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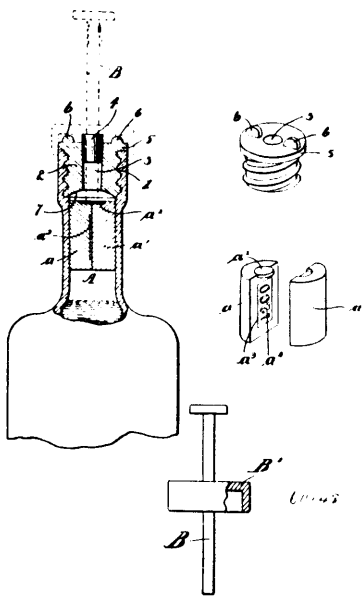
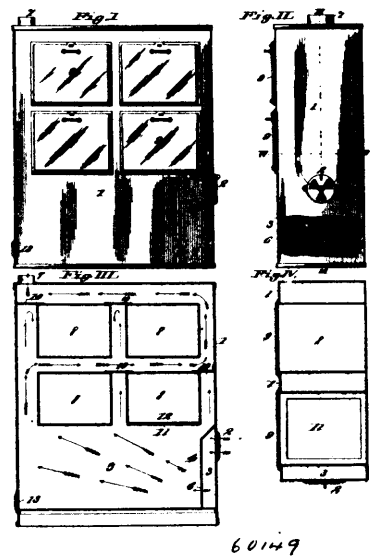
No. 60,148. Bottle. (*Bouteille.*)



Archibald Campbell, Huntsville, Alabama, U.S.A., assignee of Allan Robert Campbell, Birmingham, Alabama, U.S.A., 1st June, 1898; 6 years. (Filed 6th May, 1898.)

Claim.—1st. A bottle having a permanently secured tapered stopper threaded within the outer end of the neck thereof and a sectional cork in the lower end which is of contracted diameter, the said stopper having an aperature leading therethrough for the discharge of liquid from the bottle, substantially as shown and described. 2nd. In a bottle, the combination of a threaded stopper having a concave lower end permanently secured within the outer end of the neck thereof and a removable sectional cork placed within the lower portion of the neck thereof, said sections united by a disc, the said stopper having an aperature leading therethrough for discharge of fluid from the bottle, substantially as shown and described. 3rd. In a bottle, the combination of a cork comprising two sections united by a disc, in the lower portion of the neck thereof and a concealed coupon between said sections, and a threaded stopper having an aperature leading therethrough and a concave lower end, said stopper permanently secured in the outer end of the bottle neck, substantially as shown and described.

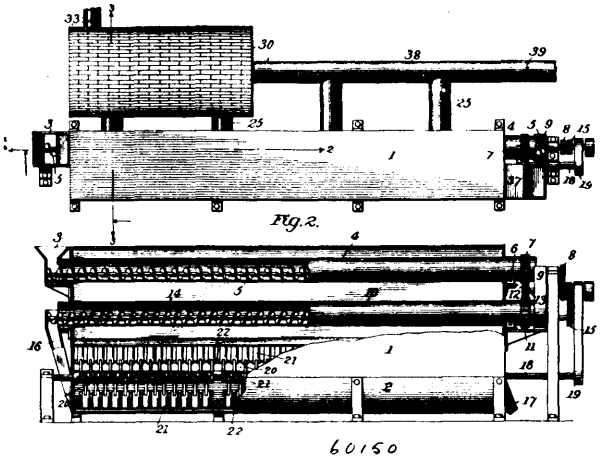
No. 60,149. Stove. (*Poêle.*)



Eugene Washington Vest, San Francisco, California, and James Albert Baker, St. Louis, Missouri, both of the U.S.A., 1st June, 1898; 6 years. (Filed 5th May, 1898.)

Claim.—1st. In a stove, the combination of a shell, a closed combustion chamber in the lower part of said shell, and two or more ovens mounted in said shell above said combustion chamber, said ovens being surrounded by passageways for the flow of hot air currents in alternating directions there-around, substantially as described. 2nd. In a stove, the combination of a shell, a closed combustion chamber in the lower part of said shell, and two or more tiers of ovens mounted in said shell above said combustion chamber, said ovens being surrounded by passage-ways for the flow of hot air currents in alternating directions there-around, substantially as described. 3rd. In a stove, the combination of a shell, a combustion chamber in the lower part of said shell, an air chamber located at one side of said combustion chamber, and two or more ovens mounted in said shell above said combustion chamber, said ovens being surrounded by passageways for the flow of hot air currents in alternating directions there-around, substantially as described. 4th. In a stove, the combination of a shell, a closed combustion chamber in the lower part of said shell, and an oven mounted in said shell above said combustion chamber, said oven being surrounded by passages for the flow of hot air currents in alternating directions there-around, substantially as described.

No. 60,150. Drier and Pulverizer. (*Sechoir et broyeur.*)



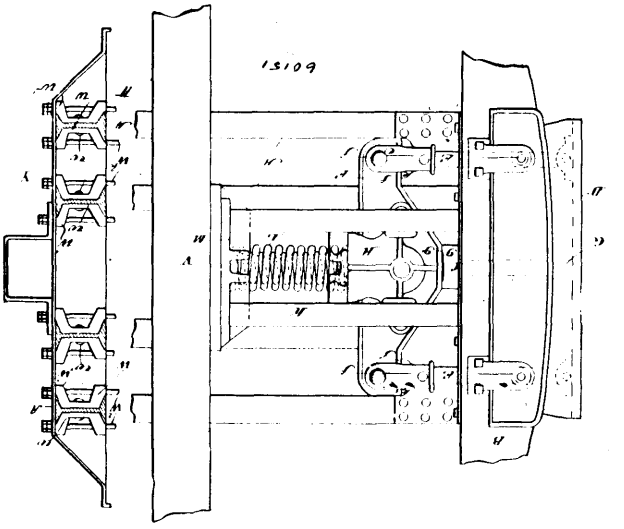
The Nitrogen Processing Company, New York City, assignee of Benjamin B. Snyder and Jonas J. Seldner, both of Baltimore, Maryland, all in the U.S.A., 1st June, 1898; 6 years. (Filed 5th May, 1898.)

Claim.—1st. In a drier, the combination with the elongated casing, of a trough in the lower part of the casing, a shaft having paddles operating in the trough, a vertical longitudinal partition in the upper part of the casing having its lower edge adjacent to the paddles, means for forcing air down upon one side of said partition and an outlet for the moistened gases from the compartment on the opposite of the partition, substantially as described. 2nd. In a drying apparatus, the combination of a casing having a trough, the conveyor shaft adapted to move materials along said trough, a central partition above said conveyor shaft, a furnace, means for producing a forced draft for said furnace and directing the hot gases down upon one side of said partition, and an outlet to the chamber on the other side of the partition whereby said hot gases may be circulated with the material through the trough, substantially as described. 3rd. In a drier, the combination with the elongated casing, of a trough in the lower part of the casing, the conveyor shaft having paddles operating in the trough, a vertical partition dividing the casing into two compartments above the conveyor, steam coils in one of said compartments, means for blowing air or gases over said steam pipes, and a vent for the moistened gases in the other compartment, said air or gas being directed from the steam coils around the conveyor shaft along with material, substantially as described. 4th. In a drier, the combination of one section thereof provided with a conveyor, steam coils, a furnace, and means for blowing heated gases through the furnace over the coils and around the conveyor, of a second drier section provided with a conveyor, with steam coils supplied with superheated steam from the first section, and with means for blowing air over said coils, substantially as described. 5th. In a grinding or pulverizing machine, the combination with a cylinder, of a feeding and pulverizing screw within and resting upon the cylinder, and means for turning the cylinder, substantially as described. 6th. The combination with a rotatable cylinder, of a feeding and pulverizing screw within and resting upon the bottom of the cylinder, and means for rotating said cylinder and screw in opposite directions, substantially as described. 7th. In a grinding and pulverizing apparatus, a cylinder, and means for revolving the same, in combination with a feeding and pulverizing screw consisting of a series of sections having inclined blades and a rod or shaft passing through openings in said sections, the said screw normally resting on the bottom of the cylinder, substantially as described. 8th. The combination with a casing having a semi-circular serrated inner surface, of a combined pulverizing and feeding device consisting of a shaft, arms mounted thereon, and inclined blades pivotally connected to the outer ends of the arms, the ends of said blades being arranged to travel in proximity to the bottom of the casing when the shaft is rotated, substantially as described.

No. 60,151. Railway Car Buffer. (*Tampon de chars.*)

The Standard Coupler Company, New York City, assignee of Henry Howard Sessions, Chicago, Illinois, all in the U.S.A., 1st June, 1898; 6 years. (Filed 4th May, 1898.)

Claim.—1st. In a buffer equipment for railway cars, the combination with the buffer plate, the stems therefor and the centrally pivoted spring supported equalizer, of substantially straight transversely arranged bearings interposed between the stems and equalizer whereby a differential leverage is exerted by the equalizer when moved into an inclined position, substantially as described. 2nd. In a buffer equipment for railway cars, the combination with the buffer plate having the rearwardly extending stems provided with substantially straight horizontal bearing surfaces at their rear ends, of a centrally pivoted spring supported equalizer having substantially straight horizontal bearing surfaces at its ends on the forward edges for co-operation with the corresponding surfaces on the stems,



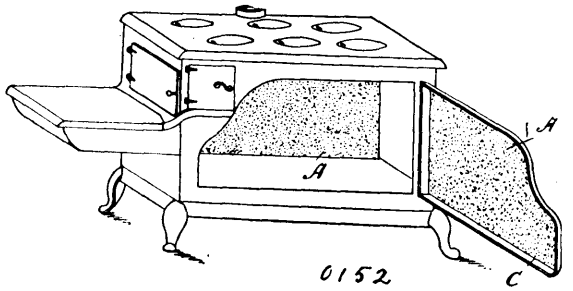
substantially as described. 3rd. In a buffer equipment for railway cars, the combination with the buffer plate and the rearwardly extending stems having substantially straight horizontal bearing surfaces and arms extending rearwardly above and below said bearing surfaces, of the centrally pivoted spring supported equalizer having its ends located between the rearwardly extending arms on the stems and provided with substantially straight horizontal bearings co-operating with the corresponding bearings on the stems and pins loosely uniting the stems and equalizers, substantially as described. 4th. In a buffer equipment for railway cars, the combination with the centrally pivoted spring supported equalizer having substantially straight bearing surfaces on its front edge at the centre and each end respectively, of the buffer plate and the side and central buffer stems, each having a substantially straight horizontal bearing surface for co-operating with the corresponding bearing surface on the front edge of the equalizer, substantially as described. 5th. In a buffer equipment for railway cars, the combination with the supporting beams of a depending yoke for the draw-bar adapted to be moved laterally and a central spring adapted to be put under compression by the movement of the yoke in either direction, substantially as described. 6th. In a buffer equipment for railway cars, the combination with the supporting beams and a laterally movable yoke depending therefrom, of a central spring and a telescoping connection between said yoke and each end of the spring whereby lateral movement in either direction will put the spring under compression, substantially as described. 7th. In a device such as described adapted to be applied to the buffer equipment of railway cars, the combination with the sleeve having the depending yoke for the draw-bar, the thimbles telescoping in said sleeve and the central spring for holding said sleeves extended, substantially as described. 8th. The combination with the sleeve having the depending yoke and internal end flanges, of the thimbles having the external end flanges and adapted to telescope with the sleeve, of the central spring for holding said thimbles extended and the bolt for maintaining the parts in position, substantially as described. 9th. The combination with the sills of a car body frame and I-beams passing longitudinally beneath said sills, of I-beam brackets united to the webs of the I-beam by through-bolts or rivets, and having eyes extending beyond the flanges of the I-beams and supporting or tie-bolts passing through said eyes outside of said flanges and into the sills of the car body framing, substantially as described. 10th. The combination with the car body frame and I-beams, of I-beam brackets secured on opposite sides of said I-beam and preferably arranged out of line with each other, of a bolt or rivet passing through the web of the I-beam and through both of said brackets at the point where they over-lap, and bolts or rivets uniting each of of said brackets and said web of the I-beam, said I-beam brackets having lateral projections extending beyond the flanges of the I-beam and tie or supporting bolts passing through said extensions and uniting the I-beams to the car body frame, substantially as described.

No. 60,152. Oven for Cooking Stoves.
(*Fourneau de poêle de cuisine.*)

The Michigan Stove Company, Detroit, Michigan, U.S.A., 1st June, 1896; 6 years. (Filed 5th May, 1898.)

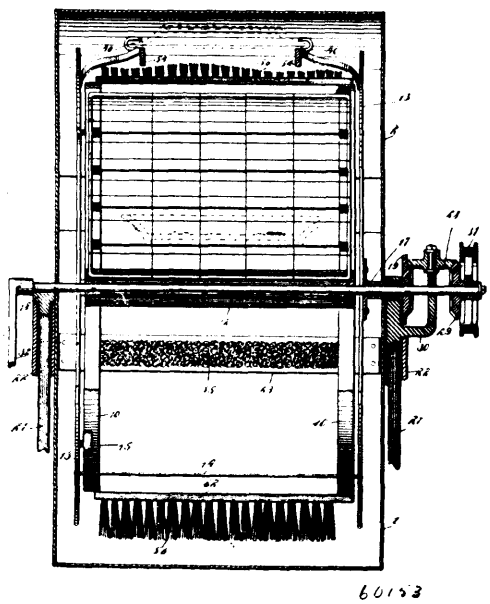
Claim.—1st. In combination with a stove, an oven coated on its interior with aluminum, substantially as described. 2nd. As a coating for the interior of stove ovens, a layer of aluminum laid on and adhering closely to the iron composing the oven walls, substantially as described. 3rd. In combination with a stove provided

with an oven, a door to said oven having a reflecting surface of aluminum on its interior side, substantially as described. 4th. In



combination with a stove, an oven having its door and wall opposite the door coated with aluminum, substantially as described. 5th. An oven rack located midway between the top and bottom of the oven and covered with aluminum to reflect light and heat, substantially as described.

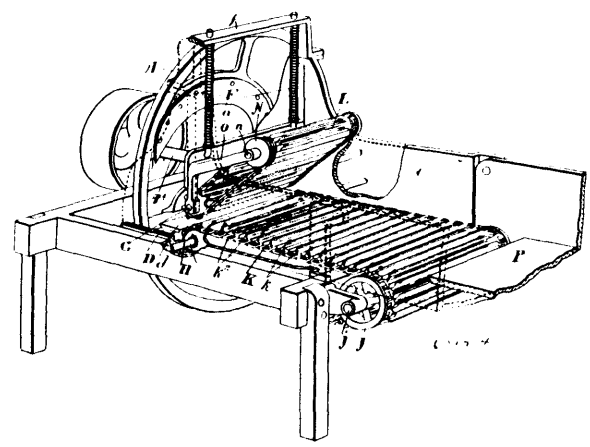
No. 60,153. Dish Washing Machine.
(*Machine à laver la vaisselle.*)



Robert R. Parry and Edwin Evans, both of South Poulcney, Rutland County, Vermont, and John Hughes Parry, Utica, New York, all in the U.S.A., 1st June, 1898; 6 years. (Filed 4th May, 1898.)

Claim.—1st. A dish-washing machine, comprising a reservoir, a cover therefor, carrier rings mounted to rotate in the reservoir and cover, means for raising and supporting the carrier rings above the water in the reservoir, a series of open work receptacles for containing articles to be washed, said receptacles being arranged to conform to the outline of the carrier rings, a brush secured to the said carrier rings, and means for holding dishes in the reservoir, to pass the same over said brushes, substantially as specified. 2nd. A dish-washing machine, comprising a reservoir, a cover thereon, a carrier mounted to rotate in said reservoir, vertically movable rods on the reservoir and having bearings for the shaft of the carrier, guides for the rods, and levers having pivotal connections with said rods, substantially as specified. 3rd. A dish-washing machine, comprising a reservoir, a cover therefor, a carrier mounted to rotate in the reservoir and cover and adapted to receive dish receptacles a brush secured to said cover, another carrier surrounding the first named carrier, and spring-yielding clips on said other carrier for receiving and holding dishes to be operated upon by the brush, substantially as specified. 4th. A dish-washing machine, comprising a reservoir, a carrier mounted to rotate in the reservoir, and means for lifting and supporting the carrier, comprising sliding bearing blocks, guides for said blocks, and levers, substantially as specified. 5th. A dish-washing machine, comprising a reservoir, a cover therefor, a carrier in the reservoir for receiving dish-holding receptacles, another carrier surrounding the first named carrier, means for rotating each of said carriers in opposite directions, spring clips on the outer carrier for holding dishes diverging spreader arms for spreading the clips to receive a dish, an endless carrier for moving dishes through an opening in the rear side of the cover so as to engage the said clips, a door for an opening in the front portion of the cover, and a discharge spreader for the clips adapted to be swung into operative position, to engage with pins on the clips when it is desired to discharge the dishes, substantially as specified. 6th. A dish-washing machine, comprising a reservoir, two carriers in the reservoir, one carrier being arranged within the other carrier, means for rotating said carriers in opposite directions, brushes carried by the inner carrier, plate-holding clips attached to the outer carrier, means for automatically feeding dishes to said clips, means for automatically releasing the dishes from the clips and brushes in the reservoir to engage against the outer surface of the dishes carried by the clips, substantially as specified.

No. 60,154. Straw Cutter. (*Hache-paille.*)



The Peter Hamilton Manufacturing Company, assignee of Andrew Johnston, all of Peterboro, Ontario, Canada, 1st June, 1898; 6 years. (Filed 3rd May, 1898.)

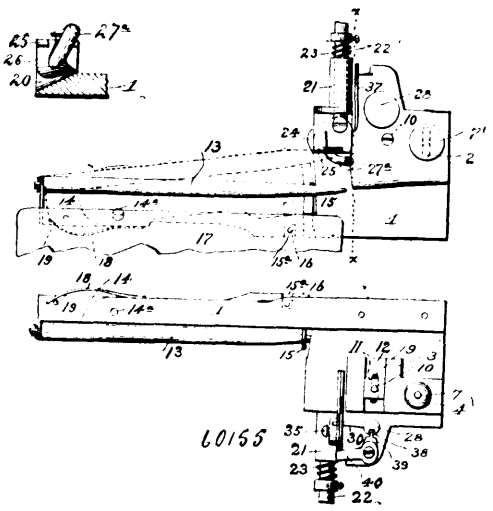
Claim.—1st. In a straw cutter, the combination with the knife wheel and guiding jaws for the straw, of a horizontally placed endless belt extending into proximity to the feed jaws at the inner end and comprising a number of slats having link shaped ends suitably connected together and suitable shafts and sprocket wheels secured to the shafts carrying the ends of the endless belt, as and for the purpose specified. 2nd. In a straw cutter, the combination with the knife wheel and guiding jaws for the straw, of a horizontally placed endless belt extending into proximity to the feed jaws at the inner end and comprising a number of slats having link-shaped ends suitably connected together, and suitable shafts and sprocket wheels secured to the shafts carrying the ends of the endless belt, and the similarly formed upper inclined slatted belt provided with link-shaped ends suitably connected together and supported at the ends on sprocket wheels secured to suitable shaft and driven as and for the purpose specified. 3rd. In a machine of the class described, the endless belt, formed of slats with link-shaped ends suitably connected together, suitably supported on sprocket wheels, and suitably driven and provided with longitudinal ribs on the outside of the slats, as and for the purpose specified. 4th. In a machine of the class described, the endless belt formed of slats with link-shaped ends suitably connected together, suitably supported on sprocket wheels and suitably driven, and the separating lugs at one edge of each slat designed to keep the links from being disconnected, as and for the purpose specified. 5th. In a straw cutter, the combination with the knife wheel and guiding jaws for the straw, of a horizontally placed endless belt extending into proximity with the feed jaws and suitably formed to carry the straw to the jaws, as and for the purpose specified. 6th. In a straw cutter, the combination with the knife wheel and guiding jaws for the straw, of a horizontally placed endless belt extending into proximity with the feed jaws and suitably formed to carry the straw to the jaws, and an inclined endless upper belt extending into proximity with the lower horizontally placed endless belt and with the feed jaws, so as to form a contracted throat to feed the straw, as and for the purpose specified.

No. 60,155. Cigar Wrapping Machine.
(*Machine à envelopper les cigares.*)

The Bunn Cigar Rolling Machine Company, assignee of John Bunn, all of Binghampton, New York, U.S.A., 1st June, 1898; 6 years. (Filed 9th March, 1898.)

Claim.—1st. In a cigar machine, the combination of a wrapper stretcher table, having a depending sleeve, the standard having an opening receiving said sleeve, an adjusting screw threaded into said sleeve and bearing upon the lower wall of said opening, and means for holding the table in adjusted position, substantially as and for the purpose set forth. 2nd. The combination of the wrapper stretcher table, having an elongated slot near one end, a plate having a similar slot and provided with a depending sleeve, a standard having an opening receiving said sleeve, an adjusting screw

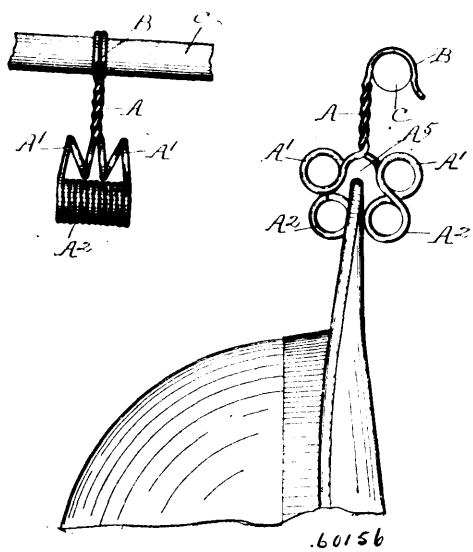
bearing upon the lower wall of said opening and extending through said sleeve and the slot in the table, means extending through the



slot in the plate for securing the same to the table, and means for securing the table when adjusted vertically, as and for the purpose set forth. 3rd. In a cigar wrapping machine, the combination of the wrapper stretcher table and header, the plate beneath said table, having an elongated slot and a groove adjacent to said slot, the screw extending from said table through said slot, and the nut threaded upon said screw, said nut being located within said groove and having its opposite sides engaged with the walls thereof, substantially as shown and for the purpose set forth. 4th. In a cigar wrapping machine, the combination with the standard having a cylindrical opening, of the wrapper stretcher table having a cylindrical sleeve projecting into said opening, the sleeve being formed internally with screw threads, and a threaded screw passing through said sleeve and having its lower end engaged with said standard, whereby the table may be turned upon the screw as a pivot and adjusted vertically by turning said screw within the sleeve, as and for the purpose set forth. 5th. In a cigar machine, the combination of the wrapper stretcher table, a plate pivoted near one end thereto, and the stretcher roller carried by said plate, as and for the purpose set forth. 6th. In a cigar machine, the combination of the wrapper stretcher table, a plate pivoted near one end thereto, the stretcher roller carried by said plate, the swinging table engaging said plate and operating to turn the same upon its pivot in one direction as the wrapping progresses and a spring for holding the free end of said plate against said swinging table, as and for the purpose set forth. 7th. In a cigar machine, the combination of the adjustable table, the pivoted plate carried thereby, and the stretcher roller carried by said plate, as and for the purpose set forth. 8th. The combination of the pivoted adjustable table, the pivoted plate carried thereby, the stretcher roller carried by said plate, and means for holding said table in adjusted position, as and for the purpose set forth. 9th. The combination of the adjustable table, means for holding the same in adjusted position, the pivoted plate carried by said table, the stretcher roller carried by said plate, and the swinging table for pressing the said table inward as the wrapper is wound on the bunch, as and for the purpose set forth. 10th. The combination of the wrapper stretcher table, the plates pivoted near one end thereto and having flanges at its end, the stretcher roller supported by said flanges, and the stop pin for limiting the movement of said plate, as and for the purpose set forth. 11th. The combination of the stretcher table, a hollow bearing at the header end thereof, a spring pressed bolt journalled in said bearing, and the paste tube carrying a plate connected with said bolt, as and for the purpose set forth. 12th. The combination of the stretcher table, having a recess with curved walls at its header end, and provided with a hollow bearing projecting from the latter, a spring pressed bolt journalled in said bearing, and the paste tube carrying a curved plate connected with said bolt and forming one side of said recess, as and for the purpose set forth. 13th. The combination with the wrapper stretcher table, having a recess with curved walls at its header end and provided with a hollow bearing projecting from the latter, a spring pressed bolt journalled in said bearing, and the paste tube having a plate curved oppositely to that of said recess and forming therewith the cavity for the smaller end of the bunch, said plate being connected with said bolt by a spring hinge, as and for the purpose set forth. 14th. The combination with the wrapper stretcher table, having a recess with curved walls at its header end and provided with a hollow bearing projecting from the latter, a spring pressed bolt journalled in said bearing, and having a plate at its inner end, the spring bearing against said plate, the paste tube having a plate curved oppositely to that of said recess and forming therewith the cavity for the smaller end of the cigar, and a spring hinge connecting said plates together, as and for the purpose set forth. 15th. The combination with the wrapper stretcher table, of the nicking blades pivoted thereto, and a sliding bolt connected with said blades and forcing both of the same toward each other, as described. 16th. The combination with the wrapper stretcher table, of slotted pivoted blades on the header end thereof, and a longitudinally movable bolt having a pin projecting into and traversing the slots in said blades so as to move the same simultaneously toward each other, as and for the purpose set forth. 17th. The combination with the wrapper stretcher table, of slotted pivoted blades on the header thereof, a longitudinally movable bolt having a pin projecting into and transversing the slots in said blades so as to move the same simultaneously toward each other, and a spring pressing said bolt upward, as set forth. 18th. The combination with the wrapper stretcher table, of slotted pivoted blades on the header end thereof, a longitudinally movable bolt having a pin projecting into and traversing the slots in said blades so as to cause the same to be moved simultaneously toward each other, said bolt having a longitudinal groove, a stationary guide pin projecting into said groove, and a spring pressing said bolt upward. 19th. The combination of the wrapper stretcher table, having a recess with curved walls in its header end, a spring pressed plate curved oppositely to said recess and forming therewith the conical cavity for the end of the cigar, the pivoted nicking blades and means for forcing said blades simultaneously toward each other. 20th. The combination with the wrapper stretcher table, having a recess with curved walls in its header end and provided with a hollow bearing projecting from its said end, a plate curved oppositely to that of said recess, a sliding bolt carrying said plate and extending through said bearing, and means for forcing said plate yieldingly toward the wall of said recess, substantially as described and for the purpose specified. 21st. The combination with the wrapper stretcher table, having a recess with curved walls in its header end, and provided with a hollow bearing projecting from its said end, a spring-pressed bolt extending through said bearing, a spring pressed plate secured to the inner end of said bolt, and a second plate attached to said first mentioned plate by a spring hinge and curved oppositely to the wall of said recess, said second plate, conjointly with said recess, forming the cavity for the tip of the cigar, substantially as described.

No. 60,156. Store Window Display Apparatus.

(*Appareil de montre pour fenêtres de magasin.*)

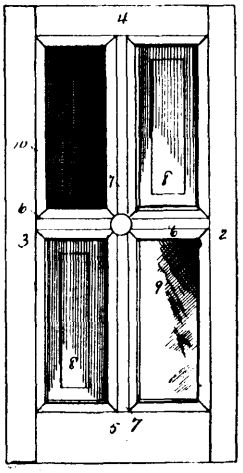


Clarence L. Wells, assignee of Jeremiah J. Slattery, both of Troy, New York, U.S.A., 1st June, 1898; 6 years. (Filed 30th April, 1898.)

Claim.—1st. A spring-wire clamp, comprising a twisted-wire shank, a pair of parallel helical clamping coils, each having a plurality of connected loops, the loops of each coil lying closely side by side and presenting an approximately continuous bearing surface, and the loops of the respective coils arranged edge to edge, and a pair of spring-coils between the clamping-coils, and shank connected one to one end of one clamping coil, and the other to the diagonally opposite end of the other clamping coil, whereby the combined clamping force of each pair of coacting loops is the same as that of each other pair in the coiled jaws, substantially as described. 2nd. In a clamp, the combination with a wire shank, and a pair of parallel helical clamping coils, each comprising a plurality of connected wire loops lying side by side and presenting an approximately continuous cylindrical surface, the loops of the respective coils being arranged edge to edge, of a pair of spring-coils connected each with one end of a clamping coil, the spring-

coils being located directly above and engageable with the respective clamping coils intermediately of their ends, whereby the clamping coils are re-enforced by the spring-coils in the clamping operation, substantially as described.

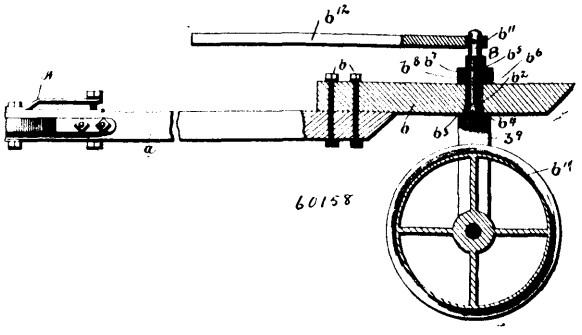
No. 60,157. Door. (*Porte.*)



James Martin and Charles J. Deitch, both of Elkhart, Indiana, U.S.A., 1st June, 1898; 6 years. (Filed 3rd May, 1898.)

Claim.—1st. A door provided with a series of interchangeable panels, in combination with a turn-button having projecting wings disposed angularly to the axis of the button, said turn-button being placed at the crossing of the rail and munnion and said flanges operating in grooves in said rail and munnion and also in the contiguous corners of the panels, for removably securing said panels in said door, as and for the purpose set forth. 2nd. A door, comprising the side, top and bottom rails and the intersecting munnion and lock-rails, in combination with the thumb-button 12, having a shank 13, provided with a series of inclined flanges or wings 14, and the interchangeable panels provided with the engaging studs 11, substantially as shown and described.

No. 60,158. Wheel Scraper. (*Grattoir pour roues.*)



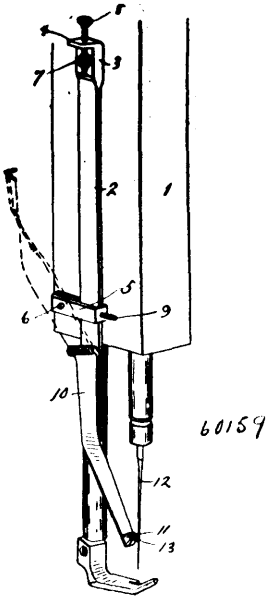
Thomas H. Stedman and Joseph Gaudaur, both of Calgary, assignees of William Maloney, of Calgary, aforesaid, all of the North-West Territories of Canada, 1st June, 1898; 6 years. (Filed 3rd March, 1898.)

Claim.—1st. The combination with a carrier, having a bar extending forwardly therefrom, of means pivotally secured to said bar for supporting the front end of said bar, said means being provided with a draught attaching device, and means for reversing the direction of traction, substantially as described. 2nd. A tongue support, comprising a guide wheel pivotally connected to a tongue, a double tree mounted on the mounting of said guide wheel, and a handle for reversing the direction of traction of said guide wheel, substantially as described.

No. 60,159. Needle Threader. (*Enfile aiguille.*)

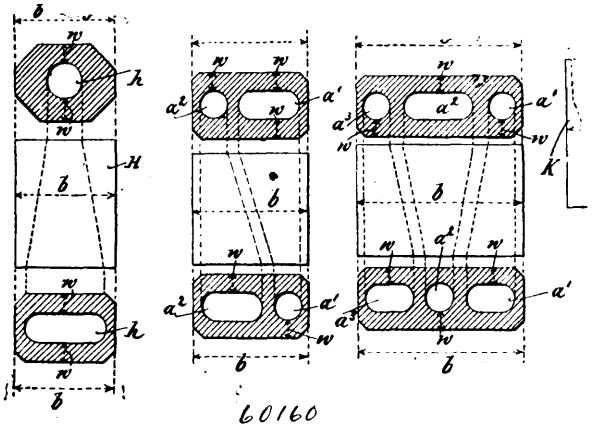
Willard A. Northup, Harvard, and Arthur H. Bevridge, Belvidere, both of Illinois, U.S.A., 1st June, 1898; 6 years. (Filed 8th January, 1898.)

Claim.—A needle threader, consisting of a bar 2 having a slotted head 3 at its upper end, a flange projecting from said head, a screw extending through said flange, the two-part clip adapted to be secured to the head of the sewing-machine, the adjusting screw in the head



of said clip, the bent arms hinged at an angle to said bar 2, and the open guide piece secured to the lower extremity of said arm, substantially as and for the purpose set forth.

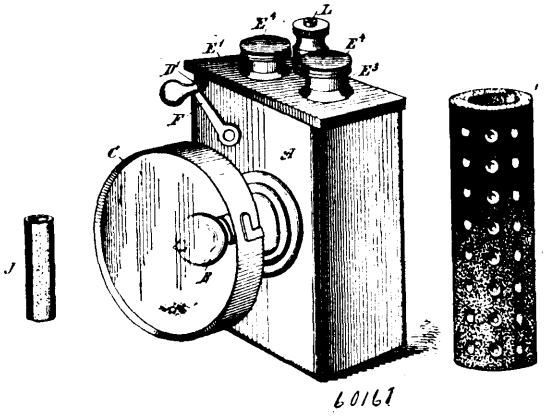
No. 60,160. Pipe-Making Apparatus.
(*Appareil à faire des tuyaux.*)



Bruno Hiedemann, 29 Hohenzollern Ring, Cologne, assignee of Adolph Husener, Duisburg, German Empire, 1st June, 1898; 6 years. (Filed 12th September, 1896.)

Claim.—1st. The herein described process of producing tapered tubes with walls of uniformly varying thickness or diameter, consisting in forming hollow ingots with walls of uniformly varying thickness, then rolling said ingots into a long double or hollow strip, and then expanding said strip into the tube or pipe, whereby an exteriorly tapered tube is formed, substantially as and for the purpose described. 2nd. The herein described process of manufacturing conical tubes, etc., consisting in forming an ingot with an interiorly tapered bore, then rolling out said ingot into a long flat double strip having an uniform exterior diameter or width and a tapered exterior, then cutting off surplus metal from the sides of the strip so as to make its exterior contour conform to its interior, and then expanding said strip, forming a hollow conical tube, etc., all substantially as and for the purpose set forth. 3rd. An expanding mandrel for tubes, etc., consisting of a conical plug *e* and means for supporting it, with the mandrel composed of parts *c* working on and over said plug, substantially as and for the purpose described. 4th. The combination with the rod *d* and conical grooved plug *e*, with the mandrel composed of parts *c* fitted in the grooves of plug *e*, and means for adjusting parts *c* on the plug, all substantially as and for the purpose set forth.

No. 60,161. Electric Lamp. (*Lampe électrique*)



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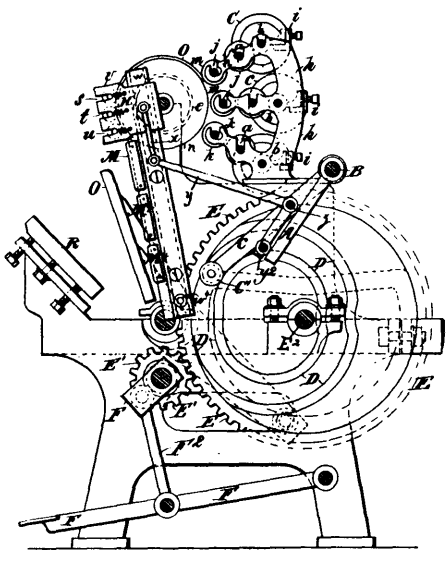
Walter Scott Doe and John H. Weastell, both of Jersey City, U.S.A., 1st June, 1898; 6 years. (Filed 6th August, 1897.)

Claim.—1st. An electric lamp, comprising a metallic casing carrying the lamp bulb, and a battery having a jar of an insulating material and fitted to slide into the said casing, the jar having a contact plate to make one contact casing, the jar having a contact plate to make one contact with the bulb on placing the battery into the casing, substantially as described. 2nd. An electric lamp comprising a metallic casing carrying the lamp bulb and a battery having a jar of an insulating material and fitted to slide into the said casing, the jar having a contact plate to make one contact with the bulb on placing the battery into the casing, and a second contact carried by the jar and adapted to be engaged by a switch on the casing, substantially as described. 3rd. An electric lamp comprising a cartridge or anode of a size according to the length of time the electric light is desired to burn, a perforated non-conductor tube provided with a contact for the anode inserted in the said tube, and a hollow cathode in which the said perforated tube with its anode is suspended, and which is adapted to receive an exciting fluid, substantially as shown and described. 4th. An electric lamp comprising an incandescent lamp, a battery jar formed with one or more cells each containing an exciting fluid, a cathode in the form of a hollow perforated cylinder of carbon, a perforated tube of non-conducting material, suspended within the said cathode, an anode adapted to be dropped into the said perforated tube, and a contact wire held in the said tube, and on which rests the said anode, the said contact wire and the cathode being connected with the filament of the electric incandescent lamp, substantially as shown and described. 5th. An electric lamp comprising an incandescent lamp, a battery jar formed with one or more cells each containing an exciting fluid, a cathode in the form of a hollow perforated cylinder of carbon, a perforated tube of a non-conducting material, suspended within the said cathode, an anode adapted to be dropped into the said perforated tube, and a contact wire held in the said tube, and on which rests the said anode, the said contact wire and the cathode being connected with the filament of the electric lamp, the said tube being in alignment with the filling opening in the cover of the battery jar, to permit of dropping the anode into the tube, substantially as shown and described. 6th. An electric lamp comprising an incandescent lamp, a battery jar formed with one or more cells each containing an exciting fluid, a cathode in the form of a hollow perforated cylinder of carbon, a perforated tube of a non-conducting material, suspended within the said cathode, an anode adapted to be dropped into the said perforated tube, and a contact wire held in the said tube, and on which rests the said anode, the said contact wire and the cathode being connected with the filament of the electric lamp, the said tube being in alignment with the filling opening in the cover of the battery jar, to permit of dropping the anode into the tube, the filling opening being closed by a cap, substantially as shown and described. 7th. An electric lamp, provided with an air and gas escape valve formed with a chamber for drawing splashed up liquid back into the cell, and a screw or the like in the top of the valve, and having a minute opening for the escape of the gas and entrance of air to the chamber, substantially as shown and described.

No. 60,162. Printing Press. (*Presse à imprimer.*)

John Adam Gledhill, 43 Blackfriers Street, Manchester, England, and George Charles Challenger, 57 and 58 Long Millgate, Manchester, assignees of Joshua Charles Whitney of 43 Blackfriers Street, aforesaid, 1st June, 1898; 6 years. (Filed 25th January, 1897.)

Claim.—1st. In a platen or other similar printing machine in combination the lateral sliding or suitably actuated distributing roller *a*, the ring or disc roller *j*, with the rings or disc *m*, the border ink roller *k*, the tappit pulleys *p p*^{1}, provided with tappits *o*, *o*^{1}, the rollers *s*, *t*, *u*, with their runners, the tappits M, M^1, M^2, M^3, M^4, M^5, on the bearers L, L^1, and the mechanism for operating the carriers V, V^1, substantially as and for the purposes herein fully set forth and described. 2nd. In a cylinder or other similar printing machine in combination the lateral sliding or suitably actuated distributing roller *a*, the ring or disc rollers *j*, with the rings or discs *m*, the border ink roller *k*, the tappit pulleys *p p*^{1}, with the tappits *o*, *o*^{1}, the ductor rollers *s*^{5}, *t*^{6}, the colour table V, the tappits V^1, V^2, V^3, V^4, the tappits Y, Y^1, Y^2, Y^3, Y^4, Y^5, and the inking rollers W, W^1, W^2, W^3, substantially as for the purposes herein fully set forth and described. 3rd. In combination the lateral sliding distributing roller *a*, the disc roller *j*, with the rings or discs *m*, mounted thereon, the inking cylinder *n*, and the tappits O, O^1, affixed to pulleys *p*, *p*^{1}, or to the inking cylinder whereby the coloured inks from the separate or colour compartments of the ink duct may be equally and well distributed on the colour inking rings, and the said rings passed into engagement with the distributing roller and the inking cylinder at intermittent periods which coloured inks are thereby transferred from the distributing roller on to the inking cylinder, substantially as and for the purposes herein fully set forth and described. 4th. In combination the lateral sliding distributing roller *a*, the border ink roller *k*, the inking cylinder *n*, and the tappits *o*, *o*^{1}, affixed to pullies *p*, *p*^{1}, or to the inking cylinder, whereby the said roller is placed intermittently into contact with the distributing roller and the inking cylinder and whereby a single ink of one colour is led from the ink duct equally and well distributed thereon and which colour is thereby transferred from the distributing roller on to the inking cylinder, substantially as and for the purposes herein fully set forth and described. 5th. In combination a tappit or other actuated ring or disc roller *j*, with disc *m*, and the sliding distributing roller *a*, as and for the purposes herein fully set forth and described. 6th. In combination a tappit or other actuated border ink roller *k*, and the sliding distributing roller *a*, as and for the purpose herein fully set forth and described. 7th. In combination a series of tappits or other actuated disc rollers *j*, with rings *m* with or without a border ink roller *k*, and the cylinder *n* whereby sections of coloured inks or inks and a single coloured or one ink or sections of coloured inks only may be transferred on to the inking cylinder substantially as and for the purposes herein fully set forth and described. 8th. The circular faced adjustable tappits *o*, *o*^{1} adjusted on the pulleys *p*, *p*^{1}, or cylinder *n* as and for the purposes herein set forth and described. 9th. The tappits or other actuated inking rollers *s*, *t*, *u*, having runners I, J, K, in combination with the tappit inking cylinder *n* and of the pullies *p*, *p*^{1}, whereby the series of number of coloured ink transferred to the inking cylinder by the rings or discs and the single colour transferred by the border roller *k*, may be alternately taken therefrom by the said inking rollers, as and for the purposes herein fully set forth and described. 10th. In combination the tappit inking rollers *s*, *t*, *u*, having runners I, J, K, the projecting adjustable pieces or tappits affixed to the bearers L, L^1, whereby the said rollers are actuated so as to respectively ink or transfer the border colour to the border separate and distinct from the colours employed to ink the letterpress, substantially as and for the purposes herein fully set forth and described. 11th. In combination the bearers L, L^1, and the pieces or any other convenient number of tappits M, M^1, M^2, M^3, M^4, M^5, substantially as and for the purposes herein fully set forth and described. 12th. In combination the tappit inking cylinder *n*, or the tappit pullies *p*, *p*^{1}, with tappits *o*, *o*^{1}, and the ducter rollers *s*^{5}, *t*^{6}, which may or may not be tappit actuated whereby the inks when borders are to be worked may be alternately collected from or taken off the inking cylinder but when borders are not to be printed the inks are taken therefrom simultaneously,



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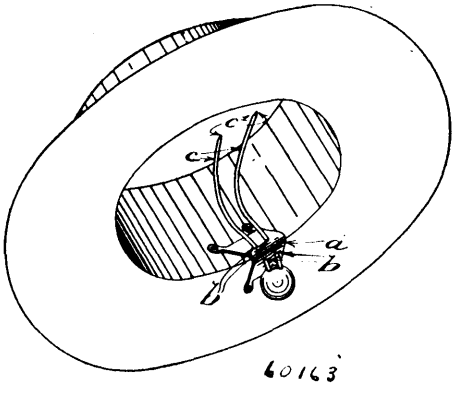
substantially as and for the purposes herein set forth and described. 13th. In combination the ducter rollers s^5 and t^6, the colour or ink table V, with or without the tappits V^1, V^2, V^3, V^4, whereby the colour collected from the cylinder may be when borders are to be printed alternately transferred to the said table or simultaneously transferred when borders are not to be printed, substantially as and for the purposes herein fully set forth and described. 14th. In combination, the tappits V^1, V^2, V^3, V^4, the colour table v, the type table Z^1, the inking rollers W, W^1, W^2, W^3, and the tappits Y, Y^1, Y^2, Y^3, Y^4, Y^5 whereby the coloured inks from the ducter rollers may be transferred on to convenient parts of the horizontal colour or ink table and then taken therefrom by the inking rollers ready for transference to the type or the operations of inking and printing type and border accomplished simultaneously, substantially as and for the purposes herein fully set forth and described. 15th. In combination ducter rollers for carrying inks for letter press only and the colour table to be employed when border ink is not required and to ink the type in multi-colour work, substantially as and for the purposes herein fully set forth and described. 16th. In combination, colour table V, with or without the tappits V^1, V^2, V^3, V^4 and the inking rollers W, W^1, W^2, W^3 whereby the inking rollers may receive the inks from the table, substantially as and for the purposes herein fully set forth and described. 17th. In combination and the inking rollers W, W^1, W^2, W^3 with or without the tappits Y, Y^1, Y^2, Y^3, Y^4, Y^5 whereby the inks collected by the rollers may be transferred in their proper order and appointed places to the type or rolled uninterruptedly thereon accordingly as borders are or are not to be worked, subtantially as and for the purposes herein fully set forth and described. 18th. The tappit or other alternately actuated ducter collecting and ink transferring rollers s^5, t^6, as and for the purposes herein fully set forth and described. 19th. The tappit or other alternately actuated inking rollers, as and for the purposes herein fully set forth and described. 20th. In combination, a series or number of solid rollers in substitution for the disc rollers j, and discs m, with the distributing apparatus and the tappit inking cylinder n, or tappit pulleys p p^1, whereby a number of colours may be employed and transferred through the medium and lengthwise of the cylinder n to the inking rollers suitably for the purposes of rolling the cross-lines of the pipe, substantially as and for the purposes herein fully set forth and described. 21st. In combination, any convenient number of circular or curvilinear tappit actuated inking rollers s, t, u, W, W^1, W^2, W^3, one of the rollers may or not be a roller for border inking purposes and the others or all for type inking purposes, as and for the purposes herein fully set forth and described. 22nd. In combination, the side and middle tappits with inking rollers, whereby a central or intermediate portion between the lines of the form may be inked in a colour separate from the colour or colours of the letterpress or type, substantially as and for the purposes herein fully set forth and described. 23rd. In combination, the middle tappits with an inking roller whereby the said roller may be actuated or removed from the form subsequent to the inking of a central or intermediate portion in a coloured ink distinct from the lines of the letterpress, as herein fully set forth and described.

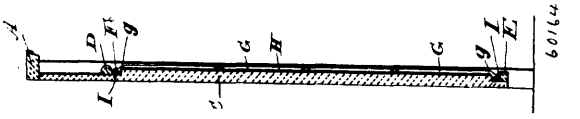
No. 60,163. Hat Fastener. (*Attache de chapeau.*)



Frederick Reast, 62 Braybrooke Road, and Charles Herbert Crisp, 103 Braybrooke Road, both in Hastings, Sussex, England, 1st June, 1898; 6 years. (Filed 13th May, 1898.)

Claim.—1st. A hat fastener consisting of a plate having apertures in same through which prongs of bent wire or other suitable material are passed, said prongs being so curved and arranged that their ends will separate when in their securing position, the plate or support having perforations, being so bent and secured to the hat as to lock the prongs owing to their particular curvature when in their securing position. 2nd. In hat fasteners a plate having apertures through which prongs pass, said aperture being set or distanced from each other so as to cause the prongs to be spread or separated when in their extended position.

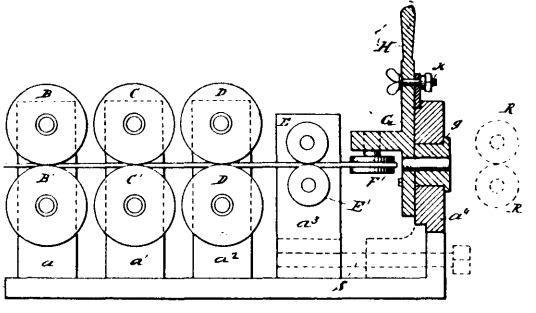
No. 60,164. Bulletin Board. (*Tableau.*)



Stephen George Thompson, assignee of Herbert Kossuth Lee, both of Ottawa, Ontario, Canada, 1st June, 1898; 6 years. (Filed 13th April, 1898.)

Claim.—1st. In a bulletin board, the combination with the body, of a groove extending around the edge of the said body, and a suitably hinged wire frame designed to have the edge wire to engage with the groove, as set forth and for the purpose specified. 2nd. In a bulletin board, the combination with the body having an edge groove and edge bars, the wire frame suitably hinged at the bottom and having cross wires G, secured to such frame and designed to engage with the inder edges of the said groove when the edge of the frame is brought into engagement with the groove, as set forth and for the purpose specified.

No. 60,165. Wire Working Machine.
(*Machine à travailler le fil de fer.*)



James Atkins, Montclair, New Jersey, U.S.A., 1st June, 1898; 6 years. (Filed 13th May, 1898.)

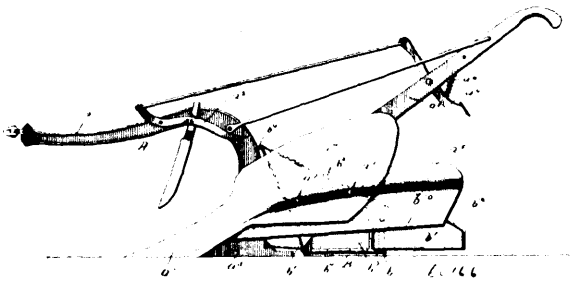
Claim.—1st. A machine for twisting prismatic wire, comprising two sets of rolls having their peripheries formed and arranged to present between them spaces which conform to the shape of the wire, and means for supporting and fixing said rolls so that said spaces have different angular positions in the two sets of rolls, so that as the wire passes from one set of rolls to the other it is twisted in conformity to said spaces. 2nd. A wire twisting machine, comprising two sets of rolls conforming to the wire and arranged in line with one another so that the wire can pass through them in succession, means for varying the angular relation of one of said two sets of rolls to the other, and means for clamping and fixing the two sets of rolls in definite angular relation. 3rd. A twisting machine for prismatic wire, comprising two sets of rolls conforming to the wire and adapted to pass it successively between them, a fixed support for one of said sets of rolls, and a support for the other set of rolls, which is angularly adjustable around the line of motion of the wire as a centre, and means for fixing said support in any desired angular position. 4th. A straightening and twisting machine for prismatic wire, comprising three sets of rolls arranged in line so as to pass the wire successively between them and so straighten it, the peripheries of said rolls being formed and arranged to conform to the shape of the wire in different angular positions of same in the successive rolls, and means for holding the said sets of rolls in such relative positions. 5th. A straightening and twisting machine for prismatic wire, comprising three sets of rolls arranged in line so as to pass the wire successively between them and so straighten it, the peripheries of each set of rolls conforming to the wire, and means for holding two of the sets in such angular relation that the peripheries of said sets conform to the wire in a different angular position of the wire, so that the wire is twisted in passing from one to the other. 6th. A machine for forming, straightening and twisting prismatic wires, consisting of a series of forming rolls having their peripheries formed to successively act on a round wire to change it to prismatic form, and two or more sets of twisting rolls, one at least of which has its peripheries formed to conform to the prismatic wire in a different angular position to that which is given it by the forming rolls, so as to twist the wire, such sets of rolls being arranged in line, so as to straighten the wire, and means for holding the said set of rolls in such relative positions.

No. 60,166. Ditch Making Plough.
(*Charrue à fossoyer.*)

Napoleon Louis Gobeille, St. Hyacinthe, Quebec, Canada, 1st June, 1898; 6 years, (Filed 14th May, 1898.)

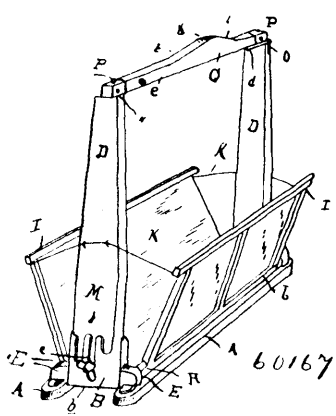
Claim.—1st. A plough comprising a beam, shoes fixed thereto, a point secured to said beam in front of said shoe, shovel boards

extending rearwardly from said beam and forming a continuation of said point, and adjustable plates secured to the lower portion of



said shovel boards, substantially as described. 2nd. The combination with a ditch forming plough, of an attachment removably secured in rear thereof, said attachment serving to receive extraneous ground from the cross ditches or trenches, substantially as described. 3rd. The combination with a ditch forming plough, of an attachment removably secured thereto in rear of said plough, said attachment comprising a plate, extensions pivotally secured thereto, wings pivotally secured to said extensions, and means, operated by the operator, for moving said extensions and said wings into position whereby the ground located in the cross ditches will be removed, substantially as described. 4th. The combination with a ditch forming plough, of an attachment secured thereto, said attachment comprising a plate, extensions pivotally secured to and normally extending upwardly and inwardly at an angle, a spring connection between the top of said extensions, wings pivotally secured to the rear ends of said extensions, means operated by the operator for moving said wings to an operative position, and means for moving said extensions against the action of said spring, substantially as described. 5th. The combination with a ditch forming plough, of an attachment removably secured thereto, said attachment comprising a plate, extensions pivotally secured thereto and normally held in inoperative position, a spring for holding said extensions in their inoperative position, wings pivotally secured to the rear ends of said extensions, a foot lever connected to said plate, connections between said foot lever and said wings whereby when said lever is depressed, said wings will be moved into an operative position, and a lever pivotally mounted below said foot lever for moving said extensions into position, substantially as described.

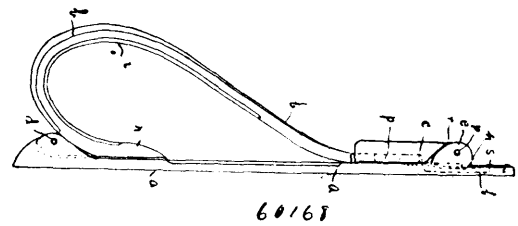
No. 60,167. Ironing Board. (*Planche à repasser.*)



Albert Rothrock, Jackson, Michigan, U. S A., 1st June, 1898; 6 years (Filed 16th May, 1898.)

Claim.—1st. The combination with the base and standards, of a hinge having one leaf secured to one standard and a projecting pin on the other leaf, a pressing-board provided with means engaging said pin to support the board with either edge or side uppermost, and means on the other standard for supporting the pressing-board with either side or edge uppermost. 2nd. In a pressing-board, the combination of the base comprising the separated strips A, the metal and brackets secured to said strips and provided each with a vertical socket, standards detachably supported in said sockets, horizontal bearing sockets formed on said brackets, a pressing-board supported on the tops of said standards, wings pivoted in said bearing-sockets, and means for holding the wings in adjustable positions, substantially as described. 3rd. In a pressing-board, the combination of the base comprising the separated strips A, the metal end brackets B, secured to said strips, the standards detachably supported in said brackets, the pressing-board detachably supported on the tops of the standards, the wings J, pivoted in horizontal bearing-sockets formed in the brackets, and a cord connecting said wings and sliding in eyes on the standards.

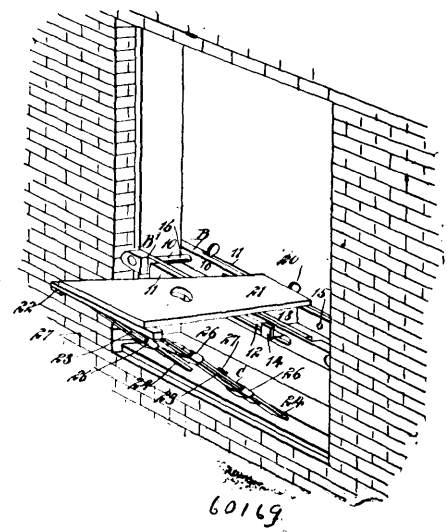
No. 60,168. Thill Tug for Harnesses. (*Porte-limonière*)



John W. Salezman, Bloomington, Illinois, U.S.A., 1st June, 1898; 6 years. (Filed 16th May, 1898.)

Claim.—A thill-tug for harness comprising a stock *a*, with the clasp *c*, attached to the stock by the lugs *e*, and turning on the axle *p*, and the flat spring *s*, fastened to the stock *a*, directly under the hinged clasp *c*, and so as to press against the lug *h*, with the tug-loop *b*, hinged to the stock *a*, at *d*, and the ear *f*, the flat end metal fitting against the stock at the lug *g*.

No. 60,169. Window Bracket. (*Console de fenetre.*)



Silas Grant Dean, Norfolk, Nebraska, U.S.A., 1st June, 1898; 6 years. (Filed 16th May, 1898.)

Claim.—1st. In a window bracket, a body portion consisting of binding strips constructed in adjustable sections, clamping devices connecting the binding strips, a platform adjustably supported by the said binding strips, an adjustable support hinged to the outer end of the platform, and a locking device for said platform, as set forth. 2nd. In a window bracket, the combination, with parallel binding strips each constructed of two members mounted to slide one upon the other, and clamping devices connecting the end portions of the binding strips, of a platform mounted to slide in the said binding strips, a locking device for the platform, and adjustable supports for the outer end of the said platform, substantially as described. 3rd. In a window bracket, the combination, with binding strips, each comprising two members constructed to slide one upon the other, the members of the binding strips being provided with registering longitudinal openings and guide devices, and clamping screws connecting the end portions of the said binding strips, of a block held to slide between the binding strips, a clamping screw for the block passed through the slots of the binding strips, a platform carried by the said block, and legs attached to the outer end portion of the said platform, the said legs being constructed in sections mounted to slide one upon the other, guides for the said sliding sections of the legs, and locking devices for the sections of the legs, as and for the purpose set forth.

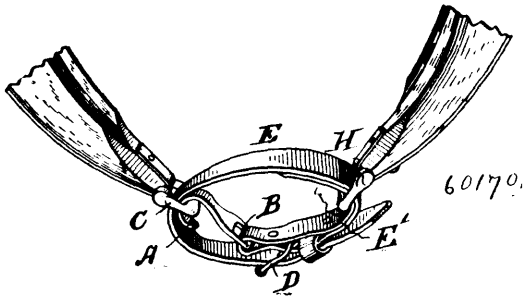
No. 60,170. Hame Fastening.

(*Couplière d'attelles.*)

Richard Quincey, El Paso, Texas, U.S.A., 1st June, 1898; 6 years. (Filed 16th May, 1898.)

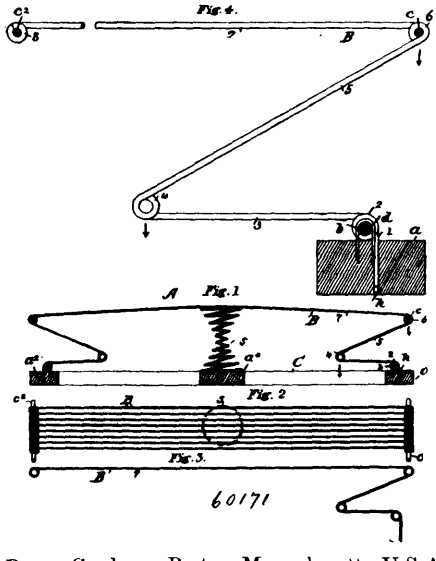
Claim.—1st. A hame strap doubled back on itself and fastened so as to form two loops, a metallic hook secured in the outer loop, and a buckle and keeper held by the second loop, whereby the wearing strain is taken off the main portion of the strap by the hook and

looped portion and whereby the strain on the buckle is partially removed, substantially as described. 2nd. A hame fastening compris-



ing a strap doubled back upon itself forming a loop, a metallic hook having a slot enclosed by said loop, a buckle secured in said loop, and the doubled over end of said strap extending to some distance past said buckle and serving to take the wearing strain off the main portion of the strap, substantially as described.

No. 60,171. Seat for Couches. (*Siège de canapé.*)



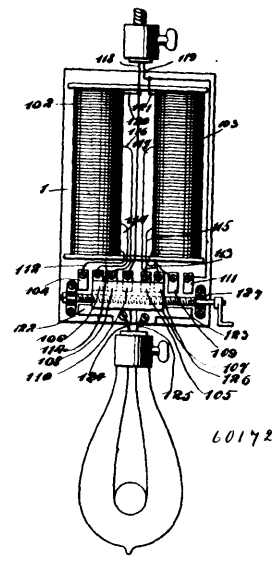
Joseph Brown Gardener, Boston, Massachusetts, U.S.A., 1st June, 1898; 6 years. (Filed 16th May, 1898.)

Claim.—1st. A seat for an article of furniture, composed of a base or frame having rails *a* and a^2, and a series of springs each consisting of a single piece of spring wire bent to form coils 2, 4 and 6, with intermediate arms 3 and 5, and having a short end 1 and a long arm 7 terminating in a coil 8, the said springs having their ends 1 secured to the said rails *a* and a^2 alternately, the arms 7 alternating in their direction of extension across the top, rigid rods passing through the coils 2, and flexible wires or rods passing through the coils 6 and 8 to string them together. 2nd. A seat for an article of furniture, composed of a base or frame having rails *a*, a^2 and a^3, and a series of springs each consisting of a single piece of spring wire bent to form coils 2, 4 and 6, with intermediate arms 3 and 5, and having a short end 1 and a long arm 7 terminating in a coil 8, the said springs having their ends 1 secured to said rails *a* and a^2 alternately, the arms 7 alternating in their direction of extension across the top, rigid rods passing through the coils 2, flexible wires or rods passing through the coils 6 and 8 to string them together, and springs *a* interposed between the rails a^3 and the arms 7 of the springs.

No. 60,172. Regulators for Electric Lamps and other Devices. (*Régulateur pour lampes électriques.*)

William Hawker, Windsor Mills, Province of Quebec, Canada, 1st June, 1898; 6 years. (Filed 16th October, 1896.)

Claim.—1st. An electric current regulator for electric lamps and other devices, comprising pairs of resistance coils, the resistance of one pair of coils being greater than that of another pair of coils, connections between the several coils, conductors adapted for engagement with the main lead wires, a contact plate for each of the coils and having connection therewith, lamp circuit plates, and a sliding contact block adapted for engagement with said lamp circuit plates, and with pairs of plates connected with the resistance coils, substantially as specified. 2nd. An electric current regulator for electric lamps and other devices, comprising pairs of resistance coils adapted for connection at one end with the main lead wires, an independent contact plate having connection with each coil, other contact plates



adapted for connection with the main lead wires, lamp circuit plates, a contact block adapted to close the circuit between the lamp circuit plates and a pair of plates connecting with the coil, and a screw rod passing through a tapped opening in said contact block whereby the block may be moved, substantially as specified. 3rd. An electric current regulator for electric lamps and other devices, comprising pairs of resistance coils, the resistance of one pair differing from that of another, means for connecting the pairs of coils with the main lead wires, contact plates having connection with the coils, lamp circuit plates, a screw-operated block for closing the circuit between pairs of contact plates and the lamp circuit plates, and a retarding device on said block, substantially as specified. 4th. An electric current regulator, comprising a pair of resistance coils, a series of pairs of contact plates, the plates of each pair being connected to the resistance coils in such a manner that varying resistances may be obtained through different pairs of plates, lead wires connected to additional contact plates and having shunt connections with the coils, another pair of contact plates, and a circuit closer for closing the circuit between pairs of the first-named plates and the last-named pair of plates, substantially as specified. 5th. An electric current regulator, comprising a pair of resistance coils, lead wires with which said resistance coils connect at one end, pairs of contact plates, shunt wires extended from the pairs of contact plates to engagement with the resistance coils at different points of their length, contact plates from which wires lead to a lamp or other device, a block of insulating material, contact plates carried by said block and adapted to close the circuit between pair of plates and thes plates from which wires extend to a lamp or other device, and means for moving said block to change the points of contact, substantially as specified.

No. 60,173. Storage Battery. (*Batterie secondaire.*)

John Vaughan Sherrin and Henrietta Helena Sherrin, both of 6 Codrington Villas, Ramsgate, Kent, England, 1st June, 1898; 6 years. (Filed 26th July, 1897.)

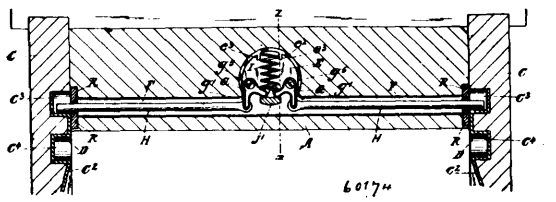
Claim.—In a secondary battery element, the combination of a conductor, a strip of springy non-conducting material wound helically thereon, and intersticial active material, which is held in close contact with the conductor by the said strip during and after expansion and during and after contraction, substantially as set forth.

No. 60,174. Sash Lift and Lock. (*Arrête-croisée.*)

William R. Reilly, London, Ontario, 1st June, 1898; 6 years. (Filed 19th February, 1898.)

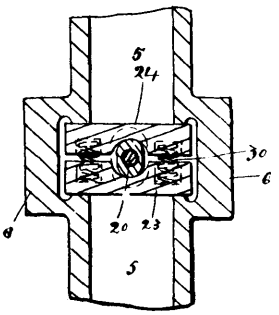
Claim.—1st. The lever or levers G, the spring I, and rod or rods H, in combination with catches with which the end of said rod or rods engage, substantially as and for the purpose set forth. 2nd.

The lever or levers G, provided with the studs or pins g^3, the spring I, and rod or rods H, in combination with catches with which the



end of said rod or rods engage, substantially as and for the purpose set forth. 3rd. The lever or levers G, the spring I, and rod or rods H, in combination with a window-sash in which the recess or recesses E and internal opening or openings F are formed, in combination with catches with which the end of said rod or rods engage, substantially as and for the purpose set forth. 4th. The sliding-bar J, plate K, and lever or levers G, provided with the studs or pins g^3, in combination with the spring I, rod or rods H, and catches with which the end of said rod or rods engage, substantially as and for the purpose set forth. 5th. The sliding-bar J, plate K, and lever or levers G, provided with the studs or pins g^3 and g^4, in combination with the spring I, lugs c^3, rod or rods H, perforated plate R, and a window-sash in which the recess or recesses E and internal opening or openings F are formed, and catches with which the end of said rod or rods engage, substantially as and for the purpose set forth. 6th. The lever L, lifter N, plate M, and lever or levers G, provided with the studs or pins g^3, in combination with the spring I, rod or rods H, and catches with which the end of said rod or rods engage, substantially as and for the purpose set forth. 7th. The lever L, lifter N, plate M, and lever or levers G, provided with the studs or pins g^3 and g^4, in combination with the spring I, lugs c^3, rod or rods H, perforated plate R, and a window-sash in which the recess or recesses E and internal opening or openings F are formed, and catches with which the end of said rod or rods engage, substantially as and for the purpose set forth.

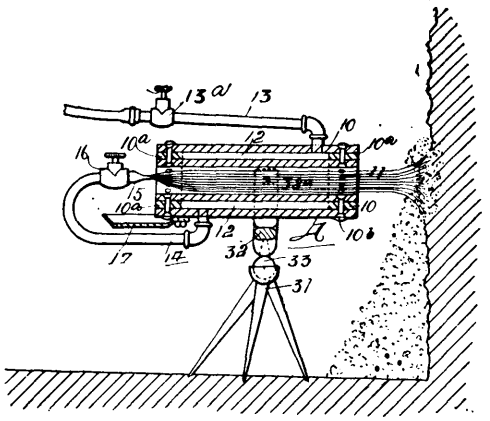
No. 60,175. Valve. (*Soupape.*)



Carl Wilhelm Vollmann, Montreal, Quebec, Canada, 1st June, 1898; 6 years. (Filed 7th April, 1898.)

Claim.—1st. The combination with a valve casing of a sliding valve having a knife edge and means to force said edge against the valve seat in travelling over same to keep such seat clear of foreign substances, for the purpose set forth. 2nd. In combination with a sliding valve having its lower edge formed with a knife edge, and its seat, of stationary means for maintaining said valve always in yielding contact with its seat and unyielding means independent of said valve and adapted to act upon same at the completion of its closing movement and force same into contact with its seat and means for operating said valve, for the purpose set forth. 3rd. The combination of a valve casing having a chamber extending at right angles to and intersecting the passage therethrough, a valve formed in two sections located respectively adjacent to the ends formed by the intersection of said passage and a wedge-like projection carried by the floor or bottom of said chamber and located intermediate of said valve sections, substantially as and for the purpose set forth. 4th. The combination of a valve casing having a chamber extending at right angles to and intersecting the passage therethrough, a valve formed in two sections located respectively adjacent to the ends formed by the intersection of said passage, a wedge-like projection carried by the floor or bottom of said chamber and located intermediate of said valve sections, the lower edges of said valve sections being formed with knife edges, and a yielding resistance adapted to maintain said valve sections yieldingly in contact with their valve seats, substantially as and for the purpose set forth. 5th. The combination with a valve casing of a sliding valve having a knife edge and a spring tending to force said edge against the valve seat in travelling over the same to keep such seat clear of foreign substances as set forth. 6th. The combinatian of a valve casing having a passage 5, enlargements 6, valve seats 16 and 17, a dome 9, a screw 15, a wedge 20, a block 28 travelling along said screw, valve sections 23 and 24, connected at their upper end to said block, and located adjacent to said valve seats, and coiled springs located between said valve sections, all arranged substantially as described and for the purpose set forth.

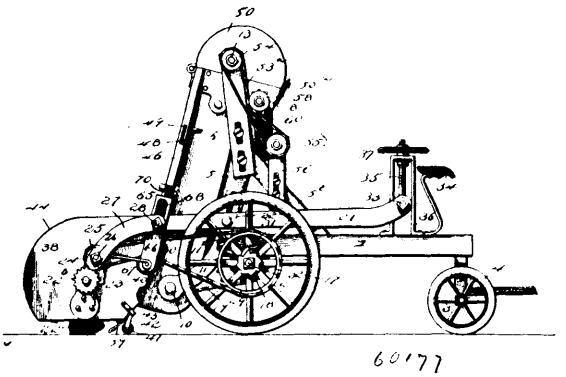
No. 60,176. Liquid Fuel Burner.
(*Bruleur de combustible liquide.*)



Charles Malcolm Cookson and Arthur McCoy, both of Victoria, British Columbia, Canada, 1st June, 1898; 6 years. (Filed 1st April, 1898.)

Claim.—1st. In a device for producing a blast heat, a burner A composed of cylindered sections 10 and 11, the section 11 being arranged within and at some distance from the inner walls of the outer section 10, and the annular space 12 closed at either ends by the sections 10^a intervening between the said members 10 and 11, a fuel supply pipe 13 connecting with the upper side of the annular space 12, in proximity to the forward end of the same, a delivery pipe 14 connecting with the underside of such space, near the end thereof, a nozzle 15 secured to the end of the pipe 14, which is curved so that such nozzle is directed into the cylindered opening through the said burner, and means for controlling the flow of the fuel to such burner, as and for the purposes set forth. 2nd. In an apparatus for producing blast heat, a burner A formed of cylindrical parts 10 and 11, with sections 10^a intervening between, an annular space between the walls of the sections 10 and 11, an inlet pipe connecting with such space, an outlet pipe or duct connecting with the opposite side of the said space, and a nozzle 15 on the end of said pipe, the said nozzle being directed through the centre of the cylindered orifice of the burner, and means for controlling the flow of fuel to and from the said burner, substantially as specified.

No. 60,177. Street Sweeper. (*Balayeuse de rue.*)

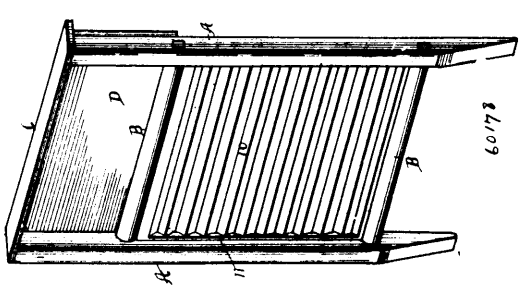


Simon D. Lanyon, Joplin, and John W. Fripp, Sedalia, both in Missouri, U.S.A., 1st June, 1898; 6 years. (Filed 9th May, 1898.)

Claim.—1st. In a street sweeping machine, the combination with an upright casing, a wheeled carrying frame, and an elevator within said casing, of the broom-carrying levers fulcrumed on the frame, a rotary-broom mounted on the carrying levers, driving mechanism for said broom, side fenders 38, rigidly attached to the carrying levers and arranged at the end of the broom, a hood 44, pivoted to the side fenders and extending from the upright casing rearwardly

around the broom, said head and side fenders forming an inclosure for the broom and adjustable with the carrying levers to remain in the same relation at all times to said broom, substantially as described. 2nd. In a street sweeping machine, the combination of a wheeled frame, an upright provided with the receptacle 7, the broom-carrying levers, the side fenders and hood carried by said levers and forming an inclosure in the rear casing, a broom mounted on the levers, a driving mechanism for the broom, an elevator, and an inclined plate 39, situated within the side fenders in advance of the broom hinged at its upper edge to the receptacle 7, and provided with the ground rollers, substantially as described. 3rd. In a street sweeping machine, the combination with a wheeled carrying frame, an axle, and a driving wheel, of the longitudinal carrying levers fulcrumed on the machine, a broom having its shaft journalled in said levers and provided with a spur gear wheel, a fixed plate on one side of a carrying lever, a compound sprocket and gear wheel journalled between one lever and the fixed plate and meshing with the gear on the broom shaft, a sprocket wheel on the driving wheel, and a sprocket chain fitted to said driving sprocket wheel and to the sprocket member of the compound gear, substantially as described. 4th. In a street sweeping machine, the combination with a frame, a main axle and a broom-shaft, of a wheel mounted on the axle to rotate therewith and carrying a driving sprocket, a countershaft geared to the broom-shaft and having a sprocket pinion, a driving chain operatively connected to the driving sprocket and to the sprocket pinion on the counter-shaft, a slidable tension frame carrying a loose guide roller arranged in contact with one strand of said chain, and a spring which normally lifts the slidable tension frame and its roller, substantially as described, for the purposes set forth. 5th. In a street sweeping machine, the combination with the main carrying frame, a driving wheel, an axle and a broom shaft, of longitudinal adjusting levers fulcrumed to the carrying frame and sustaining the broom shaft, a driving sprocket on the driving wheel, a countershaft journalled in the adjusting levers and geared to the broom-shaft, a driving chain between the driving sprocket and the countershaft, a horizontal bar rigid with one of said adjusting levers, a slidable tension frame mounted on said bar, an idler friction roller journalled in said tension frame and engaging with one strand of the driving chain, and a spring seated against said fixed bar and against the slidable tension frame, substantially as described. 6th. In a street sweeping machine, the combination with a carrying frame, and a driving axle provided with a clutch controlled sprocket wheel, of adjusting levers fulcrumed on said carrying frame, a broom having its shaft journalled in said levers and provided at one end with a gear pinion, a plate or link arranged parallel to one of said levers and connected rigidly thereto by a spindle and a fixed bar, a pinion and sprocket wheel journalled on said spindle and arranged for the pinion to gear with the broom shaft pinion, a driving chain operatively connected with said sprocket wheel and with the clutch-controlled sprocket wheel, a slidable tension frame loosely mounted on said fixed bar and carrying at its lower end a tension roller which engages with one strand of the driving chain, a spindle passing through the head of the tension frame and seated on the fixed bar, and a spring fitted at its respective ends against the spindle and the head of the tension frame, substantially as described. 7th. In a street sweeping machine. the combination with a main frame an upright elevator casing and a broom, of a closure detachably fastened to the rear of said upright casing, side fenders situated in close lateral relation to the ends of the broom, a pivoted hood attached to the lower part of the upright casing, a trough like receptacle situated in advance of the upper end of said casing, a hood hinged to the rear closure and arranged to close the upper end of the upright casing and the trough like receptacle, an endless elevator within said upright casing, a transverse conveyor, and suitable driving mechanism for said elevator and the conveyor, substantially as specified. 8th. In a street sweeping machine, the combination with a main frame an upright casing and its trough like receptacle, of the delivery spout or chute extending laterally from the trough like receptacle and provided with a hinged delivery section arranged to be fastened detachably to said spout or chute, a broom, an elevator, and a transverse conveyor, substantially as described.

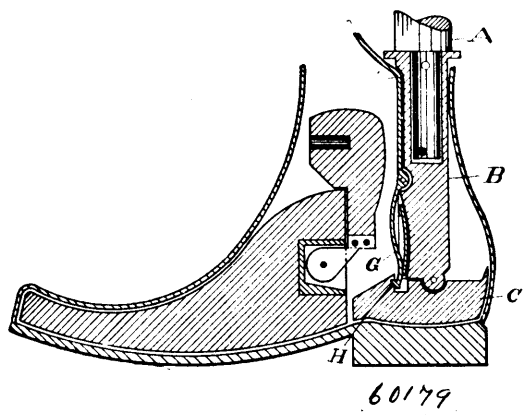
No. 60,178. Wash Board. (*Planche à laver.*)



John Valentine, Vancouver, British Columbia, Canada, 1st June, 1898; 6 years. (Filed 5th May, 1898.)

Claim.—In a wash board having its rubbing surface 10 composed of glass or material of a like nature, the combination with the corrugated surface and the plain straight edges 11 and the grooves on the inner sides, into which the edges of the web 10 are received, as set forth.

No. 60,179. Heeling Last. (*Forme pour talons.*)



Edwin L. Goding, Sanford, Maine, U.S.A., 1st June, 1898; 6 years. (Filed 16th May, 1898.)

Claim.—1st. A heeling last composed of a spindle adapted to be secured in the spindle of a heeling machine and a heel pivotally secured to the end thereof, substantially as and for the purposes set forth. 2nd. A heeling last composed of a spindle to be secured to the spindle of a heeling machine and terminating in a heel pivotally secured thereto, its forward end being adapted to be turned down to a position nearly parallel with said spindle, substantially as and for the purposes set forth. 3rd. A heeling last composed of a spindle of a heeling machine and terminating in a heel pivotally secured thereto and means for locking said spindle and heel, substantially as and for the purposes set forth.

No. 60,180. Cement. (*Ciment.*)

William S. Welch, Westfield, New Jersey, U.S.A., 1st June, 1898; 6 years. (Filed 22nd August, 1896.)

Claim.—1st. A non-hardening luting, cement or putty containing an oil which has been boiled to a thick glutinous consistency. 2nd, A non-hardening luting, cement or putty consisting of an oil which has been boiled to a thick glutinous consistency, a non-drying oil and a suitable powder body in substantially the proportions stated. 3rd. The herein-described process of making non-hardening luting, cement or putty, which consists in boiling an oil from five to eight hours or until it assumes a thick glutinous or rubber-like consistency, mixing therewith a non-drying oil such as cotton-seed oil or lard-oil, and a volatile spirit and finally, thoroughly mixing a sufficient quantity of powder such as whiting, white lead or other similar substance to make the mass the desired thickness and plasticity, as set forth.

No. 60,181. Sugar Bowl. (*Bol à sucre.*)

Fig. 1.

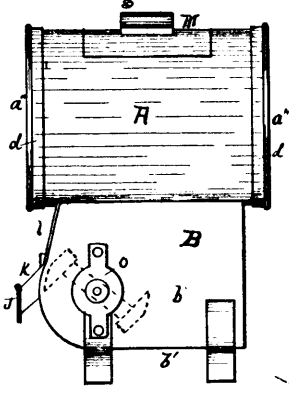
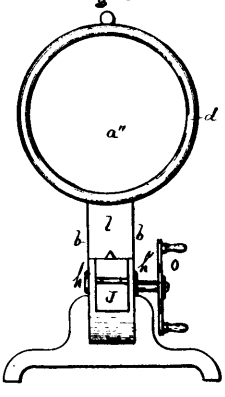


Fig. 2.



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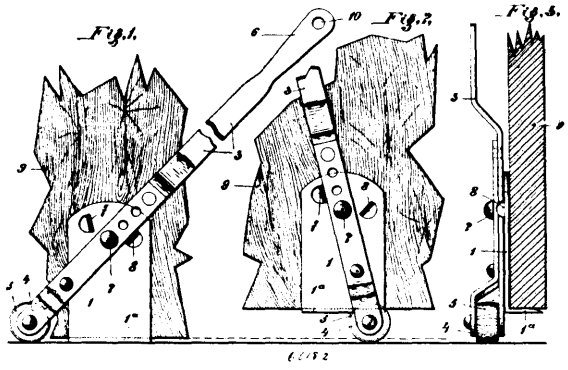
James Lachlin Weir, Chatham, Ontario, Canada, 1st June, 1898 6 years. (Filed 13th May, 1898.)

Claim.—1st. The combination in the reservoir or holder A, being constructed cylindrical or barrel-shaped, of metal, having glass

ends, and being located horizontally over the compartment B, substantially as specified. 2nd. The combination of the cylindrical reservoir A and the compartment B, the inclines C and C^1, forming a chute, and the slide *e* for the purpose of regulating the supply of sugar into the said compartment B, substantially as set forth. 3rd. The combination of the cylindrical reservoir A, the compartment B containing the rotating scoops D D^1, engaged on the axle E, substantially as specified and set forth. 4th. The combination of the reservoir A, the compartment B containing the scoops D D^1, the axle E, the spout K, having the cover *j*, and the handle *g*, for the purpose of operating the device, all substantially as specified and set forth.

No. 60,182. Door-Raising Device.

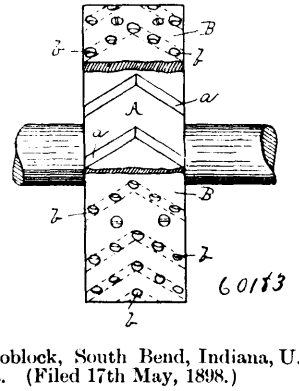
(*Appareil à soulever les portes.*)



Hermann Leidenfrost, Erfurt, Prussia, Germany, 1st June, 1898; 12 years. (Filed 13th May, 1898.)

