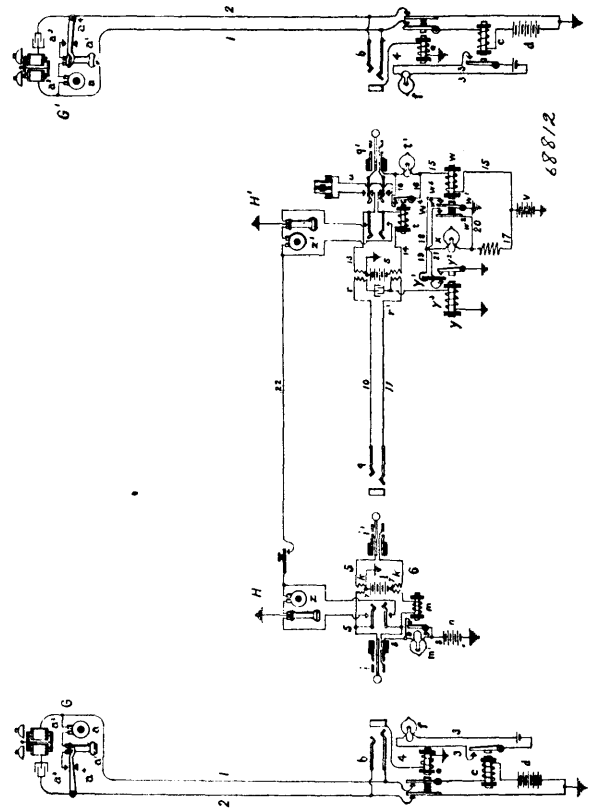
The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of C. E. Scribner, Chicago, Ill., U.S.A., 24th Steptember, 1900; 6 years. (Filed 30th March, 1898.)

Claim.—1st. The combination with the core and the spool thereon, of the flat narrow extended pole piece parallel with the core, the straight transverse channel therein, the armature placed vertically above the channel formed with an edge resting in the channel, a contact piece carried by the armature, and a fixed contact therefor whereby a highly sensitive relay is formed while the contacts are made certain, as described. 2nd. In combination, the core and the spool thereon, the extended pole piece parallel with the core, the transverse channel therein, the armature placed vertically above the channel formed with an edge resting in the channel, a recess in the armature, and a projection of the pole piece entering the recess, whereby lateral movement of the armature is prevented, as described. 3rd. In combination, the core and the spool thereon, the pole piece



extended parallel with the core having the transverse channel formed in it, the armature formed with an edge resting in the channel, and provided with an adjustable contact screw c^2, the opposite anvil d^2 carried upon the strip d, the armature being perforated, the stud carried by the core projecting freely through the said perforation, and the adjusting nut on the stud for limiting the play of the armature, as described. 4th. The combination with the core of the magnet and the spool thereon, the flat narrow extended pole piece parallel with the core, and the armature resting on the pole piece, of the plate e carried on the pole piece of the magnet, and the closed thick tubular envelope of copper carried by the said plate, as described. 5th. The combination with a telephone circuit and a relay having its magnet included in said circuit, of a thick envelop of good conducting non-magnetic material surrounding and inclosing the said relay, substantially as described. 6th. The combination with the core and the extended pole piece thereof, the armature resting on the pole piece and the contact point carried by the armature, of the contact strap d having a portion bent at right angles lying against the head of the spool in position to make contact with the said contact piece of the armature, and having an extended portion lying parallel with the core, plate e, the terminal extension of said contact strap passing through the bushed opening in the plate and being secured thereby, as described.

No. 68,812. Telephone Trunk Line. *(Ligne téléphonique.)*



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of C. E. Scribner, Chicago, Ill., U.S.A., 24th September, 1900; 6 years. (Filed 9th December, 1898.)

Claim.—1st. The combination with an interoffice trunk line, subscribers' lines, means for making connection from a calling subscriber's line to the outgoing terminal of the trunk line at one office,

and supervising mechanism at the said office, means for making connection from the incoming terminal of the trunk line to the called subscriber's line, a signal at the incoming terminal of the trunk line, an exciting circuit for the signal closed in making connection with the trunk line at either office, and a circuit closed in completing connection at both terminals of the trunk line adapted to cause the effacement of the signal, whereby the signal is a clearing out signal when connection exists only at the incoming end of the trunk line, but is a guard signal when connection exists only at the outgoing terminal thereof, as described. 2nd. In combination with a trunk line at the incoming terminal thereof, of a signal and two circuits therefor, means for closing one circuit in making connection with the outgoing terminal of the trunk line, means for closing the other circuit in making connection with the incoming terminal of the trunk line, and circuit connection made operative in the simultaneous completion of both said circuits adapted to cause the effacement of the indication of said signal, substantially as described. 3rd. The combination with an interoffice trunk line at the incoming terminal thereof, of a signal lamp, a local circuit including the lamp together with a source of current, said circuit being divided at one point into parallel branches, two relays, means for exciting one of the relays in making connection with the incoming terminal of the trunk line, means for exciting the other of the relays in making connection with the outgoing terminal of the trunk line, the continuity of one of said branches being controlled by each of the relays, and means made operative in the simultaneous excitement of both relays to interrupt the current through the lamp, as described. 4th. The combination with an interoffice trunk line at the incoming terminal thereof, of a signal lamp, a local circuit including the lamp together with a source of current, said local circuit being divided into parallel branches which are normally open, two relays, means for exciting one of the relays in making connection with the incoming terminals of the trunk line, means for exciting the other relay in making connection with the outgoing terminal of the trunk line, the continuity of one of said branches being controlled by each of the relays, a shunt of the lamp, and normally open switch contacts of both relays included in the said shunt, as described. 5th. The combination with an interoffice trunk line at the incoming terminal thereof, of a lamp signal, a local circuit therefor including a source of current and divided into parallel branches, two relays, controlling normal breaks in the different branches, a circuit through the magnet of one of said relays, and means for closing said circuit in making connection with the outgoing terminal of the trunk line, a circuit through the magnet of the other relay, and means for closing it in making connection with the incoming terminal of the trunk line, a shunt of the lamp, and normally open switch contacts of both said relays included serially in said shunt, as described.

No. 68,813. Apparatus for Magnetic Separation.

(Separateur Magnétique.)

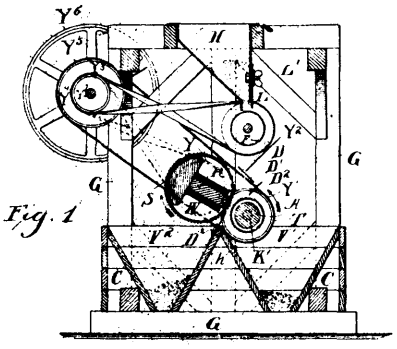


Fig. 1

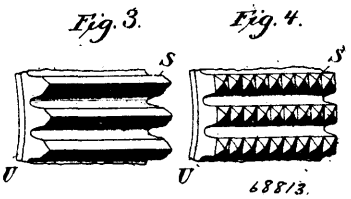


Fig. 3. Fig. 4.

688/13.

Clarence Quintard Payne, Manhattan, New York, U.S.A., 24th September, 1900; 18 years. (Filed 8th January, 1900.)

Claim.—1st. In a magnetic separator, two opposing magnetic surfaces, connections with said surfaces whereby a magnetic fluid may be formed in the air gap between the two surfaces, in combination with a separating carrier provided with means for producing a series of line dispersions of the flux density within said field, and means for moving said carrier through the field on one side thereof. 2nd. In a magnetic separator, an electro-magnet and an oppositively disposed inducing body separated therefrom by an interval constituting a magnetic field, in combination with a separating carrier travelling through the field between the magnet and the inducing body, and provided with means for intercepting and converging the lines of force at a series of separated locations upon the surface of the carrier, thereby inducing wide differences of magnetic potential in the field on the two sides thereof, substantially as and for the purpose described. 3rd. In a magnetic separator, and electro-magnet, and an oppositively disposed inducing body separated therefrom by an interval constituting a magnet fluid, combined with a plurality of wedge terminations arranged to travel through the magnetic field, to establish wide differences of magnetic potential in the field between the two sides thereof, substantially as and for the purpose described. 4th. In a magnetic separator, an electro-magnet, and an oppositely disposed inducing body, separated therefrom by an interval constituting a magnetic field, in combination with a separating carrier passing through said field, and provided with a series of wedge terminations which are successively opposed to said inducing surface as they pass through the magnetic field. 5th. In a magnetic separator, a magnetic field formed between two opposing magnetic surfaces, in combination with a separating carrier, passing through said field on one side thereof, and provided with a series of inductively magnetized wedge terminations, and a non-magnetic carrier also passing through said field on the other side thereof, substantially as and for the purpose described. 6th. In a magnetic separator, an electro-magnet, and an oppositely disposed inducing body, separated therefrom by an interval constituting a magnetic field, forming the circuit for the total magnetic flux generated by the electro-magnet, in combination with a separating carrier travelling through said field, and provided with means for inducing wide differences of magnetic potential in the field on the two sides thereof, by intercepting and converging the lines of force at a series of wedge terminations upon the surface of the carrier, substantially as and for the purpose described. 7th. In a magnetic separator, an electro-magnet and an oppositely disposed inducing body, separated therefrom by an interval constituting a magnetic field, in combination with a separating carrier travelling through the field between the magnetic and the inducing body and arranged to intercept and magnetically induce wide differences of magnetic potential in the field between the two sides thereof, by opposing to the surface of the inducing body on one side of the field, a series of wedge terminations upon the separating carrier on the other side of the field, substantially as and for the purpose described. 8th. In a magnetic separator, the combination of means for creating two unipolar magnetic fields upon the same circuit, combined with two series of wedge terminations, each series arranged to travel through one of said magnetic fields, for inducing wide differences of magnetic potential in each of the fields between the two slides thereof, and means for moving said wedge terminations through the fields, substantially as and for the purpose described. 9th. In a magnetic separator, the combination of an electro-magnet and an oppositely disposed inducing body separated therefrom by an interval constituting a magnetic field, a rotating magnetic cylinder surrounding the electro-magnet, said cylinder being provided with a plurality of devices for establishing wide differences of magnetic potential in the field between the two sides thereof, means for rotating said cylinder, and a non-magnetic cylinder surrounding the inducing body. 10th. In a magnetic separator, an electro-magnet, and an oppositely disposed inducing body separated therefrom by an interval constituting a magnetic field, in combination with an inductive carrier travelling through the field and between the electro-magnet and inducing body, said carrier being provided with a plurality of wedge terminations on the side thereof nearest the inducing body, whereby the lines of force are magnetically intercepted and converged at those projections of the carrier, which at that time pass through the field. 11th. In a magnetic separator, an electro-magnet, and an oppositely disposed inducing body, separated therefrom by an interval constituting a magnetic field, a rotating carrier provided with devices acting to induce wide differences of magnetic potential in the field between the two sides thereof, means for rotating said carrier and non-magnetic carrier between the inducing body and the magnetic carrier, substantially as and for the purpose described. 12th. The combination of a suitably energized electro-magnet, an armature, an armature so arranged with reference thereto as to form two unipolar magnetic fields upon the same circuit, a rotating cylinder surrounding the armature for conveying the material to be separated into both fields, and an inductively magnetized carrier for removing the magnetic portion of the material, provided with means for causing a series of parallel wedge-shaped convergences of the lines of force in both of said fields. 13th. The combination of a suitably energized electro-magnet, a cylindrical armature so arranged with reference thereto, as to form two unipolar magnetic fields upon the same circuit, a non-magnetic cylinder surrounding the armature for conveying the material to be separated into both fields, and a carrier surrounding and arranged to rotate around the electro-magnet, composed of a central non-magnetic portion, and two independent inductively magnetized iron portions, each of which pass through one of the unipolar fields, and is provided with a series of parallel wedge terminations for removing the magnetic portion of the material attracted by the electro-magnet. 14th. In combination, a magnetic separator provided with two opposing magnetic surfaces, connections forming two magnetic circuits, whereby a single magnetic field may be formed in the air gap between the two surfaces,

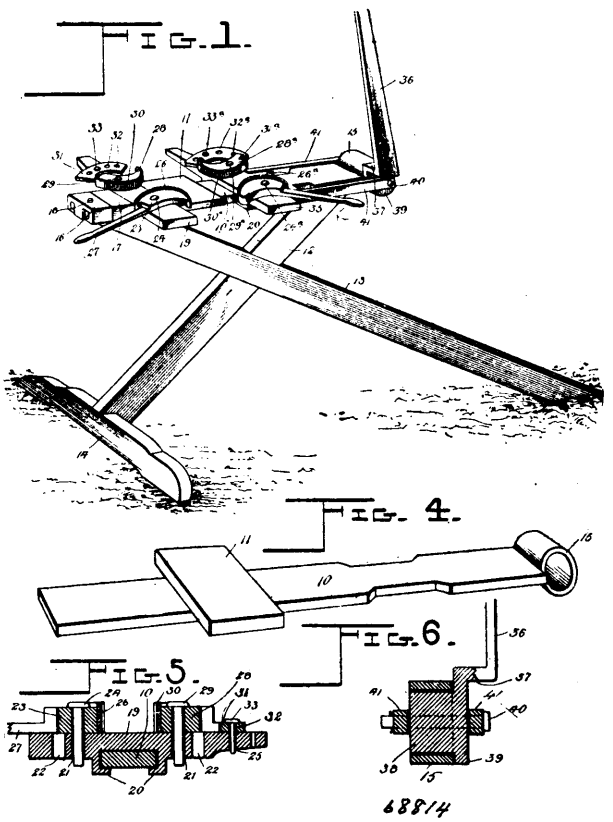
and means for producing line dispersions of the flux density within said field, substantially as described. 15th. In combination, a magnetic separator provided with two opposing magnetic surfaces, connections forming two magnetic circuits, whereby a single magnetic field may be formed in the air gap between the two surfaces, and means for producing wide differences of magnetic potential within said field, arranged to pass through said field. 16th. In combination, a magnetic separator provided with two opposing magnetic surfaces, connections forming two magnetic circuits, whereby a single magnetic field may be formed in the air gap between the two surfaces, a separating carrier provided with means for producing line dispersions of the flux density within said field on one side thereof, substantially as described. 17th. In combination, a magnetic separator provided with two opposing magnetic surfaces, connections forming two magnetic circuits whereby a single magnetic field may be formed in the air gap between the two surfaces, a separating carrier provided with means for producing undulations of magnetic potential within said field, by moving said carrier through said field on one side thereof, substantially as described. 18th. In a magnetic separator, the combination of a suitably energized electro-magnet, an armature, two yokes so connecting the electro-magnet with the armature that a single magnetic field may be formed by two magnetic circuits in the air gap between them, a feed carrier and a separating carrier, each arranged to pass through said field, said separating carrier being provided with a series of wedge terminations which are successively magnetized by induction as they pass through said field and produce line dispersions of the flux density therein, substantially as described. 19th. In combination, a magnetic separator provided with two opposing magnetic surfaces, connections forming two magnetic circuits, whereby a single magnetic field may be formed in the air gap between the two surfaces, a series of iron wedges passing through said field on one side thereof which are successively magnetized by induction as they pass through said field, and which produce line dispersions of the flux density and wide differences of magnetic potential therein, and means for feeding the material to be separated through said field on the other side thereof, substantially as described. 20th. In combination, a magnetic separator provided with opposing magnetic surfaces, connections forming two magnetic circuits whereby a single magnetic field may be formed in the air gap between the two surfaces, a separating carrier passing through said field on one side thereof provided with wedge terminations which are successively magnetized by induction as they pass through said field, a magnetic feed carrier also passing through said field on the other side thereof, and means for feeding the ore through said field, substantially as described. 21st. In combination, a magnetic separator provided with two opposing magnetic surfaces, connections forming two magnetic circuits whereby a single magnetic field may be formed in the air gap between the two surfaces, a separating carrier passing through said field on one side thereof provided with wedge terminations which are successively magnetized by induction as they pass through said field, a feed carrier also passing through said field on the other side thereof, and means for feeding the ore through said field, substantially as described.

No. 68,814. Machine for Upsetting or Shrinking Tires.

(Machine pour contracter les bandages.)

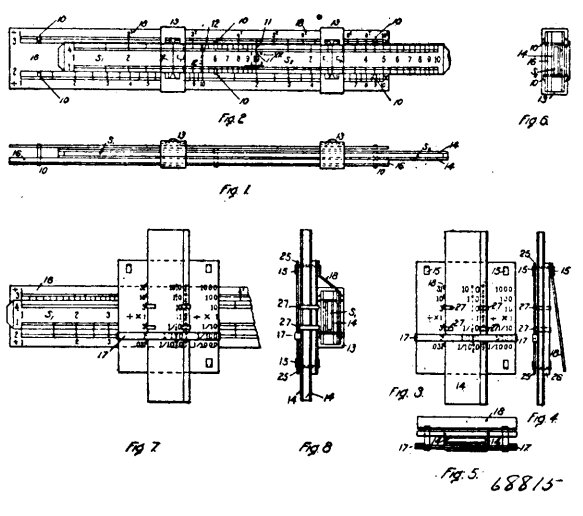
The Lavoie-Guay Company, Plessisville, assignee of François Morin, St. Lin, all in Quebec, Canada, 27th September, 1900; 6 years. (Filed 30th June, 1900.)

Claim.—1st. In a metal upsetting machine, the combination of two sets of jaws disposed with the members of each set in opposing relation, each set of jaws having the normally stationary member mounted in adjustable relation to the other member of the set, and mechanism for moving one set of jaws towards the other set of jaws, substantially as described. 2nd. In metal upsetting machine, the combination of two sets of jaws, and means for moving one set of jaws with relation to the other set of jaws, each set of jaws having one member provided with a handle and the other member disposed in adjustable relation to the handled member, substantially as described. 3rd. In a metal upsetting machine, the combination of two sets of gripper jaws, and means for advancing the gripper jaws of one set toward or from the other set of jaws, each set of jaws having the pivot member provided with an eccentric gripping face and with a concentric segment having a locking device for holding said pivoted jaw in stationary and adjustable relation to the other member of the set, substantially as described. 4th. In a metal upsetting machine, the combination of the bed plate, a set of jaws mounted thereon, a carrier plate slidably mounted on the bed plate, another set of jaws mounted on the carrier plate and shiftable therewith toward or from the first named set of jaws, an operating lever, and connections between said lever and the carried plate, substantially as described. 5th. In a metal upsetting machine, the combination of a bed plate, a set of jaws mounted thereon, a carrier plate slidably mounted on the bed plate, another set of jaws mounted on the carrier plate, an eccentric, links between the eccentric and the carrier plate, and means for operating the eccentric to shift the carrier plate, substantially as described. 6th. In a metal upsetting machine, the combination of a bed plate, a carrier plate mounted on said bed plate, a set of jaws supported on said carrier plate and adjustable thereon toward or from each other, a slidable carrier plate also mounted on the bed plate, another set of jaws mounted on said slidable carrier plate for adjustment toward or from each other, and means for moving said slidable carrier plate,



substantially as described. 7th. In a metal upetting machine, the combination of a bed plate, a carrier plate, spacing blocks for adjusting the carrier plate on the bed plate, a slidable carrier plate, two sets of gripper jaws arranged for each set to be mounted on one carrier plate, and means for actuating the slidable carrier plate, substantially as described.

No. 68,815. Calculating Scales. (*Machine à compter.*)



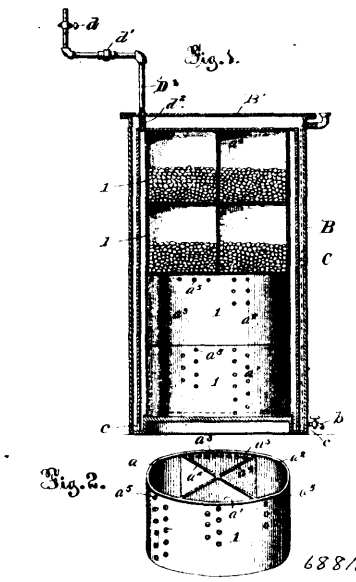
James Cruickshank, New York City, assignee of Rudolph Charles Smith, Yonkers, both of the State of New York, U.S.A., 27th September, 1900; 6 years. (Filed 27th April, 1900.)

Claim.—1st. A slide rule with the figures 10, 100, 1000, etc. to the right of, or above 1, and the figures $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{1000}$, etc. below or to the left of 1 on the slide, and the stationary scale, with the same divisions and figures, substantially as described. 2nd. In combination with the main slide rule, an auxiliary scale with the figures $\frac{1}{100}$, $\frac{1}{10}$, 1, 10, 100, 1000, etc., and with a slide having the same division and figures, and an extra additional column or place to the right,

marked by a conventional notation, as $\frac{1}{2}$, $\frac{2}{3}$, indicating the relation of this column to the corresponding part of the main slide, substantially as described. 3rd. In combination with the main slide rule, an anxiliary scale with the figures $\frac{1}{100}$, $\frac{1}{10}$, 1, 10, 100, 1000, etc., and the slide with the same division and figures, and an extra column to the left of the normal column, marked with the notation showing its relation to the corresponding part of the main slide, a sign or conventional notation of the column to the left of the ordinary unit place, and a corresponding sign or notation on the main scale, as described. 4th. In combination with the main slide rule, an auxiliary scale with the figures $\frac{1}{100}$, $\frac{1}{10}$, 1, 10, 100, 1000, etc., a slide with the same division and figures, and the signs or notation respectively of the column to the left and the one to the right of the regular division placed to change their location at the fractions, as described. 5th. A slide rule with flexible transparent covers, a folded transparent cover for the slide, and sliding with the same, substantially as described. 6th. A slide rule with a sliding clamp, a flexible transparent face on the clamp, forming a closed sleeve and transparent from one edge to the other, substantially as described. 7th. A slide rule with flexible covers, and clamps perforating the different parts of the structure and of extra length for clearance, substantially as described. 8th. In combination with the slide rule, an auxiliary scale with a flexible transparent cover fastened to the body at one end, and adapted to slide between the covering plates of the main scales, substantially as described. 9th. A slide rule with visible marks distinguishing one-half of the slide from the other, with an auxiliary scale having the same distinguishing marks on its slide, and clamps on the main scale having on their edges the same distinguishing marks, as described. 10th. A slide rule having the figures of the right hand halves of the scales marked $\frac{1}{10}$ of the value of those pointed on the left hand halves of same, substantially as set forth.

No. 68,816. Acetylene Gas Generator.

(Generateur à gaz acétylène.)



William Ralph Goodwin, Bowmanville, Ontario, Canada, 27th September, 1900; 6 years. (Filed 14th April, 1899.)

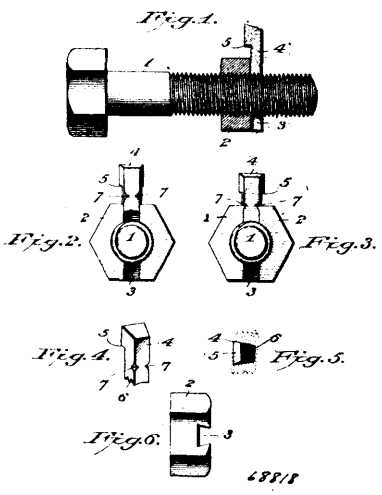
Claim.—1st. An acetylene gas generator, comprising in its construction an outer tank, an inner tank, a series of removable carbide holders arranged one above the other, each holder being divided into independent compartments which have no communication one with the other, the said sections being provided with openings through which water may enter from the outside, the lowermost opening or openings in each section being above the lowermost openings in the adjoining section, said holders being closed at top and bottom, substantially as described. 2nd. An acetylene gas generator, comprising in its construction an outer tank, an inner tank provided with means at its lower end for the admission of water to form a water seal, and also provided with a pipe for conducting off the generated gas, a cock in said pipe for preventing the escape of gas when the inner tank is removed from the generator, and a series of removable carbide holders arranged one above the other, each holders being divided into independendent compartments having no communication one with the other, said sections being provided with openings through which water may enter from the outside, the lowermost opening or openings in each section being above the lowermost openings in the adjoining section, said holders being closed at top and bottom, substantially as described.

No. 68,817. Yeast. *(Levain.)*

Herman Jansen, Schiedam, Netherlands, 27th September, 1900; 6 years. (Filed 15th August, 1899.)

Claim.—1st. A process of producing a seed yeast (or bub) for use in the manufacture of yeast by the aeration or clear wort process, consisting in propagating the seed yeast in a yeast material or bub composed of high grade wort and concentrated clear spent wash, substantially as hereinbefore described. 2nd. A process of producing a seed yeast (or bub) and using the same in the manufacture of yeast by the aeration or clear wort process, consisting in mixing high grade wort with concentrated clear spent wash, bringing this mixture into fermentation, and, after sufficient fermentation of yeast, adding it to the main wort, substantially as hereinbefore described. 3rd. The herein described process of producing a seed yeast (or bub) in the manufacture of yeast by the aeration or clear wort process, consisting in mixing a portion of the high grade wort from the mash-tun with concentrated clear spent wash, bringing the mixture into fermentation, and, after sufficient generation of yeast, adding the said mixture to the main wort.