Claim.—A device for raising doors for oiling their hinges or other purposes, consisting of a bent plate 1, 1^a, with a lever 3 pivoted to said plate, the shorter arm of said lever, projecting beyond the plate, being bifurcated and carrying a roller 5, the longer arm being provided with a handle 6, the plate 1 being provided with stops 7 and 8 for limiting the movement of the lever 3, substantially as specified.

No. 60,183. Pulley. (*Poulie.*)



John Charles Knoblock, South Bend, Indiana, U.S.A., 1st June, 1898; 6 years. (Filed 17th May, 1898.)

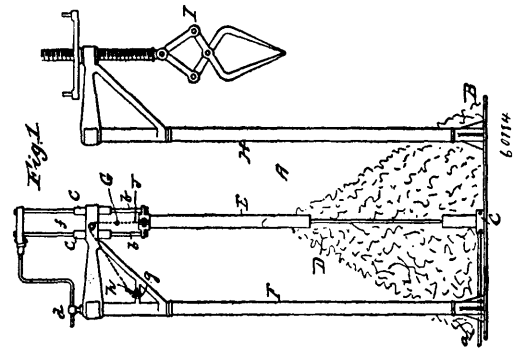
Claim.—A pulley, having opposite air-channels formed within the rim and leading from the edge of said pulley to a point of intersection at the centre, and a series of perforations through the rim communicating with said channels, substantially as described.

No. 60,184. Process of Forming Calcium Carbide.

(*Procédé pour la formation de carbure de calcium.*)

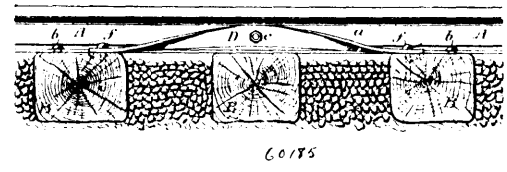
William Roberts King and Francis Wyatt, both of New York, U.S.A., 1st June, 1898; 6 years. (Filed 10th November, 1896.)

Claim.—1st. The above described substantially continuous process of forming calcium carbide, which consists in forming a mound of coke and lime mixed in proper proportions around a core of conducting material supported in vertical position between two superposed electrodes, heating the vertical centre of said mound to incandescence by passing an electric current through said electrodes and core and maintaining said current until a nugget of calcium carbide is formed in said mound, permitting the upper electrode to descend freely as the supporting mixture beneath it is gradually reduced and fused, removing said nugget while hot, inserting a new core, covering it with the material of said mound and repeating the specified steps. 2nd. The above described process of forming calcium carbide, which consists in forming a mound of coke and lime mixed in proper proportions around a core of conducting material supported in vertical position between two superposed electrodes, heating the vertical centre of said mound to incandescence by passing an electric current through said electrodes and core and maintaining said current until a nugget of calcium carbide is formed in said mound, permitting the upper electrode to descend freely as the supporting mixture beneath it is gradually reduced and fused, removing said nugget, inserting a new core, covering it with the material of said mound and repeating the specified steps.



No. 60,185. Railway Strut Tie.

(*Lien de traverse pour chemins de fer de rue.*)

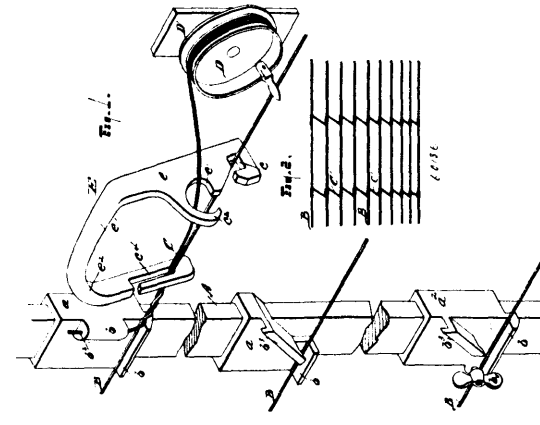


Adolphus Bonzano, Philadelphia, Pennsylvania, U.S.A., 1st June, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—1st. As a new article of manufacture, a strut-tie having a section adapted to be secured to a rail and members projecting from each end and adapted to be secured to the supporting ties of the road bed, substantially as described. 2nd. As a new article of manufacture, a strut-tie made from a metal bar bent to form a central section and end sections connected to the central section by twisted members, substantially as described. 3rd. The combination of a rail, cross ties on which it is mounted, a strut-tie having two members, said strut-tie being secured to the centre of the web of the rail and the end of each member secured to a cross tie, substantially as described. 4th. The combination of a rail, cross ties on which the rail is mounted, a strut-tie having a central section secured to the web of the rail, end sections secured to cross ties and twisted members connecting the end sections to the central section, said strut-tie being of such a length as to extend from one tie to another with a tie intervening, substantially as described. 5th. The combination of a rail, cross ties on which the rail is mounted, a strut-tie made in one or more pieces and secured to the rail and secured to the tie on each side of the point where it is secured to the rail, substantially as described.

No. 60,186. Wire Fence Weaving Machine.

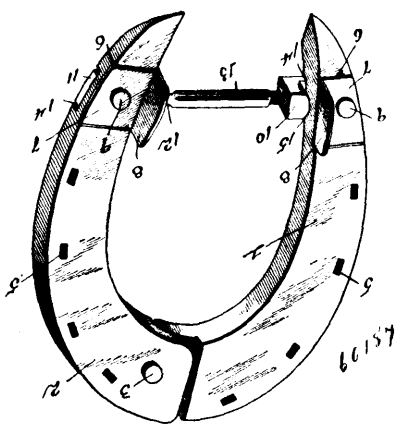
(*Machine pour le tissage de clôture en fil de fer.*)



Jacques Rocheleau, Windsor, Ontario, Canada, 1st June, 1898; 6 years. (Filed 21st May, 1898.)

Claim.—1st. In a fence weaving device the frame provided with the inclined inner side substantially as and for the purpose described. 2nd. In a fence weaving device the frame E provided with the slot c, the cone c^1, and the hook c^2, substantially as described. 3rd. In a fence weaving device the spacing block provided with the ledge b and the guide b^3, substantially as described.

No. 60,187. Horseshoe. (*Fer à cheval.*)



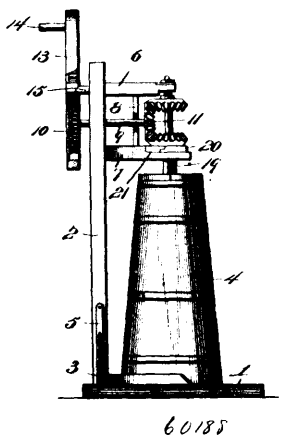
Elvin Stephen Barrows, North Clarendon, Vermont, U.S.A., 1st June, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—1st. In a device of the class described, the combination of a shoe composed of two pivotally connected sections adapted to be expanded, pivotally mounted flanges projecting from the upper face of the shoe and arranged to bear against the walls of a hoof, said flanges being adapted to yield to the adjustment of the shoe in order to conform to the position of the walls of a hoof, and an adjusting device connecting the sides of the shoe, substantially as described. 2nd. In a device of the class described, the combination of a shoe composed of two pivotally connected sections provided at their lower faces with recesses, sockets interposed between the sections of the shoe, provided with rounded inner edges and having outwardly extending flanges pivoted in the said recesses, the lower faces of the sockets being substantially flush with the lower face of the shoe, and an adjusting bar connecting the sockets, substantially as described. 3rd. In a device of the class described, the combination of a shoe composed of two sections pivotally connected and recessed at their upper and lower faces, plates arranged in the upper recesses and provided with upwardly extending flanges, sockets located between the sections of the shoe and provided with outwardly extending flanges arranged in the lower recesses, pivots passing through the sections of the shoe and connecting the plates and the sockets and securing them to the shoe, and an adjusting bar connecting the sockets, substantially as described. 4th. In a device of the class described, the combination of a shoe composed of two sections pivoted together at one side of the center of the front of the shoe and being of unequal length, sockets mounted on the sides or sections of the shoe near the rear end of the same, the socket of the longer side or section being smooth and the other sockets being threaded, and an adjusting bar connecting the sockets and having one end smooth and its other end threaded, substantially as described. 5th. In a device of the class described, the combination of a shoe composed of two sections of unequal length pivoted together at one side of the front of the shoe, plates pivoted to the upper faces of the sections and provided with upwardly extending flanges, sockets pivoted to the sections adjacent to the plates, one of the sockets being smooth and the other being threaded, and an adjusting bar connecting the sockets and having one end smooth and its other end threaded to agree with the same, substantially as described.

No. 60,188. Churn. (*Baratte.*)

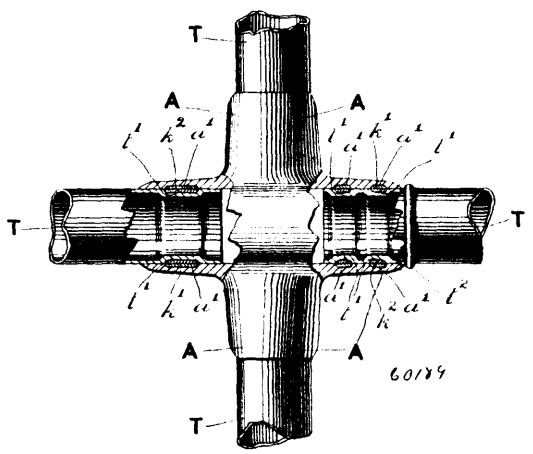
Peleg C. Barlow, Buckhamon, West Virginia, U.S.A., 1st June, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—A churn dasher formed of a central member, having a central collar perforated for the passage of a dasher staff, and provided with alined arms projecting from opposite sides of said collar, the undersides of said arms being provided with recesses forming guideways extending longitudinally from the central collar and opening at the ends of the arms, said arms being also provided with longitudinally extending slots of less width than and arranged centrally along the guideways, movable members having shanks fitting in and slidable along said guideways and provided with openings corresponding with the slots in the arms of the central member, enlargements on the outer ends of the shanks corresponding in cross section with and forming shoulders to engage the ends of the arms when the movable members are adjusted toward each other, blades projecting at right angles from the enlargements and having their outer surfaces bevelled to form an angle projecting beyond the other portions of the blade and shank, and adapted to traverse the inner surface of the churn body, bolts passed through the slots in



the arms and the openings in the shanks, and nuts on the bolts, substantially as described.

No. 60,189. Method of Joining Metal Tubing.
(*Méthode de joindre les tubes métalliques.*)



Edwin Taylor, 1 Alfred Street, Warstone Lane, Birmingham, Warwick, England, 1st June, 1898; 6 years. (Filed 2nd November, 1897.)

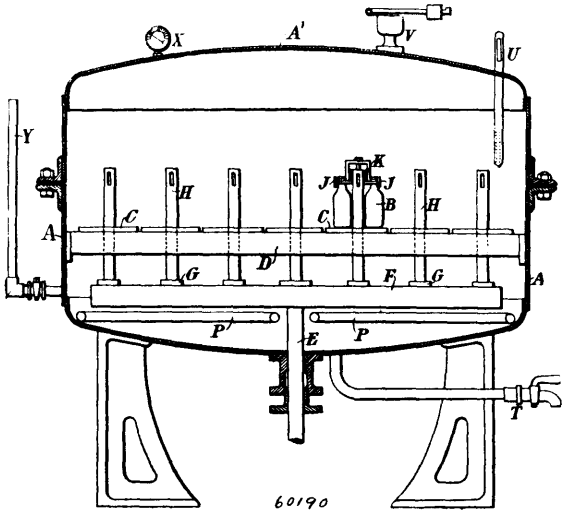
Claim.—1st. The improvements in the mode and means for making the junctions of cyles, motor car frames, bedsteads and fender and other junctions by grooving the sockets into which a ring of fusible metal is placed, then placing the tube or other equivalent part in the socket and applying heat to melt the ring which then sets and fastens the junction, substantially as herein set forth and shown. 2nd. The improvements in the mode and means for making the junctions of cycles, motor car frames, bedsteads and fender and other junctions by grooving the socket and tube or other part and placing in each a fusible ring or rings, then bringing the two parts together as described, when heat is applied and the two parts fused together and upon the tube and in the recesses, substantially as herein set forth and shown. 3rd. Making junctions for framing and other purposes by a helical groove cut in the socket or in the socket and inner member and then threading around the groove a coil of fusible material which is afterwards fused by heat, substantially as herein set forth and shown.

No. 60,190. Apparatus for Sterilizing Milk, etc.
(*Appareil pour stériliser le lait.*)

Edward Carstensen de Segundo, 28 Victoria Street, Westminster, London, England, 1st June, 1898; 6 years. (Filed 17th March, 1898.)

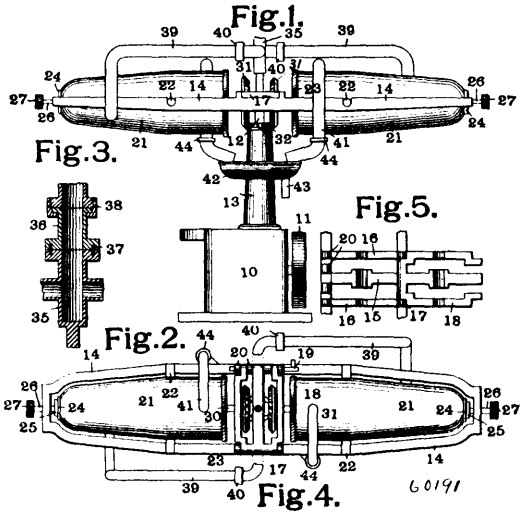
Claim.—In sterilizing apparatus, the combination with an enclosing chamber having a removable cover, valve-controlled steam and

water supply inlets and discharge outlet, and safety-valve, thermometer and water-guage, of supports within such chamber for



the vessels containing the substance to be sterilized, and movable presser-bar mechanism for operating the closing wires of the vessels, substantially as described and illustrated.

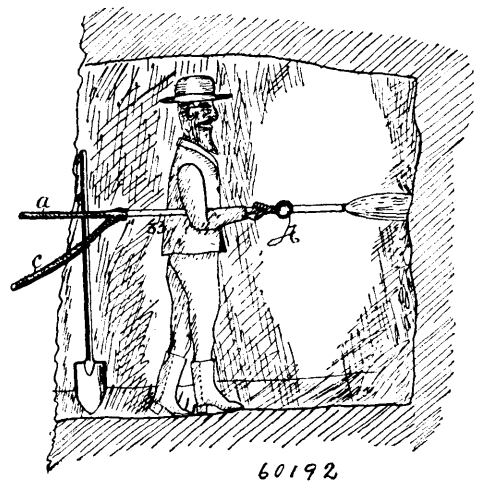
No. 60,191. Ore Separator. (*Séparateur de minerais.*)



John Joseph Link, St. Louis, Missouri, U.S.A., 1st June, 1898; 6 years. (Filed 9th December, 1897.)

Claim.—1st. In a centrifugal ore separator, a suitable revolving frame, means for revolving said frame, vessels transversely pivoted in said frame, and means for preventing said vessels from swinging on their pivots. 2nd. In a centrifugal ore separator, a suitable revolving frame, means for revolving said frame, vessels transversely pivoted in said frame, means for preventing said vessels from swinging on their pivots, stirrers in said vessels, and means for actuating said stirrers. 3rd. In a centrifugal ore separator, a suitable revolving frame, means for revolving said frame, vessels transversely pivoted in said frame, stirrers in said vessels, gearing being brought into operative position when said vessels are swung in a longitudinal position in said frame, and means for securing said vessels in said longitudinal position in said frame. 4th. In a centrifugal ore separator, a suitable revolving frame, vessels transversely pivoted in said frame, means for preventing said vessels from swinging on their pivots, and supply and discharge passages for said vessels. 5th. In a centrifugal ore separator, a suitable revolving frame, means for revolving said frame, vessels carried by said frame, supply passages opening into said vessels, and discharge passages communicating with said vessels between said supply passages and the axis of rotation of said frame. 6th. In a centrifugal ore separator, a suitable revolving frame, means for revolving said frame, vessels transversely pivoted in said frame, means for preventing said vessels from swinging on their pivots, stirrers in said vessels, means for actuating said stirrers, and supply and discharge passages for said vessels. 7th. In a centrifugal ore separator, a suitable revolving frame, means for revolving said frame, vessels transversely pivoted in said frame, means for preventing said vessels from swinging on their pivots, stirrers in said vessels, means for actuating said stirrers, supply passages opening into said vessels, and discharge passages communicating with said vessels between said supply passages and the axis of rotation of said frame.

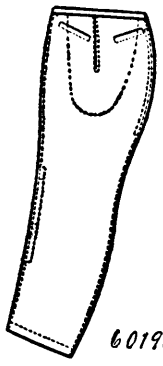
No. 60,192. Liquid Fuel Burner.
(*Bruleur de combustible liquide.*)



James Des Brisay, New Westminster, British Columbia, Canada, 1st June, 1898; 6 years. (Filed 10th February, 1898.)

Claim.—1st. In a liquid fuel burner, a main section A, having a series of ducts for receiving fuel on one side and air on the other, a vaporizing chamber 21 secured over the outlets of the air and fuel ducts about the centre of the said frame A, a cylindered body arranged within said chamber 21, a pipe to conduct air into a chamber in said cylinder, and a pipe to conduct the same back to the said section A, and to eject the said air into a vaporizing chamber 21, and a contracted outlet at the opposite end of said chamber, as set forth. 2nd. In a liquid fuel burner, a main section A, having a series of ducts for passing fuel and air therethrough, a vaporizing chamber 21 secured over the escape ducts from the said main section, means for passing the air through a heated surface before coming to the said escape duct to the vaporizing chamber, and means for volatilizing the oil before being brought in contact with the air in said vaporizing chamber, as set forth. 3rd. In a liquid fuel burner, a main frame A, ducts arranged therethrough for the passage of air, a vaporizing chamber secured about the centre of said frame A, a cylinder having an air chamber within the said vaporizing chambre, an air duct 11 leading from the outer side of said frame A, to the chamber within the said cylinder and back to said frame A, and to the vaporizing chamber, a fuel passage 26 leading through the opposite side of the frame A, said passage being spirally coiled around the exterior of the vaporizing chamber and back through a duct in said frame A, and to the chamber 21, as set forth. 4th. In a burner, a main frame A having a central cylindrical position 21 detachably secured thereto, a burner nozzle 2 lb., a cylinder within the said chamber 21, a chamber within said cylinder, a pipe leading from the outer side of said chamber to a duct on the outer side of frame A, and a pipe connecting the inner end of the said chamber with the air passage in the frame A, which connects with the vaporizing chamber 21, a means for passing liquid fuel through a pipe around the exterior of the chamber 21, and back to the said frame A and to within the said chamber 21, whereby the said fuel will be votalized before coming in contact with the air, which air will eject it through the nozzle 2 lb. to the outer atmosphere. 5th. In a burner for the purposes set forth, a frame A having an inlet duct at one side for air and an inlet duct for fuel at the other, means for forcing said air and fuel together under air pressure and ejecting the same to an ignited flame, as and for the purposes specified. 6th. A main frame A, having ducts therethrough, a valve for controlling the passage of fuel therein, means for heating said fuel before being ejected therefrom, an air duct arranged to pass through a warming chamber within a vaporizing reservoir and means for passing said air back to the duct in the frame A, suitable handles secured to the oppposite sides of the frame A, and projecting backward, whereby the said device may be manipulated as desired. 7th. In a device of the kind described, a frame A having a duct therethrough,, means for forcing oil or other fuel through such duct to a chamber 21, and means for producing an air pressure in the duct in the frame A, the said chamber 21 secured to and projecting forward from the centre of the frame A, a nozzle 17 projecting from the frame A within the chamber 21, a cylinder 13 within the said chamber, a cone 13^a, on said cylinder directly in front and facing the nozzle 17, for the purposes set forth.

No. 60,193. Trousers. (*Pantalon.*)



Andrew Birkland, Springfield, Illinois, U.S.A., 2nd June, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—The herein-described trousers in their entirety consisting of two legs united by a single seam at the crotch, each of said legs consisting of an outer member shaped in the cutting to conform to the person of the wearer, an inner member shaped in the cutting to form a crotch, also shaped in the cutting to conform to the person of the wearer, said members being united by sewing together the curved edges thereof so as to form seams down the front and the back of each trousers-leg, and tapes sewed in with the seams at the knee and at the thigh of each trousers-leg, as set forth.

No. 60,194. Washing Machine. (*Machine à laver.*)

Fig. 1.

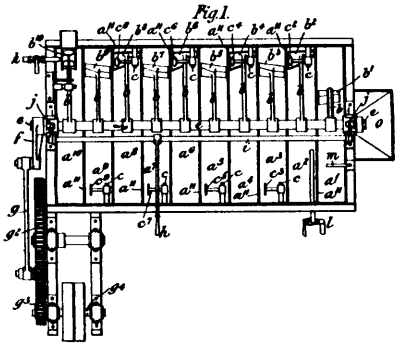
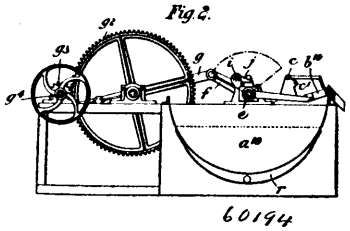


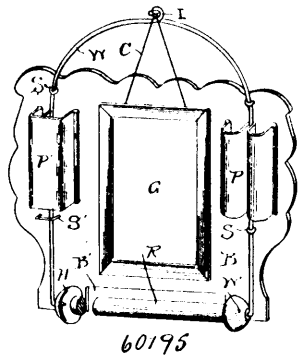
Fig. 2.



Robert Moodie, 41 Alkham Road, Stoke, Newington, London, England, 2nd June, 1898; 6 years. (Filed 17th May, 1898.)

Claim.—1st. A washing, or leaching apparatus consisting of or comprising adjoining cells and scoops, propellers or stirrers provided with means for oscillating them in the said cells, so as to stir, or move, the material being treated, and convey, and discharge, it from cell to cell, substantially as hereinbefore set forth. 2nd. A washing, or leaching, apparatus consisting of or comprising adjoining cells, and scoops, propellers, or stirrers, provided with means, for oscillating them in the said cells, so as to stir, or move, the material being treated, and convey and discharge it from cell to cell, and scrapers, brushes, or the like, for facilitating the discharge of the material from the scoops, or the like, substantially as hereinbefore described. 3rd. In apparatus for washing or leaching a feeding arrangement consisting of a scoop, or the like, moving to and fro in the receptacle for the material to be treated and a device for tipping the scoop to discharge the material into the cell next the said receptacle, substantially as hereinbefore described and illustrated in Figures 5 and 6, of the accompanying drawings. 4th. The arrangement and combination of parts constituting the washing or leaching apparatus substantially as hereinbefore described and illustrated in the accompanying drawings.

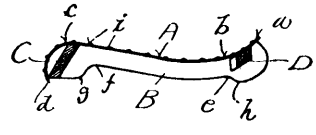
No. 60,195. Towel Rack. (*Porte-serviette.*)



Henry S. Broughton, Stayton, Oregon, U.S.A., 2nd June, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. In a wall cabinet, the combination with a flat back, and a wire of inverted U-shape whose arms are secured to the face thereof and whose bend extends above the back to form a supporting eye, of a pair of upright pockets secured to the face of the back each astride one wire arm so that the latter stands at the transverse centre of the pocket, as and for the purpose set forth. 2nd. In a wall cabinet, the combination with a back, and a wire secured to the face thereof and extending upward to form a supporting bail, of a pocket substantially B-shaped in plan view, the inward central bend thereof being clamped between the wire and back, as and for the purposes set forth. 3rd. In a wall cabinet, the combination with a back, a wire attached to the face thereof and extending upward to form a support, and upright pockets also attached to the face of the back over said wire and having upright partitions of which the wire forms a part, of a towel roller removable carried by the lower ends of the wire, and standing at the lower part of said back, all as and for the purpose set forth. 4th. In a towel rack, the combination with a flat back, upright spring wires having inturned lower ends, and staples over the wires into the back, one of the staples being elongated laterally of and loosely spanning its wire, of a towel roller resing at its ends against the back and having sockets in its extremities into which said inturned ends pass loosely, whereby the springing force of the wires causes the roller to bear at all times, frictionally against said back and yet one of the wires can be removed longitudinally from the socket in the roller, substantially as described. 5th. In a towel rack, the combination with an upright back having its lower edge cut away at the centre to leave two downwardly projecting side feet, and a roller resting at its ends against the face of said feet, of upright wires attached to and clamped against the face of the back at points above the roller and sprung outward from the back below such points of attachment, and journals between their lower ends and the extremities of the roller whereby the latter is born frictionally against said back at its ends only, leaving its centre free as and for the purpose set forth. 6th. In a towel rack, the combination with an upright back having its lower edge cut away at the centre to leave downwardly projecting feet at its sides, and a roller standing across its face and having enlarged heads at its ends resting against the feet, said roller being provided with axial sockets in its extremities, of upright spring wires attached to the back and having inturned lower ends removably entering said sockets, the springing force throwing the heads into frictional contact with the back, as and for the purpose set forth.

No. 60,196. Chair Seat. (*Siège de fauteuil.*)



Fred Albert Dennett, Sheboygan, Wisconsin, U. S. A., 2nd June, 1898; 6 years. (Filed 20th November, 1897.)

Claim.—As a new article of manufacture, the described chair-seat, consisting of a frame comprising the side pieces B B, front piece C, and rear piece D, in combination with the top A, formed of a thin continuous strip of wood, secured to the said side pieces of the frame and brought down over the front piece of the frame, on a rounded line, concealing said front frame-piece, substantially as shown and described.

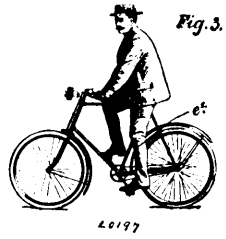
No. 60,197. Trousers. (*Pantalon.*)

John Samuel Fisher, 2 Walpole Street, King's Road, Chelsea, London, England, 2nd June, 1898; 6 years. (Filed 18th May, 1898.)

Claim.—1st. Constructing trousers or breeches, the leg parts of which extend down to feet or ankles, with a flap or opening just

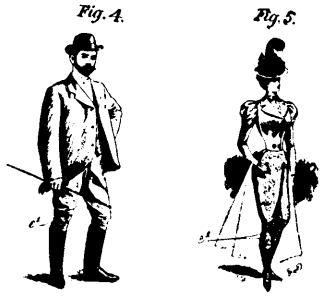
below the knee and provided with means to close said flap or opening tightly around the legs of the wearer, substantially as and for the

Fig. 3.



60197

Fig. 4. Fig. 5.



purposes described. 2nd. In trousers or breeches reaching from the waist down to the feet for men's or women's wear, providing an opening in each leg portion just below the knee by means of a flap such as d, provided with buttonholes therein such as d^1, adapted to be buttoned onto buttons such as e^1, on the under flap e, substantially in the manner and for the purposes hereinbefore described.

No. 60,198. Machine for grinding Bread and Crackers.
(*Machine pour émietter le pain et biscuits.*)

Fig. 1.

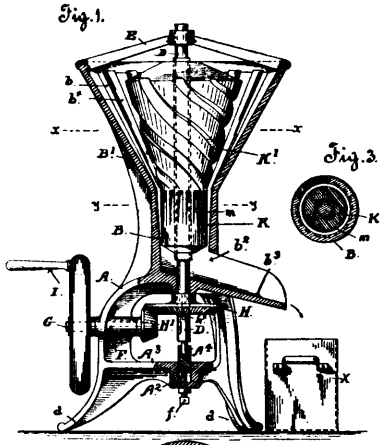
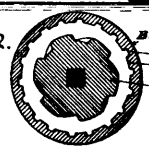


Fig. 3.

Fig. 2.

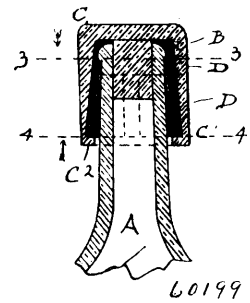


60198

Emma Taylor, San Francisco, California, U.S.A., 2nd June, 1898; 6 years. (Filed 4th May, 1898.)

Claim.—The herein described machine for grinding bread and crackers for culinary purposes, comprising the frame having supporting legs and bearings for the shafts, the inverted hollow conical chamber having an open top and terminating in a cylindrical lower portion with an an outlet opening in one side and a slanting bottom extending beyond said opening, a spirally grooved grinding cone mounted on a central upright shaft in said conical chamber and having a longitudinally grooved cylindrical lower portion, an operating shaft provided with a hand-crank and geared into the upright shaft carrying the grinding cone, and a vertically adjustable box in which the bottom of the said shaft is stepped, substantially as described, to operate as set forth.

No. 60,199. Non-removable Cap for Bottles.
(*Capuchon inamovible pour bouteilles.*)

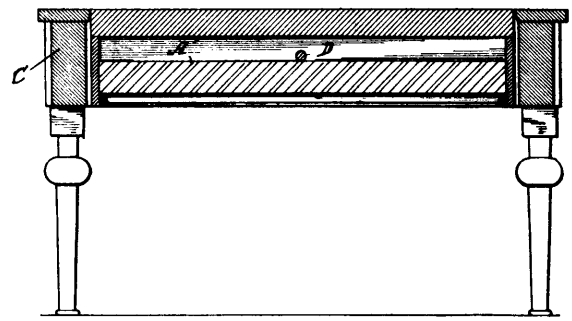


60199

Wallace Clinton Barrett, Portland, Oregon, U.S.A., 2nd June, 1898; 6 years. (Filed 21st April, 1898.)

Claim.—1st. A non-removable frangible cap for bottles, consisting of a cap having a recess in its inner wall, a circular band having spring strips extending downwards, with their ends bent outwardly, said band adapted to rest under the head about the neck of the bottle and having its spring clips engaged in the recess of said cap, substantially as shown and described. 2nd. In a non-removable cap for bottles, a band D having projecting arms d^1 extending downwardly, with their ends inclined outwardly, and a cap C adapted to fit over the top and neck of the bottle, having in its lower inner end a recess C^1 for engaging the ends of the arms d^1, substantially as shown and described. 3rd. The combination with the neck of a bottle, having a head B, a frangible cap C having an inner recess near the lower end of the cap, and the band D having spring arms, extending downwardly and outwardly, said band D being supported at its top by the head B and having the free ends held in the recess C^1, substantially as shown and described.

No. 60,200. Table. (*Table.*)

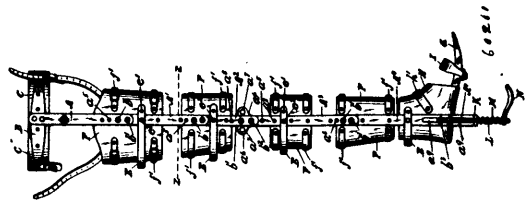


60200

Joseph F. Roman, Chicago, Illinois, U.S.A., 2nd June, 1898; 6 years. (Filed 21st May, 1898.)

Claim.—1st. A reversible table A, revolving on its axis, which can be changed from a dining table to a billiard table, also a pool table, or *vice versa*, instantly. 2nd. The table A, revolving on its axis in socket F, which is equally balanced, when released for reversing it is easily put in position. 3rd. The reversing clamps 6 to hold table in position, and the mode of securing them, and the adjustable screws E for levelling and holding table in proper position.

No. 60,201. Splint. (*Eclisse.*)

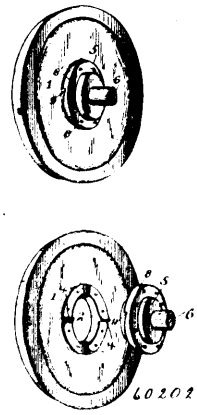


John Boyd, Lucknow, Ontario, Canada, 2nd June, 1898; 6 years. (Filed 20th December, 1897.)

Claim.—1st. A splint composed of adjustable splint sections, to adapt it to limbs of different length, and means for holding and firmly securing the adjacent ends of said splint sections together, at

the position to which they may be adjusted, in combination with the resilient spring bands E, for firmly, and at the same time resiliently holding the opposite splint sections in place, and the foot rest G, secured to the lower sprint sections, substantially as and for the purpose set forth. 2nd. In a splint, the bands F, open at back and front, and means for securely holding the adjacent sides of said bands in place, to permit the splint to be reversed, to adapt it to either leg, substantially as and for the purpose set forth. 3rd. In a splint, the resilient spring bands E, for the purpose of firmly holding and securing the splint sections in place, substantially as and for the purpose set forth. 4th. A splint, composed of adjustable splint sections, in combination with bands F, to adapt it to limbs of any length and size, substantially as and for the purpose set forth. 5th. A splint, composed of splint sections, in combination with the resilient spring bands E and bands F, substantially as and for the purpose set forth. 6th. The splint sections, the resilient spring bands E, and bands F, in combination with the extension A, curved brace B, belt C, and strap D, substantially as and for the purpose set forth. 7th. In a splint, a splint section A^3, provided with a lateral extension a^6, in combination with a splint section A^2, and means for securing said splint sections together at the position to which they are adjusted, by which the angle of flexion is formed at the knee, substantially as and for the purpose set forth. 8th. In a splint, a foot piece G, provided with a counter H, substatntially as and for the purpose set forth. 9th. A splint section A^4, provided with elongated slots a^9, the foot piece G, the counter H, and stirrup J, in combination with the screw L, cross-brace K, spring M, and nut N, substantially as and for the purpose set forth. 10th. The splint section A^4, provided with elongated slots a^9, the resilient spring band E, the foot piece G, counter H, strap I, and stirrup J, in combination with the screw L, cross-brace K, spring M, and nut N, substantially as and for the purpose set forth. 11th. The adjustable splint sections A^1, A^2, A^3 and A^4, the resilient spring bands E, and the bands F, in combination with the foot piece G, counter H, stirrup J, screw L, cross-brace K, spring M, and nut N, substantially as and for the purpose set forth. 12th. The adjustable splint sections A^1, A^2, A^3 and A^4, the resilient spring bands E, the bands F, and the extension A, curved brace B, belt C, and strap D, in combination with the foot-piece G, counter H, stirrup J, screw L, cross-brace K, spring M, and nut N, substantiially as and for the purpose set forth.

No. 60,202. Car Wheel. (*Roue de chars.*)



James Fairfield, Manchester, New Hampshire, John J. Cilley, Deerfield, New Hampshire, U.S.A., 3rd June, 1898; 6 years. (Filed 12th May, 1898.)

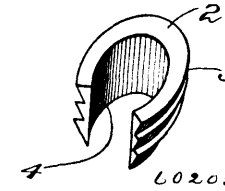
Claim.—1st. A car wheel composed of a body portion and a hub, the former being provided with a central tapering aperture with an integral shoulder surrounding said aperture and provided with projections and bolt holes, and the latter being tapering in form and adapted to the central aperture, and provided with an annular flange having recesses adapted to receive the projections of the body portion, and bolt holes registering with the bolt holes of the body portion, and bolts passing through the annular flange of the hub and the annular shoulder of the wheel, substantially as set forth. 2nd. In combination with the body of a wheel or outer portion having projections about a central aperture, of a hub having a portion adapted to fit said aperture, and provided with an annular flange having recesses adapted to receive projections, and bolts passing through the annular flange and the body of the wheel, together with an axle to which the hub is attached, for the purpose set forth.

No. 60,203. Heel and Sole Protector.

(*Protecteur de semelles et talons.*)

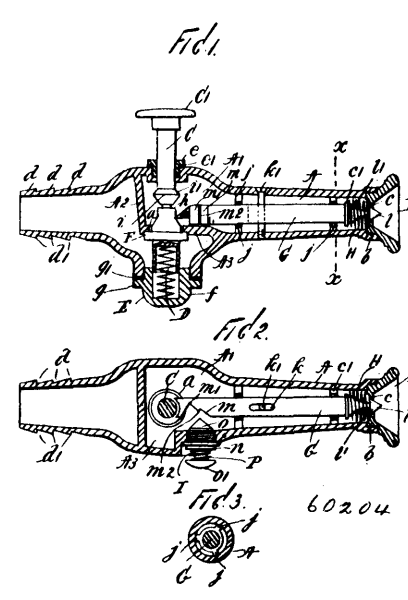
The Sanford Manufacturing Company, Bouton, assignee of Nelson H. Tucker, Newton, both in Massachusetts, U.S.A., 3rd June, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—1st. A heel or sole protector consisting of a strip bent to enclose a part of the material into which it is driven, having a wedge shaped entering edge and thereby adapted to produce the incision into which it is driven to enable it to be driven into a heel or sole



from the exterior thereof and formed a long the surface of the protector with inclined projections the upper portions of which constitute barbs or shoulders which engage with the leather when the protector is set and hold it from retraction, the protector not exceeding in its thickness at the shoulders or barbs chat of the wear-resisting edge or thread, substantially as set forth. 2nd. A heel or sole protector consisting of a strip bent to enclose a part of the material into which it is driven, having a wedge-shaped entering edge and thereby adapted to produce the incision into which it is driven, to enable it to be driven into a heel or sole from the exterior thereof, having a thickened wear-resisting edge or thread, and provided intermediate its width with a longitudinally extending shoulder, the protector not exceeding in its thickness at the shoulder that of the said wear resisting edge or thread, the said shoulder operating to prevent the withdrawal of the protector, substantially as set forth.

No. 60,204. Nozzle. (*Lance.*)

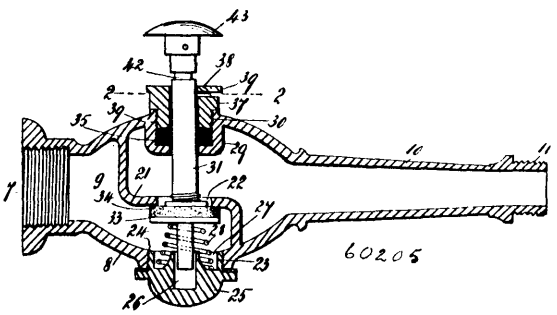


Edwin Ferris, Mont Clair, New Jersey, assignee of Henry Nicholsburg, New York City, U.S.A., 3rd June, 1898; 6 years. (Filed 5th March, 1898.)

Claim.—1st. In a nozzle the combination with a valve adapted to open and close the same and a depressible plunger arranged to actuate said valve, said plunger being normally raised, of means for holding said plunger in the depressed position and a button engaging said holding means and adapted when pressed to release the plunger therefrom, substantially as described. 2nd. In a hose-nozzle the combination of a depressible rod or plunger journalled therein, carrying a valve and normally raised, means for wholly opening the mouth of the nozzle, means for causing said mouth to spray, means upon the rod whereby the depression thereof actuates said opening and spraying means, and means for restoring said rod and nozzle to the normal position. 3rd. In a hose-nozzle the combination of a horizontally-movable spring actuated bar supported therein, a conical head upon the end of said bar, adapted when the same is retracted to open the mouth of the nozzle, when projected to cause the same to spray, a single rod adapted to project and permit the retraction of said bar and carrying a valve and means for releasing said bar and rod from engagement. 4th. In a hose-nozzle, the combination of a horizontally movable bar mounted therein, a conical head upon the end of the same, adapted when retracted to open the mouth of the nozzle, and when projected to cause the same to spray, a spring maintaining said bar in the normal position whereby the head is within the mouth, a depressible rod or plunger carrying a valve, normally raised and engaging with the bar, means upon said rod whereby the depression thereof permits the retraction

of said bar, and further depression thereof projects the same, and means for releasing said rod and bar from engagement. 5th. In a hose-nozzle the combination of a horizontally-movable bar mounted therein, a conical head upon the end of said bar, adapted when retracted to open the mouth of the nozzle, and when projected to cause the same to spray, a spring surrounding the bar to force the same rearwardly, a depressible rod or plunger mounted in the nozzle and carrying a valve, a spring normally raising said plunger and closing the valve, said plunger being in contact with the end of the bar, having a shoulder thereon, and reduced in diameter to permit said bar to retract when the plunger is depressed, and provided with a conical or bevelled projection to project said bar when the plunger is further depressed and means for projecting said bar beyond the greatest diameter of the plunger to release said plunger therefrom, and restore the nozzle to its normal position. 6th. In a hose-nozzle the combination of a horizontal bar mounted therein to be horizontally movable and decreased in diameter at the end, a conical head upon said end, adapted when retracted to open the mouth of the nozzle, and when projected to cause the same to spray, a spring surrounding said bar to force the same rearwardly, said bar being bevelled upon its upper face at the rear end, and inclined or bevelled upon its side, a depressible rod or plunger mounted in the centre of the nozzle and carrying a valve, a spring beneath said plunger to normally raise the same and close the valve, said plunger being in contact with the end of the bar, provided with a shoulder and reduced in diameter to permit the same to retract when the plunger is depressed, a conical or bevelled projection upon said plunger, adapted to engage the end of the bar when said plunger is further depressed and project the same, a rod sliding in the side of the nozzle carrying a conical or bevelled head, adapted to engage the bevelled side portion of the bar to project the same beyond the greatest diameter of the plunger to release said plunger from the bar, and restore the nozzle to its normal position. 7th. In a hose-nozzle the combination of an angular integral partition extending through the centre of the same, and having a horizontal extension forming a valve seat, a plurality of annular bevelled flanges or projections upon the rear end of the nozzle to form shoulders, whereby a hose may be frictionally secured upon the end thereof, a detachable flaring mouth screwed into the forward end of the nozzle, a depressible rod or plunger mounted vertically in the nozzle, and normally raised by a spring beneath the same, a valve mounted upon said rod beneath the valve-seat, whereby said valve is normally closed, means for securing the plunger in the depressed position and the valve open, and means for releasing the same.

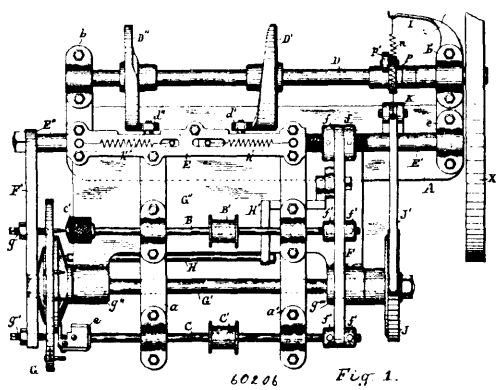
No. 60,205. Nozzle. (*Lance.*)



Edwin Ferris, Mont Clair, New Jersey, assignee of Henry Nicholsburg, New York City, both in the U.S.A., 3rd June, 1898; 6 years. (Filed 5th March, 1898.)

Claim.—1st. A water nozzle, comprising a body portion, in which is formed an enlarged chamber, and one end of which is provided with means for securing it to a flexible tube or pipe and the other end with an extension to which the discharge nozzle proper is secured, said chamber being provided centrally thereof with a longitudinal partition-plate which is provided with a central opening through which passes a spring-operated shaft which is provided with a valve which is adapted to close said opening, said shaft being projected through an opening in said chamber at one side thereof, which is closed by a screw-threaded plug in which is formed a transverse slot or groove in which is mounted a spring-operated lever, and said shaft being provided with an annular groove in connection with which said lever operates, substantially as shown and described. 2nd. A nozzle, comprising an enlarged body portion, at one end of which is a head by means of which the nozzle may be connected with a tube or pipe, the other end of said body portion being provided with an extension adapted to receive a discharge nozzle proper, said enlarged body portion being provided with a chamber in which is a partition-plate provided with a central opening, said body portion being also provided at one side with an opening which is closed by a screw-threaded plug in which is formed a cavity or recess, and at the opposite side with a tubular inwardly directed casing, and a spring-operated shaft passing through said chamber, one end of which enters the cavity or recess in said screw-threaded plug and the other end of which passes through said tubular casing and through a screw-threaded plug mounted therein, said last-named screw-threaded plug being provided at one side with a transverse slot or groove in which is placed a spring-operated lever, and said shaft being provided with an annular groove in connection with which said lever operates and with a valve by which the opening in the partition-plate is closed, substantially as shown and described. 3rd. A discharge nozzle, comprising an enlarged portion 16, bell-shaped mouth 17, flange 18, bar 19, and disc 20, substantially as and for the purpose set forth. 4th. A nozzle, provided with an enlarged body portion, in which is formed a partition which is provided with a central opening, and a transversely-movable spring-operated shaft which is provided with a valve adapted to close said opening, and means for locking said shaft and said valve in an opening position, consisting of a screw-threaded plug mounted in one side of the body portion of the nozzle through which said shaft passes, said plug being provided with a spring-operated lever, and said shaft with a groove in which said lever operates, substantially as shown and described.

No. 60,206. Trimming and Drilling Machine.
(*Machine à forer et ajuster.*)



The Morse-Keefer Cycle Supply Company, assignee of Arthur Jacob Morse, all of Salisbury, Connecticut, U.S.A., 3rd June, 1898; 6 years. (Filed 9th March, 1898.)

Claim.—1st. In a nipple finishing machine, the combination of a disc provided with a circular series of apertures to hold nipples, means to rotate the disc intermittently, a longitudinally movable bar a guide-way for the bar, the driving shaft, a cam-wheel on the driving shaft to move the bar, spindle adapted to be reciprocated in bearings by said bar, a tool on the end of the spindle to operate on the nipples, means to rotate the spindle, a second longitudinally movable bar in a guideway, a cam on the driving shaft to move the bar, and an arm carried by the said second bar and extending on the opposite side of the disc, as set forth. 2nd. In a nipple finishing machine, the combination of a disc provided with a concentric series of apertures to hold the nipples, a shaft for the disc, a ratchet-wheel on the shaft, a pawl engaging the ratchet-wheel, the lever K, connected to the pawl, a ball crank lever pivoted to the frame and to the latter lever, one arm of the bell crank lever serving as a detent for the ratchet-wheel, a contact carried on the lever K, for engagement with the other arm of the bell crank lever, a cam on the driving shaft to engage the lever K, a longitudinally movable bar, a guide way for the bar, the driving shaft, a cam-wheel on the driving shaft to move the bar, a spindle adapted to be reciprocated in bearings by said bar a chuck on the end of the spindle to hold a tool to operate upon the nipples, and a pulley on the spindle for rotating the same, as set forth. 3rd. In a nipple finishing machine, the combination of a disc provided with a concentric series of apertures, a shaft for the disc, a ratchet-wheel on the shaft, a pawl engaging the ratchet-wheel, the lever K, a bell crank lever pivoted to the frame at its angle and provided with a projection connected to the lever K, and a detent on one of its arms, an adjustable contact on the lever K, to engage the other arm of the bell crank lever, a roller carried on a projection extending from the driving shaft to operate the lever K, a longitudinally movable bar, a guide-way for the bar, the driving shaft, a cam-wheel on the driving shaft to move the bar, a spindle adapted to be reciprocated in bearings by said bar, a chuck on the end of the spindle to hold a tool to operate upon the nipples, and a pulley on the spindle for rotating the same, as set forth. 4th. In a nipple finishing machine, the combination of a disc provided with apertures to hold the nipples, means to rotate the disc intermittently, a reciprocating bar carrying a pair of parallel rotable spindles parallel with the axis of the disc, a driving shaft, a cam-wheel on the driving shaft to move the said bar, cutters on the ends of the spindles to operate on the nipples, and means to drive spindles, as set forth. 5th. In a nipple finishing machine, the combination of a disc provided with apertures to hold the nipples, means to rotate the disc intermittently, a reciprocating bar carrying a pair of parallel rotable spindles parallel with the axis of the disc, a driving shaft, a cam-wheel on the driving shaft to move the said bar, cutters on the ends of the spindles to operate on the nipples, and the means to drive the spindles, a second longitudinally

movable bar in a guide-way, a cam-wheel on the driving shaft to move the bar, and an arm carrid by the said second bar and extending on the opposite sides of the disc, as and for the purpose described. 6th. In a nipple finishing machine, the combination, of a disc provided with a circular series of apertures to hold the nipples, a shaft for the disc to turn in bearings, a ratchet-wheel on the shaft, a pawl engaging the ratchet-wheel, a cam on the driving shaft to operate the pawl, a detent for the ratchet-wheel, a longitudinally movable bar, a guide-way for the bar, the driving shaft, a cam-wheel on the driving shaft to move the bar, a spindle adapted to be reciprocated in bearings, a bar connecting the spindle with the said longitudinally movable bar, means for adjusting the spindle relatively to the said movable bar, a chuck on the end of the spindle to hold the tool to operate upon the nipples, and suitable means for driving the spindle, substantially as described and shown. 7th. In a nipple finishing machine, the combination of a disc provided with a concentric series of apertures, a shaft for the disc, a rachet-wheel on the shaft, a pawl engaging the ratchet-wheel, a cam carried by the driving shaft for operating the pawl, means to hold the nipple in the disc while it is operated upon, a longitudinally movable bar, a guide-way for the bar, the driving shaft, a cam-wheel on the driving shaft to move the bar in one direction, a spring to retract the bar, a spindle reciprocated in bearings by the said bar, a chuck on the end of the spindle to hold a tool to operate upon the nipples, a pulley on the spindle for rotating the same, a longitudinally movable rod held parallel with the axis of the disc in a bearing, and a connecting bar between the latter and the longitudinally movable bar, as and for the purpose described. 8th. In a nipple finishing machine, the combination with the frame and its projections and bearings, a driving shaft carrying a driving pully and a pair of cam-wheels, a guide-way on the frame, a pair of longitudinal y movable bars in the guide-way to be operated by said cam-wheels, a disc provided with a concentric series of apertures for holding the nipples, a ratchet-wheel on the shaft of the disc, a pawl and detent for the ratchet-wheel, a cam on a sleeve on the driving shaft to operate the pawl and detent, a bar on one side of the disc provided with screws to bear upon the heads of the nipples when they are operated upon, a pair of spindles having pulleys thereon and chucks to hold tools for operating on the nipples, said spindles being parallel with each other an the opposite side of the disc from the bar carrying the screws, an arm connected to the said spindles and adjustably mounted on one of the sliding bars, and a rod connected to the said arm and movable therewith to remove the nipples from the disc after they have been operated upon, as set forth. 9th. In a nipple finishing machine, the combination with the frame and its projections and bearings, a driving shaft carrying a driving pulley and a pair of cam-wheels, a guide-way on the frame, a pair of longitudinally movable bars in the guide-way to be operated by said cam-wheels, a disc provided with a concentric series of apertures for holding the nipples, a rachet-wheel on the shaft of the disc, a pawl and detent for the ratchet-wheel, a cam on the sleeve on the driving shaft to operate the pawl and detent, a bar one side of the disc provided with screws to bear upon the heads of the nipples when they are operated upon, a pair of spindles having pulleys thereon and chucks to hold tools for operating on the nipples, said spindles being parallel with each other and on the opposite side of the disc from the bar carrying the screws, and unsuitable means for removing the nipples from the disc successively after they have been operated upon, substantially as shown and described.

No. 60,207. Slotting and Slabbing Machine.

(Machine à mortaise et rotation.)

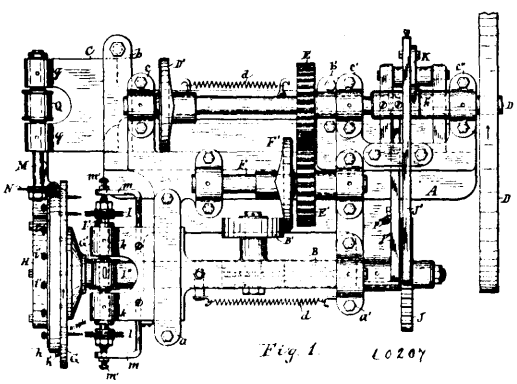


Fig 1 60207

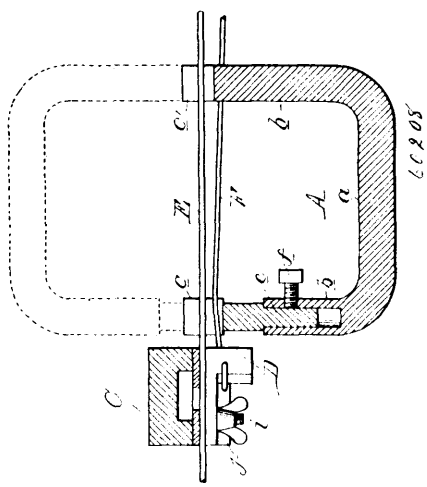
The Morse-Keefer Cycle Supply Company, assignee of Arthur Jacob Morse, all of Salisbury, Connecticut, U.S.A., 3rd June, 1898; 6 years (Filed 9th March, 1898.)

Claim.—1st. In a slabbing machine, the combination of a disc provided with chambers to hold the articles to be slabbed, means to rotate the disc intermittently, a reciprocating bar carrying a spindle on one end and extending parallel with a face of the disc, a pair of cutters on each end of the spindle to operate upon two articles, and means to drive the spindle, as set forth. 2nd. In a slabbing machine for nipples for bicycle wheels, the combination of a disc provided with chamber to hold the nipples, means to rotate the disc intermittently, a longitudinally reciprocating bar carrying a rotatable spindle extending parallel with the face of the disc, two pairs of cutters on the spindle to operate simultaneously on a pair of nipples, and suitable means to operate the bar and drive the spindle, as set forth. 3rd. In a slotting and slabbing machine for nipples, the combination of a disc provided with chambers to hold the nipples, means to rotate the disc intermittently, a longitudinally reciprocating bar carrying a rotatable spindle extending parallel with a face of the disc, two pair of cutters on the spindle to slab simultaneously a pair of nipples, suitable means to operate the bar, a second reciprocating bar carrying a spindle on the opposite side of the disc, a cutter on the latter spindle to slot the heads of the nipples, and means to operate the spindles, as set forth. 4th. In a slotting and slabbing machine for nipples, the combination of a disc provided with chambers to the hold the nipples, means to rotate the disc intermittently, a longitudinally reciprocating bar carrying a rotatable spindle extending parallel with a face of the disc, two pairs of cutters, on the spindle to slab simultaneously a pair of nipples, suitable means to operate the bar, a second reciprocating bar carrying a spindle on the opposite side of the disc, a cutter on the latter spindle to slot the heads of the nipples, a tension plate to retain the nipples in the disc while they are being operated upon, and means to drive the spindles, as set forth. 5th. In a slotting and slabbing machine for nipples, the combination of a disc provided with chambers to hold the nipples, means to rotate the disc intermittently, a longitudinally reciprocating bar carrying a rotatable spindle extending parallel with a face of the disc, two pair of cutters on the spindle to slab simultaneously a pair of nipples, suitable means to operate the bar, a second reciprocating bar carrying a spindle on the opposite side of the disc, a cutter on the latter spindle to slot the heads of the nipples, a tension plate to retain the nipples in position in the disc while they are slabbed, means to drive the spindles, and a pusher connected with one of the reciprocating bars to remove the nipples from the disc, as set forth. 6th. In a slotting and slabbing machine for nipples, the combination of a disc provided with chambers to hold the nipples, me ns to rotate the disc intermittently, a longitudinally reciprocating bar carrying a rotatable spindle extending parallel with the face of the disc, two pair of cutters on the spindle to slab simultaneously a pair of nipples, suitable means to operate the bar, a second reciprocating bar carrying a spindle on the opposite side of the disc, a cutter on the latter spindle to slot the heads of the nipples, a curved tension plate to retain the nipples in position in the disc while they are slabbed, means to drive the spindles, and a pusher to remove the nipples from the disc, consisting of a longitudinally movable rod in a guideway, said rod being parallel with the shaft of the disc and movable in the path of the nipples, and a connecting bar between the said rod and one of the said reciprocating bars, as set forth. 7th. In a slabbing machine for nipples, the combination with the frame, of a disc provided with a circular series of apertures to hold the nipples, a shaft for the disc carrying a ratchet-wheel, a driving-shaft, a shaft carrying a cam-wheel parallel with the driving-shaft and geared to the latter, a cam on the driving-shaft, a pawl to rotate the ratchet-wheel operated by the cam on the driving-shaft, a longitudinally movable bar operated by the said cam-wheel, a spindle carried by the bar, a pair of cutters on the spindle, and a pulley on the spindle, substantially as described and shown. 8th. In a slabbing machine for nipples, the combination with the frame, of a disc provided with a circular series of apertures to hold the nipples, a shaft for the disc carrying a ratchet-wheel, a driving-shaft, a shaft carrying a cam-wheel parallel with the driving-shaft and geared to the latter, a cam on the driving-shaft, a pawl to rotate the ratchet-wheel operated by the cam on the driving-shaft, a longitudinally movable bar operated by the said cam-wheel, a spindle carried by the bar parallel with a face of the disc, a pair of separated cutters on each end of the spindle, and a pulley on the spindle between the bearings, substantially as described and shown. 9th. In a slabbing machine for nipples, the combination with the frame, of a disc provided with a circular series of apertures to hold the nipples, a shaft for the disc carrying a ratchet-wheel, a driving shaft, a shaft carrying a cam-wheel parallel with the driving-shaft and geared to the latter, a cam on the driving-shaft, a pawl to rotate the ratchet-wheel, a bell-crank lever having an arm for engagement with the cam, and an arm connected with a spring, the first-mentioned arm being connected with the said pawl, a longitudinal movable bar operated by the said cam-wheel, a spindle carried by the bar, and a pair of cutters on the spindle, substantially as and for the purpose described. 10th. In a slabbing machine for nipples, the combination with the frame, of a disc provided with a circular series of apertures to hold the nipples, a shaft for the disc carrying a ratchet-wheel, a driving-shaft, a shaft carrying a cam-wheel parallel with the driving-shaft and geared to the latter, a cam on the driving-shaft, a pawl to rotate the ratchet-wheel, a bell-crank lever having an arm for engagement with the cam and an arm connected with a spring, the first-mentioned arm being connected with the said pawl, a detent for the ratchet-wheel, a cam on the driving-shaft to operate the detent, a longitudinally movable bar operated by the said cam-

wheel, a spindle carried by the bar, and a pair of cutters on the spindle, substantially as described and shown. 11th. In a machine of the class described, the combination with the frame, of a disc provided with a circular series of apertures to hold the nipples, a segment of a disc supported stationary near one face thereof, a curved groove in the segment in the path of the nipples, a pair of curved plates in the groove, one of which is adapted to bear upon the heads of the nipples in the disc, a rubber strip between the two plates, adjusting screws passing through the segment and bearing on one of the curved plates, means to cut the nipples while they are held in the disc, and means to intermittently rotate the disc, substantially as described and shown. 12th. In a machine of the class described, the combination with the frame, of a disc provided with a circular series of apertures to hold the nipples, means to rotate the disc intermittently, a driving-shaft, a cam-heel on the said shaft, a longitudinally movable bar operated by the cam-wheel, a spindle carried in bearings on one end of the bar, a cutter on the spindle to slot the heads of the nipples, and a pulley on the spindle, substantially as described and shown. 13th. In a machine of the class described, the combination with the frame, of a disc provided with a circular series of apertures to hold the nipples, means to rotate the disc intermittently, a driving-shaft, a cam-wheel on the said shaft, a longitudinally movable bar operated by the cam-wheel, a spindle carried in bearings on one end of the bar, a cutter on the spindle to slot the heads of the nipples, a bifurcated spring plate secured to the frame and adapted to bear upon the head of the nipple while it is being slotted, as and for the purpose described. 14th. The combination with the bar B, the pair of bearings at one end, the pulley between the bearings, a bar extending through the pulley diametrically, a divided spindle in the bearings having its inner ends passing on opposite sides of the bar in the pulley, cutters on the outer ends of the pulley, and angular adjustable arms carried by the bar B, to retain the spindle in the bearings, substantially as described and shown.

No. 60,208. Wire Weaving Machine.

(*Machine à tisser le fil de fer.*)



Charles F. Farrar, Howell, Michigan, U.S.A., and Robert Paddon, Windsor, Ontario, Canada, 3rd June, 1898; 6 years. (Filed 9th May, 1898.)

Claim.—1st. In a tool for weaving stay wires, a curved bar or frame having two guide slots for engagement with a line of wire, one in the plane of the frame and the other in a plane inclined thereto at an angle. 2nd. In a tool for weaving stay wires, the open frame A, formed with a central portion *a*, and sides *b*, b^1, having the slots *c*, c^1, inclined at an acute angle towards each other. 3rd. In a tool for weaving stay wires, the open frame A, formed with a central portion and two side bars having slots in the ends for engagement with the line wire, one of said bars being provided with an adjustable portion in which the slot is formed. 4th. In a tool for weaving stay wires, the combination of the frame A, formed with side bars *b*, b^1, the adjustable piece *d* in the end of the side bar *b*, and having the slot *c*, the slot c^1 in the end of the side bar b^1, and the slot *g* on the side bar b^1.

No. 60,209. Water Heating and Feed Cooking Apparatus. (*Appareil à chauffer l'eau et cuire les aliments.*)

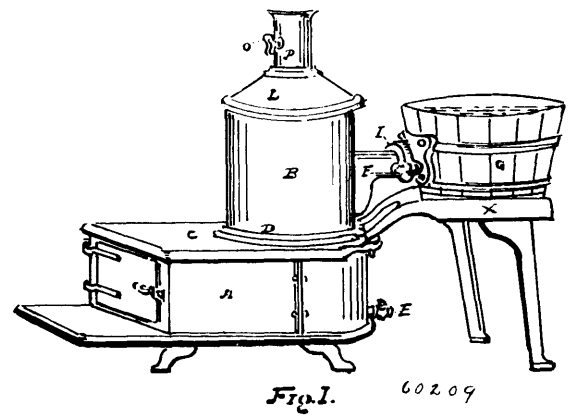


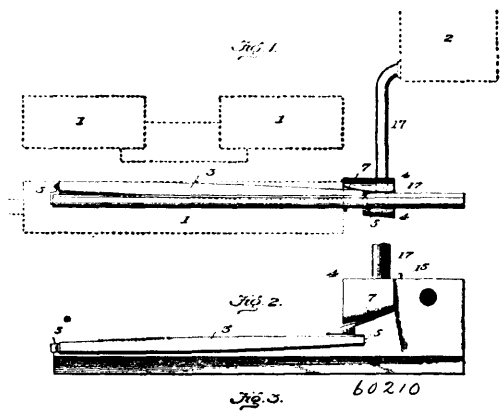
Fig. 1.

James Frederick Vigar, assignee of Peter Marshall, both of Amherstburg, Ontario, Canada, 3rd June, 1898; 6 years. (Filed 18th March, 1898.)

Claim.—The combination of a cooking vessel with duplex connections, suitably attached to a double shell boiler inserted in a specially prepared furnace, all substantially as set forth.

No. 60,210. Cigar Header and Wrapper Stretcher.

(*Machine à cigares.*)



The Bunn Cigar Rolling Machine Co., assignee of John Bunn, all of Binghampton, New York City, U.S.A., 3rd June, 1898; 6 years. (Filed 9th March, 1898.)

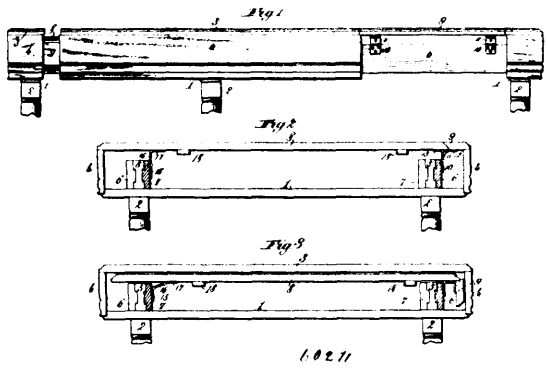
Claim.—1st. In a cigar machine having a stretcher plate, a wrapper stretcher consisting of a tapering journalled roller on the inner edge of said plate, said roller being rotated by frictional contact with the wrapper as the wrapper is fed over the roller into the machine, substantially as and for the purpose set forth. 2nd. In a cigar machine, a wrapper stretcher consisting of a journalled roller adapted to be rotated by friction with the wrapper, as the wrapper is fed over it into the machine, said roller tapering in each direction from its longitudinal centre, substantially as and for the purpose set forth. 3rd. In a cigar machine, the combination with a cigar header having a tip forming chamber and a recess communicating with said chamber, of a conical roller journalled to rotate in said recess with its periphery forming a portion of the interior wall of the chamber, said roller being yieldingly supported, substantially as and for the purpose set forth. 4th. In a cigar machine, the combination with a cigar header, having a tip forming chamber and a recess communicating with said chamber, a pintle, the shank of which is pivoted to the header, a spring seated in the header and engaging the outer portion of the shank beyond its pivot, a conical roller supported on the pintle to rotate in said recess, the periphery of said roller forming a portion of the interior wall of the tip forming chamber, substantially as and for the purpose set forth.

No. 60,211. Extension Table. (*Table à rallonge.*)

The Smith Table Company, assignee of Charles Barnabas Smith, all of Painted Post, New York, U.S.A., 3rd June, 1898; 6 years. (Filed 11th May, 1898.)

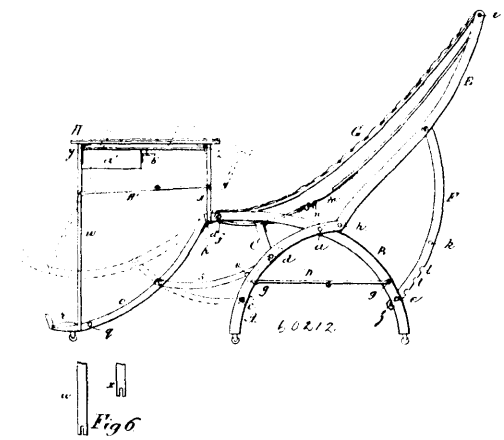
Claim.—1st. In an extension table, the combination with the table frame, the longitudinal slides, the stationary top and the skirting, of a vertically adjustable extension leaf having a drop leaf at its end, hinges connecting the said extension leaf and drop leaf to the longi-

tudinal slides of the table, said hinges being each composed of a number of leaves adapted and arranged to raise and lower the exten-



sion leaf of the table in a direction of movement transversely to the table top, and means for supporting the said drop leaf, substantially as described. 2nd. An extension table, the combination with the table frame, the longitudinal slides, the stationary top, the skirting, and a vertically adjustable extension leaf adapted to be raised and lowered in a direction of movement transversely to the table top, of a drop leaf for one of said extension leaves, hinges composed of three leaves for connecting the extension leaf of the table with the inner side of the longitudinal slides on one side of the table, and four leaf hinges for connecting the said extension leaf and its drop leaf with the outer side of the longitudinal slides on the other side of the table, said four leaf hinges constituting also the means for connecting the extension leaf and its drop leaf, substantially as described. 3rd. In an extension table, the combination with the table frame, the longitudinal slides, the stationary top and the skirting, of an extension leaf adapted and arranged to be raised and lowered in a direction of movement transversely to the table top, hinges connecting the said extension leaf to the longitudinal slides of the table, said hinges being each composed of a number of leaves adapted to impart a longitudinal movement to the extension table leaf in raising and lowering it, a drop leaf at the end of the said extension leaf, and means for supporting the raised drop leaf, substantially as described. 4th. In an extension table, the combination with the table frame, the longitudinal slides, the stationary top and the skirting, of a vertically adjustable extension leaf provided with a drop leaf, hinges composed of more than two leaves attached to the longitudinal slides of the table and adapted to lower, raise and support the said extension leaf, and means for supporting the lifted drop leaf, substantially as described.

No. 60,212. Chair. (*Fauteuil.*)

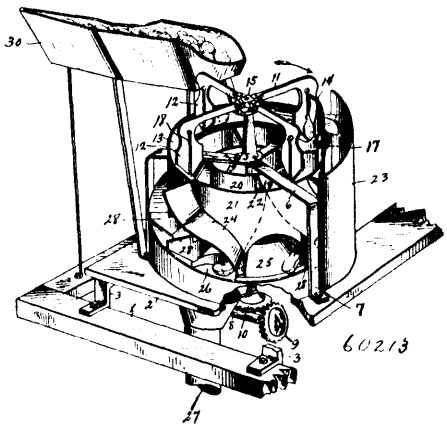


John Will Cummins and Oliver Jenison Brown, both of Hamilton, Ontario, Canada, 3rd June, 1898; 6 years. (Filed 13th May, 1898.)

Claim.—1st. In a folding, reclining and table chair, the front and rear legs bent and arched to about a quarter circle, crossed and pivoted together, and connected with four rungs, the rear leg extending a distance out in front of where they cross, braces hinged to the outer side of said extensions having forked ends to impinge on a rung of the front legs to strengthen the said extensions and adjustable back frame, and curved braces attached thereto, flexible detachable seat and back rest, a projecting curved frame, carrying a foot rest, hinged to the front ends of the rear legs, and capable of height adjustment, a table adjustably fitted on the frame of the foot rest and front end of the rear legs, so as to be horizontal or on an incline, by elevating the outer ends of the foot rest, joint ends secured to the front and rear legs to prevent them from spreading and allow them to fold, all substantially as and for the purpose specified. 2nd. In a folding and reclining chair, a detachable flexible seat and back rest supported by rungs of the legs and reclining frame, the ends secured by straps and buckles, lacings or otherwise, by which it can be easily and quickly removed for renewal, cleaning, or to enable the chair to be folded, substantially as specified.

No. 60,213. Potato Cutter and Planter.

(*Semoir et tranche patates*)



Frederick D. Bell and Frank J. Nelson, both of Hornellsville, New York, U.S.A., 3rd June, 1898; 6 years. (Filed 16th May, 1898.)

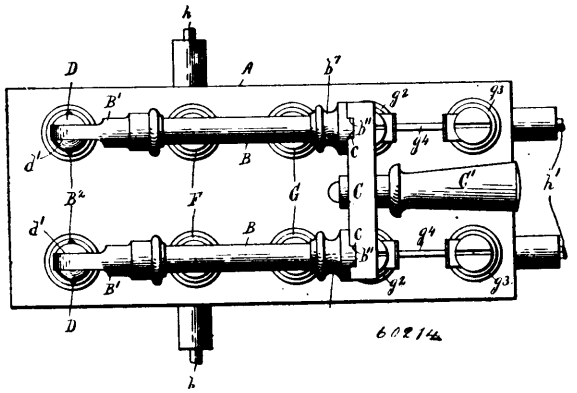
Claim.—1st. The combination of a dropper, a circular trough discharging into the dropper, and a series of hands rotatably mounted and adapted to sweep the trough. 2nd. The combination of a circular trough having a discharge-opening therein, a radially-arranged series of rotating chutes or pockets, and a series of hands secured to the divisions between the series of chutes, adapted to sweep the trough. 3rd. The combination of a circular trough having a discharge-opening therein, a radially-arranged series of chutes or pockets, the division-walls of which extend downwardly and are inclined rearwardly, and a series of hands secured to the division-walls, adapted to sweep the trough. 4th. The combination of a circular trough having a discharge-opening therein, an inner and outer series of rotating chutes or pockets, disposed above the trough, both the inner and outer series of pockets discharging into said trough, and means for sweeping the trough. 5th. The combination of a circular trough, an inner and outer series of pockets rotatingly mounted and disposed above the trough, the inner series of pockets discharging vertically and outwardly into the trough, and the outer series of pockets discharging vertically and rearwardly into the trough, and means for sweeping the trough. 6th. The combination of a segmental fed-trough, a series of rotating hands adapted to sweep said trough, and means for discharging or dropping the potato or other seed fed into said trough. 7th. The combination of a feed-trough, a series of hands adapted to traverse said trough, and a knife located at the discharge end of the trough. 8th. The combination of a segmental trough, a series of rotative arms adapted to traverse said trough, a vertical knife secured to the discharge end of the trough, and a vertical apron secured to the rear edge of the knife. 9th. The combination of a feed-trough, a series of hands adapted to traverse said trough, a vertical knife secured to the discharge end of the trough, each of the hands being vertically slitted to straddle or pass over the knife. 10th. The combination of a segmental trough, a series of rotative arms adapted to sweep said trough, a series of chutes rotatively mounted below said segmental trough, a circular trough disposed below the chutes, and having a discharge-opening, and a series of hands moving with the chutes, and adapted to sweep the circular trough. 11th. The combination of a segmental trough, a stationary knife, a series of rotative arms adapted to sweep said trough, a series of chutes or pockets below the segmental trough, a circular trough having a discharge-opening, a series of hands adapted to sweep the circular trough, the hands of the feed trough, the hands of the circular trough and the series of chutes all being mounted for rotation in unison.

No. 60,214. Electric Switch. (*Aiguille électrique.*)

Jessie Lorenzo Hinds, and Huntington Beard Crouse, both of Syracuse, New York, U.S.A., 3rd June, 1898; 6 years, (Filed 5th February, 1898.)

Claim.—1st. In an electric switch, the combination of a base provided with a terminal, a back or support consisting of a slotted tube, and a movable terminal for engaging the former terminal, said movable terminal being removably secured to the back or support, substantially as and for the purpose described. 2nd. In an electric switch, the combination of a base provided with a terminal, a movable terminal for engaging the former terminal, said movable

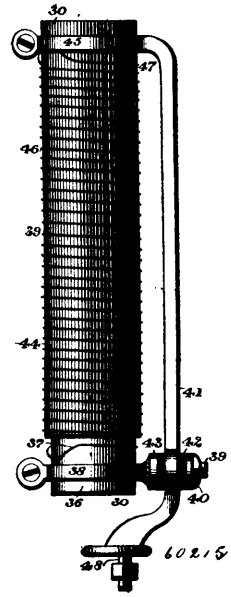
terminal being formed with an engaging shoulder, and a back or support consisting of a slotted tube provided with means for engaging said shoulder of the movable terminal and holding the movable terminal in position, substantially as and for the purpose specified. 3rd. In an electric switch, the combination of a base provided with a terminal and a pillar or post, a movable terminal for engaging the former terminal, said movable terminal being formed with an engaging shoulder, and a back or support consisting of a slotted tube pivotally secured to the pillar or post and provided with means for engaging said shoulder of the movable terminal and holding the movable terminal in position, substantially as and for the purpose set forth. 4th. In a switch, the combination of a back or support provided with an internal chamber and a longitudinal groove opening therein, a terminal carried by the back or support and having one edge inserted through the groove into the internal chamber, a head movable within the internal chamber for detachably engaging the terminal and securing the same to said back or support, a base for the back or support, and a second terminal for contacting with the former terminal, substantially as and for the purpose described. 5th. In a switch, the combination of a back or support provided with an internal chamber and a longitudinal groove opening therein, a terminal carried by the back or support and having one edge inserted through the groove into the internal chamber, said terminal having its opposite ends formed with inwardly extending notches, oppositely arranged head movable longitudinally within the internal chamber and having their adjacent end-faces provided with centrally arranged shoulders for entering the notches and securing the terminals to the back or support, a base for the back or support, and a second terminal for contacting with the former terminal, substantially as and for the purpose specified. 6th. In a switch, the combination of a base provided with a terminal, a movable back or support consisting of a slotted tube, a bar arranged at an angle with the back or support, said bar being secured to the back support and provided with an engaging shoulder, a movable terminal for engaging the former terminal, said movable terminal being inserted into the slot of the back or support, movable means within the back or support for engaging the movable terminal and securing the same to the back or support, and a collar encircling the back or support and having one end provided with a shoulder for engaging the shoulder of the bar and its opposite end provided with a second shoulder for engaging the movable terminal, substantially as and for the purpose set forth. 7th. In a switch, the combination of a base, a pillar or post engaged with the front face of the base and having an internal chamber, a plunger movable within one end of the chamber and provided with a lengthwise socket in its end adjacent to the base, a securing piece passed through the base and having one extremity provided with a shoulder engaged with the rear face of the base and its other extremity arranged in the opposite end of the chamber and provided with a lengthwise socket, a spring having its opposite ends arranged in said sockets, and a terminal-carrying back or support pivoted to the pillar or post and engaged with the plunger, substantially as and for the purpose described. 8th. In a switch, the combination of a pillar or post having an internal chamber, a plunger movable within one end of the chamber and having one extremity provided with a projecting shoulder formed of less diameter than the plunger, a securing piece having one extremity adjustable lengthwise in the opposite end of the chamber, a spring interposed between the plunger and the securing piece, and a terminal-carrying back or support pivoted to the pillar or post and having a cam and a stop shoulder for engaging the end and peripheral faces of the shoulder of the plunger, substantially as and for the purpose specified.



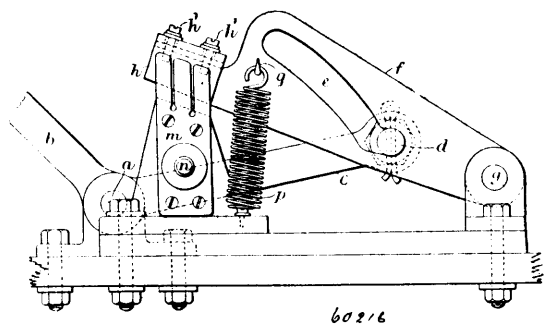
No. 60,215. Electric Heater. (*Chauffeur électrique.*)

David W. Van Tine, assignee of George Brinton Fraley, Philadelphia, Pennsylvania, U.S.A., 3rd June, 1898; 6 years. (Filed 3rd July, 1897.)

Claim.—1st. In an electric heater, the combination of a slotted core and a resistance coil wound around said core. 2nd. In an electric heater, the combination of a metallic core slotted for a portion of its length and an insulating resistance coil wound around said core. 3rd. In an electric heater, a core, having a plurality of slots therein beginning alternately at opposite ends, the length of said slots being less than the length of said core, the latter forming a secondary circuit and an insulated primary coil surrounding said core. 4th. In an electric heater, a core having a plurality of slots therein, beginning alternately at opposite ends, the length of said slots being less than the length of said core, the latter forming a secondary circuit, and a primary resistance coil surrounding said core. 5th. In an electric heater, the combination of a core, a resistance coil wound around said core, and a reflector suitably supported, adjacent an end of said core. 6th. In an electric heater, the combination of a core, a resistance coil wound around said core and a reflector located adjacent each end of said core. 7th. In an electric heater the combination of a core, a resistance coil wound around said core and a reflector located within said core intermediate the ends thereof. 8th. In an electric heater the combination of a core, a resistance coil wound around said core, and a concave reflector located near each end of said core, the concave surface of said reflectors facing each other.



No. 60,216. Apparatus for Controlling Electrically Propelled Vehicles. (*Appareil pour controler les voitures mus par l'électricité.*)

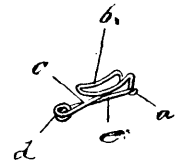


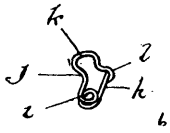
The Electrical Vehicle Syndicate, Limited, Juxon Street, London, assignee of the Honourable Reginald Thomas Dudley, Brougham, Dorset Street, Portman Square, and Walter Charles Bersely, 28 Victoria Street, Westminster, all in England, 3rd June, 1898; 6 years. (Filed 15th December, 1897.)

Claim.—1st. In mechanism for controlling electrically propelled vehicles, the combination with a brake lever, and a switch lever, of a foot lever operatively connected with both the brake lever and switch lever whereby the movement of the foot lever will simultaneously operate the switch and brake levers, substantially as described. 2nd. The combination of a switch lever, a brake-lever, a foot lever, a connection between the foot and switch levers such that the first movement of the former causes a rapid and wide separation of the contacts and a connection between the foot lever

and brake lever such that the movement of the former gradually operates the latter. 3rd. The combination of a switch lever, a slot in it, a foot lever, a pin carried by it working in the slot, a brake lever and a flexible connection between the foot and brake levers.

No. 60,217. Hook and Eye. (*Crochet et oeillet.*)

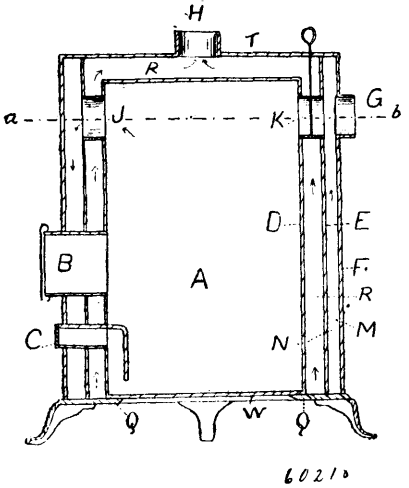




Frances Ann Carveth, Toronto, Ontario, Canada, 4th June, 1898; 6 years. (Filed 12th July, 1897.)

Claim.—1st. A garment hook consisting of a single piece of wire bent to form a pin, then coiled to form a spring and bent to form a shank or body portion, and doubled or bent upon itself to form a hook, one member of the hook portion being extended and bent at its end to form a clasp to embrace the point end of the pin and body portion lying below and approximately parallel to the hook, substantially as specified. 2nd. A garment hook consisting of a single piece of wire bent to form a pin, a spring comprising a horizontal coil or coils, a shank or body portion, and doubled or bent upon itself to form a hook, and a clasp, said pin and body portion crossing or overlapping each other at about the centre of their length, substantially as specified. 3rd. A garment fastening comprising a hook consisting of a single piece of wire bent to form a pin, a spring comprising a horizontal coil or coils, a shank or body portion, and double or bent upon itself to form a hook, having an extension which is bent to form a clasp, said pin and body portion crossing each other at an angle, in combination with an eye consisting of a pin, a spring, and a body portion terminating in a clasp, substantially as specified.

No. 60,218. Heater. (*Chauffeur.*)



Charles Warwick, Southwold, Ontario, Canada, 4th June, 1898; 6 years. (Filed 19th April, 1898.)

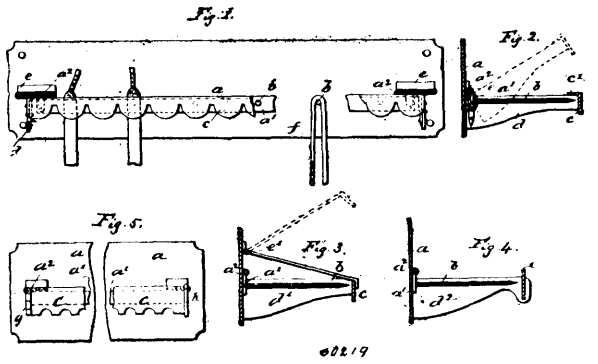
Claim.—The arrangement of the cylinders F, E, D, and the passages N, M, Q, substantially as and for the purpose hereinbefore set forth.

No. 60,219. Shoe Lace Holder.

(*Porte lacets de chaussures.*)

Alfred Verlander, 6 The Causeway, Yeddington, Middlesex, England, 4th June, 1898; 6 years. (Filed 23rd May, 1898.)

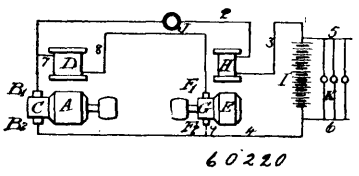
Claim.—1st. A holder for boot and shoe laces consisting of a back piece, wires or prongs arranged thereon, and upon which the laces



are placed and a guard adapted to allow removal of the laces, substantially as described. 2nd. A holder for boot and shoe laces consisting of a back piece, wires or prongs arranged thereon, and upon which the laces are placed, and a hinged guard adapted to allow of the removal of the laces and then fall back into position again, substantially as described. 3rd. In a holder for boot and shoe laces back plate a, hinged plate a^1, pivots a^2, wires on prongs b, guard c, sides d, and pivots e, all arranged and operating substantially as set forth with reference to Fig. 1 and 2 of the accompanying drawings. 4th. In a holder for boot and shoe laces, back plate a, hinged plate a^1, pivots a^2, wires or prongs b, guard c, sides d^1, and pivots e^1, all arranged and operating substantially as set forth with reference to Fig. 3 of the accompanying drawings. 5th. In a holder for boot and shoe laces, back plate a, hinged plate a^1, pivots a^2, wires or prongs b, guard c, and sides d^2, all arranged and operating substantially as set forth with reference to Fig. 4 of the accompanying drawings 6th. In a holder for boot and shoe laces, back plate a, hinged plate a^1, pivots a^2, wires or prongs b, sides d, guard c, pivot g, and clip h, all arranged and operating substantially as set forth with reference to the drawings.

No. 60,220. Electrical Distribution System.

(*Système de distribution électrique.*)



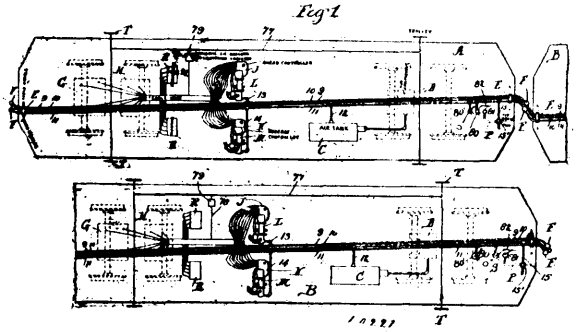
William Lord Bliss, Brooklyn, New York, U.S.A., 4th June, 1898; 6 years. (Filed 10th March, 1898.)

Claim.—1st. The herein described method of controlling the current and e. m. f. of a dynamo, consisting in demagnetizing the field of said dynamo, as the speed and e. m. f. of said dynamo increase, by means of an auxiliary counter e. m. f., which increases as the speed and e. m. f. of said dynamo increase and which is connected a series with the primary exciting field coil of said dynamo. 2nd. The herein described method of maintaining constant the e. m. f. impressed upon translating devices which derive their energy from a storage battery, said storage battery being arrranged so as to be charged, simultaneously with the operation of said translating devices, by a dynamo whose speed and e. m. f. vary, consisting in generating in the circuit of said translating devices a counter e. m. f. which shall vary from zero to a maximum coincidently with the variation of the e. m. f. impressed upon the terminals of said storage battery by said dynamo, from a value equal to that of the e. m. f. of said storage battery when the charging current is zero to such a value as will enable the maximum charging current to be forced through said storage battery by said dynamo. 3rd. The herein described method of maintaining constant the e. m. f. impressed upon translating devices which derive their energy from a storage battery, said storage battery being arranged so as to be charged, simultaneously with the operation of said translating devices, by a dynamo, consisting in generating in the circuit of said translating devices a counter e. m. f. of such value, that when said counter e. m. f. is deducted from the e. m. f. impressed upon said storage battery by said dynamo during said charging process, the remaining e. m. f. shall be constant and equal to the e. m. f. impressed upon said translating devices by said storage battery when said charging process shall have been discontinued. 4th. The herein described method of maintaining constant the e. m. f. impressed upon translating devices which derive their energy from a storage battery, said storage battery being arranged so as to be

charged simultaneously with the operation of said translating devices by a dynamo, consisting in generating in the circuit of said translating devices, a counter e. m. f. which is approximately proportional to the charging current flowing through said storage battery. 5th. The herein described method of maintaining constant the e. m. f. impressed upon translating devices which derive their energy from a storage battery said storage battery being arranged so as to be charged simultaneously with the operation of said translating devices by a dynamo, consisting in generating in the circuit of said translating devices, a counter e. m. f. which is approximately proportional to the sum of the charging current flowing through said storage battery and the current flowing through said translating devices. 6th. The combination in a system of electrical distribution, of a main dynamo, a shunt field coil on said main dynamo, a storage battery connected so as to be charged by said main dynamo, and an auxiliary dynamo whose armature is connected in series with the shunt field coil on said main dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo for the purpose as herein set forth. 7th. The combination in a system of electrical distribution, of a main dynamo, a shunt field coil on said main dynamo, a storage battery connected so as to be charged by said main dynamo, translating devices operated by said storage battery, and an auxiliary dynamo connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f. of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo for the purpose as herein set forth. 8th. The combination in a system of electrical distribution, of a main dynamo, a storage battery connected so as to be charged by said main dynamo, translating devices operated by said storage battery and an auxiliary dynamo connected in series with said translating devices, and so arranged that the e. m. f. of said auxiliary dynamo opposes the flow of current through said translating devices for the purpose as herein set forth. 9th. The combination in a system of electrical distribution of a main dynamo, a shunt field coil on said main dynamo, a storage battery connected so as to be charged by said main dynamo, translating devices operated by said storage battery and an auxiliary dynamo connected in series with said translating devices and so arranged that the e. m. f. of said auxiliary dynamo opposes the flow of current through said translating devices for the purpose, as herein set forth. 10th. The combination in a system of electrical distribution, of a main dynamo, a shunt field coil on said main dynamo, a storage battery connected so as to be charged by said main dynamo, translating devices operated by said storage battery and an auxiliary dynamo, the armature of which is provided with two windings, one of said windings being in series with the shunt field coil of said main dynamo and the other of said windings being in series with said translating devices and so arranged that the e. m. f.'s of said windings oppose respectively the flow of current through the shunt field coil of said main dynamo and through said translating devices, as and for the purpose as herein set forth. 11th. The combination in a system of electrical distribution, of a main dynamo, a shunt field coil on said main dynamo, a storage battery connected so as to be charged by said main dynamo, translating devices operated by said storage battery, two auxiliary dynamos, one of said auxiliary dynamos being in series with the shunt field coil of said main dynamo and the other of said auxiliary dynamos being in series with said translating devices and so arranged that the e. m.f.'s. of said auxiliary dynamos oppose respectively the flow of current through the shunt field coil of said main dynamo and said translating devices as and for the purpose herein set forth. 12th. The combination in a system of electrical distribution, of main dynamo having a shunt field coil, an auxiliary dynamo having a course wire field coil, a storage battery, and a working circuit including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo, substantially as herein described. 13th. The combination in a system of electrical distribution, of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, and a service circuit containing translating devices connected as a shunt to said storage battery, the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo, substantially as herein described. 14th. The combination in a system of electrical distribution, of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, and a service circuit containing translating devices connected as a shunt to said storage battery and the coarse wire field coil of said auxiliary dynamo, the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo, substantially as herein described. 15th. The combination in a system of electrical distribution, of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, and a motor connected across the terminals of said main dynamo and fitted for driving said auxiliary dynamo, the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo, substantially as herein described. 16th. The combination in a system of electrical distribution of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit containing connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, a service circuit containing translating devices connected as a shunt to said storage battery, and a motor connected across the terminals of said main dynamo and fitted for driving said auxiliary dynamo, the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo, substantially as described. 17th. The combination in a system of electrical distribution, of a main dynamo having a shunt field coil, and auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit containing connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, a service circuit containing translating devices connected as a shunt to said storage battery and the coarse wire field coil of said auxiliary dynamo, and a motor connected across the terminals of said main dynamo and fitted for driving said auxiliary dynamo, the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the shunt field coil of said main dynamo, substantially as herein described. 18th. The combination in a system of electrical distribution, of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit containing connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, and a service circuit containing translating devices connected in series with the armature of said auxiliary dynamo as a shunt to said storage battery, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through the translating devices, substantially as herein described. 19th. The combination in a system of electrical distribution, of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit containing connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, and a service circuit containing translating devices connected in series with the armature of said auxiliary dynamo as a shunt to said storage battery and the coarse wire field coil of said auxiliary dynamo and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through said translating devices, substantially as herein described. 20th. The combination, in a system of electrical distribution of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit containing connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, a service circuit containing translating devices connected in series with the armature of said auxiliary dynamo as a shunt to said storage battery, and a motor connected across the terminals of said main dynamo and fitted for driving said auxiliary dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of current through said translating devices, substantially as herein described. 21st. The combination in a system of electrical distribution of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil, a storage battery, a working circuit containing connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, a service circuit containing translating devices connected in series with the armature of said auxiliary dynamo as a shunt to said storage battery and the coarse wire field coil of said auxiliary dynamo, and a motor connected across the terminals of said main dynamo and fitted for driving said auxiliary dynamo, and so arranged that the e. m. f. of the armature of said auxiliary dynamo opposes the flow of the current through the translating devices, substantially as herein described. 22nd. The combination, in a system of electrical distribution of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil and an armature provided with two windings, a storage battery, a working circuit including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, and a service circuit containing translating devices connected in series with one winding of the armature of said auxiliary dynamo as a shunt to said storage battery, the other winding of the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the

e. m. f.'s of the two windings of the armature of said auxiliary dynamo respectively oppose the flow of current through said translating devices and the shunt field coil of said main dynamo, substantially as herein described. 23rd. The combination, in a system of electrical distribution of a main dynamo having a shunt field coil an auxiliary dynamo having a coarse wire field coil and an armature provided with two windings, a storage battery, a working circuit, including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, and a service circuit containing translating devices connected in series with one winding of the armature of said auxiliary dynamo as a shunt to said storage battery and the coarse wire field coil of said auxiliary dynamo, the other winding of the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f's fof the two windings of the armature of the said auxiliary dynamo respectively oppose the flow of current through said translating devices and the shunt field coil of said main dynamo substantially as herein described. 24th. The combination in a system of electrical distribution of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil and an armature provided with two windings, a storage battery, a working circuit including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, a service circuit containing translating devices connected in series with one winding of the armature of said auxiliary dynamo as a shunt to said storage battery, and a motor connected across the terminals of said main dynamo and fitted for driving said auxiliary dynamo, the other winding of the armatnre of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f's of the two windings of the armature of said auxiliary dynamo respectively oppose the flow of current through said translating devises and the shunt field coil of said main dynamo, substantially as herein described. 25th. The combination in a system of electrical distribution of a main dynamo having a shunt field coil, an auxiliary dynamo having a coarse wire field coil and an armature provided with two windings, a storage battery, a working circuit including connected in series the armature of said main dynamo, the coarse wire field coil of said auxiliary dynamo and said storage battery, a service circuit containing translating devices connected in series with one winding of the armature of said auxiliary dynamo as a shunt to said storage battery and the coarse wire field coil of said auxiliary dynamo, and a motor connected across the terminals of said main dynamo and fitted for driving said auxiliary dynamo, the other winding of the armature of said auxiliary dynamo being connected in series with the shunt field coil of said main dynamo, and so arranged that the e. m. f's of the two windings of the armature of said auxiliary dynamo respectively oppose flow of current through said translating devices and the shunt field coil of said main dynamo, substantially as herein described.

No. 60,221. Controlling Mechanism for Electric Railway Cars. (*Mécanisme de controle pour chars de chemin de fer électrique.*)



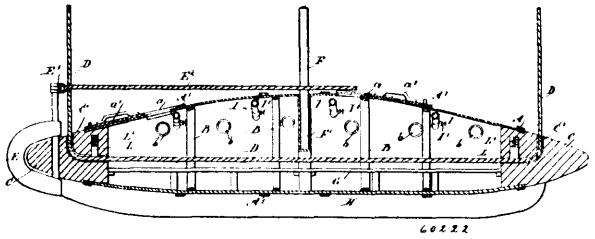
Sidney Howe Short, Cleveland, Ohio, U.S.A., 4th June, 1898; 6 years. (Filed 3rd March, 1898.)

Claim.—1st. In a system of controlling motors in a train of cars, a controller for each car, fluid pressure mechanism for simultaneously actuating said controllers, and means mounted on each car of the train for controlling said fluid pressure mechanism, as and for the purpose set forth. 2nd. In a train of several cars, motors mounted on one or more of the cars of the train, a motor controller mounted on each motor car, a fluid pressure mechanism for actuating all of the controllers throughout the train, and means located on each car of the train for controlling said fluid pressure mechanism, as and for the purpose set forth. 3rd. In a system of controlling motors in a train of cars, a controller for each motor, fluid pressure mechanism for simultaneously actuating the controllers throughout the train, and manually actuated means located on each car of the train for controlling said fluid pressure mechanism, as and for the purpose set forth. 4th. In a system of controlling motors in a train of cars, a controller for each motor, fluid pressure actuated mechanism for each controller, a source of fluid pressure, a train pipe extending throughout the train and communicating with all the controller actuating mechanisms throughout the train, and means mounted on each car of the train for controlling communication between said source of fluid pressure and said controller train pipe, as and for the purpose set forth. 5th. In a pneumatic controlling system for electric cars, a source of fluid pressure, a motor controlling mechanism, means for supplying pressure to said motor controlling mechanism, in combination with means for automatically controlling the supply of pressure from said source of fluid pressure to said motor controlling mechanism, as and for the purpose set forth. 6th. In a pneumatic controlling system for electric cars, a source of fluid pressure, a motor controlling mechanism, and means for supplying pressure to said controller mechanism, in combination with a valve arranged to automatically control the supply of pressure to said motor controlling mechanism, as and for the purpose set forth. 7th. The combination with a car, a propelling motor mounted thereon, a pressure actuated controller for said motor, an air pipe for supplying pressure to said motor controller, a valve for controlling the admission of pressure to said pipe and means for controlling the pressure in said pipe, as and for the purpose set forth. 8th. The combination with a car, a propelling motor mounted thereon, a pressure actuated mechanism for controlling said motor, an air tank or reservoir mounted on said car, a controller pipe communicating with said tank, a valve device arranged to control the admission of pressure to said pipe, an electrically operated means for regulating said pressure, as and for the purpose set forth. 9th. The combination with a car, a propelling motor mounted thereon, a controller for governing the circuits of said motor when operating in one direction, a separate controller for governing the circuits of said motor when operating in the opposite direction, and means for actuating said controllers, as and for the purpose set forth. 10th. The combination with a car, a propelling motor mounted thereon, a controller for governing the ahead movements of said motor, a separate controller for governing the reverse movements of said motor, and means whereby when one of said controllers is actuated the other is locked, as and for the purpose set forth. 11th. The combination with a car, a propelling motor mounted thereon, a pressure actuated ahead controller for said motor, a pressure actuated reverse controller for said motor, a pressure tank, pipes for supplying pressure therefrom to said controllers, and a valve device arranged to control the admission of pressure from said tank to said pipes, as and for the purpose set forth. 12th. The combination with a plurality of cars in a train, a propelling motor mounted on one or more of the cars, a pneumatically actuated controller for each motor, connections extending throughout the train for synchronously operating said controller actuating means, and means mounted on each car of the train for controlling the supply of pressure to the controller, actuating means throughout the train, as and for the purpose set forth. 13th. The combination with a plurality of cars in a train, a propelling motor mounted on one or more of the cars, a pneumatically actuated controller for each motor, connections extending throughout the train for simultaneously supplying pressure to said controller actuating means, means mounted on each car of the train for controlling the admission of pressure to the controller actuating means throughout the train, and means mounted on each car for automatically controlling the supply of pressure to the controller actuating means on the same car therewith, as and for the purpose set forth. 14th. The combination with a plurality of cars in a train, a propelling motor on one or more of the cars, a pressure, actuated controller for each motor, a controller pipe arranged to be connected up throughout the train for supplying pressure to said controllers, a pressure storage tank, a valve device for controlling the communication between said tank and pipe, and means for automatically regulating the supply of pressure to each controller actuating means, as and for the purpose set forth. 15th. The combination with a plurality of cars in a train, a propelling motor on one or more of the cars, a pair of pressure actuated controllers for each motor, a train pipe for each controller, the controller pipes of one car adapted to be coupled up to the controller pipes of the next car, a pressure storage tank, and a valve device arranged to control the communication between said tank and said pipes whereby when pressure is supplied to either of the controller pipes pressure is exhausted from the other of said pipes, as and for the purpose set forth. 16th. The combination with two or more cars in a train, a propelling motor mounted on one or more of said cars, a controller for the circuits of each motor, an air cylinder for actuating said controllers, a pipe arranged to extend the length of the train and communicating with each cylinder, a pressure storage tank mounted on one or more of the cars, a second pipe arranged to extend throughout the length of the train and communicating with all of said tanks, and a valve device arranged at each end of each car for controlling the communication between said pipes and to the atmosphere, as and for the purpose set forth. 17th. The combination with a car, a propelling motor mounted thereon, a controller therefor, a pressure actuated means for effecting the movements of said controller, a pipe arranged to extend throughout the length of the car and communicating with said controller actuating means, a pipe arranged to extend throughout the length of the car for supplying pressure to the brake mechanism, a pressure storage tank, a supply pipe communicating therewith and extending throughout the length of the car, a valve

device arranged at each end of the car for controlling the communication between said controller and supply pipes and to the atmosphere, and an independent valve for controlling said brake pipe, as and for the purpose set forth. 18th. The combination with a car, a propelling motor mounted thereon, a controller for controlling the ahead movements of said motor, a controller for controlling the reverse movements of said motor, pipes communicating respectively with said controllers, a pressure storage tank, and a common valve device for controlling the communication between said pipes and said tank, whereby when pressure is admitted to one of said pipes it is exhausted from the other, as and for the purpose set forth. 19th. The combination with a car, a propelling motor mounted thereon, two controllers for said motor, one controlling the ahead movements and the other the reverse movements of said motor, pipes arranged to extend throughout the length of the car and respectively communicating with the actuating means of said controllers, a brake pipe mounted on the car for supplying pressure to the brake mechanism, a storage tank, a delivery pipe communicating therewith, a valve device arranged at each end of the car for controlling the communication between said supply pipe and said control pipes, and an independent valve for controlling the communication between said supply and brake pipes, as and for the purpose set forth. 20th. The combination with two or more cars in a train, a propelling motor mounted on each car, two controllers for each motor, one controlling the ahead movements and the other the reverse movements of said motor, pipes arranged to be detachably coupled up throughout the entire train and respectively communicating with the actuating devices for said controllers, a storage tank, and a common valve device arranged to respectively open communication between said pipes and said tank, as and for the purpose set forth. 21st. The combination with two or more cars in a train, a propelling motor mounted on each car, two controllers for each motor, one controlling the ahead movements and the other the reverse movements of said motor, pressure actuated devices for operating said controllers, pipes mounted on each car and communicating respectively with the controller actuating devices on that car, the controller pipes of one car adapted to be detachably connected to the corresponding controller pipes of the adjacent car throughout the train, a storage tank mounted on each car, a supply pipe also mounted on each car and communicating with said tank, and a valve device mounted on each car for controlling the admission of pressure from said supply pipe to said controller pipe, as and for the purpose set forth. 22nd. The combination with a car, a propelling motor mounted thereon, a controller for controlling the ahead movements of said motor and a controller for controlling the reverse movements of said motor, independent pressure actuated means for effecting the movements of said controllers, a storage tank, a valve device for controlling the communication between said controller actuating means and said tank, said valve device comprising two valves, and means for locking one of said valves until the other of said valves is moved to a position corresponding to the off position of the controller governed thereby, as and for the purpose set forth. 23rd. The combination with a car, a propelling motor mounted thereon, an ahead controller and a reverse controller for said motor, an air cylinder for actuating each of said controllers, an air tank, a double valve for controlling the air pressure supplied from said tank to said cylinders, and means for locking one of said valves during the operation of the other, as and for the purpose set forth. 24th. The combination with a car, a motor mounted thereon, an ahead controller and a reverse controller for said motor, an independent air cylinder for actuating each of said controllers, an air tank, a valve device for controlling the supply of air therefrom to said cylinders, comprising two valves, a notched disc mounted on the stem of each of said valves, and locking pawls arranged to engage said discs, as and for the purpose set forth. 25th. A double valve device, comprising two valves, discs mounted on the stem of each valve, said discs provided with peripheral seats or depressions, pivotally mounted pawl arms arranged to peripherally engage said discs, and operating handles for said valves, as and for the purpose set forth. 26th. In a double valve device, two valves having peripherally recessed discs mounted on the stems thereof, a pair of pawl arms pivotally mounted at one end and arranged to engage the peripheral seats in said discs at the other end, and means for yieldingly spreading said pawl arms apart whereby one of said valve stems is locked against movement until the other has been moved into a predetermined position, as and for the purpose set forth. 27th. In a valve device, a valve having a notched flange, a detachable operating handle for said valve, said handle provided with a hook arranged to engage underneath said notched flange, whereby said handle is prevented from being removed until it is moved to a predetermined position, as and for the purpose set forth. 28th. The combination with a car, of a propelling motor mounted thereon, a controller for said motor, an air cylinder, means for admitting and exhausting air pressure to and from said cylinder, a piston arranged in said cylinder, means actuated by the movements of said piston for effecting the movements of said controller, and means actuated by the amount of current supplied to the motor for controlling the supply of air to said cylinder, as and for the purpose set forth. 29th. The combination with a car, a motor mounted thereon, a controller therefor, an air cylinder, means for supplying air pressure thereto and exhausting same therefrom, a piston mounted in said cylinder, means actuated by the movements of said piston for effecting the movements of said controller, a valve arranged to control the admission of air to said cylinder, and means arranged in the motor circuit for actuating said valve, as and for the purpose set forth. 30th. The combination with two or more cars in a train, a motor mounted on one or more of the cars, an air cylinder mounted on each motor car and having a piston, means actuated by the movement of said piston for controlling the circuits of said motor on that car, means for admitting air pressure to each of said cylinders simultaneously throughout the train, and means actuated by variations in the current supplied to each motor throughout the train for automatically controlling the supply of air pressure to the individual air cylinders throughout the train, whereby the action of all the motors throughout the train are synchronized, as and for purpose set forth. 31st. A motor controller, an air cylinder for actuating the same, means for supplying air pressure to said cylinder, a valve controlling said air pressure supply, a magnet arranged in the motor circuit, and means actuated by variations in the strength of the current traversing said magnet for automatically actuating said valve, as and for the purpose set forth. 32nd. The combination with a car, a propelling motor mounted thereon, a pneumatically actuated controller for governing the ahead movements of said motor, an independent pneumatically actuated controller for governing the reverse movements of said motor, an air pressure tank carried by the car, independent pipes for delivering pressure from said tank to said controller actuating means, and means whereby when pressure is supplied to one of said pipes it is exhausted from the other, in combination with a brake pipe for supplying air pressure to the brake mechanism, a safety exhaust valve for each of said pipes, and a controlling rope for simultaneously actuating said valves, as and for the purpose set forth. 33rd. The motor controller, an air cylinder, a piston mounted therein, means actuated by the movement of said piston for effecting the movements of said controller, a valve arranged to control the supply of air pressure to said cylinder, a spring arranged to hold said valve in normally open position, and electrically operated means for closing said valve, said electrical means being arranged in the motor circuit, as and for the purpose set forth. 34th. An air cylinder having a piston, a casing communicating with said cylinder, a supply pipe communicating with said casing, a supply passage formed in said casing and delivering from said pipe to said cylinder, an exhaust passage formed in said casing and communicating with said cylinder, a plunger arranged to close said exhaust passage, a piston for actuating said plunger, said piston arranged in said supply passage, in combination with a motor controller, and means actuated by the movements of said cylinder piston for effecting the movements of said controller, as and for the purpose set forth. 35th. An air cylinder having a piston, a casing having a passage therein communicating with a source of fluid supply and delivering into said cylinder, means for adjusting the area of the opening of said passage, an outwardly seating check valve arranged in said passage, an exhaust passage formed in said casing, means actuated by fall of pressure in said passage for opening said exhaust passage, a motor controller, and means actuated by the movements of said piston for actuating said controller, as and for the purpose set forth. 36th. A air cylinder having a piston, a casing having a passage communicating with a source of fluid supply and delivering into said cylinder, an exhaust passage communicating with said cylinder, a plunger for opening and closing said exhaust passage, a piston arranged to actuate said plunger, said piston arranged in said supply passage, and a plug carried by said cylinder piston arranged to enter said exhaust passage as said piston approaches the limit of its movement, whereby said piston is cushioned, in combination with a motor controller, and means actuated by the movements of said piston for moving said controller, as and for the purpose set forth. 37th. In a pneumatic controlling system for a train of cars, a propelling motor mounted on one or more of the cars, a controller for each motor, pressure actuated mechanism for actuating said controllers, connections extending throughout the train for supplying pressure to said controller actuating means, and means actuated by reduction of pressure in said connections for simultaneously opening each controller actuating means directly and independently to the atmosphere, as and for the purpose set forth. 38th. In a pneumatic controlling system for a train of cars, a propelling motor mounted on one or more of the cars, a controller for each motor, an air cylinder mounted on each motor car and having a piston, a source of air pressure, a train pipe communicating between said source of fluid pressure and air cylinders throughout the train, a passage opening direct communication between each cylinder and the outer air, means actuated by the reduction in pressure in said train pipe for simultaneously opening said passages, and connections between said pistons and controllers for actuating the latter, as and for the purpose set forth. 39th. In a pneumatic controlling system for a train of cars, a propelling motor mounted on one or more of the cars, a controller for each motor, an air cylinder mounted on each car and having a piston, a source of air pressure, a train pipe communicating beteen said source of fluid pressure and the air cylinders throughout the train, a passage opening direct communication between each cylinder and the outer air, a plunger arranged to control said passage, said plungers arranged to be moved simultaneously to close said passages when pressure is supplied to said train pipe and to simultaneously open said passages when pressure is exhausted from said train pipe, as and for the purpose set forth. 40th. The combination with a car, a propelling motor mounted thereon, a controller for said motor, pressure actuated devices for effecting the movements

of said controller, an air pressure tank carried by the car, a supply pipe for delivering air pressure therefrom to said controller actuating devices, a brake pipe for supplying air pressure to the brake mechanism, a safety exhaust valve for each of said pipes, and a controlling rope for simultaneously actuating said valves, as and for the purpose set forth.

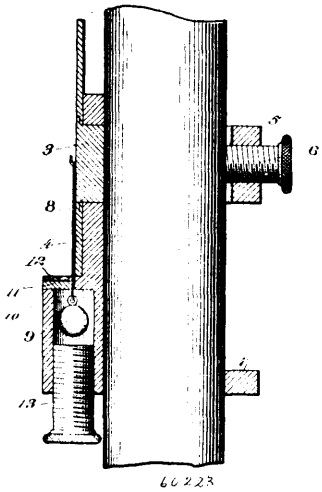
No. 60,222. Life Boat. (*Bateau de sauvetage.*)



James Mitchell, Sr., Arrow River, Manitoba, Canada, 4th June, 1898; 6 years. (Filed 8th March, 1897.)

Claim.—1st. A boat, comprising a hollow enclosed figure, having a rope guiding passage through each end thereof, and a slide adapted to close said passage when the rope is removed therefrom, substantially as described. 2nd. A boat, comprising a hollow enclosed figure having pointed ends, and a rope guiding passage through each end, and a slide having a spring acting thereon and adapted to close said passage when the rope is removed therefrom, substantially as described. 3rd. A boat, comprising a hollow enclosed figure having pointed ends, hatch-ways upon the upper side of the boat, a mast socket in the boat, a rudder pivoted at one end of the boat, steering ropes connected to the rudder, and a rope guide-way at each end of the boat communicating with the interior and adapted to receive a suspending rope, and means for automatically closing said rope guide-ways upon the removal of the rope, substantially as described. 4th. A boat, comprising a hollow enclosed figure, provided with hatch-ways, lighting port holes, ventilator pipes extending to the outside, and rope guide-ways at each end extending from within the boat to the outside, and adapted to receive a common suspending rope which passes lengthwise within the boat, and means for automatically closing said rope guide ways upon the removal of the rope, substantially as described. 5th. A boat, comprising a hollow enclosed figure, provided with hatch-ways, lighting port holes, ventilator pipes extending to the outside, and rope guide-ways at each end extending from within the boat to the outside, and adapted to receive a common suspending rope which passes lengthwise within the boat, and a spring-held slide in said guide-ways adapted to close the guide-way when the rope is removed, substantially as described.

No. 60,223. Inclinometer. (*Inclinomètre.*)



Otto Robert Nystrom, New Brighton, New York, U.S.A., 4th June, 1898; 6 years. (Filed 28th January, 1898.)

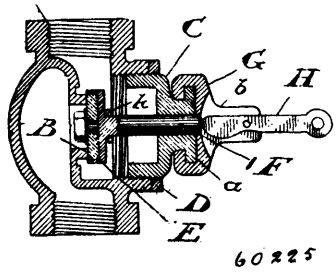
Claim.—1st. In a device of the character set forth, an inclinometer, comprising an adjustable body, a rotatable disc mounted thereon having vertical and horizontal diameters and concentric circles forming spaces for arcs, natural cosines and natural sines, and a plumb-line carrying a plumb-bob or weight attached to the centre of said disc, substantially as and for the purpose specified. 2nd. In a device of the character set forth, an inclinometer, comprising an adjustable body having a socket therein, a rotatable disc mounted above said socket and having lines and spaces thereon, as specified, a plumb-line attached to the centre of said disc, with a plumb-bob or weight on the lower end thereof, and means for supporting said plumb-bob or weight, substantially as and for the purposes specified. 3rd. In a device of the character set forth, the combination with a hand-spike or other vertical support, of a body having slotted arms engaging said hand-spike or support and provided with a socket at the lower front portion thereof, an adjusting screw extending upwardly into said socket, a rotatable disc mounted on said body and having lines and spaces thereon, as specified, a plumb-line carrying a plumb-bob or weight at its lower end mounted in said socket, and a removable plate mounted over the top of said socket, substantially as and for the purpose specified.

No. 60,224. Liniment. (*Liniment.*)

Moses Garland, Moncton, New Brunswick, Canada, 4th June, 1898; 6 years. (Filed 11th February, 1898.)

Claim.—1st. A compound composed of saltpetre, lime-water, sweet oil, ammonia, spirits of camphor and turpentine, in the proportions and for the purpose set forth.

No. 60,225. Valve. (*Soupape.*)



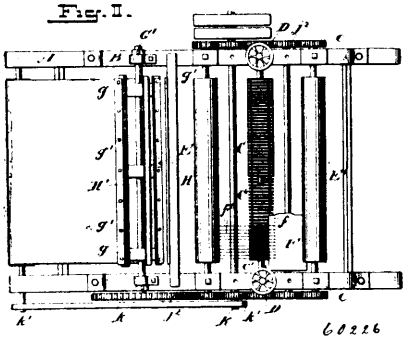
Edward John Philip, Toronto, Ontario, Canada, 4th June, 1896; 6 years. (Filed 24th March, 1898.)

Claim.—1st. As a valve for use in automatic fire sprinklers, a valve casing, a valve seat formed within the casing, a valve disc adapted to fit the said seat to close the water passage, a valve mounting screwed into the casing, and a valve spindle carrying the valve disc and slidable in the said mounting, in combination with a suitably pivoted cam lever suitably supported on the valve mounting, and adapted to engage the valve spindle, substantially as and for the purpose specified. 2nd. As a valve for use in automatic fire sprinklers, a valve casing, a valve seat formed within the casing, a valve disc adapted to fit the said seat to close the water passage, a valve mounting screwed into the casing, and a valve spindle carrying the valve disc and slidable in the said mounting, in combination with a bearing piece revolvably supported on the valve mounting, and a cam lever pivoted in a slot in the said bearing piece, and adapted to engage the valve spindle, substantially as and for the purpose specified. 3rd. As a valve for use in automatic fire sprinklers, a valve casing, a valve seat formed within the casing, a valve disc adapted to fit the said seat to close the water passage, a valve mounting screwed into the casing, and a valve spindle carrying the valve disc and slidable in the said mounting, in combination with a toggle mounted in the valve mounting and bearing against the end of the valve spindle and a stationary bearing on the mounting, a cam lever mounted in a slot in the mounting and bearing against the central joint of the toggle, substantially as and for the purpose specified. 4th. As a valve for use in automatic fire sprinklers, a valve casing, a valve seat formed within the casing, a valve disc adapted to fit the said seat to close the water passage, a valve mounting screwed into the casing, and a valve spindle carrying the valve disc and slidable in the said mounting, in combination with a toggle mounted in the valve mounting and bearing against the end of the valve spindle, and a stationary bearing on the mounting, a cam lever mounted in a slot in the mounting and bearing against the central joint of the toggle, and means for adjusting the stationary bearing, substantially as and for the purpose specified. 5th. As a valve for use in automatic fire sprinklers, a valve casing, a valve seat formed within the casing, a valve disc adapted to fit the said seat to close the water passage, a valve mounting screwed into the casing, and a valve spindle carrying the valve disc and slidable in the said mounting, in combination with a suitably pivoted cam lever suitably supported on the valve mounting and adapted to engage the valve spindle, a weight connected by a loose chain with the end of the lever, a wire connected to the weight and a stationary part, and a fusible link in the wire substantially as and for the purpose specified. 6th. A valve havingits spindle sliding freely in the valve mounting, in combination with a suitably pivoted cam lever suitably supported on the valve mounting, and adapted to engage the valve spindle, substantially as and for the purpose specified. 7th. A water supply

pipe and a valve therein releasable by the movement of a lever, in combination with the said lever, a weight connected with the end of the lever, a wire connected at one end to the weight, and at the other to a stationary part and arranged when slacked to permit the weight to drop, one or more wires running in proximity to sprinkler heads and provided with one or more fusible links, a pulley or guide on the end of each wire and pulleys or guides connected to a stationary part between which pulleys the first mentioned wire is zig-zagged, substantially as and for the purpose specified. 8th. As a valve for use in automatic fire sprinklers, a valve casing, a valve seat formed within the casing, a valve disc adapted to fit the said seat to close the water passage, a valve mounting secured to the said casing and a valve spindle carrying the valve disc and passing loosely through a hole in the said mounting, in combination with a rubber ring surrounding the said spindle, and adapted to close the said hole when the valve is open full, substantially as and for the purpose specified.

No. 60,226. Paper Cutting Machine.

(*Machine à couper le papier.*)

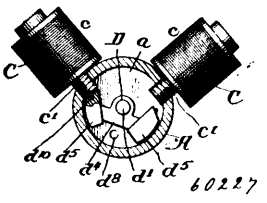


Richard James Roussay and William Gardner Sinclair, both of St. Clair Works. Albert Street, New Edinburgh, Scotland, 4th June, 1898; 6 years. (Filed 30th March, 1898.)

Claim.—1st. In a machine for cutting paper into strips or shavings, an upper and lower rotary cutter composed of circular metal discs mounted upon a shaft and kept apart at equal distances from one another by washers, the upper of which cutters is mounted in adjustable bearings whereby the two cutters can be adjusted to work into each other, as described and shown. 2nd. In a machine for cutting paper into strips or shavings, the combination with an upper and lower rotary cutter of a circular cutter mounted at a distance and operated by gear wheels from the rotary cutters and consisting of two knife blades fixed upon the machine to act as a shear and cut the strips or shavings into the required lengths, as described and shown. 3rd. In a machine for cutting paper into strips or shavings, a plate provided with a number of holes corresponding to the number of washers upon the spindle of the lower rotary cutters from which holes wires extend forwardly between the knives of the cutter whereby the cutters are kept clear and the strip or shavings led to the rollers feeding the dead knife and cutter, as described and shewn. 4th. In a machine for cutting paper into strips or shavings, an endless canvas or other band mounted upon two rollers, the lower of which is operated by a belt from the driving shaft of the machine, whereby the strips or shavings after having been cut to the desired length are fed to the packing receptacle, as described and shewn.

No. 60,227. Electrical Gas Cock.

(*Robinet électrique à gaz.*)

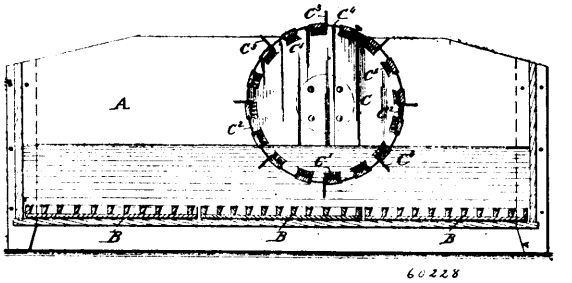


Frank W. Ackerman and Frank P. Foster, both of Corning, New York, U.S.A., 4th June, 1898; 6 years. (Filed 21st March, 1898.)

Claim.—1st. In a gas-regulating cock the combination with a casing, of an oscillating valve mounted therein and adapted to control the gas-supply, an armature mounted upon said valve, and electromagnets applied in the casing so as to exert their force upon the armature at a tangent to its direction of rotation or oscillation, substantially as described. 2nd. In a gas-regulating cock the combination of a separable casing, an oscillating valve mounted therein and having a pendent cylindrical portion with a flattened side adapted to bring the valve-openings into communication with each other, and electromagnets for oscillating or partially rotating said valve either in one direction or the other, substantially as described. 3rd. In a gas-regulating cock the combination of a casing, a valve mounted therein and comprising a vertical cylinder having a flattened side adapted to bring the valve-openings into communication, and an armature on said cylinder, and electromagnets applied in the casing so as to exert their force upon the armature at a tangent to its direction to rotation or oscillation, substantially as described. 4th. In a gas-regulating cock the combination of a casing having a hollow chamber, a vertical recess, an inlet groove formed in said recess, and a passage from said recess to said chamber, a rotary or oscillating valve mounted in said recess and provided with a flattened side to bring the passage and inlet groove into communication either more or less, an armature on said valve and electromagnets for operating the armature to turn the valve either one way or the other, substantially as described. 5th. In a gas-regulating cock the combination of a casing comprising two separable parts, one of the parts being provided with a hollow chamber communicating with the gas-supply, a valve in said chamber for regulating the supply and provided with an armature, electromagnets for actuating the valve, the other member of the casing being adapted to be removed from the lower member without breaking the connection or disturbing the magnets, substantially as described.

No. 60,228. Gold-Washing Machine.

(*Machine à laver l'or.*)



Charles A. Bentzen, New York City, U.S.A., 4th June, 1898; 6 years. (Filed 19th November, 1897.)

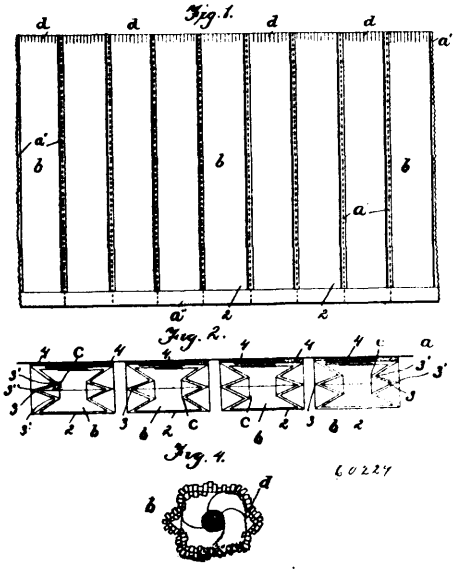
Claim.—1st. The combination of a trough, removable trays at the bottom of the same, said trays being provided with grooves or cavities, and a rotary drum adapted to be charged with gold-bearing sand, and composed of inwardly-projecting brushes, intermediate perforated plates or screen-sections, and outwardly-projecting paddles or agitators, substantially as set forth. 2nd. The combination of a trough containing water, removable trays at the bottom of said trough, said trays being provided with cleats and intermediate grooves or cavities, a drum in said trough composed of inwardly-projecting brush-sections, intermediate perforated plates or screen sections, and outwardly-projecting paddles or agitators and means for rotating said drum, substantially as set forth. 3rd. In a machine for washing gold-bearing sand, a drum, composed of solid heads, transverse strips provided with inwardly-projecting brushes, intermediate perforated plates or screen-sections between said brush-strips, substantially as set forth. 4th. In a machine for washing gold-bearing sand, a drum, composed of solid heads, transverse strips provided with inwardly-projecting brushes, perforated plates or screen-sections arranged between said brush-strips, and sheet-metal protecting plates applied to the outer surface of the brush-strips, substantially as set forth. 5th. In a machine for washing gold-bearing sand, a drum, composed of solid heads, transverse strips provided with inwardly-projecting brushes, perforated plates or screen-sections between said brush-strips, and outwardly-projecting paddles or agitators attached to some of the brush-strips, substantially as set forth.

No. 60,229. Cigar Pocket. (*Poche pour cigares.*)

Orville Lucius Parmenter, Racine, Wisconsin, U.S.A., 4th June, 1898; 6 years. (Filed 16th April, 1898.)

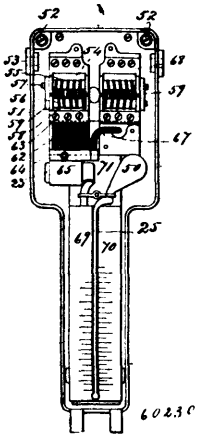
Claim.—1st. A sheet of detachable paper cigar pockets comprising a backing sheet having transverse parallel lines of perforations, equally spaced, with the pockets arranged transversely on one face of the sheet between the lines of perforations, each pocket frayed at its upper end and formed of a single sheet faced with a sheet of wax paper and folded to form the pocket with its ends brought together and pasted to the backing, the sides of the pocket formed with two or more short inward angular bends, and three or more short angular bends, substantially as described. 2nd. As an article of manufacture, a series of long narrow paper pockets, pasted on a backing sheet, the upper end of each pocket formed soft and pliable by slits forming soft tongues, so that a cigar on being inserted is cushioned

from engagement with sharp or stiff edges of the paper, substantially as described. 3rd. A collapsible paper cigar pocket formed



of a sheet of folded paper with its ends secured at the back of the pocket, and a loose lining impervious to moisture folded with said sheet, said lining and sheet formed with soft pliable tongues surrounding the mouth or open end of the pocket, substantially as described. 4th. As an article of manufacture, a sheet of cigar pockets comprising a single backing sheet, and a series of pockets thereon, each pocket formed of an independent sheet of paper pasted on the backing so that the pockets are arranged side by side and connected only by the single backing sheet, said backing sheet separable on lines between the pockets, each pocket formed soft and pliable around its open end, as by fraying or longitudinally slitting the paper thereof, substantially as described. 5th. As an article of manufacture, a sheet of cigar pockets comprising a single backing sheet, and a series of cigar pickets arranged side by side on one side of said single sheet which forms the only connection between the pockets, each pocket formed of an independent sheet of paper with a loose lining impervious to moisture and of approximately the same size, and folded therewith to form the collapsible sides with the plurality of short angular in and out ends, the ends of said sheet forming the pocket being secured to the backing sheet, the plurality of short angular in and out bends holding the lining sheet in its proper place within the pocket and against pulling out with a cigar, substantially as described. 6th. A paper cigar cell formed long and narrow to snugly receive a cigar and having a closed end, two sides of the cell formed collapsible with a plurality of short angular inward folds and a plurality of short angular folds, said folds not extending into the central open portion of the cell and extendlng the full longitudinal length thereof from end to end and arranged parallel, the cell f rmed soft and pliable around its open end or mouth by longitudinally slitting or fraying the paper at that point to form tongues so that the tapered end of the cigar, on insertion into the cell, engages said pliable tongues and thus forces the cell open gradually without injury to the cigar wrapper and without engaging sharp cutting paper edges at said longitudinal folds, substantially as described. 7th. A long, narrow paper cigar pocket or cell having the paper around its open end formed with a pliable, soft, frayed or slitted surface or end, and having the collapsible sides, whereby the tapered end of the cigar first engages said surface on entering the pocket and presses open and distends the same without cutting or injury to the cigar wrapper by engaging sharp or stiff cutting edges, substantially as described. 8th. A long, narrow paper cigar pocket or cell formed of two rectangular sheets of the same size, the inner sheet of an oily nature impervious to moisture, said sheets folded together without being secured to each other to form the two collapsible sides, each with a plurality of short in and out angular folds extending the full length of the cell, and whereby the inner sheet is held in the cell against pulling out with a cigar by the friction and pressure at said pluralities of intermeshing short side folds, the ends of the outer sheet pasted to a backing sheet, the lower end of the cell compressed and closed by pasting the backing sheet over the same, substantially as described. 9th. As an article of manufacture, a series of connected paper cigar cells or pockets formed long and narrow and closed at one end, and having the collapsible sides and an interior lining or coating of an oily and smooth nature impervious to moisture, the end of the pocket being frayed or slitted through the collapsible sides and front and back, forming pliable tongues having the lining or coating of an oily nature, so that cigars can be moved into and out of the pocket without injury to the wrappers thereof by friction, and can be carried in the pocket without injury from the heat of the body or conditions of the atmosphere. 10th. The sheet of paper cigar cells, comprising a backing sheet and the series of collapsible paper cigar cells pasted thereon, the open end of each cell formed and surrounded by a surface of pliable tongues integral with the cell and coated or lined by an oily smooth material to prevent injury to the wrappers of the cigars forced into and distending the cells, substantially as described. 11th. A series of paper cigar cells, comprising a backing sheet and paper cells pasted transversely thereon with closed lower ends and open upper ends, the upper ends of the cells formed with longitudinal closely arranged slits or cuts completely through the cells and backing sheet.

No. 60,230. Electric Meter. (*Electromètre.*)



Arthur Wright, Brighton, Sussex, England, 4th June, 1898; 6 years. (Filed 11th January, 1897.)

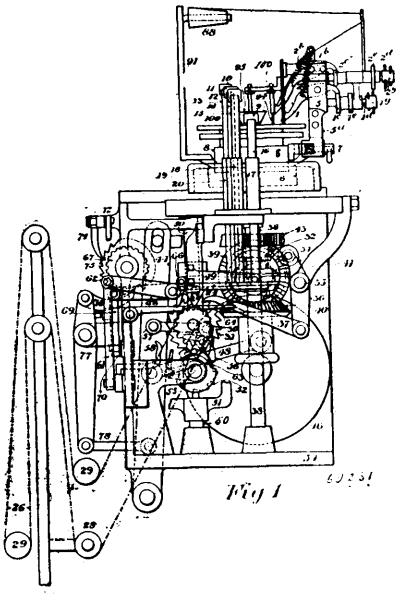
Claim.—1st. The method of recording the maximum or minimum characteristic of an electric current, which consists in withdrawing from a body of liquid a portion of the same, whose amount shall depend upon the amount of such characteristic. 2nd. The method of recording the highest maximum or lowest minimum, or both, of a variable characteristic of an electric current within a certain time limit, which consists in withdrawing from a body of liquid portions thereof by the action of, and commensurate with, the said maximum or said minimum, or both, substantially as described. 3rd. The method of recording the highest maximum or lowest minimum, or both, of a variable characteristic of an electric current within a certain time limit, which consists in withdrawing from a body of liquid a portion of the same, by and commensurate with the heating effect of the said current maximum or minimum, or both, substantially as described. 4th. A meter for recording the highest maximum of a variable characteristic of an electric current within a certain time limit, comprising a vessel containing a liquid, an electric heating coil in operative relation to said vessel for heating the same by and in accordance with said current characteristic, to cause an overflow of the liquid from said vessel, and a receptacle communicating with said vessel for receiving the overflow, substantially as described. 5th. A meter for recording the highest maximum of a variable characteristic of an electric current within a certain time limit, comprising a U-shaped tubular vessel, containing a liquid, an electric heating coil in operative relation to one end of said vessel, and a receptacle at the other end of the vessel arranged to receive the overflow from the vessel caused by the heat of the coil, substantially as described. 6th. A recording electric meter, comprising a U-shaped tube containing a liquid and terminating at each end in a bulb or enlargement, an electric heating coil surrounding the bulb at one end of the tube, and a tube or receptacle communicating with the first-named tube adjacent to the second bulb, substantially as described. 7th. A recording electric meter, comprising a U-shaped tube having a bore of alternate large and small diameter and terminating at each end in a bulb or enlargement, and containing a liquid, an electric heating coil surrounding one of the bulbs, and a tube or receptacle communicating with the first-named tube adjacent to the other bulb, substantially as described. 8th. A recording electric meter, comprising a sealed U-shaped tube, containing a liquid, having a bulb at the upper end of each leg, an electric heating coil surrounding one of the bulbs, a tube or receptacle connected to and communicating with the first-named tube adjacent to the other bulb, a support for the tubes, and a casing or box to which the support is hinged, substantialiy as described.

No. 60,231. Knitting Machine. (*Machine à tricoter.*)

Henry Clarke, Nottingham City, England, 4th June, 1898; 6 years. (Filed 21st March, 1898.)

Claim.—1st. In a knitting machine the combination of the needles 100, knitting cams 102, striping thread carriers 1, 2, 3, 4, means for

throwing each carrier into work at one side of a needle, means for throwing each carrier out of work at the other side of the same



needle, a guide 95, for holding the slack thread, a guide 94, for preventing the out of work threads twisting together to the ends of the carriers, and pattern mechanism controlling the movements of the above means, substantially as set forth. 2nd. In a knitting machine the combination of the needles, 100 knitting cams, 102 striping thread carriers 1, 2, 3, 4, means for throwing the same into and out of action at the same needle, pattern mechanism for controlling the above means, guides 94, 95, for the threads, and means for throwing into and out of action the mechanism for charging the character of the motion of the cam ring, substantially as set forth. 3rd. In a knitting machine, the combination of the needles 100 knitting cams, 102 striping thread carriers pivoted on a bracket 5, which is rotated round the needle cylinder cams and star wheels for throwing the thread carriers into and out of action, movable inclines 9, 10, 11, 12, for the star wheels to strike against a pattern chain 26, controlling the position of the inclines and mechanism for stopping and starting the pattern chain wheel 30, substantially as herein set forth. 4th. In a knitting machine the combination of the needles, 100 knitting cams, 102 striping thread carriers, a bracket 5, carrying the same, cams, star wheels and inclines for operating the thread carriers, a pattern chain, a guide 94, for ensuing the selected thread being fed at a particular needle, a guide 95, for holding the out of work threads clear of the needles, and mechanism for stopping and starting the pattern wheel 30, substantially as herein set forth. 5th. In a knitting machine the combination of the needles, 100 knitting cams, 102 striping thread carriers 1, 2, 3, 4, a bracket 5, carrying the same, cams, star wheels 19, inclines 9, 10, 11, 12, and pattern chain 26, for throwing the thread carriers into and out of action, guides 94, 95, for the threads, a frame 91, for carrying the bobbins 88, 89, 90, a cam, 32, lever 34, and clawker 37, for actuating the pattern wheel ratchet 31, a lever 64, operated from the pattern chain 26, for holding out of action the clawker 37, for the pattern wheel ratchet wheel, a cam 52, and ratchet wheel 63, for operating the knitting cam motion changing mechanism a lever 59, for preventing the clawker acting on the above mentioned ratchet wheel, and connections between the latter lever and pattern chain substantially as set forth. 6th. In a knitting machine the combination of the needles, 100 knitting cams, 102 striping thread carriers 1, 2, 3, 4, a bracket 5, carrying the same, cams 1c, star wheels 19, inclines 9, 10, 11, 12, and pattern chain 26, for throwing the thread carriers into and out of work at the same needle, guides 94, 95, for the thread, a bobbin frame 91, pattern wheel rachet mechanism, means for stopping the motion of the same, a clawker 66, pivoted to the clutch operating arm 49 for starting the pattern wheel rachet mechanism when the motion of the cam ring changes from reciprocating to circular, a lever 68, and connections from the pattern chain for throwing into action, the pattern chain used during the shaping of the leg, substantially as set forth.

No. 60,232. Manufacture of Sulphide and Aluminium.

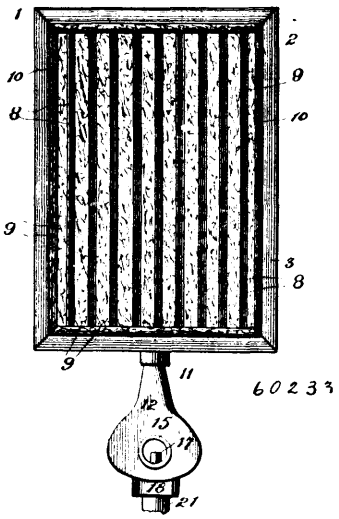
(*Fabrication de sulfure d'aluminium.*)

Dmitry A. Péniakoff, Rue Baudun Pierre, Huy, Belgium, 6th June 1898; 6 years. (Filed 11th July, 1896.)

Claim.—1st. The herein described process of manufacture of sulphide of aluminium either by itself or combined with other sulphides which consists in melting anhydrous salts of aluminium and sulphides of alkalies or alkaline earths in a flux, substantially as described and in the proportions specified. 2nd. The herein described process of obtaining sulphide of aluminium which consists in melting a anhydrous halogen salt of aluminium, such as a single or double fluoride together with a sulphate of an alkali or of an alkaline earth in a flux, consisting of a mixture in suitable proportions of fluoride and alkaline chloride, substantially as described and in the proportions specified.

No. 60,233. Gas Burning Apparatus.

(*Bruleur de gaz.*)



Thomas Edward McCaffrey and Peter Francis McCaffrey, both of Allegheny, Pennsylvania, U.S.A., 6th June, 1898; 6 years. (Filed 27th May, 1898.)

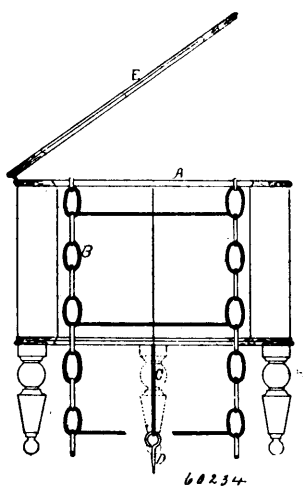
Claim.—1st. A gas burner comprising a gas receiving box having its entire interior area forming a gas chamber, a face board fitted over the open side of the box to inclose the gas chamber thereof and pierced with a multiplicity of gas orifices or openings arranged in vertical rows extending from top to bottom of the box, and continuous longitudinal rows of asbestos fiber secured on the outer surface of the face board at each side of each vertical row of gas orifices or openings to produce between the adjacent rows of fibers narrow continuous valleys or crevices, open throughout their entire lengths to permit the flame to freely rise and follow the same, substantially as set forth. 2nd. A gas burner, comprising a gas receiving box having a vertical face board provided along its outer surface with a series of narrow continuous valleys or crevices extending from top to bottom thereof and open throughout their entire length to permit the flame to freely rise and follow the same, and vertical rows of gas orifices piercing the face board and opening into the valleys or crevices thereof, the orifices in the lower portion of the board being larger than the remaining orifices thereabove to compensate for the pressure of gas on the smaller orifices, substantially as set forth. 3rd. In a gas burning apparatus, the combination with the burner, of a gas mixer comprising a tubular casing formed with an upper tapering discharge neck and a lateral enlarged rounded base portion having in its bottom a single gas inlet opening, and a lateral air inlet neck at one of its flat sides above the plane of the gas inlet and disposed at right angles to the latter, said air inlet neck lying directly opposite the flat imperforate side of the casing, and a valve body carrying a regulating valve and provided with a gas feed nozzle projected through through the gas inlet opening above the plane of the bottom of the casing and having its upper end arranged approximately opposite the centre of the air inlet, substantially as set forth.

No. 60,234. Fire Escape. (*Sauveteur d'incendie.*)

Jane McNeil, St. Thomas, Ontario, Canada, 6th June, 1898; 6 years. (Filed 28th May, 1898.)

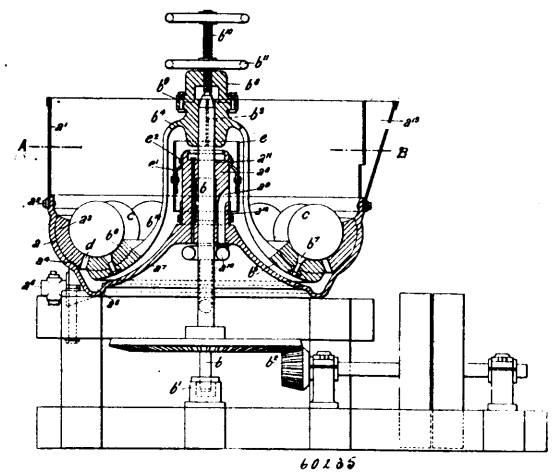
Claim.—1st. The combination with a fire escape ladder of an enclosed stand forming part of the furniture of a room, for retaining

it when not in use, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the ladder B, and the enclosed



stand A, of the cable C, and the screw-eye D, substantally as and for the purpose hereinbefore set foth.

No. 60,235. Grinding Mill. (*Moulin à broyer.*)



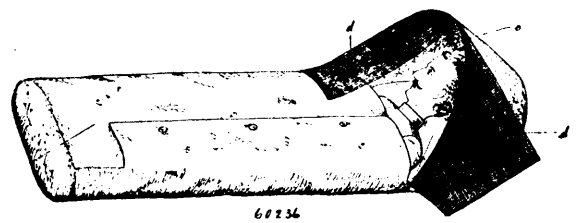
Alfred George Wells, 29 Cornhill, London, England, 6th June, 1898; 6 years. (Filed 27th May, 1898.)

Claim.—In mills for grinding auriferous and argentiferous ores and the like and extracting the metal particles by mercury, in combination, a stationary pan adapted at its periphery to support a water casing, a feed hopper and a grinding ring, and at its lower part formed with an annular mercury trough, and having an upwardly inclined bottom which at its central part is cylindrical and is formed with pulp outlets and is fitted with an adjustable shutter serving to regulate the level of the overflow and with the adjustable shield serving to steady and prevent undue agitation of the pulp in the vicinity of the outlets and is also adapted to act as a bearing to the central shaft, an overhanging yoke keyed to the shaft, and descending around the upraised central part of the pan and approximately conforming at its bottom to the shape of the inclined bottom of the pan and adapted at its lower part to support a grinding ring, the grinding rings of the pan and yoke being so shaped and disposed as to form a channel adapted to support a series of crushing balls and a continuous annular opening leading to the mercury trough of the pan, a series of crushing balls adapted to roll around within the channel formed by such grinding rings and to be actuated by the rotation of one of such rings, means of regulating and adjusting the distance between the bottoms of the pan and the yoke, and means for rotating the central shaft, as set forth.

No. 60,236. Sleeping Bag. (*Sac à coucher.*)

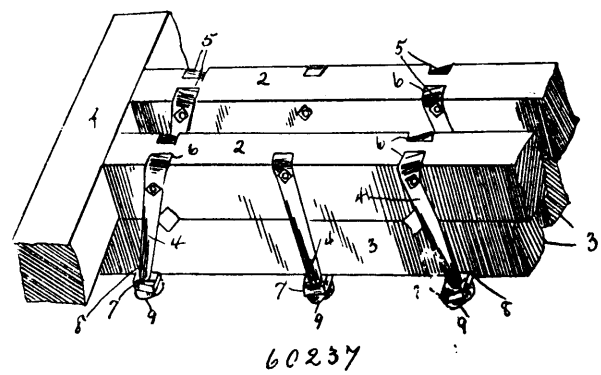
Ferdinand Jacob, Dinslaken, Prussia, Germany, 6th June, 1898; 6 years. (Filed 28th May, 1898.)

Claim.—An improved waterproof sleeping bag provided with hood-like wind screen *c* enclosing pillow *b* to be used or required on its rough or smooth side, and having two collapsible jointed arms, after the manner of carriage hoods, and gauge curtains *d* to protect



the sleeper, substantially as and for the purpose hereinbefore set forth.

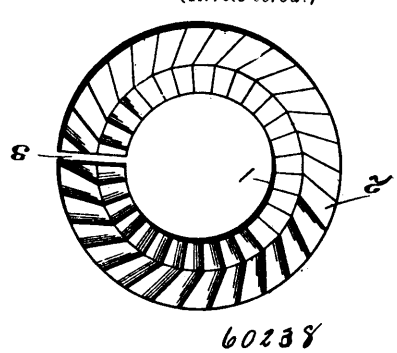
No. 60,237. Draft Timber Fastener.
(*Attache pour bois de construction.*)



William W. Pruett, Effingham, Illinois, U.S.A., 6th June, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. The combination with the centre sills and draft-timbers formed with registering recesses in their meeting faces, transverse pins located in said recesses to prevent the longitudinal movement of one of the drift-timbers, with respect to the centre sills, and straps embracing the centre sills and draft-timbered covering portion of the ends of said pins to prevent the accidental displacement of the same, substantially as set forth. 2nd. The combination with the centre sills and the draft-timbers having angular registering recesses in their meeting faces pins inserted in said recesses and corresponding in cross-section to the area of the recesses, straps having angular ends that are seated in recesses formed in the upper faces of the centre sills, bolts passing through the upper ends of said timbers, clip-plates connecting the lower ends of said straps and seated in recesses formed in the under face of said draft-timbers, and bolts secured upon the lower ends of said straps to hold the clips in place, said straps covering a portion of the ends of said pins to prevent displacement of the same, substantially as set forth.

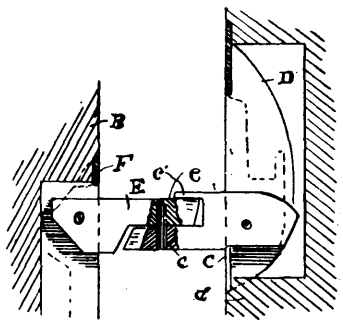
No. 60,238. Nut-Lock. (*Arrête-écrou.*)



Frank O. Johnson, Clarendon, Pennsylvania, U.S.A., 6th June, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—As an improved article of manufacture, a nut-lock of the type comprising a split spiral ring or washer formed upon its opposite faces with ratchet-teeth of angular-shape extending in opposite directions from the central line of said ring, with the meeting point of said teeth upon one face of the nut elevated and those upon the opposite side depressed, all substantially as and for the purpose specified.

No. 60,239. Window Sash Hinge.
(*Penture pour cadres de chassis.*)

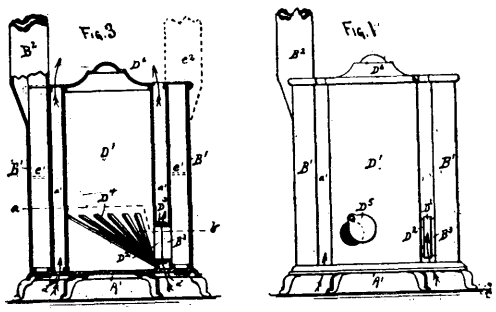


60239

Tito M. Lash, Sacramento, California, U.S.A., 6th June, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—A window-sash hinge, consisting of casings let into the window-frame and stile of the sash, a bar pivoted within one of said casings and adapted to be turned vertically to lie flush with the face thereof and to be turned to a horizontal position so that it may rest upon the lower wall of the opening in the casing, a bar pivoted within the other casing and adapted to be turned from a vertical to a horizontal position and to be supported by the companion bar, said bars being pivoted at points between their ends whereby one end of each bar may be pressed upon to cause the opposite end to move out of the casing so that it may be grasped and moved into its horizontal position, one of said bars having a hole and the other bar having a pin to engage therewith to form a hinge, and said last named bar having a lip adapted to overhang the end of the opposite bar to lock the bars together, both of said bars being weighted at one side of their pivots whereby the bars assume vertical positions when the engagement of their opposite ends is broken.

No. 60,240. Stove. (*Poêle.*)

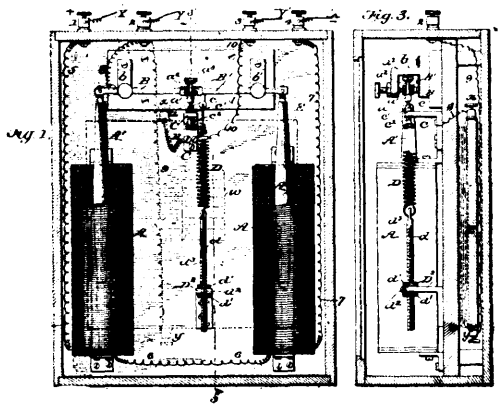


60240

Ezro D. Ellis, Minneapolis, Minnesota, U.S.A., 6th June, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—1st. In a straw and hay stove, a drum having hollow walls and resting on a base and having the outlet flue leading therefrom, and a removable magazine within said drum and communicating therewith near the bottom, whereby the products of the combustion pass through said drum on their way to the outlet flue, substantially as set forth. 2nd. In a straw and hay stove, a base, a U-shaped drum having hollow walls and resting on said base and with the outlet flue leading therefrom, a flue magazine removably supported upon said base within said U-shaped drum, and means for removably connecting said magazine to said drum, substantially as set forth. 3rd. In a hay and straw stove, a base, a U-shaped drum mounted upon said base and with the outlet flue leading therefrom, a horizontal diaphragm within said drum, and means for connecting said magazine and drum whereby the products of combustion pass through said drum in two complete circuits on its way to the exit flue, substantially as set forth.. 4th. In a hay and straw stove, a base, a U-shaped drum supported upon said base, a fuel magazine resting upon said base within said drum and with a space between them, means for connecting said magazine and drum to cause the products of combustion to pass through said drum, and perforations through said base between said drum and magazine, whereby the circulation of the atmosphere is assured, substantially as set forth.

No. 60,241. Regulator for Dynamos.
(*Regulator pour dynamos.*)



60241

Allen Augustus Terrill, Whitefield, and Phill Sheridan Terrill, Grovetown, both in New Hampshire, U.S.A., 8th June, 1898; 6 years. (Filed 4th April, 1898.)

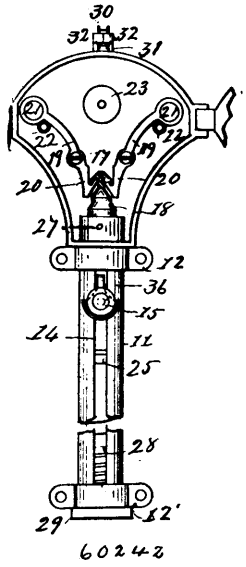
Claim.—1st. An automatic potential governor for dynamos, consisting of one or more vertical solenoid coils arranged in a branch of the main supply circuit, a vertical core for each solenoid, a lever fulcrumed above and outside of the solenoid and attached to and suspending the core of the solenoid, contact points arranged as terminals to a shunt from the field-magnets of the dynamo, one of said contact points being stationary and the other mounted upon the lever and movable, and a spring and adjusting device attached to the said lever for balancing the solenoid core and adjusting the sensitiveness of the contacts, substantially as and for the purpose described. 2nd. An automatic potential governor for dynamos, consisting of a case having a vertical partition, one or more solenoid coils mounted in vertical position on one side of said partition and having its wires arranged in a branch of the main supply circuit, a core for the solenoid, and a lever fulcrumed outside of and above the solenoid and attached to and supporting the core of the solenoid, contact points arranged as terminals to a shunt from the field-magnets of the dynamo, one of said contact points being stationary and the other mounted upon the lever and movable, a spring and adjusting devices attached to said lever for balancing the solenoid core and adjusting the sensitiveness of the contacts, and a condenser arranged vertically on the opposite side of the partition from the solenoid, said condenser having its opposite terminals connected to the opposite contacts of the shunt from the field-magnets, substantially as and for the purpose described. 3rd. An automatic potential governor for dynamos, consisting of two vertically arranged solenoids with cores, a pair of levers loosely connected to each other in the middle and to the cores at their outer ends, a spring for pulling down the inner ends of said levers, two contact points, one carried by the said levers and the other by an adjusting screw, and means for regulating the tension of the spring, substantially as and for the purpose described. 4th. The combination of the vertical solenoids A and cores A^1, the horizontal levers B, B^1 lapped and loosely connected in the middle and provided with boss a^1, contact point a, stem a^2 and nut a^3, the adjustable screw c^2 carrying contact point c, tension spring D for the levers, and the tension regulating and locking devices, consisting of the longitudinally grooved and screw-threaded stem d, bracket plate D^2, nuts d^1, d^1, and screw d^2, and circuit wires, all arranged substantially as shown and described.

No. 60,242. Trolley Catch. (*Accroche-trollée.*)

Robert Orme, Racine, Wisconsin, U.S.A., 8th June, 1898; 6 years. (Filed 6th April, 1898.)

Claim.—1st. The combination on a car with a spring-actuated trolley-pole provided with a trolley-cord, of a pole-retrieving device mounted on the car, comprising a gravity-actuated weight to which the cord is attached, a catch or catches releasably supporting the weight, and means by which the catches are actuated by the raising of the weight to automatically release it. 2nd. In a trolley-pole-retrieving device, the combination of a weight having a bevelled upper extremity, a head secured to the weight above the bevelled end, gravity-actuated lever-catches arranged to releasably take under the head and support the weight, and faces on the catches adapted to contact with the bevelled end of the weight when it is lifted and be thereby pushed laterally from engagement with the head. 3rd. In a trolley-pole-retrieving device, the combination of a weight having a bevelled upper extremity, a conical head secured to the weight above the bevelled end, gravity-actuated lever-catches arranged to releasable take under the head and support the weight, stops to limit the tilting of the catches both inwardly and outwardly,

and faces on the catches adapted to contact with the bevelled end of the weight when it is lifted and thereby to be pushed laterally

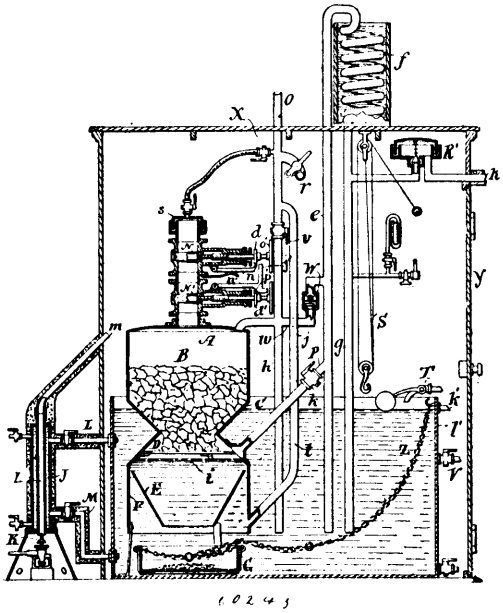


60242

from beneath the head said faces being also adapted to contact with the conical face of the head and be forced laterally by the lifting of the head permitting it to pass the catches. 4th. In a trolley-pole-retrieving device, the combination with a weight having a head and a bevelled face, of tilting lever-catches respectively weighted at one extremity and provided with shoulders or hooks at the other extremity and so pivoted as by gravity to bring the shoulder or hook extremities near to each other, and stops to limit the movement of the catches in both directions.

No. 60,243. Gas Making Machine.

(*Machine pour la fabrication du gaz*)

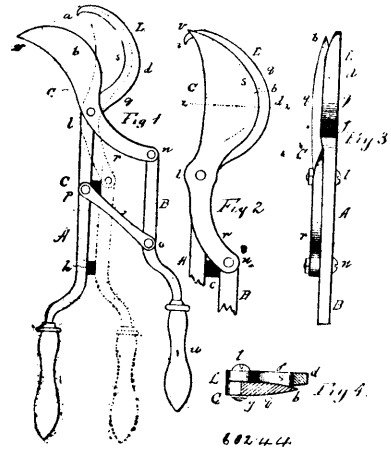


60243

Edward N. Dickerson, New York City, U.S.A., 8th June, 1898; 18 years. (Filed 27th May, 1896.)

Claim.—1st. The combination in a gas generating apparatus of a chamber for containing the gas producing solid material, of another chamber for containing water connecting with said first chamber by a constricted oriffice, of a perforated support for the solid material below said oriffice in a chamber, greater in diameter than the oriffice, substantially as described. 2nd. The combination in a gas generating apparatus of a chamber for containing the gas producing solid material, of another chamber for containing water connecting with said first chamber by a constricted oriffice having an independent overflow chamber, and a perforated support for the solid material below said oriffice located in a chamber greater in diameter than the oriffice, substantially as described. 3rd. The combination of a chamber for containing a solid gas-producing body, an independent chamber beneath containing a liquid which combines with solid material to form a gas, a fixed grating or equivalent support for supporting the solid material, and a gas-escape pipe permanently fixed at the level of the grating for removing the gas, substantially as described. 4th. The combination of a chamber for containing a solid-producing body, an independent chamber beneath containing a liquid which combines with said solid material to form a gas, a grating equivalent support for supporting the solid material, a gas-escape pipe at the level of the grating for removing the gas, and a constricted opening between said upper and lower chambers and above the gas-escape pipe, substantially as described. 5th. In a gas producing apparatus, the combination of the chamber A, having a constricted lower opening, the chamber F, greater in diameter than the constricted lower opening A, the grating D located in the chamber F at a point greater in diameter than the constricted opening. and the surrounding water-jacket Z, surrounding said constricted chamber and serving as an overflow chamber, substantially as described. 6th. In a gas producing apparatus, the combination of the chamber A, having a constricted lower opening, the chamber F, greater in diameter than the constricted lower opening A, the grating D located in the chamber F at a point greater in diameter than the constricted opening, the surrounding water-jacket Z, surrounding said constricted chamber and serving as an overflow chamber, and the gas escape pipe t connected with the chamber F, below the level of the constricted opening of chamber, and itself passing through the surrounding water-jacket, substantially as described. 7th. The combination of the chamber A, having lower converging sides with the chamber F having upper converging sides uniting with the chamber A to form a constricted orifice, and the perforated support D for the solid material beneath the constricted orifice, and a chamber below the perforated support D, substantially as described. 8th. The combination of the chamber A provided with gate valve N, the water-seal S connecting with flexible pipe, thereby allowing the chamber A to be emptied of gas, and likewise carrying off any escape past the valve N, substantially as described. 9th. The combination of the generating chamber A, the water chamber E, the grating D, and overflow water chamber Z, and the gas delivery pipe g provided with gas regulator R^1, controlling the height of the water in the chamber F and the overflow chamber Z, substantially as described. 10th. The combination of the gas generator A, the water chamber F, the grating D, the surrounding water chamber Z provided with automatic water supply arranged to deliver water obtained from a source exterior to the mechanism above the level of the grating D, and the overflow k^1 above the level of the water supply, substantially as described. 11th. The combination of the chamber A, the water chamber F, the grating D, and the escape pipe t connecting with the lower portion of the chamber F, normally beneath the water level in said chamber thereby serving as an automatic escape, substantially as described.

No. 60,244. Pruning Shears. (*Sécateur.*)

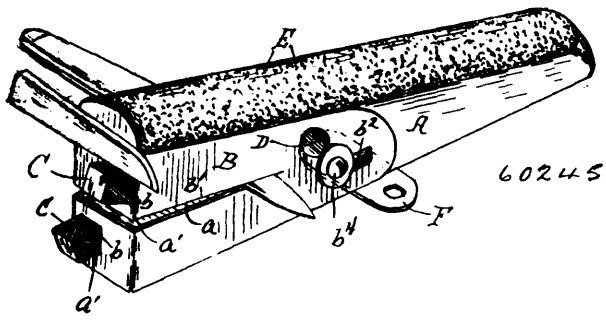


60244

Albert Barling, Youngstown, Ohio, U.S.A., 8th June, 1898; 6 years. (Filed 8th February, 1898.)

Claim.—In a pruning implement, the combination with a handle having a segmental blade with hooked end, a cutting blade pivoted on said handle and provided with a hooked end, an operating handle pivoted to said cutting blade, a link pivotally connecting said operating handle and the first-mentioned handle at their middles, and the lugs on the first-mentioned handles, substantially as and for the purpose described.

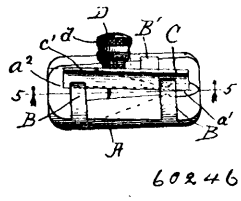
No. 60,245. Knife-Sharpener. (*Aiguiseur de couteau.*)



Ira J. Ide, Emanuel Réchard and Robert B. Gilmour, all of Duluth, Minnesota, U.S.A., 8th June, 1898; 6 years. (Filed 2nd March, 1898.)

Claim.—1st. In a knife-sharpener of the type herein described, the combination with a handle or stock provided with a guide slot for the passage of the knife-blade, and inclined file-channels intersecting said slot, files or hones, removable and adjustable, applied in said file-channels, an apertured channel in the stock at the ends of the said file-channels for the reception and discharge of filings, and an adjustable cap constructed with an aperture coinciding with the guiding slot in the stock and an adjusting slot, and fastening means working in conjunction with said adjusting slot, substantially as described. 2nd. The combination of the reversely-inclined files, the stock provided with a guiding slot, and a cap provided with coinciding apertures, said slot and apertures serving for the passage of the knife against the files, and said parts being constructed to permit the files to be set inclined and to extend out beyond the stock, and to be fastened in such position as to permit a knife to be sharpened on certain portions of the files and scissors or shears to be sharpened on other portions thereof, substantially as described. 3rd. The combination with a handle provided with a guide slot and reversely-inclined file-channels intersecting said slot in opposite directions, and an adjustable cap having apertures in its ends of greater diameter than the files, and also provided with a guiding slot corresponding with the apertures in the handle, means for securing the cap to the handle and adjusting it longitudinally, files removably fixed in said channels, an apertured channel for receiving and discharging the filings, a file or hone of suitable material affixed to one side of the stock, and means for securing said sharpener to a wall or other foundation, substantially as described. 4th The combination of the stock or handle, provided with a slot for the insertion of the article to be sharpened, the cap having similar coinciding apertures and made adjustable longitudinally on the stock, reversely-inclined files entering snugly into the apertures of the stock, and means for fastening the cap in its adjusted binding position upon the files, the whole being such that the cap binds on the under inclined surface of one file and on the upper inclined surface of the other file when the cap is forced home and secured in its position by the fastening means.

No. 60,246. Lead Pencil Sharpener. (*Taille-crayon.*)



William Morrison Moseley, Elgin, Illinois, U.S.A., 8th June, 1898; 6 years. (Filed 8th March, 1898.)