No. 68,818. Nut Lock. *(Arrête-écrou.)*



Robert Campbell and Orlando R. Goldman, both of Gadsden, Alabama, U.S.A., 27th September, 1900; 6 years. (Filed 15th August, 1900.)

Claim.—1st. In a nut lock, the combination with a bolt, a nut having a dovetailed recess which intersects the bolt aperture, of a locking key having bevelled side walls and indentations, the indentations being so positioned that when the end of the key engages with the bolt the outer walls of the dovetailed recess of the nut will be on a line with the indentations so that the corners can be forced into said indentations to lock the key in place. 2nd. In combination with a bolt and nut, of a key for locking the nut upon the bolt, said key having a rearward extending head adapted to lie over the nut, indentations in its front and side walls which will be positioned on a line with the side of the nut when one end of the key engages the thread of the bolt, substantially as shown. 3rd. As an improved article of manufacture, a locking key for the purpose set forth, comprising a body portion with bevelled side walls, a head which projects from the wider side of one end of the body portion, the end opposite the head being curved, substantially on the same radii as the circumference of the bolt, said end having threads of a different pitch from the pitch of the thread of the bolt with which it is intended to engage and indentations in the front longitudinal edges of the key, substantially as shown. 4th. The combination with a threaded bolt, and a nut having a dovetailed recess which extends into and across the face of the nut, of a locking key adapted to be placed in said recess, one end of the key having threads which are of a different pitch from the threads of the bolt, indentations in said key, and a head or rear projecting portion adapted to be positioned over the nut, the parts being positioned in use so that the metal of the nut may be forced into said indentation, for the purpose set forth.

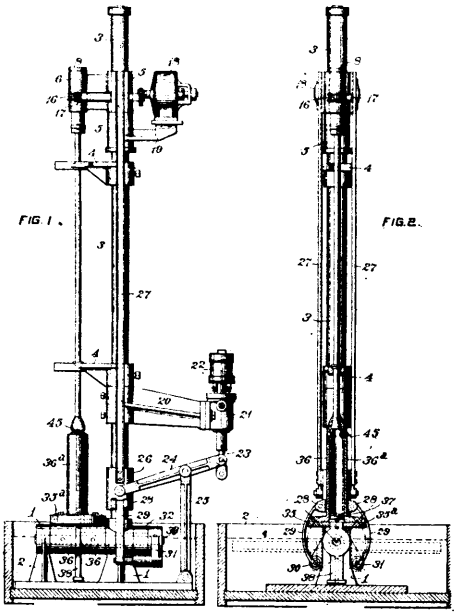
No. 68,819. Glass Blowing Machine.

(Machine à souffler le verre.)

Charles Henry William Ruhe, Pittsburg, Pennsylvania, U.S.A., 27th September, 1900; 6 years. (Filed 29th August, 1900.)

Claim.—1st. In a machine for blowing glass, the combination of pivotally mounted mould sections, a vertically movable blow head, a fluid pressure cylinder and piston and connections from the piston to the mould sections of the blow head, substantially as set forth. 2nd. In a machine for blowing glass, the combination of pivotally mounted mould sections, a blow head adapted to engage the blow-

pipe, means for rotating the blow head, and a fluid pressure cylinder and piston connections from the piston to the blow head and mould sections, substantially as set forth. 3rd. In a machine for blowing glass, the combination of pivotally mounted mould sections, a blow head adapted to engage the blow-pipe, means for imparting a constant rotation to the blow head and pipe, a fluid pressure cylinder and piston, an electrically controlled valve mechanism controlling the flow of fluid pressure to the cylinder and connections from the piston to the blow head and mould sections, substantially as set forth. 4th. In a glass blowing machine, the combination of pivotally mounted mould sections, a movable blow head adapted to engage the blow-pipe, the mould sections being adapted to be closed and the blow head to be moved down into engagement with the blow-pipe by gravity, and a fluid pressure cylinder having its piston connected to the mould sections and blow head and adapted to open the mould sections and raise the blow head, substantially as set forth. 5th. The combination of two pivotally mounted mould sections, a pivotally mounted support weighted so as to stand in normal or operative position, and a disc adapted to form the bottom of the mould detachably mounted on the pivotal supports, substantially as set forth. 6th. In a machine for blowing glass, the combination of a mould, a hollow post or standard adapted to form a storage reservoir or chamber for fluid under pressure, a valve mechanism carried by the post or standard and a blow-pipe adapted to operate the valve mechanism, substantially as set forth. 7th. In a machine for blowing glass, the combination of a mould, a hollow post or standard adapted to form a storage reservoir or chamber, for fluid under pressure, a movable blow head mounted on the post or standard and adapted to control the flow of fluid pressure from the reservoir, and a blow-pipe, substantially as set forth.



No. 68,820. Production of Cliches and Stamps in Celluloid. (*Production des clichés sur celluloide.*)

Dan Lichtenberg-Madsen, 31 Nedergade, Odense, Denmark, 27th September, 1900; 6 years. (Filed 14th February, 1900.)

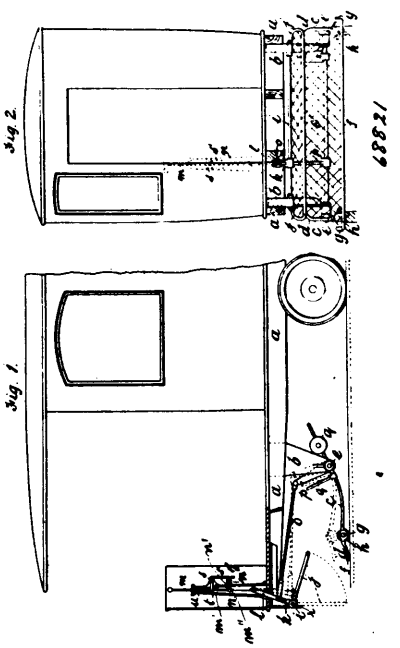
Claim.—The process for the reproduction in celluloid of cliches, stamps, and the like, characterized by the fact that a matrix is stamped with the original in a special kind of celluloid, containing seventy per cent of nitrocellulose, twenty-five per cent of camphor, and five per cent of resinous oil or the like, whereupon the desired number of stampings are effected in the usual manner in celluloid, containing from thirty-five to fifty per cent of camphor.

No. 68,821. Guard for Tram Cars.

(Protecteur pour chars.)

William Wilson and Thomas Bennett, Hyde, Chester, England, 27th September, 1900; 6 years. (Filed 10th August, 1900.)

Claim.—1st. An automatic life saving guard for tramway cars and other vehicles consisting of a pivoted tray provided with rollers to engage with the tramway rails or road, a downwardly projecting pivoted grid, a system of levers and links connecting the shaft carrying said tray and grid, an operating rod to replace the parts in normal position and means for locking said rod and connected parts in the operative and non-operative positions substantially as described. 2nd. An automatic life saving guard for tramway cars and other vehicles consisting of brackets *b* fixed to frame *a* of the tramcar, shaft *e* journalled in said brackets, a tray *c* pivoted to shaft *e* and provided with rollers to engage with the tramway rails or road, a downwardly projecting pivoted grid *j* and a system of levers and links *k*, *p*, *l* and *o* connecting shafts *i* and *l* together and to a rod *m* slidable in a casing *n* capable of being locked in operative and non-operative positions substantially as described. 3rd. A semi-automatic life saving guard for tramway cars and other vehicles consisting of a pivoted tray provided with rollers to engage with the tramway rails or road, a downwardly projecting pivoted grid, a system of levers and links connecting the shaft carrying said tray and grid and an operating rod, a collar on said rod, and a knee plate pivoted to the casing in which the operating rod slides with one arm capable of engaging with said collar substantially as described. 4th. A semi-automatic life saving guard for tramway cars and other vehicles consisting of a pivoted tray provided with rollers to engage with the tramway rails or road, a shaft carrying said tray, an operating rod slidable in a casing, a system of levers and links connecting the tray with the operating rod and a spring controlled knee plate pivoted to the casing and arranged to engage with notches in said operating rod, substantially as and for the purpose described. 5th. In a life saving guard such as described for tramway cars and other vehicles the combination with the frame *d* of the tray *c* of rollers *h* arranged to engage with the tramway rails or road. 6th. In a life saving guard for tramway cars and other vehicles the combination with a tray *c* and grid *d* and their supporting shafts, of a system of levers and links *k*, *p*, *l* and *o*, the connecting point of link *l* with lever *k* being below the centres of shaft *i* and coupling point of lever *p* and link *o* when parts are in normal position, substantially as described.

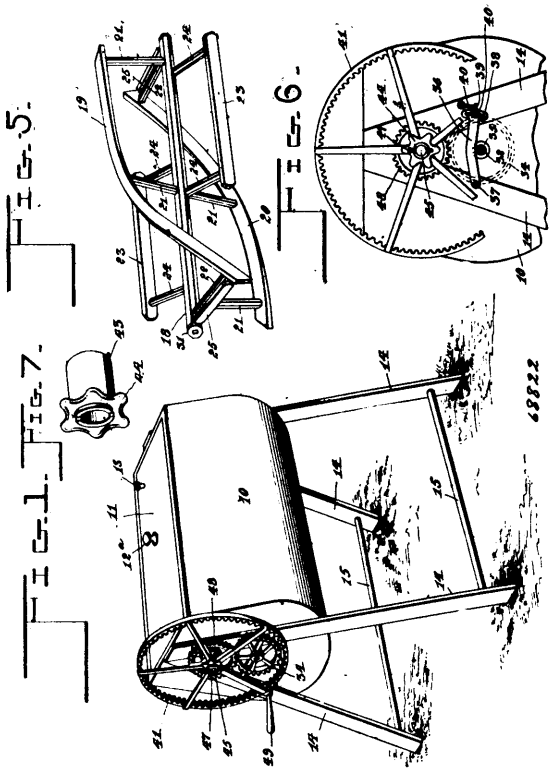


No. 68,822. Churn. (*Baratte.*)

Adelard Leclerc, St. Antoine de Tilly, Quebec, Canada, 27th September, 1900; 6 years. (Filed 10th September, 1900.)

Claim.—1st. In a churn, the combination with a dasher, of a changeable speed driving mechananism operatively connected therewith, whereby the dasher can be driven at variable speed, as may be desired. 2nd. In a churn, the combination with a dasher, of a changeable speed driving mechanicism therefor having a single shiftable element, and gearing between said shiftable element and a part of the dasher, as and for the purposes described. 3rd. In a churn, the combination with a dasher, and a gear adapted to rotate therewith, of a master wheel having two gear surfaces arranged to be separately brought into mesh with the dasher gear, and means for shifting the master gear to bring either gear face thereof into operative position, substantially as described 4th. In a churn, the combination with a dasher having a gear, of a changeable speed driving mechanism for said dasher comprising a master gear having an internal gear face of larger diameter and a gear pinion of less diameter, and a shifting cam arranged to change the relation of the gear faces of the master gear with respect to the dasher gear, substantially as described. 5th. In a churn, the combination of a stub shaft, a dasher gear, a shifting cam fitted on the stub shaft and having means for making the same fast therewith, and a master wheel revolubly mounted on the shifting cam and provided with an

internal gear rim and with a gear pinion, said parts arranged to be separately brought by adjustment of the cam into operative relation



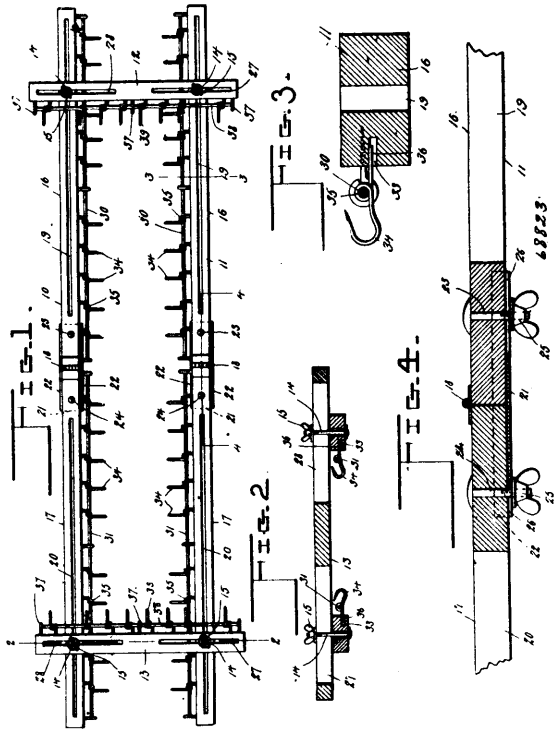
to the dasher gear, substantially as described. 6th. In a churn the combination with a dasher shaft supported at one end, of a driving shaft having an interlocking connection with said dasher shaft, means for locking the dasher shaft against endwise movement, and a dasher driving mechanism for rotating said dasher driving shaft, substantially as described. 7th. In a churn, the combination of a horizontal dasher provided at one end with a thrust plate and at its other end with a coupling socket, a pointed journal screw engaging with the thrust plate, a driving shaft having an interlocking connection with the coupling socket, a pivotal locking bar engaging with a collar on said driving shaft, means for holding the locking bar in adjusted position, and a driving mechanism in operative relation to the driving shaft, substantially as described. 8th. In a churn, a dasher comprising a shaft, spiral blades disposed on opposite sides of the shaft and united thereto by intermediate arms, and parallel blades arranged in open spaces between said spiral blades and united to the shaft by cross arms, as set forth. 9th. In a churn, a horizontal dasher comprising a shaft, spiral arms attached to the shaft, spiral blades fastened to certain of said arms, parallel blades attached to other arms of the shaft, and alternating with the spiral blades, and auxiliary blades fastened to the radial arms of the spiral blades, substantially as described.

No. 68,823. Curtain Stretcher.

(*Tendeur de rideaux.*)

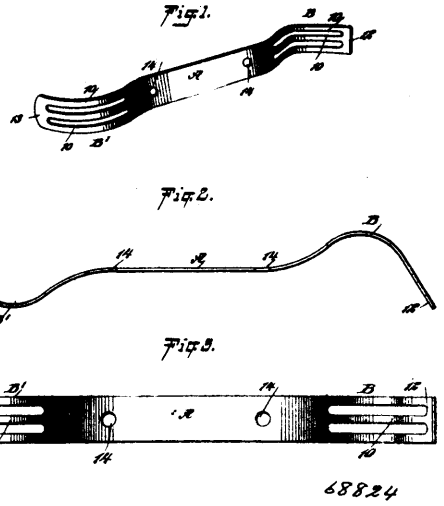
James Alfred Gemmill, Carleton Place, Ontario, Canada, 27th September, 1900; 6 years. (Filed 10th September, 1900.)

Claim.—1st. In a stretcher frame, the combination of a rail having a guideway, and a curtain attaching means slidably mounted on the rail and engaging with the guideway to be held thereby normally in operative position, substantially as and for the purposes set forth. 2nd. In a stretcher frame, the combination of a rail provided with a guideway, a rod mounted on the rail, and a curtain attaching means slidably fitted on the rod and engaging with said guideway, substantially as and for the purposes set forth. 3rd. In a stretcher frame, the combination of a rail provided with a groove, a rod supported on the rail, and a hook provided with an eye and with a shank, said eye fitted loosely on the rod and the shank engaging with the guideway, substantially as and for the purposes set forth. 4th. In a stretcher frame, the side rails having members united together, and the clamping plates fastened to said members of the respective rails and spanning joints therebetween, combined with end rails adjustably clamped to the side rails, and curtain attaching means on said rails, substantially as described. 5th. In a stretcher frame, the side rails, each comprising members united together, a slotted clamping plate fitted on each side rail to span the joint between the members thereof, and bolts engaging with the slotted plate and with the respective members of the rail, combined with



end rails clamped to the side rails on opposite sides of the hinge joints thereof, and curtain attaching means on the rails. 6th. A stretcher frame comprising slotted side rails, slotted end rails, bolts passing through said slots and two rails to adjustably clamp them together, and curtain attaching means on the inner edges of the rails substantially as described.

No. 68,824. Scraper. (*Grattoir.*)

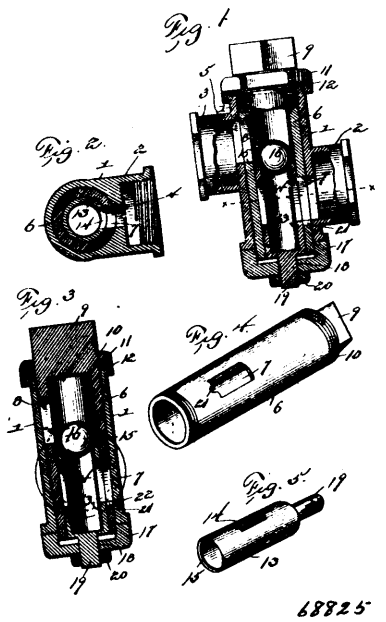


Charles A. Sutton, Pitkin, Colorado, U.S.A., 27th September, 1900; 6 years. (Filed 7th September, 1900.)

Claim.—1st. As an improved article of manufacture, a scraper consisting of a metal strip comprising a plain body and a curved end section, which curved end section consists of series of tines continuous with the body, and a cross bar connecting the outer ends of the tines, all longitudinal edges of the tines and body being scraping edges, and the end of the cross bar having likewise scraping edges or surfaces, whereby a multiple of scraping surfaces is obtained and a clearance of material scraped from a surface is insured at the curved section of the device. 2nd. As an improved article of manufacture, a scraper comprising a straight body and end sections

curved from the body in opposite directions, each end section consisting of a series of tines continuous with the body, and cross bars connecting the ends of the tines, one cross bar having a convexed outline at its extremity, the corresponding outline of the other cross bar being straight, and all longitudinal edges on the entire device being scraping edges as well as the edges of the cross bars, and whereby also the scraper may be effectively used upon surfaces of varying character and upon all manner of utensils, for the purpose specified.

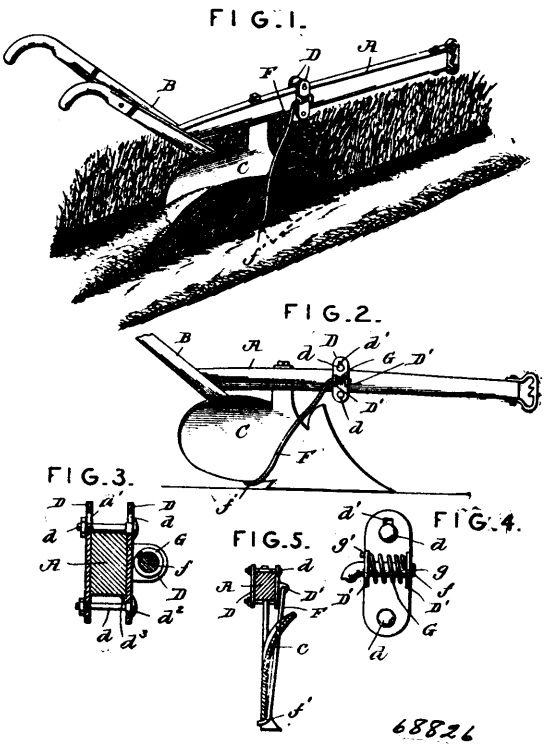
No. 68,825. Check Valve and Stop Cock. (*Soupape d'arrêt.*)



Hiram Pinney, G. F. Vosler and M. F. Vosler, all of Alma, New York, U.S.A., 27th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. A valve, having inner and outer port controlling turning plugs, and a check valve. 2nd. A valve having an outer hollow turning plug provided with inlet and outlet ports, an inner turning plug to control one of the ports, and a check valve located between the ports of the outer turning plug. 3rd. A valve, having inner and outer port controlling turning plugs, and a check valve supported by one of the plugs. 4th. A valve, having inner and outer port controlling turning plugs, of which the inner plug is removable without unseating the outer plug, and a check valve supported by and removable with the inner plug. 5th. A valve, having an outer hollow turning plug, which is open at one end, and also provided with a port, an inner turning plug to be inserted through the open end of the outer plug, and controlling the port thereof, and a check valve supported by the inner plug. 6th. A valve, having an outer hollow turning plug, which is open at one end, and also provided with inlet and outlet ports, an inner hollow turning plug controlling one of the ports of the outer plug, and having inlet and outlet ports, and a check valve controlling the outlet port of the inner plug. 7th. A valve having an outer turning plug, which is hollow, and provided with an open end, and also having inlet and outlet ports, an inner hollow turning plug controlling one of the ports of the outer plug, and having a lateral inlet port, and an open inner end forming a valve seat, and a check valve supported thereon. 8th. In a valve, a valve casing, which is open at opposite ends, and also provided with inlet and outlet branches, a hollow turning plug, having one open end, a tubular valve seat to be inserted into the hollow plug and through the adjacent open ends of the casing and the plug, the tubular valve seat having an open inner end forming the valve seat proper, and also provided with an opening to be aligned with the inlet branch, and a check valve for the valve seat. 9th. In a valve, a casing, which is open at opposite ends, and also provided with inlet and outlet branches, a hollow turning plug, which is open at one end, and said open end also projecting beyond the casing, a valve seat to be inserted into the plug and through the open end thereof, and also having a stem projecting outwardly through the open end of the plug, a check valve for the valve seat, a screw cap fitted to the projecting end of the plug, and bearing against the casing, and also having an opening for the reception of the stem, and a nut fitted to the projecting end of the stem, and bearing against the cap. 10th. In a valve, a casing, havaing inlet and outlet branches, and a drain port or perforation located between said branches, a hollow turning plug, having inlet and outlet openings for alignment with the respective branches of the casing, and the inlet opening having a notch formed in one edge thereof, and for alignment with the drain port or perforation, a hollow valve seat located within the turning plug, and movable therewith, and also provided with an inlet opening, normally aligned with the inlet opening of the plug, and a check valve for the valve seat.

No. 68,826. Weed Turner. (*Sarcleur.*)



Barney Ross and Charles H. Horton, both of Painsville, Ohio, U.S.A., 27th September, 1900; 6 years. (Filed 28th August, 1900.)

Claim.—1st. The combination with a plough, of a weed turning device or attachment therefor, consisting of a clamp secured to the plough beam, and having two lateral lugs or bearings, a single rod extending downwardly and rearwardly across the face of the mould board of the plough, having a horizontally bent journal portion at its upper extremity pivotally engaging said lugs, and an inwardly bent hook at its lower extremity adapted to be turned under the lower edge of the mould board when not in use, together with a spring for holding said rod toward the mould board, substantially as specified. 2nd. The herein described weed turning attachment for ploughs, consisting of the clamp having the bolt engaged elongated slots whereby it is adjustable along a tapered plough beam, and having two lateral lugs or bearings, of the single rod extending downwardly and rearwardly across the face of the mould board of the plough, said rod having a horizontally bent journal portion at its upper extremity pivotally engaging said bearings, and a hooked lower extremity, together with the spring coiled around said journal portion and connected thereto and to said clamp, substantially as specified.

No. 68,827. Method of Soldering Aluminium.
(*Méthode pour souder l'aluminium.*)

Hjalmar Lange, 1 Kungsdal, Vesteras, Sweden, 27th September, 1900; 6 years. (Filed 31st August, 1900.)

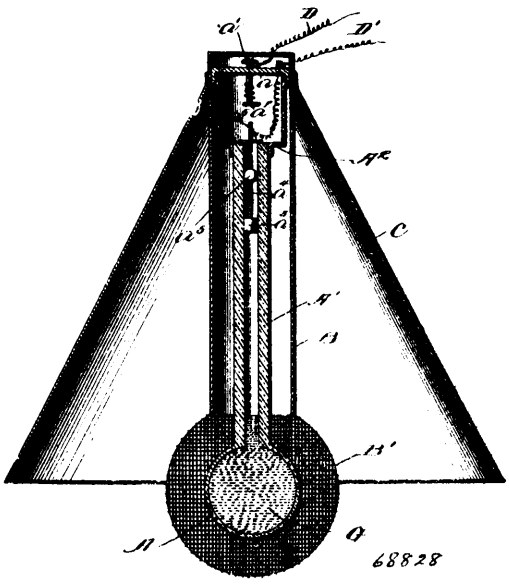
Claim.—1st. A method of soldering aluminium in which the clean aluminium surfaces are fused and connected together by means of zinc and an alloy of aluminium and zinc whilst suitably heating them. 2nd. In the alloy of aluminium and zinc indicated in the preceding claim, the following proportion of the said metals, about 1 part of aluminium and about 2½ parts of zinc.

No. 68,828. Fire Alarm. (*Avertisseur d'incendie.*)

James Edgar Gillis, Head of Tide, New Brunswick, 27th September, 1900; 6 years. (Filed 7th July, 1899.)

Claim.—1st. An automatic alarm device, comprising a bulb containing mercury or other suitable liquid, a tube connected therewith, a cap secured to the upper end of said tube, an electric contact secured in said cap, a piston slidably mounted in said tube, a rod fixed to said piston and projecting above the end of said tube, the end of said rod forming an electric contact, which is adapted to

be raised into engagement with the first mentioned electric contact by the pressure of the mercury, and an electric circuit including an

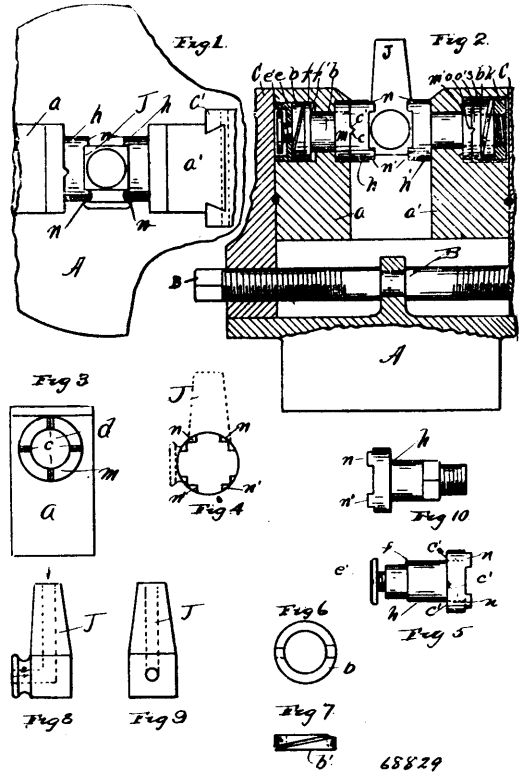


alarm, and having the aforesaid contacts as its terminals, substantially as described. 2nd. An automatic alarm device, comprising a bulb containing mercury or other suitable liquid, a tube connected therewith, a cap secured to the upper end of said tube, an adjustable screw threaded in said cap, a yielding contact plate secured to the lower end of said screw, a piston slidably mounted in said tube, a rod fixed to said piston and projecting above the end of said tube, an adjusting disc threaded upon the upper portion of said rod, the end of said rod forming an electric contact, which is adapted to be raised into engagement with the said contact plate by the pressure of the mercury, and an electric circuit including an alarm and having the aforesaid contacts as its terminals, substantially as described. 3rd. An automatic alarm device, comprising a thermometer, a cap secured to the upper end thereof, an electric contact secured within said cap, a piston slidably secured in said thermometer, a rod secured thereto and projecting beyond the end of said thermometer, the end of said rod forming an electric contact, which is adapted to be brought into engagement with the first mentioned contact by the pressure of the mercury, a protecting cylinder surrounding said thermometer, a heat deflecting screen fixed to said cylinder, and an electric circuit including an alarm and having the aforesaid contacts as its terminals, substantially as described.

No. 68,829. Machine Chuck. *(Mandrin.)*

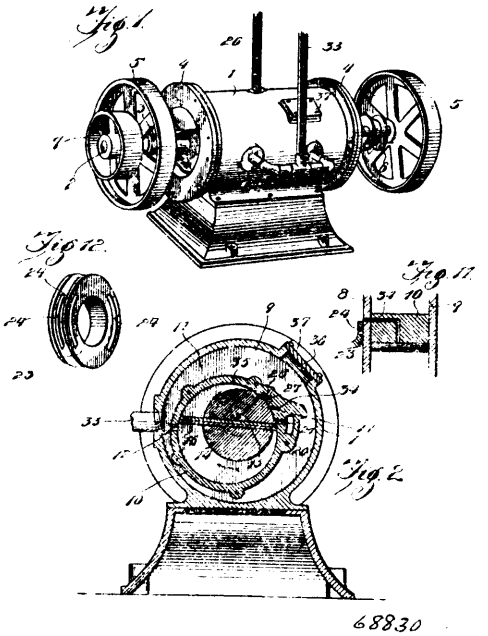
The United States Safety Gas Cock Company, Providence, Rhode Island, U.S.A., assignee of Owen Francis Garvey, of the same place, 27th September, 1900; 6 years. (Filed 16th October, 1899.)

Claim.—1st. In a combination chuck, the combination with the jaws of the chuck of stationary blocks attached to the faces of the jaws, blocks held to rotate in sockets, in said stationary blocks, a spring washer arranged to bear on one of the rotating blocks and press it out of its socket, a spring washer arranged to draw the other rotating block into its socket in its plate, substantially as described. 2nd. In a chuck, the combination with its jaws, of stationary blocks attached to the faces of said jaws, blocks fitted to rotate in sockets in said stationary blocks, a spring washer arranged to press one of said rotating blocks out of its socket in the stationary block, a set of radial ridges made around the socket in one of the stationary blocks one or more radial grooves made on one of the rotating blocks arranged to fit in said radial groove, substantially as described. 3rd. In a chuck, the combination with its jaws of stationary blocks attached to the faces of said jaws, blocks fitted to rotate in sockets in said stationary blocks, a spring washer arranged to draw one of the rotating blocks into its socket in its stationary block, a collar made fast in said socket and having radial ridges made on its inner face, a washer held to turn with said one of the rotating blocks and having radial grooves made in its face adjacent to said radial ridges to receive them, substantially as described. 4th. In a combination chuck, the combination with the jaws of the chuck, of stationary blocks attached to the faces of the jaws, blocks held to rotate in sockets in said stationary blocks, a spring washer arranged to bear on one of the rotating blocks and press it out of its socket, a spring washer arranged to draw the other rotating block into its socket in its plate, dovetailed grooves made in the faces of the rotating blocks, blocks fitted to slide in said dovetailed grooves, substantially as described. 5th. In a machine chuck, the combination with the jaws of the chuck, of blocks attached to the faces of the jaws, blocks held to slide across the face of the chuck in grooves in said blocks, a stop



placed in the groove in one of said blocks, a portion of one of the sliding blocks that slides in the grooves, cut away to accommodate the stop, set screws fitted in the end portions not cut away, to bring up against the stop and limit the motion either way, notches made in the other sliding block, a stationary spring stop arranged to catch in said notches, substantially as described.

No. 68,830. Rotary Engine. *(Machine rotatoire.)*



John Putman, Lovington, Illinois, U.S.A., 27th September, 1900: 6 years. (Filed 10th September, 1900.)

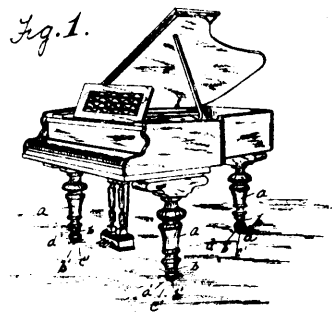
Claim.—1st. A rotary engine having a cylinder divided by transverse partitions to form eccentric piston chambers and an interme-

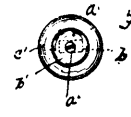
diate feed chamber, the walls of the piston chambers being spaced from the wall of the cylinder to form exhaust chambers, with which the piston chambers are in communication, connected winged pistons operating in the piston chambers, and a cut-off carried by the piston in the feed chamber, for controlling feed ports in communication with said piston chambers, substantially as specified. 2nd. A rotary engine having a cylinder, eccentric piston chambers of which the heads are extended to form cylinder partitions, between the inner of which is provided a feed chamber, the spaces between the walls of the eccentric piston chambers and the cylinder wall, constituting exhaust chambers with which the piston chambers are in communication by exhaust ports, connected winged pistons operating in the piston chambers, and a cut-off actuated by the pistons for controlling feed ports between said feed chamber and the piston chambers, substantially as specified. 3rd. A rotary engine having a cylinder eccentric piston chambers arranged within the cylinder and having their heads extended to form cylinder partitions between the inner of which is provided a feed chamber, the intervals between the eccentric piston chamber walls and the cylinder wall constituting exhaust chambers with which said piston chambers communicate by exhaust ports, and the piston chambers being arranged on the quarter, a piston having a common core or hub and wings respectively operating in the piston chambers, and a cut-off arranged in the feed chamber and carried by said core, for controlling feed ports in communication with the piston chambers, substantially as specified. 4th. A rotary engine having a cylindrical casing, a piston shaft arranged concentrically therein, outer and inner partitions arranged transversly in the casing, the inner partition being spaced apart to form an intermediate feed chamber eccentric piston chamber walls arranged between each inner partition and the adjacent outer partition and having feed ports for connecting the feed chamber with the piston chamber, and exhaust ports being formed in said piston chamber walls for communication with the exhaust chambers, consisting of the spaces between said piston chamber walls and the casing, pistons operating in the piston chambers, and a cut-off actuated by the piston shaft for controlling the feed ports of the piston chambers, substantially as specified. 5th. A rotary engine having a feed chamber, a piston chamber provided in its wall with spaced permanently open main and auxiliary exhaust ports, a piston operating in the piston chamber, spaced main and auxiliary feed ports, of different cross sectional areas, for connecting the piston chamber with the feed chamber, the piston wing being adapted to pass the auxiliary and main feed ports successively in its forward movement, and a cut-off actuated by the piston for controlling the main feed port, substantially as specified. 6th. A rotary engine having co-axial feed and exhaust chambers, and eccentric piston chamber arranged within the exhaust chamber and having in its wall an exhaust port in communication with the exhaust chamber, main and auxiliary feed ports of different cross sectional areas for connecting the piston chamber with the feed chamber, a piston arranged in the piston chamber, and a cut-off actuated by the piston for controlling the main feed port, substantially as specified. 7th. A rotary engine having a cylinder, a piston, a valve controlled main feed port in communication with the cylinder, and a permanently open auxiliary feed port, of less cross sectional area than the main feed port, in communication with the cylinder at a point in advance of the main feed port, whereby it is passed by a piston wing before said wing reaches the main feed port, substantially as specified. 8th. A rotary engine having a cylinder provided with feed and exhaust ports, a piston having wings for traversing the wall of the cylinder, and a gib arranged in the wall of the cylinder between the feed and exhaust ports, that edge of the gib with which the piston wing first comes in contact in its advance movement, being disposed obliquely to the path of movement of the piston wing, substantially as specified. 9th. A rotary engine having a cylinder, an eccentric winged piston having its core in contact at one point with the wall of the cylinder, and a gib arranged at the point of contact of the piston core and cylinder wall, said gib being tapered longitudinally to present an obliquely disposed edge for contact with the contiguous edges of the piston wing, substantially as specified. 10th. A rotary engine having a cylinder, an eccentric piston having its core arranged at one point in contact with the wall of the cylinder a longitudinally tapered gib arranged at the point of contact of the piston core with the cylinder wall and provided with a longitudinal cross sectionally dovetailed groove, and headed securing bolts engaging said groove, and extending outwardly through the wall of the cylinder, substantially as specified.

No. 68,831. Piano Base. *(Piano.)*

Frank A. Bronson, Binghamton, New York, U.S.A., 27th September, 1900; 6 years. (Filed 24th July, 1900.)

Claim.—1st. An accoustic base designed to be placed under the legs of pianos and analogous musical instruments, comprising a resonant shell having a closed top and bottom, said top being formed with a seat for the leg of the instrument, and a metallic transmitting pin or screw extending from the shell into the floor supporting the instrument, substantially as described. 2nd. An accoustic base designed to be placed under the legs of pianos and analogous musical instruments, comprising a resonant shell formed with a seat in the top for the leg of the instrument, and a metallic transmitting pin or screw extending from said top into the floor supporting the instrument, substantially as described. 3rd. An accoustic base designed to be placed under the legs of pianos and





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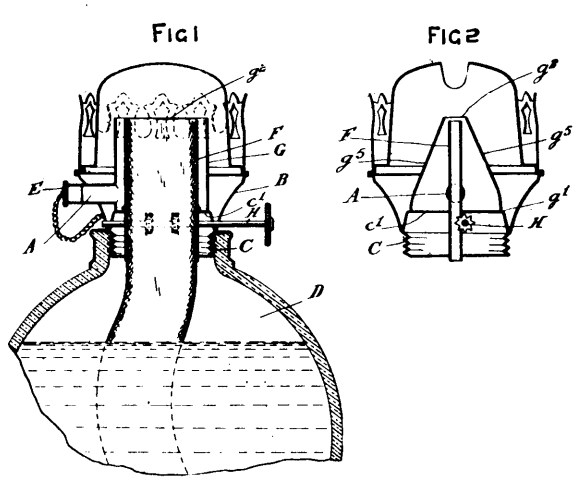
analogous musical instruments, comprising a resonant shell having a closed top and an open bottom, said top being concaved forming a seat for the leg of the instrument, and a metallic transmitting pin or screw extending from said seat into the floor supporting the instrument, substantially as described. 4th. An accoustic base designed to be placed under the legs of pianos and analogous musical instruments, comprising a resonant shell having a closed top and an open bottom, said top being concaved forming a seat for the leg of the instrument, a central prop formed in the shell and extending from the top and formed with a vertical opening, and a metallic transmitting pin or screw extending through said opening and from the aforesaid seat into the floor supporting the instrument, substantially as described.

No. 68,832. Lamp Burner. *(Brûleur de lampe.)*



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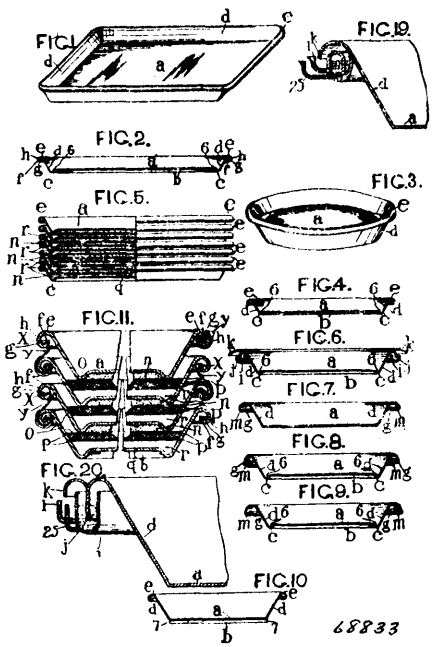
James Sharples, Birmingham, Warwick, England, 27th September, 1900; 6 years. (Filed 9th August, 1900.)

Claim.—The combination with an oil lamp burner, of a funnel closed at the bottom and enclosing the upper part of the wick tube above the winder and shaped so as to form a narrow opening all round the top of the wick tube, said funnel having an air inlet closed by a suitable plug or valve which when opened allows the air to rush through the funnel and impinge against the flame and extinguish the same, substantially as set forth.

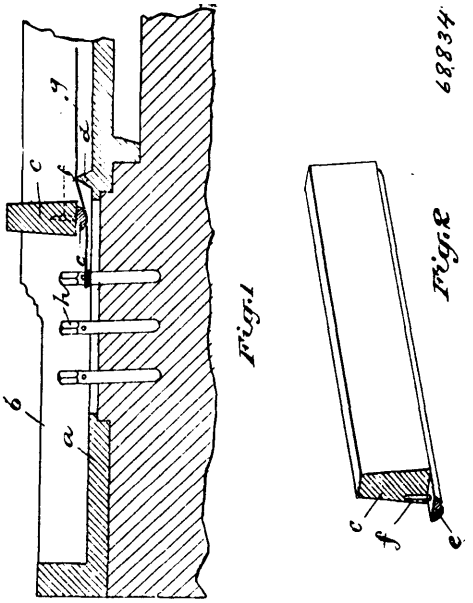
No. 68,833. Electric Storage Battery.
(Accumulateur électrique.)



S. Lloyd Wiegand, Philadelphia, Pennsylvania, U.S.A., 7th September, 1900; 6 years. (Filed 5th June, 1900.)

Claim.—1st. A conducting plate for storage batteries, having a rim raised around the under surface, enclosing a flat cavity and inclined sides around the upper side of said plate, terminating in a curled edge containing one or more troughs retaining by gravitation a liquid insulating material, or insulating material adapted to become liquid, and means to protect said insulating material from overflow of electrolyte, as set forth. 2nd. In pans or conducting plates for storage batteries, marginal rims curved so as to form one or more troughs retaining by gravitation liquid non-conducting material and means to protect said troughs from overflow of electrolyte, as set forth. 3rd. A secondary or storage battery, having horizontal conducting plates of different polarity on opposite sides, each provided with a trough at the edge, containing a liquid insulating material, and conduits to receive further supplies of insulating liquid, as set forth. 4th. In a storage battery, a series of horizontal flat bottomed conducting pans charged or coated with active material, or material adapted to become active, interposed layers of absorbent material moistened with electrolytic liquid, rims upon said plates adapted to confine the active material, and electrolytic liquid and absorbent stratum, in combination with troughs surrounding the margins of said plates, and adapted to receive and retain by gravitation an insulating material in a liquid state, substantially as and for the purpose set forth. 5th. Conducting plates for storage batteries combined with marginal troughs for holding insulation between the opposite sides thereof, and overhanging edges to exclude electrolytic fluid from the troughs, as set forth. 6th. Conducting plates for storage batteries having marginal troughs containing liquid insolation between opposite sides thereof, in combination with conduits for insulating liquid leading downwardly from said plates and immersed in the insulating liquid in the trough below, as set forth. 7th. Conducting plates for storage batteries having liquid insulating material, or material adapted to become liquid between two opposite sides of said plates, combined with conduits for liquid, covered with non conducting material to prevent accidental conducting contact of surfaces of adjoining plates, as set forth. 8th. In conducting plates for storage batteries, troughs for holding insulating material in a liquid state, on or near the margins thereof, to insulate the opposite surfaces of said plate, combined with overflow conduits for such insulating material, and a rim or dam to defend said overflow conduits from ingress of electrolytic liquid, as set forth. 9th. In storage batteries having plates of different polarity on opposite sides, troughs containing an insulating liquid, in combination with the edges of the plate immersed in said troughs of liquid, and tubes to supply said troughs with liquid, as and for the purpose set forth. 10th. In tension storage batteries, a series of conducting plates, interposed strata of active material, and strata containing electrolytic fluid, in combination with troughs containing liquid insulating material, or material adapted to become liquid, and edge or girdle of each plate immersed in said material in the troughs, insulating opposite sides thereof, as set forth. 11th. In a tension storage battery, a case having practically parallel sides, a lid fitting in the said sides and provided with overhanging projections, said case containing a pile of superposed plates coated with active material and interposed strata of absorbent material, containing an electrolyte all under compression from the lid in combination with springs and screws fitted in said projections, and nuts attached to the sides of said case fitting said screws, as and for the purpose set forth. 12th. In a tension storage battery, a series of superposed and horizontally arranged pans, having insulating edges, and coated with active material, and interposed absorbent strata containing electrolytic liquids, a case having a bottom, and sides attached thereto, enclosing said pans and strata, in combination with a lid to enter the top of said case and press upon said pans and strata, projections on said lid beyond the sides, screws fitted through said projections, and nuts exterior to said case attached to the sides of the case, all arranged to operate as set forth. 13th. A combined handle and clamping device and conductor protection for storage battery cases, consisting of a plate adapted to attach the same to the ends of such cases, nuts for screws, sockets for insulators, and ears for a bail, all formed integrally with said plate, in combination with swinging bails engaged in said ears, insulators in said sockets, and screws in said nuts adapted to clamp the lid of said cases into and on the sides thereof, as set forth. 14th. In a tension storage battery, a case having a bottom, sides attached thereto, a pile of pans having insulating rims, and coatings of active material, and absorbant strata containing electrolytic liquid interposed between said coated pans, in combination with a lid fitting into said case, and arranged to rest on the pile of pans, projections on said lid, and screws, springs on said screws and nuts exterior to and attached to the sides of said cases arranged to compress the pile of pans and intervening strata, as set forth.

No. 68,834. Piano. (*Piano.*)



Gerhard Heintzman, Toronto, Ontario, Canada, 27th September, 1900; 6 years. (Filed 27th July, 1900.)

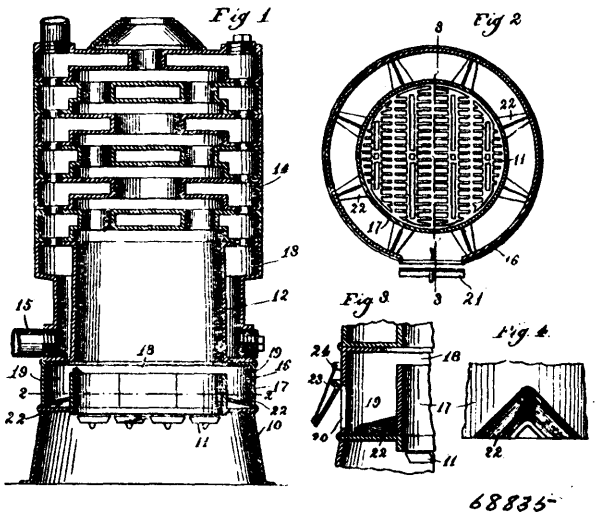
Claim.—1st. A string frame for pianos provided with a scale rib, and brace ribs extending across the scale rib, capo d'astro bars for the string frame having a bearing surface of bell metal, substantially as specified. 2nd. A string frame for pianos provided with a scale, rib, and brace ribs extending across the scale rib, a capo d'astro bar integrally with the string frame and extending from one brace rib to the other, a bearing rib of bell metal detachably connected to the capo d'astro bar, substantially as specified.

No. 68,835. Furnace for Heaters. (*Fournaise.*)

Charles B. Thompson, Chicago, Illinois, U.S.A., 27th September, 1900; 6 years. (Filed 7th September, 1900.)

Claim.—1st. In a furnace for heaters, in combination, a base ring, a fuel support mounted therein, a hollow flue casing mounted on the base ring and forming the side walls of the lower portion of the

fire chamber, such casing having an air inlet port and opening to the fire chamber entirely around the same and near the plane of the



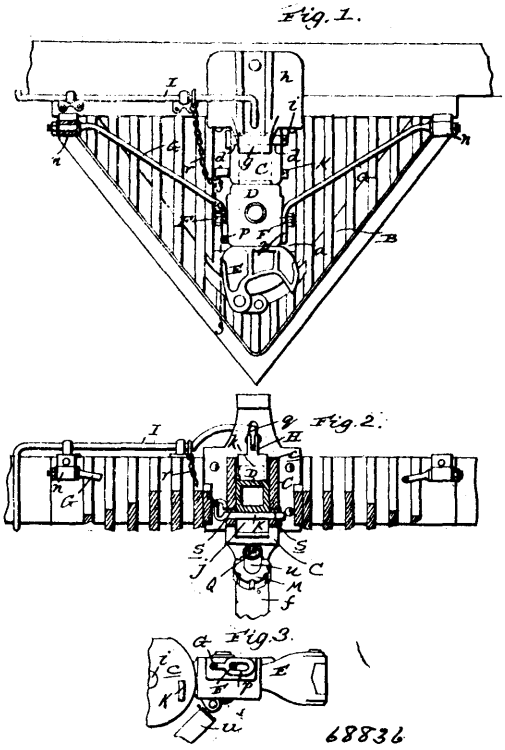
grate, and a fire pot extending upwardly from such flue casing, whereby a full air supply may be introduced into the fire chamber and into the mass of fuel contained therein without passing any part of such supply through the grate or ash pit of the furnace. 2nd. In a furnace for heaters, the combination with a base ring carrying a grate and a fire pot, of a ring resting upon the base ring and upon which the fire pot is mounted, and having an air inlet port, and an inner ring resting upon the base ring, and of less height than and spaced apart from the outer ring and forming a continuation downwardly of the fire pot, whereby an annular air flue is formed around the bottom of the fire box and opens thereto, through which the supply of air for combustion of the fuel is delivered laterally into the fire chamber near its bottom. 3rd. As an article of manufacture, a hollow casing adapted to be interposed between the grate supporting base of a furnace and the fire pot thereof, and forming a continuation downwardly of the latter, such casing having an inwardly opening port, and a port for admitting air to its chamber. 4th. As an article of manufacture, a fire chamber for heating furnaces having its walls formed of upper and lower sections spaces apart to form an air passage below the normal level of the fuel and of sufficient size to supply the full quantity of air essential to substantially complete combustion of the fuel, the upper section being hollow to contain water and the lower section forming the inner wall of an air flue. 5th. In a furnace for heaters, in combination, a fire chamber having its walls formed of upper and lower sections spaced apart below the normal level of the fuel to form an air flue, and a casing inclosing the lower section to form a passage leading to such flue and having an external air port, whereby a full supply of air for combustion may be delivered laterally into the fire chamber. 6th. In a furnace for heaters, in combination, a grate support, a fuel support mounted thereon, a flue casing forming the side walls of the lower portion of the fire chamber and having ports in its inner and outer walls, and a fire pot extending upwardly from the casing, whereby a full supply of air for combustion may be delivered laterally into the fire chamber below the normal level of the fuel. 7th. In a furnace for heaters, in combination, a grate support, a grate mounted thereon, a flue casing forming the side walls of the lower portion of the fire chamber and having ports in its inner and outer walls, and a fire port extending upwardly from the port of the inner wall and being hollow to contain water, whereby a supply of hot air adequate for complete combustion may be delivered laterally into the fire chamber below the normal level of the fuel.