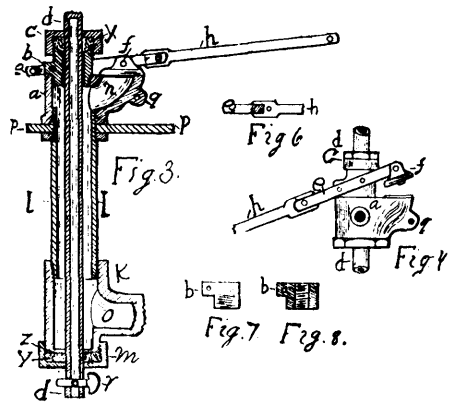
Claim.—1st. In a pencil-sharpener comprising a body portion, a bore and a cutting-blade, means for locating the cutting-blade in operative position, consisting of stops engaging the converging surfaces of the blade, which form its cutting edge, substantially as described. 2nd. In a pencil-sharpener comprising a body portion, a bore, a cutting-blade seat and a cutting-blade, means for locating the cutting-blade in operative position, consisting of stops engaging one of the two converging surfaces which form the cutting edge of the blade, while the other of said surfaces lies upon the seat, substantially as described. 3rd. In a pencil-sharpener comprising a body portion, a bore, a cutting-blade seat and a cutting-blade, means for preventing lodgment of material covered from the pencil, consisting of a clearance-groove beneath the blade, substantially as described. 4th. In a pencil-sharpener comprising a body portion, a bore, a cutting-blade seat and a cutting-blade, means for retaining the pencil within the bore, consisting of a projection on the interior surface of the bore adapted to engage the pencil, substantially as described. 5th. In a pencil-sharpener comprising a body portion, a bore, a seat for a cutter, a three-sided cutting-blade of such symmetrical form that either of the two converging surfaces which form its cutting edge may rest upon the seat without disarranging the cutting edge from its operative position, substantially as described. 6th. In a pencil-sharpener comprising a body-portion, a bore, a seat for a cutter, a three-sided blade of such symmetrical form that either of the two converging surfaces which form its cutting edge may rest upon the seat without disarranging the means for clamping the blade. 7th. A pencil-sharpener comprising a body portion, a bore, a cutting-blade seat and a cutting-blade, a recess intersected by the plane of the cutting-blade seat, and a clamping-stud adapted to engage said recess, substantially as described. 8th. In a pencil-sharpener comprising a body portion, a bore, a cutting-blade seat, a cutting-blade and a clamping-stud, a threaded recess in the body portion adapted to be engaged by the threaded exterior of the stud, the said recess being intersected by the plane of the cutting-blade seat, substantially as described. 9th. In a pencil-sharpener, comprising a body portion, a bore, a cutting-blade seat, a cutting-blade, and a clamping-stud, the axis of the stud being so arranged in relation to the blade that the back margin of the latter is impinged upon by that portion only of the end of the stud which is revolving toward the plane of the cutting-blade seat, substantially as described. 10th. In a pencil-sharpener, the combination of a body portion, a bore, a seat for a cutting-blade, a cutting-blade, stops for locating the cutting-blade in operative position, a clamping-stud and a projection on the interior surface of the bore, substantially as described. 11th. In a pencil-sharpener, the combination of a body portion, a bore, a seat for a cutting-blade, a cutting-blade, stops for locating the cutting-blade in operative position, a clamping-stud, a clearance groove and a projection on the interior surface of the bore, substantially as described. 12th. In a pencil-sharpener, the combination of a body-portion, a bore, a seat for cutting-blade, a longitudinally-adjustable cutting blade stop for locating the cutting-blade in operative position, a clamping-stud and a projecting on the interior surface of the bore, substantially as described. 13th. In a pencil-sharpener, the combination of a body-portion, a bore, a seat for a cutting-blade, a longitudinally-adjustable cutting-blade, stops for locating the cutting-blade in operative position, a clamping stud, a clearance-groove and a projection on the interior surface of the bore, substantially as described. 14th. In a pencil-shapener, the combination of a body portion, a bore, a seat for cutting-blade a reversibly adjustable cutting-blade, stops for locating the blade in operative position, a clamping-stud and a projection on the interior surface of the bore, substantially as described. 15th. In a pencil-sharpener, the combination of a body portion, a bore, a seat for a cutting-blade, a reversibly adjustable cutting-blade, stop for locating the blade in operative position, a clamping-stud, a projection on the interior surface of the bore and a clearance-groove, substantially as described. 16th. In a pencil-sharpener, the combination of a body portion, a bore, a seat for a cutting-blade, a longitudinally and reversibly adjustable cutting-blade, stops for locating the blade in operative position, a clamping-stud and a projection on the interior surface of the bore, substantially as described. 17th. In a pencil-sharpener, the combination of a body portion, a bore, a seat for a cutting-blade, a longitudinally and reversibly adjustable cutting-blade, stops for locating the blade in operative position, a clamping-stud, a projection on the interior surface of the bore, and a clearance-groove, substantially as described. 18th. The body portion of a pencil-sharpener comprising a bore, a cutting-blade seat, a threaded recess intersected by the plane of the cutting-blade seat and stops for locating the cutting-blade in operative position, substantially as described. 19th. The body portion of a pencil-sharpener comprising a bore, a cutting-blade seat, a threaded recess intersected by the plane of the cutting-blade seat, stops for locating the cutting-blade in operative position, and a clearance-groove, substantially as described. 20th. The body portion of a pencil-sharpener comprising a bore, a cutting-blade seat, a threaded recess intersected by the plane of the cutting-blade seat, stops for locating the blade in operative position, a projection on the interior surface of the bore, substantially as described. 21st. The body portion of a pencil-sharpener comprising a bore, a cutting-blade seat, a threaded recess intersected by the plane of the cutting-blade seat, stops for locating the cutting-blade in operative position, a clearance-groove and a projection on the interior surface of the bore, substantially as described. 22nd. The body portion of a pencil-sharpener, comprising a bore with its axis inclined to the axis of the body portion, a cutting-blade seat, a threaded recess intersected by the plane of the cutting-blade seat, and stops for locating the cutting-blade in operative position, substantially as described. 23rd. The body portion of a pencil-sharpener comprising a bore with its axis inclined to the axis of the body portion, a cutting-blade seat, a threaded recess intersected by the plane of the cutting-blade seat, stops for locating the cutting-blade in operative position, and a clearance-groove, substantially as described. 24th. The body portion of a pencil sharpener comprising a bore with its axis inclined to the axis of the body portion, a cutting-blade seat, a threaded recess intersected by the plane of the cutting-blade seat, stops for locating the cutting-blade in operative position, and a projection on the interior surface of the bore, substantially as described. 25th. The body portion of a pencil-sharpner comprising a bore with its axis inclined to the axis of the body portion, a cutting-blade seat, a

threaded recess intersected by the plane of the cutting-blade seat, stops for locating the cutting-blade in operative position, a clearance-groove and a projection on the interior surface of the bore, substantially as described. 26th. The combination with a pencil-sharpener, comprising a body, a conical bore therein and a cutting-blade projecting at its edge within the periphery of said conical bore, of a screw-threaded stud tapped into said body and projecting at its inner end within the periphery of said conical bore, substantially as described. 27th. A pencil-sharpener, comprising a body provided with a conical bore or recess, a cutting-blade seat intersecting the periphery of said conical bore to form a throat-opening, a cutter-blade mounted upon said seat and projecting at its cutting edge within said throat, and a clearance-space extending out across the face of said seat beneath the cutter-blade thereon from a point below the apex of the conical recess, substantially as described. 28th. A pencil-sharpener, comprising a cylindrical body, a tapered or conical bore having its axis inclined at an angle to the axis of said body, a cutter-blade seat substantially tangential to the periphery of said conical bore, a cutter-blade triangular in cross section mounted upon said seat, overhanging arms formed integrally with said body engaging the upper surface of said blade, and a retaining-stud arranged to impinge against the rear of said blade to hold the latter in operative position between its seat and said overhanging arms, substantially as described. 29th. A pencil-sharpener, comprising a cylindrical body having a cutter-blade seat, a conical recess or bore extending inwardly from one end of said body and intersecting at its periphery the plane of said cutter-blade seat, the axis of said bore being inclined to the axis of the cylindrical body, a cutter-blade mounted upon the seat, and means for holding the same in position, substantially as described. 30th. A pencil-sharpener, comprising a body portion and bore, a cutting-blade seat, a triangular cutting-blade and a stop to engage one of the two oblique surfaces of the blade which unite to form a cutting edge, and a clamping-stud, the arrangement of the axis of which in relation to the blade being such that a portion only of the end of the stud will engage the back margin of the blade, substantially as described. 31st. A pencil-sharpener, comprising a body portion, a bore, the axis of which is inclined with relation to the axis of the body portion, a cutting-blade seat and cutting-blade, the cutting edge of the latter being so arranged with relation to the axis of the inclined bore that the line of the cutting-edge is not parallel to and does not intersect the axis of the bore, whereby a cylindric, instead of a conical end, is given to the graphite core of the pencil being sharpened. 32nd. In a pencil-sharpener the combination of a body-portion, an inclined bore, a cutting-blade seat and cutting-blade stops for locating the blade in operative position, a clamping-stud and a clearance groove the latter in a blade seat extending from the intersection of the latter with the bore at that part of the intersection opposite where the graphite core of the pencil joins the wood, substantially as described. 33rd. A pencil sharpner comprising a body portion, a bore, a cutting blade, the two oblique surfaces of which unite to form a cutting edge, means for preventing the movement of the cutting blade toward the bore beyond the operative position of the blade, consisting of a bearing surface or part on the body portion against which one of the oblique surfaces of the blade abuts and a stop engaging the rear or outer edge of the blade, substantially as described. 34th. A pencil sharpner comprising a body portion having a seat for a cutter, a cutting blade having two oblique surfaces which unite to form its cutting edge, a bearing surface part on the body portion engaging one of said oblique surfaces whereby the other oblique surface is held upon said seat and the position of the cutting edge determined, and a stop engaging the back or outer edge of the cutter, substantially as described. 35th. A pencil sharpner comprising a body portion provided with a seat for a cutter, a cutting blade having two oblique surfaces which form a cutting edge, surfaces on the body portion engaging one of said oblique surfaces whereby the other surface is held to said seat, and an adjustable stop engaging the back or outer margin of the cutter, substantially as described. 36th. A pencil sharpener comprising a body portion having a seat for a cutter, a three sided cutting blade the two oblique sides of which unite to form a cutting edge, a stop on the body portion to engage the third or outer side of the cutter, and means for removably securing the cutter to its seat, whereby it may be reversed end for end, or shifted endwise thereon comprising stops on the body portion engaging one of the oblique surfaces when the other is upon said seat, substantially as described. 37th. A pencil sharpener, comprising a cutting blade, a body portion provided with a seat for the cutting blade, and means for holding the cutting plate in place, comprising stops engaging the oblique surface of the cutting blade by which its cutting edge is formed at its side opposite that which is in contact with said seat, and a screw acting against the outer edge of the cutting blade, to hold the same in contact with said stop, substantially as described.

No. 60,247. Pipe System. (*Système de tuyaux.*)

George E. Montague, Granby, Massachusetts, U.S.A., 8th June, 1898; 6 years. (Filed 25th January, 1898.)

Claim.—1st. A pipe-and-valve system for controlling the flow of liquids from supply-mains and analogous purposes, comprising a stand-pipe, a connection on one end thereof, whereby said pipe has communication with a supply-main, a valve-body secured to the outlet end of said pipe, having an outlet-passage terminating at one side of the axis of said pipe, a yoke-casing attached to the upper end of said valve-body, a yoke pivoted on said casing for vibratory



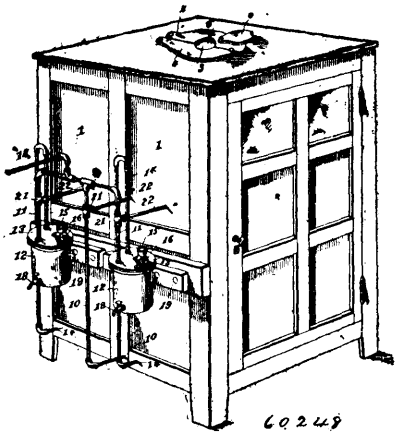
motion thereon, having an arm extending over the outer end of said outlet-passage, a valve connected to said arm for movement against and from said valve-body at the outer end of said passage, and an operating-lever connected to said arm, combined and operating, substantially as set forth. 2nd. A pipe-and-valve system for controlling the flow of liquids from supply-mains and analogous purposes, comprising a stand-pipe, a connection on one end thereof whereby said pipe has communication with a supply-main, a valve-body secured to the outlet end of said pipe, having an outlet-casing attached to the upper end of said valve body, a yoke passage terminating at one side of the axis of said pipe, a yoke pivoted on said casing for vibratory motion thereon, having an arm extending over the outer end of said outlet-passage, a valve connected to said arm for movement against and from said valve-body at the outer end of said passage, and an operating lever pivotally hung on said casing and pivotally connected to said arm, combined and operating, substantially as set forth. 3rd. A pipe-and-valve system for controlling the flow of liquids from supply-mains and analogous purposes, comprising a stand-pipe, a connection at one end of said pipe, whereby the same has communication with a supply-main, a stuffing-box on the lower end of said connection, a valve-body secured to the outlet end of said pipe having an outlet-passage terminating at one side of the axis of said pipe, a longitudinally-perforated yoke-casing attached to the upper end of said valve-body, a stuffing-box on the outer extremity of said casing, a pipe for the reception of a heating element, of less diameter than the interior of said stand pipe extending through the latter and through each of said stuffing-boxes, a yoke pivoted on said casing for vibratory motion thereon having an arm extending over the outer end of said outlet-passage, a valve connected to said arm acting to open and close the outer end of said passage and an operating lever pivotally hung on said casing and pivotally connected to said arm, combined and operating, substantially as set forth. 4th. A pipe-and-valve system for controlling the flow of liquids from supply-mains and analogous purposes, comprising a stand-pipe, a connection on one end thereof, whereby said pipe has communication with a supply-main, a valve body secured to the outlet end of said pipe, having an outlet-passage terminating at one side of the axis of said pipe, a yoke-casing attached to the upper end of said valve-body, a yoke pivoted on said casing for vibratory motion thereon, having an arm extending over the onter end of said outlet-passage, a valve connected to said arm for movement against and from said valve-body at the outer end of said passage, a pivoted-fulcrumed link connected to said casing by one end, and a valve-operating lever pivotally hung on the free extremity of said link, and having one end pivotally engaging said arm, combined and operating, substantially as set forth. 5th. A pipe-and-valve system for controlling the flow of liquids from supply-mains and analogous purposes, comprising a stand-pipe, a connection at one end thereof, whereby said pipe has communication with a supply-main, a valve-body secured to the outlet end of said pipe, having an outlet-passage terminating at one side of the axis of said pipe, a yoke-casing attached to the upper end of said valve-body, a vent-orifice through the side of said casing, a yoke pivoted on said casing with variable pivot-points for vibratory motion thereon, having an arm extending over the outer end of said outlet-passage, a valve connected to said arm for movement against and from said valve-body at the outer end of said passage, a pivoted fulcrum-link connected to said casing by one end, and a valve-operating lever pivotally hung on the free extremity of said lever support, and having one end pivotally engaging said arm, combined and operating, substantially as set forth.

No. 60,248. Apparatus for Administering Medicated Vapor-Baths. (*Appareil de bains.*)

Peter John Holm, Eau Claire, Wisconsin, U.S.A., 8th June, 1898; 6 years. (Filed 19th March, 1898.)

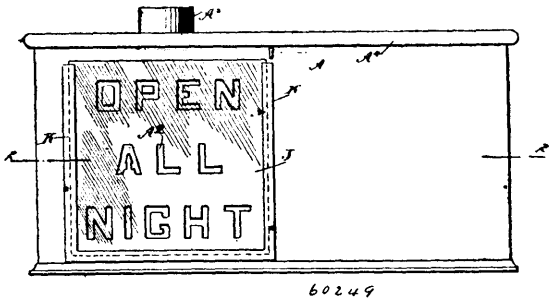
Claim.—A bath apparatus consisting of a compartment or casing provided with a false bottom or floor having perforations through

only a portion of its area, and an imperforate section of sufficient size to prevent the vapor from coming into direct contact with the



bather when in position upon the imperforate section, two medicine-receptacles supported at the side of the casing, a single vapor-supply pipe having three depending connected branches each provided with a valve having a horizontal stem extending inwardly through one side of the casing for separate or simultaneous use, the side branches of the supply-pipe being extended downwardly into the medicine-receptacle and the intermediate of said branches having at its lower end a horizontal portion through one side of the casing and having its discharge end located directly under the perforated portion of the false bottom or floor, and a pair of delivery-pipes respectively connected to the separate medicine-receptacles at one end and having their discharge-orifices located beneath the false bottom or floor at the opposite sides of the imperforate portion thereof, as and for the purposes set forth.

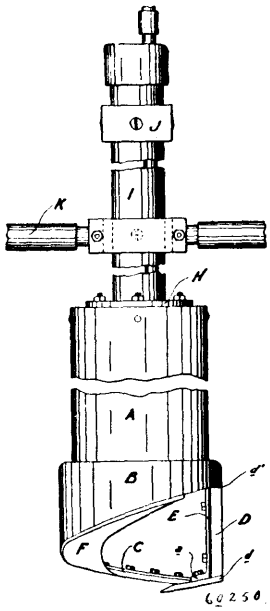
No. 60,249. Illuminated Sign. (*Enseigne illuminé.*)



Charles Philip Gates, New York City, U.S.A., 8th June, 1898; 6 years. (Filed 18th March, 1898.)

Claim.—1st. The combination with a casing, of a driving crank therein, a pitman connected to the crank shaft, a series of shutters pivotally carried by the casing at the inner side thereof, and a bar pivotally connected to the shutters and to the pitman, the casing having orifices capable of being closed by the shutters when moved through the medium of the bar and pitman, substantially as described. 2nd. The combination with a casing having orifice therein, of a driving crank shaft mounted within the casing, a plurality of horizontal lines of shutters pivotally mounted within the casing and capable of swinging to open and close the orifices within the casing, a bar pivotally connected with each horizontal line of shutters, a pitman connected to the crank shaft and having a vertically elongated pivot pin, the pivot pin having connection with the horizontal bars whereby the shutters are operated in unison with each other, substantially as described. 3rd. The combination with a casing having orifices therein, of a driving crank shaft mounted within the casing, a pitman one end of which is formed with a longitudinally elongated slot receiving the crank shaft, a series of horizontal lines of pivotally mounted shutters, the shutters being movable to open and close the orifices, and a bar pivotally connected with each horizontal line of shutters, the pivot having the end opposite the crank shaft forked and having a pivot pin running vertically across the arms of the fork, the pivot pin having connection with all of the horizontal bars and serving to transmit simultaneously operative movement to the swinging plate, substantially as described.

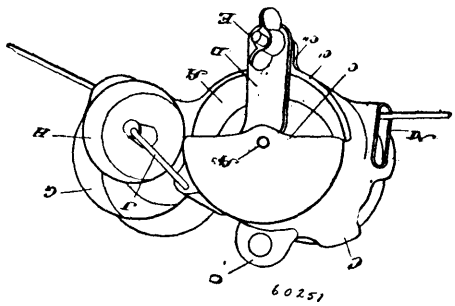
No. 60,250. Earth Auger. (*Sonde à trepan.*)



Zotique Leroux, Montreal, Quebec, Canada, 8th June, 1898; 6 years. (Filed 31st March, 1898.)

Claim.—1st. An earth boring auger having its barrel A strongly reinforced at its lower extremity, by a piece B, substantially as described and for the purposes set forth. 2nd. An earth boring auger having its lower extremity cut off spirally and provided with both a vertical and an horizontal cutter substantially as described and for the purpose set forth. 3rd. In combination an earth boring auger having a reinforced base, spirally shaped bottom, vertical and horizontal cutters, of a pipe inside the vertical operating tube, substantially as described and for the purpose set forth.

No. 60,251. Harvester Binder.
(*Moissonneuse-lieuse.*)



Thomas Henry King, Cannington, Ontario, Canada,, 8th June, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—1st. A tension device for the binding mechanism of a harvester binder embracing in its construction a frame, a tension sheave journaled in the frame around which the binder twine is adapted to be passed, and an idler journalled in the frame contiguous to the tension sheave, substantially as specified. 2nd. A tension device for the binding mechanism of a harvester binder embracing in its construction a frame, a tension sheave journalled in the frame around which the binder twine is adapted to be passed, an idler journalled in the frame contiguous to the tension sheave, and a friction brake bearing against the hub of the tension sheave, substantially as specified. 3rd. A tension device for the binding mechanism of a harvester binder embracing in its construction a frame, a tension sheave journalled in the frame around which the bindder twine is adapted to be passed, an idler journaled in the frame contiguous to the tension sheave, a friction brake bearing against the hub of the tension sheave, and means for increasing and diminishing the pressure of the friction brake against the hub of the tension sheave, substantially as specified. 4th. A tension device for the binding mechanism of a harvester binder embracing in its construction a frame, a a tension sheave journaled in the frame around which the binder twine is adapted to be passed, an idler journaled in the frame contiguous to the tension sheave, a friction brake bearing against the hub

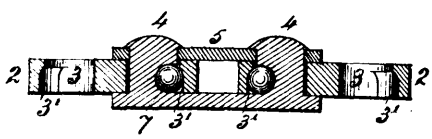
of the tension sheave, means for increasing and diminishing the pressure of the friction brake against the hub of the tension sheave, consisting of a lug projecting from the frame, and a set screw passing through the friction brake and entering the lug, substantially as specified. 5th. A tension device for the binding mechanism of a harvester binder embracing in its construction a tension sheave, a shell for the tension sheave consisting of a strap, a check depending from the strap, a pintle passing through the check on which is mounted the hub of the tension sheave, a friction brake consisting of a metallic bar through which passes the pintle, one end of the friction brake bearing against the inner side of the check of the shell, and the other end projecting beyond the strap, a lug projecting from the strap, a set screw passing throug the friction brake and entering the lug, an idler, a swinging bail for the idler pivotally connected to the shell, a spring connected to the swinging bail and pintle of the idler to hold it in its normal position, a strap encircling the idler integrally formed with the shell of the sheave, and holes formed through the straps for the course of the binder twine, substantially as specified. 6th. In a tension device for the binding mechanism of a harvester binder a tention sheave consisting of two parts, a frictional disc interposed between the two parts, a pheripheral groove for tension sheave having convexed sides, and binding screws for locking together the two parts of the tension sheave, substantially as specified.

No. 60,252. Beverage. (*Breuvage.*)

James Kennedy Anderson, Wankesha, Wisconsin, U.S.A., 8th June, 1898; 6 years. (Filed 25th March, 1898.

Claim.—1st. A mineral water consisting of carbonic acid water containing, in solution, a form of lithium and boric acid, substantially as described. 2nd. An artificial mineral water consisting of carbonic acid water, lithium carbonate and boric acid in about the proportions of 35 grains of the carbonate and 15 grains of the acid to a gallon of the water, substantially as described. 3rd. The herein described process of making an artificial mineral water, which consists in taking water, adding thereto a salt of lithia and boric acid in about the proportions specified, effecting solution, and then charging the solution with carbonic acid to the degree desired, substantially as described. 4th. A potable water containing lithium carbonate and boric acid in about the proportions of 35 grains of the carbonate and 15 grains of b ric acid to the gallon, substantially as described..

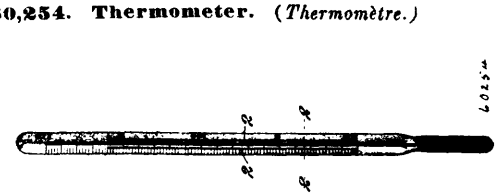
No. 60,253. Bicycle Chain. (*Chaine de bicycles*)



Lyman Ferguson, Ithaca, New York, U.S.A., 8th June, 1898; 6 years. (Filed 5th April, 1898.)

Claim.—1st. A chain comprising solid links, side plates, hinge-pins connecting them, and a ball seated in each hinge pin and bearing against the wall of each hinge pin opening in each solid link. 2nd. A chain comprising solid links, with transverse openings, side plates, hinge pins inserted through said plates and links and connecting them together, and balls seated in and bearing in the line of strain against a recess in each pin, and against the walls of said openings. 3rd. In a chain, means for holding the side plates on, comprising pins notched and a spring clasp adapted to engage therewith, as set forth. 4th. A chain comprising solid links, with transverse openings milled out as shown, side plates, hinge pins, inserted through said plates and links and connecting them together, and balls seated in and bearing in the line of strain against a recess in each pin, and against the walls of said openings.

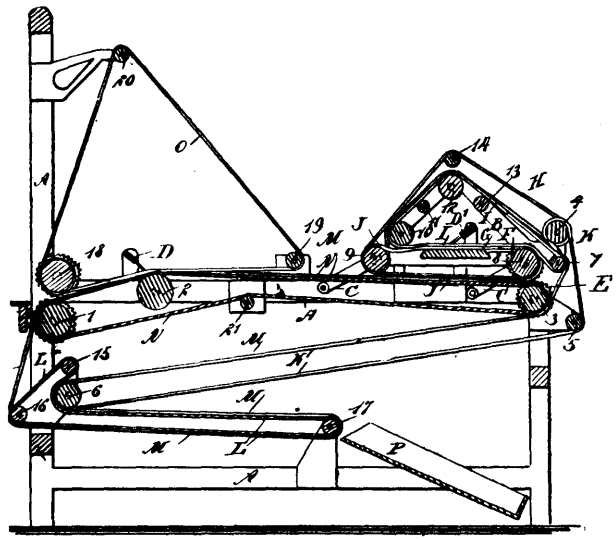
No. 60,254. Thermometer. (*Thermomètre.*)



Charles S. Ruckstuhl, St. Louis, Missouri, U.S.A., 8th June, 1898; 6 years. (Filed 15th April, 1898.)

Claim.—A prismatic thermometer, having one edge formed into a cylindrical lens adapted to magnify the image of the thread of mercury, and having narrow coloured streaks of low reflecting power on its surface alongside of the edge lens for indicating the place to look for the magnified image of the mercury thread and for rendering such image more easily visible, said streaks being narrow so as not to intercept the mercury-illuminating light-rays excessively, substantially as set forth.

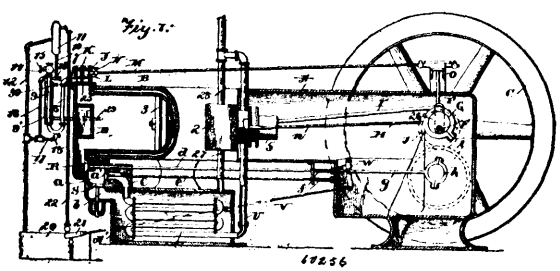
No. 60,255. Ruling Machine. (*Machine à régler.*)



Charles Stoll, Chicago, Illinois, U.S.A., 8th June, 1898; 6 years. (Filed 28th February, 1898.)

Claim.—A double-ruling attachment for a single-ruling machine, comprising an auxiliary frame having rollers and cords or bands passing about the same and co-operating to secure the reversal of the paper, a ruling device carried upon this frame, arms pivoted to the auxiliary and main frames by which the auxiliary frame may be raised clear of the main frame, and means by which the roller carrying the back strings at the rear end may be shifted between the main and the auxiliary frames, substantially as described.

No. 60,256. Explosive Engine. (*Machine explosive.*)

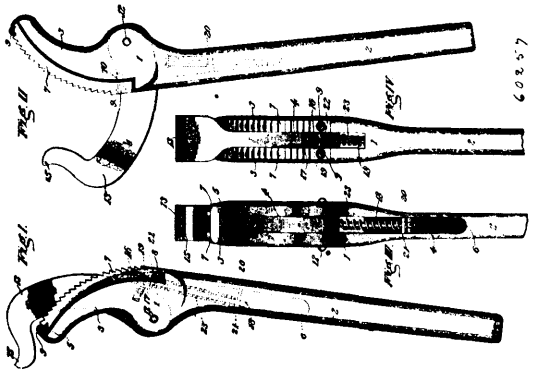


Alexander Winton, Cleveland, Ohio, U.S.A., 8th June, 1898; 6 years. (Filed 29th July, 1897.)

Claim.—1st. An explosive engine, comprising a cylinder having an explosion chamber at one end, a valve mechanism establishing interrupted communication between the explosion chamber and the opposite end of the cylinder therefrom, and an exhaust passage for the explosion chamber independent of the interrupted communication. 2nd. An explosive engine, comprising a cylinder having an explosion chamber at one end, a compounding valve establishing interrupted communication between said explosion chamber, the opposite end of the cylinder and the atmosphere, and a valve establishing interrupted communication between said explosion chamber and the atmosphere independently of the said compounding valve. 3rd. An explosion engine, comprising a cylinder having an explosion chamber at one end, the opposite end of the cylinder adapted to be used for compounding, an exhaust chamber, a compounding valve establishing communication between the exhaust chamber and the compounding end of the cylinder, and a valve establishing interrupted communication between the explosion end of the cylinder and the exhaust port independent of the compounding valve. 4th. An explosive engine, comprising a cylinder having an explosion chamber at one end, an exhaust chamber, a valve establishing interrupted communication between the said explosion chamber and the exhaust chamber and the atmosphere, a valve estalishing interrupted communication between the exhaust chamber, the opposite end of the cylinder from the

explosion chamber, and a check valve interrupting backward pressure from the exhaust chamber to the explosion chamber. 5th. An explosive engine comprising an explosion chamber having exhaust ports or openings therefor, a compounding valve establishing communication between said explosion chamber and the end of the cylinder opposite thereof and the atmosphere, a main valve interrupting the said communication between the explosion chamber and the compounding valve, when the explosion occurs, and an auxiliary valve establishing interrupted communication between said explosion chamber and the atmosphere. 6th. An explosive engine comprising an explosion chamber, an exhaust chamber in interrupted communication with an explosion chamber, a compounding valve establishing interrupted communication between the opposite end of the cylinder, said explosion chamber and the exhaust chamber, and an exhaust pipe or passage through said exhaust chamber to the atmosphere, and an auxiliary valve establishing interrupted communication through said pipe or passage to the atmosphere. 7th. An explosive engine comprising an explosion chamber, an exhaust chamber in interrupted communication with the explosion chamber, the pipe coil within the exhaust chamber and communicating with the exhaust chamber and atmosphere independent of the exhaust chamber. 8th. An explosive engine comprising an explosion chamber, an exhaust chamber, a compounding valve establishing interrupted communication between the exhaust chamber and the explosion chamber, a main valve establishing communication between the explosion chamber, and the exhaust chamber, and an auxiliary valve establishing interrupted communication between the explosion chamber and the atmosphere, and a mechanism for operating the main valve in advance of the auxiliary valve. 9th. In an explosive engine, the combination of an explosion chamber having an explosive inlet port, a valve controlling the same, a pressure producing device, a pressure controlled member connected with said valve, a communication between the pressure producing device and the pressure controlled member, and a regulating pressure escape situated between the pressure producing device and the pressure controlled member. 10th. In an explosive engine, a pressure actuated valve establishing communication with the engine cylinder, a pressure producing device operated by the engine, a communication between the pressure producing device and the pressure actuated valve, and an escape for the pressure at the pressure actuated valve. 11th. A hydro-carbon feeder for explosive engines comprising a pipe having one end open to the atmosphere and the opposite end in communication with the engine cylinder, a fluid feeder having an opening within the said pipe, and adapted to deliver oil across the same, a fluid tank, and an overflow pipe having an inlet opening in the fluid receiving pipe at a point opposite the fluid feeder whereby it is adapted to receive the unevaporated fluid and deliver it to the fluid tank. 12th. A fluid supply for explosive engines comprising an air communication with the engine cylinder, a fluid supply tank, a feeder tank above the supply tank, a fluid elevator establishing communication between the feeder tank and the fluid supply tank, a fluid feeder between the feeder tank and the supply tank, and an overflow communication between the air supply pipe, the feeder tank and the supply tank. 13th. The combination with an explosive engine of a hydro-carbon feeder comprising a U-shaped pipe having one end open to the atmosphere, the opposite end in communication with the cylinder, a fluid supply at a point near the open end of said pipe, a fluid tank, a pipe opening into the air and fluid supply pipes at a point opposite the fluid feeder to receive the excess fluid and deliver it to the tank, and a pipe in communication with the double portion of the U-shaped pipe and the tank, the parts adapted for the purpose described. 14th. In an explosive engine, the combination of an explosive chamber having an explosive inlet port, a valve controlling the same, a pressure producing device, a pressure controlled member connected with said valve, a communication between the pressure producing device and the pressure controlled member, and a regulating pressure escape regulating the pressure upon the pressure controlled member.

No. 60,257. Wrench. (*Clé à écrou.*)

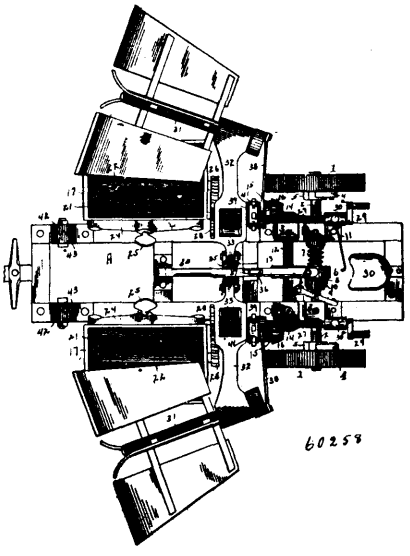


Albert Katzki, Erie, Pennsylvania, U.S.A., 8th June, 1898; 6 years. (Filed 22nd March, 1898.)

Claim.—In a wrench, the combination of the body terminating at one end in a fixed jaw and at the other end in a handle, and provided with a cavity or recess which extends through the fixed jaw from the front to the rear, and in its lower portion is situated in the front side of the handle, a movable jaw pivotally supported in the recessed part of the wrench-body, a guide-rod secured to the movable jaw, and mounted entirely within that part of the recess in the front of the handle, a spring for operating the movable jaw, and a stop-piece against which the spring bears, situated in the said recess, substantially as set forth.

No. 60,258. Insect Exterminating Machine.

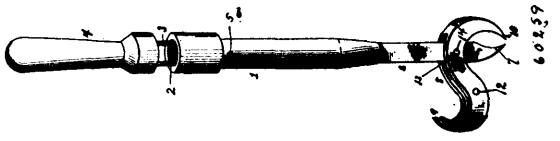
(*Machine à insecticides.*)



George J. Moeller, jr., Stratmann, Missouri, U.S.A., 8th June, 1898; 6 years. (Filed 30th March, 1898.)

Claim.—1st. The combination with a frame, of a pair of hoppers, a roller journalled in each hopper, and each hopper pivotally supported on a roller. 2nd. The combination with a frame, of a pivoted hopper, a pair of rollers, one journalled in the frame, and the other in the hopper, the two lying side by side and the hopper mounted on the axle of one, a ball connected with the roller supported in the hopper, and means for adjusting this roller laterally to take up the wear. 3rd. The combination with a frame, of a hopper pivoted thereto, said hopper having a segment thereon a shaft having a pinion thereon which meshes with the segment, and a crank on the shaft for turning the latter, and setting the inclination of the hopper. 4th. The combination with a frame, of pivoted arms, sweeper or fans revolubly supported in the arms of a hand-lever, links connecting said lever to the arms and a pivoted toothed bar to which the hand-lever is locked when the fans or sweeps are set in position. 5th. The combination with a frame, hoppers and rollers turning in the bottom of the hoppers, of sweeps or fans, a revolubly supported sprocket-wheel, a pitman extending therefrom to the fan or sweep, a sprocket-wheel at the roller-shaft, a chain extending around these sprocket-wheels, and means for driving the roller-shafts.

No. 60,259. Nail Extractor. (*Arrache-clou.*)

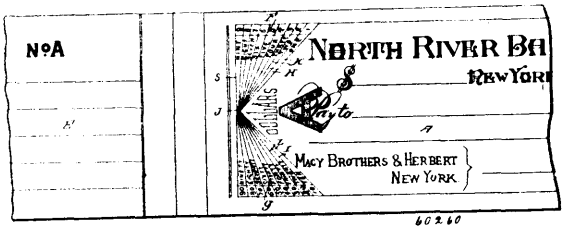


Charles M. Morrison, Viroqua, Wisconsin, U.S.A., 9th June, 1898; 6 years. (Filed 22nd March, 1898.)

Claim.—1st. In a combination nail-extractor and staple-drawer, the combination with the lever-bar having a curved lower end, of the adjustable and reversable S-shaped jaw bifurcated at one end forming two claws, and the other end formed with a single point and formed with two pivot-holes at opposite sides of the centre and the pivot-pin connecting said jaw with the lever-bar, substantially as described. 2nd. The combination with the lever bar, having a central recess at the upper end, the transverse pin, the hammer, the guide-arms consisting of a metal rod bent at the centre and having

the ends secured to said hammer and the lower end of said bar formed with a curved point, of the S-shaped jaw bifurcated at one end forming two clamps, and the other end formed with a solid point, and said jaw formed with two holes at opposite sides of the centre and the pivot-pin connecting said jaw with the lever bar, substantially as described.

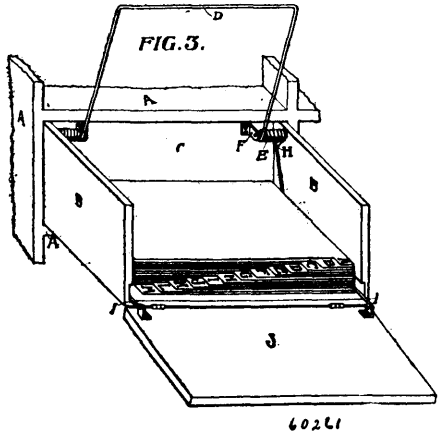
No. 60,260. Blank Form for Checks, Drafts, etc.
(*Blanc pour chèques, mandats, etc.*)



William Henry Howard, New York City, U.S.A., 9th June, 1898; 6 years. (Filed 1st March, 1898.)

Claim.—1st. The check or other order having a diagram lying within the area of the check proper, composed of thetwo corresponding parts formed of lines and intervening spaces radiating from a given point, said parts each being in the form of a triangle and so arranged with respect to one another that said diagram may, to properly denote the desired values, be severed on connected lines running through both of said parts and at an angle to one another, substantially as set forth. 2nd. The check or other order having a diagram lying within the area of the check proper composed of the two corresponding parts formed of lines and intervening spaces bearing indicating characters denoting money values and radiating from a given point, said parts each being in the form of a triangle and so arranged with respect to one another that said diagram may, to denote the proper value of the check or order, be reversed on connected lines running through both of said parts and at an angle to one another, the indicating characters on one of said parts representing values of one denomination and those on the other of said parts denoting values of another denomination, substantially as set forth. 3rd. A series of checks or similar orders each having a diagram lying within the area of the check and composed of two corresponding parts formed of lines and intervening spaces which radiate from a common point, whereby in order to denote value, the diagram may be severed along two intersecting lines, the parts of the diagram being in the forms of triangles having base-lines S, and said base-lines varying in positions in the respective forms of the series, in substantially the manner explained and for the purposes set forth.

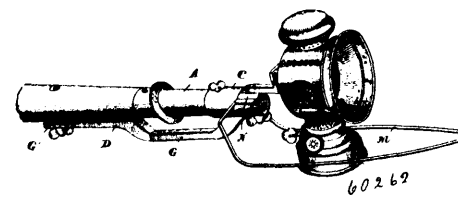
No. 60,261. File for Documents. (*File pour documents.*)



Frederick L. G. Straubel, Green Bay, Wisconsin, U.S.A., 9th June, 1898; 6 years. (Filed 9th March, 1898.)

Claim.—A drawer for cabinet letter files, the rod I in connection with the hinged front J, the rod *a* in connection with the spring compressor, and the rod or lever *b* in connection with the rods I and *a*, forming a combination of connecting-rods between and arranged to act upon, the spring compressor and the hinged front J, substantially as and for the purpose described and set forth.

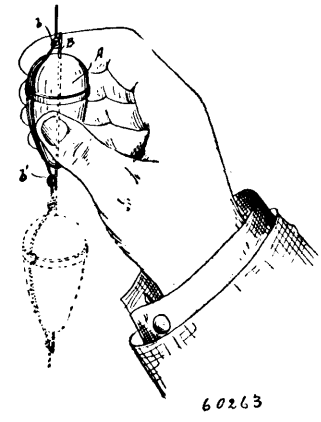
No. 60,262. Lamp Holder. (*Porte-lampe.*)



Edgar Rea Holmes, Ayr, Nebraska, U.S.A., 9th June, 1898; 6 years. (Filed 12th February, 1898.)

Claim.—1st. The combination with a waggon-pole or shaft, of a lamp-holder, detachably connected to the end thereof and adapted to have a lamp connected therewith, substantially as shown and described. 2nd. The combination with a waggon-pole or shaft, of a lamp-holder, detachably connected with the end thereof, and a guard for the lamp connected therewith, substantially as shown and described. 3rd. The combination with a waggon-pole or shaft, of a lamp-holder connected therewith, consisting of the socket-piece fitting on the end of the pole and provided with an extension adjustably and detachably held to the pole, substantially as shown and described. 4th. The combination with a waggon pole or shaft, of a lamp-holder fitting on the end thereof, said holder consisting of the socket-piece, the extension, having the bifurcated end having teeth formed on its upper surface, and means for adjustably and detachably connecting this end to the pole, consisting of the locking-plate, having teeth which engage the teeth on the end, and the bolt and nut for holding the two parts in engagement, substantially as shown and described. 5th. The combination with a waggon-pole or shaft, of a lamp-holder fitting on the end thereof, said holder consisting of a socket-piece fitting on the end of the pole or shaft and carrying a set-strew, an extension, adjustably and detachably connected with the waggon-pole or shaft, and a lamp-bracket detachably connected with the socket-piece, substantially as shown and described. 6th. The combination with a waggon-pole or shaft, of a lamp-holder fitting on the end thereof, and a guard, consisting of the loop, having its ends connected with a plate, and said plate being provided with means for attaching the guard to the holder, substantially as shown and described.

No. 60,263. Fishing Float. (*Flotte de ligne à pêcher.*)



Gustav H. Wenger, South Bend, Indiana, U.S.A., 9th June, 1898; 6 years. (Filed 28th March, 1898.)

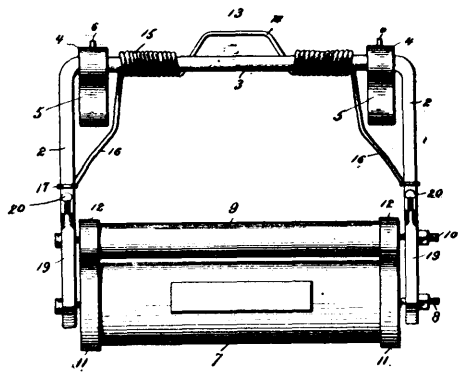
Claim.—In a float for fish-lines, in combination with a float-body having a wire extending longitudinally through the same and looped at each end, of a transverse circumferential groove in the body at a point intermediate its length, and an elastic band arranged in the groove, substantially as set forth.

No. 60,264. Printing Device for Paper-Roll Holders.
(*Appareil d'imprimerie pour portes rouleaux de papier.*)

Charles H. Long, Tipton, Iowa, U.S.A., 9th June, 1898; 6 years. (Filed 29th March, 1898.)

Claim.—1st. A printing-device for paper-roll holders comprising a pair of clamps adapted to engage the frame of a paper-roll holder and provided with perforated ears, a substantially rectangular frame journalled in the perforated ears, whereby it is hinged to a paper-roll holder, a spring composed of spring-coils disposed on the cross-bar of the frame, a central loop connecting the spring-coils and arranged to engage a paper-roll holder, and the spring arms extending from the coils and engaging the sides of the rectangular frame, and the printing and inking-rolls carried by the latter, substantially

as described. 2nd. A printing device for paper-roll holders, comprising a substantially rectangular supporting-frame provided with



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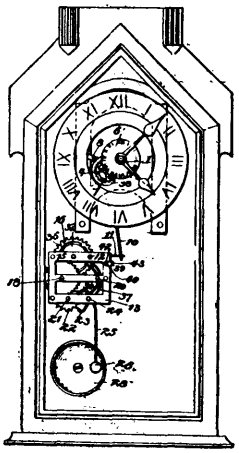
angularly-disposed arms, the latter being slotted and having threaded openings communicating therewith, clamps adapted to engage a paper-roll holder and provided with bearings receiving the supporting-frame, a spring engaging the supporting-frame and adapted to force the same downward, an inking-roll having a rod arranged in the slots of said arms, screws mounted in the threaded openings of the latter and engaging the rod, and a printing-roll journalled on the frame and arranged contiguous to the inking-roll, substantially as described.

No. 60,265. Alarm Clock. (*Réveille-matin.*)



60265

William Dupen, Whatcom, Washington, U.S.A., 9th June, 1898; 6 years. (Filed 31st March, 1898.)

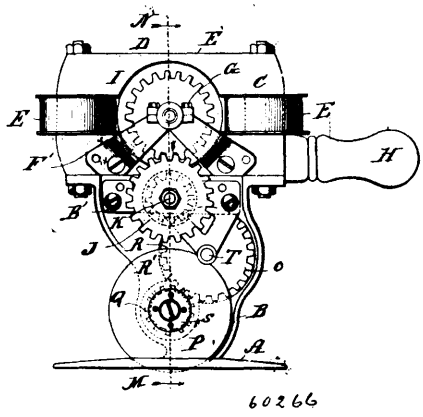
Claim.—1st. An alarm clock comprising a time mechanism and an alarm movement, with intermediate connections, comprising a bell crank lever, one arm of which is connected to the time mechanism and the opposite arm is provided with a stud, an escape-lever for the alarm movement, a pivoted lever having an arm operated by the stud, and a depending arm adapted to contact with said escape lever and throw of the alarm, and a throw-off lever pivoted to the alarm frame and having a toe projecting into the path of movement of the bell crank, substantially as described. 2nd. An alarm clock having the time and alarm movements and operative connections, a bell-crank lett-off lever 11, a stud fixed on its shorter arm, a toothed disc loosely mounted on the main shaft of the alarm mechanism, and provided with a pin projecting into the path of a spring fixed to said disc, a disc 32 connected to the main shaft, and provided with teeth which throw the let-off lever out of operation, an escape-lever and a stop lever therefor, the latter lying in the path of the lett-off lever, substantially as described.

No. 60,266. Electric Cloth Cutting Machine,

(*Machine électrique pour couper le draps.*)

Edward Willington Warning, New York City, U.S.A., 9th June, 1898; 6 years. (Filed 18th April, 1898.)

Claim.—1st. In an electric cloth cutting machine having a supporting foot carrying standard and driving electric motor, on said standard, the combination, substantially as described, of the electric motor armature shaft horizontally mounted centrally over said standard, a gear upon said armature shaft a counter shaft immedi-



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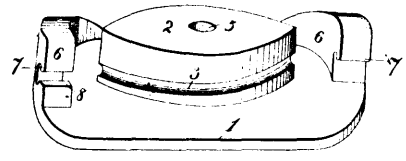
ately beneath the motor and parallel to said armature shaft, a spur gear upon the outer end of said counter shaft in mesh with the gear upon the armature shaft, a spur gear at the inner end of said counter shaft in line with the standard and cutter and practically coincident with the central line of the motor, a cutting disc journalled on said standard and having a pinion or spur wheel secured thereto, and a spur wheel journaled in the standard and meshing both with the pinion on the inner end of the counter shaft and with the pinion or spur wheel to which said cutting disc is fastened, substantially as and for the purpose set forth. 2nd. In a rotary cloth cutting machine, the combination with the standard thereof, of a nut removably secured to the standard on one side thereof, a headed bearing stud screwed into said nut from the other side of the standard and passing through an enlarged opening in the standard, a gear provided with a hub projecting into the body of the standard and journalled on said stud, and a cutting disc fastened to said gear, substantially as and for the purpose set forth. 3rd. The combination in a cloth cutting machine, of the cutting disc, the gear carrying the same on its outside face, the headed bearing stud on which the gear is journaled, the flat ring surrounding the head of said stud and borne on the outer face of the cutting disc, and fastening pins or screws passing through said ring and disc for securing the disc to the gear, as and for the purpose described.

No. 60,267. Insulator. (*Insoloir.*)



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Louis F. Rembe, Haverstraw, New York, U.S.A., 9th June, 1898; 6 years. (Filed 21st April, 1898.)

Claim.—An insulator comprising a base having its ends rounded, a head raised from the center of the base, said head being formed with a spiral groove, lugs raised from the base on opposite sides of the head and formed of the same contour as the head, said lugs having their upper edges inclined rearwardly, and downwardly, hooks formed in the lugs, a projection raised from the base adjacent the hook of one of the lugs, and means for attaching the insulator to a support, substantially as set forth.

No. 60,268. Method of Printing Fabrics.

(*Méthode d'imprimer les tissus.*)

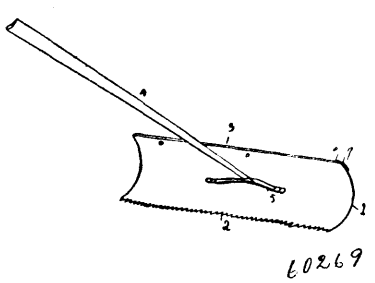
Thomas Francis Stimpson, Providence. Rhode Island, U.S.A., 9th June, 1898; 6 years. (Filed 12th March, 1898.)

Claim.—1st. The method of printing fabrics which consists in producing a black or other dark ground pattern on the fabric and also printing upon the fabric a pattern of comparatively bright colour, the figures of which do not register with our fit the dark ground pattern, whereby the figures composing the bright colour pattern will not show in their entirety on the finished fabric, portions of such bright colour figures being obliterated or concealed by the black or other dark ground pattern, substantially as set forth. 2nd. The method of printing fabrics which consists in producing a black or other dark ground pattern on the fabric and also printing upon the fabric a pattern of comparatively bright colour, the figures of which are of different form or outline from the white figures formed by the dark

ground pattern, and do not register with or fit the dark ground pattern, substantially as set forth. 3rd. The methods of printing fabrics which consists in producing a black or other dark ground pattern on the fabric, and also printing upon the fabric a pattern of comparatively bright colour, the figures of which have a different arrangement with relation to each other from the arrangement of the white figures formed by the dark ground pattern, and do not register with or fit the dark ground pattern, substantially as set forth. 4th. The method of printing fabrics which consists in producing a black or other dark ground pattern on the fabric and also printing upon the fabric a pattern of comparatively bright colour, the figures of which are of a blotch character and do not register with or fit the dark ground pattern, substantially as set forth. 5th. The method of printing fabrics, which consists in producing a black or other dark ground pattern on the fabric and also printing upon the fabric a pattern of comparatively bright colours, the figures of which do not register with or fit the dark ground figure, different parts of such bright colour pattern being printed in different colours, substantially as set forth. 6th. The method of printing fabrics, which consists in padding the fabric with a black producing liquor, printing on the fabric a pattern with a resist, developing the black to produce a black ground with white figures, and printing a pattern with comparatively bright colour, the figures of which do not register with or fit the black ground pattern, substantially as set forth. 7th. The method of printing fabrics, which consists in padding the fabric with a black producing liquor, printing on the fabric a pattern with a resist, developing the black to produce a black ground with white figures, and printing a pattern with a comparatively bright colour having a mordant mixed therewith, the figures of which bright colour pattern do not register with or fit the black ground pattern, substantially as set forth. 8th. The method of printing fabrics, which consists in padding the fabric with a black producing liquor, printing on the fabric a pattern with a resist-mordant, developing the black to produce a black ground with white figures, and printing a pattern of comparatively bright colour, the figures of which do not register with or fit the black ground pattern, substantially as set forth. 9th. A printed fabric having a black or other dark ground and intervening figures of comparatively bright colour, said bright colour figures differing in their colouring in an irregular and varying manner, substantially as set forth. 10th. A printed fabric having a black or other dark ground pattern and having printed thereon a pattern of comparatively bright colour, the figures of the two patterns overlapping or overlying each other in an irregular and varying manner, substantially as set forth. 11th. A printed fabric, having a black or other dark ground pattern and having printed thereon a pattern of comparatively bright colour, the figures of which do not register with or fit the dark ground pattern, and consequently do not show in their entirety on the finished fabric, portions of said bright colour figures being obliterated or concealed by the black or other dark ground pattern, substantially as set forth.

No. 60,269. Lawn Rake, Scraper and Cutter.

(*Rateau, grattoir et coupoir pour pelouses.*)



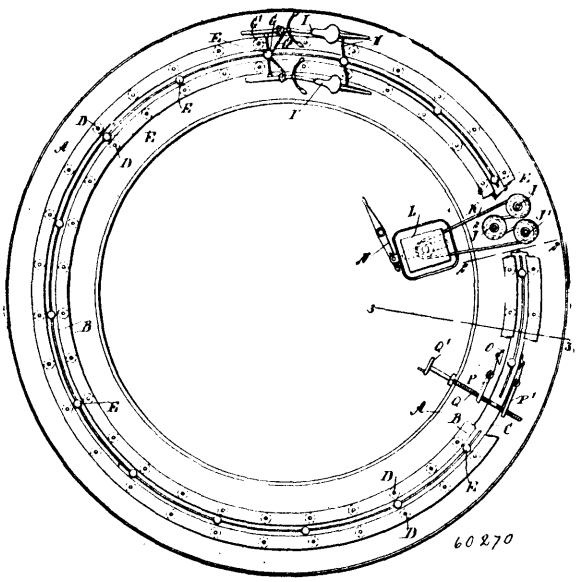
John W. Lewis, assignee of Edward Starkwether, both of Saginaw U.S.A., 10th June, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—A combined lawn-rake, scraper and cutters, comprising a rectangular plate of metal bent longitudinally, concave, and having short sharp saw-teeth, along one edge, the teeth being bent inward at their base to the proper degree to give them the desired slant, the opposite edge straight and sharp and provided with a strip of rubber adjustably secured along the edge for the purpose described, the end edges of the plate being sharp for use as a hoe, and a handle adapted to be secured as specified, and as and for the purpose set forth.

No. 60,270. Bicycle Railway. (*Tourniquet.*)

William Frederick Mangels and William S. Smith, both of New York City, U.S.A., 10th June, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—1st. A bicycle railway, comprising a continuous track, guide-wheels, an endless band of rigid material adapted to travel on the said guide-wheels and a rigid support erected on the said band and connected with the bicycles arranged to travel on the track, substantially as shown and described. 2nd. A bicycle railway, comprising a continuous track, a duct on the said track, an endless band of rigid material mounted to travel in the said duct,



posts erected at intervals on the said band, frames carried by the said posts and connected with the bicycles travelling on the said band and connecting the several posts with each other, as set forth. 3rd. A bicycle railway, comprising a continuous track an endless band of rigid material movable in a duct in the said track, posts erected at intervals on the said band, frames provided with transverse rods or bars connecting adjacent posts with the axles of the front and rear wheels of the bicycles respectively, and a brace connecting the several posts with each other, substantially as specified. 4th. A bicycle railway comprising a continuous track, an endless movable band, posts erected at intervals on the said band, frames provided with transverse rods or bars connecting adjacents posts with the axles of the front and rear wheels of the bicycles respectively, and a brace extending above the said band and connecting the said posts, the said brace being depressed between adjacent posts, substantially as shown and described. 5th. A bicycle railway, comprising a continuous track, an endless band of rigid material movable in a duct on the said track, means for connecting the band with the bicycles arranged to travel on the said track and a device for clamping the said band to stop the same, substantially as shown and described. 6th. A bicycle railway, provided with a continuous track, guide-wheels, an endless band travelling on the said guide-wheels, posts erected at intervals on the said band, frames provided with transverse rods or bars connecting adjacent posts with the axles of the front and rear wheels of the bicycles respectively, a brace connecting the several posts with each other, an auxiliary starting device for imparting a travelling motion to the said band and a stopping device for said band, substantially as shown and described. 7th. A bicycle railway, comprising a continuous track, an endless movable band, of rigid material, means for connecting the band with the bicycles travelling on the track and a stopping device for the said band comprising jaws adapted to clamp the edges of the band on opposite sides, and means for moving the jaws in or out of engagement with the band, substantially as set forth. 8th. A bicycle railway, comprising a continuous track, a duct on the said track, guide-wheels journalled in the walls of said duct, an endless band of rigid material arranged to travel on the said guide-wheels, means for connecting the band with bicycles mounted to travel on the track, and an auxiliary driving device for the said band comprising pulleys arranged for frictional engagement with the edges of the band, and means for driving the said pulleys, substantially as shown and described.

No. 60,271. Wire Hammock. (*Hamac de fil de fer.*)

The White Manufacturing Company, assignee of Marshall B. Lloyd, all of Minneapolis, Minnesota, U.S.A., 10th June, 1898; 6 years. (Filed 18th May, 1898.)

Claim.—1st. A wire hammock, composed of interlocked coils bunched at the ends, and a spiral arranged upon each end to secure the coils and for attachment to the hammock ropes, substantially as described. 2nd. The combination, with the gathered ends of the wire fabric coils, forming a bunch or roll having a natural thread upon its surface, and the spiral or screw arranged thereon in the thread thereof, substantially as described. 3rd. The combination, with the gathered ends of the wire coils forming a bunch or roll having a natural thread upon its surface, of the spiral or screw arranged thereon in the thread thereof, and additional means to prevent the drawing of the wires from said spiral or screw, sub-

stantially as described. 4th. The combination, with a bunch of wire coils, of the cast-metal cap or end thereon, substantially as

Fig. 1.

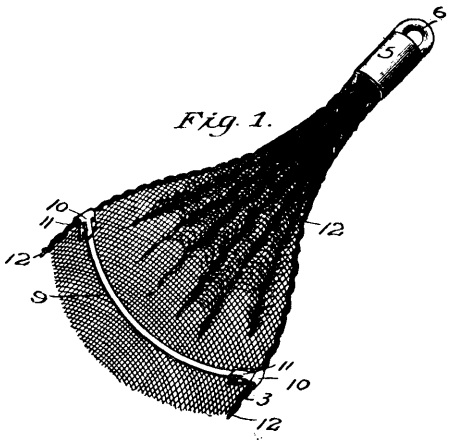
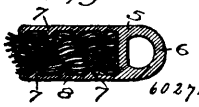


Fig. 2.

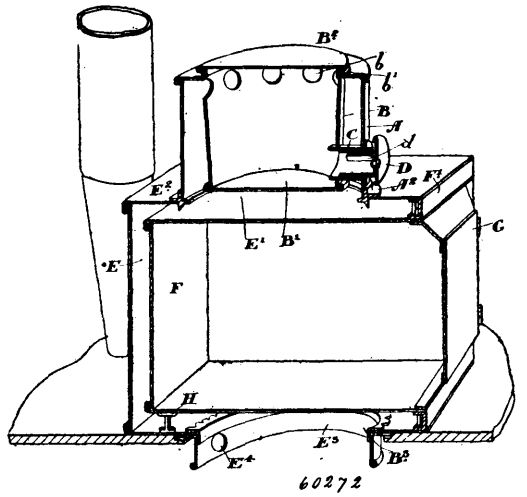


described. 5th. The combination, with a bunch of wire coils, of the cast-metal cap or end thereon, said cap being provided with an integral eye or loop for the attachment of the hammock rope or support, substantially as described. 6th. The wire fabric composed of interlocked coils and having its ends gathered or bunched, in combination, with the heads or caps cast upon said ends, securing the ends of the coils and providing means for hanging the hammock, substantially as described. 7th. The means for securing the ends of the coils of a wire fabric, which consists in a cylindrical cap or ferrule arranged upon the gathered ends of the coils and suitably secured thereon, substantially as described. 8th. The combination with the gathered ends of the wire fabric coils, forming the thread described, with the spiral screwed thereon, substantially as described. 9th. The combination with the gathered ends of the wire fabric coils, forming the thread described, of the cap secured thereon, and said cap being filled to prevent the loosening or turning of the cap on said thread, substantially as described. 10th. The combination of a gathered or rolled coiled wire fabric, with an internally threaded cap or ferrule screwed thereon, substantially as described. 11th. The combination, in a hammock, of the hammock fabric with a flexible spring-spreader detachably and transversely secured to said fabric, substantially as described. 12th. The combination, in a hammock, of the hammock fabric with a flexible spreader, and means for so securing said spreader to the edges of the hammock that it may be readily detached therefrom to permit the collapsing of the fabric, substantially as described. 13th. The combination, in a hammock, of the hammock fabric, the clips arranged at the edges thereof, and the spring-spreader extending transversely across the hammock and having its ends held in said clips, substantially as described. 14th. The wire hammock fabric, in combination, with the clips on the edges thereof, the wires arranged in said edges, and the spreader having its ends in said clips, substantially as described. 15th. The combination of the wire fabric with the metal clips fastened on the edges thereof and having or forming sockets, and the spreader having its ends slipped into said sockets, substantially as described. 16th. The combination of a wire hammock, with a spreader, and the wires or rods provided on the edges of the hammock at the ends of said spreader, substantially as described. 17th. The combination, with the hammock, of the bow spring-spreader, having its ends held at the edges of the hammock, and readily detachable therefrom, whereby the hammock may be collapsed, and, if desired, formed into a coil or ring for shipment. 18th. The combination, with the wire fabric having the ends of its coils drawn together and suitably fastened, of the metal sockets permanently attached to the edges of the fabric, and the spring-spreaders extending across the fabric and having their ends slipped into said sockets and easily removable therefrom, substantially as described.

No. 60,272. Charcoal Stove. (*Poêle pour charbon de bois.*)

John Simpson and Charles Henry Davis, both of Toronto, Ontario, Canada, 10th June, 1898; 6 years. (Filed 17th May, 1898.)

Claim.—1st. A charcoal cooking stove, comprising an outer casing provided with a suitable top having an opening therein, an inner casing fitting within the outer casing and provided with a suitable bottom located above the level of the botttom edge of the outer casing, suitable perforations around the top of the inner casing communicating with the space between the outer and inner casings and a draught tube extending through the outer and inner casings, as



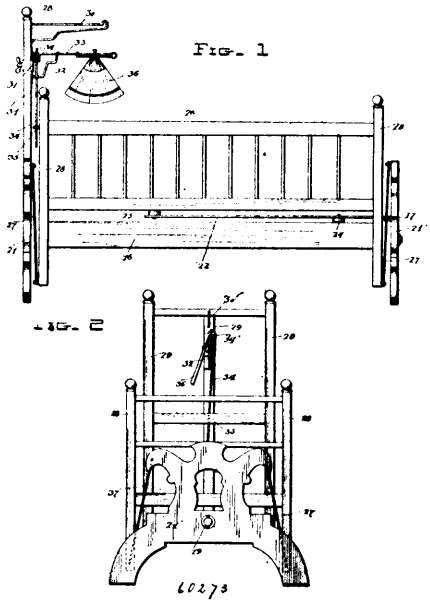
and for the purpose specified. 2nd. A charcoal cooking stove, comprising an outer casing provided with a suitable top having an opening therein, an inner casing fitting within the outer casing and provided with a suitable bottom located above the level of the bottom edge of the outer casing, suitable perforations around the top of the inner casing communicating with the space between the outer and inner casings and a draught tube extending through the outer and inner casings and a suitable damper consisting of a cap *a*, having inwardly projecting prongs *d*, as and for the purpose specified. 3rd. A charcoal cooking stove, comprising an outer casing provided with a suitable top having an opening therein, an inner casing fitting within the outer casing and provided with a suitable bottom located above the level of the bottom edge of the outer casing, suitable perforations around the top of the inner casing communicating with the space between the outer and inner casings and a draught tube extending through the outer and inner casings, a lower casing, an oven provided with suitable lining fitting within the lower casing leaving a space around the oven, a suitable door for the oven and a bottom opening for the casing having a suitable flange designed to fit within the lid hole of the stove, as and for the purpose specified. 4th. A charcoal cooking stove, comprising an outer casing provided with a suitable top having an opening therein, an inner casing fitting within the outer casing and provided with a suitable bottom located above the level of the bottom edge of the outer casing, suitable perforations around the top of the inner casing communicating with the space between the outer and inner casings, and a bottom opening for the casing having a suitable flange and a hole in the flange for the connection of the stove pipe thereto, as and for the purpose specified. 5th. A charcoal cooking stove, comprising an outer casing provided with a suitable top having an opening therein, an inner casing fitting within the outer casing and provided with a suitable bottom located above the level of the bottom edge of the outer casing, suitable perforations around the top of the inner casing communicating with the space between the outer and inner casings and a draught tube extending through the outer and inner casings and a suitable top for closing the interior of the inner casing, as and for the purpose specified.

No. 60,273. Cradle. (*Berceau.*)

Albert A. Dafoe and Frank A. Walters, assignees of John Josef Kowicz, all of Steven's Point, Wisconsin, U.S.A., 10th June, 1898; 6 years. (Filed 12th May, 1898.)

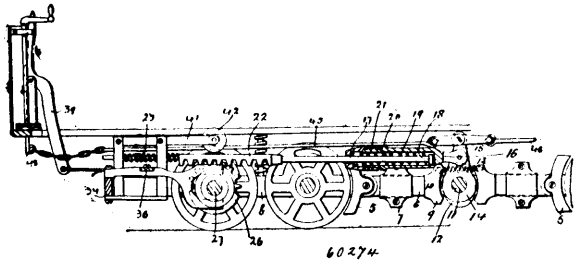
Claim.—1st. In a self-rocking cradle, the combination with the stationary head and foot pieces and the boxing connecting said pieces, of the cradle body and a series of suspension rods connecting said body and head and foot pieces, substantially as shown and described. 2nd. In a self-rocking cradle, the combination with the stationary head and foot pieces and a brace connecting them, of the cradle body and suspension rods 27, 27, connecting the four corners of said body with said head and foot pieces, substantially as shown and described. 3rd. In a self-rocking cradle, the combination with the stationary head and foot pieces, the brace connecting them, and the oscillating cradle-body suspended from said head and foot pieces, of the plate 31 adjustably secured to said stationary head-piece, the bracket 32 fixed to said plate, the crank-shaft 33 journalled in said plate and bracket and formed at its outer end with a fan clamp and the lever 34, fulcrumed on said bracket 32 and having its upper end formed with a loop 34^1 to engage the crank pin of said crank-shaft 33 and its lower end in operative engagement with said cradle-body, substantially as shown and described. 4th. In a self-rocking cradle, the combination with the head and foot pieces, the longi-

tudinal boxing connecting them and the cradle-body suspended from said head and foot pieces, of the escape wheel 1 pivoted in said head-



piece, the lever 2 fulcrumed on said wheel, the pawl 5 pivoted on the lower end of said lever and having its free end projecting into the path of the teeth on said escape wheel, the rod 13, connecting said lever and cradle-body, the sectional shaft B having one end connected to said escape wheel and the spiral spring A encompassing said shaft and having one end fixed thereto and its opposite end fixed to said foot piece, substantially as shown and described. 5th. In a self-rocking cradle, the plate 3^1 formed with the hub 3 and lug 14, the pawl 4 and the lever 6, formed with the lugs 19 and 20 and fulcrumed on said plate, the spring actuated escape wheel journalled in said plate, the lever 2 fulcrumed on said escape wheel, the pawl 5 pivoted on said lever 2 and the spring 7 fixed at one end to said plate and having its free end in contact with the lever 6, substantially as shown and described.

No. 60,274. Brake. (*Frein.*)



William James Lewis, assignee of Antoine Desbains, both of Montreal, Quebec, Canada, 10th June, 1898; 6 years. (Filed 14th May, 1898.)

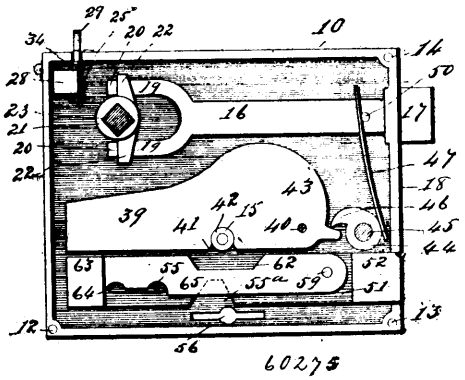
Claim.—1st. In combination with a car truck a car brake comprising a brake shoe, mounted upon one end of a suitably supported sliding bar and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted upon said shaft, means for causing the free end of said sliding bar to normally yieldingly bear upon said cam and means actuated by the rotation of said wheel for rotating said shaft, for the purpose set forth. 2nd. In combination with the truck of a car, a car brake comprising a brake shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, arm extending laterally from and connected rigidly to said hub, and means for operatively connecting said arm to one of the axles of the truck whereby said arm and with it said shaft may be oscillated to either side of the vertical according to the direction of rotation of the wheels mounted upon said axle, for the purpose set forth. 3rd. In combination with the truck of a car, a car brake comprising a brake shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, and means comprising a buffer section for operatively connecting said arm to one of the axles of the truck whereby said arm and with it said shaft may be oscillated to either side of the vertical according to the direction of rotation of the wheels mounted upon said axle, for the purpose set forth. 4th. In combination with the truck of a car, a car-brake comprising a brake shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, a pinion mounted loosely upon one of the axles of the truck and having one of its ends formed with a clutch face, a clutch block mounted loosely upon but keved to said axle, a toothed rack adapted to intermesh with said pinion and operatively connected to the aforesaid arm, and means for shifting said clutch block into and out of engagement with the clutch face of said pinion, for the purpose set forth. 5th In combination with the truck of a car, a car brake comprising a brake shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, a pinion mounted loosely upon one of the axles of the truck and having one of its sides formed with a clutch face, a clutch block mounted loosely upon but keyed to said axle, a toothed rack adapted to intermesh with said pinion, and operatively connected to the aforesaid arm, a lever leaving one end forked to straddle and take into a groove in the clutch block, and the other end fulcrumed to the truck frame, a cross bar secured upon and transversely of said lever, the end of said cross arm being connected to the lower end of a vertical lever mounted upon the end of the truck, substantially as described and for the purpose set forth. 6th. In combination with the truck of a car, a car-brake, comprising a brake-shoe mounted upon one end of a suitably supported sliding bar and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, and means including a buffer section for operatively connecting said arm to one of the axles of the truck whereby said arm and with it said shaft may be oscillated to either side of the vertical according to the direction of a rotation of the wheels mounted upon said axle, for the purpose set forth. 7th. In combination with the truck of a car, a car-brake comprising a brake-shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transverely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, a pinion mounted loosely upon one of the axles of the truck and having one of its sides formed with a clutch face, a clutch block mounted loosely upon but keyed to said axle, a toothed rack adapted to intermesh with said pinion and connected to a buffer section which is connected to the aforesaid arm, and means for shifting said clutch-block into and out of engagement with the clutch face of said pinion, for the purpose set forth. 8th. In combination with the truck of a car, a car-brake comprising a brake-shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, a pinion mounted loosely upon one of the axles of the truck and having one of its sides formed with a clutch face, a clutch block mounted loosely upon but keyed to said axle, a toothed rack adapted to intermesh with said pinion and connected to a buffer section which is connected to the aforesaid arm, a lever leaving one end forked to straddle and take into a groove in the clutch block and the outer end fulcrumed to the truck frame, a cross bar secured upon and transversely of said lever, the end of said cross arm being connected to the lower end of a vertical lever mounted upon the end of the truck, for the purpose set forth. 9th. In combination with the truck of a car, a car-brake comprising a brake-shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, a pinion mounted loosely upon one of the axles of the truck and having one of its sides

formed with a clutch face, a clutch block mounted loosely upon but keyed to said axle, a toothed rack adapted to intermesh with said pinion and connected to a buffer section consisting of a sleeve having one end permanently closed and pivotally connected to the aforesaid arm, a rod connected rigidly at one end to said rack and having its other end located within said sleeve and provided with a head, a cap adapted to take over said rod and close the open end of said sleeve, and a spiral spring encircling the portion of said rod within said sleeve and bearing between said cap and the head of said rod, and means for shifting said clutch block into and out of engagement with the clutch face of said pinion, for the purpose set forth. 10th. In combination with the truck of a car, a car-brake comprising a brake-shoe mounted upon one end of a suitably supported sliding bar, and located in close proximity to the periphery of the wheel to which it is to be applied, a shaft mounted transversely of the truck, a cam mounted rigidly upon said shaft, means for causing the free end of said sliding bar to normally bear upon said cam, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, a pinion mounted loosely upon one of the axles of the truck and having one of its ends formed with a clutch face, a clutch block mounted loosely upon but keyed to said axle, a toothed rack adapted to intermesh with said pinion and connected to a buffer section consisting of a sleeve having one end permanently closed and pivotally connected to the aforesaid arm, a rod connected rigidly at one end of said rack and having its other end located within said sleeve and provided with a head, a cap adapted to take over said rod and close the open end of said sleeve, and a spiral spring encircling the portion of said rod within said sleeve and bearing between said cap and the head of said rod, a lever having one end forked to straddle and take into a groove in the clutch block and the other end fulcrumed to the truck frame, a cross bar secured upon and transversely of said lever, the end of said cross arm being connected to the lower end of a vertical lever mounted upon the end of the truck, for the purpose set forth. 11th. The combination of a car truck comprising a truck frame, a series of axles mounted transversely of said frame, and a pair of wheels mounted rigidly upon each of said axles, a shaft mounted transversely on said truck frame and centrally thereof, a pair of cam discs mounted rigidly upon said shaft and in line with said wheels, two pairs of sliding bars mounted in brackets carried upon said truck frame, one pair being located at each side of the frame, a brake-shoe mounted upon one end of each of said bars and located in close proximity to the periphery of one of the wheels, the other end of each of said bars being located in contact with one side of one of the cams, means for maintaining said bars in constant yielding contact with said cams, a hub mounted rigidly upon said shaft, an arm extending laterally from and connected rigidly to said hub, a pinion mounted loosely upon one of the axles of the truck and having one of its ends formed with a clutch face, a clutch block mounted loosely upon, but keyed to said axle, a toothed rack adapted to intermesh with said pinion and connected to a buffer section consisting of a sleeve havin g one end permanently closed and pivotally connected to the aforesaid arm, a rod connected rigidly at one end to said rack and having its other end located within said sleeve and provide l with a head, a cap adapted to take over said rod and close the open end of said sleeve, and a spiral spring encircling the portion of said rod within said sleeve and bearing between said cap and the head of said rod, a lever having one end forked to straddle and take into a groove in the clutch block and the other end fulcrumed to the truck frame, a cross bar secured upon and transversely of said lever, the end of said cross arm being connected to the lower end of a vertical lever mounted upon the end of the truck, substantially as described and for the purpose set forth. 12th. The combination of the truck 8, brake shoes 5, sliding bars 6, bearing sections 9, with bearing faces 10, shaft 11, cam discs 12, springs 13, hub 14, arm 15, sleeve 16, rod 17, collar 18, spring 19, cap 20, rack 22, rod 23, bracket 41, springs 25, pinion 26, clutch face 28, axle 27, clutch block 29, lever 30, 33, 35, 36, rods 37, 38, lever 39, bracket 40, roller 42, rods 45, 46, chain 47, crank spindle 48, ratchet 49, and pawl 50, all arranged substantially as described and for the purpose set forth.

No. 60,275. Lock. (*Serrure.*)

George A. Donaldson and Perry O. Wells, both of Girard, Illinois, U.S.A., 10th June, 1898; 6 years. (Filed 7th May, 1898.)

Claim.—1st. In a lock, a suitable case, a latch-bolt mounted for reciprocation within said case, a dog pivotally mounted within said case, a leaf-spring attached to said dog and engaging said latch-bolt, a gravity tumbler pivotally mounted within said case, and a lug attached to said gravity tumbler and engaging the free end of said dog, substantially as specified. 2nd. In a lock, a suitable case, a latch-bolt mounted for reciprocation within said case, a dog pivotally mounted within said case, a leaf-spring attached to said dog and engaging said latch-bolt, a gravity tumbler pivotally mounted within said case, a lug attached to said gravity tumbler and engaging the free end of said dog, and means of locking said latch-bolt in its latched position, which means consists of a shaft mounted adjacent to the rear end of said latch-bolt, a handle upon said shaft for manually operating the same, and an arm projecting from said shaft and designed to engage the rear end of said latch-bolt and hold the same securely in position when desired and to be turned out of engagement with said latch-bolt when it is desired to have said bolt operate freely, substantially as specified. 3rd. In a device



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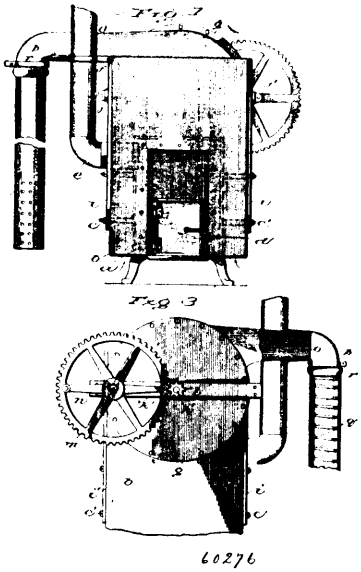
of the class described, a suitable case, a lock-bolt mounted for reciprocation within said case, a lever pivotally connected to said lock-bolt, a weight upon the free end of said lever, a pin transversely positioned under said lever, said lever having notches designed to engage said pin as required to hold said lock-bolt in its locked or unlocked position, as desired, a gravity-tumbler pivotally mounted within said case and above said lock-bolt and resting upon said lever, a latch-bolt slidingly mounted within said case, a dog pivotally mounted within said case, a leaf-spring attached to said dog and engaging said latch-bolt, and a lug upon said gravity tumbler and designed to be engaged by the free end of said dog, substantially as specified.

No. 60,276. Earth Thawing Apparatus.
(*Appareil à dégeler la terre.*)

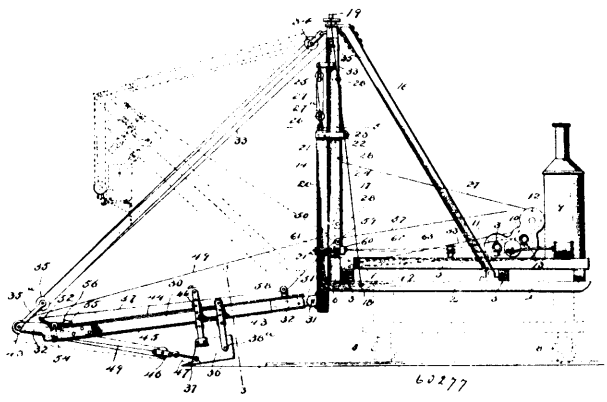


60276

Harry Knox Greenleaf, Charles E. Potter, and John C. Hollister, all of Portland, Oregon, U.S.A., 10th June, 1898; 6 years. (Filed 7th May, 1898.)

Claim.—1st. As a device for the purpose specified, in combination, a furnace, a hood about such furnace constituting a hot-air chamber, a fan and casing attached to such hood, and an air passage between such hot-air chamber and fan casing a discharge spout from such fan-casing and a suitable extension therefrom whereby the generated hot air can be directed and delivered where wanted, and means for rotating the fan, all substantially as described. 2nd. As a device for the purposes specified, in combination, a furnace, a hood about such furnace, constituting a hot-air chamber, a fan and casing attached to such hood, and an air passage between such hot-air chamber and fan casing, a discharge spout from such fan casing, and a suitable flexible extension therefrom, whereby the generated hot-air can be directed and delivered where wanted, and means for rotating the fan, all substantially as described.

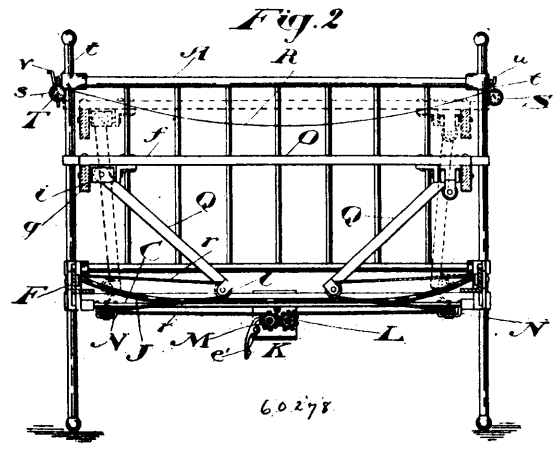
No. 60,277. Excavating Machine. (*Excavateur.*)



Gustof J. Miller, John A. Watterworth and Henry Fee, all of Duluth, Minnesota, U.S.A., 10th June, 1898; 6 years. (Filed 3rd May, 1898.)

Claim.—1st. The combination with a main mast, of a vertically slidable mast, a boom carried thereby, an excavator bucket mounted on the boom, means for adjusting said slidable mast in a vertical direction, and operating means for the boom and the travelling bucket, substantially as and for the purposes described. 2nd. The combination with a main mast, of a vertically slidable mast connected thereto to travel endwise, a swinging boom carried by said slidable mast, and means for moving the slidable mast and the swinging boom, substantially as and for the purposes described. 3rd. the combination with a main mast, of a slidable mast connected thereto, a boom pivoted to the foot of the slidable mast, a travelling excavator bucket or shovel mounted on said boom, a latch or trigger to confine the bucket or shovel against travelling movement on the boom, and operating means for the slidable mast, the boom and said bucket or shovel, substantially as and for the purposes described. 4th. The combination with a suitable framework and a main mast mounted to rock thereon, of a slidable mast attached to said main mast and adapted to turn therewith and to slide endwise thereon, a boom connected to the slidable mast, a travelline bucket or shovel mounted on the boom, and means for rocking thg main mast, adjusting the slidable mast in a vertical direction, raising and lowering the boom, and hauling the shovel or bucket, substantially as and for the purposes described. 5th. The combination with a frame and a main mast mounted thereon, of a slidable mast attached to said main mast and adapted to be lowered below the frame, a boom carried by the slidable mast, a travelling bucket or scoop, and operating means for said slidable mast, the boom and the bucket or scoop, substantially as and for the purposes described. 6th. The framework having diagonal timbers united together by a vertically disposed casting having one of its faces adapted to serve as a guide, in combination with a main mast, a slidable mast connected with said main mast and adapted to ride against the guide face of said casting, a boom a travelling bucket or scoop, and means for operating said slidable mast, the boom and the bucket or scoop, substantially as and for the purposes described. 7th. The combination with a frame and a main mast, of a vertically slidable mast, a keeper fixed to said slidable mast and loosely embracing the main mast, another keeper fixed to the main mast and slidably fitted to the slidable mast, a boom, a travelling bucket or scoop, and suitable operating means, substantially as and for the purposes described. 8th. The combination of a main mast provided with track rails, a slidable mast fitted laterally against said main mast, a keeper fixed to the slidable mast and carrying suitable rollers adapted to travel on the track rails of the main mast, another keeper fixed to the main mast and embracing the slidable mast, means for raising and lowering said slidable mast, a boom, a travelling bucket or scoop, and suitable operating means for the boom and said bucket or scoop, substantially as and for the purposes described. 9th. The combination with a suitable frame having a vertical guide casting, of a main mast stepped on the frame and provided on one side with track rails which terminate above said guide casting, a slidable mast having a movable keeper and rollers or wheels adapted to travel on the track irons, a keeper fixed to the main mast below the track irons and above the guide casting to embrace the foot of the slidable mast, a boom carried by the slidable mast, and a travelling bucket or scoop, substantially as and for the purposes described. 10th. The combination with a mast and a boom, of a bucket carriage slidably mounted on said boom, a trigger carried by the boom in the path of the bucket carriage, and a dumping bucket or scoop hinged to said bucket carriage, substantially as and for the purposes described. 11th. The combination with a boom, of a bucket carriage fitted thereto and consisting of a hanger and a saddle, a bucket or scoop hinged to the hanger, and a haulage cable attached to said bucket or scoop and adapted to force the latter against the saddle, whereby said saddle limits the upward movement of the bucket or scoop with relation to the boom, substantially as and for the purposes described. 12th. The combination with a boom, of a hanger slidably fitted thereto, a bucket or scoop hung eccentrically on said hanger, a saddle fitted on said boom to travel thereon with the hanger and arranged to bear upon the bucket or scoop in advance of its pivotal connection with the hanger, and a haulage cable connected to said bucket or scoop below the bearing of the saddle thereon, substantially as and for the purposes described. 13th. The combination of a boom provided on its upper and lower sides with track irons, a bucket carriage fitted loosely on said boom and provided with rollers adapted to travel on said track irons above and below the boom, a bucket hinged to said carriage, a trigger mounted on the boom in the path of the bucket carriage, and a haulage cable connected to said bucket, substantially as and for the purposes described. 14th. The combination with a boom of a bucket carriage slidably fitted thereon, a bucket hinged to said carriage, a haulage cable for said bucket, an over-balanced trigger or latch mounted on the boom in the path of the bucket carriage, and an operating line connected with said trigger, substantially as and for the purposes described. 15th. The combination of a swinging boom, a bucket carriage consisting of a hanger and a saddle mounted on the boom to travel endwise thereon, a bucket hinged eccentrically to the hanger and adapted to press or bear against the saddle of said carriage, a haulage cable connected to the bucket in advance of its pivotal connection with the hanger and below the bearing of the saddle on said bucket, a trigger or latch mounted on the boom in the path of the bucket carriage and having an operating line, and means for raising and lowering said boom, whereby the latch is adapted to confine the carriage and bucket, at or near the free end of the boom, while the latter is being raised and the bucket is adapted to tilt to a dumping position without hindrance from the saddle of the bucket carriage, substantially as and for the purposes described. 16th. The combination with a boom, of an angular bracket carried by the free end of said boom a sheave mounted in said angular bracket, a traveling bucket or scoop mounted on said boom, a haulage cable which is led around said sheave and is operatively connected with another sheave on the bucket or scoop and means for raising and lowering said boom, substantially as and for the purposes described. 17th. The combination with a suitable frame-work, of a main mast stepped thereon, a transverse bar or arm rigid with said main mast and having suitable operating lines to turn the main mast in a horizontal direction, a vertically slidable mast connected with said main mast and adapted to be lowered below the frame and the main mast, a swinging boom carried by the foot of the slidable mast, means for raising and lowering the slidable mast and said swinging boom, a traveling bucket or scoop mounted on the swinging boom, and a haulage cable guided on the main mast and the swinging boom and connected with said bucket or scoop, substantially as and for the purposes described.