No. 68,836. Locomotive Coupling.

(*Attelage de locomotive.*)

George W. Butcher, San Antonio, Texas, U.S.A., 27th September, 1900; 6 years. (Filed 8th September, 1900.)

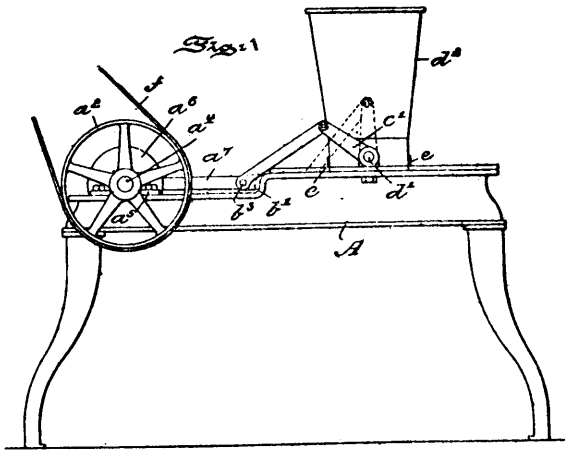
Claim.—1st. In means for raising locomotive pilot draw bars, a draw head, a cylinder held in a portion of and fixed with respect to the draw head, and connected with a fluid pressure supply, a piston working in the cylinder, and a connection between the piston and bar. 2nd. In means for raising locomotive pilot draw bars, a draw head or main casting, a vertically swinging draw bar connected thereto, a cylinder held in and fixed to the draw head or main casting, and connected with a fluid pressure supply, a piston working in the cylinder, and a connection between the piston and bar. 3rd. In means for raising locomotive pilot draw bars, a draw head or main casting having a tubular portion, a cylinder secured in said tubular portion and connected with a source of fluid pressure supply, a vertically swinging draw bar connected to the draw head, a piston working in the cylinder, and a connection between the piston and

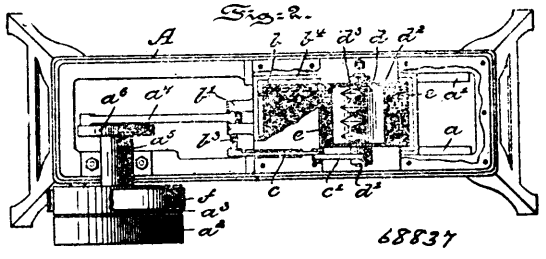


the draw bar, substantially as specified. 4th. In a locomotive pilot coupling, a draw head, a fluid pressure cylinder, a draw bar pivotally connected to the draw head, a piston working in the cylinder, a connection between the piston and draw bar, and a latch for automatically engaging and holding the draw bar in its raised position, substantially as specified. 5th. In a locomotive pilot coupling, a draw head, a fluid pressure cylinder, a draw bar pivoted in the draw head and having an upwardly extending bevelled lug, a piston working in the cylinder and connected with the draw bar, and a gravity latch arranged to be raised by the lug of the draw bar and adapted to drop in front of the same, substantially as specified. 6th. In a locomotive pilot coupling, a draw head, a fluid pressure cylinder, a draw bar pivoted in the draw head and having an upwardly extending bevelled lug, a piston working in the cylinder, a gravity latch arranged to be raised by the lug of the draw bar, and adapted to drop in front of the same, and a transverse rock shaft having an arm connected with said latch, substantially as specified. 7th. In a locomotive pilot coupling, a draw head or main casting having a tubular portion, a fluid pressure cylinder secured in said tubular portion, a draw bar pivoted in the draw head and having an upwardly extending bevelled lug, a piston working in the cylinder and connected with the draw bar, and a gravity latch arranged in a vertical aperture in the draw head and adapted to be raised by the lug of the draw bar and drop in front of same. 8th. In a locomotive pilot coupling, the combination of a chambered draw head having coincident angular apertures in its side walls, and an aperture in its top wall, a draw bar pivoted in said draw head, and having an upwardly extending bevelled lug, a fluid pressure cylinder, a piston working in said cylinder and connected with the draw bar, a gravity latch movable in the aperture in the top wall of the draw bar, and an auxiliary draw bar support consisting of a transverse pin of angular form in cross section removably arranged in the coincident apertures in the side walls of the draw head, substantially as specified. 9th. In a locomotive pilot coupling, the combination of a draw head or main casting, a cylinder held in and fixed thereto and connected to a source of fluid pressure supply, a piston working in said cylinder, and a piston rod connected in a swivelled manner to the piston, and also connected to the draw bar, substantially as specified. 10th. In a locomotive pilot coupling, the combination of a draw head or main casting having a tubular portion, a draw bar pivotally connected to the draw head, a fluid pressure cylinder comprising a tube arranged in the tubular portion of the draw head or main casting, and heads secured on said tube at opposite ends of the tubular portion of the casting, a piston working in the cylinder, and a connection between the piston and draw bar. 11th. In a locomotive pilot coupling, the combination of a draw head, a fluid pressure cylinder, a draw bar pivoted in the draw head, a piston working in the cylinder and having a tubular extension passed

through one of the heads thereof, a piston rod swivelled in the tubular extension of the piston and connected to the draw bar, and a suitable closure for the outer end of the tubular extension, substantially as specified. 12th. In a locomotive pilot coupling, the combination of a draw head or main casting having a tubular portion, a draw bar pivotally connected to the draw head, a fluid pressure cylinder comprising a tube arranged in the tubular portion of the draw head or main casting, and heads secured on said tube at opposite ends of the tubular portion of the casting, a piston working in the cylinder and having a tubular extension passed through one of the heads thereof, a piston rod swivelled in the tubular extension of the piston, and connected to the draw bar, and a suitable closure for the outer end of the tubular extension, substantially as specified. 13th. In a locomotive pilot coupling, the combination of a draw head, a fluid pressure cylinder, a draw bar pivoted in the draw head, a piston working in the cylinder and having a tubular extension passed through one of the heads thereof, a piston rod interposed between the piston and draw bar and connected to the latter and having a groove in its portion within the tubular extension, and cross bars connected to said tubular extension and resting in the groove of the rod, substantially as specified. 14th. In a locomotive pilot coupling, the combination of a locomotive, a draw head, a draw bar pivoted in said draw head so as to swing vertically, and brace rods journalled at their outer ends in bearings and having slottep portions at their inner ends arranged parrallel to and receiving lateral projections on the draw bar, substantially as specified.

No. 68,837. Granulating Machine. *(Machine à granuler.)*

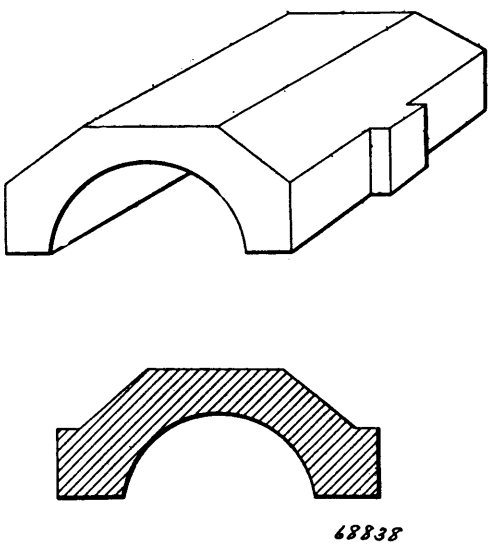




Abraham Rowland Morris, Philadelphia, Pennsylvania, U.S.A., 27th September, 1900; 6 years. (Filed 23rd August, 1900.)

Claim.—1st. A mechanical granulating machine for plastic or similar material, comprising a hopper or receptacle having an open base, a bed upon which the base of the hopper is supported, an open meshed sieve, means for maintaining said sieve in substantially flat condition in said bed and across the base of the hopper, means for reciprocating said sieve in said bed across the open base of the hopper, and means located within the hopper for feeding and forcing the material in the hopper towards and through the meshes of the sieve during the reciprocation of said sieve, substantially as and for the purposes described. 2nd. In a mechanical granulating machine of the character described, an open meshed sieve, a grated body upon which said sieve is supported, said body comprising cross-bars having upper knife-like edges adapted to rest upon the strands of the sieve, and a frame adapted to clamp the sieve down upon said body, substantially as and for the purposes described. 3rd. In a mechanical granulating machine, a combined feeding and forcing mechanism, in combination with a reciprocatory open meshed sieve and means for reciprocating said sieve, said feeding and forcing mechanism adapted to present and force the material to and through the meshes of the sieve, during the reciprocation of said sieve, substantially as and for the purposes described. 4th. In a mechanical granulating machine, a reciprocatory open meshed sieve, an open ended hopper across the open base whereof the sieve is adapted to be reciprocated, a feeding mechanism having two faces adjacent to and normally arranged at an angle to the sieve, and means for oscillating the feeding mechanism so as to cause each face to alternately approach the sieve, substantially as and for the purposes described. 5th. In a mechanical granulating machine, a feeding mechanism having two angular under faces, a hopper wherein said feeding mechanism is pivotally supported, means for oscillating said feeding mechanism in said hopper to alternately bring an under face towards the base of said hopper, a sieve, and means for reciprocating said sieve across the base of said hopper and in a direction opposite to the direction of travel of the feeding mechanism, substantially as and for the purposes described. 6th. In a mechanical granulating machine, a combined feeding, pressing and disintegrating mechanism, comprising an oscillating body having two angular under faces and upwardly projecting fingers, substantially as and for the purposes described.

No. 68,838. Bearing. *(Coussinet.)*



Guilliam H. Clamer and Joseph G. Hendrickson, both of Philadelphia, Pennsylvania, U.S.A., 27th September, 1900; 6 years. (Filed 18th June, 1900.)

Claim.—1st. A journal bearing, consisting of a lead copper alloy containing a relatively small proportion of nickel, substantially as described. 2nd. The process of preventing segregation of lead copper alloy, which consists in adding thereto a relatively small proportion of nickel, substantially as described.

No. 68,839. Pneumatic Tire. *(Bandage pneumatique.)*

Edwin Hemsted, Toronto, Ontario, Canada, 27th September, 1900; 6 years. (Filed 8th June, 1900.)

Claim.—1st. In a pneumatic tire, a grooved rim, in combination with an outer cover, two divided flat steel bands, one of which is secured to each edge of the outer cover, means for fastening together the said bands one over the other, and means for drawing together the ends of one of the bands, substantially as and for the purpose specified. 2nd. In a pneumatic tire, a grooved rim, in combination with an outer cover, two divided flat steel bands, one of which is secured to each edge of the outer cover, means for fastening together the said bands one over the other, and means for drawing together the ends of the bands, substantially as and for the purpose specified. 3rd. In a pneumatic tire, a grooved rim, in combination with an outer cover, two divided flat steel bands, one of which is secured to each edge of the outer cover, means for fastening together the said bands, and means for drawing together the ends of one of the bands, substantially as and for the purpose specified. 4th. In a pneumatic tire, a grooved rim, in combination with an outer cover, a divided flat steel band secured to one edge of the cover and provided with a series of holes each having a portion of contracted width, a divided flat steel band secured to the other edge of the cover and provided with a series of headed studs adapted to pass through the wider portions of the aforesaid holes and to engage the edges of the contracted portions, and means for drawing together the ends of one of the bands, substantially as and for the purpose specified. 5th. In a pneumatic tire, a grooved rim, in combination with an outer cover a divided flat steel band secured to one edge of the cover and provided with a series of holes each having a portion of contracted width, and having their greatest length parallel to the periphery of the rim, a divided flat steel band secured to the other edge of the cover and provided with a series of headed studs adapted to pass

through the wider portions of the aforesaid holes and to engage the edges of the contracted portions, and means for drawing together

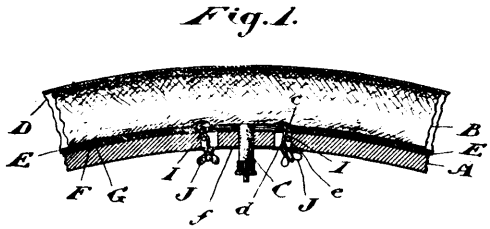


Fig. 1.

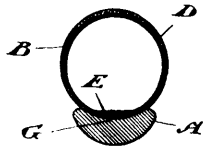


Fig. 3.

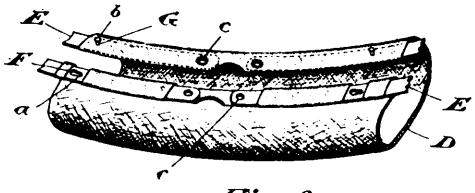


Fig. 2.

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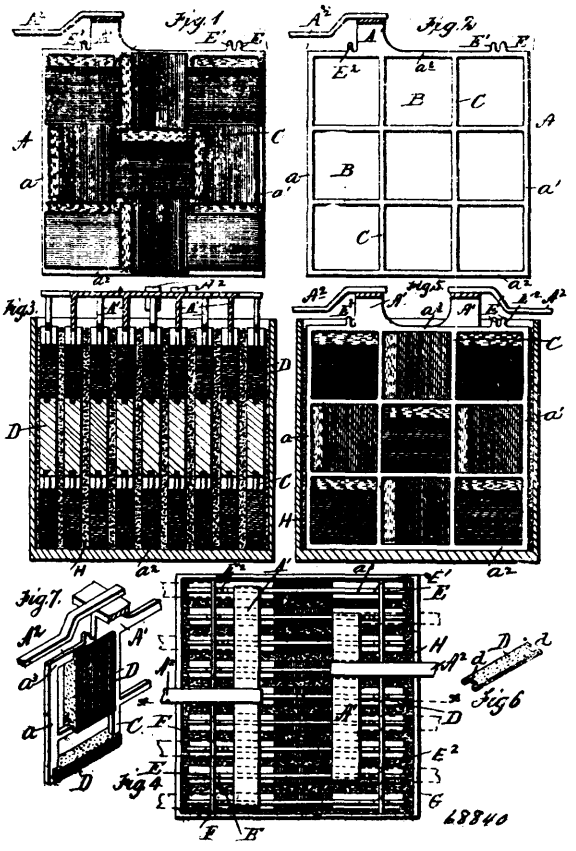
the ends of both of the bands, substantially as and for the purpose specified. 6th. In a pneumatic tire, a grooved rim, in combination with an outer cover, two divided flat steel bands, one of which is secured to each edge of the outer cover, means for fastening together the said bands one over the other, hooks engaging the ends of one of the bands and passing out through the rim, and nuts threaded on the stems of the said hooks and engaging the rim, substantially as and for the purpose specified. 7th. In a pneumatic tire, a grooved rim, in combination with an outer cover, two divided flat steel bands, one of which is secured to each edge of the outer cover, means for fastening together the said bands one over the other, hooks engaging the ends of both of the bands and passing out through the rim, and nuts threaded on the stems of the said hooks and engaging the rim, substantially and for the purpose specified. 8th. In a pneumatic tire, a grooved rim, in combination with an outer cover two divided flat steel bands, one of which is secured to each edge of the outer cover, means for hooking together the said bands one over the other, bent hooks engaging the ends of both of the bands, pins against which the backs of the said hooks may lie, and nuts threaded on the stems of the said hooks and engaging the rim, substantially as and for the purpose specified.

No. 68,840. Electrode for Storage Batteries.

(Electrode pour batteries secondaires.)

Charles W. Kennedy, Rutledge, Pennsylvania, U.S.A., 27th September, 1900; 6 years. (Filed 16th July, 1900.)

Claim.—1st. An electrode for a storage battery, consisting of several parallel series of masses of active material, one series being vertically above another, each mass comprising a series of parallel strips of lead tape, the strips in one mass extending at right angles to the strips in the next adjacent masses, and a frame or holder supporting all of said masses, substantially as set forth. 2nd. The herein described battery electrode, consisting of a frame having several parallel series of holders formed therein, one series vertically above another and a series of strips of lead tape arranged within each of said holders, the strips in each holder extending in a direction different from that of the strips in any of the surrounding holders, substantially as set forth. 3rd. The herein described electrode, consisting of an inclosing frame A, having its interior divided by intersecting cross bars into several horizontal series of holders, and a series of strips of lead tape arranged within each of said holders, and engaging with the bars forming the same, the



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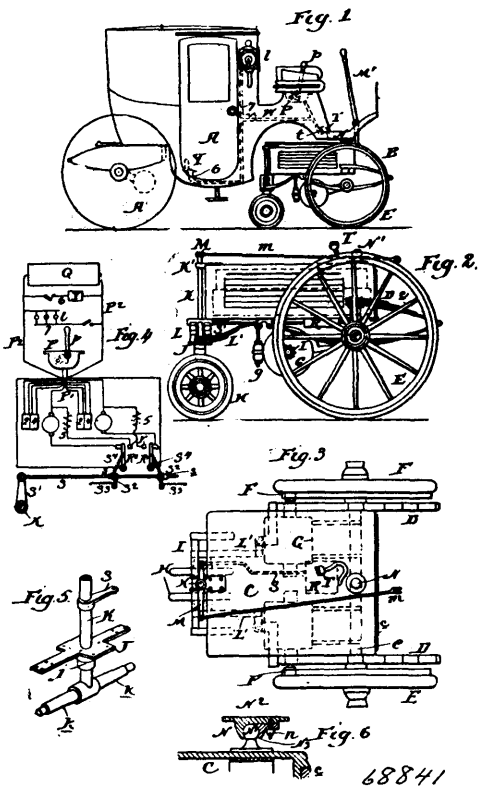
strips in one holder extending in a different direction from the strips in adjacent holders, substantially as and for the purpose set forth.

No. 68,841. Electric Device for Propelling and Controlling Vehicles. *(Appareil électrique pour vehicules.)*

Rudolph Melville Hunter, Philadelphia, Pennsylvania, U.S.A., 27th September, 1900; 6 years. Filed 8th May, 1900.)

Claim.—1st. In an electrically propelled vehicle the combination of the body portion having a pair of rear wheels, with an electromotive mechanism consisting of a battery box spring supported on a pair of driving wheels and pivoted to the front of the vehicle body portion, a battery in and movable with the box, a separate electric motor for rotating each of the driving wheels, electric circuits for supplying currents from the battery to the motors, and means extending to the vehicle body for rendering either motor non-propelling whereby the battery box motors and driving wheels may be caused to travel in a curve. 2nd. An electric motive mechanism for vehicles consisting of a battery box having a pivot connection for attachment to a vehicle body, springs and axles for sustaining the battery box, a pair of driving wheels, two electric motors for respectively rotating said wheels, one or more steering wheels also supporting the battery box, means for adjusting the angle of the steering wheels, and a battery in the box for supplying current to the motors. 3rd. An electrically propelled vehicle having a battery supported on driving and steering wheels, combined with a separate electric motor to rotate each of the driving wheels, means for adjusting the steering wheels, and switch devices under the control of the steering means for rendering either of the motors non-propelling. 4th. An electrically propelled vehicle having a battery supported on driving and steering wheels, combined with a separate electric motor to rotate each of the driving wheels, means for adjusting the steering wheels, switch devices under the control of the steering means for rendering either of the motors non-propelling, a trailing body part pivoted to the driving wheels adapted to swing laterally, and means on the body part for controlling the current to both motors and operating the steering means. 5th. In an electrically propelled vehicle self-propelled battery and motor mechanism, combined with a body part supported upon a pair of wheels at one end and pivoted at the other end to the self-propelled battery and motor mechanism on a vertical axis. 6th. In an electrically propelled vehicle, a frame having a pair of driving wheels, electric motor mechanism to rotate said wheels and an adjustable steering wheels, combined with a trailing body part supported upon rear wheels, and a pivot connec-

tion between the forward part of the body and the frame carrying the driving and steering wheels. 7th. In an electrically propelled

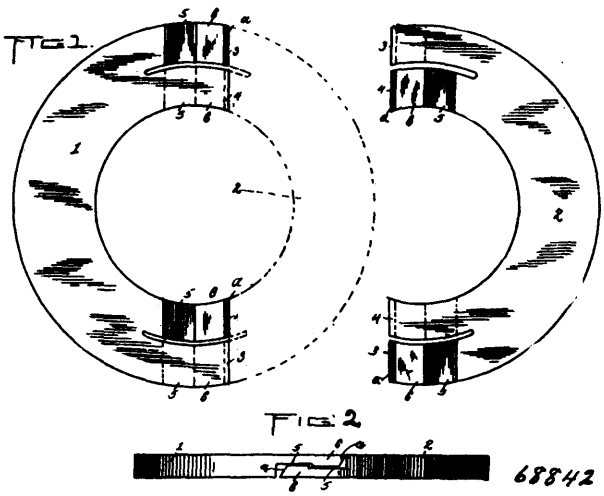


vehicle a pivoted truck portion provided with a battery compartment and one or more adjustable steering wheels, a battery in said compartment and movable with the truck independently of the body, a body part supported on two wheels at its rear and pivoted at its forward part upon the truck portion, and means on the body part for controlling the steering wheels and flow of current from the battery of the truck. 8th. An electrically propelled truck having one or more adjustable steering wheels, combined with a trailing vehicle body, a detachable universal pivot connection between the forward part of the body and truck whereby they may be detached when required but are normally inseparable, and detachable means extending to the vehicle body for controlling the steering gear. 9th. In a mechanically propelled motor vehicle, the combination of a forward self-supporting and steered truck pivoted under the forward end of the main body of the vehicle and consisting of two main supporting wheels carrying the main weight and one or more steering wheels, with means extending to the body of the vehicle for controlling the steering wheel or wheels irrespective of the position of the truck. 10th. In an electrically propelled vehicle, a frame having two driving wheels independently rotated, a rear steering wheel of smaller diameter adjustable upon the frame about an upright axis, a separable electric motor to rotate each of the driving wheels sustained by the frame, a trailing body part supported upon wheels and pivoted at its forward part to the frame of the driving wheels and motors, and means extending to the body part for controlling the motors and operating the steering wheel. 11th. In a motor-vehicle, the combination of a pivoted mechanically driven truck having driving wheels and one or more steering wheels adjustable about an upright axis, and a trailing body portion supported upon wheels at the rear and having its forward end pivoted to the truck. 12th. In a motor-vehicle, the combination of a pivoted mechanically driven truck having driving wheels and one or more steering wheels adjustable about an upright axis, a trailing body portion supported upon wheels at the rear and having its forward end pivoted to the truck, and means evtending from the body portion to the pivoted truck for adjusting the steering wheel and controlling the speed of the driving means.

No. 68,842. Washer. *(Rondelle.)*

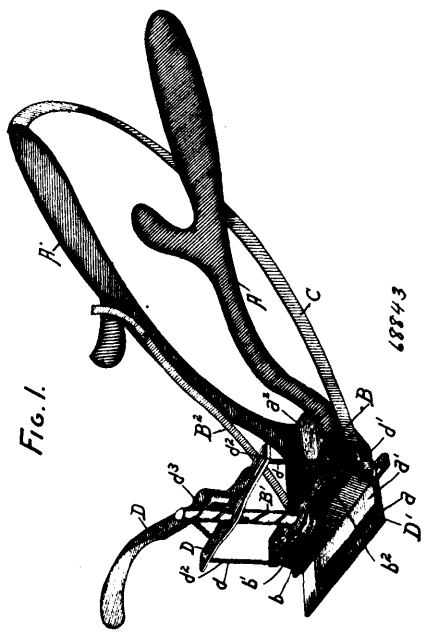
Charles F. Adams, Tampico, Illinois, U.S.A., 27th September, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—A washer composed of two semi-circular parts, each of said parts having its ends divided into two leaves, all of which leaves are provided with a catch at the end thereof and a depression in the rear of said catch, the catches on each of said parts having bevelled engaging edges, and being adapted to engage the depressions in the leaves of the other part, each alternate leaf on each of



said parts having lateral resistance in an opposite direction to the one preceding, whereby said parts are adapted to be securely and firmly locked together, substantially as shown.