No. 60,278. Invalid's Bed. (*Lit d'invalides.*)



Messrs. Shurly and Dietrich, assignees of Joseph Powley, all of Galt, Ontario, Canada, 10th June, 1898; 6 years. (Filed 18th April, 1898.)

Claim.—1st. In an invalid bed, a bed frame and a track supported on one of the cross bars thereof, in combination with a mattress frame, arms pivoted beneath the end of the mattress frame and having their lower ends adapted to engage the track, and means for moving the lower ends of the arms on the track, substantially as and for the purpose set forth. 2nd. In an invalid bed, a bed frame, and a track supported on one of the cross bars thereof, in combination with a mattress frame, blocks transversely journaled beneath the end of the mattress frame, arms pivoted on the sides of the said blocks and having their lower ends adapted to engage the track, and means for moving the lower ends of the arms on the track, substantially as and for the purpose specified. 3rd. In an invalid bed a bed frame and a track supported on one of the cross bars thereof,

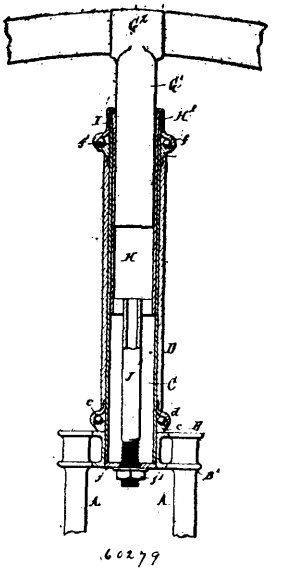
and having its ends bent upwardly, in combination with a mattress frame, arms pivoted beneath the end of the mattress frame, and having their lower ends adapted to engage the track, and means for moving the lower ends of the arms on the track, substantially as and for the purpose specified. 4th. In an invalid bed a bed frame and a track supported on one of the cross bars thereof, in combination with a mattress frame, arms pivoted beneath the end of the mattress frame, and having their lower ends adapted to engage the track, a pulley journalled at each side of the bed frame, two rollers geared together and journaled at the centre of the cross bar, and a cord wound upon each roller, passing round one of the pulleys on the bed frame, round the pulley on the end of one of the arms, and thence secured to the bed frame, substantially as and for the purpose specified. 5th. In an invalid bed, a bed frame and a track supported on one of the cross bars thereof, in combination with a mattress frame, arms pivoted beneath the end of the mattress frame, and having their lower ends adapted to engage the track, a pulley journalled at each side of the bed frame, two rollers geared together and journalled at the centre of the cross bar, and a cord wound upon each roller, passing round one of the pulleys on the bed frame, round the pulley on the end of one of the arms, and thence secured to the bed frame, an arm connected to the mattress frame above the portion of each cord between its fixed point and the pulley on the arm and having its end adapted to engage therewith, substantially as and for the purpose specified. 6th. In an invalid bed a bed frame and a track supported on one of the cross bars thereof, in combination with a mattress frame arms pivoted beneath the end of the mattress frame, and having their lower ends adapted to engage the track, a pulley journalled at each side of the bed frame, two rollers geared together and journalled at the centre of the cross-bar, and a cord wound upon each roller, round the pulley on the end of one of the arms, and thence secured to the bed frame, and a spring actuated pawl engaging one of the gears on the rollers, substantially as and for the purpose specified. 7th. In an invalid bed, a bed frame provided with corner posts and tracks supported by cross-bars, in combination with a mattress frame having its ends shaped to engage the corner posts to prevent longitudinal or transverse motion, arms pivoted beneath the ends of the mattress frame, and having their lower end adapted to engage the tracks, and means for moving the lower ends of the arms upon the tracks, substantially as and for the purpose specified. 8th. In an invalid bed, a bed frame having tracks thereon supported by cross-bars, in combination with a mattress frame formed in two parts, one hinged at one end to the centre of the other, arms pivoted beneath each part of the mattress frame at the ends of the bed, and having their lower end adapted to engage the tracks and means for moving the lower ends of the arms upon the tracks, substantially as and for the purpose specified. 9th. In an invalid bed, a bed frame having tracks thereon supported by cross-bars, in combination with a mattress frame formed in two parts one hinged at one end to the centre of the other, means for securing the two parts together, arms pivoted beneath each part of the mattress frame at the ends of the bed and having their lower end adapted to engage the tracks and means for moving the lower ends of the arms upon the tracks, substantially as and for the purpose specified. 10th. In an invalid bed, the ends A, having one or more casings B, secured thereto, each provided with the perforated lugs D, in combination with the side rails F, having holes c formed therein, and the castings F, each provided with the lugs G, pins O and offset hook H, substantially as and for the purpose specified. 11th. In an invalid bed the ends A, having one or more castings B, secured thereto each provided with the perforated lugs D, in combination with the side rails F, having holes c formed therein, and the castings E, each provided with the lugs G, pins O, and offset hook H, and the screw bolts *d* holding the side rails and castings together, substantially as and for the purpose specified. 12th. In an invalid bed a bed frame provided with corner posts and hooks secured thereto in combination with a suitably supported mattress frame, mechanism for elevating the same, a roller provided with means for hanging it on the hooks at one side of the bed, a stretcher connected at one edge to the said roller and provided with eyes at its other edge, a roller provided with hooks to engage the said eyes and journalled in suitable bearings, means for supporting the bearings from the hooks at the other side of the bed, and means for locking the roller in one of the bearings, substantially as and for the purpose specified. 13th. In an invalid bed a bed frame and a track supported on one of the cross-bars thereof, and having its ends bent upwardly, in combination with a mattress frame, arms pivoted beneath the end of the mattress frame, and having their lower ends adapted to engage the track, a pulley journalled at each side of the bed frame, two rollers geared together and journalled at the centre of the cross-bar, and a cord wound upon each roller, passing round one of the pulleys on the bed frame, round the pulley on the end of one of the arms, and thence secured to the bed frame, an arm connected to the mattress frame above the portion of each cord between its fixed point and the pulley on the arm and having its end adapted to engage therewith, substantially as and for the purpose specified.

No. 60,279. Bicycle Handle Bar Clamp.

(*Lien pour manches des barre de bicycles.*)

The Welland Vale Manufacturing Company, assignee of Bert Dunbar Harris, all of St. Catharines, Ontario, Canada, 10th June, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. The combination with the hollow fork stem, of a contractible clamping tube or sleeve arranged in said stem and



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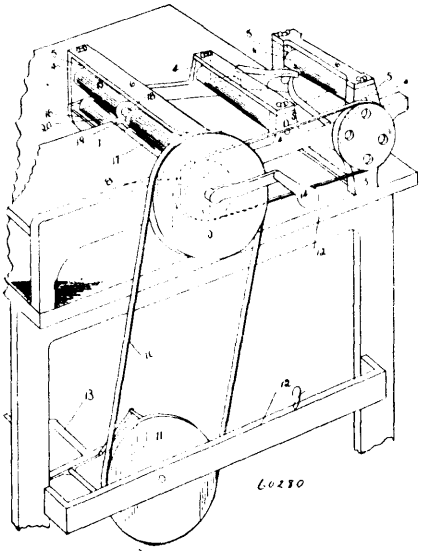
adapted to receive the shank of a handle bar, said clamping tube and fork stem being provided with contiguous tapering surfaces which cause the tube to contract and bind upon the handle bar shank by a longitudinal movement of the tube in the stem, and a tightening device which operates to draw said clamping tube downwardly in the fork stem and which is accessible at the lower end of the steering head, substantially as set forth. 2nd. The combination with a wheel fork and a hollow stem connected therewith and provided with a tapering seat, of a clamping tube fitted in said stem and having a split tapering portion arranged in the tapering seat of said fork stem, and a clamping bolt extending downwardly from said clamping tube, and passing through the upper portion of the fork, substantially as set forth. 3rd. The combination with a wheel fork and a hollow stem projecting upwardly therefrom and having its upper end split and provided with a tapering seat, of a clamping tube fitted in said stem and having a split tapering upper portion arranged in the tapering seat of said fork stem, a cap applied to the split end of the fork stem, and a clamping bolt extending downwardly from said clamping tube, and passing through the crown or upper end of the wheel fork and provided with a nut which bears against the underside of the fork crown, substantially as set forth.

No. 60,280. Envelope Closing Machine.

(*Machine à fermer les enveloppes.*)

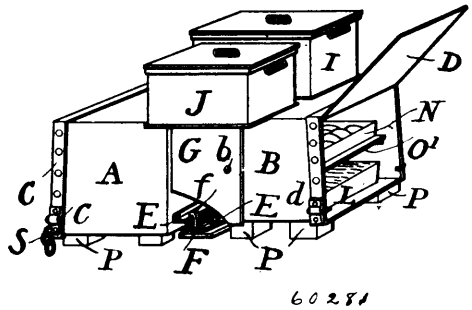


60280

Leonard W. Gifford, John H. Skinner and Ella D. Cross, all of Washington, Columbia, U.S.A., 10th June, 1898; 6 years. (Filed 9th March, 1898.)

Claim.—1st. A machine for automatically moistening, folding and sealing envelopes, consisting of a frame, a set of feeding rollers, moistening devices, intermediate devices for receiving the moistened envelope and closing the flap thereof, and a set of rollers for receiving the envelope from the closing devices and sealing and delivering the same, as and for the purpose specified. 2nd. A machine for automatically moistening, folding and sealing envelopes, consisting of a horizontally disposed frame, mechanism in one end of the frame for moistening and feeding the envelopes in open condition, devices arranged intermediate of the frame for closing the moistened flap of the envelope, devices in the other end of the machine for sealing and delivering the envelope, and mechanism for imparting motion to the feed rollers, moistening devices and sealing devices, as and for the purpose specified. 3rd. A machine for automatically moistening, folding and sealing envelopes, consisting of a frame having a feed table or platform, feed rollers mounted in the frame contiguous to said platform, a moistening roller adjacent to the feed-rollers, means for supplying moisture to said rollers, intermediate devices secured to the frame for guiding the envelope and closing the moistened flap thereof, sealing rollers which receive the moistening roller, feed rollers and sealing rollers, as and for the purpose specified. 4th. A machine for automatically moistening, folding and sealing envelopes, consisting of a frame having a horizontally disposed feeding platform, a pair of feed rollers contiguous to said platform, a moistening roller for moistening the flap of the envelope, said feed and moistening rollers being separated by a gap to permit the flap of the envelope to fall out of the path of the rollers, intermediate guiding and closing devices, and sealing rollers for sealing the envelope after it leaves the guiding and closing devices, and mechanism for driving the moistening, feeding and sealing rollers, as and for the purpose specified.

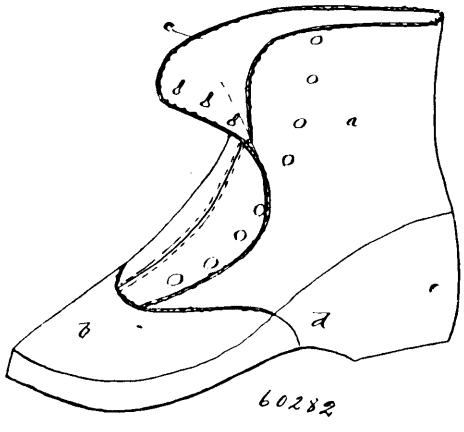
No. 60,281. Portable Cooking Stove.
(*Poêle de cuisine portatif.*)



The Military Equipment Stores and Tortoise Tents Company, Limited, 7 Waterloo Place, London, England, assignee of Alfred Savill Tomkins, Holmwood, Caterham, Surrey, England, 10th June, 1898; 6 years. (Filed 8th February, 1898.)

Claim.—1st. A portable cooking stove, consisting of two detachable ovens, separated when in use by a fire space and a removable fire grate between them, and pivoted plates connecting the ovens and partially enclosing such fire space, as shown and described. 2nd. A portable cooking stove, consisting of two detachable ovens A, B, separated when in use by a fire space, a removable fire grate F between them, having hooks *f* to connect with the ovens, all substantially as shown.

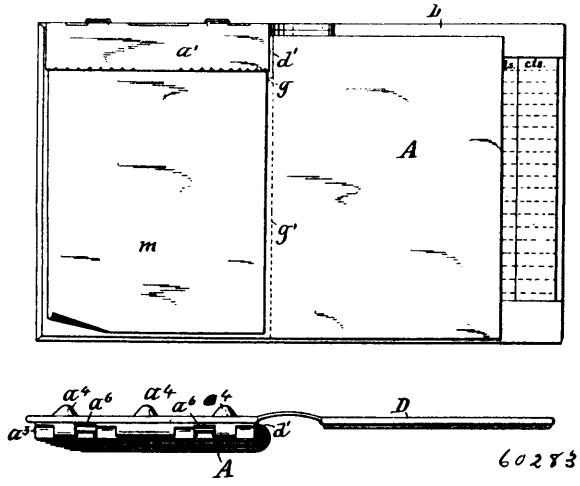
No. 60,282. Rubber Overshoe. (*Claques.*)



The Canadian Rubber Company, of Montreal, asignee of John Jones McGill, also of Montreal, Quebec, Canada, 10th June, 1898; 6 years. (Filed 20th May, 1897.)

Claim.—1st. A rubber overshoe, having its upper cut from an unvulcanized web, comprising a lining and outer fabric cemented together, and the top edge of the vamp, quarters and flap bound, substantially as described. 2nd. In the manufacture of rubber overshoes, first making a web by cementing together strips of the usual inner lining and outer fabric, then cutting from such web the vamp, quarters and flap of the upper of the overshoe, securing together the quarters and flap, binding the top edges of vamp, quarters and flap, securing the vamp to the quarters and flap, lasting the upper and securing the foot portion thereto, and finally vulcanizing the whole, substantially as described. 3rd. A binding for overshoes or the like, composed of a cord attached to the edge of the material to be bound by an overlapping stitch consisting of a thread formed into a series of loops, one strand of each of which loops being connected to the loop adjacent thereto on one side and to one strand of the loop adjacent to the other side thereof by a second thread, substantially as described. 4th. An overshoe, having the edges of its upper bound with a cord extending longitudinally of such edges and an overlapping stitch transversely thereof, as and for the purpose set forth.

No. 60,283. Manifold Book. (*Livre multiple.*)



The Carter Crume Company, Niagara Falls, assignee of John Robert Carter, Boston, Massachusetts, U.S.A., 10th June, 1898; 6 years. (Filed 9th September, 1895.)

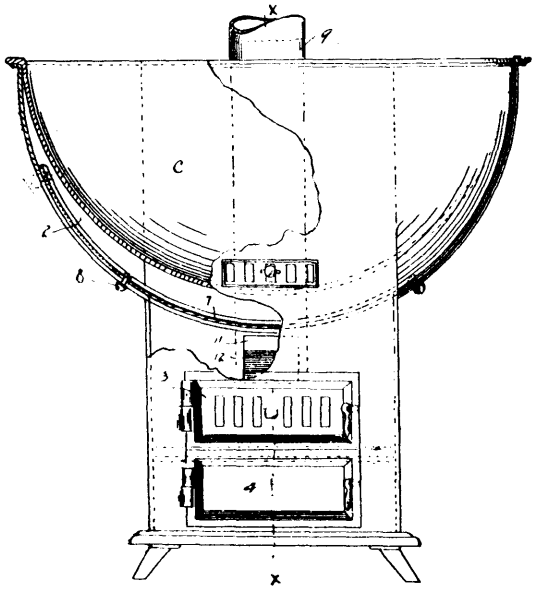
Claim.—1st. A manifold salesbook comprising a series of sheets arranged in a pile, each of said sheets having the line of perforations g^1, at or near the centre, the line of perforation g, extending at right angles from the central line of perforations to the edge of said sheets, and the slit d^1, extending from the junction of said lines of perforations to the nearest edge of the sheets, the perforation g, and the slit d^1, forming binding stubs, a black leaf, and means to unite said black leaf and the sheets along the binding stubs, substantially as described. 2nd. A manifold salesbook comprising a series of sheets arranged in a pile, each of said sheets having the line of perforations g^1, at or near the centre, the line of perforations g, extending at right angles from said central line of perforations to one edge of said sheets, perforations g, forming binding stubs, and the line of perforations g, extending at right angles from said central line of perforations to the other edge of said sheets to form cashier's vouchers, a black leaf, and means to unite said black leaf and the unfolded sheets along the blinding stubs, substantially as described. 3rd. A manifold salesbook comprising a series of sheets arranged in a pile, each of said sheets having the line of perforations g^1, at or near the centre, the line of perforations g extending at right angles from said central line of perforations to one edge of said sheets, the perforations g, forming binding stubs, a black leaf, means to unite said black leaf and the sheets along the binding stubs, and the cover to which the said pile of sheets is attached, substantially as described. 4th. A manifold salesbook comprising a series of sheets arranged in a pile, each of said sheets having the line of perforations g^1, or the bar in the centre, the line of perforations g, extending at right angles from said central line of perforations to the edge of said sheets, the perforations g, forming binding stubs, a black leaf, means to unite said black leaf and the said sheets along the binding stubs, the cover, and a clamp secured to said cover and engaging the binding stubs to said sheets, substantially as described.

No. 60,284. Kettle and Stove. (*Chaudron et poêle.*)

John F. Brown, Prescott, Wisconsin, U.S.A., 11th June, 1898; 6 years. (Filed 27th May, 1898.)

Claim.—1st. In a furnace of the class described, the combination with the fire-box, and the kettle supported above the same in direct contact with the fire, of the partition having sliding support upon the walls of the furnace, and adapted to be moved beneath the

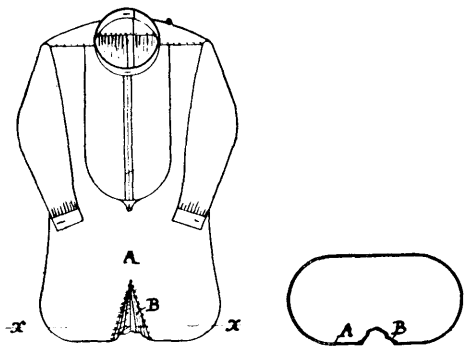
kettle to serve as a dividing-wall between the same and the fire-box, the auxiliary outlet connected with the fire-box, and having valve



60284

connection therewith, so that the products of combustion may be diverted from the fire-box through the same when said partition is closed. 2nd. In a kettle-furnace, the combination with the fire-box, and the kettle supported above the same in direct contact with the fire, of the valves having sliding support in the wall of the furnace, and adapted to be moved underneath the kettle to separate the same from the fire-box, the auxiliary opening connected with the fire-box, through which the products of combustion are adapted to be diverted when the valves are interposed between the same and the kettle, and the draft-inlet in the furnace-wall for allowing a current of outer air to pass between the kettle and closed valves to cool said kettle. 3rd. In a kettle-furnace, the combination with the fire-box and the fire-box and the kettle supported above the same, of the valves arranged upon opposite sides of the kettle, the supports for said valves provided with grooves in which the same are adapted to slide, the means for holding said valves in raised or suspended position, or allowing the same to be closed underneath the kettle to serve as a dividing-wall between the same and the fire-box, and a valve-controlled auxiliary opening adapted to connect said fire-box with the smoke-outlet when the space between said fire-box and kettle is closed.

No. 60,285. Shirt. (*Chemise.*)

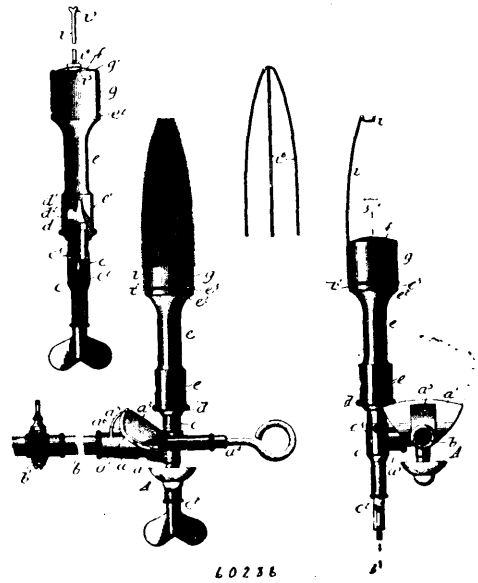


60285

John Forbes, Halifax, Nova Scotia, Canada, 11th June, 1898; 6 years. (Filed 27th May, 1898.)

Claim.—1st. A shirt or undershirt having a V-shaped or other shaped gusset, set or formed into the bottom portion of its front flap or skirt to increase the breadth of fullness thereof at the part indicated and thereby to obtain results, substantially as specified. 2nd. In a shirt or undershirt a gusset of suitable shape, inserted, or, woven into, the lower portion of the flat of a shirt or an undershirt for the purpose of widening this part of the garment at the part indicated so as to enable the garment to be tucked comfortably in between the thighs of the wearer in the manner herein described.

No. 60,286. Lamp. (*Lampe.*)

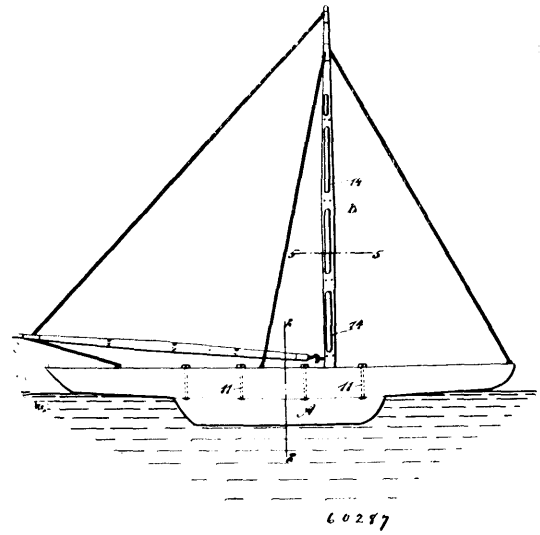


60286

Peter James Fitzgerald, Boston, Massachusetts, U.S.A., 11th June, 1898; 6 years. (Filed 18th March, 1898.)

Claim.—1st. A burner for hydro-carbon liquids, comprising an incandescent illuminating burner, the burners adapted to be used alternately for illumination, said latter burner being adapted for supplying heat for vaporization of the liquid, substantially as described. 2nd. A burner for hydro-carbon liquids, comprising an illuminating burner provided with a vaporizer passage and with a flame plate as described, and an incandescent burner connected with said passage, substantially as set forth. 3rd. A burner for hydro-carbon liquids comprising an illuminating burner provided with a vaporizer passage, a flame plate and a valve for controlling the vapor, and an incandescent burner connected with said passage and provided with a valve.

No. 60,287. Hull and Spars of Vessels.
(*Coque et espars de vaisseaux.*)



60287

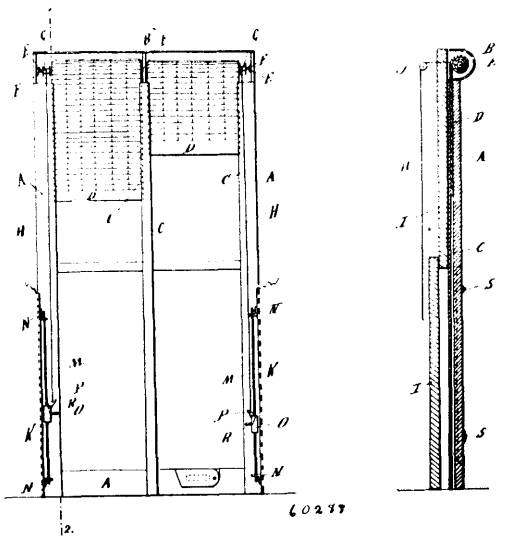
Thomas Clapham, Roslyn, New York, U.S.A., 11th June, 1898, 6 years. (Filed 19th March, 1898.)

Claim.—1st. The combination with the hull of a vessel, of hollow pontoon keels located longitudinally at each side of the hull near the bilge, for the purpose set forth.. 2nd. The combination, with the hull of a vessel, of hollow pontoon detatchably attached under the bilge of the hull, one each side, for the purpose specified. 3rd. The combination, with the hull of the vessel, of hollow pontoon keels detachably attached under the bilge of the hull, one at each side, and

means, substantially as described, for obtaining pumping access to the said pontoons, as and for the purpose specified. 4th. In the combination of vessels, a spar consisting of a series of longitudinal strips and braces separating the said strips, whereby the spar is a made-up spar and is provided with openings extending through the same, as specified.

No. 60,288. Storm Window and Blind.

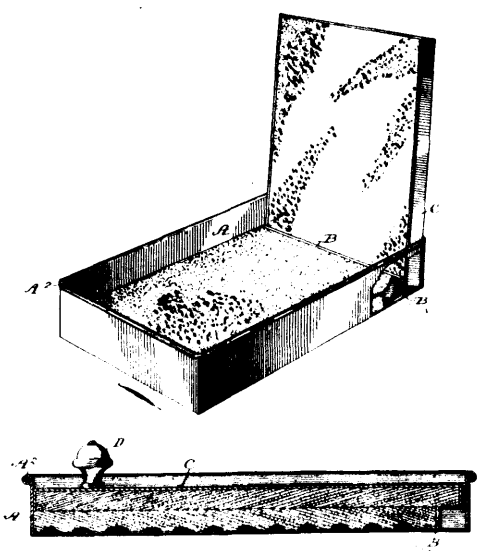
(Contrevent et store.)



Ezra B. Hallman, Hanover, Ontario, Canada, 11th June, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. A combined storm window and blind, constructed with rolling blinds D, D, running in grooves C, in window sash and operated by cords H, H, attached to pulleys G, G, on rollers E, E, and regulated by spools O, O, provided with camps P, P, on rods M, all substantially as hereinbefore set forth. 2nd. In combined storm windows and blind, the combination of rolling blinds D, D, operated with cords H, H, attached pulleys G, G, on rollers E, E, with sash provided with grooves G, all substantially as hereinbefore set forth. 3rd. In combined storm windows and blinds the combination of rolling blinds D, D, operated with cords H, H, attached to pulleys G, G, with clamps P, P, attached to spools O, O, on rods M, M, all substantially as hereinbefore set forth.

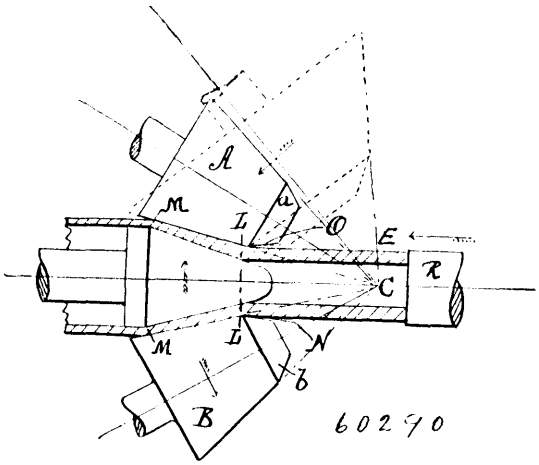
No. 60,289. Blotter Bath. (*Buvard.*)



Fred L. Fairbank and Theodric N. Cantril, both of Chicago, Illinois, U.S.A., 11th June, 1898; 6 years. (Filed 17th March, 1898.)

Claim.—1st. The herein described composition of matter, comprising plaster of paris, charcoal, sulphur, salt, cement and water in about the proportions stated, substantially as and for the purposes set forth. 2nd. A blotter bath comprising a pan having a transverse partition near one end, an absorbent composition having a flat top surface placed in the pan, a metal cover for the pan having a heavy absorbent filling that has a smooth surface and is adapted to overlay the absorbent in the pan and the cover and absorbent therein adapted to stand on and in the vacant end of the pan, as and for the purposes stated. 3rd. An absobent composition for blotters bath consisting of plaster of paris, charcoal and water in about the proportions stated. 4th. A blotter bath, comprising a pan, an absorbent composition having a flat top surface placed in the pan and a cover fitted to the pan and an absorbent composition having a flat surface combined with the cover, for the purposes stated.

No. 60,290. Art of and Apparatus for Expanding Metallic Tubes (*Art et appareil pour l'expansion de tubes métalliques.*)



Ralph Charles Stiefel, Ellwood City, Pennsylvania, U.S.A., 11th June, 1898; 6 years. (Filed 14th March, 1898.)

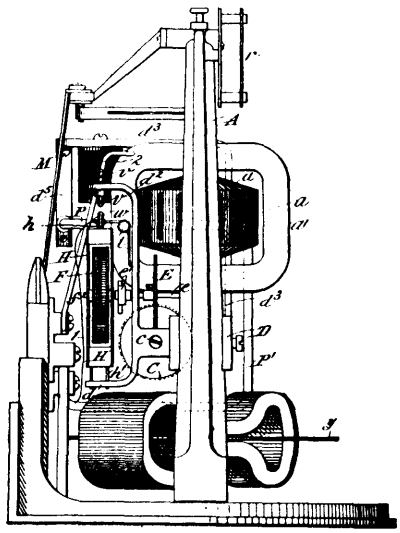
Claim.—1st. The process of expanding metallic tubular structures consisting in subjecting them to true lateral rolling compression upon a conical mandrel without twisting their fibres and without slip between their sides and the compressing rolling surfaces, and simultaneously subjecting them to forcible endwise movement against the mandrel thereby causing the metal to yield and expand around said mandrel, substantially as set forth. 2nd. The combination of conical rolls or bodies disposed to form a pass between them, the sides of which converge towards its entrance end, a mandrel located in said pass, the diameters of the rolls varying progressively in the same direction and in the same ratio as the width of the pass, substantially as set forth. 3rd. The combination of conical rolls or bodies disposed to form a pass between them the sides of which converge towards the entrance end, a conical mandrel located in said pass, the axes of the opposed rolls and the lines of their working faces substantially converging towards and intersecting a common point on the axial line of the point, substantially as set forth. 4th. The combination of conical rolls or bodies disposed to form a pass between them the sides of which converge towards the entrance end of the pass, a conical mandrel located in said pass, the axes of the opposed rolls and the lines of their working faces converging towards and passing through points on a common line drawn at right angles through the axis of the pass, substantially as set forth. 5th. The combination of conical rolls or discs disposed to form a pass between them the sides of which converge towards its entrance end, a conical mandrel located in said pass, the diameters of the rolls diminishing in the same ratio as the width of the pass diminishes, with means for forcing the hollow billets or blanks endwise into the pass and against the mandrel, substantially as set forth. 6th. The combination of conical rolling bodies disposed to form a pass between them the sides of which converge towards its entrance end, a conical mandrel located in said pass, the axes of the rolling bodies and the lines of their working surfaces converging towards and intersecting a common point or points on an axis intersecting the axial line of the pass at a right angle, the rolling bodies being adjustable towards or away from each other by swinging around said axis, substantially as set forth.

No. 60,291. Electric Motor. (*Eléctromètre.*)

William Frank Browne, New York City, U.S.A., 11th June, 1898; 6 years. (Filed 3rd January, 1898.)

Claim.—1st. The combination with an electric meter, of a rotary coin-pocket wheel and suitable gearing connecting said wheel with a rotary part of the meter, whereby said wheel will be rotated by the operation of the meter and a predetermined quantity of volume of current metered to a customer by insertion of a suitable coin in said pocket wheel. 2nd. The combination with the rotary shaft of the meter, of a coin-pocket wheel yieldingly supported so that it may rise and fall, to make and brake electrical contacts in a circuit, and suitable gearing and connections between said moving part of

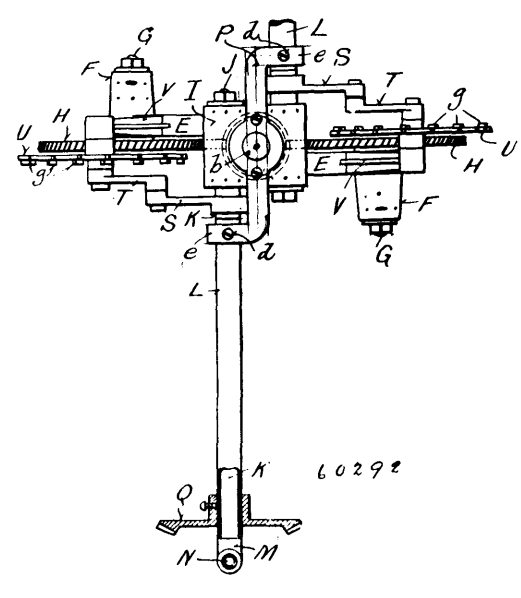
the meter and the coin wheel for rotating the latter by operation of the meter, substantially as described. 3rd. The combination with



60291

a meter, of a rotary coin pocket wheel, in a yielding support, means connecting said support with a conductor of electricity to be metered for shutting off or admitting current to the meter, and suitable gearing connecting said wheel with a moving part of the meter, whereby current may be metered to the customer by the insertion of a coin in the coin wheel, substantially as described. 4th. The combination with the armature shaft of an electric meter, of a yieldingly-supported frame, adapted to automatically rise and fall, means connecting said frame to a movable contact or switch in an electric circuit, a rotary coin-pocket in said frame and means connecting with said shaft for rotating said coin-pocket to discharge a wheel therefrom. 5th. The combination with a meter, of a yieldingly supported frame a rotary coin-pocket wheel in said frame, an electric circuit having a movable contact or switch, means connecting said frame to said contact or switch for opening or closing the circuit, and gearing connecting the shaft of the meter to said coin-pocket wheel for rotating it, whereby a coin, inserted in the wheel, will close the circuit admitting current to the meter, and cause the coin-pocket wheel to rotate, substantially as described. 6th. The combination with the rotary shaft of a meter having a worm gear, of a yieldingly supported rotary coin-pocket wheel, which is adapted to be raised and lowered, connections from said wheel to a movable contact or switch in an electric circuit, connecting with the meter, suitable gearing connecting with said worm and having a shaft provided with a yielding coupling device, connecting with the rotary coin-wheel, whereby said wheel may be rotated and permitted to rise and fall for the purpose described. 7th. In an electric meter the armature shaft, having a worm gear and motor, in combination with a coin-pocket wheel and intermediate operating gearing and shafts connecting them, whereby, they may be rotated by the operation of the meter, substantially as described. 8th. In a coin-controlled mechanism, the coin-pocket wheel centrally mounted on a motor-operated shaft and having a pocket made with a curved interior wall or bottom extending from points in the periphery, inwardly beyond the center of the wheel, the depth being such that coin may be deposited at the centre of the wheel and therefore exert no leverage on said shaft, substantially as described. 9th. In coin controlled mechanism, the coin pocket wheel having two adjacent overlapping pockets extending from the periphery inwardly beyond the centre of the wheel, and provided each, with an interior wall beveled from the periphery inwardly for guiding a coin from the coin conduit to the bottom of the pocket, substantially as described. 10th. In coin controlled mechanism, a yieldingly supported frame containing a coin pocket wheel and having guide rods and bearings, means for automatically raising said frame, and means connecting it to a moveble contact or switch in the electric circuit, substantially as described. 11th. In coin-controlled mechanism, the yieldingly supported frame, and the coin pocket wheel therein, in combination with the coin conduit and a detent projecting at one end into the conduit for retaining the coin, and means for operating said detent to release a coin when the parts are in the proper position. 12th. The combination with the meter, of a rotary coin pocket wheel, in a yielding support, means connecting said support with an electric conductor or switch for opening and closing the circuit to the meter, suitable gearing connecting said wheel with the moving part of the meter, and means for automatically raising said yielding support, whereby a coin inserted in the wheel, will, by its weight, operate said yielding support to close the circuit, and thereby meter a current to the customer, substantially as described. 13th. The motor shaft of a meter having a worm gear and meter, in combination with a yieldingly supported coin pocket wheel adapted to be raised and lowered, intermediate operating gearing, a shaft provided with a yielding coupling connecting said motor shaft and wheel, whereby said wheel may be rotated by the operation of the meter, substantially as described. 14th. In a coin-controlled mechanism, the yieldingly supported coin pocket wheel, having a suitable coin pocket and adapted to be moved upward and downward in combination with suitable operating mechanism, substantially as described. 15th. In coin-controlled mechanism for electric meters, the yieldingly supported coin holder, having a contact point as *w* and a second contact point as *v*, in combination with an electro-magnet, a movable section or switch in the main conductor, having an armature, and adapted to be opened out of contact by said magnet, and a spring as i^{11} bearing on said switch to close it, and suitable electrical connections, substantially as described. 16th. In coin-controlled mechanism, the yieldingly supported frame for the coin wheel, and having a contact point, another contact point adjacent thereto, means for moving the frame to bring said points in contact, a movable contact section or switch in the main circuit an electro-magnet adjacent thereto, adapted to operate it, and electrical connections between the main circuit the contact points and said magnet, substantially as described. 17th. In a coin-controlled mechanism for electric meters, the combination with the yieldingly supported frame for the coin holder, of a contact section attached directly to said frame, and adapted to open and close the circuit in the main conductor, and means for automatically raising said frame to open the circuit on the discharge of the coin, substantially as described. 18th. The combination with the meter, of a rotary coin pocket wheel in a yielding support, a switch for opening and closing the circuit to the meter, suitable gearing connecting said wheel with the rotary shaft of the meter, means for automatically raising said yielding support, an electro-magnet arranged to operate said switch and suitable electric connections, whereby a coin inserted in the wheel will, by its weight, operate said yielding support to close the circuit, and thereby meter current to the customer, substantially as described. 19th. In coin-controlled mchanism, the yieldingly-supported coin-pocket wheel, adapted to be moved downward by the weight of a coin, and means for automatically moving it upward on discharge of the coin, in combination with the coin conduit, a detent projecting into said conduit and holding the coin therein, and an electro-magnet arranged to operate said detent to release one of the coin at the proper time, and suitable electrical connections for such purpose. 20th. In coin-controlled mechanism, the combination with the yieldingly-supported coin holder, of the conduit adapted to hold a number of coin, a detent projecting into said conduit for holding the coin therein, an electro-magnet arranged to operate the detent to release one of the coin at a time, and suitable electrical connections, substantially as described.

No. 60,292. Fountain. (*Jet d'eau.*)

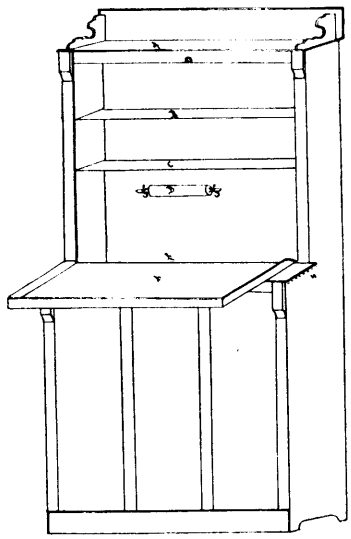


Benedict Ott, LaCrosse, Wisconsin, U.S.A., 11th June, 1898; 6 years. (Filed 19th March, 1898.)

Claim.—1st. A worm-sleeve for stationary connection with a fountain stand-pipe, a hollow stem having rotative engagement with the worm-sleeve, pipes extending laterally in opposite directions from the stem and having discharge terminals at suitable angles, hollow stem-arms extending in opposite directions and having perforated horizontal shell terminals, hollow perforated spigots in these arm terminals, and worm-wheels made fast to the

spigots to mesh with said worm-sleeve. 2nd. A worm-sleeve for stationary connection with a fountain stand-pipe, a hollow stem having rotative engagement with the worm-sleeve, arms extending in opposite directions from the stem, worm-wheels in rotative connection with the stem-arms to mesh with said worm-sleeve, other wheels in rotative connection with stem-arm branches and having intermittent motion imparted thereto from the worm-wheels, pipes having hollow perforated spigot-terminals engaging perforated horizontal protuberances of said stem, the other terminals of these pipes being at suitable angles, pipe-supports in connection with the aforesaid stem, levers fast to the pipes, and links connecting the levers with the intermittently driven wheels. 3rd. A worm-sleeve for stationary connection with a fountain stand-pipe, a hollow stem having rotative engagement with the worm-sleeve, arms extending in opposite directions from the stem, worm-wheels in rotative connection with the stem-arms to mesh with said worm-sleeve, other wheels in rotative connection with stem-arm branches and having intermittent motion imparted thereto from the worm-wheels, pipes having hollow perforated spigot-terminals engaging perforated horizontal protuberances of said stem, other pipes in ground-joint union with the ones aforesaid, bevel-pinions fast on the latter pipes and meshed with bevel gear-wheels fast on supporting sleeves engaged by the former pipes, levers fast to the sleeve-engaging pipes, and links connecting the levers with the intermittently driven wheels. 4th. A worm-sleeve for stationary connection with a fountain stand-pipe, a hollow stem having rotative engagement with the worm-sleeve, hollow arms extending in opposite directions from the stem and having perforated horizontal shell terminals, hollow perforated spigots in these arm-terminals, worm-wheels made fast to the spigots to mesh with said worm-sleeve, other wheels in rotative connection with stem-arms branches and having intermittent rotation imparted thereto from the worm-wheels, pipes having hollow perforated spigot-terminals engaging perforated horizontal protuberances of said stem, the other terminals of these pipes being at suitable angles, pipe-supports in connection with the aforesaid stem, levers fast to the pipes, and links connecting the levers with intermittently driven wheels. 5th. A worm-sleeve for stationary connection with a fountain stand-pipe, a hollow stem having rotative engagement with the worm-sleeve, hollow arms extending in opposite directions from the stem, and having horizontal perforated shell-terminals, hollow perforated spigots in these arm-terminals, worm-wheels made fast to the spigots to mesh with said worm-sleeve, other wheels in rotative connection with the stem-arm branches and having intermittent motion imparted thereto from the worm-wheels, pipes having hollow perforated spigot-terminals engaging horizontal perforated protuberances of said stem, other pipes in ground-joint union with the ones aforesaid, bevel pinions fast on the latter pipes and meshed with bevel-gear wheels fast on supporting sleeves engaged by the former pipes, levers fast to the sleeve-engaging pipes, and links connecting the levers with the intermittent driven wheels.

No. 60,293. Bake Board, Flour Bin and Kitchen Cabinet. (*Planche à boulanger huche et cabinet de cuisine.*)

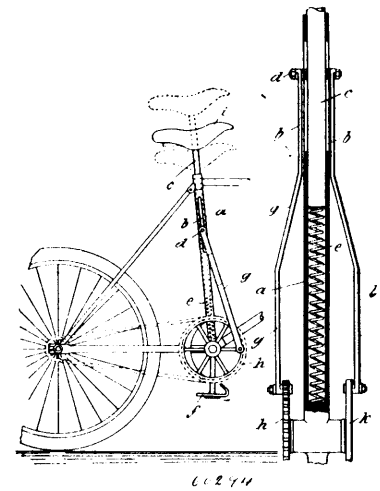


60293

Edward William Dartnall, Glanford, Ontario, Canada, 11th June, 1898; 6 years. (Filed 17th May, 1898.)

Claim.—A household article of furniture, simulating a cupboard, consisting of flour bins in the lower portion G, the same having a front extension, a hinged bake or pastry board F, which, when open is supported by said extension, shelves A, B, C, on the upper portion, and the slide H, to cover the ingress and egress opening E, all constructed and arranged substantially as and for the purpose specified.

No. 60,294. Bicycle Movement. (*Mouvement de bicycles.*)

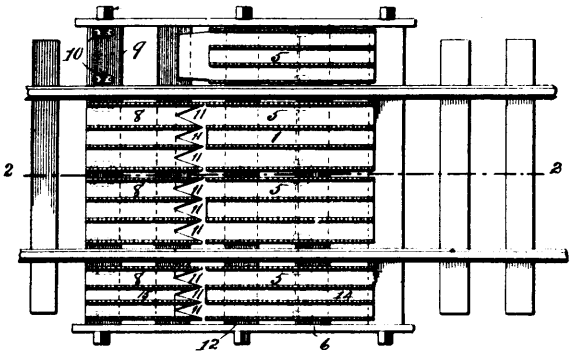


60294

Julius F. A. Runge, 30, I Querstrasse, Leipzig, Germany, 11th June, 1898; 6 years. (Filed 16th February, 1898.)

Claim.—1st. A bicycle having operating gear in the form of a vertically reciprocating seat pillar operated by the weight of the rider and a spring and operatively connected with the driving gear of the bicycle as shown and described. 2nd. In a bicycle, an operating gear comprising a seat pillar movable up and down in a frame tube, a spring *e*, immovable fixed rests for the feet of the rider and operating connections between the seat pillar and the driving gear of the bicycle, constructed and arranged substantially as hereinbefore described. 3rd. In a bicycle, an operating gear comprising a sliding bar *g*, set in motion by the seat pillar *c*, and which works the wheel *h*, constructed and arranged, substantially as hereinbefore described.

No. 60,295. Cattle-Guard. (*Garde-bétail.*)

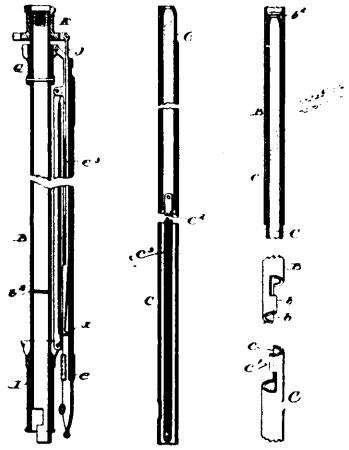


60295

Charles C. Kiefer, Blue River, and Louis J. Evert, Bascobel, both in Wisconsin, U.S.A., 11th June, 1898; 6 years. (Filed 19th February, 1898.)

Claim.—1st. A cattle-guard comprising a series of tilting plates having upturned edges, a second series of tilting plates having upturned edges and resting at one end upon the adjacent ends of the first named plates whereby when the first named plates are tilted they will raise the second plates. 2nd. A cattle-guard comprising a series of tilting plates having upturned edges provided with serrations, a second series of tilting plates having upturned edges provided with serrations, said second plates each having one end serrated and lying upon its respective first named plate whereby when the first named plates are tilted the second named plates will be raised. 3rd. A cattle-guard comprising a series of tilting plates having upturned edges, supplemental plates secured thereto having upturned edges, a second series of tilting plates having upturned edges, supplemental plates having upturned edges secured to the second series of plates, one end of each of said second series being serrated and lying upon its respective first named plate whereby when the first named plates are tilted the second named plates will rise.

No. 60,296. Umbrella. (*Parapluie.*)

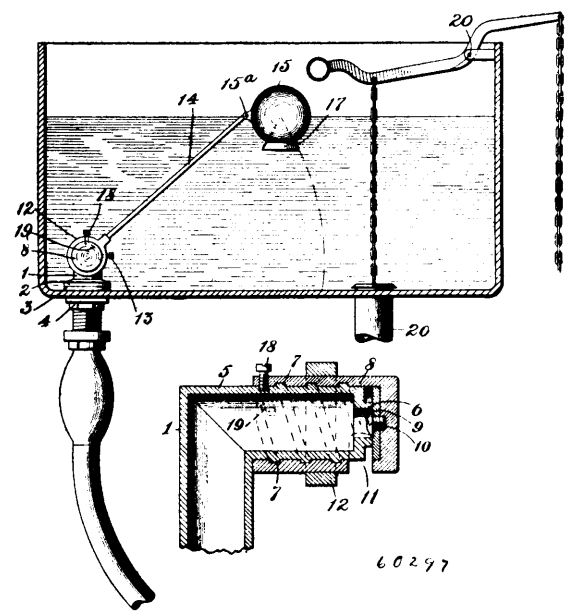


60296

Charles Holmes Ely, Orange, James W. Danser, Freehold, and Frank Bergen Rue, Atlantic Highlands, all in New Jersey, U.S.A., 11th June, 1898; 6 years. (Filed 9th March, 1898.)

Claim.—1st. The combination in an umbrella, of a set of ribs pivoted to a collar on the staff and each rib having sections adapted to telescope, and locking rods located within the inner rib sections for locking the rib sections when extended, said rods being pivoted to a collar on the staff adjacent to the first named collar, substantially as set forth. 2nd. The combination in an umbrella, of a set of ribs U-shaped in cross-section, each rib being in two telescoping sections, the outer sections being arranged to slide over the inner sections, and the inner sections being pivoted to a collar on the staff, and locking rods within the inner sections and pivoted to a collar on the staff adjacent to the first named collar, substantially as set forth. 3rd. The combination in an umbrella, of a set of ribs U-shaped in cross-section, each rib being in two telescoping sections, the outer sections being arranged to slide over the inner sections, and the inner sections being pivoted to a collar on the staff, and locking rods within the inner sections and pivoted to a collar, on the staff above the first named collar, substantially as set forth. 4th. The combination in an umbrella, of a set of rib having sections adapted to telescope, locking rods for locking the ribs sections when extended, a pair of collars on the staff to which the ribs and locking rods are respectively pivoted, one of said collars being stationary and the other movable to permit relative longitudinal movements of the ribs and locking rods to effect the locking and unlocking of the outer rib sections, and means for locking the movable collar when the locking rods are in locking position, substantially as set forth. 5th. The combination in an umbrella, of a set of ribs having sections adapted to telescope, locking rods for locking the rib sections when extended, a pair of collars on the staff to which the ribs and locking rods are respectively pivoted, one of said collars being stationary and the other movable to permit relative longitudinal movements of the ribs and locking rods to effect the locking and unlocking of the outer rib sections and a movable staff section for locking the movable collar when the locking rods are in locking position, substantially as set forth. 6th. The combination in an umbrella, of a set of pivoted ribs having sections adapted to telescope, a collar on the staff to which the inner rib sections are pivoted, a locking rod each rib held parallel with the inner rib section, and a collar adjacent to the first named collar to which the locking rods are pivoted, said rods being capable of longitudinal movement relative to the inner rib sectons in opening and closing the umbrella to compensate for the difference at the pivotal points of the ribs and locking rods, substantially as set forth. 7th. The combination in an umbrella, of a set of pivoted ribs having sections adapted to telescope, a collar on the staff to which the inner rib sections are pivoted, a locking rod located within each of the inner rib sections, a collar adjacent to the first named collar to which said locking rods are pivoted, and locking heads at the outer ends of said locking rods adapted to enter slots in the overlapping end of the rib in sections when extended, said slots being of such length as to permit longitudinal movement of the heads therein, in opening and closing the umbrella to compensate for the difference in the pivotal points of the ribs and locking rods, substantially as set forth. 8th. In a telescoping umbrella, the combination with telescoping rib sections, of a locking device within each rib adapted to engage the outer rib section to lock it in the extended position, and means whereby all the locking devices are simultaneously operated to unlock the outer rib sections, substantially as set forth. 9th. In a telescoping umbrella, the combination with telescoping rib sections, of a locking device within each rib and having a head adapted to enter a slot in the outer rib section to lock it in the extended position, and means whereby all the locking devices are simultaneously operated to unlock the outer rib sections, substantially as set forth. 10th. In a telescoping umbrella, the combination with telescoping rib sections U-shaped in cross-section and provided with slots which are brought into line when the rib sections are extended, of a locking rod located within the inner section of each rib and having a head adapted to enter the slots and lock the outer section in the extended position, and means whereby said rods are shifted to move said heads into and out of locking position, substantially as set forth. 11th. A sectional rib for telescoping umbrellas, having in combination two telescoping rib sections, and a locking rod carried by the inner rib section, said inner section having two arms by which the rib is adapted to be pivoted to the collar and between which arms the locking rod extends for connection to another collar adjacent to the first-named collar, substantially as shown and described. 12th. A sectional rib for telescoping umbrellas, having in combination two telescoping rib sections U-shaped in cross-section, and a locking rod held within the inner rib section, said inner section having two arms by which the rib is adapted to be pivoted to the collar and between which arms the locking rod extends for connection to another collar above the first-named collar, substantially as described. 13th. A sectional rib for telescoping umbrellas, having in combination two telescoping rib sections U-shaped in cross-section and provided with slots which are brought into line when the rib sections are extended, and a locking rod held within the inner rib section and provided with a head adapted to enter the slots and lock the sections in the extended position, said inner section having two arms by which the rib is adapted to be pivoted to a collar and between which arms the locking rod extends for connection to another collar, substantially as shown and described. 14th. A sectional staff composed of separable tubular sections having scarfed ends provided with interlocking projections to hold the sections against separation by longitudinal movement, and a movable rod or tube within the staff adapted to be moved within the joint to hold the sections against separation by lateral displacement, substantially as set forth. 15th. A sectional staff having in combination separable tubular sections having scarfed ends provided with interlocking projections to hold the sections against separation by longitudinal movement, a rod or tube within one end of a section and having an extension projecting from the other end, whereby said rod or tube is adapted to be moved into the other section to bridge the joint when the scarfed ends are interlocked and hold the sections against separation by lateral displacement, substantially as set forth. 16th. The combination in a sectional umbrella staff, of two tubular sections provided with interlocking projections, a locking rod within one tubular section adapted to be moved partially into the other section to hold the sections in line and prevent the unlocking of the projections, a hollow handle for said staff, a catch for holding the handle in place, and an extension of said locking rod projecting into the handle to prevent movement of the locking rod while said handle is in place, substantially as set forth. 17th. A telescoping umbrella having separable staff sections, telescoping rib sections, and locking rods provided with locking heads, all arranged and operated, substantially as herein described.

No. 60,297. Valve. (*Soupape.*)



60297

Will Joseph Frederick, Pittston, Pennsylvania, U.S.A., 11th June, 1898; 6 years. (Filed 14th May, 1898.)

Claim.—1st. In a valve, the combination with a supply-pipe, and a longitudinal extension therefrom, of a longitudinally-movable cap

for said extension, a segmental opening in the side of said cap, for the exit of the water, a seat in said cap against which the end of the pipe is adapted to abut, a guide-way parallel with the direction of movement of said cap, a stop-pin working in said guide-way and limiting the longitudinal movement of said cap, a float connected with said cap, and actuating the same, by the rise and fall of the water in the tank, and an open air chamber, formed in the under side of said float, designed to cause said float to follow the falling water and prevent binding of the valve parts. 2nd. In a valve, the combination with a supply pipe, having its end screw-threaded and formed with a peripheral groove, parallel with the screw-threads on the pipe, a cap screw-threaded thereon and designed to act as a cut-off, a slot or opening in said cap, through which the water passes, when the cap uncovers the bore of the supply-pipe, the stop-pin passing through said cap and engaging with the groove in the pipe, the band adjustably secured on said cap, the swinging float connected thereto, and an open air-chamber, formed in the under side of said float, and designed to cause said float to follow the falling water in the tank and prevent binding of the valve parts. 3rd. In a valve, the combination of a supply pipe, having external screw-thread and formed with a peripheral groove, parallel with said threads, the cap fitting on said pipe, having a slot or opening, and provided with corresponding threads, the washer located in the said cap, the stop pin passing through the cap and engaging with said groove, the band on said cap, the spindle secured thereto, the float pivoted to said spindle, the open cone secured to the under side of the float, and the set screw for adjustably securing said band to the cap, whereby the length of movement of the said cap, from the end of the pipe, may be varied to regulate the quantity of water to be supplied, substantially as described.

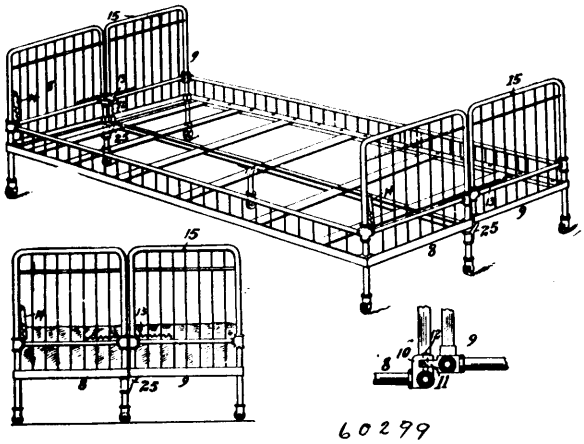
No. 60,298. Method of Precipitating Milk Products.

(*Mèthode de précipitation des produits du lait.*)

Hubert Higgins, 4 Trinity Street, Cambridge, England, 11th June, 1898; 6 years. (Filed 26th March, 1898.)

Claim.—1st. The process of precipitating milk proteids from separated milk, which consists in subjecting the milk, heated to substantially the temperature specified, to the action of hydrochloric acid, substantially in the proportions specified. 2nd. The process of precipitating milk proteids from separated milk, which consists in subjecting the milk, heated to substantially the temperature specified, to the action of hydrochloric acid, and then adding the supernatent liquid from the mixture to a further quantity of separated milk to separate the proteids therefrom, substantially as described. 3rd. The process of precipitating milk proteids from separated milk, which consists in subjecting the milk, heated to substantially the temperature specified, to the action of hydrochloric acid, and then treating the precipitated proteids with hot water, substantially in the manner described. 4th. As a food product, precipitated milk proteids, in combination with other alimentary substances, substantially as described. 5th. As a food product, precipitated milk proteids, in combination with gluten, and a gluten treated so as to lose its binding quality, bran flour, or almond flour, substantially as described. 6th. The process of precipitating milk proteids from separated milk, which consists in subjecting the milk, heated to substantially the temperature specified, to the action of hydrochloric acid, substantially in the proportions specified, then scalding the precipitate and treating it with a solution of an alkaline salt to form a jelly, substantially as described.

No. 60,299. Bed. (*Lit.*)



60299

Katherine Louis Stenhouse, Chicago, Illinois, U.S.A., 13th June, 1898; 6 years. (Filed 21st May, 1898.)

Claim.—A combined bed and settee composed of two similar members having upwardly-extending end sections, so hinged to each other that the end sections may pass each other when the folding section is elevated, counterbalancing-springs connecting said members, locking mechanism for securing the folding member when raised, bracket-supports on the fixed member to engage the end rails of the folding member when lowered, telescoping legs on said folding member provided with means for locking said legs in either their inner or outer position, bedding mounted on both of the said members, extending from one to the other and adapted to be folded and unfolded without the removal thereof, a flexible cover for said bedding, and hooks or buttons mounted on the outer rails of said members for detachably securing said flexible cover, substantially as described.

No. 60,300. Electrical Conductor.

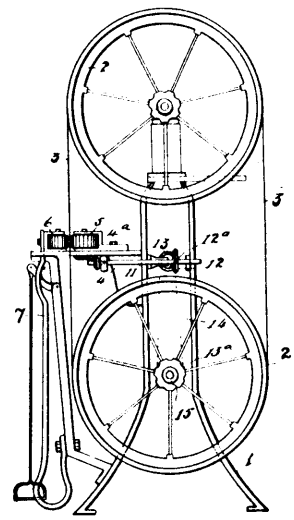
(*Conducteur électrique.*)

Antoine Bournonville, Philadelphia, Pennsylvania, U.S.A., 13th June, 1898; 6 years. (Filed 20th April, 1898.)

Claim.—1st. A flexible electric conducting cord, having a single central section and two or more terminal sections at one end, a fabric covering for said cord extending continuously over the single section and the terminal sections, substantially as described. 2nd. A flexible electric conducting cord having two electric conductors therein, each conductor having a primary covering, a braided covering confining the two conductors within one strand, said braided covering being separated and braided around each conductor at one end forming a covered cord having a single section and two terminals, substantially as described. 3rd. As a new article of manufacture, an electric conducting cord having two sets of wires braided to form a single central section, with two terminal sections at each end, the threads of the central section being separated, one half of the threads being continued and braided on the other terminal section, substantially as described. 4th. As a new article of manufacture, a flexible electric conducting cord, consisting of single sections alternating with plural sections adapted to form two or more terminals when cut, with a fabric covering for said cord extending continuously over the single sections and the plural sections, substantially as described.

No. 60,301. Machine for Sawing Barrel Hoops.

(*Machine pour scier les cercles de baril.*)



60301

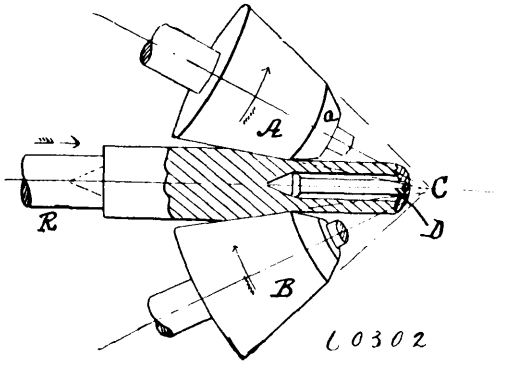
Theodore C. Seekell, Bay City, Michigan, U.S.A., 13th June, 1898; 6 years. (Filed 1st June, 1898.)

Claim.—1st. In a machine for sawing barrel hoops from poles, the combination with a band saw having a horizontal sawing table and a yielding whip roller, of a yielding surfaced guide roller opposite the whip roller, with its axis parallel with and at the side of the saw teeth, said guide roller being adapted to rotate toward the saw by connection with the band wheel shaft, and serving both as a fulcrum about which the hoop may be swerved in sawing and also as a friction feeding roller, substantially as described and for the purpose set forth. 2nd. In a machine for sawing barrel hoops from poles, having a band saw and a flexibly mounted whip roller, the combination feeding and guiding mechanism herein described, consisting

of a vertical guide roller at the side of the saw and substantially on the same transverse line with the saw teeth and the axis of the whip roller, forming a fulcrum about which to swerve the pole being sawed, and having a yielding surface adapted to seize the pole, said roller being rotated from the band saw shaft and by the friction of its yielding surface feeding the pole at a speed proportional to the velocity of the saw, substantially as described. 3rd. In a hoop sawing machine, a combined feeding and guiding roller having a yielding surface for feeding the pole by frictional contact therewith, together with means of rotating said roller at a speed proportional to the speed of the saw, the roller being mounted substantially on a line with the teeth of the saw, and forming a fulcrum about which to swerve the pole in feeding, substantially as described.

No. 60,302. Metal Tube Making Process.

(Procédé pour faire les tubes en metal.)



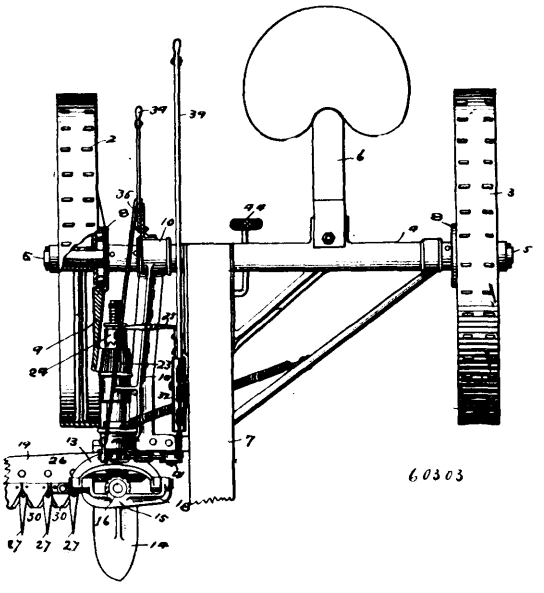
Ralph Charles Stiefel, Ellwood City, Pennsylvania, U.S.A., 13th June, 1898; 6 years. (Filed 14th March, 1898.)

Claim. 1st. The process of piercing billets which consists in subjecting them in a heated state to transverse rolling pressure without slip or twist of the fibres and lengthwise pressure against a mandrel, thereby causing the metal to yield and expand at the point and around the head of the mandrel, substantially as set forth. 2nd. The process of piercing billets which consists in subjecting them in a heated state to transverse rolling between gradually approaching rolling surfaces and to lengthwise pressure against a mandrel, increasing the compression of the metal as it approaches the mandrel, and proportioning the surface speed of the rolling surface to the diameter of the compressed billet at each point in the pass, thereby preventing spiral twist or slip of the metal, substantially as set forth. 3rd. the combination of rotating rolls having working faces which form sections of substantially true cones, placed to form a pass, converging towards its exit end, and a mandrel located axially of the pass, the surface speeds of the said rolls diminishing towards the narrowest point of the pass in the same ratio as the diameter of the pass and of the billet whereby conical rolling pressure without spiral twist or slip is produced, substantially as set forth. 4th. The combination of conical rolls disposed to form a pass between them, the width of which diminishes towards its exit end in the same ratio as the diameters of the rolls diminish, a piercing mandrel located in the pass, and means for forcing billets or blanks endwise through the pass and against the mandrel, substantially as set forth. 5th. The combination of conical rolls disposed to form a pass between them, the width of which diminishes towards its exit end in equal ratio with the diameters of the rolls, and a piercing mandrel located axially in the pass, the said rolls being somewhat skewed or inclined to the pass to produce forward movement of the billet against the mandrel, substantially as set forth. 6th. The combination of conical rolls disposed to form a pass between them, the width of which diminishes towards its exit end in equal ratio with the diameters of the rolls and a piercing mandrel located axially in the pass, the axes and working surfaces of the conical rolls converging substantially to a common apical point, and the conical rolls being angularly adjustable to and from the pass, substantially about said point, thereby maintaining the said ratio constant.

No. 60,303. Mowing Machine. (*Faucheuse.*)

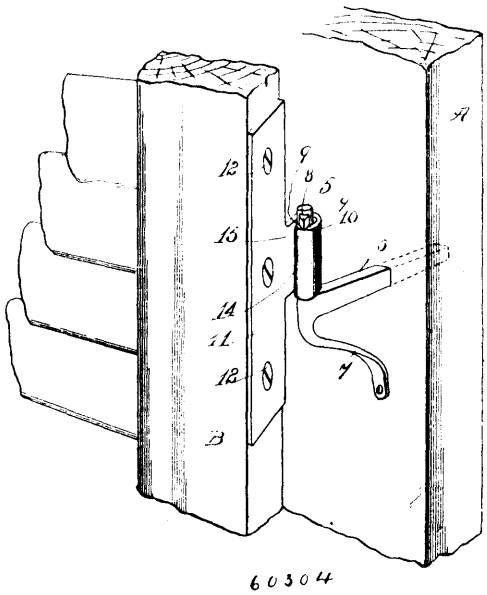
Edwin G. Stande, Minneapolis, Minnesota, U.S.A., 13th June, 1898; 6 years. (Filed 25th May, 1898.)

Claim.—1st. In a mowing machine, the combination, with the carriage, of the frame, the cutter bar pivotally attached thereto, means for tilting said cutter bar to raise or lower the teeth or guards thereof, the driving shaft perpendicular to said cutter bar and in said frame, means upon said cutter bar to operate the knife thereof, and the bulging gears upon said cutter bar and said shaft connecting said shaft with the knife operating means and permitting the tilting of said bar, substantially as described. 2nd. In a mowing machine, the combination, with the carriage having the driving wheel or wheels, of the frame, the cutter bar attached to said frame, the



shaft perpendicular to said cutter bar having bearings in said frame and driven from said driving wheel or wheels, a vertical crank upon said cutter bar to drive the knife thereof, and bevelled gear-wheels upon said crank and said shaft, substantially as described. 3rd. In a mowing machine, the combination, with the carriage having the driving wheel or wheels, of the frame, the cutter bar attached to said frame, the shaft perpendicular to said cutter bar having bearings in said frame and driven from said driving wheel or wheels, a vertical crank upon said cutter bar to drive the knife thereof, bevelled gear-wheels upon said crank and said shaft, and means upon the carriage to swing said cutter bar upon said shaft as a pivot, substantially as described. 4th. In a mowing machine, the combination with the carriage, of the frame pivoted thereon, and vertically movable, the shaft perpendicular to the axle of said carriage and held in bearings upon said frame, means for driving said shaft from the wheel or wheels of said carriage, the cutter bar, shoe thereof pivoted upon said frame concentrically with said shaft, means for raising said cutter bar, independent means for tilting said shaft and cutter bar, and the bulging gears within said shoe connected with said shaft and with the knife in said cutter bar for driving said knife and permitting the tilting of the shoe and the operation of the knife at any position of the cutter bar, substantially as described. 5th. In a mowing machine, the combination, with the carriage, of the frame pivoted thereon, the shaft having bearings in said frame and perpendicular to the axle of said carriage and adapted to be driven from one or both of the wheels thereof, the short shaft also journalled upon said frame and concentric with the first-mentioned shaft, the yoke thereon, the shoe pivoted in said yoke to be tilted, the cutter bar extending from said shoe, means within the shoe for driving the knife of the cutter bar from the first-mentioned shaft, and the horizontally and vertically extending means for first lifting the shoe and cutter bar from the ground and afterwards swinging or lifting the free end of the cutter bar, substantially as described. 6th. In a mowing machine, the combination, with the cutter bar and the guards thereon, of the knife bar, the knives thereon, and the ledger plates extending into a groove of said bar and serving as guides therefor, substantially as described. 7th. The combination, with the cutter bar, of the guards extending therefrom, the knife bar provided with a groove in its forward side and having its rear side guides by the forward edge of said cutter bar, and said guides having rearwardly projecting lugs or tongues entering the groove of said knife bar and serving as guides for the same, substantially as described. 8th. In a mowing machine, the combination, with the axle, of the wheels, the bevelled gear-wheel upon one of said wheels, the tongue and seat carrying frame upon said axle, the swinging frame pivoted about said axle, the short shaft having bearings upon the side of said frame perpendicular to said axle, the shaft pivotally attached to the forward end of said short axle, the cutter bar extending from said shoe and containing the knife, the shaft journalled within said short shaft, a pinion thereon to engage said bevelled gear-wheel, the forward end of said shaft extending into said shoe, the vertical crank shaft having bearings in said shoe, the bulging bevelled gear wheels provided upon the shafts in the shoe, the pitman rod connecting said crank shaft with the knife bar of said cutter bar, and means for tilting said shoe and for raising said frame with the shoe and cutter bar, and lifting the free end of the cutter bar, substantially as described.

No. 60,304. Shutter-Hinge. (*Penture de volets.*)



60304

John Henry Pineo, Brookline, Massachusetts, U.S.A., 13th June, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. In a shutter-hinge, the combination with a pivot, having means for securing the same to a frame and furnished at its upper end with a laterally extending locking tooth, of a shutter-plate having a laterally extending member bent to form a bearing sleeve, an entrance slot being formed between the end of said member and the main portion of the plate. 2nd. In a shutter-hinge, the combination of a spindle support, and a spindle 5 provided with a radial tooth 8 having a quadrangular body 9 and a wedge-shaped end 10, with the shutter-plate 11 having the lateral member 13 provided with an unclosed bearing sleeve having a longitudinal slot 15 in its periphery adjacent to said plate for the passage of the tooth 8, whereby a guide is obtained from the surface of the shutter-plate for the wedge-shaped end of the tooth 8, substantially as described.

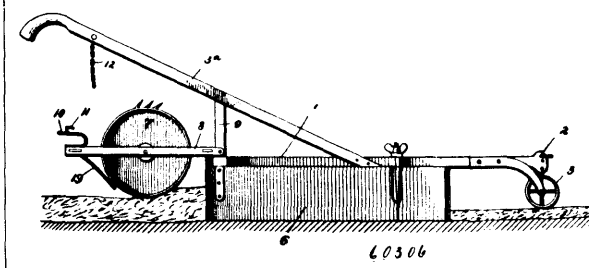
No. 60,305. Shoe-Tip. (*Pointe de soulier.*)

60305

Henry Waters, Bisbee, Arizona, U.S.A., 13th June, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—1st. A shoe, provided with a substantially U-shaped tip, consisting of a curved front or toe portion arranged at the toe of the shoe, and the sides or wings extending rearward along the sides of the shoe from the toe and protecting the upper at its points of attachment to the outer sole throughout the entire length of the latter, substantially as described. 2nd. A substantially U-shaped shoe-tip, comprising the curved front or toe portion, the rearwardly-extending sides or wings, said front or toe portion and the sides or wings being transversely curved, and the continuous inwardly-extending longitudinal flange designed to be arranged between the inner and outer soles of the shoe and provided at intervals with perforations for the reception of pegs, stitches, or other suitable fastening devices, substantially as described.

No. 60,306. Agricultural Implement.
(*Machine agricoles.*)

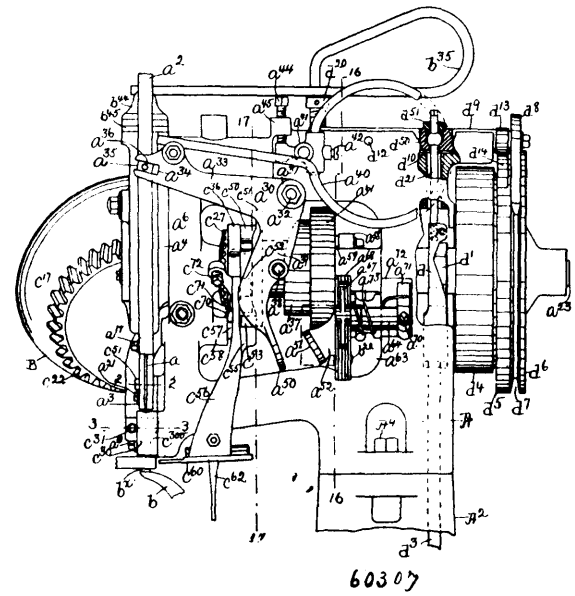


60306

Fabien Laporte, St. Ambrose de Kildar, Quebec, Canada, 13th June, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—1st. An agricultural implement comprising a beam, a colter wheel secured thereto, handles mounted thereon, cross-pieces secured in said beam, and plates secured to said cross-pieces, said plates extending downwardly at an angle, the inclination of which is toward the centre as the bottom of the plates are approached, substantially as described. 2nd. An agricultural implement comprising a beam, a coulter wheel secured thereto, handles mounted thereon, cross-pieces secured to said beam, and plates secured to said cross-pieces, said plates extending downwardly at an angle, the inclination of which is toward the centre as the bottom of the plates are approached, said plates also being inclined longitudinally, the rear ends being arranged closer together than the front ends, substantially as described. 3rd. In an agricultural implement, the combination with a hill forming device, of a roller pivotally mounted in rear of said device and adapted to roll said hill, substantially as described. 4th. In an agricultural implement, the combination with a hill forming device, of a roller pivotally mounted in rear of said device, said roller being adapted to contain fertilizing material, teeth or spurs formed on said roller at predetermined points, and openings formed in said roller continuous to said teeth, substantially as described.

No. 60,307. Nailing Machine for Boots and Shoes.
(*Machine pour clouer les chaussures.*)



60307

George Goddu, Winchester, Massachusetts, U.S.A., 13th June, 1898; 6 years. (Filed 25th May, 1898.)

Claim.—1st. In a machine of the class described, the combination of the following instrumentalities, namely, a throat, a reciprocating awl and a reciprocating driver co-operating with said throat, means to positively move bodily both the awl and driver laterally with relation to the said throat, to alternately carry the said awl and driver from their stationary positions out of line with said throat

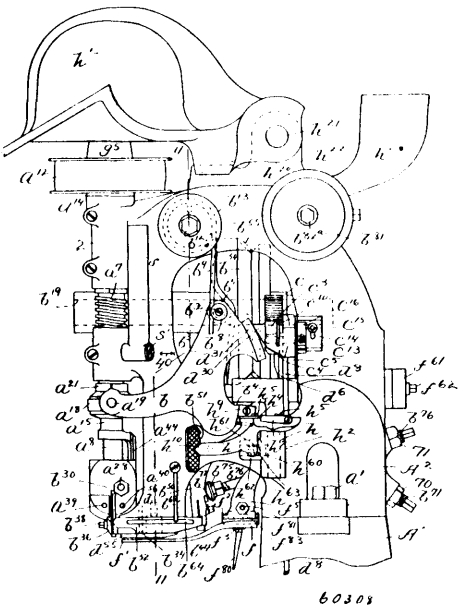
into line with the same, independent mechanisms to reciprocate said awl and driver and operate one of said parts and insert it into and withdraw it from said throat, while the other of said parts is held stationary out of line with said throat, substantially as described. 2nd. In a machine of the class described, the combination of the following instrumentalities, namely, a stationary throat, a reciprocating awl, a reciprocating driver movable independent of the awl, a carrier for said awl and driver movable with relation to the stationary throat to alternately place the said awl and driver into line with said throat, and independent and disconnected means to reciprocate said awl and driver independent of each other, substantially as and for the purpose specified. 3rd. In a machine of the class described, the combination of the following instrumentalities, namely, a throat, a reciprocating awl, reciprocating driver, a carrier for said awl and driver movable with relation to said throat with the awl out of the work to alternately place the awl and driver in line therewith, independent mechanisms to reciprocate said awl and driver when placed in line with said throat and to hold one of said parts stationary out of line with said throat when the other of said parts is being moved into and out of said throat, substantially as described. 4th. In a machine of the class described, the combination of the following instrumentalities, namely, a reciprocating awl, a reciprocating driver, a carrier for said awl and driver, a throat disconnected from said carrier to permit of movement of one with relation to the other, and independent mechanisms to alternately reciprocate the said awl and driver in said throat, and to maintain one of said parts stationary out of the throat while the other of said parts is being inserted therein, and a feed mechanism for the work independent of the awl and acting upon the work when the awl is withdrawn therefrom, substantially as described. 5th. In a machine of the class described, the combination of the following instrumentalities, namely, an awl, mechanism to effect movement of the said awl in one direction to prick a hole in the work, a work support or horn, and mechanism connected to said horn and co-operating with said awl-actuating mechanism to automatically control the extent of movement of the awl into the work according to the thickness of the work, substantially as and for the purpose specified. 6th. In a machine of the class described, the combination of the following instrumentalities, namely, an awl, a driver, a carrier for said awl and driver, a throat disconnected from said carrier to permit of movement of one with relation to the other, and means to alternately insert the said awl and driver in said throat, and means to automatically control the extent of movement of the awl through and beyond the said throat, substantially as described. 7th. In a machine of the class described, the combination of the following instrumentalities, namely, a horn or work support, a lever connected thereto to move simultaneously therewith, a cam-actuated lever, a friction surface or member movable with the cam-actuated lever and adapted to engage a co-operating friction surface on the lever connected to the said horn, and means to effect the engagement of the said friction surface with its co-operating surface, substantially as and for the purpose specified. 8th. In a machine of the class described, the combination of the following instrumentalities, namely, a horn or work-support, a lever connected thereto to move simultaneously therewith, a cam-actuated lever, a rock-shaft carried by said lever, a crank or eccentric on said rock-shaft, a clutch member operated by said eccentric to engage with and be disengaged from the lever connected to the said horn, and means to control the rotation of the said rock-shaft, substantially as described. 9th. In a machine of the class described, the combination of the following instrumentalities, namely, a stationary frame, a throat secured thereto, a roadway attached to said frame and co-operating with said throat, a separator movable between the said throat and the said roadway, a reciprocating awl, a reciprocating driver, a carrier for said awl and driver pivoted to the said frame, and means to move said carrier on its pivot when both the awl and driver are removed from the said throat to alternately place the said awl and driver in line with said throat, and independent mechanisms to reciprocate said awl and driver and operate one and move it into and out of the said throat while the other is held stationary out of line with said throat, substantially as and for the purpose specified. 10th. In a machine of the class described, the combination of the following instrumentalities, namely, a reciprocating awl, a reciprocating driver, a carrier for said awl and driver, a throat disconnected from said carrier to permit of movement of one with relation to the other, independent mechanisms to reciprocate said awl and driver and operative at different times to insert one of the said parts in the throat while the other of said parts is held stationary out of line with said throat, and means to automatically control the extent of movement of the awl through and beyond the said throat, substantially as described. 11th. In a machine of the class described, the combination of the following instrumentalities, namely, a reciprocating awl, a cam-actuated mechanism to lift the awl, a spring to throw the awl downward, a horn or work support, and mechanism connected to said horn and co-operating with the awl-actuating mechanism to automatically limit the downward movement of the awl by the said spring, to thereby control the depth of the hole pricked in the work by the awl according to the thickness of the work, substantially as described. 12th. In a machine of the class described, the combination of the following instrumentalities, namely, a throat provided with a longitudinal passage and with a longitudinal slot in its side wall communicating with said passage and provided with inclined front faces 3, a roadway co-operating with the said slot and having an inclined end wall 4 substantially parallel with the inclined faces 3 of the said slot to form a separator passage inclined with relation to the passage in the said throat, a separator movable in said separator passage, and means to operate said separator, substantially as described. 13th. In a machine of the class described, the combination of the following instrumentalities, namely, a stationary throat, a reciprocating awl and a reciprocating driver adapted to be alternately inserted into said stationary throat, means to effect a uniform stroke of the driver in the said throat, and means to effect a variable stroke of the awl in the said throat, substantially as and for the purpose specified. 14th. In a machine of the class described, the combination of the following instrumentalities, namely, a reciprocating driver-bar provided with a driver, a cam to move it in one direction, a spring to move it in the opposite direction and composed of a bent wire rod having one end in engagement with the driver-bar and its opposite end secured to a pivoted lever, and means to turn said lever on its pivot and thereby adjust the said spring substantially as described. 15th. In a machine of the class described, the combination of the following instrumentalities, namely, a reciprocating awl-bar provided with an awl, a lever connected therewith to move said awl-bar in one direction, a cam to act on said lever, a spring to move the said lever in an opposite direction and composed of a bent wire rod having one end in engagement with the said lever, and its other end secured to a lever a^{41}, and means to turn said lever on its pivot to adjust the said spring, substantially as described. 16th. In a machine of the class described, the combination of the following instrumentalities, namely, a stationary frame, a throat secured thereto, a roadway attached to said frame, a separator movable between said throat and roadway, an awl, a driver, a carrier for said awl and driver pivoted to said frame, means to move said carrier on its pivot in one direction to place the awl in line with the said throat, means to move the carrier on its pivot in the opposite direction to place the driver in line with said throat, means to move the driver into the said throat a uniform distance, means to move the awl through the said throat, and means to vary the extent of movement of the awl through the said throat, substantially as and for the purpose specified. 17th. In a machine of the class described, the combination of the following instrumentalities, namely, a stationary throat, a reciprocating awl to prick a hole in the work normally out of line with said throat, a movable carrier for said awl, mechanism to move said carrier to place the said awl into line with said throat, mechanism to reciprocate said awl, a horn or work support, and a movable back-stop connected to said horn and co-operating with the awl-actuating mechanism to automatically govern the length of stroke of the awl through said throat, and thereby govern the depth of the hole made in the work by the awl, substantially as and for the purpose specified. 18th. In a machine of the class described, the combination of the following instrumentalities, namely, a work support or horn provided with a tip or cup, a stationary throat permanently in line with the said cup, an awl, a driver, a carrier for said awl and driver movable with relation to said stationary throat to alternately place the said awl and driver into line with said throat, means to move said driver into said throat, means to move said awl into said throat, and means connected to said work support or horn and co-operating with the awl-actuating mechanism to automatically govern the length of stroke of the awl, substantially as described. 19th. In a machine of the class described, the combination of the following instrumentalities, namely, the throat a^7 provided with the passage a^{15} and with the slot c having the inclined walls, a roadway provided with the inclined end wall co-operating with the faces of the inclined walls of the slot c, and the thin separator-blade movable in the inclined passage between the throat and roadway, substantially as described. 20th. In a machine of the class described, the combination of the following instrumentalities, namely, the throat a^7 provided with the passage a^{15} and with the slot c having the inclined walls provided with transverse slots 10, the roadway provided with the inclined end wall co-operating with the faces of the inclined walls of the slot c and having projecting fingers extended into the transverse slots 10, and a separator-blade movable in the inclined passage between the throat and roadway, substantially as described. 21st. The combination with a throat having a fixed or stationary position, of a reciprocating awl co-operating with said throat, mechanism to reciprocate said awl, a horn or work support movable toward and away from the under side of the fixed or stationary throat, and means connected to said horn to be moved thereby and co-operating with the awl-actuating mechanism to automatically lengthen or shorten the stroke of the awl through and below the stationary throat according as the work bearing against the under side of the throat increases or diminishes in thickness, to thereby increase or decrease the depth of the hole made in the work according to the thickness of the work below the stationary throat, substantially as described.