No. 68,843. Clippers. *(Tondeur.)*



A. C. Dauphinais and D. Garon, Côté St. Paul, Quebec, Canada, 29th September, 1900; 6 years. (Filed 27th July, 1899.)

Claim.—1st. A hair clipper, comprising fixed and movable cutter plates, levers members therefor, an adjusting plate in adjustable relation to the fixed cutter plate, a screw rod connected to the adjusting plate, ratchet feed mechanism in operative relation to the screw rod and one of the lever members, a lever having a fixed point of resistance in shiftable relation to the screw rod, and automatic means for retracting the screw rod and adjusting plate on the disengagement of the fixed point of resistance from said screw rod, substantially as described. 2nd. A hair clipper, comprising fixed and movable cutter plates, lever members therefor, an adjusting plate in adjustable relation to the fixed cutter plate, a screw rod connected to the adjusting plate, the ratchet mechanism having operative connection with a lever member and said screw rod, a cross bar slidably fitted to the screw rod and connected to the adjusting plate, a lever mounted on the cross bar and having a plate engaging with the groove of the screw rod, and coiled springs in operative relation to the cross bar to lift the latter and the adjusting plate on the release of the lever and plate from the screw rod, as set forth.

3rd. A hair clipper, comprising the fixed and movable cutter plates, lever members therefor, an adjusting plate, a screw rod connected with said plate, a ratchet fast with the screw rod, a spring lever sleeved on the screw rod and having detachable connection with the movable lever member, and feed pawl carried by the spring lever and engaging with the ratchet, and fixed point of resistance for the screw rod, substantially as described, for the purpose set forth. 4th. A hair clipper, comprising fixed and movable cutter plates, lever members therefor, a bracket fast with the fixed plate and one lever member and provided with suitable guide lugs, an adjusting plate, a ratchet feed mechanism having operative connection with the movable lever member, a screw rod connected to the adjusting plate and made fast with the ratchet of the feed mechanism, a cross bar slidable on the screw rod, rods connecting the adjusting plate and the cross bar and slidable in the lugs of the bracket, springs fitted on the rods and seated against the lugs and the cross bar, and a lever fulcrumed on the cross bar and having a plate which engages with the groove of the screw rod, substantially as described. 5th. A clipper, comprising a base plate, a lever member fixed thereto, a movable lever member pivotally connected therewith, a cutting plate fixed to said base plate, a movable cutting plate pivotally connected with said movable lever member, a bracket mounted upon said base plate, an ajusting screw journalled in said bracket, a pawl and ratchet connected with said screw, a cross bar slidably mounted upon said screw, an adjusting plate connected with said cross bar, retracting springs for returning said adjustable plate to its normal position, a spring pressed lever pivoted to said cross bar and adapted to be moved into and out of engagement with said adjusting screw, and a lever secured to said ratchet mechanism and adapted to be detachably connected with said movable member, substantially as described.

No. 68,844. Lamp Burner. *(Bec de lampe.)*

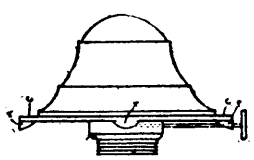


Fig 1

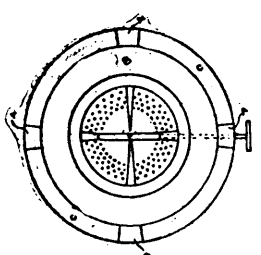


Fig 2 68844

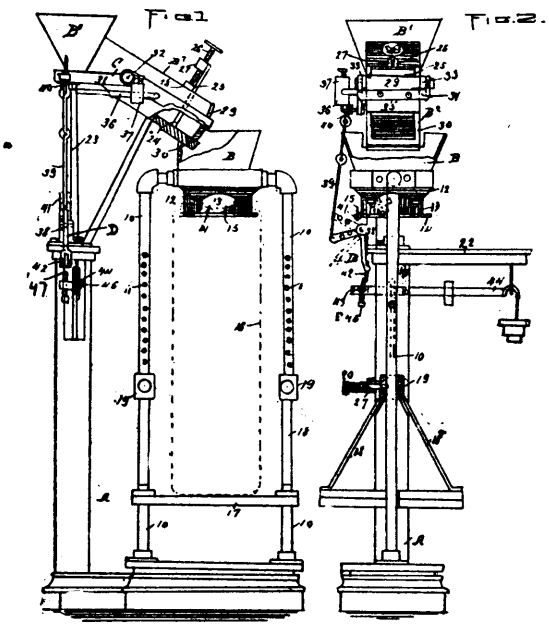
Hugh McSween, Leamington, Ontario, Canada, 29th September, 1900; 6 years. (Filed 12th September, 1900.)

Claim.—The combination with the base B of a burner for lamps and lanterns, having an outer rim C with the indentations A, substantially as set forth.

No. 68,845. Weighing and Bagging Machine.
(Machine à peser et mettre ed sac.)

Alonzo C. Bosworth, Putnam, Connecticut, U.S.A., 29th September, 1900; 6 years. (Filed 11th July, 1900.)

Claim.—1st. In a weighing and bagging machine, a bagging device adapted to be supported on a scale platform, a chute adjacent said bagging device and provided with a gate, an operating lever for said gate, a locking lever connected with said gate-operating lever and having a pivoted finger, and a vertically adjustable keeper on scale beam and adapted to engage with said finger, as and for the purpose set forth. 2nd. In a weighing and bagging machine, a bagging device adapted to be supported on a platform scale, a chute supported adjacent said bagging device, and provided with a gate, a lever operating said gate, a lock lever connected with said gate-operating lever and having a pivoted finger and an adjustable keeper mounted on the scale beam and adapted for engagement with said lever, as set forth. 3rd. In a weighing and bagging machine, a bagging device adapted to be supported on a scale platform, a chute supported adjacent said bagging device and provided with a gate, a lever operating said gate, a lock lever connected with



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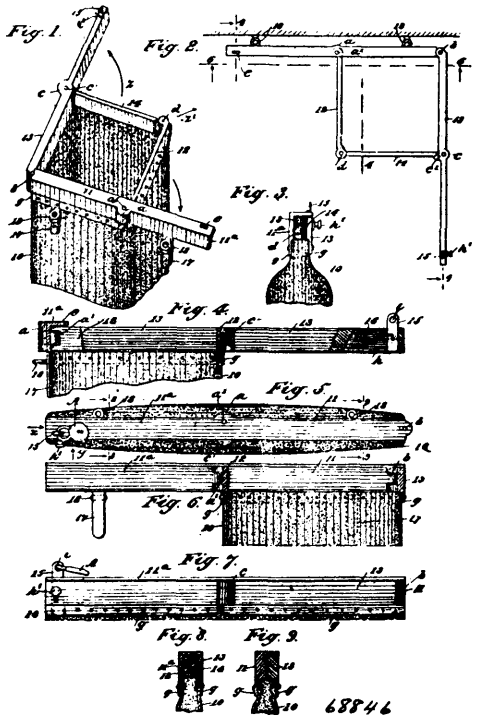
said gate-operating lever and having a pivoted finger, and a keeper vertically adjustable on the scale beam and having a beveiled upper edge on which said finger is adapted to ride, as and for the purpose set forth. 4th. In a weighing and bagging machine, a bagging device adapted to be supported on a scale platform, and a chute supported adjacent said bagging device, a lever fulcrumed on the side of said chute and carrying a gate adapted to close the end of the same, an arm secured to said lever between its fulcrum point and the said gate, a weight adjustable on said arm, a bell crank locking lever having one arm connected with said gate-operating lever, and the other arm provided with a pivoted finger and a vertically adjustable keeper mounted on the scale beam and adapted to engage with said finger, as set forth. 5th. In a weighing and bagging machine, the combination with a platform scale, a bag supporting device carried by the platform of the scale, a chute arranged to deliver material to the said bag supporting device, and a lever operated end gate for the said chute, of a vertically adjustable keeper, a lock lever having a pivoted finger arranged for engagement with said keeper, and a connection between the lock lever and the gate lever, whereby the end gate is held in an upper position and is permitted to drop because of the positions assumed by the balance beam of the scale during the process of weighing, as described. 6th. In a weighing and bagging machine, the combination with a scale platform, a bag supporting hopper, of a chute connected with the bag supporting hopper, a regulating gate for the chute, an end gate for the chute, a weighted operating lever for said end gate, a lock lever provided with a pivoted finger, said lever being connected with the gate lever, a bearing adjustably mounted on the balance beam of the scale, and an adjustable keeper mounted in the said bearings and provided with a tapering upper end arranged for engagement with the finger of the lock lever, all arranged for operating, as described.

No. 68,846. Throat Frame for Mail Bags.
(Gorge de sac de malle.)

Charles Bateman, Gales Creek, Oregon, U.S.A., 29th September, 1900; 6 years. (Filed 4th December, 1899.)

Claim.—1st. A throat frame for bags, consisting of a pair of side bars hinged together at one end and formed with reduced portions on their inner faces extending from their middle to their free ends, one of said bars being L-shaped in cross-section, a second pair of side bars one-half the length of the first named bars and hinged together at one end and with their opposite ends hinged to the first named bars in the inner ends of the reduced portions thereof, the shorter bars being adapted to lie against the reduced portions of the longer bars when the frame is closed and engaging as stops the adjacent other portions of the longer bars when the frame is open, and the horizontal member of the L-shaped longer bar covering the remaining three bars when the frame is closed, as set forth. 2nd. A throat frame for bags, comprising a pair of side bars hinged together at one end and having their opposite side faces reduced from a point between their ends to their free ends, one of said bars being L-shaped in cross-section, a second pair of side bars hinged together at

one end and having their opposite ends hinged to the first named bars in their inner ends of the reduced portions thereof, said second

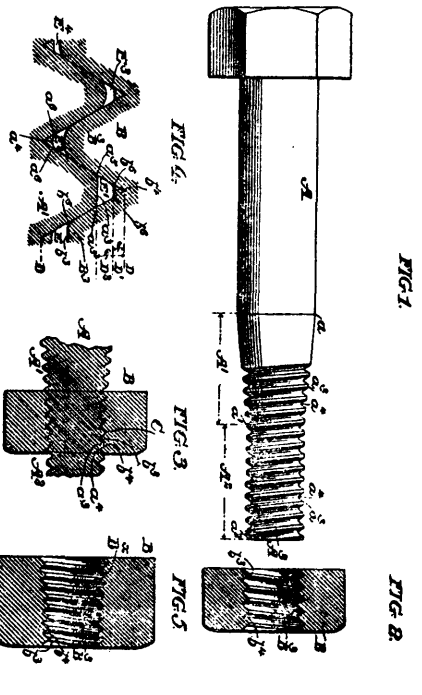


pair of bars being of a length and thickness equal to the reduced portions of the respective bars to which they are hinged, being adapted to lie against the reduced portions of such bars when the frame is closed and engaging as stops the adjacent ends of the other portions when the frame is open, and the horizontal member of the L-shaped side bar being of a width sufficient to cover the other bars when the frame is closed, as set forth. 3rd. In a device of the character described, the combination with two long frame bars, two short frame bars pivoted together at an end of each bar, the other ends respectively having pivoted engagement with one of the long frame bars at the longitudinal center thereof, each long frame bar having an outer half portion reduced in thickness to receive laterally one of the short frame bars, one of the long frame bars being L-shaped in cross-section, permitting the three other frame bars to fold beneath the top horizontal flange on said long frame bar, and a spring-actuated slide-bolt on one of the long frame bars, loosely engaging a slot in the horizontal flange of the other frame bar, said bolt having a perforation in the portion projected above the frame bar through which it passes, for the reception of a hasp-lock.

No. 68,847. Screw Coupling. *(Joint de vis.)*

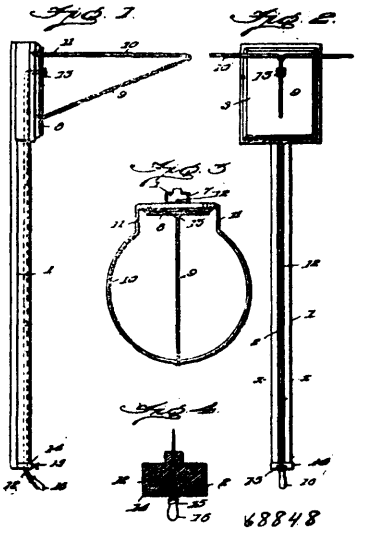
Clinton Allen Higbee, Philadelphia, Pennsylvania, U.S.A., 29th September, 1900; 6 years. (Filed 13th September, 1900.)

Claim.—1st. A screw coupling consisting of male and female members each having the portion of their threads which are first inter-engaged formed on cylindrical surfaces to engage freely and without jamming and one coupling member having a continuation of its thread formed on a conical surface and so as to form a jamming engagement with the threads of the other member, the threads of the coupling members which engage in a jamming union as aforesaid being so formed as to leave a clearance between their tops and the bottoms of the engaged threads which permits of and is closed or partly closed up by a flow of the metal of the thread as the members are screwed together. 2nd. A screw coupling consisting of male and female members each having the portion of their threads which are first inter-engaged formed on cylindrical surfaces to engage freely and without jamming and the male coupling member having a continuation of its thread formed on an outwardly clearing conical surface so as to form a jamming union with the cylindrical or more nearly cylindrical thread of the female member, the thread of both members being so formed as to leave a clearance between their tops and the bottom of engaged threads which permits of and is partly or wholly closed up by the flow of the metal of the threads where they form a jamming engagement. 3rd. A bolt and nut in which the thread of the bolt is formed partly on a cylindrical surface and partly on a conical surface and the thread of the nut on a cylindrical surface and so as to fit upon the cylindrical portion of the bolt and in which the threads of both bolt and nut are formed to engage with a clearance between their tops and the bottoms of engaged threads which clearance permits of and is partly or wholly closed up by the flow of the metal of the threads where the nut forms a jamming union with the conical thread of the bolt. 4th. A screw coupling



having V-shaped threads of the male and female members formed on cylindrical surfaces the tapered sides of the threads being formed to make a nice fit with each other and the tops and bottoms of the threads being formed to have a substantial clearance between the coupled threads. 5th. A screw coupling having V-shaped threads with squared tops and squared spaces between the bottoms of their angular sides the squared tops being broader than the squared spaces at the bottom and the threads of the coupling members formed to leave a substantial clearance between the tops and bottoms of the coupled threads.

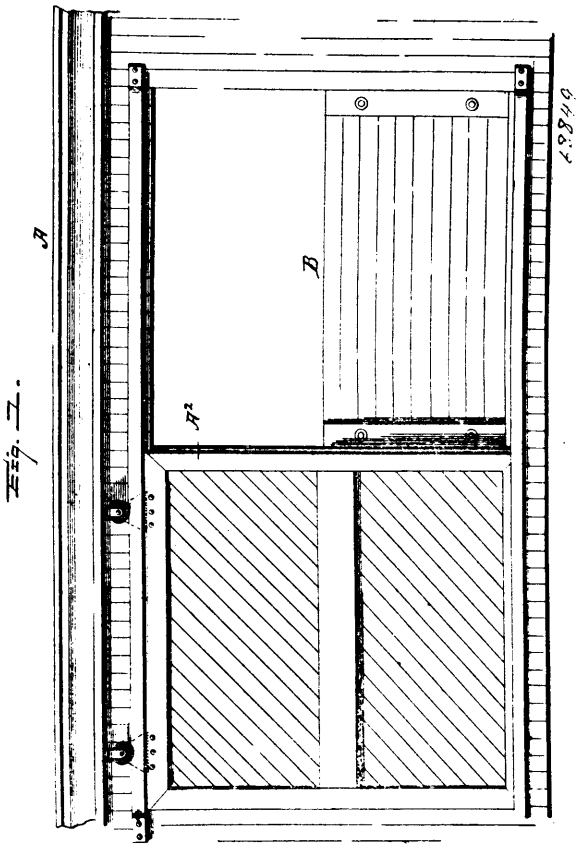
No. 68,848. Bracket. *(Console.)*



Mathias Schonbachler, Rome, New York, U.S.A., 29th September, 1900; 6 years. (Filed 12th September, 1900.)

Claim.—The combination with a standard of the character described, of a plate adjustably secured to the standard, an arm extending at right angles therefrom and having a series of horizontal strips on the upper surface thereof, a rod slidable in the groove of the standard and projecting through the plate and strips, and secured to the lower portion of the outer surface of the plate.

No. 68,849. Grain Car Door. *(Porte à grain de chars.)*



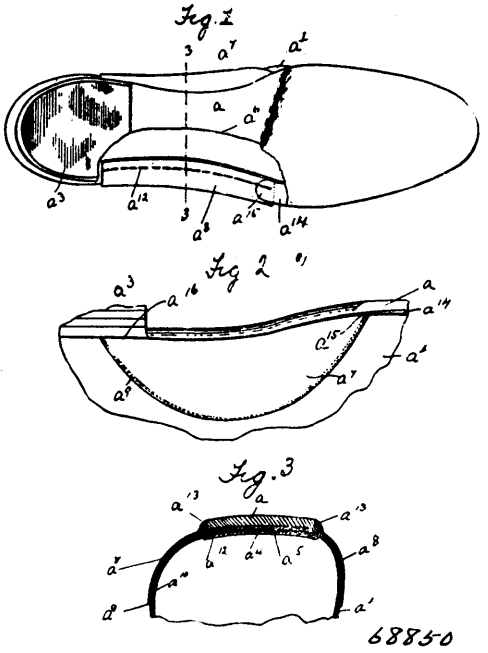
John Clarke, Orangeville, Ontario, Canada, 29th September, 1900; 6 years. (Filed 12th September, 1900.)

Claim.—1st. In a grain car door, the combination with a door opening having a pair of keepers secured on each stile thereof, of a door carrying two sets of connected levers adapted for movement in arcs of aligned circles, the ends of the levers to engage the keepers, substantially as described. 2nd. In a grain car door, the combination with the door opening having a pair of keepers secured on each stile thereof and provided with inclined lips, of a door carrying two sets of connected levers having bevelled free ends, the levers being adapted for movement in arcs of aligned circles, the bevelled ends of the levers to engage the keepers, substantially as described. 3rd. In a grain car door, the combination with the door opening having a pair of keepers arranged on each stile thereof and provided with inclined lips, of a door carrying two sets of connected levers adapted for movement in arcs of aligned circles, the levers having bevelled ends to engage the inclined lips of the keepers, and means for holding the levers at the desired adjustment, substantially as described. 4th. In a grain car door, the combination with the door opening having a pair of keepers arranged on each stile thereof provided with inclined lips, of a door carrying two sets of connected levers adapted for movement in arcs of aligned circles, the levers having bevelled ends to engage the inclined lips of the keepers, means for holding the levers at the desired adjustment, guides secured to the car adjacent to the door opening, and runners carried by the door and engaging the guides, substantially as described.

No. 68,850. Shoe. *(Chaussure.)*

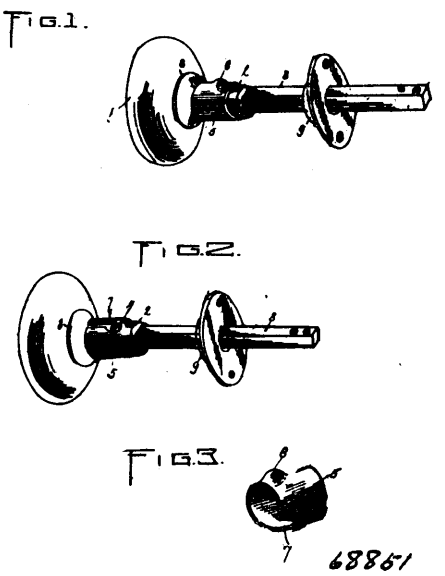
Andrew Osborn, Bridgewater, Massachusetts, U.S.A., 29th September, 1900; 6 years. (Filed 11th September, 1900.)

Claim.—1st. A shoe comprising a vamp, a welt, and an outer sole, the welt terminating adjacent the forward part of the shank of the shoe, and an external piece of heavy, stiff, non-pliable material extending from adjacent the end of said welt to the heel, and being secured to the outside of the vamp and outer sole, substantially as described. 2nd. A shoe having opposite combined stiffeners and protectors secured at the shank of the shoe and extending exter nally of the vamp so as to cover and protect the latter in the region



of the shank part thereof, and extending under the heel at their rear ends and between the sole and vamp and stitched to the vamp, substantially as described.

No. 68,851. Knob. *(Bouton).*



Daniel W. Rand, Dubuque, Iowa, U.S.A., 29th September, 1900; 6 years. (Filed 11th September, 1900.)

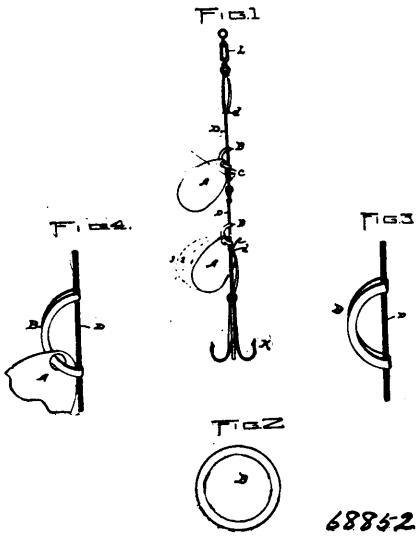
Claim.—A knob attachment consisting of a split sleeve, one end of which at its adjacent edges is cut away to form a recess, and the side of which is provided with a bulged screw head seat, said sleeve being adapted to be engaged with the shank of an ordinary door knob, substantially as and for the purpose set forth.

No. 68,852. Spoon Hook for Fishing. *(Hameçon de pêche.)*

George H. Bacon, Burlington, Vermont, U.S.A., 29th September, 1900; 6 years. (Filed 28th August, 1900.)

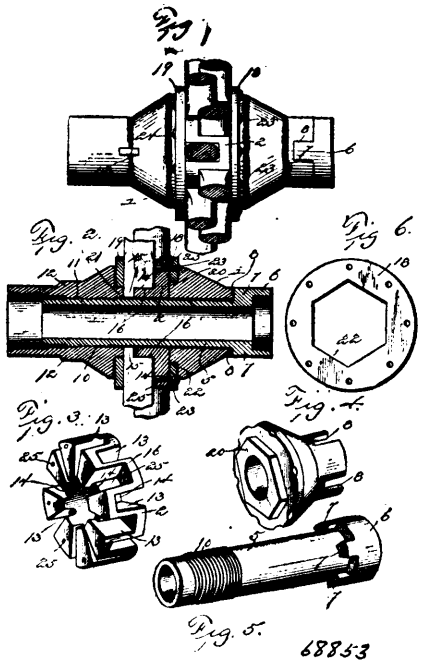
Claim.—1st. A device for mounting spoon bait, consisting of a ring bent upon itself to form a semi-circular support, the curve of the semi-circular end freely supporting the spoon and the bent end

portions adapted to receive a rod longitudinally therethrough, substantially as described. 2nd. A fishing tackle device comprising a



rod for the attachment of hooks and spoons, a metallic ring bent upon itself and serving to mount a spoon on the rod by passing the bent portion of the ring, substantially as described.

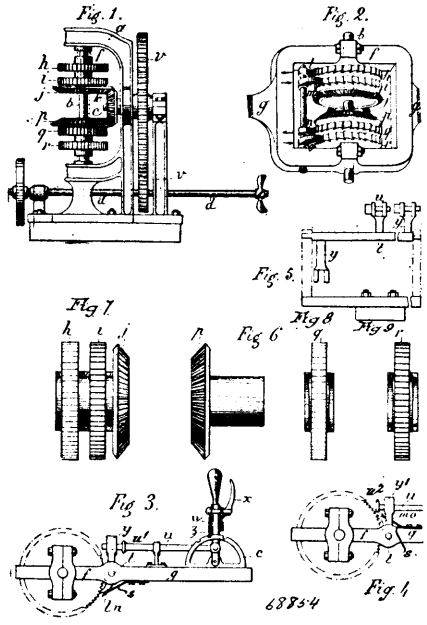
No. 68,853. Wheel Hub. *(Moyeu de roue.)*



Isaac Allaman, Hummelstown, Pennsylvania, U.S.A., 29th September, 1900; 6 years. (Filed 12th July, 1900.)

Claim.—1st. A hub, comprising a central section provided with oppositely disposed mortises or sockets open at the bottom, top and outer side and provided at the bottom with a supporting portion, rings located at opposite sides of the central section, the inner and outer sections fitting against the rings and located at opposite sides of the central section, an axle box fitted within the said sections and connected with the inner and outer ones, and spokes fitting within the sockets or mortises and abutting against the bottoms of the same and provided with extensions or lugs bearing against the axle box, substantially as described. 2nd. In a device of the class described, the combination of a central hub section provided with oppositely disposed mortises or sockets open at the top and outer sides and provided with bottoms 16 having openings or recesses, an axle box, inner and outer sections connected by the axle box, and spokes fitting within the mortises or sockets and abutting against the bottoms 16, and provided with lugs 15 extending through the recesses or openings of the said bottoms 16 and abutting against the axle box, substantially as described. 3rd. A hub, comprising an axle box having its inner end enlarged and provided with exterior longitudinal lugs, an inner section provided with recesses to receive the lugs and having a polygonal flange, a central section provided with spoke sockets or mortises, an outer section engaging the axle box and provided at its inner end with a flange, and the inner and outer rings interposed between the sections and receiving the flanges and conforming to the configuration of the same, substantially as described. 4th. A hub, comprising a central section provided with oppositely disposed mortises open at the top and outer sides and provided at the bottom with openings, said central section being also provided at opposite sides between the mortises with transversely disposed sockets having interior threads, rings arranged at opposite sides of the central section, fastening devices passing through the rings and engaging the screw threads of the transverse sockets, the inner and outer sections, and the axle box interlocked with the inner section and detachably secured to the outer section, substantially as described.

No. 68,854. Driving Gear. *(Engrenage de commands.)*

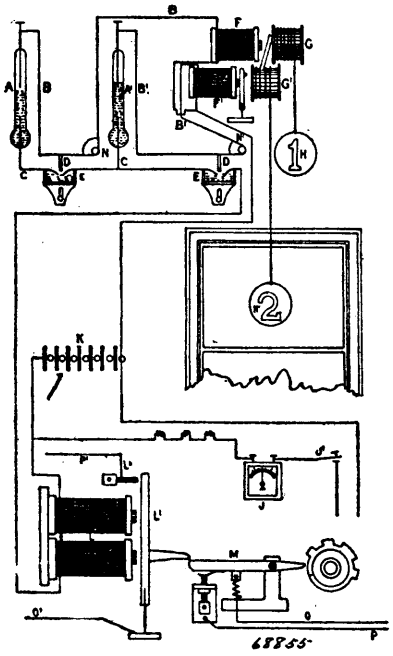


Marius Chenivesse, Paris France, 29th September, 1900; 6 years. (Filed 9th July, 1900.)

Claim.—1st. The combination with a shaft *b*, of two bevelled gear wheels of opposite angle loose on said shaft, each bevelled gear wheel having an extended nave, ratchet wheels having their teeth in opposite direction on the nave of each bevelled wheel, an oscillatory lever *g* journalled on said shaft *b*, a shaft *t* on said lever *g*, pawls on said shaft *t* for engaging the aforesaid ratchet wheels, and a bevelled pinion *k* engaging the bevelled wheels *j p*, for the purpose set forth. 2nd. The combination with a shaft *b*, of two bevelled gear wheels of opposite angle loose on said shaft, each bevelled gear wheel having an extended nave, two ratchet wheels *h q* having their teeth in the same direction, one on the nave of each bevelled wheel, two other ratchet wheels *i r* having their teeth in the same direction and contrary to the direction of the teeth of the aforesaid ratchet wheels, one on the nave of each bevelled wheel, an oscillatory lever *g* journalled on said shaft *b*, a shaft *t* on said lever *g*, pawls *l n* in the same direction on said shaft *t* for engaging ratchet wheels *h q* and pawls *m o* in the same direction and contrary to the direction of the pawls *l n* for engaging ratchet wheels *i r*, a bevelled pinion *k* engaging the bevelled whels *j p*, and means for alternately shifting either the pawls *m o* or the pawls *l n* out of engagement with their respective ratchet wheels, for the purpose set forth.

No. 68,855. Fire Alarm Annunciator.

(Avertisseur d'incendie.)

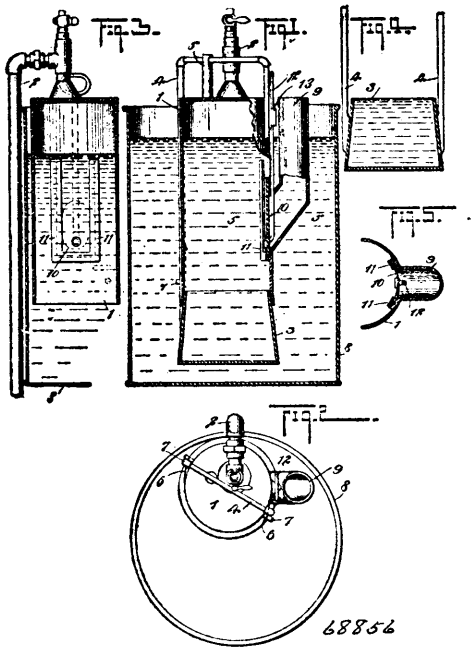


Charles May, Dunedin, New Zealand, 29th September, 1900; 6 years. (Filed 8th April, 1899.)

Claim.—The combination with a metallic wire and means for stretching it, of a movable contact piece suspended from the wire between its ends and descending by gravity when the wire is heated, and a stationary contact piece arranged in the downward path of the movable contact piece, substantially as set forth.

No. 68,856. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

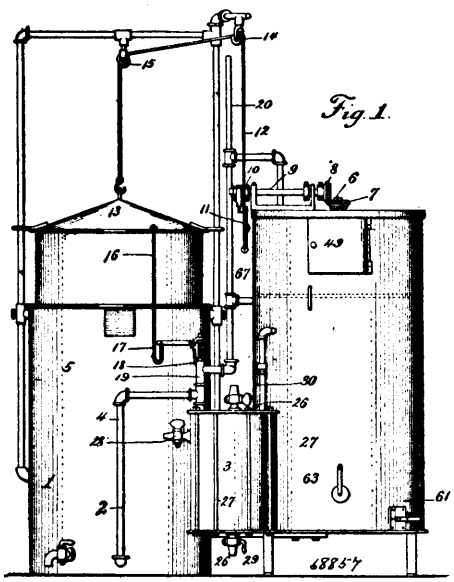


Henry Phillips Schaefer, Schulenberg, Texas, U.S.A., 29th September, 1900; 6 years. (Filed 8th March, 1900.)

Claim.—1st. A gas generator, comprising a gas generating cylinder, a pipe leading therefrom to a receiver, a bucket or carbide holder removably connected to the lower end of the cylinder, a chute leading into the cylinder, and a valve for controlling communication between said chute and the cylinder, substantially as specified. 2nd. In a gas generator, a generating cylinder suspended in said tank, a bucket or carbide holder removably connected to the lower end of the cylinder, a chute leading into the cylinder, and a valve for controlling the communication between said chute and the cylinder, substantially as specified. 3rd. A gas generator, comprising a water tank, a generating cylinder suspended in a tank, a bucket having its upper end inserted in the open lower end of the cylinder, a bail on said bucket extended upward over the cylinder, stop pins on the cylinder with which the bail engages, and a valve controlled chute leading into the cylinder, substantially as specified. 4th. A gas machine, comprising a tank, a generating cylinder suspended in the tank, a bucket removably connected to the lower end of the cylinder, a bail extended upward from the bucket and across the top of the cylinder, and a supporting block arranged between the top of the cylinder and the upper portion of the bail, substantially as specified. 5th. A gas generator, comprising a tank for containing liquid, a generator cylinder suspended in the tank, a bucket removably connected to the lower end of said cylinder, a bail extended from the bucket, inclined guide blocks on the cylinder for engaging with the bail, stop pins on the cylinder, and a valve controlled chute leading into the cylinder, substantially as specified.

No. 68,857. Acetylene Gas Generator.

(Générateur de gaz acétylène.)



Addison V. Sanford, Utica, New York, U.S.A., 29th September, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. A feeding mechanism for acetylene gas generators, comprising a rotating support and an inner and outer series of carbide holders mounted upon said rotating support in position to bring the outer series at greater radial distance from the centre of rotation than the inner series, and suitable means for controlling the discharge of carbide from the holders of both series by the rotation of the support, substantially as herein set forth. 2nd. An acetylene gas generator comprising a feeding mechanism a rotating support, and a plurality of circular series of carbide holders mounted thereon, the holders of one series alternating in radial position with those of an adjacent series, substantially as and for the purposes set forth. 3rd. A feeding mechanism for acetylene gas generators, comprising a rotating spider having two series of radial arms differing in length and alternating in position, and carbide holders removably mounted upon the ends of said radial arms so as to arrange them in two series of holders at different radial distances from the centre of rotation of the spider, and thereby adapting them for separate manipulation, substantially as herein explained. 4th. In combination with an acetylene gas generator, a horizontally rotatable spider having arms adapted to receive carbide holders, and carbide holders mounted upon the end of said arms, said arms being of varying lengths, whereby the holders are held at different radial distances from the centre and thereby adapted to be separately manipulated, substantially as herein explained. 5th. A feeding mechanism for acetylene gas generators, comprising a rotating support, carbide holders mounted upon said support in two concentric series at different distances from the centre or rotation, closures for the discharging ends of the respective carbide holders, and latches for holding said closures in closed position and projecting into engagement with a fixed tripping device, whereby said latches are successively tripped by the movement of the holders with the support, substantially as herein explained. 6th. An acetylene gas generator comprising feeding mechanism, a rotating support and two circular series of holders mounted on said support and each provided with an independently tripped closure, and with latches adjacent to the dividing

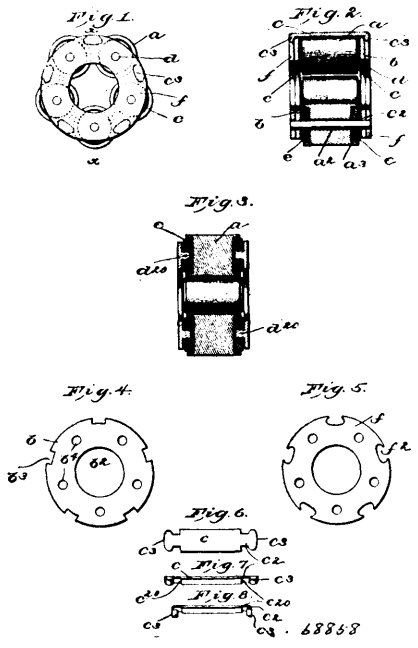
line between the two series, means for imparting rotation to the support, and a tripping device located upon a fixed part in the path of the latches of the closures, substantially as and for the purpose set forth. 7th. An acetylene gas generator comprising a feeding mechanism, a horizontally rotating support having radial arms, and carbide holders fitting upon said radial arms, and placed in position or removed by radial movement of the arms, and tripping devices for keeping the holders closed, engaged and released by the circumferential movement of the holders, substantially as herein explained. 8th. In combination with a moving part of a carbide feeding mechanism, a holder mounted upon said moving part and provided with a swinging closure for its discharging end, a swinging latch arm mounted upon the holder, and a shoulder carried by said latch arm, engaging beneath the swinging closure and adjustable to and from the latter, substantially as and for the purpose set forth. 9th. In an acetylene gas generator, the combination of a generating chamber, a closed top for said chamber having an eccentric feed opening, a horizontally rotating spider for carbide holders concentrically mounted upon the top of the generator, holders mounted upon the spider at a radial distance which brings them successively over the feed opening in the top of the generator, and movable radially into and out of engagement with the spider arms, swing closures for the lower ends of said holders, detents for said closures mounted upon pivots radially disposed to the spider on the sides of the holders next to the centre of the spider, and means mounted upon the generator at a radial distance which brings it within the path of the holders for engaging and releasing said detents as each holder comes vertically above the discharge openings, substantially as herein explained. 10th. An acetylene gas generator, the combination of a generating chamber having a feeding opening in its top, a horizontally rotating spider centrally mounted above said generator having radial arms, inverted carbide holders having sockets on their upper closed ends engaging with the spider arms, and having downwardly swinging closures for their lower ends with detents releasable by movement in the direction in which the holders travel with the spider, and means on the generator for engaging the detents as the holders move past the feed opening of the generator and thereby cause the discharge of the contents of the holders successively into said feed opening, as herein explained. 11th. In an acetylene gas generator, the combination of the generating chamber, a waste chamber and a carbide chamber arranged in vertical series and each separate from the rest, and carbide carrying and delivering mechanism located in and enclosed by the carbide chamber, substantially as and for the purpose set forth. 12th. An acetylene gas generator, a generating chamber having a closed top provided with a door opening, a partition providing a waste chamber above the generating chamber and having a sealed communication therewith, a discharge outlet from the waste chamber, an automatically closing door for the opening in the top, and means for supplying carbide upon the door, substantially as described. 13th. An acetylene gas generator comprising a generating chamber having a closed top provided with a door opening, a partition providing a waste chamber located above and having a passage communicating with said generating chamber, and a door admitting carbide to the waste chamber above, the passage from said waste chamber to the generating chamber, substantially as and for the purpose set forth. 14th. An acetylene gas generator comprising a generating chamber having a closed top provided with a door opening, a partition providing a waste chamber located above, and communicating with said generating chamber, and an automatic door affording communication from the outside into said waste chamber, substantially as set forth. 15th. An acetylene gas generator comprising a generating chamber, a waste chamber located above and communicating through a sealed passage with said generating chamber, an escape outlet for gas from said waste chamber, and a safety valve communicating between the generating chamber and the waste chamber, whereby surplus of generated gas may be discharged through a determined outlet and prevented from entering the room in which the generator is located, substantially as herein explained. 16th. In an acetylene gas machine, the combination of a generating chamber, a waste chamber, and a carbide chamber communicating with the generating chamber by a chute extending through the waste chamber. 17th. An acetylene machine, the combination of the generating chamber, the waste chamber above the generating chamber, and the carbide chamber above the waste chamber communicating with the generating chamber through a water sealed chute, said chute having a gas trap communicating with the waste chamber. 18th. In an acetylene machine, the combination of the generating, waste, and carbide chambers arranged in vertical series, a chute communicating between the carbide and generating chambers, and a gas trap in the chute communicating with the waste chamber and water sealed from the passage into the carbide chamber. 19th. In combination with an acetylene gas generator, a carbide chamber, horizontally rotating mechanism for carrying and delivering charges of carbide located in said chamber, detachable carbide holders forming part of such mechanism, and a door in the side wall of said carbide chamber through which the holders may be removed and replaced as they are successively brought opposite thereto by rotation of the carrier, substantially in the manner and for the purpose set forth. 20th. In a combination with an acetylene gas generator, a closed carbide chamber, a rotating mechanism for supporting the carbide, holders detachably mounted upon said carbide holder and brought by the latter successively into position for delivering their contents to the generator, and a door restricted in the carbide chamber to which the removable holders are successively brought by rotation of the supporting mechanism after passing the discharging position, substantially as and for the purpose set forth. 21st. In combination with an acetylene gas generator, the rotary supporting spider having radially slotted arms, and the carbide holders detachably mounted upon said arms by means of T-heads which fit in the slots, and a discharging trip engaging the holders in a circumferential direction, substantially in the manner and for the purposes set forth. 22nd. In combination with an acetylene gas machine, dumping carbide holders and an automatically closing trap through which the holders dump, said trap being formed by the downwardly projecting triangular walls 51, and the angularly arranged doors automatically closing against the inclined edges of said walls, substantially as set forth. 23rd. In combination with an acetylene gas generator, the head 40 resting upon the body of the generator, the diaphragm 46 carrying the mechanism for controlling the discharge of the carbide, and suspended from said head and removable with it, substantially in the manner and for the purposes set forth. 24th. In an acetylene gas generator, the combination of the body of the generator, the removable had 40, the frame 42 suspended from the head by means of the rods 41, the shaft 6 having bearings in the head and in said frame, the carbide carrying and delivering mechanism mounted on said shaft, the diaphragm 46 supported upon the frame, and the trap 39 mounted on the diaphragm and through which the carbide discharges, substantially as set forth. 25th. In an acetylene gas machine, the combination of a generating chamber, a waste chamber located above and separated from the generating chamber, and a carbide chamber located above and separated from the waste chamber, substantially as and for the purposes set forth. 26th. In an acetylene gas machine, the combination of the body of the generator, the tapered hood 54 located in and removable from the body of the generator and forming a generating chamber therein, and a detachable chute for delivering the carbide through the inclined wall of the hood, substantially as explained. 27th. In combination with the body of the generator, the hood 54 located therein and providing a generating chamber, and the guard 56 for preventing the escape of gas passed through the lower edge of the hood, substantially as and for the purposes set forth. 28th. In combination with the body of the generator, having the ledge 55 projecting inwardly from its inner wall, the hood 54 having its lower edge resting upon the ledge 55, and the guard 56, substantially as and for the purposes set forth. 29th. In an acetylene gas generator, the combination of the removable hood 54 located therein and providing a generating chamber, and the chute 58 projecting through a side wall of the hood and delivering carbide thereinto, substantially as and for the purposes set forth. 30th. In an acetylene gas generator, the combination of the hood 54 inclined upwardly and laterally and providing the inclined wall 57, the chute 58 projecting downwardly in said generator and entering the inclined wall 57, and suitable means for delivering carbide into said chute, substantially as and for the purposes set forth. 31st. In an acetylene gas generator, the combination of the hood 54, the chute 58 delivering into said hood, and the deflector 64 inclined downwardly from its ends to the centre and from its middle line laterally, substantially as and for the purposes set forth. 32nd. In an acetylene gas generator, the combination of the waste chamber B, the hood 54 providing the generating chamber C, and having openings 68 at its base through which water may pass from one chamber to the other, and the guard 56 projecting upwardly within the base of the hood, substantially as set forth.

No. 68,858. Roller Bearing. (*Coussinet anti-frottant.*)

The Moffet Bearing Company, Council Bluffs, Iowa, assignee of Julius Augustus Perkins, Omaha, Nebraska, both in the U.S.A., 29th September, 1900; 6 years. (Filed 8th June, 1900.)

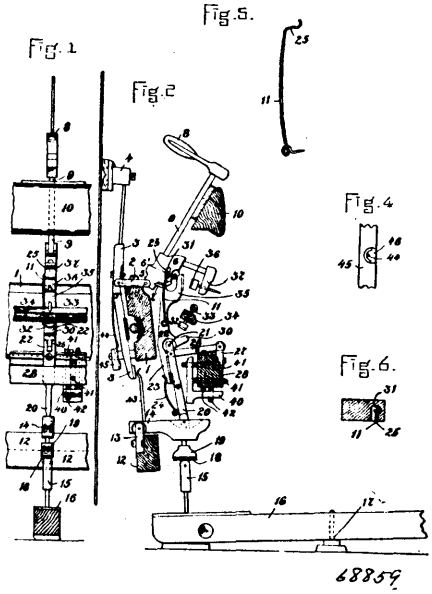
Claim.—1st. A roller bearing containing a plurality of bearing rollers, a cage therefor having extended from its walls supports to centre and align said rollers, and anti-friction washers surrounding said supports and interposed between the ends of said rollers and the walls of said cage. 2nd. In a roller bearing, a plurality of metallic bearing rollers chambered at their ends, roller supports entering said chambers, and anti-friction washers located at the ends of said rollers and surrounding said supports, said washers preventing the contact of said rollers with said supports. 3rd. A roller bearing, containing a plurality of bearing rollers chambered at their ends, supports to enter the chambers of and align said rollers, and anti-friction washers interposed between the ends of said rollers and the inner sides of said cage, said washers preventing contact of said bearing rollers with said supports and also with said cage. 4th. A bearing roller for use in a roller bearing, said roller consisting of a metallic body, having applied to and contained within its ends anti-friction washers, the washers extending from the ends of the metallic body of the roller. 5th. In a roller bearing, a series of bearing rollers, a cage having aligning means for said rollers, and non-metallic means to prevent contact of said rollers with any part of said cage or its aligning means. 6th. In a roller bearing, a cage containing a series of metallic rollers, each roller having fixed to its opposite ends and travelling therewith an anti-friction washer. 7th. A roller bearing cage, composed of detached end members united by cross pieces having projections provided with right angled

tongues, said projections and tongues entering peripheral spaces of said members. 8th. A cage for roller bearings, comprising end



members consisting of end plates having recesses cut along their peripheries, cross pieces provided with shoulders to engage the surface of said members and projections beyond said shoulders to enter the recesses, tongues at the ends of said projections to overlie said plates and retain them in engagement with the shoulders, and locking plates to engage said tongues and prevent lateral displacement of the cross pieces, substantially as described. 9th. The combination with the plates b provided with peripheral recesses b^3, of the cross pieces c having the projections c^2 and tongues c^3, and the locking plates f, having peripheral recesses of such shape as to fit said tongues, substantially as described. 10th. The combination with the plates b, of the spindles d, the rollers a and the washers e, affording means for keeping said rollers out of contact with said spindles, the cross pieces c connecting the plates b, and a locking plate f to co-operate with said pieces c, substantially as described.

No. 68,859. Pianoforte Action. (*Action de piano.*)



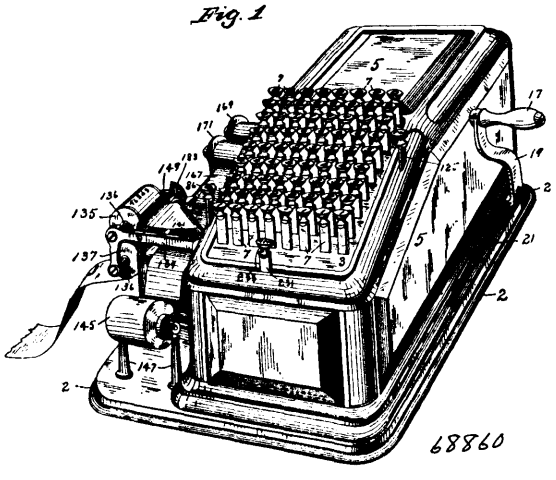
Louis Adams Guild, assignee of George Morse Guild, both of Boston, Massachusetts, U.S.A., 29th September, 1900; 6 years. (Filed 20th June, 1900.)