No. 60,308. Machine for Inserting Screw Threaded Wire in Boots and Shoes. (*Machine pour inserer le fil retors dans les chaussures.*)

Louis Henry Goddu, Winchester, Massachusetts, U.S.A., 13th June, 1898; 6 years. (Filed 25th May, 1898.)

Claim.—1st. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a

supporting-head, a rotating wire-carrying spindle having bearings in said head, wire-feeding devices carried by said spindle, and an



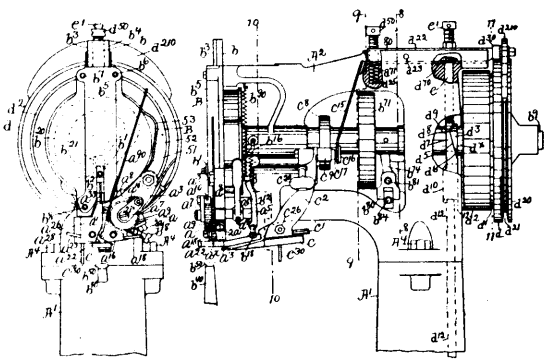
actuating mechanism for said wire-feeding devices consisting of a sleeve loosely fitted over and longitudinally movable on said spindle, a pivot or rod b^2, having bearings in the said head and extended to the opposite sides thereof, levers b, b^1, fast on the said pivot pin or rod on opposite sides of the said head, a collar loose on said sleeve and to which the front ends of said levers are hinged at substantially diametrically opposite points and on opposite sides of the head to guide the said sleeve in its longitudinal movement on the spindle, a cam operating on one of said levers to effect the downward movement of the said levers, collar and sleeve, means to move the levers in an opposite direction to lift and suspend the collar and its connecting-sleeve, a bevelled or inclined measuring surface on one of said levers, and a bevelled or inclined back-stop co-operating with said measuring surface and having a sliding engagement therewith to limit the backward movement of said lever, substantially as described. 2nd. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a supporting-head, a rotating wire-carrying spindle having bearings in said head, wire-feeding devices carried by said spindle, and an actuating mechanism for said wire-feeding devices consisting of a sleeve longitudinally movable on said spindle and connected to the wire-feeding devices to operate the same when moved in one direction, a pivoted lever connected to said sleeve to operate it, a cam to act on said lever, a bevelled or inclined measuring surface on said lever, and a bevelled or inclined back-stop co-operating with said measuring surface and having a sliding engagement therewith to limit the backward movement of the said lever, substantially as described. 3rd. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a supporting-head, a rotating wire-carrying spindle having bearings in said head, wire-feeding devices carried by said spindle, and an actuating mechanism for said wire-feeding devices consisting of a sleeve longitudinally movable on said spindle and connected to the wire-feeding devices to operate the same when moved in one direction, a pivoted lever connected to said sleeve to operate it, a cam to act on said lever, a measuring-surface on said lever bevelled with relation to the pivot thereof, a back-stop provided with a bevelled surface co-operating with the bevelled measuring-surface of the said lever and movable with relation to the bevelled measuring-surface to vary the backward movement of the said lever, a work-support or horn vertically movable with the relation to said head and to which said bevelled back-stop is connected to move simultaneously therewith to vary the position of the inclined back-stop with relation to the inclined measuring-surface on the said lever, and means to return the lever in opposition to the said cam, substantially as described. 4th. In a machine for inserting metallic fastenings into work the combination of the following instrumentalities, namely, a supporting head, a rotating wire-carrying spindle having bearings in said head, wire-feeding devices carried by said spindle, and an actuating mechanism for said wire-feeding devices consisting of a sleeve longitudinally movable on said spindle and connected to the wire-feeding devices to operate the same when moved in one direction, a pivoted lever connected to said sleeve to operate it, a bevelled or inclined measuring-surface attached to said lever, a cam to act on said lever, a work-support movable toward and from the wire-carrying spindle, a bevelled or inclined back-stop for said lever connected to said work-support to move simultaneously therewith but in an opposite direction thereto, to place said back-stop in various positions with relation to the bevelled or inclined measuring-surface on said lever, substantially as and for the purpose specified. 5th. In a machine for inserting metallic fastenings into the work, the combination of the following instrumentalities, namely, a work-support or horn movable in a substantially vertical plane, means to effect the up movement of the said work-support, and means to positively effect its downward movement and consisting of a cam, a lever or arm operated thereby, a curved arm or segment, a lever to which said segment is attached connected to the said horn to move simultaneously therewith, an arm movable with the cam-operated lever and adapted to engage the said segment to place the horn under control of the cam-operated lever, and means to control the engagement of the said arm with the said segment, substantially as described. 6th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a work-support or horn movable in a substantially vertical plane, means to effect the up movement of the said work-support, and means to positively effect its downward movement and consisting of a cam, a lever or arm operated thereby, a curved arm or segment, a lever to which said segment is attached connected to the said horn to move simultaneously therewith, an arm movable with the cam operated lever and adapted to engage the said segment to place the horn under control of the cam-operated lever, and adjustable means to control the engagement of the said arm with the said segment, substantially as described. 7th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a supporting-base provided with a hollow upright, a horn-shaft extended through said hollow upright and rotatable therein, and provided at its lower end with a socket internally screw-threaded, a connecting-rod d^{18} provided with a head extended into said socket, and a check-nut or threaded sleeve fitted on the said connecting-rod and provided with external screw-threads to engage the screw-threads of the said socket, substantially as described. 8th. In a machine for inserting metallic fastenings into the work, the combination with the following instrumentalities, namely, a vertically-movable work-support or horn, a shaft to which it is secured, a lever, a connecting-rod joining said horn-shaft and lever, a sleeve d^{44} movable longitudinally on said rod and provided with studs or arbours on its opposite sides, grooved rollers mounted on said studs or arbours, means to lock said sleeve in its adjusted position, and bent spring-rods having one end anchored to a fixed support, and their other or free ends engaging the under side of the said grooved rollers to force the connecting-rod and horn upward, substantially as described. 9th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a rotating wire-carrying spindle, wire-feeding devices carried by said spindle, and an actuating mechanism for said wire-feeding devices consisting of a sleeve longitudinally movable on said spindle and connected to the wire-feeding devices to operate the same when moved in one direction, a pivoted lever connected to said sleeve to operate it, a cam to act on said lever, and a wire-feed-stopping device co-operating with said lever and consisting of an arm or lever movable toward and from the cam-actuated lever, and a spring-actuated plate or arm carried by said movable arm and adapted to be projected into the path of movement of the cam-actuated lever, substantially as and for the purpose specified. 10th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a horn or work-support movable longitudinally in opposite directions, means to move it one direction, and means to move it in an opposite direction, consisting of a pivoted lever provided with a segmental arm and to which the horn is connected, a cam-operated lever movable independently of the said pivoted arm, means carried by the said lever and co-operating with the said segmental arm to effect a connection between the said lever and segmental arm, and a controlling device to regulate the said connection and thereby the extent of movement of the said arm, substantially as described. 11th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a wire-carrying spindle, a wire-feed mechanism, and a wire-cutting mechanism consisting of cutter-carriers pivotally mounted on separate pivots in substantially the same horizontal plane below the said spindle and provided with inclined portions b^{40}, b^{41} on one side of said pivots, cutters or knives carried by said carriers on the other side of said pivots, a pivoted lever having one arm extended between said carriers and movable toward the pivots of said carriers in engagement with the inclined portions b^{40}, b^{41} to turn the cutter-carriers on their pivots and engage the knives with the wire and sever the portion inserted into the stock, and means acting on the said carriers to return them to their normal position as the said lever moves back on the inclined portions away from said pivots, substantially as described. 12th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, the head A^2 provided with depending front arms 6, a wire-carrying spindle having bearings in said head, a wire feed mechanism, cutter-carriers pivoted to the under side of the depending arms on separate pivots and having their rear arms provided on their inner sides with inclined portions b^{40}, b^{41}, and with straight portions b^{42}, b^{43}, cutters or knives carried by said carriers, a cam-operated lever pivoted to said head and having one arm normally in engagement with the straight portions b^{42}, b^{43} of the said cutter-carriers and movable between the cutter-carriers toward their pivots in engagement with the said inclined portions, to act on the inclined

portions of the said carriers and cause the cutters to act on and sever the wire, and means to return the carriers to their normal position as the arm of the cam-lever travels back on the inclined portions of the carriers, substantially as described. 13th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a wire-carrying spindle, a wire-feed mechanism, pivoted cutter-carriers mounted on separate pivots in substantially the same horizontal plane below the said spindle and having their rear arms provided with inclined portions b^{40}, b^{41}, and with substantially straight portions b^{42}, b^{43}, cutters or knives carried by said carriers, a cam-operated lever normally engaging the straight portions b^{42}, b^{43}, and movable between the said cutter-carriers toward and from their pivots to travel up the inclined portions of the said carriers to cause the cutters to act on and sever the wire, springs to act on the cutter-carriers in opposition to the cam-lever as the lever travels down the said inclined portions, and a bunter or back-stop for said cam-lever to limit the backward movement of the said lever with its lower end in engagement with the straight portions b^{42}, b^{43} of the cutter-carriers, substantially as described. 14th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a supporting-head, a wire-carrying spindle having bearings therein, a wire-feed mechanism, pivoted cutter-carriers mounted on separate pivots in substantially the same horizontal plane, and having their rear arms provided on their inner sides with inclined portions, cutters or knives carried by said carriers, a cam-operated lever pivoted in said head and movable between said carriers toward their pivots in engagement with the inclined portions of the said carriers to cause the cutters to act on and sever the wire, springs to act on the cutter-carriers in opposition to the cam-lever as the latter travels back on the said inclined portions, and an adjustable bunter or back stop for said cam-lever, substantially as described. 15th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a wire-carrying spindle, a wire-feed mechanism, a wire-cutting mechanism consisting of cutters or knives, pivoted carriers for said knives having their rear ends provided with inclined portions, a pivoted lever having its lower arm movable in a substantially vertical plane to act on the cutter-carriers, and its other or upper arm extended at an angle to said lower arm, and a cam to act on the said upper arm, substantially as and for the purpose specified. 16th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a wire-carrying spindle, a wire-feed mechanism, a wire-cutting mechanism consisting of cutters or knives, pivoted carriers for said knives having their rear ends provided with inclined portions, a pivoted lever having its lower arm movable in a substantially vertical plane to act on the cutter-carriers, and its other or upper arm extended at an angle to said lower arm, a cam to act on the said upper arm, a spring to move said lever in opposition to the said cam, and a stop to limit the return movement of the said lever, substantially as described. 17th. In a machine for inserting metallic fastenings into work, a work-seeding mechanism, consisting of a feed-bar provided with teeth or projections to engage the work, a supporting-lever for said feed-bar, means to move said feed-bar in said lever, a cam to operate said lever and effect the movement of the feed-bar in one direction, a spring to move said lever in an opposite direction, means to adjust the tension of said spring, and an adjustable stop to limit the movement of the lever in the direction to effect the feed of the work, substantially as described. 18th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a hollow wire-carrying spindle provided at its lower end with a socket, a hollow or recessed head for said spindle having a hollow stem a^{43} inserted into said socket and provided with a wall 14 provided with a longitudinal slot, feed-rolls within said head, a driving pinion or gear for the said feed-rolls in line with the longitudinal slot in the wall 14, a sleeve encircling the wire-carrying spindle and loose thereon, a sliding plate or bar a^{44} separate from the wire-carrying spindle attached to said sleeve to move therewith, dovetailed into the wall 14 of the said spindle-head, and provided with a rack-bar a^{45} of less width than the plate a^{44} and extended into the longitudinal slot in the wall 14 of the spindle-head to engage the driving-pinion for the feed-rolls, and means to reciprocate said sleeve, plate and rack-bar, substantially as described. 19th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a supporting-base provided with a head having mounted therein a wire-carrying spindle provided at its upper end with a reel for a coil of wire, a bonnet or cap pivotally secured to the said head to move in a substantially vertical plane and adapted to fit over the said reel and the upper part of said spindle, substantially as described. 20th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a rotating wire-carrying spindle, a wire-feed mechanism, an actuating mechanism for said wire-feed mechanism, consisting of a lever provided with an inclined or bevelled surface, and a cam to rotate said lever in one direction, a measuring device for the wire-feed mechanism, consisting of a lever provided with an inclined or bevelled surface co-operating with the inclined or bevelled surface on the said wire-feed lever and constituting a back-stop therefor, and a work-support or horn to which the said bevelled back-stop is connected to move in opposite directions the said horn, substantially as described. 21st. In a machine for inserting metallic fastenings into work, the combination of the different instrumentalities, namely, a wire-feed mechanism, a lever co-operating therewith, means to act on the said lever to effect the feed of the wire, means to move the lever backward, a vertically-movable horn or work-support, a back-stop for the said feed-lever movable with the said horn and automatically positioned with relation to the said lever by the thickness of the work acted upon, and mechanism normally disconnected from said back-stop but adapted to be automatically connected thereto, to move the said back-stop in the same direction it is moved by the work but independent thereof, substantially as and for the purpose specified. 22nd. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a supporting-base, a substantially vertical horn-supporting shaft rotatably mounted in said base, a horn firmly secured to the upper end of said shaft, a lever, a connecting-rod attached to said lever, and means to loosely yet positively attach said connecting-rod to said horn-shaft, to effect a positive movement of the said horn-shaft in opposite directions and yet permit the said horn-shaft to rotate freely, substantially as and for the purpose specified. 23rd. In a machine for inserting metallic fastenings into work, the combination of the following iestrumentalities, namely, a vertically-movable work-support or horn, a rotatable shaft to which the horn is firmly secured at the upper end thereof, an operating lever, a connecting-rod attached to said lever at one end, means to positively yet loosely connect the opposite end of said rod to said shaft to effect its movement in opposite directions without interfering with its rotary movement, an adjusting device or stop movable on said connecting-rod, and springs composed of bent wire rods anchored at one end and having their free ends engaging said stop or device to force the said connecting-rod and its horn-shaft upward, and having its tension regulated by the movement of the said stop or device on the said rod, substantially as described. 24th. In a machine for inserting metalic fastenings into work, the combination of the following instrumentalities, namely, a wire-feed mechanism, a lever co-operating therewith, means to act on the said lever to effect the feed of the wire, means to move the lever backward, a horn or work-support, a back-stop for said feed-lever movable with said horn, and automatically positioned with relation to the said lever by the thickness of the work acted upon, and means normally disconnected from said back-stop but adapted to be connected thereto, to move the said back-stop in the same direction it is moved by the work but independent thereof, substantially as and for the purpose specified. 25th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a supporting-base, substantially vertical horn-supporting shaft rotatably mounted in said base, a lever, a connecting-rod attached to said lever and means to loosely yet positively attach said connecting-rod to said horn-shaft, to effect a positive movement of the said horn-shaft in opposite directions and yet permit the said horn-shaft to rotate freely, substantially as and for the purpose specified. 26th. In a machine for inserting metallic fastenings in the work, the combination of the following instrumentalities, namely, a vertically-movable work-support or horn, a rotatable-shaft to which it is secured, an operating-lever, a connecting-rod attached to said lever at one end, means to positively yet loosely connect the opposite end of the said rod to said shaft to effect its movement in opposite directions without interfering with the rotary movement, an adjustable device or stop movable on said connecting-rod, and springs composed of bent wire rods anchored at one end and having their free ends engaging said stop or device to force the said connecting-rod and its horn-shaft upward, and having its tension regulated by the movement of the said stop of device on the said rod, substantially as described. 27th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a hollow-wire-carrying spindle, a hollow or recessed head for said spindle, wire-feed rolls located within the said recessed head and provided with gear-teeth in mesh with each other within said recess and having screw-threads on their inner circumferences, and shafts or arbors for said feed-rolls extended across the said recess and having bearings in solid portions of the said head and provided with tapering portions intermediate of the ends and having screw-threads to engage the screw-threaded inner circumference of the said feed-rolls, substantially as described. 28th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a work-support or horn movable in a substantially vertical plane, a lever to which said horn is connected, a toothed segment connected to said lever, a pivoted arm or lever to which said toothed segment is attached, an arm or pawl co-operating with said toothed segment, a lever in which said pawl is loosely pivoted movable on the same centre as the segment-carrying lever but independent thereof, a cam to operate the pawl-carrying lever, an arm on the pivot for the said pawl, a block with which said arm co operates to normally hold the said pawl out of engagement with the toothed segment, and means to engage the said pawl with the toothed segment when the said arm is unacted upon by the said block, substantially as described. 29th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a rotable wire-carrying spindle, wire-feeding devices carried thereby, a wire-feed mechanism, an actuating mechanism for said wire feed mechanism consisting of a pivoted lever connected to the wire-feed mechanism, a cam to operate said lever, a bevelled surface on said lever, a bevelled lug co-operating with said surface to form a back-

stop therefor, a lever to which said bevelled lug is attached, a horn or work-support, intermediate connections joining said work-support with the back-stop carrying lever, a segment attached to the lug-carrying lever, a pawl or arm co-operating therewith, a lever supporting said pawl or arm, a cam to operate said pawl-carrying lever, and means to control the engagement of the said pawl or arm with the said segment, substantially as described. 30th. In a machine for inserting metallic fastenings into work, the combination of the following instrumentalities, namely, a rotating wire-carrying spindle, wire-feeding devices carried by said spindle, and an actuating mechanism for said wire-feeding devices consisting of a sleeve longitudinally movable on said spindle and connected to the wire-feeding devices to operate the same when moved in one direction, a pivoted lever connected to said sleeve to operate it, a cam to act on said lever, and a wire-feed-stopping device co-operating with said lever and consisting of an arm or lever movable toward and from the cam-actuated lever, and a spring-actuated plate or arm carried by the said movable arm and adapted to be projected into the path of the movement of the cam-actuated lever, and a brake mechanism for the said arm or lever, substantially as and for the purpose specified. 31st. In a machine for inserting metallic fastenings into work, a work-feeding mechanism consisting of a feed-bar provided with teeth or projections to engage the work, a lever to which said feed-bar is secured, a cam to operate said lever and move it in one direction, and means to act on said lever to move it in the opposite direction, and an adjustable stop to limit the movement of the lever in the direction to effect the feed of the work, substantially as described. 32nd. In a machine for inserting metallic fastenings into the work, the combination of the following instrumentalities, namely, a stationary head, an elbow lever pivoted thereto and provided with a bevelled or inclined surface, a horn or work-support movable longitudinally in opposite directions, means to move it in one direction, and means to move it in an opposite direction, consisting of a pivoted lever provided with a segmental surface and to which the horn is connected, an inclined surface or back-stop attached to the said pivoted lever and co-operating with the inclined surface on the elbow lever to limit the movement of the said elbow-lever in one direction, a cam-operated lever movable independently of the lever carrying the segmental surface, means carried by the said cam-actuated lever and co-operating with the said segmental surface to effect a connection between the said cam-actuated lever and the segmental surface, and a controlling device to regulate said connection and thereby the extent of movement of said horn, substantially as described.

No. 60,309. Nailing Machine for Boots and Shoes.

(*Machine à clouer pour chaussures.*)



60309

Louis Henry Goddu, Winchester, Massachussets, U.S.A., 13th June, 1898; 6 years. (Filed 25th May, 1898.)

Claim. 1st. In a machine of the character described, the combination of the following instrumentalities, namely, a reciprocating driver, a throat having a fixed position with relation to said driver, a wire-guide provided with a passage a^{15} having closed side walls and movable with relation to said throat, a movable carrier for said wire guide, a wire-feed mechanism supported by said carrier, a cutter attached to said carrier, a co-operating cutter located on the opposite side of the path of movement of the said driver, means to move said carrier and bring the wire into line with the said throat, means to operate the wire-feed mechanism and carry the wire into the said throat, and means to again move the carrier to bring the cutter attached to it into operation to sever the wire in the throat, means to return the carrier to its normal position, and means to operate the driver and carry it into the said throat, substantially as described. 2nd. In a machine for inserting nails into boots and shoes, the combination with the following instrumentalities, namely, a vertically-movable horn or work-support, a rotatable shaft, a cam on said shaft to effect movement of the horn downward a uniform distance beyond what is necessary to permit the work thereon to be fed or moved over the said horn, intermediate mechanism connecting said horn with said cam, and a brake-mechanism to stop the rotation of the cam-shaft and adjusted with relation to the said cam to operate to stop rotation of the said shaft when the point of greatest throw of the horn-lowering cam is acting upon the said intermediate mechanism to lower the horn a uniform distance and beyond what is necessary to permit the work to be fed on the horn, whereby the work may be taken off and placed on the horn, substantially as described. 3rd. In a machine of the character described, a wire-feed mechanism consisting of two members, one of which is rotatable and movable bodily toward the other to adjust it to the size of the wire used, a carrier for the rotatable movable member in which the said movable member is eccentrically supported, means to secure the eccentrically-supported and rotatable movable member in its adjusted position with relation to its co-operating member, and means to produce an intermittent rotation of the movable member after its eccentric support has been secured or rendered stationary in its adjusted position, substantially as described. 4th. In a machine of the character described, a reciprocating driver, a rotatable shaft, and a cam mounted on said shaft to rotate therewith and acting on the said driver to produce a plurality of reciprocations of the said driver and move it different distances in the same direction in one revolution of the said shaft to impart to the said driver the double function of an awl and a driver, substantially as specified. 5th. In a machine for inserting nails into boots and shoes, a work-feed mechanism consisting of an arm to engage the work, the lever c^2 carrying said arm and provided with the pivot-stud c^3 movable longitudinally in a bearing c^4 and rotatable therein, arms c^5, c^6 on said lever, cams acting on said arms to return said pivot-stud in its bearing and to move it longitudinally in said bearing, and means to move said pivot-stud and its lever in the reverse directions, substantially as described. 6th. In a machine for inserting nails into boots and shoes, a horn or work-support, a lever, means to connect said horn with one arm of said lever, a pivoted cam-operated lever, means to connect one arm of the cam-operated lever with the lever to which the horn is connected, and a rotatable shaft, a cam mounted on said shaft and provided with a cam-groove of a throw sufficient to lower the horn a distance greater than that necessary to permit the work to be fed on the horn, a stud or roller on the other arm of the cam-operated lever extended into the said cam-groove to positively lower and elevate the said horn a uniform distance, and a brake mechanism, to stop the rotation of the cam-shaft and adjusted to operate with relation to the said cam-groove to stop rotation of the said shaft when the greatest throw of the groove is in engagement with the said stud or roller and the horn is in its lowered position beyond what is neccessary to permit the work to be fed on the horn, whereby the work may be taken off and placed on the horn, substantially as described. 7th. In a machine of the character described, a wire-feed mechanism consisting of two members, one of which is rotatable and bodily movable toward the other, a sleeve upon which said movable member is loosely mounted, an eccentric on said sleeve, a carrier in which the said sleeve is eccentrically mounted, a rock-shaft extended through said sleeve, means to secure the eccentric sleeve in its adjusted position in the said carrier, and render it fixed or stationary therein, means attached to said rock-shaft and engaging the rotatable member of the said feed mechanism, and means to rock said shaft in said sleeve and produce intermittent rotation of the said movable member, substantially as described. 8th. In a machine for inserting nails into boots and shoes, the combination of of the following instrumentalities, namely, a wire-feed mechanism provided with an eccentrically-supported and rotatable movable member, a movable carrier in which the movable member of the wire-feed mechanism is eccentrically supported, a wire-guide attached to said carrier to move therewith, and means to intermittently rotate the movable member of the wire-feed mechanism and move the wire in its guide, and means to move said carrier, substantially as described. 9th. In a machine for inserting nails into boots and shoes, the combination of the following instrumentalities, namely, a wire feed mechanism provided with an eccentrically-supported movable member, a movable carrier in which the movable member of the wire-feed mechanism is eccentrically supported, a wire-guide attached to said carrier to move therewith, and means to operate the wire-feed mechanism and move the wire in its guide, and means to move said carrier, substantially as described. 10th. In a machine for inserting nails into boots and shoes, the combination of the following instrumentalities, namely, a wire-feed mechanism provided with an eccentrically-supported movable member, a movable carrier in which the movable member of the wire-feed mechanism is eccentrically-supported, a wire-guide attached to said carrier to move therewith, a cutter-holder attached to said carrier, a cutter in said holder, a second cutter co-operating with the cutter in the said holder, a holder for said second cutter, means to operate the wire-feed mechanism and move the wire through the wire-guide, and means to move said carrier and bring the cutter movable with it into engagement with the portion of the wire projecting from the wire-guide to sever the said projecting portion of the wire, substantially as described. 11th. In a machine of the character described, a reciprocating driver, a rotating shaft, and a cam on said shaft provided with a cam-groove shaped to effect the movement of the driver different distances in the same direction during one revolution of the said shaft to impart to the driver the double function of an awl and a driver, and means on the said driver to engage said cam-groove, substantially as described. 12th. In a machine of the character described, a reciprocating tool having the double function of an awl and a driver,

and means to effect the reciprocation of the said tool and alternately move it different distances in the same direction to impart to the single tool the alternate functions of an awl and a driver, substantially as described. 13th. In a machine of the character described, a wire-feed mechanism provided with a rotatable member, a sleeve on which said member is mounted, an eccentric on said sleeve, a movable carrier in which said eccentric is supported to turn therein, a rock-shaft supported in said sleeve and provided with a pawl-carrying arm, a ratchet-wheel movable with the said rotatable member, means to rock said shaft in one direction and means to rock it in an opposite direction, substantially as described. 14th. In a machine of the character described, a wire-feed mechanism provided with a rotatable member, a sleeve on which said member is mounted, an eccentric on said sleeve, a movable carrier in which said eccentric is supported to turn therein, a rock-shaft supported in said sleeve and provided with a pawl-carrying arm, a ratchet-wheel movable with the said rotatable member, means to rock said shaft in one direction and means to rock it in an opposite direction, and means to control or adjust the extent of movement of the said rock-shaft, substantially as and for the purpose specified. 15th. In a machine of the character described, a horn, an arm in which said horn is vertically adjustable, an elongated slot in said arm, a horn-shaft provided at its upper end with a threaded socket, and a screw or bolt extended through the said slot into said socket, substantially as described. 16th. In a machine of the character described, the combination of the following instrumentalities, namely, a driver having independent movements of different length in the same direction to prick a hole in the material by one of said movements and to drive a nail into the hole thus made by the other of said movements, a wire-feed mechanism, a cutting mechanism, and means to effect the operation of the wire-feed and cutting mechanisms intermediate of the independent movements of the said driver, substantially as and for the purpose specified. 17th. In a machine of the character described, the combination of the following instrumentalities, namely, a reciprocating driver, a wire-feed mechanism, a wire-cutting mechanism, a rotatable shaft, means to operate said wire-feed and cutting mechanisms, and a cam mounted on said shaft to operate said driver and effect two movements of the said driver in the same direction in one revolution of the said shaft, one of said movements being accomplished previous to the operation of the wire-feed and cutting mechanisms, and the other of said movements being accomplished after the operation of the cutting mechanism, substantially as described. 18th. In a machine of the character described, the combination of the following instrumentalities, namely, a work-feed mechanism consisting of a feed-arm, a supporting-lever therefor provided with a pivot-pin mounted to rotate and to move longitudinally, cams to effect the said rotary and longitudinal movements of the said lever and its pivot-pin in one direction, and means to effect corresponding movements in an opposite direction, substantially as described. 19th. In a machine of the character described, the combination of the following instrumentalities, namely, a reciprocating driver, a throat substantially fixed therewith and having a fixed position with relation thereto, a pivoted carrier normally out of the path of movement of the driver, a wire-guide attached to said pivoted carrier and through which the wire is fed to the throat, a wire-feed mechanism supported by said pivoted carrier and consisting of two members one of which is rotatable and eccentrically mounted in said carrier to permit of bodily movement of the rotatable member toward and away from its co-operating cutter located on the opposite side of the path of movement of the said driver, means to move said pivoted carrier to bring the wire-guide into line with the said throat, means to operate the feed mechanism and effect the feed of the wire from its guide into the throat, means to again move the pivoted carrier to bring the cutter attached to it into operation to sever the portion of the wire in the throat from the wire in the guide, means to return the carrier to its normal position, and a cam to operate the driver and carry it into the said throat to drive the cut portion of the wire therein, substantially as described. 20th. In a machine of the character described, a wire-feed mechanism consisting of two members, one of which is movable bodily toward the other to adjust it to the size of the wire used, and a carrier for the movable member in which the said movable member is eccentrically supported, and means to secure the eccentrically-supported movable member in its adjusted position with relation to its co-operating member, substantially as described. 21st. In a machine of the character described, a wire-feed mechanism consisting of two members, one of which is movable bodily toward the other, a sleeve upon which said movable member is mounted provided with an eccentric, a carrier in which the said sleeve is eccentrically mounted, and means to secure the eccentric sleeve in its adjusted position in the said carrier, substantially as described.

No. 60,310. Nailing Machine for Boots and Shoes.

(*Machine à clouer pour chaussures.*)

William Goddu, Winchester, Massachusetts, U.S.A., 13th June, 1898; 6 years. (Filed 25th May, 1898.)

Claim.—1st. In a machine of the character described, the combination of the following instrumentalities, namely, a multiple string-nail carrier, a shaft provided with teeth and to which said carrier is attached, a vertically-arranged rock-shaft provided with a gear in mesh with the teeth on the rock-shaft, and means located below the multiple string-nail carrier to rotate said rock-shaft, substantially as described. 2nd. In a machine of the character described, the combination of the following instrumentalities, namely, a multiple string-nail carrier, a rock-shaft to which it is attached, a crank attached to said rock-shaft, a string-nail feed mechanism, and a main shaft having cams integral therewith and of less diameter than the diameter of said shaft, to act on the said crank and the said feed mechanism, substantially as described. 3rd. In a machine of the character described, the combination of the following instrumentalities, namely, a reciprocating driver, a nose having a passage in line with said driver, a stationary driver-guide having a guideway in line with the passage in the nose and extended toward the said nose to form a substantially long bearing for the driver, a multiple string-nail carrier having its lower end offset and normally out of line with the driver and the passage in the said nose, mechanism to move the offset portion of the multiple string-nail carrier into line with the passage in the nose and across the same, and a cutter to sever the nail in the nose from the string nail in the said carrier, substantially as described. 4th. In a machine of the character described, the combination of the following instrumentalities, namely, a reciprocating driver, a nose having a passage in line with said driver, a stationary driver having a guideway in line with the passage in the nose and extended toward the said nose to form a substantially long bearing for the driver, a multiple string-nail carrier, a cutter or knife co-operating with said carrier and with the said nose, an arm carrying said knife, a rock-shaft provided with the crank b^{12}, to which the knife-carrying arm is secured, a second crank b^{17}, attached to the said rock-shaft, and an adjusting-screw b^{18}, carried by the crank b^{17}, substantially as described. 5th. In a machine of the character described, the combination of the following instrumentalities, namely, a multiple string-nail carrier, a rock-shaft provided with gear-teeth and to which said carrier is attached, a vertically-arranged rock-shaft, a gear on said rock-shaft in mesh with the teeth on the rock-shaft to which said carrier is attached, a foot-treadle movable in a substantially horizontal plane, and gearing connecting said foot-treadle with the vertically-arranged rock-shaft, substantially as described. 6th. In a machine of the character described, the combination of the following instrumentalities, namely, a work-support, a string-nail feed mechanism consisting of a cam-actuated rock-shaft provided with a crank, a knife-carrier pivotally connected to said crank, and a knife secured to said carrier to engage said string-nails, and a work-feeding arm or lever pivotally connected with said crank or arm and movable with the knife-carrier to feed the work as the string-nail is being fed, substantially as described. 7th. In a machine of the character described, the combination of the following instrumentalities, namely, a work-support, a bracket in which said work-support is vertically movable, a spring to sustain said work-support, a spring-supporting screw adjustable in an arm of said bracket below and in line with said work-support, and means attached to said work-support to lock the same against rotation, substantially as described. 8th. In a machine of the character described, the combination of the following instrumentalities, namely, the post d^6 having its upper portion reduced in diameter to form a shoulder, split longitudinally, and provided with a socket, a pin or stem inserted in said socket and provided with a head, a sleeve fitted over the reduced portion of the post d^6 and provided with an annular flange substantially in line with the head on the said pin, and means to fasten said sleeve to the post d^6 and clamp the pin or stem, substantially as described. 9th. In a machine of the character described, the combination of the following instrumentalities, namely, the bracket D provided with the

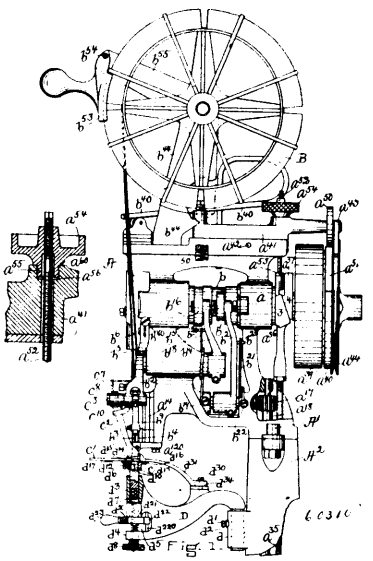
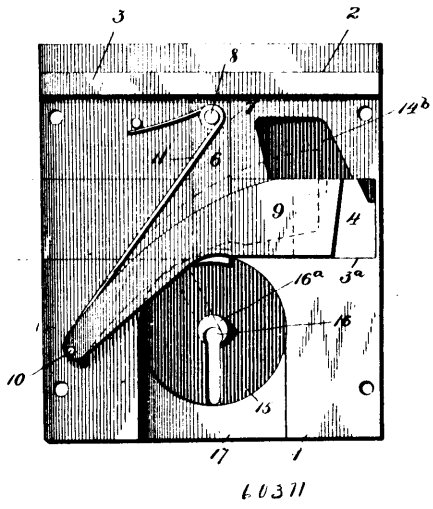


Fig. 1.

arms d^3, d^4, a post provided with a socket in its lower end, a spring inserted in said socket, an adjusting-screw extended through the arm d^4 and provided with a socket for the reception of the lower end of said spring, a collar secured to the said post between the arms d^3, d^4, and provided with a handle to lower the post, and means to prevent the said post rotating, substantially as described. 10th. In a machine of the character described, the combination of the following instrumentalities, namely, a starting mechanism for said machine, a lever movable in a substantially vertical and in a substantially horizontal direction, means to connect the said lever with the said starting mechanism, a rock-shaft capable of longitudinal movement, a string-nail carrier attached to said rock-shaft to move therewith, and means to connect said rock-shaft with the said lever to effect longitudinal movement of the rock-shaft by the movement of the said lever in a substantially horizontal direction, substantially as described. 11th. In a machine of the character described, the combination of the following instrumentalities, namely, a multiple string-nail carrier having a rocking and a longitudinal movement, a knife co-operating with said string-nail carrier, a carrier for said knife, a guard or shield for the string-nails attached to said string-nail carrier and with which said knife co-operates in its normal or starting position, a rotatable shaft provided with cams to rock said string-nail carrier and to effect the movement of the said knife, a lever connected to the string-nail carrier to effect its longitudinal movement, and a brake-mechanism for said shaft adjusted with relation to the cams thereon, to stop the rotation of the said shaft with the said knife in its starting or normal position with the said shield or guard between the knife and the string-nails, whereby the string-nail carrier may be moved longitudinally without danger of the string-nails engaging the said knife, substantially as described. 12th. In a machine of the character described, the combination of the following instrumentalities, namely, a multiple string-nail carrier, a longitudinally-movable rock-shaft to which said carrier is attached, a foot-treadle, and intermediate mechanism to connect said foot-treadle with the said rock-shaft to effect longitudinal movement thereof, substantially as described.

No. 60,311. Lock. (*Serrure.*)

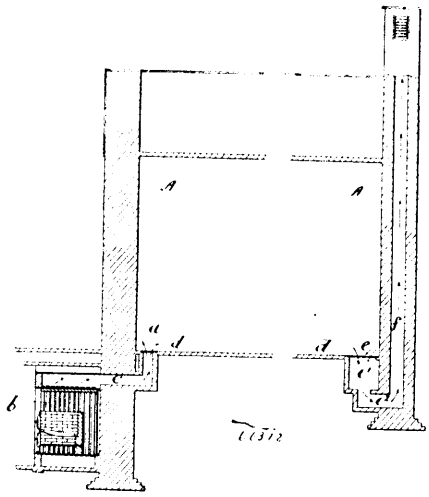


60311

Jacob Tingley Hunter, Linden, Nova Scotia, Canada, 13th June, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—1st. A lock, comprising a casing, a key-hole formed therein, and a bolt slidably mounted in said casing, said bolt being mounted on a plane at greater distance from said key-hole than the length of said key-hole, substantially as described. 2nd. The combination with a lock, having a bolt slidably mounted therein on a plane at greater distance from the key-hole than the length of said key-hole, of a key adapted to be placed in said key-hole and to operate said bolt, substantially as described. 3rd. A lock, comprising a casing, a key-hole formed therein, a bolt slidably mounted in said casing, said bolt being mounted on a plane at greater distance from said key-hole than the length of said key-hole, and means located within said casing for normally holding said bolt in position at opposite limits of its movement, substantially as described. 4th. A lock, comprising a divided casing, a key-hole formed therein, and a channel formed in casing below said casing, said channel extending from said key-hole to the lower edge of said casing, substantially as described. 5th. A key for locks, comprising a shank, and a bolt operating portion extensibly connected therewith at an angle to said shank, substantially as described. 6th. The combination with a lock, having a bolt movable on a plane a distance from the key-hole greater than the length of said key-hole, and having also cam faces mounted contiguous to said key-hole, of a key provided with an extensible operating portion, said extensible portion being operated by said cam faces, substantially as described. 7th. The combination with a lock, having a bolt movable on a plane a distance from the key-hole greater than the length of said key-hole, of a key having an extensible portion serving to move said bolt, and means for moving said extensible portion into contact with said bolt, substantially as described.

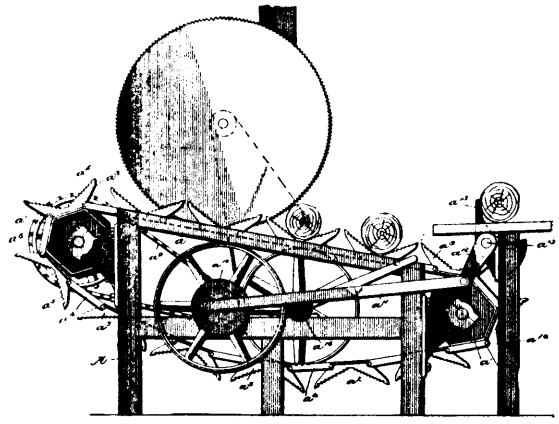
No. 60,312. Method of Heating, Drying and Ventilating. (*Méthode de chauffer, secher et ventiler.*)



John Langfield, Victoria Buildings, Manchester, England, 13th June, 1898; 6 years. (Filed 1st June, 1898.)

Claim.—The combination with the room to be heated or dried and ventilated, of suitable air heating apparatus, expansion chamber, inlet, outlet, reservoir, and uptake or chimney, constructed and arranged as hereinbefore described.

No. 60,313. Wood Sawing Machine.
(*Machine à scier le bois.*)



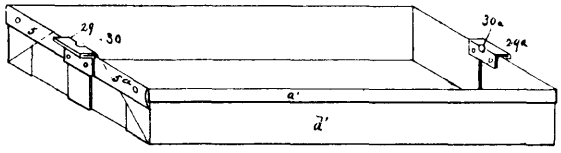
60313

Samuel Wesley Butterfield, Three Rivers, Quebec, Canada, 13th June, 1898; 6 years. (Filed 31st May, 1898.)

Claim.—1st. A log sawing machine comprising a frame, a series of log carrying chains movable thereon, said chains being adapted to carry a log into and past the path of movement of a saw, and a log releaser adapted to automatically release the logs. 2nd. A log sawing machine comprising a frame, drums mounted on each end thereof, a series of log carrying chains mounted on said drums and having movement thereon, said chains being adapted to carry a log into and past the path of movement of a saw, and an automatic log releasing device adapted to place the logs on said chains singly. 3rd. A log carrying chain, comprising a series of log carrying links, and a series of connecting bars arranged alternately. 4th. A link for log carrying chains, comprising a link provided on its upper face with a series of log engaging teeth. 5th. A link for log carrying chains, comprising a link having a V-shaped opening, and log engaging teeth extending inwardly from the sides of said opening. 6th. A sawing machine, comprising a frame, drums revolubly mounted at opposite ends thereof, a series of log carrying chains mounted on said drums and adapted to have movement over said frame said

chains being arranged in a manner to retain the portions of the log after being sawed, and a saw located in the path of movement of said chains.

No. 60,314. Tote Box. (*Boîte.*)

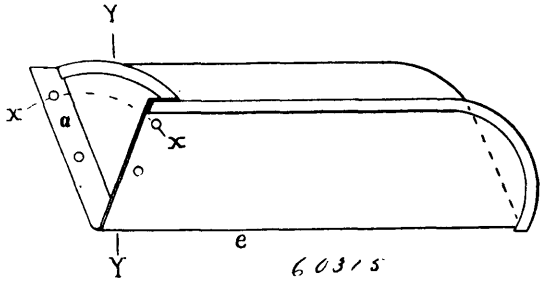


60314

William Gates Avery, Cleveland, Ohio, U.S.A., 14th June, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—As a new article of manufacture, a box or pan of sheet metal having folded strengthening and supporting ribs along its bottom, substantially as described.

No. 60,315. Hod. (*Auge.*)

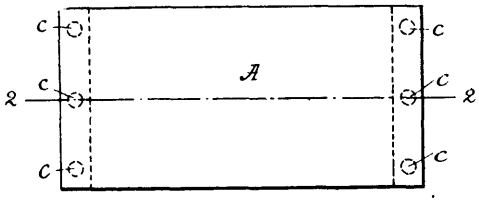


60315

William Gates Avery, Cleveland, Ohio, U.S.A., 14th June, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—1st. As a new article of manufacture, a hod formed of a single piece of sheet metal, said hod having the sheet metal folded upon itself to form three thicknesses of metal upon its end closing part, substantially as described. 2nd. As a new article of manufacture, a hod formed of a single piece of sheet metal, the metal being folded over upon itself and forming a flange and having the sheet metal further folded upon itself to form three thicknesses of metal upon its end closing part, substantially as described.

No. 60,316. Tag. (*Etiquette.*)



60316

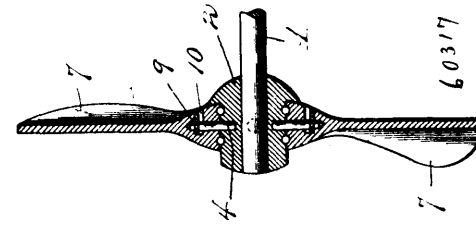
Gustaf Libert Reenstierna, Boston, Massachusetts, U.S.A., 14th June, 1898; 6 years. (Filed 24th March, 1898.)

Claim.—1st. A tag combined with tacks or nails permanently secured to said tag and having their points projecting below the underside of the tag for the purpose of readily securing the tag to boxes, etc., substantially as and for the purpose set forth. 2nd. A tag having its ends or corners turned over combined with tacks or nails having their heads arranged between the tag body and such turned over portions, and having their points projecting below the underside of the tag, substantially as and for the purpose set forth. 3rd. A tag having its ends or corners turned over and adhesively connected to the underside of the tag, combined with tacks or nails having their heads arranged between the tag body and turned over portions and having their points projecting below the underside of the tag, substantially as and for the purpose set forth.

No. 60,317. Propeller. (*Propulseur.*)

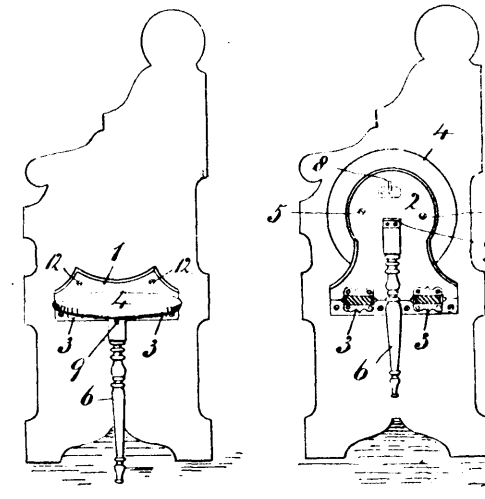
Charles Emil Oslen, Bowery Beach, Maine, U.S.A., 14th June, 1898; 6 years. (Filed 30th March, 1898.)

Claim.—1st. In a propeller, the combination with a hub having pivot or bearing pins projecting therefrom, blades having axial openings by which said blades are placed in pivotal engagement with the hub, and stops for said hubs adapted to limit the pivotal movement of said blades. 2nd. In a propeller for the purpose set forth, the combination with a hub having pivot or bearing pins projecting therefrom, blades having axial openings by which said blades are placed in free pivotal engagement with the hub, stops formed on the hub, and lugs projecting from the blades to engage said stops, substantially as shown and for the purpose set forth.



3rd. In a propeller, the combination with a head having sockets in the sides thereof and extensions on the socket forming shoulders, of blades seated within the sockets and provided with lugs that engage the shoulders formed by the extensions of the socket, and means for holding the blades in free pivotal engagement with the hub, substantially as shown and for the purpose set forth. 4th. In a propeller of the character described, the combination with the hub having sockets therein and pivot pins projecting from the centre of the sockets, blades freely pivoted upon the pins, means for holding the blades in engagement with the pins, and stops for limiting the throw of the blades, substantially as shown and for the purpose set forth. 5th. In a propeller of the character described, the combination with the hub having sockets and pivot or bearing pins projecting centrally therefrom, of the blades seated within the sockets upon the pivot pins said blades having a greater contact surface on one side of the axis, means for connecting the blades to the pivot pins, lugs projecting from the inner ends of the blades and engaging shoulders or stops formed on the hub, substantially as shown and for the purpose set forth. 6th. In a propeller of the character described, the combination with the hub having sockets with pivot or bearing pins projecting centrally therefrom, blades seated on the bearing pins and having lugs or projections adapted to engage shoulders or stops on the hub, anti-friction bearings between the parts, the blades having a greater surface to the one side of their axis and transverse openings communicating with the pivot pins, removable bearings passed into said openings to engage the pivot pins, the parts being constructed and organized, substantially as shown and described.

No. 60,318. Store and Church Stool.
(*Siège d'école et d'église.*)



60

George A. Coulson, Brockville, Ontario, Canada, 14th June, 1898; 6 years. (Filed 31st May, 1898.)

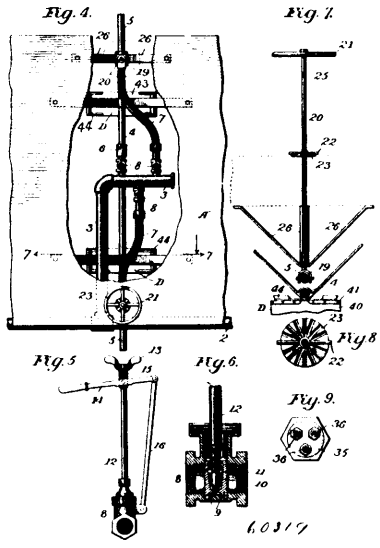
Claim.—A store or church stool, comprising a strip 1 for attachment to a counter or pew end, a seat bracket 2 connected thereto by spring hinges 3, a leg 6 hinged to said bracket, a spring latch 8 and keeper 9 engaging to lock the leg and bracket, and a seat 4 supported by said bracket, substantially as set forth.

No. 60,319. Method of Treating Railway Road Beds with Oil. (*Méthode de distribution d'huile sur les voies de chemin de fer.*)

James H. Nichol, Camden, New Jersey, U.S.A., 14th June, 1898; 6 years. (Filed 26 May, 1898.)

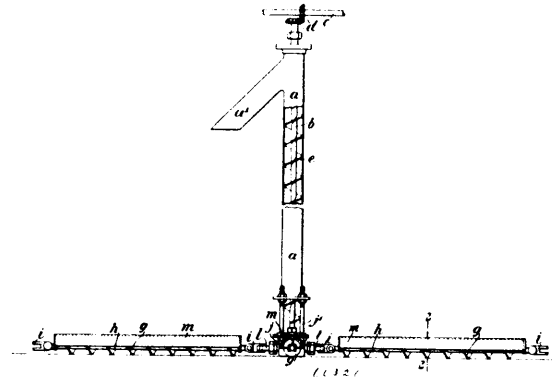
Claim.—1st. In a distributing apparatus, the combination with a car, of distributing pipes connected at the sides of the car by universal joints, and means for adjusting said distributing pipes both

horizontally and vertically and holding them in any desired adjustment, substantially as described. 2nd. In a distributing apparatus,



the combination with a car, of a distributing pipe arranged transversely beneath the car, additional distributing pipes connected at the sides of the car by universal joints, means for adjusting said pipes both horizontally and vertically, and flexible connections to said pipes, substantially as described. 3rd. In a distributing apparatus, the combination with a car, of a transverse distributing pipe beneath the car, independent distributing pipes connected by universal joints at the sides of the car, means for adjusting said side pipes vertically and horizontally, valves for governing the flow of oil to each of said pipes independently, levers for operating said valves and locking devices for said valves, substantially as described. 4th. In a distributing apparatus, the combination with a car, of a distributing pipe pivotally connected at the side of the car, and devices for locking said pipe yieldingly in any desired horizontal adjustment, whereby said distributing pipe may yield and swing back toward the car upon coming in contact with any obstacle, substantially as described. 5th. In a distributing apparatus, the combination, with a car, of a distributing pipe pivotally connected at the side of the car, a vertical shaft upon which said pipe swings, and a yielding locking device for holding said pipe yieldingly in any desired position, substantially as described. 6th. In a distributing apparatus, the combination, with a car, of vertical shafts at the sides of the car, distributing pipes connected to said shafts, means for turning the shafts to adjust the pipes horizontally, and means for locking the shafts in any desired position, substantially as described. 7th. In a distributing apparatus, the combination, with a car, of vertical shafts mounted at the sides of the car and distributing pipes pivotally connected to said shafts for vertical adjustment, and means for sustaining the pipes at any desired vertical angle, substantially as described. 8th. The combination of the car, the vertical shafts mounted on the sides of the car, the yokes connected to the lower ends of said shafts, the pipes pivotally mounted in the yokes, and means for adjustably suspending the pipes from the upper ends of the shafts, substantially as described. 9th. The combination, with the car, of the vertical shafts, the pipes pivotally connected to the lower ends of the shafts, means for vertically adjusting the pipes and sustaining them in any desired position, and means for adjusting the shafts horizontally and locking them in any desired adjustment, substantially as described. 10th. The combination with a car, and oil distributing apparatus carried by the car, of shields sustained by the car in line with the wheels and in proximity to the rails, whereby the oil is prevented from falling upon the rails, substantially as described. 11th. In combination, with a car, of a transverse oil distributing pipe carried beneath the car, and shields sustained beneath said pipe and over the rails, whereby the oil from the pipe is prevented from falling on the rails, substantially as described. 12th. The combination with a car and oil distributing apparatus, of shields for preventing the oil from falling on the rails, said shields having upturned end flanges, substantially as described. 13th. The combination with a car and a perforated oil distributing pipe, of a steam pipe communicating with said distributing pipe, whereby heat and pressure may be applied to assist the discharge of oil from said latter pipe, substantially as described. 14th. The combination with a car and an oil distributing pipe provided with suitable openings or perforations, of a pressure pipe arranged within the oil distributing pipe, said pressure pipe having openings to permit its contents to mingle with the oil in the distributing pipe, substantially as described. 15th. The combination with a car and an oil distributing pipe having suitable openings or perforations in its lower side, of a pressure pipe within said oil pipe, said pressure pipe being provided with openings in its lower side opposite the openings in the distributing pipe, substantially as described. 16th. The combination with a car and an oil distributing apparatus mounted on the car, of a main oil supply pipe, means for connecting said supply pipe with an oil tank car, a pressure pipe, and means for connecting said pressure pipe with a source of fluid pressure such as steam or air, substantially as described. 17th. The combination with a car and oil distributing apparatus, of shields for preventing the oil from falling on the rails, said shields comprising top plates located over the rails and flexible curtains extending down from said plates upon both sides of the rails, substantially as described.

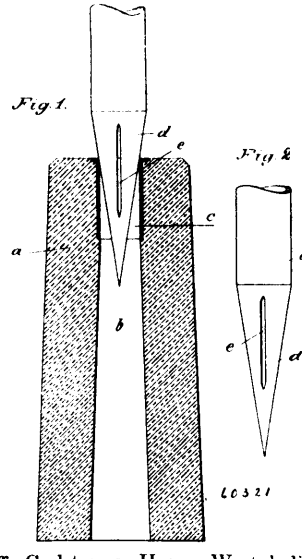
No. 60,320. Grain Conveyor (*Transport à grain.*)



Robert Victor Broodbank, and Edward Stamford Hough, both of London, England, 14th June, 1898; 6 years. (Filed 2nd June, 1898.)

Claim.—1st. In screw elevators for grain and other cereals, making the screw of less diameter than the enclosing pipe, recessing or grooving its peripheral edge and fitting the said grooved or recessad edge with a brush or other suitable packing piece, substantially as, and for the purpose hereinbefore described. 2nd. The employment for trimming grain and other cereals of a number of screw conveyor sections, the shaft of which can be connected together and to suitable driving mechanism by universal joints, substantially as and for the purpose hereinbefore described. 3rd. The trimmers for grain and other cereals consisting of the screw conveyor sections the shafts of which are connected together by universal joints, as described and illustrated in figures 1 and 2 of the accompanying drawings. 4th. The improved screw elevator for grain and other cereals hereinbefore described and illustrated in figures 1 and 3 of the accompanying drawings. 5th. The combination and arrangement of parts forming the improved apparatus for trimming, elevating and discharging grain or other cereal, hereinbere described and illustrated in the accompanying drawing.

No. 60,321. Measuring Rod. (*Perche d'arpenteur.*)

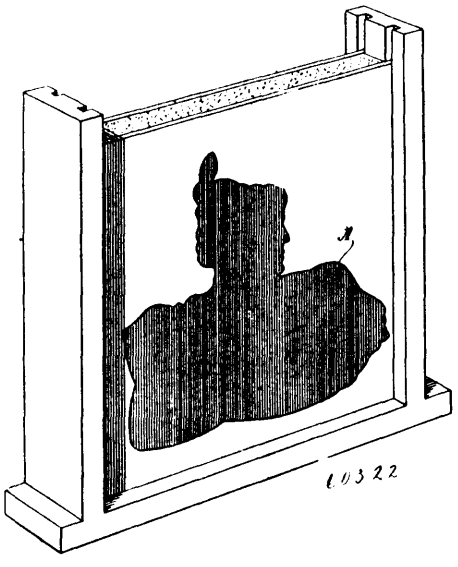


Martin Leithoff, Carlstrasse, Hagen Westphalia, Germany, 14th June, 1898; 6th years. (Filed 8th February, 1898.)

Claim.—1st. A measuring rod whose point is improved by springs for the purpose of being able to fix it firmly and surely in a vertical

position in an opening of a boundary and measuring stone constructed and arranged substantially as hereinbefore described. 2nd. A measuring rod of the kind described which is made with springs by means of slits at the point, constructed and arranged substantially as hereinbefore described. 3rd. A boundary stone, for use with a measuring rod of the kind described, hollowed completely through for the purpose of being able to get rid of the collected dirt, and provided with a bush or box *c* for guiding the point of the rod, constructed and arranged substantially a hereinbefore described.

No. 60,322. Method of Producing Photographs in Relief. (*Méthode de production de photographie en relief.*)



Theodore Christopher Marcean, San Francisco, California, U.S.A., 14th June, 1898; 6 years. (Filed 14th November, 1896.)

Claim.—1st. The method herein described for preparing intaglio blocks for the purpose of forming relief pictures, consisting in cutting an outline of the picture to be thrown up in relief, pasting the same upon the inner surface of the glass or other smooth surfaced mould, filling the mould with a plastic substance which will afterwards set and harden, then removing the hardened material from the mould, disengaging the picture from its surface, and engraving the surface to correspond with the portions of the picture which are to be thrown up into relief. 2nd. The method of throwing photographic pictures up into relief, consisting in cutting out one of the set of pictures, fixing it upon the inner surface of a mould, filling the mould with a plastic material which will afterwards set and harden, removing the hardened block from the mould and disengaging the picture therefrom, engraving an intaglio to correspond with the outline left by the removed picture, then using the outer portion from which the picture has been cut as an outline by which the other pictures are accurately registered upon the engraved block, and pressing the portions coincident with the engraved surface thereinto so as to throw them up into relief when removed from the block. 3rd. The method of forming photographic pictures in relief, consisting in cutting out one of a set of pictures and outlining it upon a block formed by hardening a plastic mass within a mould, engraving an intaglio upon the block to correspond with said outline, then registering the other pictures upon the block, and pressing the portions coincident with the engraved surface thereinto.

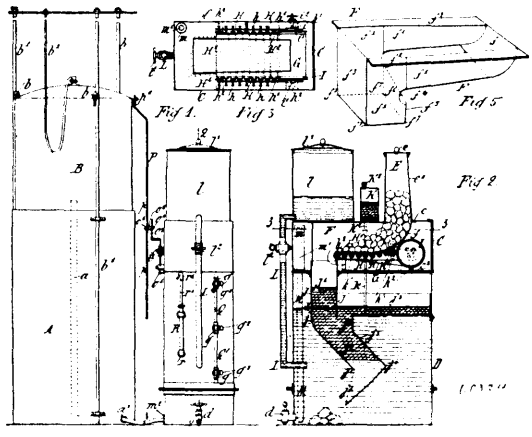
No. 60,323. Method of Producing Photographs in Relief. (*Méthode de production de photographie en relief.*)

Alfred Martin, Wanganui, New Zealand, 15th June, 1898; 6 years. (Filed 22nd March, 1897.)

Claim.—1st. In a method of producing embossed or bas-relief photographs, a backing of ductile material whereon the positive print may be moulded and supported, substantially as and for the purposes set forth herein. 2nd. In a method of producing embossed or bas-relief photographs, a pierced block cut to the outline of a reversed image prepared or mounted thereon, substantially as and for the purposes set forth herein. 3rd. In a method of producing embossed or bas-relief photographs, in combination, a sheet of india rubber or wadding, a ductile backing, and a pierced block cut to the outline of the reversed image, substantially as and for the purposes set forth herein. 4th. The herein described method of producing embossed or bas-relief photographs, substantially as and for the purposes set forth.

No. 60,324. Acetylene Gas Making Machine.

(*Machine pour faire le gaz acétylène.*)



Jean Reibel, 24 Rue de Lavalette, Angoulême, France, 15th June, 1898; 6 years. (Filed 22nd December, 1897.)

Claim.—1st. An apparatus for producing acetylene gas by the fall into water of fragments of carbide of a metal of the alkaline earths, affecting an automatic production, consisting of a gazogene and a gasometer, the gazogene comprising a carbide distributor situated in a case C, placed upon a tank D, the fragments of carbide reaching the latter through an elbowed channel J, containing a liquid without action on the carbide, the gas produced being stored in a gasometer and the bell-holder B, of this latter being connected to the distributor in such a manner as to cause the fall of the carbide when the holder descends, as above set forth and described. 2nd. An acetylene gas producing apparatus consisting of a gazogene and a gasometer, the gazogene comprising a case or receiver C, enclosing the carbide distributor formed of a band G mounted on rollers H, a tension roller H^2, and a drum I, driven by the bell B, of the gasometer, the carbide being contained in a holder E and a basket F, the shapes of which are sectionally extended towards the bases, the bottom being composed of the band G, this arrangement causing the distribution of the fragments of carbide to the upper opening of the elbowed channel J, which conducts them to the midst of the water in the receptacle D, as described and specified. 3rd. An acetylene producing apparatus consisting of a gazogene and a gasometer, the former comprising a distributor of the carbide at the entrance to the channel J, which conducts it into the receptacle D, said channel being elbowed and opening by a portion J^1, into the case C near the band G, being then inclined towards J^2, and opening at J^2, below the water-level in D, the walls of which channel is furnished with an opening j^4, allowing it to communicate with a receiver-chamber j^5, opening above the level of the water, the channel J and receiver j^5, containing a liquid without action on the carbide, as above described and set forth. 4th. An acetylene gas producing apparatus consisting of a gazogene and a gasometer, the gazogene comprising a distributor formed by a band driven by a drum I, the control of which is obtained from the bell B of the gasometer by means of a lever arm O loose upon the axis of drum I, one side of which arm can rest on support o^1, the other side comprising a guide link o^2, on which is fixed a pivot o^3, engaged in a guide link p, of a rod P pivoted at p^1, to the bell B, the arm O carrying a pawl o^3, engaging a ratchet wheel i^2 fixed to the axis of the drum I, as described and set forth. 5th. An acetylene producing apparatus consisting of a gazogene and a gasometer, the gazogene comprising a distributor formed by a band driven by a drum I, the control of which is obtained from bell B of the gasometer by means of a pulley S loose on the axis of drum I, furnished with a pawl s, engaging a ratchet wheel i^2, secured to the axis, surrounded by a cord T, carrying at its end a weight t^1, said cord passing over pulleys tt, and its other end being connected to the bell-holder B, the weight t^1 being able to rest on support t^2, and the cord supportable in tension by a weight t^4, attached to a pulley, as described. 6th. An acetylene producing apparatus consisting of a gazogene and gasometer, the former comprising and containing a distributer placed in a receiver-case C, situated above a water-holder D, communication between the two receptacles C and D being made by a channel J, containing petroleum or other liquid without action on the carbide, the receiver D being able to be supplied with water from a reservoir *l*, and the petroleum channel from a reservoir K, the receptacle D being furnished with a double gauge glass QQ^1, for the water and the petroleum, and an overflow device R for water, as described and set forth.

No. 60,325. Calcium Carbide Making Machine.

(*Machine pour la fabrication de carbure de calcium.*)

Frederick Henry Haviland, Arthur Holloway, John Bruce Collier, William Murch, all of Bournemouth, Hants, England, 15th June, 1898; 6 years. (Filed 21st January, 1897.)

Claim.—1st. The method of manufacturing calcium carbide from a mixture of carbon and lime, which consists in subjecting the

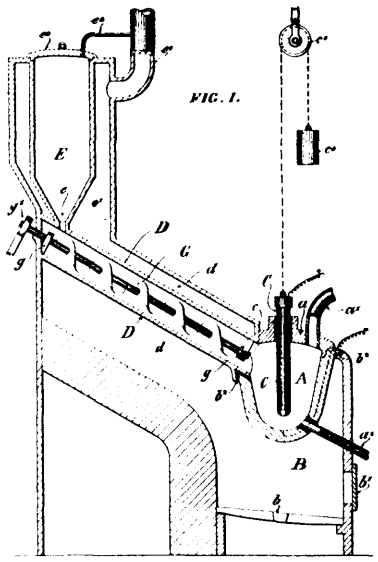


FIG. 1.

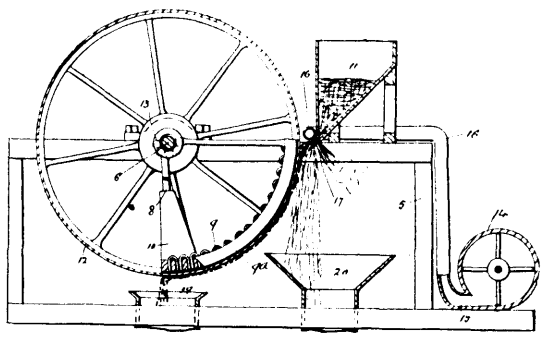
60326

mixed materials to a preliminary heating while being fed into the electric furnace, such preliminary heating being effected by means of a furnace or flues surrounding or partly surrounding the apparatus used for conveying the materials to the electric arc, substantially as shewn and described. 2nd. An apparatus for manufacturing calcium carbide from a mixture of carbon and lime, consisting essentially of a vessel which forms one electrode, a carbon or other rod which forms a second electrode, the electric arc being set up between the two, a receptacle for containing the mixed carbon and lime, and a conveyor and casing for carrying it to the vessel, both the conveyor and receptacle being surrounded by a furnace or by a jacket for containing heated products of combustion, substantially as shewn and described. 3rd. In an apparatus for manufacturing calcium carbide from a mixture of carbon and lime, the combination of the vessel A forming one electrode, and having a cover a, an outlet flue a^1, and an outlet pipe a^2, the electrode C, the furnace B, the conveyor G and casing D surrounded by the flue d, the receptacle E surrounded by the jacket e^1 and the flue e^2, substantially as shewn and described. 4th. An apparatus for manufacturing calcium carbide from a mixture of carbon and lime, consisting essentially of a vessel which forms one electrode, and into which a carbon or other rod which forms a second electrode is inserted, the electric arc being set up between the two, a receptacle for containing the mixed carbon and lime, and a conveyor and casing for carrying it to the vessel, the whole being surrounded or partly surrounded by flues, into which air or gases heated externally may be forced, substantially as described. 5th. An apparatus for manufacturing calcium carbide from a mixture of carbon and lime, consisting essentially of a vessel, two or more electrodes, the electric arc being set up between them, a receptacle for containing the mixed carbon and lime, and a conveyor and casing for carrying it to the vessel, the receptacle and conveyor being (either or both) surrounded by a furnace or by a jacket for containing heated products of combustion, substantially as described. 6th. For use in granulating molten calcium carbide, the gridiron device, substantially as shewn and described.

No. 60,326. Ore Separator. (*Séparateur de minerai.*)

Gerald James Cream, Montreal, Quebec, Canada, 15th June, 1898; 6 years. (Filed 7th January, 1898.)

Claim.—1st. A magnetic ore separator, comprising a series of stationary magnets arranged in the form of an arc, a hopper located adjacent to said magnets, a rotatable carrier adapted to travel across the surface of and in close proximity to said magnets and intermediate of same and said hopper, and said carrier being adapted to receive movement from the ore particles running from said hopper and adhering to said carriage. 2nd. A magnetic ore separator, comprising a series of stationary magnets arranged in the form of an arc, a hopper located adjacent to said magnet, a rotatable carrier adapted to receive movement from the ore particles running from said hopper and to travel across the surface of and in close proximity to said magnets and intermediate of same and said hopper, and a blower adapted to direct a current of air between said hopper and carrier, for the purpose set forth. 3rd. A magnetic ore separator, comprising a series of stationary magnets arranged in the form of an arc, a hopper located adjacent to said magnets, a rotatable carrier adapted to travel across the surface of and in close proximity to said magnets and intermediate of same and said hopper, said carrier being adapted to receive movement from the ore particles running from said hopper and adhering to said carrier,



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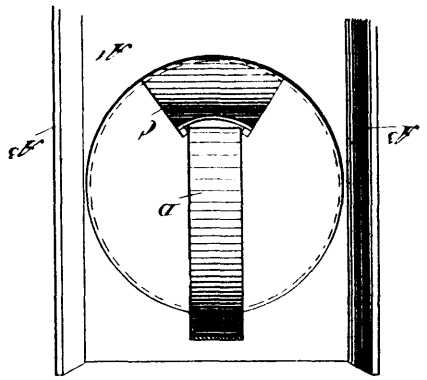
and a blower adapted to direct a current of air between said hopper and carrier, for the purpose set forth. 4th. A magnetic ore separator, comprising a frame, a shaft mounted in said frame, a series of magnets arranged in the form of an arc, means for suspending said magnets from said shafts, a counterpoise mounted at one end of said series of magnets, a carrier consisting of a non-magnetic cylinder mounted upon said shaft and adapted to receive movement from the ore particles running from said hopper and travel around and in close proximity to said series of magnets, and means for feeding the magnetic ore in granular form to said carrier, for the purpose set forth. 5th. A magnetic ore separator, comprising a frame, a shaft mounted in said frame, a series of magnets arranged in the form of an arc, means for suspending said magnets from said shaft, a counterpoise mounted at one end of said series of magnets, a carrier consisting of a non-magnetic cylinder mounted upon said shaft and adapted to receive movement from the ore particles running from said hopper and to travel around and in close proximity to said series of magnets, means for feeding the magnetic ore in granular form to said carrier, and a blower adapted to direct a current of air through said ore while being fed to the carrier, for the purpose set forth. 6th. A magnetic ore separator, comprising a frame 5, a shaft 6, a series of permanent magnets 9, right-angled frame 8, counterpoise 10, cylinder 12, adapted to receive movement from the ore particles running from said hopper, roller bearings 13, hopper 11, blower 14, discharge-pipe 16, and receptacles 19 and 20, all arranged substantially as subscribed and for the purpose set forth.

No. 20,327. Ore Sampler. (*Séparateur de minerai.*)



60327

Thomas Arthur Topham, Aspen, Colorado, U. S. A., 15th June, 1898; 6 years. (Filed 19th May, 1897.)

Claim.—1st. An ore sampler, consisting of a wheel mounted to rotate and having located between its axis and periphery a chute which passes diagonally through the wheel and which has its outer end in line with the periphery of the wheel and its inner end nearest to the axis thereof, and a spout juxtaposed to the inner end of the chute and having its discharge end below the axis of the wheel, substantially as described. 2nd. An ore sampler, comprising a stationary spout arranged to feed the material in a downward direction, and a chute mounted to revolve about an approximately horizontal axis and having its own longitudinal axis arranged at an angle to said axis of rotation, the inner end of said revoluble chute having an inlet arranged to periodically come into operative relation to the outlet of the stationary feed spout during the revolution of the chute when said inlet is below the axis of rotation of the chute, whereby both centrifugal force and the feed will act in substantially the same direction at the inlet of the revoluble chute, as and for the

purpose set forth. 3rd. An ore sampler, comprising a chute mounted to revolve about an approximately horizontal axis, and a stationary feed spout whose delivery end is located below the axis of the rotation of the revolving chute and periodically registers with the inlet of said chute, as and for the purpose set forth.

No. 60,328. Fire Proof Compound.

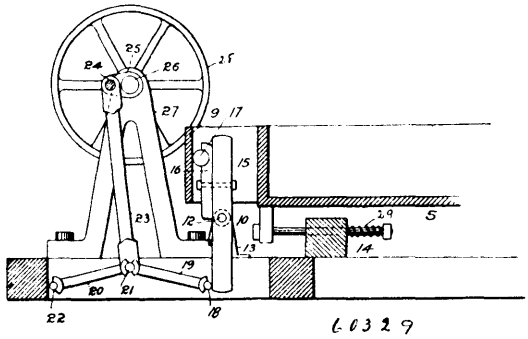
(*Composé à l'épreuve du feu.*)

Leopold Lityuski, August Rodakiewicz and Felix Kurowski, all of Lemberg, Galicia, Austria, 15th June, 1898; 6 years. (Filed 29th July, 1898.)

Claim.—1st. The herein described process for the production of a compound or preparation for the fire proofing of combustible materials of any description, consisting in dissolving degreased feather quills, gelatine horn or other glue yielding materials in a hot solution in water, of some or all of the following ingredients, namely: oxid of maganese, oxid of calcium, oxid of potassium hydroxid, carbonate of potassium, oxid of sodium and chloride of sodium in the proportions set forth. 2nd. A preparation or compound adapted for the impregnation of combustible or inflammable materials as wood, straw, paper, tissues and the like, in order to render them fire proof and non-inflammable, consisting of a solution of some or all of the following salts, namely, oxid of manganese, oxid of calcium, oxid of potassium, potassium hydroxid, carbonate of potassium, oxid of sodium and chloride of sodium, said solution having dissolved in it, degreased feather quills or other animal glue yielding substances, in the proportions and for the purposes described. 3rd. A fire extinguishing fluid consisting of a solution of one or more of the following salts, namely, oxid of manganese, oxid of calcium, oxide of potassium, potassium hydroxid, carbonate of potassium, oxid of sodium and chloride of sodium, said solution having dissolved in it, degreased feather quills or other animal glue yielding substances and the whole diluted with water, in the proportions and for the purposes described.

No. 60,329. Ore Concentrator.

(*Concentrateur de minerai.*)



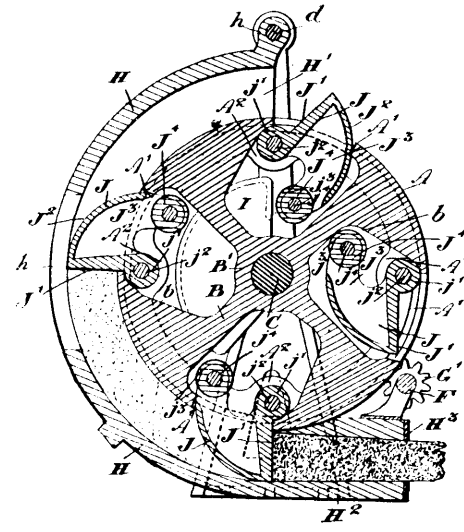
60329

Arthur R. Wilfley, Denver Colorado, U.S.A., 15th June, 1898; 6 years. (Filed 4th March, 1898.)

Claim.—1st. A transversely inclined concentrating table having a movement whose tendency is to carry the material longitudinally toward the tail or foot of the table, said table being provided with a number of riffles extending longitudinally a portion of the distance from its head toward its foot, said riffles varying in length for the purpose specified, the table having a smooth, plain, or unriffled portion extending from the extremities of the riffles toward the tail of the table, whereby the material as it leaves the riffles is subjected to the action of the water on the smooth portion of the table and the final separation of the mineral from the gangue effected. 2nd. A transversely inclined concentrating table having a number of longitudinal riffles extending a portion of the tables length from the head toward the foot, said riffles being of unequal length, the uppermost being the shortest, while the other riffles increase in length from the upper edge to the lower edge of the table, the table having a plain or unriffled portion lying at the extremities of the riffles and adapted to receive the material caught by the riffles. 3rd. The combination of a transversel inclined concentrating table having a number of longitudinal riffles of unequal length extending from the head toward the tail of the table, said riffles increasing in length from the upper toward the lower edge of the table, said table being provided with a plain or unriffled portion at the extremities of the riffles, and means for imparting to the table a longitudinally reciprocating movement comprising a toggle, an operating pitman and a lever, one link of the toggle engaging one arm of the lever, while the other arm of the lever is connected with the head of the table. 4th. The combination of a transversely inclined concentrating table having a number of longitudinal riffles extending from the head toward the foot of the table, the table being provided with a plain or unriffled portion located at the extremities of the riffles, and means for imparting to the table a longitudinal reciprocating movement comprising a toggle joint, an operating pitman and a lever, one link of the toggle engaging one arm of the lever, while the other arm of the lever is connected with the table and provided with an adjustable roller adapted to engage a keeper carried by the table. 5th. The combination of a transversely inclined concentrating table having a series of longitudinal riffles extending from the head toward the foot of the table, the table being provided with a plain or unriffled portion extending from the riffle extremities to the foot of the table, and means for imparting to the table a longitudinally reciprocating movement, and means comprising a toggle joint, an operating pitman and a lever, one link of the toggle engaging one arm of the lever, while the other arm of the lever is connected with the table and provided with an adjustable roller, said roller being mounted on a block adjustably attached to the lever. 6th. The combination of a transversely inclined concentrating table having a number of longitudinal riffles extending from the head toward the tail of the table, the table being provided with a plain or unriffled portion located at the extremities of the riffles, and means for imparting to the table a longitudinally reciprocating movement comprising a toggle joint, an operating pitman and a lever, one link of the toggle engaging one arm of the lever, while the other arm of the lever is connected with the table and provided with a vertical slot, and a block held in place by a bolt passing through the slot and carrying an anti-frictional roller engaging a keeper on the table. 7th. The combination of a transversely inclined concentrating table having a series of riffles extending longitudinally from the head toward the tail of the table, said riffles being of unequal length, the uppermost being the shortest and the riffles increasing in length from the upper to the lower edge of the table, the table being provided with a plain or unriffled portion of suitable area located at the extremities of the riffles, means for feeding the material to the upper portion of the table's head, means for discharging water on the upper edge of the table, and suitable means for imparting to the table a longitudinally reciprocating movement of a character adapted to move the material from the head toward the tail of the table.

No. 60,330. Clay Working Machine.

(*Machine pour travailler la glaise.*)



60330

Frederick Lindley Hunt Sims, Toronto, Ontario, Canada, 15th June, 1898; 6 years. (Filed 18th November, 1897.)

Claim.—1st. In a clay working machine, in combination the casing, the rotary drum, the compressing wings pivoted within openings in said drum, and having inwardly extending portions, and the stationary cam located within the circumference of the drum and designed to act on the inwardly extending portions of the wings, substantially as described. 2nd. In combination the drum having peripherial openings, the stationary cam, the receiving chamber, the independent compressing chamber and the pivoted wings adapted to be operated to move in one direction by said cam and to move in the opposite direction by said compressing chamber, as and for the purpose specified. 3rd. In combination the drum having peripherial openings, the stationary cam, the receiving chamber, the independent compressing chamber, and the wings adapted to be thrown outward by said cam, and inwardly by contacting with the wall of said compressing chamber, substantially as described.

No. 60,331. Alcohol Manufacturing Process.

(*Procédé pour la fabrication d'alcool.*)

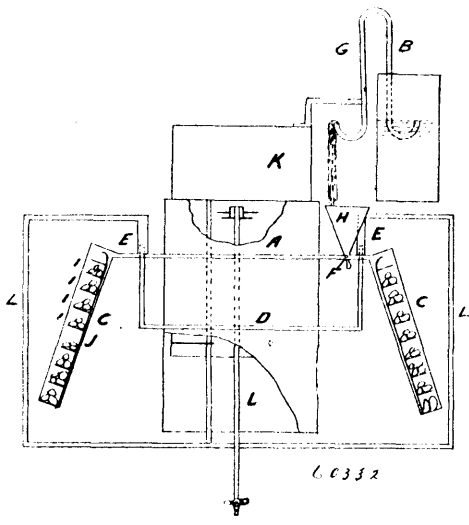
Auguste Collette, jr., and August Boidin, both of Seclin, France, 15th June, 1898; 6 years. (Filed 22nd October, 1898.)