Claim.—1st. In a piano action, the combination with the hammer and the hammer butt, the latter having the jack butt formed thereon, of a jack having a downwardly extending lifter rod pivoted thereto, a key for actuating said lifter rod, and a connecting arm pivoted at its front end to a rail or support, and extending rearwardly therefrom, and connected at its inner end to the lifter rod, said connecting arm as it moves upward from a horizontal toward a vertical position in describing the arc of a circle, serving to draw forward the lifter rod and jack as they are raised by the key to operate the hammer, substantially as described. 2nd. In a piano action, the combination with the hammer and the hammer butt, the latter having the jack butt formed thereon, of a jack having jointed thereto a downward extension or lifter rod, a key for actuating the same, a spring for stiffening the joint and keeping the jack in line with the lifter rod as it is raised by the key, and a connecting arm pivoted at one end to a stationary support and extending rearwardly therefrom and connected at the opposite end to the jack extension or lifter rod, said connecting arm as it moves upward from a horizontal toward a vertical position in describing the arc of a circle, serving to draw forward the lifter rod and jack as they are raised by the key to operate the hammer, substantially as described. 3rd. In a piano action, the combination with the hammer and the hammer butt, the latter having the jack butt formed thereon, of a jack provided with a throw-off projection adapted to contact with a stationary stop or button, the jack extension jointed to the jack, a spring for stiffening the joint and keeping the jack and jack extension in line as they are raised by the key, and a connecting arm having one end pivoted to a rail or stationary support and extending rearwardly therefrom, and the other end pivoted to the jack extension, said arm as it moves upward from a horizontal toward a vertical position in describing the arc of a circle, serving to draw forward the lifter rod and jack as they are raised by the key to operate the hammer, the jack being thereby kept beneath the jack butt during the greater part of its upward movement, and then suddenly withdrawn with a quick outward movement, substantially as described. 4th. In a piano action, the combination with the hammer and the hammer butt, the latter having the jack butt formed thereon, of a jack having a downward extension or lifter connected therewith by a joint permitting movement of the jack in one direction only, a spring for stiffening the joint and keeping the jack in line with its extension during the greater part of its upward movement, and a radial connecting arm pivoted at one end to a stationary support and extending rearwardly therefrom, and connected at its opposite end to the jack extension, said arm as it moves upward from a horizontal toward a vertical position in describing the arc of a circle, serving to draw forward the jack extension and the jack with an accelerating forward movement as they are raised to operate the hammer, and a throw-off device for producing a sudden withdrawal of the jack from the shoulder of the jack butt when the hammer has nearly reached the string, substantially as described. 5th. In a piano action, the combination with the hammer and hammer butt, the latter having the jack butt formed thereon, of a jack having a lateral throw-off projection at its lower end, a stationary stop or button with which said throw-off projection is brought into contact as the jack is raised, a downward extension connected with the jack by a joint permitting movement in one direction only, and having a spring for keeping the jack in line therewith as it is raised by the key, and a connecting arm pivoted at one end to a rail or stationary support, and extending rearwardly therefrom and connected at its opposite end to the jack extension, said connecting arm as it moves upward from a horizontal toward a vertical position in describing the arc of an circle, serving to draw forward the jack as it is raised, substantially as described. 6th. In a piano action, the combination with the hammer and hammer butt, the latter having the jack butt formed thereon, of the jack provided with a throw-off projection adapted to contact with a stationary stop or button, a downward extension connected with the jack by a joint permitting movement in one direction only, a spring for stiffening the joint and keeping the jack in line with the jack extension as it is raised by the key, a connecting arm pivoted at one end to a rail or stationary support, and extending rearwardly therefrom and connected at the other end to the jack extension, said arm as it moves upward from a horizontal toward a vertical position in describing the arc of a circle, serving to draw forward the jack as it is raised, and a back catch for holding the hammer close to the string, substantially as described. 7th. In a piano action, the combination with the hammer and hammer butt, the latter having the jack butt formed thereon, of the jack provided with a throw-off projection adapted to contact with a stationary stop or button, a downward extension connected with the jack by a joint permitting movement in one direction only, a spring for stiffening the joint and keeping the jack in line with the jack extension as it is raised by the key, a connecting arm pivoted at one end to a rail or stationary support and extending rearwardly therefrom and connected at the other end to the jack extension, said arm as it moves upward from a horizontal toward a vertical position in describing the arc of a circle, serving to draw forward the jack as it is raised, and a back catch for holding the hammer close to the string, consisting of an arm extending upwardly from the jack, and an arm projecting from the hammer butt and with which the arm projecting from the jack contacts on the release of the hammer, substantially as described. 8th. In a piano action, the combination with the hammer and the hammer butt, the latter having the jack butt formed thereon, of a jack having a downward extension or

lifter connected therewith by a joint permitting movement of the jack in one direction only, a spring for stiffening the joint and keeping the jack in line with its extension during the greater part of its upward movement, a radial connecting arm pivoted at one end to a stationary support and extending rearwardly therefrom and connected at its opposite end to the jack extension, said arm as it moves upward from a horizontal toward a vertical position, in describing the arc of a circle, serving to draw forward the jack extension and the jack with accelerating forward movement as they are raised to opeate the hammer, a throw-off device for producing a sudden withdrawal of the jack from the shoulder of the jack butt when the hammer has nearly reached the string, a back catch, consisting of an arm extending upwardly from the jack, and an arm projecting from the hammer butt and provided with an adjustable button, and a lever pivoted to the lower end of the jack extension and actuated by the key, substantially as described. 9th. In a piano action, the combination with the hammer butt provided with an oblong recess having a longitudinal groove in its front wall, of a hammer retracting spring connected at its lower end to the jack and having at its upper end an off-set, whereby it is adapted to enter said recess and engage the said longitudinal groove, substantially as described. 10th. In a piano action, the combination with the jack butt, of the jack jointed to a downwardly extending lifter rod and provided on its rear side with a tongue abutting against the said lifter rod, and a spring secured at its lower end to the lifter rod and bearing at its upper end against the tongue of the jack, whereby the jack and lifter rod are kept in line with each other as the are raised to operate the hammer, substantially as described. 11th. In a piano action, the combination with the jack and the lifter rod or extension jointed thereto, of a rail or support made adjustable both vertically and horizontally, and a connecting arm pivoted at end to said lifter rod and at its opposite end to said adjustable rail or support, substantially as described. 12th. In a piano action, the combination with the damper and damper lever, the latter pivoted to the flange 2 of the centre rail, of the downwardly extending spring 44 secured to the outer side of the damper lever, the rail 45 connected with and supported by the centre rail and having a recess forming a bearing for the lower end of the spring 44, the lever 14 operated by the key, and the arm 43 projecting upward from the rear end of the lever 14 and acting directly on the damper lever to actuate the same on the depression of the key, substantially as described. 13th. A piano action, substantially as described, the same consisting of the rail 1, flange 2, hammer 8, hammer butt 6 having the jack butt 7 formed thereon, the jack 22 with its projection 30, and back catch arm 35, the back stop 36 projecting from the hammer butt, the hammer spring 11 having one end connected with the hammer butt and the other end with the jack, the throw-off button 32, the lifter rod 20 jointed to the jack, the spring 24 secured to the lifter rod and bearing upon the lower end of the jack, the radial connecting arm 26 pivoted at one end to the lifter rod and at its opposite end to the flange of the rail 28, the lever 14 pivoted to the flange of the rail 12 and having the lifter rod pivoted thereto, said lever 14 having an upwardly projecting arm 43, the key 16 acting upon the lever 14, the damper 4, the damper lever 3 pivoted to the flange 2 and adapted to be actuated by the arm 43 of the lever 14, the rail 45, and the damper spring 44 secured to the outside of the damper lever below its pivotal point and bearing at its lower end against the rail 45, all constructed and arranged to operate, substantially as described.

No. 68,860. Computing Machine. (*Machine à compter.*)

Fig. 1



W. P. Shattuck, C. M. Amsden and William S. Nott, all of Minneapolis, Minnesota, U.S.A., 29th September, 1900; 6 years. (Filed 29th June, 1900.)

Claim.—1st. The combination, with a key board provided with a series of movable keys, of a series of type wheels and connections and a support therefor, a transmitting mechanism thereon, said key board and said support with the parts thereon being relatively movable to accomplish proportional movement of said wheels and the return thereof to gers, for the purpose set forth. 2nd. The combination, with a movable carriage, a series of type wheels mounted upon said carriage, and actuating devices therefor, of a series of movable keys for each type wheel, selected keys, when moved, producing rotary movement in said actuating devices that is transmitted to corresponding type wheels and causes said type wheels to be turned, for the purpose set forth. 3rd. The combination with a key board provided with a series of movable keys, of a series of type wheels and a support therefor carrying a transmitting mechanism, and means for moving said type wheel support along said key board and thereby causing said type wheels to be operated by selected and previously operated keys of said key board. 4th. The combination with a key board provided with a row of independent keys numbered from 1 to 9, of a sliding carriage provided with a spiral shaft in line with said keys and engageable with said keys, a type wheel carried by said carriage, and connections between said type wheel and said spiral shaft whereby as said carriage is moved said type wheel is rotated by engagement of said spiral shaft with any previously operated key of said row. 5th. The combination, with a key board provided with a series of movable keys, of a sliding carriage, a series of type wheels mounted on said carriage, and a series of spiral shafts connected with said type wheels and adapted, as said carriage is moved, to engage previously operated keys of said key board, for the purposes set forth. 6th. The combination, with a reciprocating carriage, and type wheels mounted thereon, of means for operating said wheels the same distance in both directions, as said carriage is reciprocated, for the purpose set forth. 7th. The combination, with a reciprocating carriage and type wheels mounted thereon, of a stationary key board, movable keys on said key board, and means movable with relation to the keys causing said wheels to be turned by said keys as said carriage is reciprocated to bring into recording position type on said wheels corresponding to previously moved keys, for the purpose set forth. 8th. The combination with a key board provided with a series of rows of numbered keys, of a reciprocating carriage, a series of spirally grooved shafts mounted upon and carried by said carriage, said shafts being adapted to be rotated as said carriage is moved, by engagement with previously operated keys in respective rows of said key board, type wheels connected with and rotated by said grooved shafts, and means for recording the numbers registered on said type wheels at each movement of said carriage, substantially as described. 9th. The combination, with a key board and keys, of the movable carriage, the primary or listing and the total result type wheels, both mounted upon said carriage, and means movable with said carriage for operating said wheels from previously operated keys of said key board as said carriage is moved, substantially as described. 10th. The combination, with the key board provided with a series of rows of numbered keys, of a reciprocating carriage, a series of spirally grooved shafts mounted upon and carried by said carriage, said shafts being held against longitudinal movement in said carriage but adapted to be rotated as said carriage is moved by engagement with previously operated keys of said key board, and a series of type wheels connected with and rotated by said spirally grooved shafts, for the purpose set forth. 11th. The combination, with the key board and keys, of the movable carriage, the listing type wheels and the total result type wheels mounted thereon, transfer wheels between said listing wheels and total result wheels, and means for moving said total result wheels into engagement with said transfer wheels during one movement of said carriage and holding them out of engagement with said transfer wheels during the other movement of said carriage, for the purpose set forth. 12th. The combination, with the listing wheels, the total result wheels and the interposed transfer wheels, of means for rotating said listing wheels, means for axially moving said transfer wheels for the purpose of carrying from each total result wheel to the wheel of the next higher denomination, and means for moving said total result wheels into and out of engagement with said transfer wheels, for the purpose set forth. 13th. The combination, with the listing wheels, the total result wheels and the interposed transfer wheels, of means for rotating said listing wheels, and means for moving said total result wheels into and out of engagement with said transfer wheels to be moved by or permit the independent rotation of said transfer wheels, for the purpose set forth. 14th. The combination with the keyboard and keys, of the movable carriage, the listing wheels, the total result wheels, and the interposed transfer wheels, all mounted upon said carriage, means operated by said keys for rotating said listing wheels, and means for moving said total result wheels into and out of engagement with said transfer wheels, for the purpose set forth. 15th. The combination, with the keyboard and keys, of the movable carriage, the listing wheels and the total result wheels mounted upon said carriage, means operated by said keys for rotating said listing wheels, means for transferring indicated amounts from said listing wheels to said total result wheels, and means for printing the indicated amounts from either the listing or total result wheels. 16th. The combination with the keyboard and keys, of the movable carriage, the listing, the total result and the interposed transfer wheels, all mounted upon said carriage, means operated by said keys for rotating said listing wheels, means for moving said total result wheels into and out of engagement with said transfer wheels

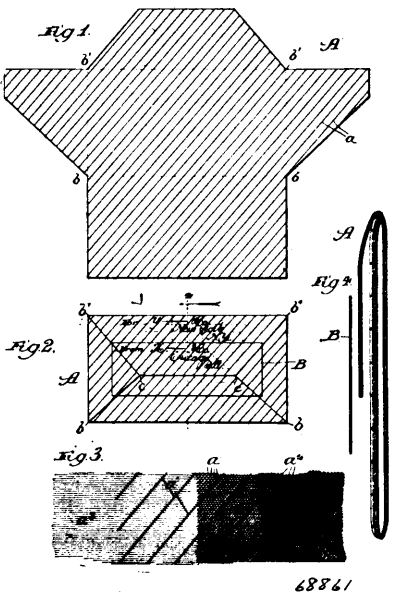
means for axially moving said transfer wheels while engaged by said total result wheels, for carrying from one of said total result wheels to the total result wheel of the next higher denomination, and means for returning said transfer wheels to their former axial position while not engaged by said total result wheels. 17th. The combination with the listing type wheels, of the total result type wheels, the interposed transfer wheels mounted upon movable supports, means for moving said total result wheels into and out of engagement with said transfer wheels, and means for axially moving any one or more of said transfer wheels for the purpose of carrying from any one of said total result wheels to the total result wheel of the next higher denomination. 18th. The combination, with the listing type wheels, of means for alternately showing sums thereon and returning the same to zero, the total result type wheels and the interposed transfer wheels mounted upon movable supports and adapted to communicate movement to said total result wheels, for the purpose set forth. 19. The combination, with the listing type wheels, of the total result wheels, the interposed transfer wheels mounted upon movable supports, and means for moving said total result type wheels into and out of engagement with said transfer wheels, for the purpose set forth. 20th. The combination, with the listing type wheels and the total result type wheels, of the interposed transfer wheels, movable standards upon which said transfer wheels are mounted, springs engaging standards, locking means for holding said standards in position against the tension of said springs, and means upon upon each of said total result wheels for releasing the next successive transfer wheel as each total result wheel makes a complete revolution, for the purpose set forth. 21st. The combination, with the listing wheels 47, and means for operating said wheels, of the total result wheels 49, the interposed transfer wheels 75, the movable standards in which said transfer wheels are mounted, means for moving said standards and thereby axially moving said transfer wheels, levers 95, for holding said standards and wheels in normal position, and means upon said total result wheels for tripping said levers, for the purpose set forth. 22nd. The combination, with the listing type wheels 47, and means for operating said wheels of the total result wheels 49, the transfer wheels 75, means for moving said total result wheels into and out of engagement with said transfer wheels, movable standards 79, in which said transfer wheels are mounted, springs 99, connected with said standards, locking levers 95, means upon said total result wheels for tripping said locking levers and permitting them to be moved by said said springs, and means for restoring said standards to their normal position, substantially as described. 23rd. The combination, with the movable carriage, of the listing type wheels and the total result type wheels mounted upon said carriage, the interposed transfer wheels, means for moving said total result wheels into engagement with said transfer wheels while said carriage is being moved in one direction means for moving said total result wheels out of engagement with said transfer wheels while said carriage is being moved in the opposite direction, and means for axially moving said transfer wheels while said total result wheels are in engagement with them, and means for restoring said transfer wheels to their normal position while said total result wheels are out of engagement with them, for the purpose set forth. 24th. The combination, with the type wheels and means for operating them, the carriage whereon the same are arranged, the type aligning device adapted to engage the type of said wheels, the movement of said carriage operating said type wheels and moving them into position to be engaged by said aligning device, and means for operating said aligning device, for the purpose set forth. 25th. The combination, with the movable carriage, the listing type wheels and the total result type wheels carried thereby, and means for moving said carriage and thereby bringing either set of wheels into printing position, and an aligning device adapted to engage and align the type of the set of wheels that is brought into printing position. 26th. The combination, with the movable carriage, of the listing type wheels and the total result type wheels carried thereby, an aligning device common to both sets of wheels, and means for moving said carriage so as to bring either set of said type wheels into position to be engaged by said aligning device, for the purpose set forth. 27th. The combination, with the movable carriage, the listing type wheels and the total result wheels carried thereby, of an impression device common to both sets of type wheels, means for moving said carriage into position to bring type on either set of wheels into position to be engaged by said impression device. 28th. The combination, with the movable carriage, type wheels carried thereby, and means for moving said carriage so as to bring said type wheels into printing position, of the slide 197 carrying a plate 199 adapted to cover the type that are in printing position and are not to be printed from, and means for regulating the movement of said slide, for the purpose set forth. 29th. The combination, with the series of type wheels, each provided with a transverse hole 213, of the movable slide 197 carrying the plate 199 and the pin 201 adapted to enter the holes in said type wheels, and means for moving said slide. 30th. The combination, with the type wheels and means for bringing said type wheels into printing position, of the diagonally arranged shaft 141 and the paper carrying and impression rolls operated by said shaft, for the purpose set forth. 31st. The combination, in a computing machine, of the keys and a transmitting mechanism, with the total result type wheels, the carriage, said keys and transmitting mechanism co-operating upon the movement of said carriage to operate said type wheels, and means for restoring said total result type wheels to zero, substantially as described. 32nd. The combination, with the carriage, of the listing and total result wheels mounted upon said carriage, means for operating said wheels, and means for restoring said total result wheels to zero. 33rd. The combination, with the carriage, of the total result wheels, the shaft 53 upon which said wheels are mounted and revolve, dogs carried by the shaft, adapted to engage projections on said wheels as the shaft is rotated in one direction, means upon said carriage for supporting said shaft, and means adapted to be thrown into engagement with said shaft to rotate it as said carriage is moved, for the purpose set forth. 34th. The combination, of the total result wheels, mounted on a rotatable shaft upon a movable carriage, means causing said wheels to move with the shaft as it is rotated in one direction, a pinion upon said shaft, a rack bar adapted to be moved into and out of path of said pinion, and a key for so moving said rack bar, for the purpose set forth. 35th. The combination, of the type wheels, the tubular shafts to which said wheels are secured, said shafts being arranged one within another, standards 39 and 41 supporting said shaft, and means for rotating said shafts. 36th. The combination, of the type wheels, the tubular shafts upon which said wheels are mounted, said shafts arranged one within another, independent bearings for each shaft, worm wheels upon said shafts, spiral shafts engaging said worm wheels, a movable carriage upon which said tubular shafts and type wheels and said spiral shafts and connections are mounted, and a series of keys adapted to be moved into the paths of said spiral shafts, for the purpose set forth. 37th. The combination, with the movable carriage, the type wheels arranged upon tubular shafts that are mounted one within another upon said carriage, spiral shafts also mounted upon said carriage and engaging worm wheels on said tubular shafts, a keyboard and a series of numbered keys arranged in line with each spiral shaft, and means for moving said carriage. 38th. The combination, in a computing machine, of the keyboard, with the plurality of series of keys thereon, catches for normally holding the keys in an elevated position, a movable carriage, a plurality of transmitting devices therein corresponding to the series of keys, figured wheels coupled with said transmitting devices, said transmitting devices and said wheels being operated upon the movement of the carriage after the keys have been set, and means positively actuated by said carriage for restoring set or depressed keys to their normal position, substantially as described. 39th. The combination, in a computing machine, of the frame, with the keyboard, the plurality of series of keys thereon, the carriage provided within said frame and provided with a plurality of transmitting devices, all movable with and by said carriage, said keys adapted to engage with said transmitting devices, and figured wheels operable by said transmitting devices when said carriage is moved a given distance, substantially as described. 40th. The combination, with the key board, the series of depressible keys, and the movable frame adapted to engage the depressed keys, of the sliding carriage, and means on said carriage to positively engage and move said frame and restore said keys, for the purpose set forth. 41st. The combination with the casing, of the movable carriage mounted therein, the rock shaft mounted in bearings upon said carriage, an operating handle connected with said rock shaft, a crank arm connected with said rock shaft, a guideway in which the end of said arm travels, transverse guideways connected with the main guideway, a switch block arranged at the junction of one of the transverse guideways and the main guideway, and a key for operating said switch block. 42nd. The combination, with the type wheels and the spiral operating shafts, of the spring controlled locking plates adapted to engage and lock said spiral shafts, for the purpose set forth. 43rd. The combination, with a keyboard provided with a series of keys, of a series of type wheels and a support therefor, a transmitting mechanism on the type wheel support, said key board and said support with the parts thereon being relatively movable to accomplish proportional movement of said type wheels and the return thereof to zero, for the purpose set forth. 44th. The combination, in a computing machine, of a keyboard provided with a plurality of series of keys, a series of type wheels, one for each series of keys, a transmitting mechanism operable by selected keys when said keyboard and transmitting mechanism are relatively moved and communicating proportional movement to said type wheels. 45th. The combination, in a computing machine, of a key, with a transmitting mechanism, a figured wheel operatively connected with said transmitting mechanism, said key adapted for indicative operation without operating said transmitting mechanism, and means for producing relative movement between said key and transmitting mechanism and thereby operating said wheel. 46th. The combination, in a computing machine, of a key, with a transmitting mechanism, a figured wheel operatively connected with said transmitting mechanism, and means independent of the selective or indicative movement of said key, producing relative movement between the same and said transmitting mechanism, by which movement the latter and said wheel are operated by said key. 47th. The combination, in a computing machine, of a key, with a transmitting mechanism, a figured wheel operatively connected with said transmitting mechanism, and means, independent of the selective or indicative movement of said key, producing relative movement between the same and said transmitting mechanism, by and during which movement the latter and said wheel are operated through the engagement of said key and the transmitting mechanism. 48th. The combination, in a computing machine, of a series of keys, with a transmitting mechanism, a figured wheel for operation by said transmitting mechanism, said

transmitting mechanism adapted for engagement with a selected key of said series, and means for producing relative movement between said key and transmitting mechanism after the engagement thereof, causing said wheel to be turned in proportion to the denomination of said key. 49th. The combination, in a computing machine, of a key, with a transmitting mechanism, a figured wheel for operation by said transmitting mechanism, said key and transmitting mechanism adapted for engagement without operating said transmitting mechanism or said wheel, and means for producing relative movement between said key and transmitting mechanism whereby the latter and said wheel are rotated, substantially as described. 50th. The combination, in a computing machine, of a key, with a transmitting mechanism, a figured wheel permanently connected with said transmitting mechanism for operation thereby in both directions, said key adapted for selective or indicative movement without operating said transmitting mechanism, and means for producing relative movement between said key and transmiting mechanism to actuate said transmitting mechanism thereby and first operate and then return said figured wheel, substantially as described. 51st. In a computing machine, the combination, with a keyboard provided with a plurality of sets or rows of keys, a transmitting shaft for each row of keys and operative upon relative movement between the same and a selected key of its row, figured wheels connected with said shafts, and means for producing relative movement between the shafts and the keyboard, thereby operating transmitting shafts and wheels corresponding to selected keys. 52nd. The combination, with the keyboard provided with a series of rows of numbered keys, of a reciprocating carriage, a series of spirally grooved shafts revoluble in and movable longitudinally with said carriage, said shafts adapted for rotation by selected keys during the movement of said carriage, the rotation of said shafts being proportional to the denominations previously operated or selected keys, and a series of type wheels operated by said shafts. 53rd. The combination, with the keyboard provided with a series of rows of numbered keys, of a reciprocating carriage, a series of spirally grooved shafts revoluble in and movable longitudinally with said carriage, said shafts adapted for rotation by selected keys during the movement of said carriage, the rotation of said shafts being proportional to the denominations of previously operated or selected keys, and a series of type wheels movable with said carriage and operable by the said shafts thereon. 54th. The combination with the figured wheel, of the rotary shaft for operating the same, a key, means for producing relative movement between said shaft and key to operate said shaft, locking means, and said locking means preventing the rotation of said shaft except during the engagement thereof by a key, substantially at described. 55th. The combination with the spiral transmitting shaft, of the type wheel operable thereby, a series of keys, a locking device for said shaft operable by a key of said series, and means operable after a key movement producing movement of said shaft and said wheel in proportion to the denomination of said key. 56th. In a computing machine, the combination with the key, of the transmitting mechanism, the type wheel for operation by the latter, and a locking device for said transmitting mechanism preventing the operation thereof save by a key, substantially as described. 57th. In a computing machine, the combination with the keyboard, of a carriage movable with respect thereto, the transmitting devices upon and movable with said carriage, co-operating with keys of said keyboard to produce computations, and the locking devices movable with said transmitting devices operable by the keys of said keyboard and preventing independent movement of said transmitting devices, substantially as described. 58th. The combination, in a computing machine, of a suitable frame or casing, a keyboard and keys thereon, a carriage movable within said casing, transmitting mechanisms within said casing co-operating with said keys, two sets of type wheels provided with said carriages and operable by said transmitting mechanism, said casing provided with a single printing device automatically operable upon either of said sets of type wheels, substantially as described. 59th. The combination with the listing type wheels and the total result type wheels, of the interposed transfer wheels mounted upon movable supports, for the purpose set forth. 60th. The combination with the temporary or listing wheels, and the total result wheels, of interposed transfer wheels, capable of both rotary and bodily movement, and means for producing said bodily movement simultaneously with the rotary movement, to communicate two steps to a total result wheel during one step of a temporary or listing wheel. 61st. The combination with the listing type wheels, of means for alternately showing sums thereon and returning the same to zero, of total result type wheels, the interposed transfer wheels mounted upon movable supports, and means for disengaging the total result type wheels during the return movement of the listing type wheels, substantially as described.

No. 68,861. Envelope. (*Enveloppe.*)

Oscar Richter and Erik Larsen Vognild, both of Chicago, Illinois, U.S.A., 29th September, 1900; 6 years. (Filed 18th April, 1900.)

Claim.—1st. In an envelope, the combination with the envelope forming material, of ribs formed of comparatively stiff material rendering them difficult of confinement without detection, when once severed, substantially as and for the purpose set forth. 2nd. In an envelope, the combination with the envelope forming material, of ribs extending parallel to each other, in a manner to protect the several edges and sides of the envelope, said ribs being formed of



comparatively stiff material rendering them difficult of confinement, when severed, substantially as and for the purpose set forth. 3rd. In an envelope, the combination with the envelope body, of ribs composed of comparatively stiff wire, rendering them difficult of confinement when severed, substantially as and for the purpose set forth. 4th. In an envelope, the combination with an envelope body, of stiff metallic wire ribs attached to the material of the body, substantially as and for the purpose set forth. 5th. An envelope formed of a fabric having spring wire ribs woven therein, substantially as described. 6th. An envelope formed from a woven fabric having therein spring wire ribs constituting a portion only of the warp strands of the fabric, substantially as described. 7th. The combination with an envelope forming blank of parallel protecting wires attached thereto and extending diagonally and serving, after the envelope is formed, to protect sides and edges, substantially as described. 8th. In an envelope, the combination with the body thereof of ribs or wire or the like, and a transparent protecting piece applied to the envelope, across the line of sealing and covering said line in a manner to prevent continuous exposure for a sufficient distance to permit a large enough incision to extract the envelope contents, substantially as and for the purpose set forth. 9th. In an envelope, the combination with the body thereof of comparatively stiff ribs of wire or the like, a transparent protecting piece applied to the envelope at a line of sealing, and characters of indelible ink or its equivalent in close juxtaposition to said transparent piece, substantially as and for the purpose set forth. 10th. In an envelope, the combination with the body thereof of ribs of wires or the like, characters of indelible ink or the like applied to the envelope at the line of sealing, and a comparatively large piece of transparent paper or the like above the characters and crossing the lines of sealing and cemented in place, substantially as and for the purpose set forth.