Claim.—1st. In the manufacture of alcohol of spirits, the process which consists in preparing a mash, liquefying the starch therein as

possible, and saccharifying and fermenting the mash while in a in a sterilised condition, for the purpose set forth. 2nd. In the manufacture of alcohol or spirits, the process which consists in preparing a mash, liquefying the starch therein as much as possible and saccharifying and fermenting the mash while in a sterilised condition by sowing into the same a non-pathogenic mucedineæ or a culture thereof, for the purpose set forth. 3rd. In the manufacture of alcohol or spirits, the process which consists in preparing a mash, liquefying the starch therein as much as possible and saccharifying and fermenting the mash while in a sterilised condition by sowing into the same a culture of a non-pathongenic mucedineæ free from other micro-organisms, for the purpose set forth. 4th. In the manufacture of alcohol or spirits, the process which consists in preparing a mash, and fluidifying the starch therein by admixture with the mash of water containing an agent capable of acting as a solvent on the starch, for the purpose set forth. 5th. In the manufacture of alcohol or spirits, the process which consists in preparing a mash, and fluidifying the starch therein by admixture with the mash of water holding a small quantity of green ground malt in suspension, for the purpose set forth. 6th. In the manufacture of alcohol or spirits, the process which consists in preparing a mash, liquefying the starch therein as much as possible, saccharifying and fermenting the mash while in a sterilised condition and adding thereto before fermentation is completed a small quantity of pure ferment, ferment culture, or yeast, for the purpose set forth. 7th. In the manufacture of alcohol or spirits, the process which consists in preparing a mash, liquefying the starch therein as much as possible, saccharifying and fermenting the mash while in a sterilised condition by seeding it with a non-pathogenic mucedinese, as the amylomicae rouxii or a culture thereof such as described, and adding to the sterilised mash before the fermentation is completed a small quantity of pure ferment, ferment culture or yeast, for the purpose set forth.

No. 60,332. Acetylene Gas Generator.

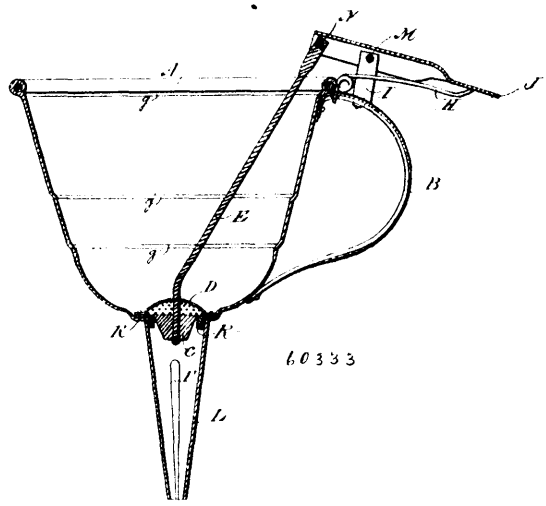
(*Générateur de gaz acétylène.*)



Jean Francois Guay, Quebec City, and Francois T. Savoie, Plessisville, both of Quebec, Canada, 15th June, 1898; 6 years. (Filed 3rd January, 1898.)

Claim.—1st. The combination of the syphon G and bell K of the gas holder, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the inverted syphon D, with the two waycock F and bell K, substantially as and for the purpose hereinbefore set forth. 3rd. The incline generator C, having the compartments III, inverted syphon D, and gas delivery pipes L, substantially as and for the purpose hereinbefore set forth. 4th. The inverted syphon D between the incline generators C, and gas pipes L, as shewn and described for the purposes set forth. 5th. The gas holder A, having gas pipes L, syphon D, in combination with generators C, joined by water pipe and provided with compartments, as shewn and described for the purpose set forth. 6th. In a gas generator the bell K, syphon G, reservoir B, funnel H, with cock F, between generators C, in combination with an inverted syphon and gas delivery pipes, as shewn and described and for the purpose set forth. 7th. In an acetylene gas generator a safety apparatus consisting of a bell shape valve fitting in an annular space on the top of a pipe set in the gas holder and in communication with the external air, the annular space is filled with water, making a liquid seal, the bell and valve are provided with corresponding lugs, making the valve operative, should the volume of gas made be in excess of the capacity of the gas holder, as shewn and described for the purpose set forth.

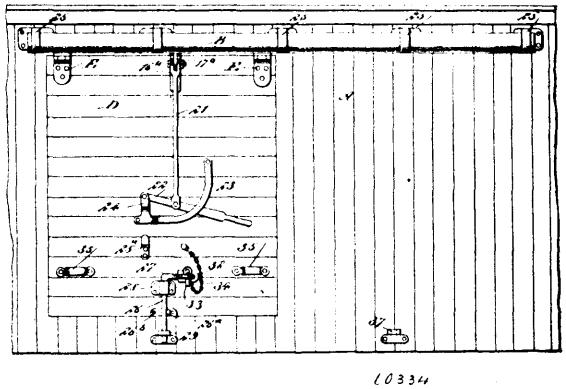
No. 60,333. Measuring Funnel. (*Entonnoir à mesurer.*



Celestin Fournier, Stanford, Quebec, Canada, 16th June, 1898; 6 years. (Filed 10th May, 1898.)

Claim.—1st. As an article of manufacture, a funnel and measure combined, comprising a funnel A, provided with circumferential creases on its body portion, a handle B, a spring actuated lever J, a connecting rod E, a stopper attached to said connecting rod and adapted to normally close the outlet of the funnel, substantially as described and shown. 2nd. As an article of manufacture, a funnel and measure combined, comprising the funnel A, provided with circumferential creases on the body portion, a handle B, a spring actuated lever J, a connecting rod E, a stopper attached to said connecting rod and adapted to normally close the outlet to the funnel, and a removable strainer in said outlet, substantially as described and shown.

No. 60,334. Door-Hanger. (*Ferrure de porte.*)

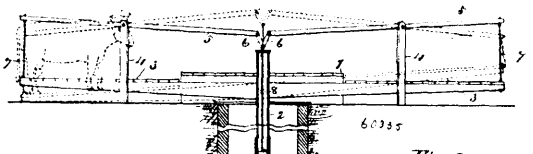


James Edward Owen, John Cornelius Gabel and George Francis McKinney, all of Onarga, Illinois, U.S.A., 16th June, 1898; 6 years. (Filed 4th June, 1898.)

Claim.—1st. The combination, with the body of a car, a trolley and track, a door connected with the said track and a lift-lever for the door, of a keeper located near the door opening, a bolt held to slide and rock upon the said door, a bolt being adapted to enter the said keeper, a lateral cam projection upon the bolt adapted to engage the door when the bolt is rotated, and a locking device for the bolt independent of the said keeper. 2nd. The combination with a hollow track having a slot in its bottom and brackets extending around the said track from one side of the slot to the other, and a carriage held to travel in the said track, consisting of a body-bar which extends within the slotted portion of the track, and wheels at each side of the carriage, travelling in the bottom portion of the track, of a drop door, hinges connecting the said drop door with the carriage, such hinges consisting of three members having a knuckle connection, the lower member of each hinge being secured to the upper portion of the door, and the upper member of each hinge being attached to the carriage, and a lift-lever fulcrumed upon the door, a rod connecting the lever with the carriage, a bolt being provided with a lateral cam projection adapted to engage the door when the bolt is rotated, a keeper for the bolt independent of the door, and a locking device for the said bolt, substantially as shown and described.

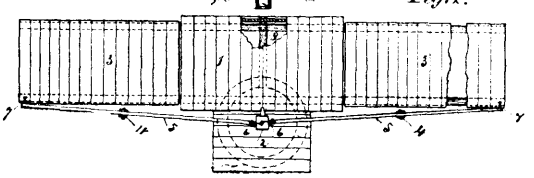
No. 60,335. Pump. (*Pompe.*)

Fig. 1.



60335

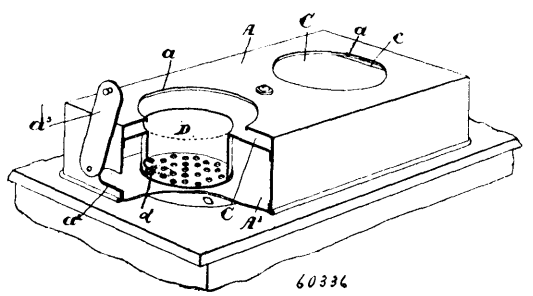
Fig. 2.



Richard D. Benson, Port Hope, Ontario, Canada, 16th June, 1898; 6 years. (Filed 18th November, 1897.)

Claim.—1st. The combination, with a pump, of an elevated stationary platform 1, a tilting platform 3 below the same and extending therefrom in opposite directions, ground posts 4, 4 intervening the pump and the free ends of the platform, levers 5, 5 fulcrumed to said posts and connected at one end by chain or rope 7 to the corresponding free end of the tilting platform, and to the pump-rod by links 6, as set forth.

No. 60,336. Charcoal Stove. (*Poêle à charbon de bois.*)

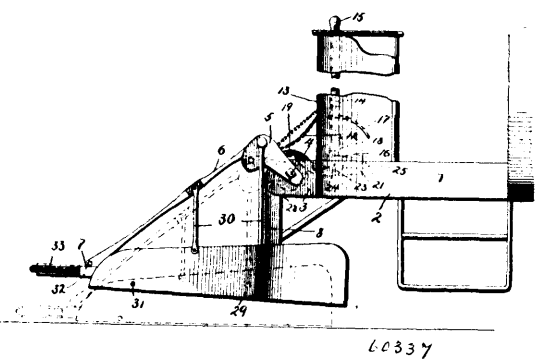


60336

Arthur Wellington Stickle and Morley Wilberforce Shepherd, both of Toronto, Ontario, Canada, 16th June, 1898; 6 years. (Filed 3rd June, 1898.)

Claim.—1st. In a charcoal stove, in combination the outer casing of the stove, the internal diaphragm extending backwardly and leaving an opening at the back of the stove and fire pot secured to and supported by the diaphragm and having a perforated bottom and front opening and a suitable opening in the front of the casing provided with a suitable door as and for the purpose specified. 2nd. In a charcoal stove, in combination the outer casing of the stove, the internal diaphragm extending backwardly to near the back of the stove and fire pot secured to and supported by the diaphragm and having a perforated bottom and the front opening and a suitable opening in the front of the casing provided with a suitable door, a bottom for the front portion of the casing of the stove situated beneath the fire pot and an intermediate wall extending from such bottom to the diaphragm, so as to leave the back portion of the stove bottomless, as and for the purpose specified.

No. 60,337. Car Fender. (*Défense de chars.*)

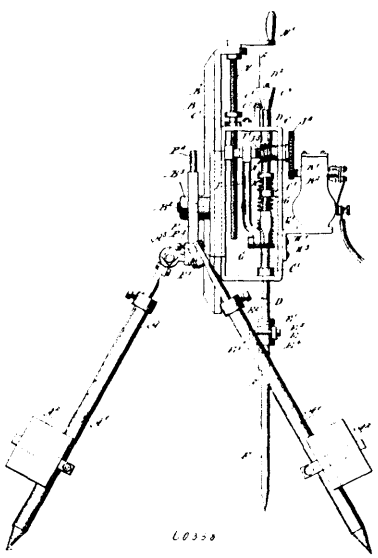


60337

Edmond Jacques, Montreal, Quebec, Canada, 16th June, 1898; 6 years. (Filed 3rd June, 1898.)

Claim.—1st. The combination with a car, of a fender pivotally connected to said car, said fender being normally held in its inoperative position, and means, operated by the foot of the motorman, for releasing said fender, whereby said fender will pass into its operative position by gravity, substantially as specified. 2nd. The combination with a car having extensions on its front end, a shaft mounted in said extensions, of a fender pivotally connected to said extensions, connections between said shaft and said fender mechanism mounted on said shaft for holding said fender in inoperative and operative positions, and mechanism operated by the motorman for moving said fender into and out of its operative position, substantially as described. 3rd. The combination with a car having extensions formed on the front end thereof, of a shaft mounted in said extensions, levers secured on the ends of said shaft, a fender pivotally connected to said extensions, connections between said fender and said levers, means operated from within the car for raising said fender, and means operated by the motorman's foot for releasing said fender from its raised position, substantially as described. 4th. The combination with a car having extensions formed on the front end thereof, of a fender pivotally connected to said extensions, a shaft mounted in said extensions, connections between said shaft and said fender, a disc mounted on said shaft, said disc being provided with stops, a lever pivotally connected to said car and having a pin adapted to engage with said stops, means for raising said fender to an inoperative position, said means being operated by the hand of the motorman, and means operated by the foot of the motorman for disengaging said pin from said stops, whereby said fender will be allowed to drop into operative position by gravity, substantially as described. 5th. The combination with a car, of a fender pivotally connected to the front end of said car, said fender being adapted to be moved into and out of an operative position, swinging sides shields pivotally connected to said fender and adapted to have a movement simultaneously therewith, and means operated by the foot of the motorman for allowing said fender and said shields to be passed from their inoperative to their operative positions by gravity, substantially as described.

No. 60,338. Drilling Machine. (*Machine à forer.*)



60338

Robert Binnie, Bolivar, Pennsylvania, U.S.A., 16th June, 1898; 6 years. (Filed 4th June, 1898.)

Claim.—1st. A drilling machine, provided with a drill spindle, a crank shaft, a connection between the shaft and the drill spindle, for imparting a reciprocating motion to the spindle, and a gearing for connecting the shaft with the drill spindle, for rotating the latter continuously while imparting a reciprocating motion thereto, substantially as shown and described. 2nd. A drilling machine, provided with a drill spindle, a crank shaft, a connection between the shaft and the drill spindle, for imparting a reciprocating motion to the spindle, a gearing for connecting the shaft with the drill spindle, for rotating the latter continuously while imparting a reciprocating motion thereto, the gearing comprising a worm-wheel on the shaft, and a worm in mesh with the worm-wheel, the worm being mounted to turn and arranged to turn the drill shaft and to allow the latter to slide in the worm, substantially as shown and described. 3rd. A drilling machine, provided with a crank shaft, a pitman connected with the crank, a cross-head connected with the pitman and mounted to slide, and springs engaging opposite sides of the cross head and abutting against collars on the drill spindle, substantially as shown and described. 4th. A drilling machine, provided with a frame or carriage mounted to slide, a feed screw for imparting movement to said frame, a ratchet-wheel nut engaging the said feed screw and mounted to turn in said frame, a spring-pressed pawl for engage-

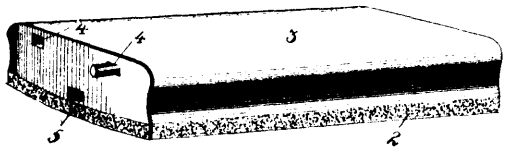
ment with the ratchet-wheel of the nut, and means for actuating said pawl from the reciprocating drill spindle to turn the nut, substantially as shown and described. 5th. A drilling machine, provided with a frame or carriage mounted to slide, a feed screw for imparting movement to said frame, a ratchet-wheel nut engaging the said feed screw and mounted to turn in said frame, a spring-pressed pawl for engagement with the ratchet-wheel of the nut, and means for actuating said pawl from the reciprocating drill spindle to turn the nut, said means comprising a friction roller on the pawl, and a cone-shaped roller on said spindle, and adapted to engage the said friction roller on the outward stroke of the spindle, substantially as shown and described. 6th. A drilling machine, provided with a tripod, an upright support to turn on said tripod, and adapted to be fastened thereto, and a standard for carrying the drill frame and mounted to turn on said support in a plane at an angle to the plane of motion of the support, said standard being adapted to be fastened to the support, substantially as shown and described. 7th. A drilling machine, provided with a drill chuck comprising a socket for the drill or bit, a clamping key laterally slidable in said socket, for engaging the bit, and a clip on the socket, for engaging and moving the key, substantially as shown and described.

No. 60,339. Welding Compound. (*Composé pour souder.*)

Henry Eberding, Peterson, New Jersey, U.S.A., 16th June, 1898; 6 years. (Filed 3rd March, 1898.)

Claim.—As a new article of manufacture adaptable for the manufacture of welding compounds, ground, pounded, or crushed steel in the state of powder corresponding to a fineness of from 10 to 30 meshes per inch, substantially as and for the purposes described.

No. 60,340. Slate Cleaner and Pencil Holder.
(*Nettoyeur d'ardoise et porte-crayon.*)

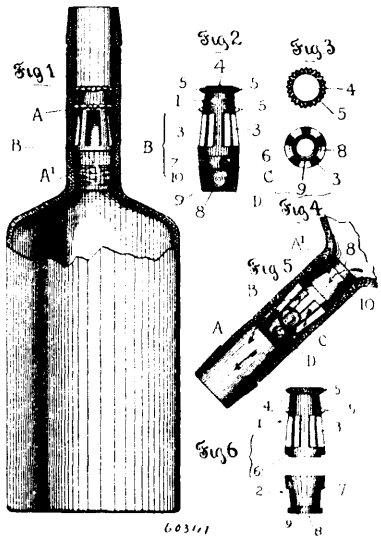


60340

Robert B. Stevenson, Massey Station, Ontario, Canada, 16th June, 1889; 6 years. (Filed 17th March, 1898.)

Claim.—1st. An eraser, comprising a body portion having a rounded under surface, a layer of erasing material secured to said rounded surface, and slots formed longitudinally of said body, said slots being arranged to receive writing or drawing instruments, substantially as described. 2nd. An eraser, comprising a body portion having a rounded under surface, a layer of erasing material secured to said rounded surface, and slots formed longitudinally of said body, and slots being of different sizes transversely, and arranged to receive writing or drawing instruments, substantially as described.

No. 60,341. Non-refillable Bottle.
(*Bouteille non réemplissable.*)

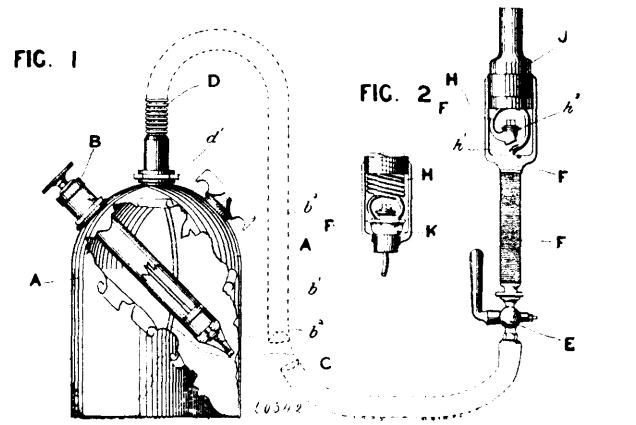


60341

Emile Gerlach, San Francisco, California, U.S.A., 16th June, 1898; 6 years. (Filed 8th June, 1898.)

Claim.—The device for inserting and fixing in the neck of a bottle, to prevent the introduction of liquid through the neck without interfering with the outflow of the liquid from the bottle, consisting of the tapering valve-case B, formed of vitreous substance in two pieces 1-2 and afterwards joined together, the valve-balls CD, and the packing-ring 10, around the body of the valve-case, the neck of the bottle having a contracted portion inside at the bottom where it opens into the bottle to hold the case in the neck, as described and shown in the drawing.

No. 60,342. Brazing Tool. (*Outil à braser.*)



60342

Thomas William Horton, 4 Bennetts Hill, and William Pullen, 51 Holloway Head, both in Birmingham, England, 17th June, 1898; 6 years. (Filed 2nd November, 1897.)

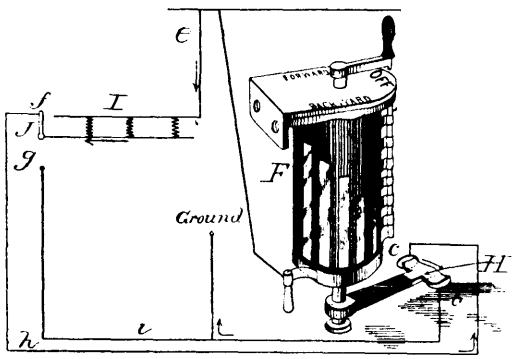
Claim.—1st. A portable brazing apparatus embracing in its construction a liquid fuel container, a burner, a vaporiser surrounding and feeding the burner, and a flexible connection between the liquid fuel container and the vaporizer, substantially as specified. 2nd. A portable brazing apparatus embracing in its construction a liquid fuel container, a burner, a vaporizer surrounding and feeding the burner, a flexible connection between the liquid fuel container and the vaporizer and a force pump to force the liquid fuel from the container through the flexible connection to the vaporizer, substantially as specified. 3rd. A portable brazing apparatus embracing in its construction a liquid fuel container, a burner, a vaporizer surrounding and feeding the burner, a rigid hollow handle supporting the burner and vaporizer, a stop cock fitted into the lower end of the handle, a flexible connection between the stop cock and the liquid fuel container and a connection between the stop cock a, the vaporizer, substantially as specified. 4th. A portable brazing apparatus embracing in its construction a liquid fuel container, a burner a vaporizer, surrounding and feeding the burner, a rigid hollow handle supporting the burner and vaporizer, a stop cock fitted into the lower end of the handle, a flexible connection between the stop cock and the liquid fuel container, a connection between the stop cock and the vaporizer and a force pump to force the liquid fuel from the container through the flexible connection to the vaporizer substantially as specified. 5th. A portable brazing apparatus embracing its construction a liquid fuel container, a burner, a vaporizer surrounding and feeding the burner a rigid hollow handle supporting the burner and vaporizer, a stop cock fitted into the lower end of the handle a flexible connection between the stop cock and the liquid fuel container a connection between the stop cock and the vaporizer a force pump to force the liquid from the container through the flexible connection to the vaporizer and a non-constructing covering for the handle, substantially as specified. 6th. A portable brazing apparatus embracing in its construction a liquid fuel container, a burner, a vaporizer surrounding and feeding the burner a nozzle for the vaporizer and burner, a bracket for the burner vaporizer and nozzle, a rigid hollow handle connected to the bracket fitted with a stop cock, a non-constructing covering for the handle a flexible connection between the fuel container and the stop cock, a connection through the hollow handle between the stop cock and vaporizer and a force pump to force the liquid fuel from the container through the flexible connection substantially as specified.

No. 60,343. Electric Heat Controller for Cars.
(*Contrôleur électrique de la chaleur pour chars.*)

Joseph A. G. Trudeau, Ottawa, Ontario, Canada, 17th June, 1898; 6 years. (Filed 4th November, 1897.)

Claim.—1st. In combination with a vehicle provided with an electric motor and with a current-controller therefor, a heater, a supply circuit for said heater, and a circuit-closer connected with and controlled by the motor-controller, substantially as described, whereby current is directed through the heater when the suppply current of the motor is cut off. 2nd. In combination with a vehicle and an electric motor for propelling the same, a supply circuit for said motor, a heater, a supply circuit for said heater, and a circuit-controller adapted to simultaneously open the motor-circuit and close the heater circuit, and to open the heater circuit and close the motor circuit. 3rd. In combination with a vehicle, an electric

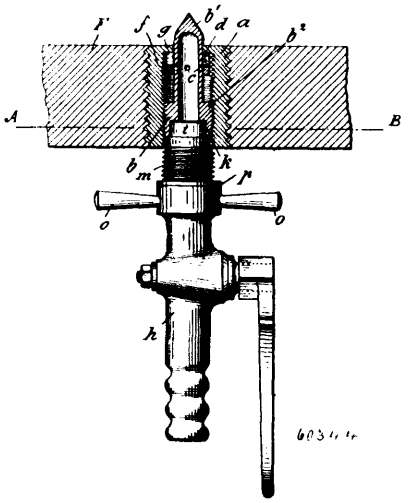
motor and an electric heater, supply circuits for the motor and the heater, a circuit-controller adapted simultaneously to close one and



to open the other of said circuits, a branch return conductor for the heater, and a switch adapted to complete the heater circuit through the conductor controlled by the circuit-controller, or through the independent return conductor at the will of the attendant. 4th. In combination with a car or vehicle, and with an electric motor E, an electric heater *l*, conductors *d*, *e*, *h*, *i* and *j*, contacts *b* and *c*, controller F provided with insulated contact block H and switch J, adapted to be included in circut at will with conductor *h* or conductor *i*, substantially as and for the purpose set forth.

No. 60,344. Cask Tapping Device.

(*Appareil pour taper les barils.*)



Anton Becker, 23 Röhrergasse, Cologne, Germany, 17th June, 1898; 6 years. Filed 25th January, 1898.)

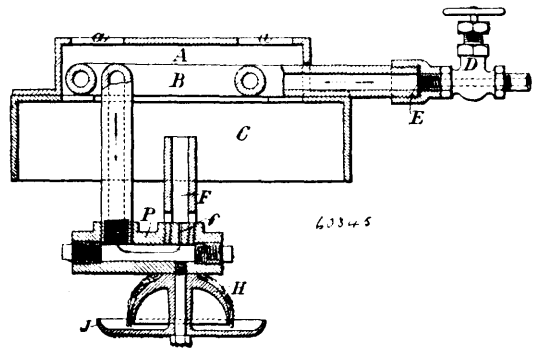
Claim.—1st. A hermetically closing and drawing off device for casks, consisting of, in combination, a casing *a* screwed fast in the cask and containing a rubber ring *d* fixed inside the said casing, a plub *b* with lateral holes *c* and adapted to screw up in the casing *a*, making a tight joint with the said casing, and a cock *h* adapted to engage with and screw up the plug *b*, the parts being constructed and arranged, substantially as hereinbefore described. 2nd. In a device of the class described, in combination, the casing *a*, the cock *h* provided with an oval extension or shoulder *i* and the plug *b* provided with an enlarged part b^2 having an aperture with which the shoulder engages, as and for the purpose specified.

No. 60,345. Oil Vapour Burner.

(*Bruleur de vapeur d'huile.*)

Joseph Nelken, St. Mary Axe, London, England, 17th June, 1898; 6 years. (Filed 1st. February, 1898.)

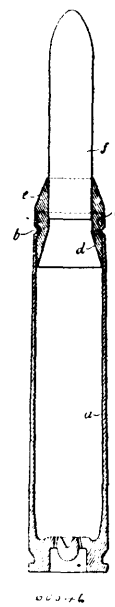
Claim.—In an oil vapour burner, the combination of inverted dishes A and C, pipe coil B, connecting piece P, carrying burner



tube F and having small passage *f*, dome H, tray J, oil supply valve D and screen E, all substantially as shown and described.

No. 60,346. Metallic Cartridge.

(*Cartouche métallique.*)

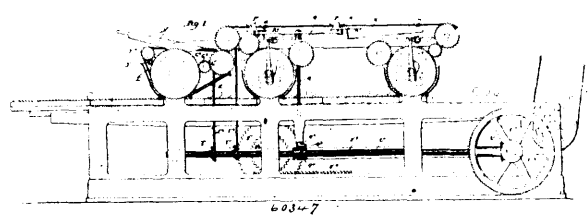


Paul Mauser, Oberndorf, Würtumberg, Germany, 17th June, 1898; 6 years. (Filed 5th February, 1898.)

Claim.—A metallic cartridge having a metallic ring *c* fixed in the front part of the cylindrical, or slightly conical, casing *a*, such ring serving to hold the projectile and having its bore wider towards the rear where it joins the inner wall of the casing *a*, whilst the front portion of said ring forms a conical abutting surface adapted to rest against a correspondingly shaped surface in the breech of the arm subetantially as herein set forth and as illustrated in the accompanying drawings.

No. 60,347. Multiple Colour Printing Machine.

(*Machine à imprimer à couleur multiple.*)

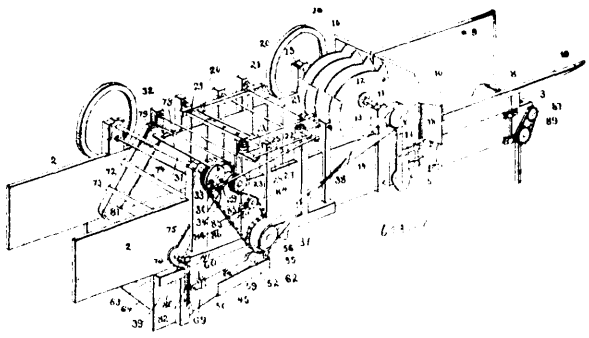


William Henry Reynett Toye, Philadelphia, Pensylvania, U.S.A., 17th June, 1898; 6 years. (Filed 25th February, 1898.)

Claim.—1st. In a multiple colour printing machine, a suitable frame, a reciprocating bed adapted to carry a series of type or forms a series of impression cylinders adapted to work in conjunction with said forms, an endless carrier provided with suitable grippers adapted

to work in conjunction with one of the cylinders, and a second endless carrier carrying suitable grippers adapted to work in conjunction with the other of the cylinders and means for transferring the material printed upon from the first named carrier, as specified. 2nd. In combination, a suitable frame for supporting the operating parts of the machine, a bed adapted to be reciprocated to and fro and carrying multiple forms of type beds, a series of impression cylinders adpted to act in conjunction with said forms, a primary endless carrier having a suitable number of grippers thereon, said primary carrier working in conjunction with one of the impression cylinders, a secondary endless carrier working on conjunction with the other cylinders, an odd number of grippers carried by this last named carrier, means for transferring the material being printed upon from the primary carrier, to the secondary carrier, means for causing the material being printed upon to pass more than one time around the first named cylinder before being transferred and means for causing said material to pass more than one time around the last named cylinders befare being delivered, and mechanism for bringing about the operations of the machine, as andfor the purpose set fo th. 3rd. In combination with a printing machine of the character described, a primary cylinder having two impression surfaces thereon, two reciprocating forms or type beds adapted to work in conjunction with said surfaces, a flexible endless carrier adapted to work in conjunction with said cylinder, three sets of grippers carried by said carrier and so arranged that the material to be printed upon will receive first one impression and then be conveyed idly during the next motion of this cylinder and then again receiving a second impression which will register with the first impression, and during this last movement will be brought to the original point of feed and there dwell, and means for transferring this material from the primary endless carrier to the sscondary carrier, as specified. 4th. In combination with a printing machine of the character described, a primary endless carrier adapted to so convey the material to be printed upon in conjunction with a primary impression cylinder as to impart two impressions thereto which register with each other, of a secondary flexible endless carrier having an odd number of grippers thereon adapted to receive the material passing through the press from the primary carrier and convey it into conjunction with secondary cylinders which will print upon the reverse side thereof, and mechanism for delivering said material to suitable tables, as specified. 5th. In combination, a primary endless carrier, an impression cylinder, of a secondary endless carrier, secondary impression cylinders with which the last-named carrier is adapted to operate, an odd number of grippers located upon the last-named carrier, forms or type beds adapted to reciprocate in conjunction with the secondary cylinders, and means for delivering the material printed upon alternately upon one table and then another, substantially as shown and described. 6th. The herein described combination of a primary cylinder having two impression surfaces thereon, two f orms or type beds adapted to operate in conjunction therewith so as to impart two impressions to the material being printed upon in register with each other, a primary endless carrier passing around said cylinder and certain idle rolls and pulleys, three sets of grippers carried by this carrier, a secondary endless carrier, two secondary impression cylinders, one having two impression surfaces thereon and the other one of such surfaces, forms or type beds adapted to work in conjunction with the secondary cylinders, an odd number of grippers carried by the secondary carrier, means for causing the material being printed upon to be carried around the first of the secondary cylinders without receiving an impression, then around the second of the secondary cylinders receiving one impression, and again around the first of the secondary cylinders receiving an impression therefrom which registers with the first impression, and finally again around the second of the secondary cylinders receiving a third impression in register with the first two impressions, two tables, and mechanism for delivering the material being printed upon alternately upon said tables, substantially as shown and described. 7th. In a multiple colour printing machine, a primary cylinder, secondary cylinders, a reciprocating bed geared to said cylinders by a rack and mutilated gears, mechanism for stopping the cylinders at a predetermined point so as to permit the bed to move in a reverse direction without affecting said cylinders, means for throwing said cylinders into activity at a predetermined time, a primary carrier provided with grippers so arranged as to convey the material being printed upon around the primary cylinder twice, a secondary carrier provided with an odd number of grippers adapted to receive said material from the primary carrier and convey it twice around the secondary cylinders, and means for delivering said material to one and then the other of two tables, as specified. 8th. A multiple colour printing machine, comprising a suitable frame, a reciprocating bed mounted thereon, forms or type beds carried by said reciprocating bed, a primary cylinder having two impression surfaces, two secondary cylinders, one having two impression surfaces and the other, one impression surface, mutilated gears carried by the cylinders, a rack-bar carried by the reciprocating bed adapted to mesh with said gears and revolve the cylinders in one direction, stop mechanism for bringing the cylinders to rest at predetermined points, the last-named mechanism also serving as a push-off to return the cylinders to activity, a primary flexible endless carrier working in conjunction wich the primary cylinder, suitable idle rolls and pulleys for the guiding of this carrier, three sets of grippers secured to the primary carrier and so arranged that the material being printed upon will be given an impression upon one side thereof, conveyed idly through the next movement of the cylinder, printed upon the same side thereof through the next movement of this cylinder and brought to the point of starting, a secondary carrier passing around the secondary cylinders and suitable guide rolls and pulleys, an odd number of grippers secured to the secondary carrier and so arranged that the material being printed upon will be carried around the first of the secondary cylinders without receiving an impression, then around the second of the secondary cylinders receiving one impression therefrom upon the reverse side thereof, again around the first of the secondary cylinders receiving an impression therefrom which registers with the first impression of the secondary cylinders, and finally again around the second of the secondary cylinders receiving the third impression which registers with the last-named impression, two tables, cam blocks for releasing the material being printed upon from the grippers, mechanism for bringing said cam blocks into activity at predetermined times whereby said material may be delivered first upon one table and then upon the other, set-off cleaners adapted to work in conjunction with each of the secondary cylinders, and suitable mechanism for bringing about the several operations of the machine, substantially as shown and described. 9th. In a multiple colour printing machine, a primary carrier, grippers carried by each of said carriers, mechanism for transferring the material being printed upon from the primary carrier to the secondary carrier at predetermined times, and mechanism for finally delivering this material upon one and then the other of two tables, as specified. 10th. In combination with a flexible endless carrier in a printing machine of the character described, an oscillating lever, two cam blocks carried thereby adapted to so act upon the grippers at predetermined times as to cause them to release their hold upon the material printed upon, a rock rod upon which said lever is mounted, a short arm carried by said rod, a shoe, a groove cam into which said shoe projects, and means for revolving said cam whereby the cam blocks are successively brought into activity, as specified. 11th. In combination with the cylinders of a multiple colour printing machine, mutilated gears carried by said cylinders, a rack-bar carried by the reciprocating bed adapted to mesh with said gears, push-off levers having teeth formed upon their upper ends, a series of gear teeth secured to the face of the mutilated gears and adapted to enter into mesh with the gear teeth of the push-off levers whereby the cylinders may be caused to dwell at the proper points and again pushed into activity, rods connecting said push-off levers with cam levers, and cams for operating the last-named levers, substantially as and for the purpose set forth. 12th. In combination with the cylinders of a multiple colour printing machine, of set-off cleaning mechanism consisting of a shoe adapted to the contour of the cylinder, rolls journalled at each edge of the shoe, a strip of cleaning material passed around the rolls and beneath the shoe so as to bear against the cylinder, a pressure roll, springs causing the last-named roll to bear upon one of the first named rolls, a drum upon which the cleaning strip is wound, and means for winding the same, as shown and described. 13th. In a printing machine of the character described, primary and secondary cylinders, flexible carriers working in conjunction therewith, each of said carriers carrying a suitable number of grippers for bringing about multiple printing and the proper transfer of the material being printed upon from one carrier to the other, as specified. 14th. A multiple colour printing machine consisting of a suitable frame, a primary cylinder mounted therein, and adapted to print one impression upon one side of the material being printed upon, a series of secondary cylinders each adapted to print one impression upon the reverse side of said material, an endless carrier working in conjunction with the secondary cylinders, grippers carried by said carrier adapted to receive the material from the primary cylinder and convey it to and around the secondary cylinders, and means for delivering said material to a suitable table, as specified. 15th. In a multiple colour printing machine, a suitable frame, a primary cylinder mounted therein, means for delivering the material to be printed upon to said cylinder whereby one impression will be printed thereupon, a series of secondary cylinders, an endless flexible carrier working in conjunction with said secondary cylinders, suitable pulleys for guiding said carrier, grippers carried by the carrier and adapted to receive the material from the primary cylinder and convey it to and around the secondary cylinders, suitable reciprocating forms for printing impressions upon the material, a table, mechanism for delivering the material to the table after having been printed upon, set-off cleaners arranged to act upon the secondary cylinders, means for giving the forms their reciprocating motion, and inking rolls of varying diameters arranged in sets, substantially as and for the purpose set forth. 16th. An endless carrier consisting of a series of flexible cables secured to a series of couplings, substantially as shown and described. 17th. An endless carrier consisting of a series of flexible cables, series of couplings to which the ends of said cables are attached, and bearings carried by the couplings in which the gripper rods may be journalled, as specified. 18th. An endless carrier consisting of a series of bands, a series of couplings to which the ends of said bands are attached, with adjustments to accurately tighten each separate band, and bearings carried by the couplings in which rods that hold the grippers may be journalled, substantially as described. 19th. An endless carrier, consisting of a series of grippers capable of being accurately adjusted, said series of grippers being one or more in number than the printing sections operated upon.

No. 60,348. Band Cutter and Feeder.
(*Coupe hart et alimentateur.*)



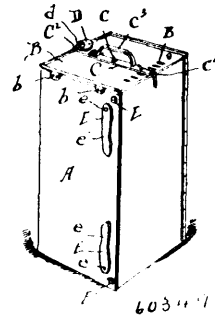
John Henry Young, Kingsbury, Indiana, U.S.A., 17th June, 1898; 6 years. (Filed 12th May, 1898.)

Claim.—1st. In a band cutter and feeder, the combination with the main frame, of a main conveyor moving along the bottom thereof, a band cutter, a distributing rake located at the rear of the band cutter, and a cylinder feed consisting of two endless conveyors arranged one above the other and having their rear ends diverging, one of the said conveyors arranged above the rear end of the floor of the main frame and the other arranged below the rear end of the floor of the main frame, and one of said conveyors having a spring controlled movement, substantially as set forth. 2nd. In a band cutter and feeder, the combination with the main frame consisting of the side pieces, the floor, and the endless main conveyor mounted on rollers, of a roller journalled between the side pieces and projecting above the end piece and geared with one of the rollers of the main conveyor, substantially as set forth. 3rd. In a band cutter and feeder, the combination with the main frame and the main conveyor, of the cylinder feed, consisting of the diverging conveyors arranged at the rear end of the main conveyor, the lower conveyor having a hinged engagement with the frame, whereby it may be swung downward, substantially as set forth. 4th. In a band cutter and feeder, the combination with the main frame and the main conveyor of the cylinder feed, consisting of the diverging conveyors arranged at the rear end of the main conveyor, the lower conveyor having a hinged engagement with the frame, whereby it may be swung downward, and a band hinged to the frame under said conveyor and capable of being swung downwardly, substantially as set forth. 5th. In a band cutter and feeder, the combination with the main frame having at its rear end two depending wings provided with slots projecting upward from their lower edge and terminating in bearing slots arranged at an angle to the first named slots, a lever having one end pivoted to stud shafts and having intermediate its ends bearing apertures to receive the trunnions of the forward roller of the lower conveyor, a bar having at its forward end bearing apertures to receive said trunnions, and having at its rear end bearing apertures to receive the trunnions of the rear roller of said lower conveyor, and means for locking the bar to the lever, substantially as set forth. 6th. In a band cutter and feeder, the combination with the main frame having at its rear end two depending wings provided with slots projecting upward from their lower edge and terminating in bearing slots arranged at an angle to the first named slots, a lever having one end pivoted to stud shafts and having intermediate its ends bearing apertures to receive the trunnions of the forward roller of the lower conveyor, a bar having at its forward end bearing apertures to receive said trunnions, and having at its rear end bearing apertures to receive the trunnions of the rear roller of said lower conveyor, means for locking the bar to the lever, and adjustable slot closer, substantially as set forth.

No. 60,349. Cooking Stove. (*Poêle de cuisine.*)

William Edward Baxter, Frankfort, Kentucky, U.S.A., 17th June, 1898; 6 years. (Filed 6th June, 1898.)

Claim.—1st. In a cooking apparatus, substantially as described, the combination of the plate having the hole provided with a notch and the pipe having lugs bearing beneath the plate and a flange bearing above the hole-plate and closing the notch therein, substantially as shown and described. 2nd. The combination of the stove and oven fitting side by side and having coincident openings, one of such parts having a tubular flange-like projection entering the opening in the other part, substantially as shown and described. 3rd. The combination of the stove having an outlet-opening, the oven fitting alongside said stove and having an opening coinciding with that of of the stove and having the lower wall of said opening turned down forming a broad hook-like part engaging the stove, substantially as shown and described. 4th. The cooking apparatus herein described comprising the stove, the oven adapted to be applied to said stove and having a notched stovepipe-hole and the stovepipe fitted to be applied to the hole of the oven or to the stove when the latter is used alone, such pipe having at its lower end, lugs bearing beneath the hole-plate and a continuous flange bearing above the hole-plate and closing the notch therein, substantially as shown and described. 5th. The combination in a stove, of the casing having bolt-seats, the



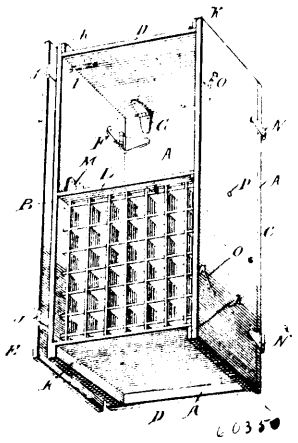
door, the bolt pivoted to the door and turning into engagement with the seats and the lock securing the bolt to the seat, substantially as shown and described. 6th. The combination with the stove or casing, of the legs pivoted thereto and bent whereby they may bear with tension against the casing when adjusted alongside the same, substantially as shown and described. 7th. The combination with a stove having a lid-hole, and provided in its top in rear of said hole with perforations, or the oven having in its underside a hole matching that of the stove and provided at the front end of said oven-hole with a hook to engage under the front wall of the lid-hole of the stove, and short bars pivoted to the rear side of the stove and turning down to enter the perforations in the top of the stove, substantially as described. 8th. The combination of the stove and oven having registered openings and a flange-like projection on one of said parts entering the other and having a hooked portion, substantially as shown and described. 9th. The combination of the door having at one end the inwardly-projected spring-latch bent substantially described and the casing having a perforation receiving said latch the latter being adapted to operate, substantially as and for the purposes set forth. 10th. In an apparatus substantially as described, the combination of the casing, the door and the latch consisting of a strip bent to form a wing fixed to the door, a spring-wing to engage the casing and an intermediate looped portion, and the hand-pull in said portion, substantially as shown and described. 11th. In a cooking apparatus, the combination with the plate having a notched hole, of the cap composed of an outer or main plate fitted to cover the hole and notch therein and an inner plate held to said upper plate and having lugs extended from its edge and arranged to move through the notch in the hole-plate and bear beneath said plate, all substantially as shown and described. 12th. A cooking apparatus, comprising the stove and oven, one of such parts being adapted to fit bodily and intact within, and to brace or strengthen the other, substantially as shown and described. 13th. A cooking apparatus substantially as described, comprising the stove having its lids arranged to be inverted and fitting in their holes from the inner side of the stove, the ash-pan arranged to be adjusted over said oven, and the oven constructed and adapted to fit in the stove and hold the ash-pan against the inverted lids, substantially as set forth. 14th. The stove-lid herein described, composed of a plate of metal continuously depressed near its outer margin or circumference making an inner cupped plate to bear continuously and vertically against the edge of the stove-hole, the outer margin or circumference of said plate to bear horizontally and lap continuously over and above said stove-hole, substantially as shown and described.

No. 60,350. Egg Crate. (*Boîte à œufs.*)

Millard F. Peterfish, Staunton, Virginia, U.S.A., 17th June, 1898; 6 years. (Filed 6th June, 1898.)

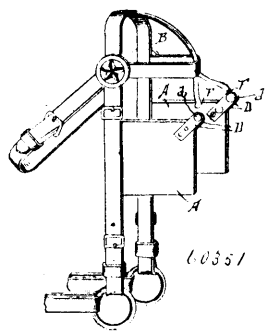
Claim.—1st. A collapsible box comprising the bottom, sides and end pieces, one of the side pieces being hinged at its lower edge to the bottom and adapted to swing outwardly, the opposite side piece hinged to the opposite edge of the bottom and adapted to swing inwardly, the end pieces hinged to the bottom at its respective ends and adapted to swing inwardly a lid hinged to the upper edge of the inwardly swinging side and adapted to swing outwardly to rest upon the outer surface of said side, and securing means for uniting the ends and sides, substantially as set forth. 2nd. A collapsible box comprising the bottom, sides and end pieces, one of the said sides being hinged to the bottom and adapted to swing outwardly, the opposite side piece hinged to the opposite edge of the bottom and adapted to swing inwardly, the lid hinged to the upper edge of the last mentioned side piece and adapted to swing outwardly and rest upon the outer surface thereof, the end pieces hinged to the bottom and adapted to swing inwardly, a partition hinged to the inwardly swinging side and adapted to fold against the inner surface of said side, and securing means for uniting the ends and lides, substantially as set forth. 3rd. A collapsible box comprising the bottom, sides and end pieces, one of the side pieces being hinged to the bottom and adapted to swing outwardly and rest against the outer side

of the bottom when folded, the opposite side being hinged to the upper surface of the bottom and adapted to swing inwardly, a lid



hinged to the upper edge of the last mentioned side and adapted to swing outwardly and rest against the outer surface of said side, the end pieces being hinged to the upper surface of the bottom and adapted to swing inwardly and rest thereon, securing means adapted to unite the ends of the side pieces when the box is unfolded, said lid, side pieces and bottom having openings which are adapted to register when the crate is folded, and a bolt adapted to pass through said opening and receive a thumb nut for securing the parts together, substantially as set forth. 4th. A collapsible box comprising the bottom A, the ends D hinged thereto, and adapted to fold inwardly thereupon, the side B hinged to the upper surface of the bottom and adapted to fold inwardly upon the end pieces, the hinges for said side piece being so formed that when said side piece is folded inward it will rest flatly upon the ends D, side C hinged to the bottom and adapted to swing outwardly, lid E hinged to the upper edge of side B and adapted to swing outwardly against the outer face of said side, and fastening means adapted to unite the sides and ends when the box is unfolded, substantially as described.

No. 60,351. Bridle. (*Bride.*)



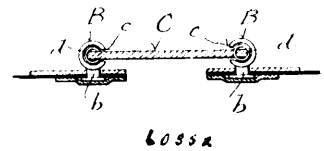
James S. Dean, Toledo, Iowa, U.S.A., 17th June, 1898; 6 years. (Filed 6th June, 1898.)

Claim.—1st. In a bridle, a separable connection between the blind and its supporting fly-strap adapted to yield under excessive strain, and come apart, substantially as described. 2nd. In a bridle, a separable connection between the blind and its supporting fly-strap, consisting of a ball or knob and spring-socket fastening adapted to yield under excessive strain, and come apart, substantially as described. 3rd. In a bridle, the combination of the blind provided with spring-clips secured upon opposite sides of the corner thereof said clips provided near their ends with depressions forming a socket, of a fly-strap provided with a plate the end of which is formed into a ball or knob adapted to fit into the aforesaid socket on the blind and capable of being withdrawn therefrom against the spring action of the clips, and come apart, substantially as described.

No. 60,352. Fastener for Shoes, Gloves, Corsets, etc.
(*Attache pour chaussures, gants, corsets, etc.*)

Charles Henry Tesch, Milwaukee, Wisconsin, U.S.A., 17th June, 1898; 6 years. (Filed 4th March, 1898.)

Claim.—1st. A fastener consisting of guides in opposite series adjacent to edges of an opening and having the form of longitudinal slotted sleeves, together with a flexible slide having a binding of spirally run wire engaging the guides. 2nd. A fastener consisting of guides in opposite series adjacent to edges of an opening and having the form of longitudinally slotted sleeves, together with a flexible slide comprising lace-connected sections having a binding of spirally run wire engaging the guides.



No. 60,353. Sewing Machine. (*Machine à coudre.*)

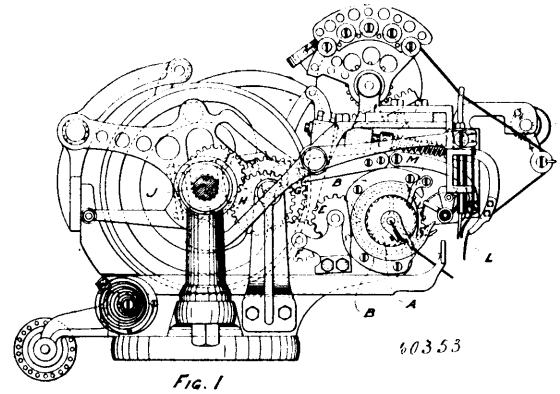
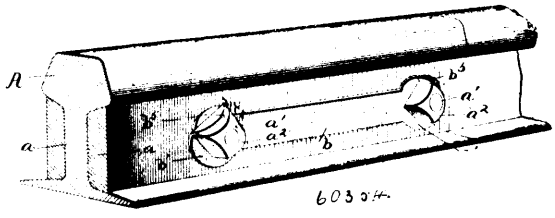


FIG. 1

Oliver Bellefeuille, Montreal, Quebec, Canada, 17th June, 1898; 6 years. (Filed 20th March, 1897.)

Claim.—In a sewing-machine, the combination of a rotating shuttle provided with a piece M, with a train of gears C, E, K, F, G, H and I, substantially as described and for the purpose set forth.

No. 60,354. Nut Lock. (*Arrête-écrou.*)



Louis Alexander Caron, Montreal, Quebec, Canada, 17th June, 1898; 6 years. (Filed 6th June, 1898.)

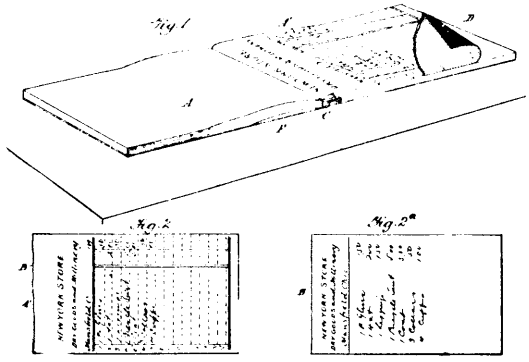
Claim.—1st. A nut lock comprising a plate adapted to be secured on a series of bolts, a segmental portion of said plate being adapted to be forced against the side of said nuts, and a washer secured to the rear face of said plate, said washer being adapted to be placed on the bolt in rear of said plate, substantially as described. 2nd. A nut lock comprising a plate having enlarged ends, an opening formed in each of said ends, and radial lugs or prongs formed integrally with said plate and extending into said openings, substantially as described. 3rd. In a nut lock the combination with a plate having enlarged ends, openings formed centrally in said ends, and radial lugs or prongs extending inwardly into said opening, and a washer of less diameter than the diameter of said enlarged ends secured in rear of said plate by means of said lugs or prongs forming a centering means for said plate and said washer, substantially as and for the purposes described.

No. 60,355. Sale Book or Pad.
(*Livre de vente.*)

Hamilton H. Webber and Samuel J. Bingner, both of Mansfield, Ohio, U.S.A., 17th June, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. An improved sale's book or pad, comprising a series or package of leaves, each having about midway thereof, on one side of the middle of the package, an advertisement on the upper face, and of the opposite side of the middle, a similar advertisement on the under face, said package having a double series of perforations at a point midway thereof, a carbon sheet held over the top printed portion of the sheet and secured at one end near the centre of the

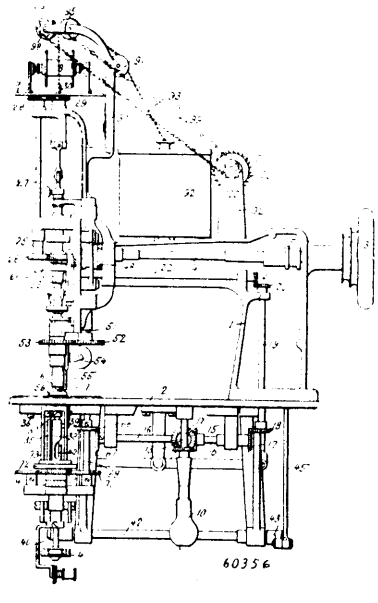
pack, and means for securing the pack of leaves together to form a solid portion at a point between the perforations, substantially as



shown and described. 2nd. An improved sale's book or pad, consisting of a package of leaves each having about midway thereof, on one side of the middle, an advertisement on the upper face, and on the opposite side of the middle, a similar advertisement on the under face, said leaf pack having a double series of perforations midway thereof, a carbon sheet held over the top printed end of the pack and having one end lapping the perforated portion of the pack, a reinforce piece held on such end of the carbon, a flexible cover formed of a single sheet, and means for securing the leaf packs, the carbon, the reinforce and the cover, substantially as shown and for the purposes described.

No. 60,356. Machine for Sewing Beads on Fabrics.

(Machine pour coudre les perles sur les tissus.)

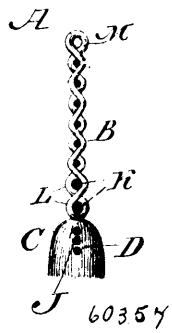


Henri André Domenget, Argenteuil, Seine et Oise, France, 17th June, 1898; 6 years. (Filed 1st March, 1898.)

Claim.—1st. In a sewing-machine, the combination, with the sewing or stich-forming mechanism, its actuating means, and the ordinary feed-dog, of a second feed dog arranged under the table of the machine in such a manner that its annular claw or bearing surface is under the claw of the former and co-operates with it to effect the feeding of the fabric, the two feed-dogs having, at the same moment, identical feeding movements in the same direction, substantially as described. 2nd. In a sewing-machine, the combination, with the sewing or stich-forming mechanism and its actuating means, of a device for feeding the fabric, comprising a feed-dog arranged above the work and means for actuating the same, a feed-dog arranged underneath, and means for actuating the latter in synchronism with the former, in consequence of which the work, which is gripped at the proper time between the two feed-dogs, is drawn or fed in a positive manner, substantially as and for the purposes described and as illustrated in the accompanying drawings. 3rd. In a machine for sewing beads on fabrics, the combination, with the stitch-forming mechanism and its actuating means, the mechanism for imparting to the sewing devices a universal movement in all directions, the upper feed-dog and the means for imparting a vertical to and fro movement thereto and for imparting to it a universal feed movement in all directions, of a second or lower feed-dog arranged under the table of the machine underneath the first feed-dog in such a manner that their two claws are opposite to each other, and means for imparting to the lower feed-dog a universal feed-motion, substantially as hereinbefore described, for ensuring the synchronism of the simultaneous movement of the two feed-dogs. 4th. A fabric-feeding arrangement for sewing-machines, comprising an upper feed-dog with its fabric-pressing claw, means for imparting to this feed-dog a vertical to and fro movement for engaging with the fabric and rising therefrom, means for imparting to this feed-dog a feeding movement in the desired direction, a lower feed-dog not possessing a vertical movement and having its annular claw, which is always displaced in the same plane and on which bears the annular claw of the said upper feed-dog in order to grip the work or fabric between the two, and means for imparting to the said lower feed-dog a feeding movement in the same sense and of the same amplitude as the movement of the said upper feed-dog and simultaneous with this movement, substantially as and for the purpose described. 5th. A fabric-feeding arrangement for universal feed sewing-machines, comprising in combination with an upper feed-dog and means for communicating to it a universal feeding movement in all directions, and a lower feed-dog co-operating with the former, and means for imparting to it a universal feeding-movement in all senses, simultaneously with the movement of the upper feed-dog in consequence of which the fabric is fed in a positive manner by the co-operative movements of the two feed-dogs, substantially as hereinbefore described. 6th. In a fabric-feeding mechanism for sewing-machines, the combination with an upper feed-dog and means for actuating it and a lower feed-dog co-operating with the former for feeding the fabric, of a cam mounted on a shaft directly connected to the main shaft of the machine and operated by the latter at the same speed as itself, a slide rod on one of the ends of which the said cam works, a spring for returning the said rod after being moved downward by the cam, a stop for limiting this return movement, a pivoted lever jointed at one of its ends to the other end of the said slide-rod and means, between the other end of this lever and the lower feed-dog, for transmitting the movement of the lever to the latter, in consequence of which the said feed-dog effects at each revolution of the main shaft a feeding-movement in synchronism with the co-operative movement of the upper feed-dog, substantially as and for the purposes described and as represented in the accompanying drawings. 7th. In a machine for sewing beads on fabrics and the like, having a sewing mechanism co-operating with the needle for the formation of the stitch, and a needle-carrier pivoted at its upper end and carrying the needle, the combination with the means for communicating to the needle its to and fro movement, of means for constraining this needle-carrier and the needle carried by it to execute, during its descent and before penetrating the fabric, a movement of lateral displacement to cause the needle to pass behind the bead and drive it to the place that it ought to occupy in the guide in order to be sewn in the desired position, substantially as described. 8th. In a machine for sewing beads on fabrics and the like, the combination with the needle-carrier, the needle carried by it, the means for imparting to the needle-carrier its vertical to and fro movement, and means for causing the needle-carrier to be displaced in all directions to follow the universal feeding movement effected by the hand of the operator, of surfaces forming cams formed on the said needle-carrier and rollers or their equivalents mounted in fixed positions on a part of the machine participating in the said universal movement, which rollers, or equivalent devices, co-operate with the said cam forming surfaces during the descent of the needle-carrier, to cause the needle to execute a movement of lateral displacement in order to drive the bead into place in the guide, substantially as hereinbefore described and represented in the accompanying drawings. 9th. A bead-supplying mechanism for machines for sewing beads on fabrics and the like, comprising a receptacle in which the beads threaded on a thread are contained loosely, a grooved roller over which the beaded thread passes, two rollers one of which is pressed against the other elastically between which the beaded thread passes and between which it is carried along, one of these latter rollers having its shaft connected by chain-wheels and a chain, or otherwise, with a shaft put into step by step movement at each stitch made by the machine in order to cause to advance or to carry along the beaded thread for a length equal to the length of the said stitch, substantially as and for the purposes described. 10th. In a bead-distributing mechanism for machines for sewing beads on fabrics and the like, the combination, with the receptacle containing the beads threaded on a thread or core and the feeding-rollers between which the beaded thread passes and by which it is carried along, a shaft suitably supported parallel to the axes of the said feeding-rollers, means, such as chain-wheels and a chain, for transmitting the movement of this shaft to the axle of one of the said rollers in order to cause it to rotate step by step, a ratchet-wheel keyed on the said shaft, a pawl engaging in the teeth of the ratchet-wheel and mounted on the face of a toothed-wheel loose on the shaft, a pivoted sector which gears into the said loose toothed-wheel and whose tail carries a roller, and a cam which is mounted on a shaft connected directly to the main shaft of the machine and operated by it at the same speed as itself, and in a

peripheral groove of which the said roller works, in consequence of which the said feeding rollers execute, at each stitch made by the machine, a partial rotation for the purposes of causing the beaded thread to advance a distance equal to the length of the stitch, substantially as herinbefore described and as represented in the accompanying drawings. 11th. In a machine for sewing beads on fabrics and the like, the combination, with the sewing and stitch-forming mechanism, the arrangements for transmitting to this mechanism a universal movement in all directions, and the rotary bobbin causing a twisting or attaching thread to make at each stitch a turn around the needle-thread and the beading-thread, in order to connect them together, of a feeding arrangement comprising an upper feed-dog and a lower feed-dog and means for communicating to them simultaneously, in synchronism, a universal feeding movement, means for transmitting to the needle-carrier, in its descent, a lateral displacement in order that the needle may drive the bead into desired position in the guide, and a bead-supplying mechanism causing the beaded thread to advance automatically at each stitch made by the machine, a distance equal to the length of the stitch, substantially as represented in the accompanying drawings.

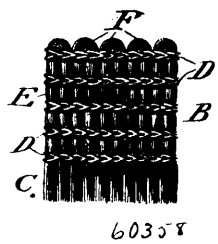
No. 60,357. Skirt Protector. (*Protecteur de jupe.*)



The Hensel, Colladay Company, assignee of John Baptiste Poyet, all of Philadelphia, Pennsylvania, U.S.A., 18th June, 1898; 6 years. (Filed 18th March, 1898.)

Claim.—1st. A skirt protector, consisting of a head, a brush thereon, and an auxiliary fabric within said brush adjacent to said head. 2nd. In a skirt protector, a brush, having therein means independent of and within the brush for spreading or flaring the same laterally. 3rd. A skirt protector, having a head, a brush thereon, and auxiliary means connected with said head and inclosed in said brush independent of the latter for flaring or spreading the latter in outward direction. 4th. A skirt protector, having a head, a brush thereon, and strengthening beads on the side of said head. 5th. A skirt protector, having a head, a brush thereon, and attaching loops on the head opposite to said brush.

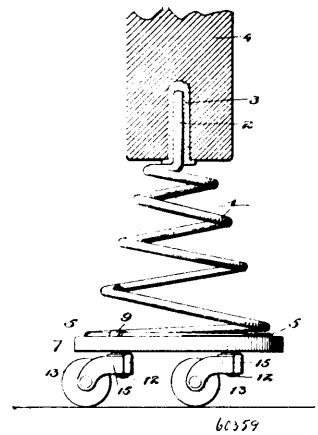
No. 60,358. Skirt Protector. (*Protecteur de jupe.*)



The Hensel, Colladay Company, assignee of Oliver Skilton Patton, all of Philadelphia, Pennsylvania, U.S.A., 18th June, 1898; 6 years. (Filed 18th May, 1898.)

Claim.—1st. A skirt protector, consisting of a head and a brush thereon, said head being formed of weft and chain-stitched warp threads, said brush being formed of yarn, which is connected with said head by means of the adjacent chain-stitch thread having its loops interlocked with said yarn and the threads at the contiguous part of the head. 2nd. A fabric for the formation of skirt protectors, consisting of two heads and yarn floated from one head to the other, said heads being composed of weft and chain-stitched warp threads, the brush forming yarn being connected with said heads by means of the adjacent chain stitched thread, whose loops are interlocked with the said yarn and the weft threads at the contiguous parts of the heads.

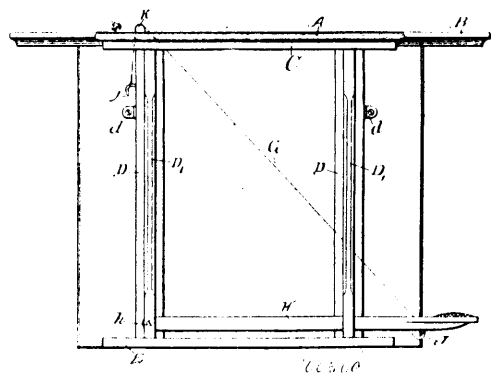
No. 60,359. Caster. (*Roulettes de meuble.*)



Levi Isaac Bodenheimer, High Point, North Carolina, assignee of John W. Spurlock, Ty Ty, Georgia, U.S.A., 18th June, 1898; 6 years. (Filed 31st March, 1898.)

Claim.—1st. The combination with the conical spring 1, the upper end of which terminates in an integral vertical pin 2, and having its lower coil 5 formed in an approximately horizontal plane, of the sheet metal caster bracket 6 formed with a semicircular concentric groove 8 to receive the coil 5, and the caster rollers 13 pivotally secured to said bracket 6, substantially as shown and described. 2nd. The combination with the conical coiled spring 1, having its upper end formed with a vertical pin 2, and its lower coil 5 terminating in a horizontal plane, of the sheet metal bracket 6 formed with a semicircular concentric groove 8, and the integral ears 9—9, extending across the path of said groove to receive said coil 5, and the caster rollers 13 pivotally secured to said bracket 6, substantially as shown and described.

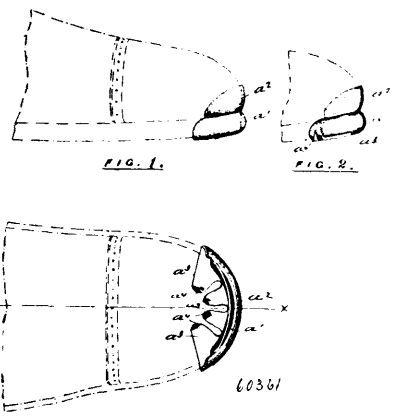
No. 60,360. Cheese Cutter. (*Coupe-fromage.*)



Henry B. Smith, Chicago, Illinois, U.S.A., assignee of William Alfred Buller, Radstock, Somersetshire, England, 18th June, 1898; 6 years. (Filed 26th March, 1898.)

Claim.—1st. In a cheese cutter, the combination with a slotted table, of a pedal below the table, and a wire having both ends secured, one end being attached to the pedal, the wire being adapted to project through the slot as a loop. 3rd. In a cheese cutter, the combination with a slotted table, of a pedal below the table, and a wire having one end attached to the pedal and one end attached to the table, and being adapted to project through the slot as a loop. 3rd. In a cheese cutter, the combination with a slab or plate, and a frame for the slab or plate and adapted to be secured to the slide of a counter or the like so as to leave a slot between the latter and the slab or plate, of a pedal secured to the frame, and a wire having one end attached to the frame and one end attached to the pedal, whereby the wire is adapted to project through such slot as a loop. 4th. In a cheese cutter, the combination with a slab or plate, and a frame for the slab or plate and adapted to be secured to the side of a counter or the like so as to leave a slot between the latter and the slab or plate, of a pedal secured to the frame, a wire having one end attached to the frame and one end attached to the pedal, whereby the wire is adapted to project through such slot as a loop, and a support at the top of such slab or plate for the wire loop.

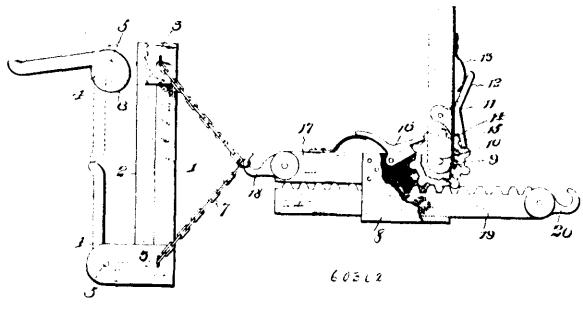
No. 60,361. Boot and Shoe Protector.
(*Protecteur de chaussures.*)



Arthur Clowes, Urmston, Lancashire, and Alfred Lloyd Hulme, Gaythorn, Manchester, both in England, assignees of Robert Stocks Sinister, Flixton, in Lancaster aforesaid, 18th June, 1898; 6 years. (Filed 12th May, 1898.)

Claim.—1st. The combination in a boot toe protecting metallic cap of angular or deflecting flanges and spikes extending at right angles to said flanges and cap all made in one piece of metal of sufficient pliability to enable the flange to be pressed or hammered to a position level with the under part of the sole of boot simultaneously with the spikes entering said sole substantially as shown and for the purpose specified. 2nd. The combination in a boot toe protecting metallic cap, of an upper portion shaped so as to embrace the toe of sole and part of toe of upper and having extending flanges therewith said flanges being formed with right angled extending spikes and all said parts being made in or stamped in one piece of metal, substantially as set forth.

No. 60,362. Belt and Cable Stretcher.
(*Tendeur de cable et courroie.*)



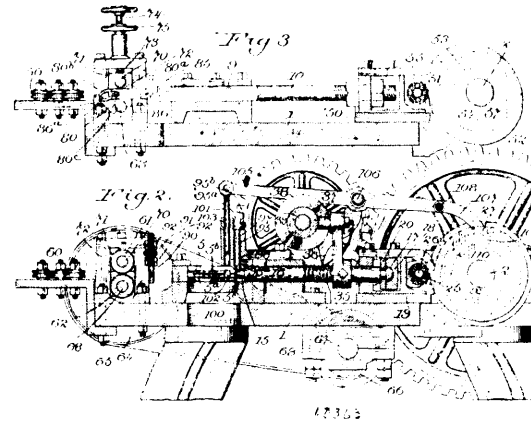
John Fern, Calvin Lynch, John H. Fellows and Benjamin F. Fern, all of Scranton, Pennsylvania, U.S.A., 18th June, 1898; 6 years. (Filed 7th October, 1897.)

Claim.—1st. In a belt or cable stretcher, a housing, an arm secured thereto, a rack bar adapted to slide in said housing, a toothed wheel pivoted in said housing and adapted to engage said rack bar, a lever pivoted to said wheel, a dog pivoted to the housing, said dog having a concaved edge and projecting nose engaging the wheel, a lever secured to the axis of the wheel, and a spring pressed dog pivoted to the lever with its pivoted portion adapted to lie in the concaved portion of the other dog when they approach, said second dog having a nose to engage the teeth of the wheel, substantially as described. 2nd. In combination, a housing, a toothed wheel pivoted therein, a dog having a nose engaging the toothed wheel, the edge of the dog being concaved, a second dog operated by a lever and having a nose operating the concaved portion of the first named dog and engaging the toothed wheel, substantially as described.

No. 60,363. Nail Machine. (*Machine à clou.*)

Charles H. Hanford, assignee of John A. Staples and Charles Bush, all of Newburg, New York, U.S.A., 18th June, 1898; 6 years. (Filed 18th March, 1898.)

Claim.—1st. In a nail machine, the combination of means for holding a nail blank, with a nail-heading punch or die, means for gradually pushing or forcing the punch or die against the end of the blank to spread the metal into a head, as distinguished from a sudden blow, and means for imparting a movement to the punch or die in a direction transverse to the line of thrust during the

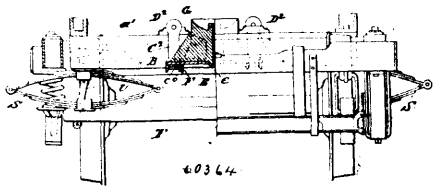


gradual spreading thrust of the die against the blank, said transverse movement assisting the spreading of the metal, substantially as and for the purpose set forth. 2nd. In a nail machine, the combination of means for holding a nail blank, with a nail-heading punch or die, means for gradually pushing or forcing the punch or die against the end of the blank to spread the metal into a head, as distinguished from a sudden blow, and means for imparting an oscillatory motion to the punch during the gradual head-spreading thrust of the die against the blank to assist in the formation of the head, substantially as set forth. 3rd. In a nail machine, the combination of a suitable clamp for holding a blank, a longitudinally and circumferentially movable header carrying a heading die, means for gradually moving the header longitudinally for forcing the die against the blank to spread the metal into a head, and means for simultaneously imparting a circumferential movement to the header to assist the spreading action, substantially as set forth. 4th. In a nail machine, the combination of a suitable clamp for holding a blank, a longitudinally movable and circumferentially oscillating header adapted to receive a metal spreading heading punch or die, means for imparting a gradual longitudinal spreading movement to the header, as distinguished from a sudden blow, means for simultaneously oscillating the header to assist the spreading action, and means for operating the clamp, substantially as set forth. 5th. In a nail machine, the combination of a blank-holding clamp, means for operating the clamp, a header comprising a longitudinally sliding portion and a circumferentially movable portion, a heading die or punch secured to the header, and means for imparting a longitudinal movement to the header and simultaneously therewith oscillate the circumferentially movable portion, substantially as set forth. 6th. In a nail machine, the combination of a suitable wire-feeding device, the laterally operating holding and cutting-off clamp, combined longitudinally movable and oscillatory header, carrying a heading device or punch, a longitudinally moving wedge engaging the movable member of the lateral clamp, a power shaft, and cams mounted upon said power shaft for operating said header and wedge, substantially as set forth. 7th. In a nail machine, the combination of a blank holding clamp, means for operating the clamp, a heading punch or die, and an intermittently operating wire feeding device automatically thrown out of operation by the action of the clamp operating means, substantially as set forth. 8th. In a nail machine, the combination of a blank holding clamp, means for operating the clamp, a header, a pair of blank feeding rolls, and means operated by the clamping operating means for rendering the feed rolls inoperative, substantially as set forth. 9th. In a nail machine, the combination of a blank holding clamp, a header, feed rolls, a block or wedge mounted between the shafts or journals of the feed rolls, and means for automatically operating the block or wedge for moving the rolls into or out of operative relation, as set forth. 10th. In a nail machine, the combination of a blank holding clamp, a header, co-operating feed rolls, a block or wedge mounted upon the journal or shaft of one of the feed rolls and adapted to engage the shaft or journal of the other feed roll, means for forcing said block or wedge in one direction for separating the feed rolls, and said block or clamp being adapted to be moved in the opposite direction by the rotation of the shafts or journals, as set forth. 11th. In a nail machine, the combination of a blank holding clamp, a header, co-operating feed rolls, a block or wedge formed with a socket fitting on the shaft or journal of one feed roll, and an elevated portion adapted to engage the shaft or journal of the other feed roll, and means for operating said block or wedge, as set forth. 12th. In a nail machine, the combination of a blank holding clamp having a stationary and movable member, a wedge for operating the movable member, a pair of feed rolls, a block or wedge supported between the shafts or journals of the feed rolls, and an arm projecting from the clamp operating wedge and suitably connected with the block or wedge for operating it, as set forth. 13th. In a nail machine, the combination of the blank feeding mechanism, the cutting-off and holding die or

clamp, and the header and operating mechanism, the operating mechanism of the header being constructed and arranged to cause the header to recede slightly as the blank is cut of just prior to the heading operation, as and for the purpose set forth. 14th. In a nail machine, the combination of the stationary and movable blank holding members, the header, the operating wedge engaging the movable member of the blank holding clamp for forcing it in one direction, and a secondary wedge on the main operating wedge engaging a projection or shoulder on the said movable member for moving it in the opposite direction, as set forth. 15th. In a nail machine, the combination of means for feeding a wire blank, a blank holding clamp or die, a heading die or punch, means for operating the blank holding clamp and heading die or punch, and a guide such as 95 arranged in the path of the wire blank and adapted to centre the blank in the holding clamp or die, as set forth. 16th. In a nail machine, the combination of means for feeding a wire blank, a holding clamp or die, a header, means for operating the clamp and header, and a blank guide such as 95, adapted to guide the blank to the clamp and means for moving the guide out of the way of the header when the header comes into operation. 17th. In a nail machine, the combination of means for feeding a wire blank, a holding clamp or die, a header, means for operating the clamp and header, and a blank guide such as 95 formed with a bevelled shoulder for guiding the blank into position in the clamp, and means for engagement between the header and guide for throwing the latter out of position when the former is brought into operation, as set forth. 18th. In a nail machine, the combination of means for feeding a wire blank, a holding clamp or die, a header, means for operating the clamp and header, and a blank guide supported in the path of the blank and movable laterally thereto, said guide having a bevelled shoulder in which the end of the blank impinges to centre it in the holding clamp, and a second bevelled shoulder against which the header impinges to move it out of the way when the header operates, as set forth.

No. 60,364. Centre Bearings for Railway Cars.

(*Coussinet de centre pour chars de rue.*)



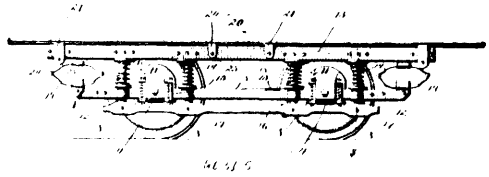
The Standard Coupler Company, New York City, assignee of Henry Howard Scissons, Chicago, Illinois, U.S.A., 18th June, 1898; 6 years. (Filed 28th May, 1898.)

Claim.—1st. The combination with the truck bolster mounted on swing hangers whereby it may move transversely, of swing links or yokes journalled on said bolster and the centre bearing mounted on said swing links to move transversely, substantially as described. 2nd. The combination with the truck bolster or centre bearing support, the channel irons incorporated therein with their flanges turned outwardly and the swing links or yokes suspended on and between said channel irons to swing transversely of the car body, of the centre bearing mounted directly on the depending portions of said swing links or yokes and co operating with the inner faces of the channel irons to prevent movement longitudinally of the car, substantially as described. 3rd. The combination with the truck bolster or centre bearing support the swing links or yokes journalled therein and having at their lower portions flattened bearing surfaces, of the centre bearing resting directly upon said swing links or yokes and having flattened bearing surfaces co-operating with the flattened bearing surfaces of the swing links or yokes, whereby the centre bearing is caused to return to its central position substantially as described. 4th. The combination with the truck bolster or centre bearing support and the swing links or yokes journalled therein, and having flat bearing surfaces on their depending portions, of the centre bearing the supporting plate underlying said centre bearing and the recessed bearings on said supporting plate having flat bearing surfaces on which the depending portions of the swing links or yokes seat, substantially as described. 5th. The combination with the truck bolster or centre bearing support and the swing links or yokes journalled therein and having the flattened depending portions, of the centre bearing, the supporting plate underlying the centre bearing and the inverted channel irons on said supporting plate, in which channel irons the flattened portions of the swing links or yokes seat, substantially as described.

No. 60,365. Street Car. (*Char de rue.*)

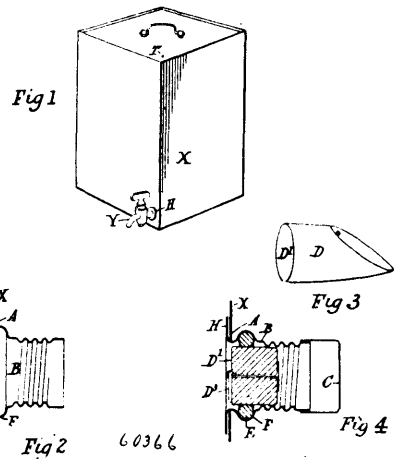
Adelard Amiotte and Charles Ross, both of Montreal, Que., Canada, 18th June, 1898; 6 years. (Filed 3rd June, 1898.)

Claim. 1st. In a street car, the combination with a car body having securing devices affixed thereto, of a car truck removably connected to said securing devices, substantially as described. 2nd. In a car truck, the combination of car supporting bars, axle supporting beams yieldingly connected to said car supporting bars, journal boxes yieldingly mounted in said axle supporting beam, and wheeled axles mounted in said journal boxes, substantially as described.



3rd. In a car truck, the combination of car supporting bars, axle supporting beams yieldingly connected to said car supporting bars, journal boxes yieldingly mounted in said axle supporting beams, spring buffers mounted on said axle supporting beams, and normally held out of contact with said car supporting bars, and wheeled axles mounted in said journal boxes, substantially as described.

No. 60,366. Can. (*Bidon.*)



Gorham Lambert and James Stewart, both of Timarn, New Zealand, 18th June, 1898; 6 years. (Filed 28th May, 1898.)

Claim.—1st. The combination with a can having an aperture therein, of a shell attached by a flange to the exterior of the can and serving as a nut or socket for a draw off cock, said shell projecting within the can, and having its inner end closed, said shell also having a corrugation or groove for an internal washer, substantially as and for the purposes set forth. 2nd. A shell or socket having the inner end closed, and the outer end flanged and secured to the exterior of a can round the edges of an aperture therein, said shell having between the said ends a corrugation or groove of less diameter than the said aperture, substantially as and for the purposes set forth. 3rd. The combination with a can of a shell or socket having a closed end and a flanged end, a corrugation between the ends, a washer comparatively held in said corrugation and adapted to closely fit a tap shank, and a plug having its face not projecting outwardly beyond the can surface, substantially as described. 4th. The combination with a can having an aperture, of an internally projecting socket closed at the inner end, a plug having a cutter, and a wad to keep said cutter out of contact with said closed end, substantially as described. 5th. In combination with a can, a tap socket having an inner closed end of easily pierced metal, said socket being so elongated that a suitable tap may be engaged with the socket and the fluid within the can put in communication with said tap by simply perforating the rear of said socket, substantially as described.

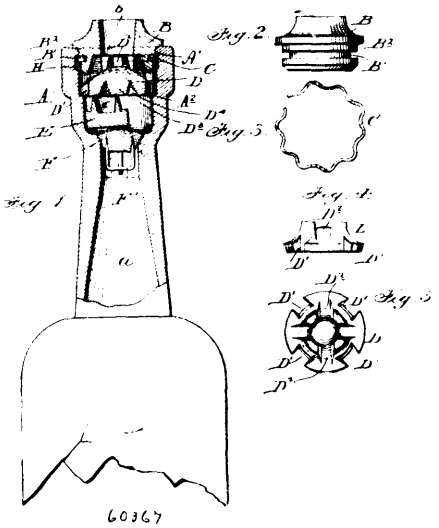
No. 60,367. Non-refillable Bottle.

(*Bouteille non-réemplissable.*)

Lyman Wheeler Merrimam and George Oliver Allen, both of Fitchburg, Massachusetts, and John Sherman Bordner, Alexandria, Virginia, U.S.A., 18th June, 1898; 6 years. (Filed 25th May, 1898.)

Claim.—1st. In a non-refillable bottle, the combination with the bottle neck having a bore of a given diameter, the locking stopper inserted in the mouth end of the bottle neck and provided with an opening of a given size, the circular area of said opening in the locking stopper being to the valve seat in the bore of the neck substantially as two to three, a channelled block situated within the bottle mouth below the locking stopper and having an outlet whose area is substantially equal to that of the outlet in the locking stopper but variable within certain narrow limits, a valve operative in connection with the valve seat, and a movable weight between the valve

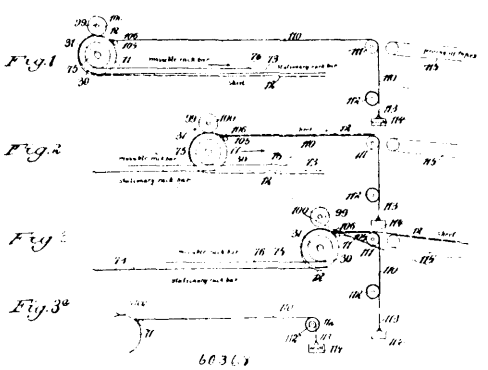
and the channelled block, said weight being from two to three times as heavy as the valve, substantially as described. 2nd. In a non-



refillable bottle, the combination with the bottle neck having in the bore thereof a valve seat, a locking stopper inserted non-removably in the mouth end of the bottle and provided with a central outlet opening having a ratio to the valve seat as two to three or thereabouts, a channelled block in the bottle mouth below the bottle stopper and having an outlet which is sub-divided into several openings the sum total of which presents an area substantially equal to that of the opening in the locking stopper but adapted to be varied if desired within certain narrow limits, a valve on the valve seat, and a weight between the valve and the channelled block, said weight being from two to three times as heavy as the valve, substantially as described.