No. 68,862. Envelope. (*Enveloppe.*)

Charles A. K. Hopkins, Honolulu, Hawaiian Islands, U.S.A., 29th September, 1900; 6 years. (Filed 15 February, 1900.)

Claim.—1st. The combination with an envelope of the flap thereof, of a flexible strip of metal fixed to the flap and extending beyond the line of fold thereof and adapted to yieldably hold the flap against displacement. 2nd. The combination with an envelope with the fold thereof, of a metallic strip fixed to the flap and extending beyond the line of fold thereof and adapted to hold the flap yieldably against displacement. 3rd. The combination with an envelope and the flap thereof, of a strip of lesser flexibility secured to the flap and extending beyond the line of fold thereof and adapted to be bent with the flap to retard displacement thereof. 4th. The combination with an envelope and the flap thereof, of a piece of metal fixed to the flap and projecting beyond the line of fold thereof and having its projecting portion fixed within the envelope, and adapted to be bent with the flap to retard the displacement 5th. The combination with an envelope and the flap

thereof, of a strip of metal fixed to the flap and projecting beyond the line of fold thereof and having its projecting portion encased

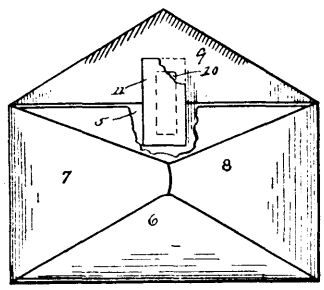


FIG I.

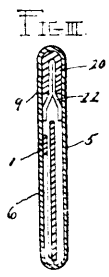


FIG III.

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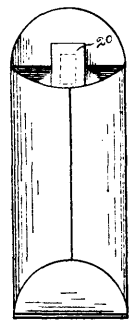
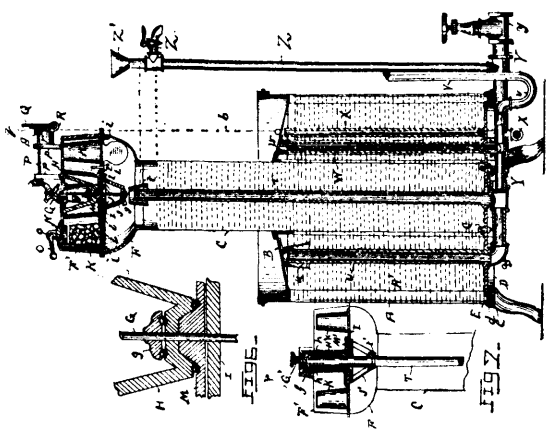


FIG II.

within the envelope and adapted to be bent with the envelope to retard displacement of the latter, and a coating of gum applied to the inner face of the flap at its edge.

No. 68,863. Acetylene Gas Generator.

(*Générateur à gaz acétylène.*)



68863

FIG I.

FIG 6.

FIG 7.

Pulaski D. Westcott, Corning, New York, U.S.A., 29th September, 1900; 6 years. (Filed 28th March, 1900.)

Claim.—1st. A feed mechanism for acetylene gas generators comprising a plate, a plurality of bottomless carbide receptacles arising from said plate, drops to close the bottoms of said receptacles, arms on said drops rising through an annular series of slots in said plate, a disc provided with an opening to register with said slots, and mechanism to rotate the disc whereby the arms are actuated to open and close the drops. 2nd. A feed mechanism for acetylene gas generators comprising a vertical shaft at the top of the generator, a plate suspended within the generator, a plurality of bottomless carbide receptacles carried by said plate, drops to close the bottoms of said receptacles, a mechanism operated by the shaft when turned in one direction to open and close the drops, clutch mechanism by which the shafts engages and rotates the plate and receptacles when turned in the opposite direction, a charging aperture in the generator top in the line of travel of the receptacles, and means for imparting motion to the shaft in either direction. 3rd. An acetylene gas generator comprising a gasometer, a water receptacle, a chamber above the water receptacle in communication with the gasometer, a vertical shaft at the top of said chamber, a plurality of bottomless carbide receptacles disposed around the shaft within said chamber, drops to close the bottoms of said receptacles, mechanism operated by the shaft to open and close the drops, a ratchet gear operated by the rise and fall of the gasometer bell to impart periodic motion to the shaft, and means for charging the carbide receptacles. 4th. An acetylene gas generator comprising a gasometer, a water receptacle, a chamber above the water receptacle in communication with the gasometer, a vertical shaft hung from the top of said receptacle, a plate supported upon said shaft within the generator, a plurality of bottomless carbide receptacles carried thereon, drops to close the bottoms of said receptacles, arms projecting from said drops through slots in the plate, a disc to rotate with the shaft above the plate provided with an opening to register with said slots in succession, a clitch whereby the plate is rotated with the disc when turned backward, means for holding the plate stationary at other times, a ratchet gear operated by the gasometer bell to impart periodic motion to the shaft, a dial carried thereby to indicate the number of receptacles discharged, and a charging aperture in the line of travel of said receptacles. 5th. An acetylene gas generator comprising a water receptacle, a carbide containing chamber above said receptacle means for feeding the carbide to the water in the water receptacle, a gas discharge pipe leading out from above the water in the water receptacle, a hood over and extending below the top of the discharge pipe, a filler pipe rising from the water receptacle to a point above the level of the bottom of said hood, whereby the water in the water receptacle may be raised above the bottom of the hood to seal the discharge pipe when the carbide containing chamber is to be re-charged, and a draw off cock to reduce the water to normal level when the generater is in operation. 6th. An acetylene gas generator comprising a stand pipe constituting the water receptacle, a carbide containing chamber at the top of said stand pipe, a gasometer surrounding the stand pipe, the bottoms of the stand pipe and gasometer walls being flanged and secured to a common base by packing rings substantially in the manner shown, feed mechanism in the carbide chamber operated by the rise and fall of the gasometer bell and pipes connecting the stand pipe with the gasometer and the gasometer with the service main.

No. 68,864. Acetylene Gas Generator.

(*Générateur à gaz acétylène.*)

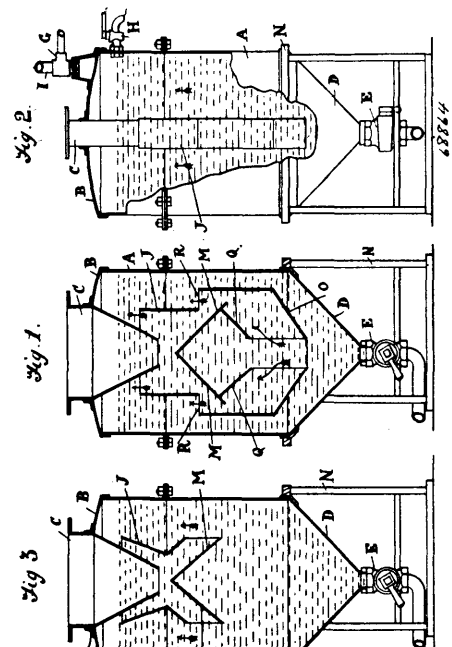


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Fig 2.

Fig 1.

Fig 3

Albert Husson, Porrentruy, Berne, Switzerland, 29th September, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In an acetylene gas generator, the combination of a vessel to contain the water and charging material, having a tapering or conical bottom and a doomed or arched cover, with a tapering or conical charging hopper the delivery orifice of which is below the working level of the water in the said vessel, a casing surrounding the lower portion of the said hopper, inclined planes formed in one with or attached to the casing below the hopper, baffle plates attached to the casing below the said inclined planes and an inclined bottom to the said casing, all substantially as specified. 2nd. In an acetylene generator, having a tapering or conical bottom, the combination

of a tapering or conical charging hopper having the delivery orifice thereof below the working level of the water in the generator, a casing wider at the bottom than at the top and provided with a sloping bottom surrounding and attached to the lower portion of the said hopper, inclined planes formed in one with or attached to the said casing, and baffle plates attached to the casing below the inclined planes, all substantially as and for the purposes specified. 3rd. In an acetylene generator, the combination of a vessel to contain the water and charging material, having a tapering or conical bottom and a domed or arched cover, with a tapering or conical charging hopper the delivery orifice of which is below the working level of the water in the said vessel, a casing surrounding the lower portion of the said hopper and inclined shoots formed in one with or attached to the casing, the said shoots being below the delivery orifice of the hopper and terminating in vertical mouths or mouths slightly inclined toward the said hopper, all substantially as set forth. 4th. In an acetylene generator, having a tapering or conical bottom, the combination of a tapering or conical charging hopper having the delivery orifice thereof below the working level of the water in the generator, a casing surrounding and attached to the lower portion of the said hopper and inclined shoots formed in one with or attached to the said casing to the mouths of the said shoots being vertical or slightly inclined towards the said hopper, all substantially as specified and for the purposes stated.

TRADE-MARKS

Registered during the month of September, 1900, at the Department of Agriculture—Copyright and Trade-Mark Branch.

7461. SOCIETE ANONYME OX-BEEF, Bruxelles, Belgique. Extrait de Viande, 1 septembre, 1900.

7462. THE F. P. DALLEY COMPANY, LIMITED, Hamilton, Ont. Baking Powder, 4th September, 1900.

7463. THE AYLMER CANNING COMPANY, LIMITED, Aylmer, Ont. Canned Goods, such as Fruits, Corn, Peas and Meats, 4th September, 1900.

7464. WILLIAM COWAN, LIMITED, Belfast, Ireland. Whisky, 5th September, 1900.

7465. WILLIAM COWAN, LIMITED, Belfast, Ireland. Whisky, 5th September, 1900.

7466. THE VANCOUVER AGENCY, LIMITED, Vancouver, B. C. Genera Trade Mark, 5th September, 1900.

7467. McKELLAR & DALLAS, Toronto, Ont. Ladies' Boots and Shoes, 6th September, 1900.

7468. THE FRANCO AMERICAN CHEMICAL COMPANY, Montreal, Que. Remedy for Female Complaints, 8th September, 1900.

7469. THE IMPERIAL VARNISH AND COLOUR COMPANY, LIMITED, Toronto, Ont. Varnishes, Paints and Enamels of all kinds, 10th September, 1900.

7470. THE IMPERIAL VARNISH AND COLOUR COMPANY, LIMITED, Toronto, Ont. Floor Finishes of all kinds, Varnishes, Paints Enamels and the like, 10th September, 1900.

7471. THE IMPERIAL VARNISH AND COLOUR COMPANY, LIMITED, Toronto, Ont. Varnishes, Paints and Enamels of all kinds, 10th September, 1900.

7472. FRANK S. EWING AND HATTIE E. EWING, Orange, Massachusetts, U.S.A. Tapioca, Gelatine, Baking Powder, Flavouring Extracts, and all preparations of Corn, Oats and Wheat as Breakfast Foods or Flour, 10th September, 1900.

7473. THE WHITMAN GROCERY COMPANY, Orange, Massachusetts, U.S.A. Tapioca, Gelatine, Baking Powder, Flavouring Extracts and all preparations of Corn, Oats and Wheat as Breakfast Foods or Flour, 10th September, 1900.

7474. THE BARBER AND ELLIS COMPANY, LIMITED, Toronto, Ont. Paper, 11th September, 1900.

7475. THE BARBER AND ELLIS COMPANY, LIMITED, Toronto, Ont. Paper, 11th September, 1900.

7476. THE INDEPENDENT BAKING POWDER COMPANY, (INCORPORATED) Chicago, Illinois, U.S.A. Baking Powder, 11th September, 1900.

7477. THE INDEPENDENT BAKING POWDER COMPANY, (INCORPORATED) Chicago, Illinois, U.S.A. Baking Powder, 11th September, 1900.

7478. CHRISTIE, BROWN & COMPANY, LIMITED, Toronto, Ont. Biscuits, 12th September, 1900.

7479. EMILE BERLINER, Washington, D.C., U.S.A. General Trade Mark, 12th September, 1900.

7480. HENRY WADE, Kingston, Ont. Corn Salve, 13th September, 1900.

7481. THE EMPIRE TOBACCO COMPANY, LIMITED, Granby, Que. Tobacco, 13th September, 1900.

7482. MARIA PASSMORE CARD, Guelph, Ont. Tomato Preparation, 13th September, 1900.

7483. DEVAN & COMPANY, Malaga, Spain, Raisins, 15th September, 1900.

7484. THE DENTAL PROTECTIVE SUPPLY COMPANY OF THE UNITED STATES, Chicago, Illinois, U.S.A. Dentists' Supplies, 15th September, 1900.

7485. B. HOUDE & COMPAGNIE, Québec Qué. Tabac coupe, Plug et Cigares et Cigarettes, 17 septembre, 1900.

7486. A. E. ADAMS & COMPANY, Leicester, England. Articles of Hosiery, 17th September, 1900.

7487. THE PUGET SOUND FLOURING MILLS COMPANY, Tacoma, Washington, U.S.A. Flour, 19th September, 1900.

7488. ALBERT TROSTEL & SONS, Milwaukee, Wisconsin, U.S.A. Leather, 19th September, 1900.

7489. THE GEORGE E. TUCKETT & SON COMPANY, LIMITED, Hamilton, Ont. Tobacco, Cigars and Cigarettes, 21st September, 1900.

7490. WALTER E. H. MASSEY, Toronto, Ont. Milk, Cream, Butter and Cheese, 21st September, 1900.

7491. A. TOUSSAINT & COMPAGNIE, Québec, Qué. Vin, 21 septembre, 1900.

7492. BRAYLEY, SONS & COMPANY, Montreal, Que. Medical Preparation, 21st September, 1900.

7493. NAPOLEON SAMSON, St. Hyacinthe, Que. Chaussures, 24 septembre, 1900.

7494. RICHARD JOHNSON, CLAPHAM & MORRIS, LIMITED, Manchester, England. Galvanized Iron or Steel Sheets, Tinned Iron or Steel Sheets, Lead Coated Iron or Steel Sheets and Black Iron or Steel Sheets, 25th September, 1900.

7495. LEHMON SHIRK, German Mills, Ont. Flour, 25th September, 1900.

7496. ALEXANDER J. BAIN, St. Catherines, Ont. Mineral Water, 26th September, 1900.

7497. DAVID GORDON LAIDLAW, Kingston, Ont. Knitting Yarns, 27th September, 1900.

INDUSTRIAL DESIGNS.

Registered during the month of September, 1900, at the Department of Agriculture—Copyright and Trade-Mark Branch.

1700. ARTHUR WELLESLEY MAYELL, Toronto, Ont. Baking Powder Boxes, 18th September, 1900.

1701. THEODORE H. ESTABROOKS, St John, N.B. Grocer's Delivery Basket for Advertising purposes, 21st September, 1900.

1702. ERNEST ALBERT JACKES & ARCHIBALD THAYER McKINLAY, Trading as JACKES McKINLAY COMPANY, Toronto, Ont. Sleeve Protector, 21st September, 1900.

1703. THE TORONTO CARPET MANUFACTURING COMPANY, LIMITED, Toronto, Ont. Core for Textile Fabrics, 21st September, 1900.

1704.
1705.
1706. F. G. GALE, Waterville, Que. Bedsteads Nos. 175, 875, 1175, 780, 2272, 25th September, 1900.
1707.
1708.

1709. GEORGE C. DAVIS, Toronto, Ont. Pad Holder for Telephones, 28th September, 1900.

COPYRIGHTS

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11621. MOOSWA OF THE BOUNDARIES. Story published in "The Canadian Magazine," Toronto, Ont. (Temporary Copyright.) W. A. Fraser, Georgetown, Ont., 1st September, 1900.

11622. JESUS, LOVER OF MY SOUL. Music by A. S. Vogt. Whaley, Royce and Co., Toronto, Ont., 1st September, 1900.

11623. PROSPECTUS OF THE CITY DAIRY COMPANY, LIMITED. City Dairy Co. (Ltd.), Toronto, Ont., 4th September, 1900.

11624. ROBERT ORANGE. A. Sequel to "The School for Saints." By John Oliver Hobbes. (Mrs. Craigie.) W. J. Gage and Co. (Ltd.), Toronto, Ont., 4th September, 1900.

11625. DOROTHY. (Picture.) Ernest J. Rowley, Toronto, Ont., 4th Septembe 1900.

11626. THE PASTURE FIELD. (Picture.) Ernest J. Rowley, Toronto, Ont. 4th September, 1900.

11627. THE CANADIAN MAGAZINE. September, 1900. The Ontario Publishing Co. (Ltd.), Toronto, Ont., 4th September, 1900.

11628. LA DÉVOTION À SAINT-ANTOINE DE PADOUE: ET QUELQUES FAITS EN RAPPORT AVEC CETTE DÉVOTION. Par L.A.L., Prétre. Rév. L. A. Lévéque, Saint-Camille de Wolfe, Qué., 4 septembre. 1900.

11629. THE NOTE TEACHER. By Dion Petros. Whaley, Royce and Co., Toronto, Ont., 6th September, 1900.

11630. ONCE. (Song.) Words by Mrs. Arthur Hervey. Music by Arthur Hervey. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 6th September, 1900.

11631. ACIDIMÉTRIE: L'ACIDIMÈTRE DANS LA FABRICATION DU BEURRE ET DU FROMAGE. Joseph de Labroquerie Taché, St. Hyacinthe, Qué., 10 septembre, 1900.

11632. HE ANSWERED THE CALL. Song. By Nate Jackson. Harry H. Sparks, Toronto, Ont., 11th September, 1900.

11633. GRAFTON'S EXERCISES IN ARITHMETIC, NO. 4. Herbert J. Silver, Montreal, Que., 12th September, 1900.

11634. THE EMPIRE SONGSTER. Being a Collection of School Songs. Edited by William H. Smith, F.T S.C., Eng., Montreal, Que., 12th September, 1900.

11635. CANADIAN HISTORY LESSONS. For Junior Classes. By W. J. Larminie, B.A., Westmount, Que., 12th September, 1900.

11636. REGISTRE ET JOURNAL D'APPEL. Joseph Edouard Mercier, Lévis, Qué., 12 septembre, 1900.

11637. ORDER AND DIVISION OF THE ALPHABET. (Chart.) William Craig McCormack. Stanford, Lincoln Co., Kentucky, U.S.A., 13th September, 1900.

11638, PRIZE OF VICTORY. March. By W. H. Scouton. The John Church Co., Cincinnati, Ohio, U.S.A., 14th September, 1900.

11639. SUB-STANDARD POLICIES. (Booklet.) The People's Life Insurance Company, Toronto, Ont., 15th September, 1900.

11640. ELEMENTARY ENGLISH COMPOSITION. By Frederick Henry Sykes, M.A., Ph.D., Toronto, Ont., 15th September, 1900.

11641. TOMMY ATKINS YOU'RE A DANDY. (Song.) By Arago Easton, London, Ont., 15th September, 1900.

11642. ROSEMARY. (Picture.) The Globe Printing Co., Toronto, Ont., 17th September, 1900.

11643. ABOUT THE SHIPS AT SEA. Fireside Stories for Piano. By James H. Rogers. Op. 31. No. I. The John Church Co., Cincinnati, Ohio, U.S.A., 18th September, 1900.

11644. ABOUT BUTTERFLIES. Fireside Stories for Piano. By James H. Rogers. Op. 31. No. II. The John Church Co., Cincinnati, Ohio, U.S.A., 18th September, 1900.

11645. ABOUT STRANGE COUNTRIES. Fireside Stories for Piano. By James H. Rogers. Op. 31. No. III. The John Church Co., Cincinnati, Ohio, U.S.A., 18th September, 1900.

11646. ABOUT FAIRIES. Fireside Stories for Piano. By James H. Rogers. Op. 31. No. IV. The John Church Co., Cincinnati, Ohio. U.SA., 18th September, 1900.

11647. ABOUT GIPSIES. Fireside Stories for Piano. By James H. Rogers. Op. 31. No. V. The John Church Co., Cincinnati, Ohio, U.S.A., 18th September, 1900.

11648. ABOUT THE OLDEN TIME. Fireside Stories for Piano. By James H. Rogers. Op. 31. No. VI. The John Church Co., Cincinnati, Ohio, U.S.A., 18th September, 1900.

11649. COMMONWEALTH. March and Two-Step. By R. B. Hall. The John Church Co., Cincinnati, Ohio, U.S.A., 18th September, 1900.

11650. DOG PEDIGREE CHART. John Allison Cunningham, Toronto, Ont., 18th September, 1900.

11651. BLANK BUSINESS FORMS TO ACCOMPANY SETS IN PRACTICAL BOOK-KEEPING FOR USE IN PUBLIC AND HIGH SCHOOLS. By J. S. Black. The Copp, Clark Co. (Ltd.), Toronto, Ont., 20th September, 1900.

11652. THE FORFAR KINDERGARTEN MUSIC SYSTEM SONGS AND RECITATIONS. Composed by James E. Forfar, M.D., Toronto, Ont., 20th September, 1900.

11653. THE MANITOBA DIGEST, 1875-1899. OF THE CASES REPORTED IN VOLUMES TEMP. WOOD AND I-XII OF THE MANITOBA LAW REPORTS. Compiled by Allan E. Ewart, Barrister-at-law. The Law Society of Manitoba, Winnipeg, Man., 20th September, 1900.

11654. THE INFLUENCE OF MUSIC AND THE NEWCOMBE PIANOS. (Booklet.) The Newcombe Piano Co. (Ltd.), Toronto, Ont., 21st September, 1900.

11655. OXYDONOR. (Circular.) Dr. H. Sanche & Co., Montreal, Que., 21st September, 1900.

11656. GRAFTON'S EXERCISES IN ARITHMETIC, No. 5. (Book.) Herbert J. Silver, Montreal, Que., 22nd September, 1900.

11657. DIVINE WORSHIP IN CONNECTION WITH THE PRESBYTERIAN CHURCH IN CANADA. The Westminster Co. (Ltd.), Toronto, Ont., 22nd September, 1900.

11658. GROUP PICTURE OF SIR CHARLES TUPPER AND HUGH JOHN MACDONALD. (Photo marked A.) William Notman & Son, Montreal, Que., 22nd September, 1900.

11659. GROUP PICTURE OF SIR CHARLES TUPPER AND HUGH JOHN MACDONALD. (Photo marked B.) William Notman & Son, Montreal, Que., 22nd September, 1900.

11660. MORANG'S READING CARDS: ANIMAL KINGDOM. Series "A" and "B." George N. Morang & Co. (Ltd.), Toronto, Ont., 24th September, 1900.

11661. MELODY PICTURES. For Little Players. By Margaret R. Martin. With Preface and Notes by Jessie L. Gaynor. The John Church Co., Cincinnati, Ohio, U.S.A., 25th September, 1900.

11662. QUISANTÉ. A Novel. By Anthony Hope. William Briggs, Toronto, Ont., 25th September, 1900.

11663. BLANK BOOKS FOR SETS IN PRACTICAL BOOK-KEEPING, INVOICE BOOK INSTRUCTIONS. The Copp, Clark Co. (Ltd.), Toronto, Ont., 26th September, 1900.

11664. EIGHTEEN LITTLE PRELUDES. (18 Kleine Praludien.) Bach. Edited by Karl Klindworth. The John Church Company, Cincinnati, Ohio, U.S.A., 27th September, 1900.

11665. LE LAC ENCHANTÉ. Caprice-Etude. By F. Boscovitz. Op. 195. Whaley, Royce and Co., Toronto, Ont., 27th September, 1900.

11666. LOVELL'S DIRECTORY FOR THE CITY OF WINNIPEG. 1900. John Lovell and Son, Montreal, Que., 28th September, 1900.

11667. BRITISH HISTORY IN BRIEF. By Chas. Forfar, B.A. (Book.) The Educational Publishing Co., Toronto, Ont., 28th September, 1900.

11668. ROMAN HISTORY IN BRIEF. By Chas. Forfar, B.A. (Book.) The Educational Publishing Co., Toronto, Ont., 28th September, 1900.

11669. GREEK HISTORY IN BRIEF. By Chas. Forfar, B.A. (Book.) The Educational Publishing Co., Toronto, Ont., 28th September, 1900.

11670. HINTS ON DRAWING: DESIGNED FOR SELF-INSTRUCTION. By S. J. Latta. The Educational Publishing Co., Toronto, Ont., 28th September, 1900.

11671. CANADA'S CHOICE. Poem. The Herald Publishing Co., Montreal Que., 28th September, 1900.