No. 60,368. Feeder for Printing Presses.

(*Alimentateur pour presses à imprimer.*)



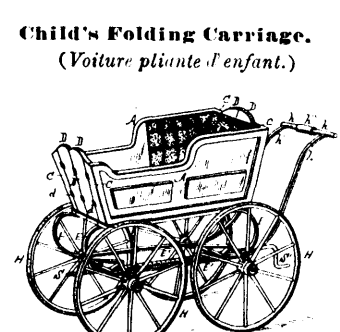
Robert Montgomery Donaldson, Greenwich, Connecticut, assignee of Charles D. Mattison, Hasbrook Heights, New Jersey, both in the U. S. A., 18th June, 1898; 6 years. (Filed 10th March, 1898.)

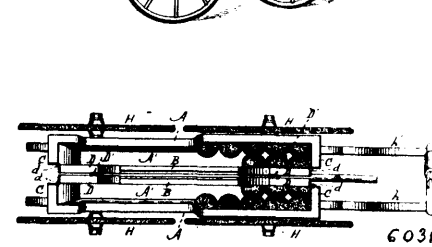
Claim.—1st. In a sheet-feeding machine, the combination with a supporting platform for a pile of sheets, of two travelling feed rolls or rollers rotating in peripheral contact, one of said rolls having means for engaging a sheet at or near one edge and adapted to separate and feed the edge of the sheets into the bite of the two feed rolls or rollers and then release the edges of the sheets to allow the sheets to pass freely from the rolls, whereby the sheets are rolled or stripped from the pile, substantially as set forth. 2nd. In a sheet-feeding machine, the combination with a pile supporting platform, of a travelling rotating separator roll adapted to move from end to end of the platform and having means for engaging a sheet, a co-operating feed roll working in peripheral contact with the separator feed roll, means for reciprocating and rotating the separator feed roll, and means for disengaging the sheet from the separator feed roll at the proper time, whereby a sheet can be separated from the pile at one edge and feed between the separator roll and co-operating feed-roller and be thereby rolled or stripped from the pile and delivered therefrom at the opposite edge of the pile, substantially as set forth. 3rd. In a sheet-feeding machine, the combination, with a platform for supporting a pile of sheets, of a ravelling rotatable separator feed roll having means for engaging a sheet and adapted to roll or strip the sheet from one edge of the pile toward the opposite edge, the co-operating feed roller or rollers travelling with the separator feed roll and in peripheral contact with it, means for disengaging the edge of the sheet from the separator feed roll when the sheet is engaged by the co-operating feed roller or rollers, and means for supporting the sheet as it passes away from the feed rolls, as set forth. 4th. In a sheet-feeding machine, the combination, with a supporting platform for a pile of sheets, of a travelling rotatable feed roll having means for engaging a sheet at or near one edge and adapted to rotate with the sheet and travel toward the opposite edge of the pile, thereby rolling or stripping the sheet from the pile without sliding it on the pile, of a travelling sheet support travelling with the feed roll and arranged to receive the sheets and support them as they pass from said feed roll, and travelling conveyor tapes or belts moving at approximately the same speed as the sheet support and receiving the sheets therefrom, substantially as set forth. 5th. In a sheet-feeding machine, the combination, with the sheet supporting platform, the travelling carriage, the separator feed roll rotatably journalled in said carriage and having means for engaging a sheet at or near its edge, a sheet support extending from and travelling with the carriage adapted to receive the sheet from the feed roll, and conveyor tapes or belts adapted to receive the sheets from said support and feed them off from the machine, as set forth. 6th. In a sheet-feeding machine, the combination with a platform for supporting a pile of sheets, a travelling carriage, a separator feed roll rotatively journalled in the carriage and having means for engaging a sheet at or near one edge, a rod or bar supported upon the carriage adjacent to the feed roll, a sheet stripping plate or flange extending from the rod or bar and supported closely to the periphery of the feed roll, and suitable sheet supports extending from the rod or bar on to which the sheet is fed from the feed roll, as set forth. 7th. In a sheet-feeding machine, the combination with a supporting platform for a pile of sheets, a travelling sheet feeding carriage carrying suitable feeding devices, cords or tapes attached to and extending from the carriage toward the point of deposit of the sheets in position to support the sheets fed from the pile, and means for holding the cords or tapes taut without interfering with the movement of the carriage, as set forth. 8th. In a sheet-feeding machine, the combination with a platform for supporting a pile of sheets, a travelling carriage, a feed roll rotatably mounted in the carriage and adapted to engage a sheet and roll or strip it from the pile, cords or tapes attached to and extending from the travelling carriage toward the point of deposit of the sheets in position to support the sheet as it passes from the feed roll, and means for holding the cords or tapes taut without interfering with the movement of the carriage as set forth. 9th. In a sheet-feeding machine, the combination with a platform for supporting a pile of sheets, of a travelling feeder carriage carrying suitable feeding devices, a stationary guide, cords or tapes attached to the carriage and extending over or around said guide, and means for holding the cord or tapes yieldingly taut, substantially as set forth. 10th. In a sheet-feeding machine, the combination with a platform for supporting a pile of sheets, of a travelling feeder carriage carrying sheet-feeding devices, a stationary guide roll, cords or tapes attached to the carriage and extending over the guide roll, a winding roll or drum around which the end of said cords or tapes are wound, and a cord and weight for keeping the slack of said cords or tapes wound upon the roll or drum, substantially as set forth. 11th. In a sheet-feeding machine, the combination with a supporting platform for a pile of sheets, of a travelling rotating suction feed roll, means for exhausting the air from the feed roll, means for breaking the suction of the suction roll, and the co-operating feed roller or rollers travelling with the suction feed roller and in peripheral contact with it, whereby the sheets can be separated from the pile at one edge and rolled or stripped therefrom toward the opposite edge and fed from the pile between the suction roll and co-operating feed roller or rollers, as set forth. 12th. In a sheet-feeding machine, the combination with a supporting platform for a pile of sheets, of a travelling rotatable suction feed roll having suction openings, the co-operating feed roller or rollers travelling in peripheral contact with the suction roll, the suction roll being adapted to separate one edge of the sheets from the pile and feed the same to the co-operating feed roll, means for periodically exhausting air from the suction roll, and means for supporting the sheets when they leave the feed rolls, as set forth. 13th. In a sheet-feeding machine, the combination with a supporting platform for a pile of sheets, of a travelling rotatable suction feed roll having suction openings, the co-operating feed roller or rollers travelling in peripheral contact with the suction roll, the suction roll being adapted to separate one edge of the sheets from the pile and feed the same to the co-operating feed roll, means for periodically exhausting air from the suction roll, means for supporting the sheets when they leave the feed rolls, and means for periodically moving the co-operating feed roll out of peripheral engagement with the suction feed roll, as set forth. 14th. In a sheet feeding machine, the combination with the sheet supporting platform, of a travelling feeder carriage, a main feed roll journalled in the carriage and having means for engaging a sheet, the co-operating auxiliary feed roll or roller normally in peripheral engagement with the main feed roll, the rock arms journalled upon the carriage and supporting a shaft or axle upon which said auxiliary feed roll or roller is journalled, and an arm or dog stationary with relation to the carriage adapted to rock the rock-arms on their journals for moving the auxiliary feed roll or roller out of engage-

ment with the main feed roll, as set forth. 15th. In a sheet-feeding machine, the combination with a pile supporting platform, of a travelling rotatable pneumatic feed roll formed with a longitudinally extending suction compartment having paper gripping suction openings, a port or passage communicating between said compartment and the interior of the roll, a port or passage at the end of the suction compartment communicating with the exterior atmosphere, valves controlling said ports or passages, and a valve actuating device suitably connected with both valves for operating them, as set forth. 16th. In a sheet-feeding machine, the combination with a supporting platform for a pile of sheets, of a pneumatic feed roll formed with a suction compartment having paper gripping suction openings, a port or passage communicating between the suction compartment and the interior of the roll, a pivoted flap valve closing said port or passage, a rock-arm engaging the valve for closing and holding it closed, and means for automatically operating the rock arm, as set forth. 17th. In a sheet-feeding machine, the combination with a supporting platform for a pile of sheets, of a pneumatic feed roll formed with a suction compartment having paper gripping suction openings, a port or passage communicating between the suction compartment and the interior of the roll, a flap or plate valve pivoted to one side of said port or passage in position to close it, a rock arm pivoted above the port or passage opposite to the pivoted side of the valve, said rock-arm engaging the top of the valve, and means for automatically operating the rock-arm, as set forth. 18th. In a sheet-feeding machine, the combination with a platform for a pile of sheets, of a pneumatic feed roll having a suction chamber and paper gripping suction openings, a port or passage communicating between said chamber and the exterior atmosphere, a rotary valve controlling said port or passage, a rock-shaft, a lock-arm keyed to said shaft and engaging said valve, a trip rock-arm also keyed to said shaft, and a tripping dog adapted to engage said trip rock-arm, as set forth. 19th. In a sheet-feeding machine, the combination with a platform for a pile of sheets, of a prismatic feed roll having a suction chamber and paper gripping suction openings, a port or passage communicating between said chamber and the exterior atmosphere, a rotary valve controlling said port or passage, a pin or lug upon said valve, a rock-arm having a bifurcated or forked end adapted to engage said pin, and means for operating the rock-arm for opening and closing the valve. 20th. In a sheet-feeding machine, the combination with a platform for a pile of sheets, of a pneumatic feed roll having a suction chamber and paper gripping suction openings, a port or passage communicating between said chamber and the exterior atmosphere, a rotary valve controlling said port or passage, a pin or lug on said valve, a rock-shaft journalled in the roll, a rock-arm on the rock-shaft having a bifurcated or forked end, one of the arms of the bifurcated or forked end being longer than the other, a stop for limiting the movement of the rock-arm, and a trip-arm also on the rock-shaft, as set forth. 21st. In a sheet-feeding machine, the combination with a platform for a pile of sheets, of a pneumatic feed roll having a suction chamber and paper gripping suction openings, a port or passage communicating between said chamber and the exterior atmosphere, a valve controlling said port or passage, an air pipe extending from the pneumatic roll and communicating with air exhausting mechanism, a rock-shaft journalled in the roll, a trip arm keyed to the rock-shaft, a curved rock-arm also keyed to the rock-shaft and adapted to project around the air pipe and engage the valve, and a stop carried by said curved rock-arm adapted to engage the air pipe for limiting the movement of the rock-arm and controlled valve, as set forth. 22nd. In a sheet-feeding machine, the combination of a pile supporting platform, of a pneumatic feed roll formed with a suction chamber or compartment having paper gripping suction openings and communicating with the interior of the roll through a suitable port or passage, a port or passage communicating between the suction chamber and the exterior atmosphere, valves controlling communications between the suction chamber and interior of roll and the suction chamber and exterior atmosphere, a rock-shaft journalled in the roll, rock-arms upon the rock-shaft engaging said valves, and a trip-arm also on said rock-shaft, for operating the valves, simultaneously, as set forth. 23rd. In a sheet-feeding machine, the combination of a pile supporting platform, a pneumatic feed roll formed with a suction chamber or compartment having paper gripping suction openings, ports or passages communicating between the suction chamber and interior of the feed roll and the suction chamber and exterior atmosphere, valves controlling said ports or passages, valve operating mechanism and stationary dogs or stops adapted to actuate the valve operating mechanism for opening and closing the valves when the roll is brought into position by the movement of the roll, as set forth. 24th. In a sheet-feeding machine, the combination of a pile supporting platform, a frame having a track or guideway, an air exhausting mechanism in communication with a port or passage in the track frame, a travelling carriage mounted to run in the track or guideway and formed with a slide-valve block having a cavity in one face adapted to register with the port or passage in the track frame, and a pneumatic feed roll journalled in the carriage and having a hollow journal in communication with the cavity of the slide-valve block, as set forth. 25th. In a sheet-feeding machine, the combination of a pile supporting platform, a frame having a track or guideway extending the length of the platform, an air exhausting mechanism communicating with a port in the track or guideway, a carriage frame sliding in the guideway, and formed with an exhaust cavity in one face adapted to register with the exhaust port of the track, a pneumatic feed roll journalled in the carriage and having a hollow journal communicating with the exhaust cavity of the carriage, and means for simultaneously rotating the feed roll and moving the carriage, substantially as set forth. 26th. In a sheet-feeding machine, the combination of a pile supporting platform, a reciprocating rotatable feed roll provided with means for engaging sheets, a stationary rack-bar, a movable rack-bar, and gears carried by the roll and meshing with said rack-bars, whereby the roll is caused to rotate and travel over the pile of sheets, substantially as set forth. 27th. In a sheet-feeding machine, the combination with a pile supporting platform, a reciprocating pneumatic separating feeding roll, means for exhausting air from the roll, differential gears on the roll, a stationary rack-bar meshing with one of the gears, a movable rack-bar meshing with the other gear and means for operating the movable rack-bar, substantially as set forth. 28th. In a sheet-feeding machine, the combination of a pile supporting platform, a reciprocating rotatable feed roll journalled in the carriage and having means for engaging sheets, differential gears carried upon the roll, a stationary rack-bar meshing with the larger gear, and a reciprocating rack-bar meshing with the smaller gear, substantially as set forth. 29th. In a sheet-feeding machine, the combination of a pile supporting platform, a stationary rack-bar secured to a suitable frame, a travelling rotatable feed roll having means for engaging sheets, a gear on the roll meshing with said stationary rack-bar, a reciprocating rack-bar supported in a suitable guideway in the frame, a smaller gear on the feed roll meshing with said reciprocating rack-bar, and means for operating the reciprocating rack-bar, as set forth. 30th. In a sheet-feeding machine, the combination of a pile supporting platform, a feeder supporting frame, a traveling rotatable feed roll provided with differential gears, a stationary rack bar mounted on the feeder frame with which the larger of the differential gears of the feed roll is in mesh, and a reciprocating rack bar movably supported upon the feeder frame and meshing with the smaller of the differential gears and adapted to cause the feed roll to travel in the same direction with it at an increased speed, substantially as set forth. 31st. In a sheet-feeding machine, the combination of an adjustable pile supporting table, a table elevating mechanism including a ratchet and a pawl, a pawl operating device, a pawl controlling rod or bar suitably connected with the pawl and adapted to hold the pawl out of operative engagement with its operating device, a detent or dog on the controlling rod or bar, and an oscillating mechanical feeler comprising a rock shaft, a pile gaging arm on the rock-shaft and a regulating rock arm on the rock shaft having a dog or detent adapted to engage the dog or detent of the controlling rod, as set forth. 32nd. In a sheet-feeding machine, the combination of an adjustable pile supporting table, a table elevating mechanism including a ratchet and a pawl, a pawl operating device, a pawl controlling rod or bar suitably connected with the pawl and adapted to hold the pawl out of operative engagement with its operating device, a detent or dog on the controlling rod or bar, and an oscillating mechanical feeler comprising a rock shaft, a pile gaging arm, a detent or dog adapted to engage the detent of the controlling rod, and a journaled guide through which the controlling arm extends, as set forth.

No. 60,369. Child's Folding Carriage.

(*Voiture pliante d'enfant.*)





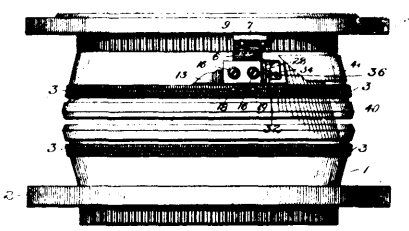
John Louis Crowley and Timothy Joseph Lehan, both of Boston, Massachusetts, U.S.A., 18th June, 1898; 6 years. (Filed 21st March, 1898.)

Claim.—1st. In a folding child's carriage, the body comprising the rigid sides A, the vertically divided ends each consisting of the two portions D, hinged together at D^1, and with their outer edges pivotally connected with the sides of the body in such a manner as

to allow the said portions D to swing and fold inward between said sides but not outward, the divided bottom consisting of the portions B, hinged together at B^1, and with their outer edges pivotally connected with the said sides in such a manner as to allow said portions to swing and fold downward but not upward, running gear provided with divided axles, a screw engaging the said axles and adapted to fold or contract the same, and means for mounting the body upon the axles at a sufficient height above the gear to allow space for the downward swinging and folding of the divided bottom and for drawing the sides of the body together as the axles are contracted, substantially as set forth. 2nd. In a folding child's carriage, a body adapted to be folded or compressed, the screw-threaded spindle S, in combination with the blocks P and P^1, and coacting with the same as specified, the divided or jointed axles K, and jointed actuating bars L, pivotally connected with said blocks P and P^1, respectively, and the springs E, E^1, intermediate of the axles and body, substantially as described. 3rd. In a folding child's carriage, the axles K, made of two pivotally connected members and provided with the pivot-pin blocks P, jointed actuating bars L, provided with the pivot-pin blocks P^1, and the screw-threaded spindle S, engaging with said blocks and operating as specified, substantially as and for the purpose set forth. 4th. In a folding child's carriage, a folding running gear consisting essentially of the combination of the side springs E, E^1, axle-supporting blocks sustained thereby, the jointed axles K pivotally connected to said blocks, the jointed actuating bars L, pivotally connected to said blocks, the screw-threaded spindle S, screw-threaded pivot blocks P, carrying said axles at their pivotal points, bored pivot blocks P^1, carrying said actuating bars at their pivotal points, and engaging pins T, or equivalent mechanical devices, substantially as described.

No. 60,370. Knitting Machine Cam.

(*Came de machine à coudre.*)



60370

Charles Cooper, assignee of William T. Barratt, both of Bennington, Vermont, U.S.A., 18th June, 1898; 6 years. (Filed 9th March, 1898.)

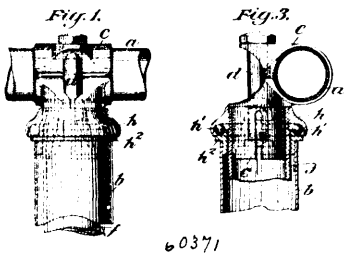
Claim.—1st. In a knitting machine, the combination with a supporting bracket having an arm formed with two grooves located adjacent to each other, and with an elongated opening between each of said grooves and the nearer vertical edge of the arm, of a draw-up cam divided upon a straight line into two independently adjustable parts, guide-pins projecting from said parts into the grooves, and two fastening bolts projecting into said elongated openings for holding said parts independently in adjusted position, substantially as and for the purpose set forth. 2nd. In a knitting machine, the combination with the cam, having an opening in its edge and a groove in its face, of a casting-off piece adjustably secured to said cam, and having a stem received by said groove and a laterally enlarged curved head received by said opening, substantantially as and for the purpose set forth. 3rd. In a knitting machine, the combination with the cam, and the casting-off piece adjustably secured thereto and operating to draw the stitches tight one at a time, of a plate adjustably secured to said cam and having a bent upper end extending over the edge thereof at a slight distance therefrom, and an inclined arm extending from said bent part of the plate above the casting-off piece, substantially as and for the purpose set forth. 4th. The herein described draw-up cam, comprising two independently adjustable parts, a casting-off piece adjustably secured upon one of said parts and operating to draw the stitches tight one at a time, and a needle-returning plate adjustably secured to said part of the cam and extending over the end thereof rearward of the casting-off piece, and having an arm projecting over said casting-off piece, substantially as and for the purpose set forth.

No. 60,371. Bicycle Handle Bar Clamp.

(*Emboîture pour poignée de barres de bicycles.*)

The Pope Manufacturing Company, assignee of James Samuel Copeland, all of Hartford, Connecticut, U.S.A., 18th June, 1898; 6 years. (Filed 17th May, 1898.)

Claim.—1st. The combination with a handle bar holder comprising a split ring to receive the handle bar and a shaft and a tube to which said holder is to be secured, of a bolt passing through the free end of said ring and into the shaft and a nut to engage the bolt adapted to be drawn by said bolt to press the shaft tightly against said tube and clamp the same in the tube, substantially as shown and described. 2nd. The combination with a handle bar holder com-

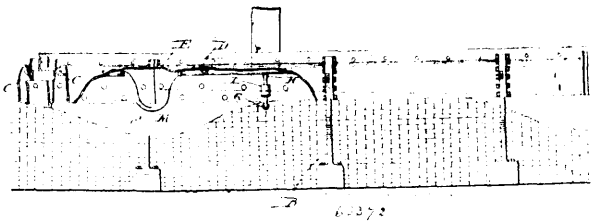


60371

prising a split ring to receive the handle bar and an expansible shaft and a tube to which said holder is to be secured, of a bolt passing through the free end of said ring and into the shaft and a nut to engage the bolt adapted to be drawn into the shaft to expand the same, substantially as shown and described. 3rd. The combination with a socket head supporting a part of the bearing of the steering head, and a fork tube having an expansible end and screw threaded to receive the adjustable part of the said bearing, of a bolt entering longitudinally within the end of the fork tube and a nut held from rotation and adapted to be moved by the bolt longitudinally within the tube to expand the same against the part of the bearing thereon and thereby to lock said part, substantially as shown and described.

No. 60,372. Electric Railway Conduit System.

(*Systeme de conduit pour chemins de fer électrique.*)

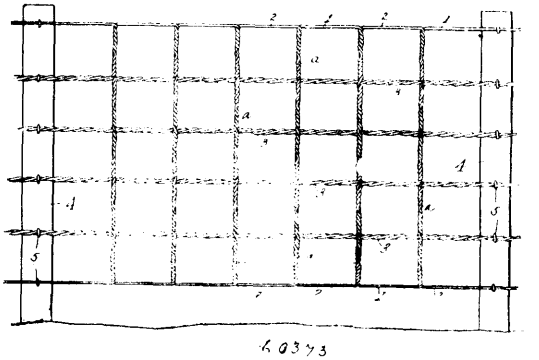


60372

Ralph Fowler Thompson and Edward Jeremiah Sullivan, both of Alexandria, Lousiana, U.S.A., 18th June, 1898; 6 years. (Filed 11th January, 1898.)

Claim.—1st. An electric railway conduit system, consisting of the conduit provided with the air and water tight chambers, one on each side of the trolley slot and secured to the yokes, said chambers being provided with the insulators D, trolley wires C, partitions E, E^1, and curved projections F, F^1, substantially as and for the purpose specified. 2nd. In an electric railway conduit system, the conduit provided with the air and water tight chambers, located one on each side of the trolley slot, and having insulators D, trolley wires C, partitions E, E^1, and curved projections F, F^1, in combination with the trolley arms having contact wheels H, H^1, friction rollers G, G^1, and insulators L, L^1, substantially as and for the purpose specified.

No. 60,373. Wire Fence. (*Clôture de fil de fer.*)



60373

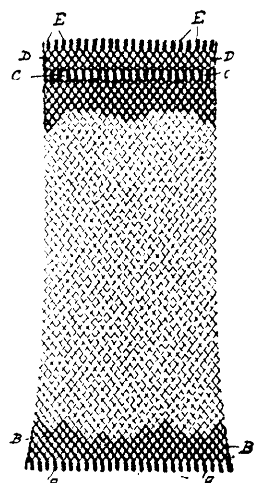
Thomas Sutherland and William W. Sivright, assignees of Maurice D. Pendergast, all of Hutchinson, Minnesota, U.S.A., 20th June, 1898; 6 years. (Filed 13th November, 1897.

Claim.—1st. A wire fence, composed of suitable filling line wires and a pair of main wires, reversely looped in opposite directions to form, in succession, the top and bottom strands of the fence and afford pairs of vertical strands embracing said filling wires, and

with said pairs of vertical strands twisted together between the filling wires embraced thereby to afford the vertical stays of the fence, substantially as described. 2nd. A wire fence, composed of filling line wires 3 of cable form and a pair of main wire, 1 and 2, reversely looped in opposite directions, to form in succession top and bottom strands of the fence and afford pairs of vertical strands embracing said filling wires, with said pairs of vertical strands twisted together reversely between the successive filling wires embraced thereby, substantially as and for the purpose set forth. 3rd. A wire fence, composed of suitable filling line wires, a pair of marginal or lock wires, and a pair of main wires reversely looped, in opposite directions, to form horizontal sections at the top and bottom of the fence, in succession, and vertical sections embracing said filling wires, with the horizontal sections of said loops, and the adjacent portions of said lock wires twisted together between said vertical sections, and said pair of vertical sections reversely twisted together between the successive filling wires embraced thereby, substantially as and for the purposes set forth. 4th. The wire fence composed of the filling wires 3 of cable form, the marginal or lock wires 6 and 7, and the main wires 1 and 2, with said main wires looped in opposite directions to afford horizontal sections at the top and bottom of the fence in succession, and vertical sections embracing said filling wires, and with said horizontal sections and the adjacent portions of said lock wires twisted together between said vertical sections, and said vertical sections twisted together in reverse order between the successive filling wires embraced thereby, substantially as and for the purposes set forth.

No. 60,374. Foundation for Incandescent Mantles.

(*Base pour pellicules incandescentes.*)



60374

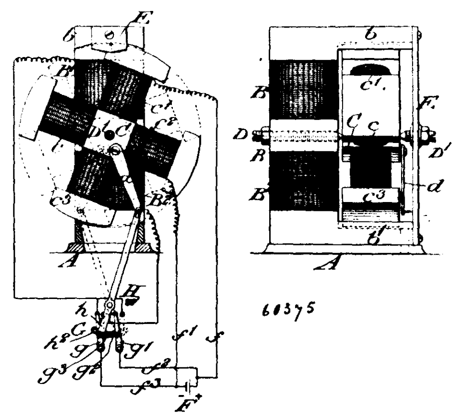
Henry Hill, Nottingham, England, 20th June, 1898; 6 years. (Filed 4th March, 1897.)

Claim.—1st. A thread foundation for an incandescent mantle formed of warp lace fabric without a seam and of parallel or conoidal form with pillarings A and E, at its ends, substantially as described. 2nd. A thread foundation for an incandescent mantle, formed of warp lace fabric without a seam, and of parallel or conoidal form with pillarings A and E, at its ends and with holes C, for the reception of the draw or suspensory threads, substantially as described.

No. 60,375. Electric Motor. (*Moteur électrique.*)

James Henry Mason, Brooklyn, New York, U.S.A., 20th June, 1898; 6 years. (Filed 26th February, 1898.)

Claim.—1st. A direct acting oscillating electric motor comprising field magnets, means for energizing them, an armature mounted to rock back and forth past the poles of the field magnets and means under the control of the rocking armature for changing the polarity of the field magnets, substantially as set forth. 2nd. A direct acting oscillating electric motor comprising field magnets arranged symetrically with respect to the axis of the armature, means for energizing the field magnets, an armature mounted on said axis to rock back and forth past the poles of the field magnets and means under the control of the rocking armature for changing the polarity of the field magnets, substantially as set forth. 3rd. A direct acting oscillating electric motor comprising field magnets arranged symetrically with respect to the axis of the armature, means for energizing the field magnets, a rocking armature mounted on said axis and provided with coils, means for maintaining a constant electric current through the coils of the armature and means under the control of the armature for changing the polarity of the field magnets, substantially as set forth. 4th. A direct acting oscillating electric motor comprising field magnets having forwardly extended arms projecting at right angles to the axis of their coils, means for energizing the said field magnets, an armature comprising a plurality of radially extending arm mounted to rock back and forth between the projecting arms of

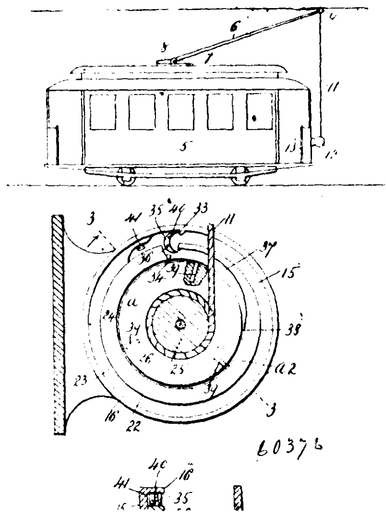


60375

the field magnets, said arms being provided with coils, means for maintaining a constant current through the coils of the armature and means for changing the polarity of the field magnets, substantially as set forth.

No. 60,376. Electric Railway Car.

(*Char de rue électrique.*)

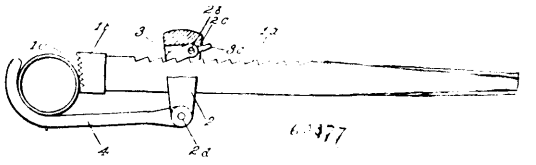


60376

Jeremiah Dulhagan Hull, New York City, U.S.A., 20th June 1898; 6 years. (Filed 19th February, 1898.)

Claim.—1st. The herein described attachment for controlling and manipulating the pole of a trolley car which consists of a support, provided with a circular head, and adapted to be secured to either end of the car, a shaft passing centrally through said head, a revoluble disc mounted on said shaft adjacent to said head, a spool mounted on said shaft adjacent to said disc, a spring mounted at each side of said disc, one end of one of said springs being secured to said spool, and the other to said disc, and one end of the other spring being secured to said disc and the other to said head and a locking device for locking the disc to the head so as to prevent the revolution thereof, said devices connected with the spool for releasing said locking devices and operatively engaging said disc, substantially as shown and described. 2nd. The herein described attachment for controlling and manipulating the pole of a trolley car, which consists of a support, provided with a circular head, and adapted to be secured to either end of the car, a shaft passing centrally through said head, a revoluble disc mounted on said shaft, adjacent to said head, a spool mounted on said shaft adjacent to said disc, a spring mounted at each side of said disc, one end of one of said springs being secured to said spool, and the other to said disc, and one end of the other spring being secured to said disc, and the other to said head, a locking device for locking the discs to the head, so as to prevent the revolution thereof, and devices connected with the spool for releasing said locking devices and operatively engaging said disc, and said disc and said spool being adapted to revolve in the same direction, substantially as shown and described.

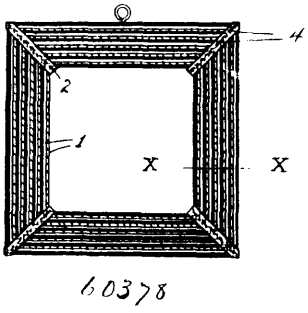
No. 60,377. Wrench. (*Clé à écrou.*)



John E. England and Charlie J. Bousfield, both of Bay City, Michigan, U.S.A., 20th June, 1898; 6 years. (Filed 2nd April, 1898.)

Claim.—1st. In a pipe wrench, the combination with a bar having teeth on one edge, of a link having a transverse opening to receive said bar and provided inside one end of said opening with teeth adapted to engage the teeth of the bar, and a hook pivoted to the lower end of said link, for the purpose described. 2nd. In a pipe wrench, the combination with a bar having teeth on the upper side thereof and an enlarged head, of a link having a transverse opening to receive said bar and provided at the upper side of said opening with a movable catch having teeth adapted to engage the teeth of the bar, and a hook pivoted to the lower end of said link, substantially as described and for the purpose set forth. 3rd. In a pipe wrench, the combination with a bar having teeth on the upper edge thereof and an enlarged head, of a link having a transverse opening to receive said bar and provided at the upper side of said opening with a movable catch pivoted to the link, and having teeth adapted to engage the teeth of the bar, and a hook pivoted to the lower end of said link, substantially as described and for the purpose set forth. 4th. In combination with a pipe wrench having a toothed bar and an adjustable link, a movable locking catch pivoted within the link, said catch having teeth adapted to engage the teeth of the bar, substantially as described. 5th. In a pipe wrench of the kind described, the combination of a link having a solid thrust resisting portion, of a locking catch pivoted within the link above the toothed bar, said catch having teeth on its lower edge, a pivot hole larger than the pivot to allow the catch to thrust against the thrust resisting portion of the link, and a projection integral with the catch and extending beyond the edge of the link, by which the catch may be raised, substantially as and for the purpose described. 6th. In a pipe wrench, the combination of a toothed bar having an enlarged end, a link slotted to receive said bar and provided with a thrust resisting portion, a catch loosely pivoted inside said slot, and having teeth adapted to engage the teeth of the bar, and a hook pivoted to the lower end of said link, substantially as and for the purpose described.

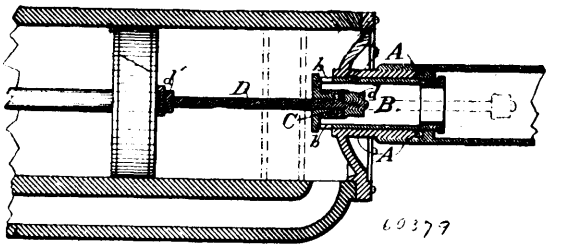
No. 60,378. Picture Frame. (*Cadre d'images.*)



Peter Emmenegger, Fairmont, West Virginia, U.S.A., 20th June, 1898; 6 years. (Filed 2nd April, 1898.)

Claim.—1st. A picture-frame comprising a frame 3, a plurality of glass rods arranged thereon in separate series along each arm of the frame, forming the face of the frame, and bands connecting the adjoining ends of the rods at the corners of the frame, and each having a rib secured to its inside and fastened in the frame 3, substantially as described. 2nd. A picture-frame comprising a frame 3, a plurality of glass rods arranged thereon in separate parallel series along each arm of the frame, forming the face of the frame, and bands connecting the adjoining ends of the rods at the corners of the frame, and each having a rib secured to its inside and fastened in the frame 3, substantially as described. 3rd. A picture-frame comprising a frame 3, a plurality of glass rods arranged thereon in separate series forming the face of the frame, bands overlapping the ends of the rods, cement interposed between said ends and under said bands, and a rib secured to the inside of each of said bands, and seated in the cement, substantially as described. 4th. A picture frame comprising a frame 3, a plurality of glass rods arranged thereon in separate parallel series, forming the face of the frame, bands overlapping the ends of the rods, cement interposed between said ends and under said bands, and a rib secured to the inside of each of said bands, and seated in cement, substantially as described.

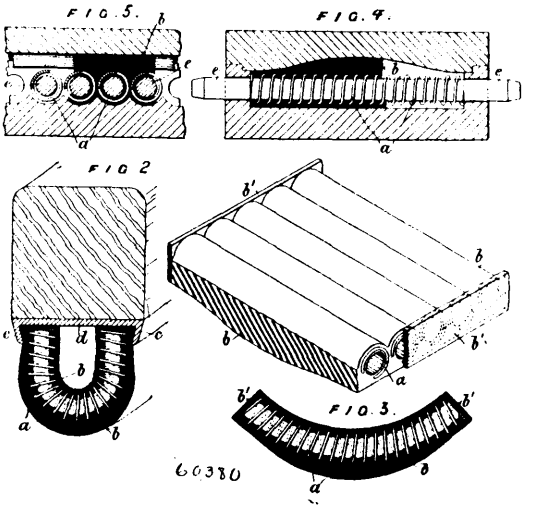
No. 60,379. Valve. (*Soupape.*)



Richard D. Watson, Toledo, Ohio, U.S.A., 20th June, 1898; 6 years. (Filed 21st April, 1898.)

Claim.—The combination in an engine or pump having a cylinder, or shell, and head having a seat and stuffing-box therein containing a valve B, having a stuffing-box through which operates a sliding rod D, having means at both its ends for adjustment to operate in combination with the piston, or plunger, substantially as set forth.

No. 60,380. Elastic Tire. (*Bandage élastique.*)



William Frederick Williams, 32 Shaftesbury Avenue, London, England, 20th June, 1898; 6 years. (Filed 22nd April, 1898.)

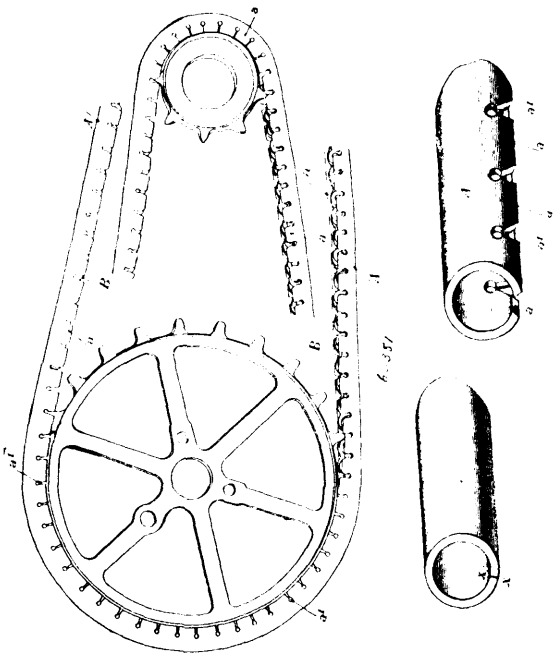
Claim.—1st. The herein described elastic tire for wheels, consisting of a band of rubber or rubber and canvas or other suitable material, having juxtaposed, transversely-extending, spiral springs embedded therein, the band being transversely arched to a U-form when applied to the wheel rim, and being retained thereon by being sprung into engagement therewith, substantially as specified. 2nd. The herein described elastic tire for wheels, consisting of a band of rubber or rubber and canvas or other suitable material, having juxtaposed, transversely-extending, spiral springs embedded therein, the band being provided with lateral extensions of rubber, or rubber-coated canvas or other suitable material, stiffened by non-coiled prolongations of the springs extending to the edges of the said extensions, the band being transversely arched when applied to the wheel rim, and being retained thereon by the engagement of the said lateral extensions therewith, substantially as specified.

No. 60,381. Chain Cover for Bicycles, etc.
(*Couverture pour chaines de bicycles, etc.*)

Walter Edouard Felix Marshal, 11 Avenue Daumesnil, St. Maude, Seine, France, 20th June, 1898; 6 years. (Filed 19th February, 1898.)

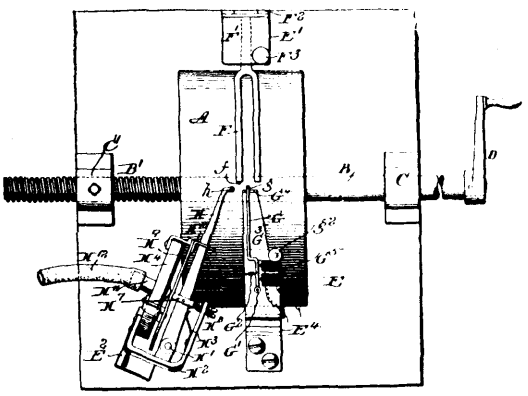
Claim.—1st. A chain-cover, formed from a complete tube of elastic material, which is subsequently slit along its length, substantially

as and for the purpose described. 2nd. A chain-cover, formed from a complete tube of elastic material, which is subsequently slit along



its length and furnished with suitable slots on the edges of the slit, as described and illustrated.

No. 60,382. Mechanism for Locating Obstructions in Tubes. (*Mécanisme pour établir les obstructions dans les tubes.*)

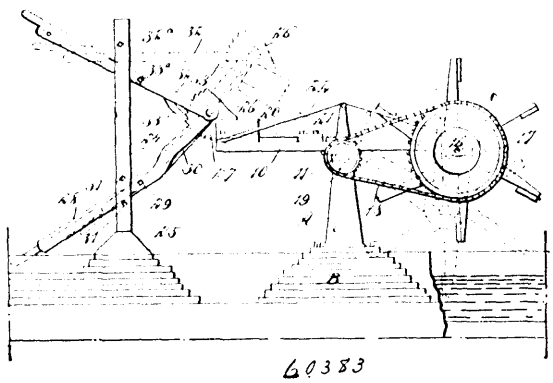


60382

Birney Clark Batcheller, Philadelphia, Pennsylvania, U.S.A., 20th June, 1898; 6 years. (Filed 19th April, 1898.)

Claim.—1st. The method of locating obstructions in tubes, which consists in connecting the tube to be tested with an apparatus for recording time intervals and sound waves created in the tube, making a loud noise, as by an explosion, in the part of the tube to which the recording apparatus is attached, partly closing the connection from the tube to the recording apparatus prior to the making of said loud noise therein so as to avoid an undue strain on the recording apparatus, and immediately opening said connection after the sound impulses is created in the tube so as to afford a free passage to the recording apparatus for the sound impulse reflected from the obstruction in the tube. 2nd. In an apparatus for locating obstructions in tubes, the combination with an apparatus for visually recording time intervals, of means for co-ordinately recording sound waves, said means being connected with the tube to be tested, as described, and so that sound waves created in said tube will be visually recorded, and means for wholly or partially interrupting the transmission of the sound waves from the tube to the sound recording device. 3rd. In an apparatus for locating obstructions in tubes, consisting of a device for visually recording time intervals, and means for co-ordinately recording sound impulses created in the tube to be tested, the combination of a tubular connection leading from the tube to be tested, a diaphragm open to sound impulses coming through said connection, a stylus actuated by said diaphragm to record the sound impulses, and means for varying the opening through the tubular connection to the diaphragm. 4th. In an apparatus for locating obstructions in tubes, consisting of a device for visually recording time intervals, and means for co-ordinately recording sound impulses created in the tube to be tested, the combination of a tubular connection leading from the tube to be tested, a diaphragm open to sound impulses coming through said connection, a stylus actuated by said diaphragm to record the sound impulses, and a guard plate situated in front of the diaphragm arranged to check its outward movement beyond a point of safety.

No. 60,383. Water Wheel. (*Roue d'eau.*)



60383

David Morgan, Axial, Colorado, U.S.A., 20th June, 1898; 6. (*Filed 20th April, 1898.*)

Claim.—1st. The combination, with a pivoted frame, a water wheel carried at one end of the said frame and a rack at the opposite end of the frame, of levers pivoted upon the said rack, one lever being provided with a dog and the other lever with a pawl, both the dog and pawl being arranged for engagement with the rack, the pawl and attached lever being adapted to hold the frame in its adjusted position and the dog and its attached lever being adapted for raising the wheel and to assist in lowering the same, as described. 2nd. The combination, with a pivoted frame, a water wheel located near one end of the said frame and a rack of segmental character at the opposite end of the said frame, of uprights, and a lever having guided movement between the said uprights and provided with a pawl for engagement with the rack, and a second lever pivoted likewise to said rack, and provided with a dog arranged for engagement with said rack, one lever and its dog being adapted to raise the said wheel and assist in lowering it, the other lever and its pawl being arranged, to hold the wheel in its adjusted position, and means, substantially as described for limiting the movement of the lever carrying the dog in one direction, as and for the purpose specified. 3rd. The combination, with a pivoted frame, a water wheel located at one end of the said frame, the opposite end of said frame being weighted to partially counterbalance said wheel, of a rack secured to the weighted portion of the frame, the said rack being of a segmental form and provided with teeth upon its segmental surface, standards, guide-pins passed through the said standards, a lever passed between the said guide-pins and fulcrumed upon the said rack, a pawl pivoted in the said lever, arranged for engagement with the teeth of the rack, and a second lever likewise pivoted to the said rack, provided with a dog arranged also for engagement with the teeth of the rack, for the purpose specified. 4th. The combination, with a pivoted frame provided with a water wheel at one of its ends, and a weight at its opposite end which partially counterbalances the wheel, of a rack attached to the weighted end of the frame, levers connected with the said rack, one lever being provided with a dog for engagement with the said rack, the other lever having a pawl likewise adapted for engagement with the rack, as and for the purpose specified. 5th. The combination, with a pivoted frame provided with a water wheel at one of its ends and a weight at the opposite end which partially counterbalances the wheel, of a rack attached to the weighted end of the frame, two levers pivotally attached to the said rack, one lever above the other, the upper lever being provided with a dog for engagement with the teeth of the rack, the lower lever carrying a pawl likewise adapted for engagement with the teeth of the rack, a support upon which the lower lever slides, and means substantially as described, for limiting the upper movement of the upper lever, as set forth.

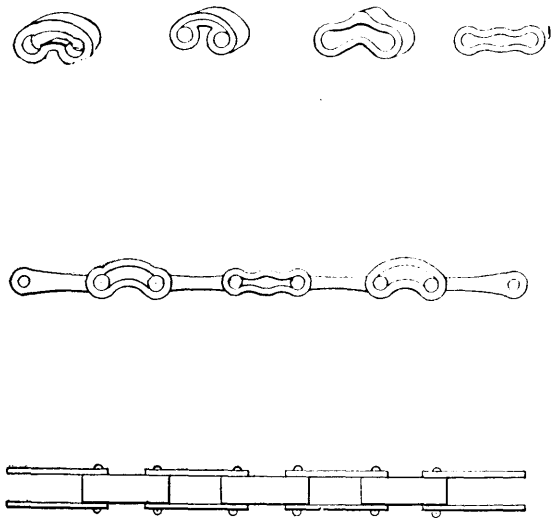
No. 60,384. Power Transmitting Chain.

(*Chaine pour la transmission du pouvoir.*)

Peter Maurice Staunton, Dalmeny Houth, Dublin, Ireland, 20th June, 1898; 6 years. (Filed 23rd April, 1898.)

Claim.—1st. A chain consisting of links and blocks, a plurality of said blocks being elastic, substantially as described. 2nd. A chain consisting of links and blocks, a portion of said blocks being elastic substantially as described. 3rd. a chain consisting of links and blocks a portion of said blocks having end pivot openings and intermediate double arches, substantially as described. 4th. A block

for a driving chain comprising end pivot openings, a centrally arched bottom piece and upwardly arched top piece, substantially as described.

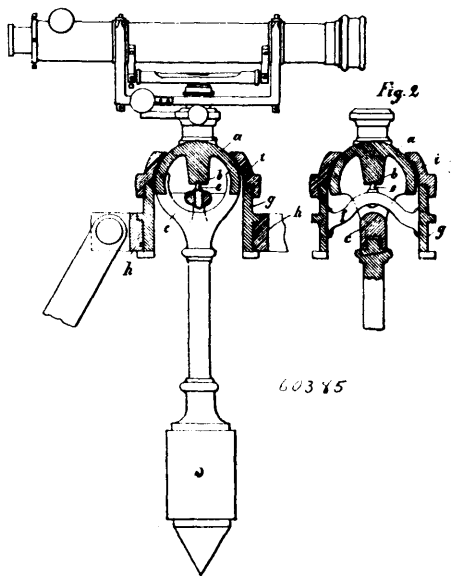


60384

5th. A block for a driving cham comprising end pivot openings suitable for the reception of cylinders and shaped substantially as described and illustrated in fig. 3. 6th. The general arrangement and combination of the parts comprising my improvements in driving chains, substantially as described.

No. 60,385. Levelling Instrument.

(*Instrument pour niveler.*)



Martin Leithoff and Adolph Hein, both of Hagen, Westphalia, Prussia, 20th June, 1898; 6 years. (Filed 15th January, 1898.)

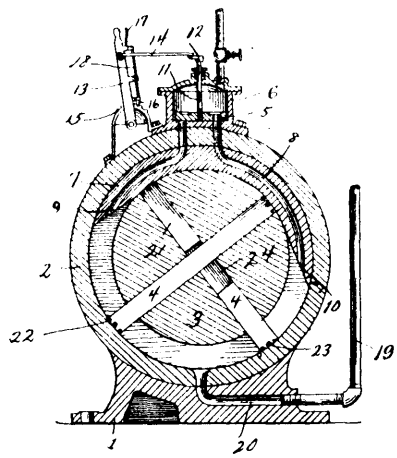
Claim.—A surveyor's instrument comprising a telescope, a pendulum attached thereto and having its axis perpendicular to the axis of the telescope, a support carrying a pivot on which the telescope and pendulum are supported, a spherical bearing member attached to the telescope, and a spherical ring surrounding said spherical bearing member and adjustably fastened to said support, so as to clamp the parts together.

No. 60,386. Rotary Steam Engine.

(*Machine à vapeur rotatoire.*)

Benjamin F. Murphy, Burlington, Missouri, U.S.A., 20th June, 1898; 6 years. (Filed 21st April, 1898.)

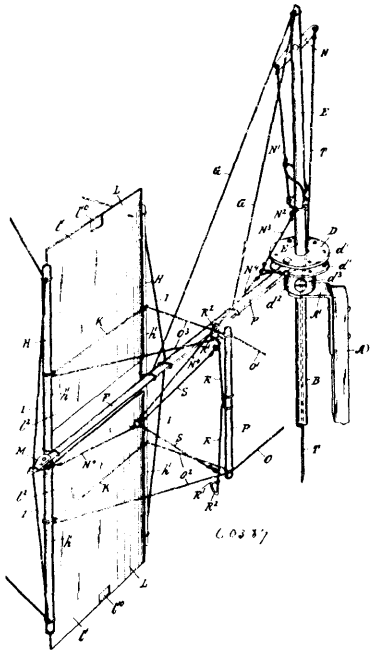
Claim.—The combination with a casing provided with an abutment extending along a portion of its interior and having inclined ends and oppositely-extending steam-passages leading from the steam-chest to the ends of said abutment, of a rotary piston mounted in said casing, sliding wings extending diametrically through said piston so as as to be alternately projected upon opposite sides of the



60386

same by engagement with the ends of said enlargement, a pair of antifriction-rollers mounted in each end of each wing, one at each corner thereof, a packing-strip set into the extremity of each wing between each pair of rollers, an exhaust-pipe opening into the lower portion of said casing, and a valve for throwing the steam to one or the other end of said enlargement for reversing the engine at will, substantially as described.

No. 60,387. Windmill. (*Moulin à vent.*)



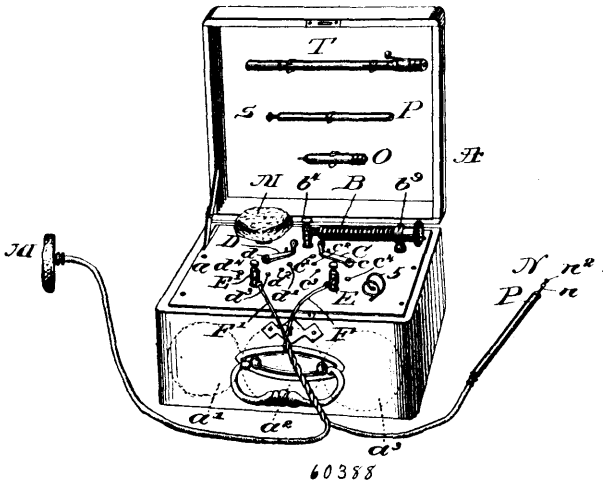
James N. Bruce, London, Ontario, Canada, 20th June, 1898; 6 years. (Filed 26th December, 1896.)

Claim.—1st. A shaft B, and means by which said shaft is supported and in which it revolves perfectly free, the hub D, horizontal arms F, F, frames H, pivotal wires K, and stop wires J, in combination with the sails L, pivoted off their centre, substantially as and for the purpose set forth. 2nd. A shaft B, and means by which said shaft is supported and in which it revolves perfectly free, the hub D, the horizontal arms F, F, the frames H, the pivotal wires K, and stop wires J, in combination with the sails L, pivoted off their centre, and the narrow sides of the sails weighed or formed heavier to form the wide sides of the sails, substantially as and for the purpose set forth. 3rd. A shaft B, and means by which said shaft is supported and in which it revolves perfectly free, the hub D, the horizontal arms F, F, weights M, the frames H, the pivota wires K, and the stop wires J, in combination with the sails L, pivoted off their centre, substantially as and for the purpose set forth. 4th. A shaft B, tower A, bracket A^1, bearing A^2, hub D,

standard E, horizontal arms F, F, frames H, stays or braces G, G¹, and I, the pivotal wires K, and the stop wires J, in combination with the sails L pivoted off their centre, substantially as and for the purpose set forth. 5th. The shaft B, the hub D, standard E, lever N, wire T, horizontal arms F, F, frames H, and sails L pivoted off their centre, in combination with the catches R and bar P, and means for supporting said bar P and for connecting the catches R with the lever N, substantially as and for the purpose set forth. 6th. The shaft B, the hub D, standard E, lever N, wire T, horizontal arms F, F, frames H, and sails L pivoted off their centre, in combination with the catches R and bar P, stay or brace wires O, O¹, O² and O³, and means for connecting the catches R with the lever N, substantially as and for the purpose set forth. 7th. The shaft B, the hub D, the standard E, lever N, wire T, horizontal arms F, F, frames H, and sails L pivoted off their centre, in combination with the catches R, the wires S, N¹, N³ and N⁴, and ring N², the bar P, and means for supporting the latter, substantially as and for the purpose set forth. 8th. The shaft B, the hub D, the standard E, lever N, wire T, horizontal arms F, F, frames H, and sails L pivoted off their centre and in which the pocket or opening 1¹⁰ is formed, in combination with catches R, provided with the shoulder R¹, and the bar P, and means for supporting the latter and for connecting the catches R with the lever N, substantially as and for the purpose set forth. 9th. The shaft B, the hub D, the standard E, lever N, wire T, horizontal arms F, F, frames H, and sails L pivoted off their centre, in combination with the catches R, wires S, S, N⁴, N³ and N¹, and ring N², the bar P, and the brace wires O, O¹, O², O³, substantially as and for the purpose set forth. 10th. The shaft B, tower A, bracket A¹, bearing A², hub D, standard E, lever N, wire T, horizontal arms F, F, frames H, braces G, G¹ and I, and the sails L pivoted off their centre, in combination with the bar P and the brace wires O, O¹, O², O³, the catches R, and the connecting wires S, S, N⁴, N³ and N¹, and ring N², substantially as and for the purpose set forth.

No. 60,388. Electrical Apparatus.

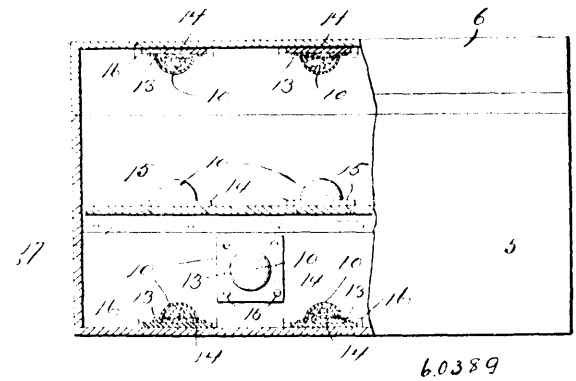
(*Appareil électrique.*)



Willard Elbridge Dow, Braintree, Massachusetts, U.S.A., 20th June, 1898; 6 years. (Filed 16th August, 1897.)

Claim.—1st. In a rheostat, a resistance coil or helix, a contact piece in constant electrical engagement with the convolutions thereof and means, acting upon rotation of said coil, to cause axial movement of the latter, substantially as described. 2nd. In a rheostat, a rotatable body or support, a helix of resistance wire mounted thereon, a contact piece in constant electrical engagement with one or more of the coils of said helix, and means engaging said body and acting upon rotation of the same to cause axial movement thereof, substantially as described. 3rd. In a rheostat, a rotatable cylindrical body of insulating material having a longitudinal bore, a resistance wire wound on said body in the form of a helix with separated coils, a contact piece in constant electrical engagement with said helix, a rod entering the bore of said cylinder, and means intermediate said rod and cylinder, acting upon rotation of the latter to cause axial movement thereof, substantially as described. 4th. In a rheostat, a rotatable tubular body of insulating material, provided with a peripherally mounted resistance helix, and threaded interiorly, a threaded member entering and in operative engagement with said tubular body, and electrically connected with one end of said helix, a clip or contact piece embracing said body and in electrical contact with said helix, means to rotate said body, a support for said threaded member, and a base upon which said clip and support may be fixed in adjusted relative position, substantially as described. 5th. An insulating handle of the class described, comprising an elongated support of insulating material provided at its ends with similar contact sockets electrically connected with one another and adapted to receive interchangeable any of a series of electrodes having similar contact pieces or shanks, substantially as described. 6th. A universal electrode support or handle composed of a plurality of co-axially arranged tubes, the outer of said tubes being formed of insulating material, and the inner of conductive material arranged to present open ends respectively adapted to receive any of a series of interchangeable electrodes, substantially as described. 7th. An electrode of the class described, comprising a contact shank adapted to enter a suitable contact socket and having a split portion or member adapted to receive a pellet of fibrous material or other suitable vehicle for an anaesthetic, substantially as described. 8th. An electrode of the class described, comprising a shank or contact piece, a bundle of wire secured thereto, and a ring or the like to regulate the degree of separation of the wires in said bundle, substantially as described. 9th. An electrode consisting of a contact piece or shank, adapted to enter and be supported by a suitable contact socket, said shank being provided with a head, or laterally extended member, substantially as described. 10th. An electrode, or cautery, of the class described, comprising an elongated tubular support of insulating material, a conductor arranged longitudinally within said support, a bipart sheath of conductive material mounted externally on the support, the members of the sheath being insulated from each other, a cautery loop between and electrically connecting said conductor and sheath at one end, means to connect the members of said sheath electrically at will, said electrode having its parts arranged at its end distant from the cautery loop to enter a suitable suitable contact socket, substantially as described. 11th. A magnet or magnetic electrode, comprising an elongated core of magnetizable material, an insulated helix of wire surrounding the same and a metallic sheath for said helix and core, said electrode presenting at one end a reduced continuation of the beyond core, and said helix sheath, and means to connect said helix in circuit with a suitable source of electricity, substantially as described. 12th. A electrode of the class described, comprising a nail-like core of magnetizable material, an exciting helix therefor and having one end of its wire connected thereto, a metallic protecting sheath for the intermediate portion of the core, and electrically connected to the other end of the helix wire, said core extending at its point beyond said sheath and helix, and arranged at its head to enter and engage with one contact member of a suitable contact socket, while the portion of the sheath adjacent the head of the core is adapted to engage with the other contact member of said socket, substantially as described. 13th. An electrode of the class described, comprising a shank or contact piece, a split portion or member adapted to receive a pellet of fibrous material or other suitable vehicle for an anaesthetic, and a bead or beads of insulating material to regulate the diameter of said split portion, substantially as described.

No. 60,389. Hat Box. (*Boîte à chapeaux.*)



Blanche Willis Emory, Casenovia, New York, U.S.A., 20th June, 1898; 6 years. (Filed 22nd September, 1897.)

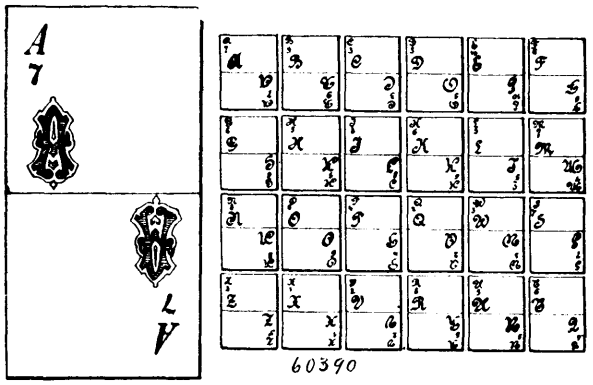
Claim.—1st. A hat-box or trunk, the inner walls of which are provided with cushions or holders for hats, said holders being constructed of a body portion, an outwardly extending flange integral with the lower end of the said body portion and provided with securing screws whereby the holders may be secured to the trunk, substantially as and for the purpose set forth. 2nd. A hat-box or trunk, the inner walls of which are provided with cushions or holders for hats, said cushions being circular or semi-spherical in form and composed of an outer covering of leather fabric or other flexible material provided with an inner packing, and the covering being also provided with an integral flange or rim by which it is secured in position to the inner walls of the trunk, and said cushions being adapted to receive the hats which are pinned thereto, substantially as and for the purpose set forth.

No. 60,390. Game. (*Jeu.*)

Conrad Büttgenbach, No. 2 Reinoldstrasse, Cologne, Germany, 20th June, 1898; 6 years. (Filed 28th December, 1897.)

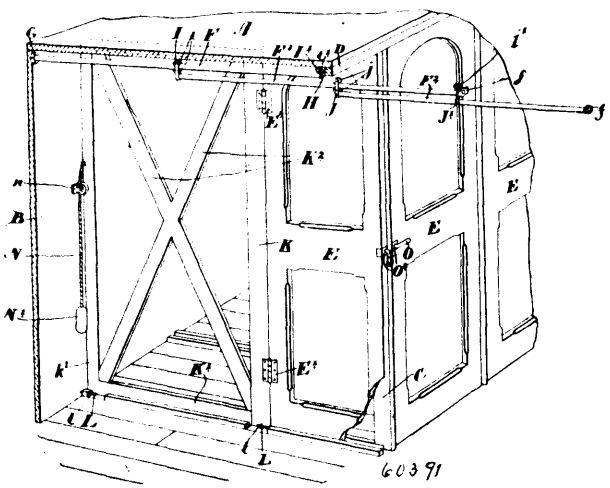
Claim.—Means for playing a game, consisting of cards or tablets, each of which bears a letter of the alphabet, such letter appearing

one or more times on the said card, the vowels being easily distinguished from the consonants by being of different design or different



colour, each letter has a point value expressed by a figure added thereto, so that the letters, and figures denoting their values, can be read in two directions, the two halves of the face being divided by a line or other device, constructed and arranged substantially as hereinbefore described.

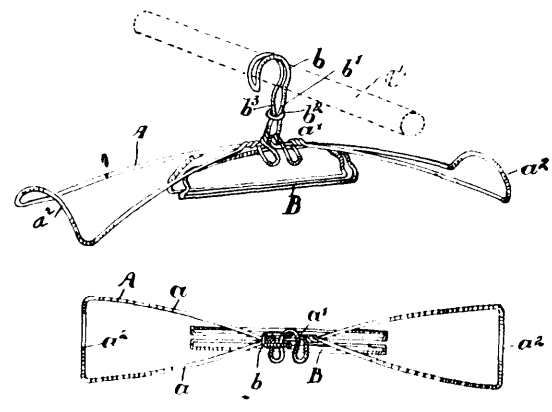
No. 60,391. Wardrobe. (*Garde-robe.*)



John Ernest Kennedy, Montreal, Quebec, Canada, 21st June, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. In a wardrobe, a garment support comprising the main bar having a suitable support at each end, and the supplemental bars, and carrier brackets connecting the supplemental bars to each other and supporting them upon the main tubular bar whereby the supplemental bars may be extended lengthwise from underneath the main bar, as and for the purpose specified. 2nd. In a wardrobe, a garment support comprising the main tubular bar, suitable end brackets supporting the same on the front and back of the wardrobe, a supplemental tube and suitable carriers for same, whereby it may be extended lengthwise and supported by the main tube, as and for the purpose specified. 3rd. In a wardrobe, a garment support comprising the top tubular bar, and brackets supporting the same on the front and back of the wardrobe, the supplemental lower tubes and the carrier brackets provided with suitable rollers and secured to the lower tubes at the inner ends and intermediate of their lengths, as and for the purpose specified. 4th. In a wardrobe, in combination the back, the front top board, the upper tube, the end brackets for same, the intermediate and lower tube, the carrier brackets secured on the end of the lower tubes and intermediate of their lengths and the stop collar and handle on the intermediate tube, as and for the purpose specified. 5th. In a wardrobe, in combination the back, the front top board, the upper tube, the end brackets for same, the intermediate and lower tube, the carrier brackets secured on the ends of the lower tubes and intermediate of their length, the stop collar and handle on the intermediate tube, and the stop collar on the end of the lower tube, as and for the purpose specified. 6th. In a wardrobe, the combination with the back and top board and extensible tubes supported thereon as specified, of the door designed to close the front opening of the wardrobe, the panel to which the door is hinged, suitable supporting rollers for the bottom of the panel, and guide-ways for such rollers whereby when the door is swung open on a line with the panel, such door may be pushed inwardly, as and for the purpose specified. 7th. In a wardrobe, in combination the side upright provided with an arc-shaped groove at the front edge thereof, the panel provided with a front bevelled edge, the door hinged thereto and provided with a reversely bevelled edge designed to abutt the bevelled edge of the panel when swung open in alignment, as and for the purpose specified. 8th. In a wardrobe, in combination a suitable casing, a panel supported therein in suitable guide-ways, the door hinged to the panel and a cord and weight attached to the inner end of the panel, as and for the purpose specified. 9th. In a device of the class described, a panel recedably supported in the compartment, the door hinged thereto and provided with a recess in the locking-style, a cube provided with suitable trunnions journalled in the top and bottom of the recess and an L-shaped handle extending horizontally through the cube and provided with a lateral projection on the inside designed to catch in the recess in the upright, as and for the purpose specified. 10th. In a wardrobe, a locking device comprising a cube journalled in the top and bottom of the recess in the door having an arc-shaped vertical side, an L-shaped handle journalled in the cube and provided with a lateral locking-style projection, the said cube being designed to be rotated horizontally, on its pivot, so as to throw the handle down and around in alignment with the edge of the door, as and for the purpose specified.

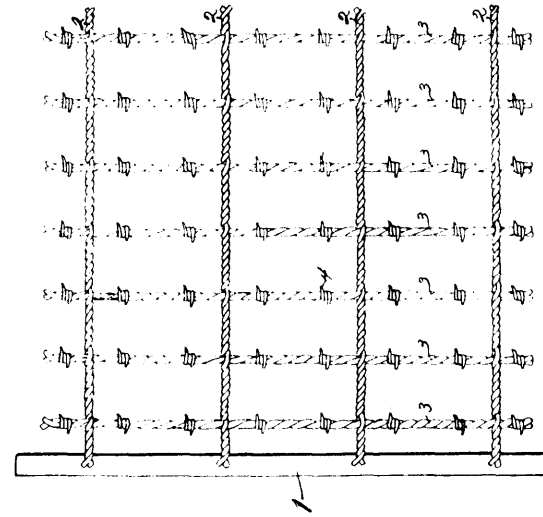
No. 60,392. Garment Hanger. (*Porte-vêtement.*)



John Ernest Kennedy, Montreal, Quebec, Canada, 21st June, 1898; 6 years. (Filed 7th June, 1897.)

Claim.—1st. In a garment hanger, a coat support comprising a cross bar having at each end an upwardly extending laterally arranged archshaped form as and for the purpose specified. 2nd. In a garment hanger, the combination with the coat support of arch-shaped form from end to end, of the support and having a central open loop or notch extending laterally, approximately at the centre of the arch, of the trousers and vest support comprising the laterally arched clamping bars and compressible double hooked pendant extending upwardly therefrom through the open loop of the coat support as and for the purpose specified.

No. 60,393. Fence. (*Clôture.*)

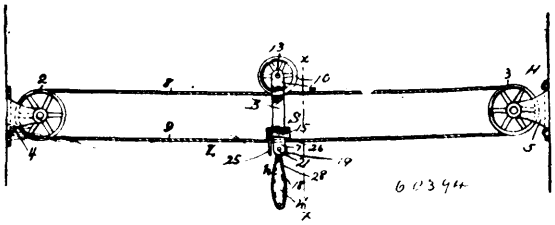


Jesse M. Keith, Murray, Iowa, U.S.A., 21st June, 1898; 6 years. (Filed 7th August, 189.7)

Claim.—An improved fence, comprising approximately continuous strands each composed of two smooth wires twisted together, and pickets formed of lengths of barbed wire, positioned at right angles to the strands and woven within the twists of the strands.

No. 60,394. Clothes Line Support.

(*Support de cordes à linge.*)

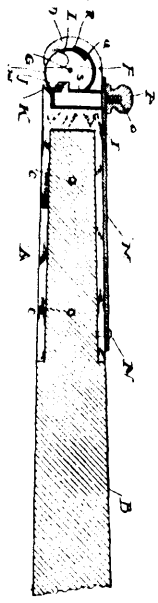


Charles Leonard Schwalm, New Britain, Connecticut, U.S.A., 21st June, 1898; 6 years. (Filed 26th November, 1897.)

Claim.—1st. A support for endless clothes lines, consisting of a longitudinal body portion bifurcated at its opposite ends, a wheel pivotally supported between the branches of the upper bifurcation, an elastic shoe fitted in a pocket formed by the lower bifurcation, and a locking lever pivoted between the branches of the lower bifurcation, and having a cam head adapted to co-operate with said shoe. 2nd. A support for endless clothes lines, consisting of a longitudinal body portion a wheel sapported at the upper end of the body portion, an elastic shoe fitted in a pocket formed in the lower part of the body portion, a locking lever pivoted to said body portion, and having a weighted handle and also having a camhead adapted to co-operate with said shoe. 3rd. A support for endless clothes lines, consisting of a longitudinal body portion, bifurcated at its opposite ends and widened near its lower end, a wheel pivotally supported between the branches of the upper bifurcation, an elastic shoe fitted in a pocket formed by the lower bifurcation, a locking lever provided with a cam head pivoted between the branches of the lower bifurcation and having a line receiving notch, the handle of the locking lever being weighted and furnished with a projection near the cam head, and a spring catch secured to said widened portion and having a hook adapted to engage said projection.

No. 60,395. Neck Yoke Holder for Waggon Tongues.

(*Porte volée d'avant pour armons de wagon.*)

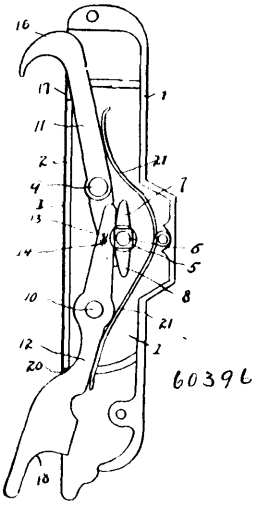


Donald Murray, Stratford, Ontario, 21st June, 1898; 6 years. (Filed 15th March, 1898.)

Claim.—1st. As a new article of manufacture, a neck yoke holder consisting of two sections adapted to embrace the end of a vehicle tongue, a hook formed upon the end of this holder, a dog pivoted therein, a plug adapted to operate said dog, and a spring for holding said plug in its normal position. 2nd. A neck yoke holder consisting of two sections adapted to embrace the end of a vehicle tongue a hook formed upon the outer end of said holder, a dog pivoted therein, a plug fitted within the holder, a lug projecting from said plug into engagement with a notch of the dog, a spring holding said plug in its normal position, so as to lock the dog against rotation, and a knob for moving the plug upward, as specified. 3rd. The herein described combination of the two sections A, secured about the end of a vehicle tongue, hooks formed upon each of said sections, a dog pivoted between the sections and provided with a stop shoulder for limiting its rotary movement, a plug also fitting between the sections a lug projecting from said plug into engagement with a notch formed in the dog, a spring secured to the sections and to the plug, and a knob for withdrawing said plug upwards as specified.

No. 60,396. Extension Ladder Coupling.

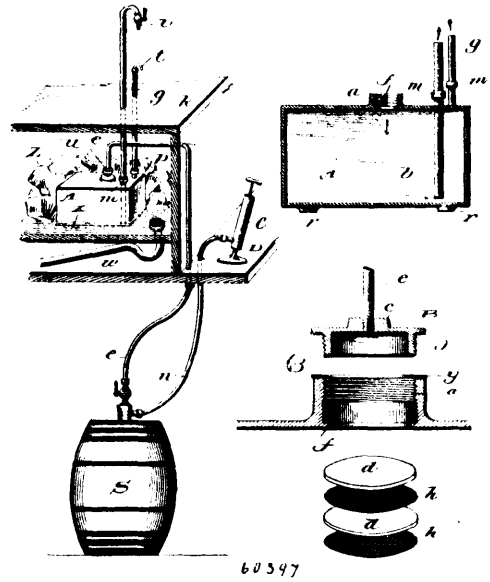
(*Joint pour échelles à rallonge.*)



Frederic S. Seagrave, Columbus, Ohio, U.S.A., 21st June, 1898; 6 years. (Filed 3rd May, 1898.)

Claim.—1st. In a coupling for extension ladders, the combination with a coupling body or plate adapted to be secured to a ladder frame, of two locking arms fulcrumed on said plate and normally projecting in the path of the rung of an adjacent ladder said locking arms adapted to engage simultaneously with two rungs of said adjacent ladder and means for disengaging said arms from said rungs, substantially as and for the purpose specified. 2nd. The combination with a ladder 26 and spring actuated locking arms 11 and 12 fulcrumed thereto, of a ladder 27 arranged adjacent to said ladder 26 and rungs 26 and 29 with which said locking arms are adapted to be engaged at the same time and means arranged between said locking arms for withdrawing the latter from connection with said rungs, substantially as and for the purpose specified.

No. 60,397. Liquid Cooler. (*Rafraichissoir pour liquides.*)

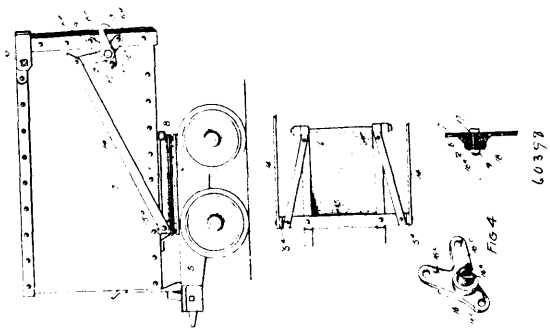


Francis Oakley, Newport, Rhode Island, U.S.A., 21st June, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—In a cooler, the combination with the box A mounted on suitable legs within an ice-box, the pipes *b* and *g* communicating

with the interior of said box, the internally threaded neck-portion of the box and shoulder *f*, the cap B with integral nut extension *e*, which is centrally apertured, the pipe *c* having screw-threaded connection with the said cap in said aperture, of the alternately disposed screens and filters *h* and *d* respectively, held within the said neck-portions and between the shoulder *f* and cap B, and the pump and connection with the supply tank and box A, all substantially as shown and described.

No. 60,398. Ore Car. (*Char à minerai.*)



George E. Truax, Denver, Colorado, U.S.A., 21st June, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. In a dumping car, the combination with the car body, the hinged end door and the locking lever, of a plate secured to the car side and having an opening adapted to receive the fastening bolt passed through an aperture in the car side, the said plate being provided with an annular shoulder surrounding the said opening and forming a fulcrum for the locking lever. 2nd. The combination of the car body, the hinged door, the locking lever, and the fastening bolt, the car side being provided with a fulcrum for the locking lever surrounding the opening for the fastening bolt, the said fulcrum being independent of the said bolt. 3rd. The combination with the car body, the hinged door, the locking lever and the fastening bolt, of a fulcrum for the said lever, said fulcrum being mounted on the car side and apertured to register with the bolt-hole therein. 4th. The combination with the car body, the hinged door, the locking lever fulcrumed on the car body, and the arms connected with the locking lever, the latter being fulcrumed relatively low on the car side, and the rear extremities of said arms being pivoted on the turn table to the rear of its centre.

No. 60,399. Harness. (*Harnais.*)

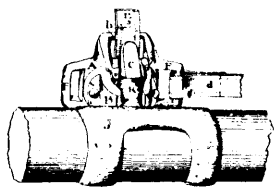


FIG. 1.

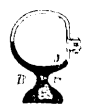


FIG. 4.

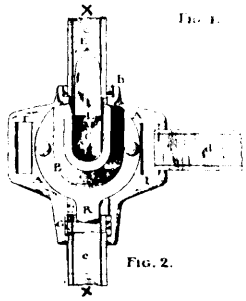


FIG. 2.

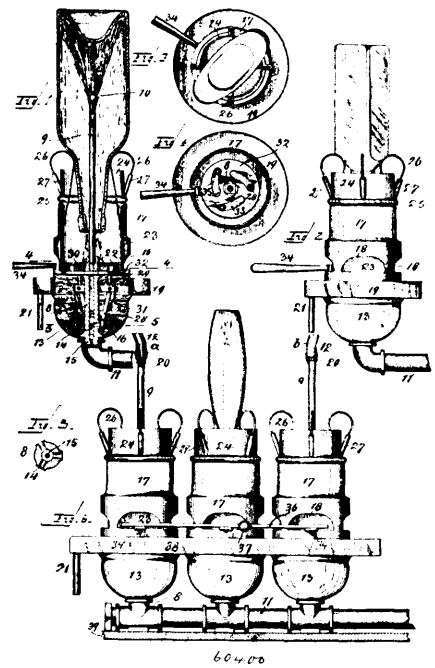
FIG. 3.

William Jenkins, Markham, Ontario, Canada, 21st June, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. In a harness attachment, the combination of a back or body portion having suitable lugs to receive the back band, breast collar and belly band straps respectively, a socket portion with upward slot attached to the body portion, a shaft portion having a suitable knob to fit the socket, and a spring to prevent the knob from rising upwards, all made of malleable iron, brass, or other suitable metal, substantially as shewn and described. 2nd. In a harness attachment, the combination of a back or body portion having a suitable groove at the back to receive the back band, keepers and pin to hold it in position, and suitable lugs to receive the breast collar and belly band straps respectively, a socket portion with upward slot with means of attaching it to the body portion, a shaft portion capable of being attached to the inner side of the shaft, having a suitable knob and stem to connect the shaft with the socket portion, and a spring to hold the knob in position, all made of malleable iron, brass, or other suitable metal, substantially as shewn and described. 3rd. In a harness attachment, the combination of a back or body portion having suitable lugs to receive the back band, breast collar and belly band straps respectively, a socket portion with upward slot attached to the body portion by rivet or otherwise, a shaft portion attached to the shaft with means of connecting the shaft with the socket portion, and a spring with means of holding the shaft portion in position when connected with the socket portion, all made of malleable iron, brass, or other suitable metal, substantially as described.

No. 60,400. Bottle-Cleaning Device.

(*Appareil à nettoyer les bouteilles.*)



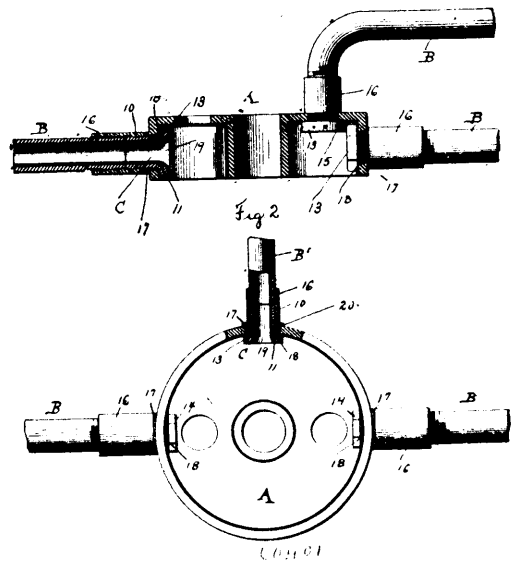
Henry B. Fischer and Charles H. Fischer, both of Cincinnati, Ohio, U.S.A., 21st June, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. In a bottle-scouring device, the combination of a vessel containing the scouring medium, a continuous water pipe entering and passing through said vessel, terminating above it in a discharge nozzle, and having lateral openings in its wall at such height as to be within that part of the vessel occupied by the scouring medium, so that, when water is permitted to pass through said pipe, portions of the scouring medium are drawn in through said lateral openings, and a bottle support for sustaining the bottle in an inverted position above the discharge end of said pipe. 2nd. In a bottle-cleaning device, the combination of a vessel to contain the scouring medium, a water pipe passing through the same, having lateral openings which communicate with the lower part of the vessel, means to open and close these openings, and supporting means for holding an inverted bottle above the discharge end of the water pipe. 3rd. In a bottle-cleaning device, the combination of a vessel to contain the scouring medium, a pipe passing through the same, provided with lateral openings, which communicate with the lower part of the vessel and adapted to carry alternately a scouring and rinsing current, means to support an inverted bottle above the discharge end of the water pipe and a spreader to cause the discharged water to return to the vessel near the sides thereof. 4th. In a bottle-cleaning device, the combination of a vessel to contain the scouring medium, a water pipe passing through the same, provided with lateral openings which communicate with the lower part of the vessel, means to support an inverted bottle above the discharge end of the water pipe and overflow openings contained in

the upwardly continued sides of the vessel which are of a size to permit floating impurities to pass freely out. 5th. In a bottle cleaning device, the combination of a vessel to contain the scouring medium, a water pipe passing through the same, provided with lateral openings which communicate with the lower part of the vessel, means to support an inverted bottle above the discharge end of the water pipe, overflow openings contained in the upwardly continued sides of the vessel which are of a size to permit floating impurities to pass freely one and a guard 23 interposed between said overflow openings to prevent the water from passing directly through the latter. 6th. In a bottle-cleaning device, the combination of a vessel to contain the scouring medium, a pipe passing through the same, provided with lateral openings which communicate with the lower part of the vessel, and adapted to carry alternately a scouring end a rinsing current and means to support an inverted bottle above the discharge end of the water pipe. 7th. In a bottle-cleaning device, the combination of a vessel to contain the scouring medium, a water pipe passing through the same, provided with the lateral openings which communicate with the lower part of the vessel, means to support an inverted bottle above the discharge end of the water pipe, overflow openings contained in the upwardly continued sides of the vessel and an annular drain gutter surrounding the latter below these overflow openings. 8th. In a bottle-cleaning device, the combination of a vessel to contain the scouring medium, a water pipe passing through the same, provided with lateral openings which communicate with the lower part of the vessel, and having its bore contracted to a smaller diameter below these openings and means to support an inverted bottle above the discharge end of the water pipe. 9th. In a bottle-cleaning device, the combination of a vessel 13, a water pipe 8, lateral openings 14 therein, lids 16 for these openings, means to open and close them and a support for holding an inverted bottle above the water pipe. 10th. In a bottle-cleaning device, the combination of a vessel 13, a water pipe 8, lateral openings 14 therein, lids 16 for these openings, levers 28 which carry these lids, means to swing the levers for closing or uncovering openings 14, and a support for holding an inverted bottle above the water pipe. 11th. In a bottle-cleaning device, the combination of a vessel 13, a water pipe 8, lateral openings 14 therein, lids 16 for these openings, levers 28 which carry these lids, a cam-plate 32 with an accessible handle for operating these levers to open or close openings 14 and a support for holding an inverted bottle above the water pipe. 12th. In a bottle-cleaning device, the combination of a vessel 13, a water pipe 8, lateral openings 14 therein, lids 16 for these openings, means to open and close them, a spreader 22 supported on pipe 8 and a support for holding an inverted bottle above the water pipe. 13th. In a bottle cleaning device, the combination of a vessel 13, a water pipe 8 having lateral openings 14, a member 17 superposed upon vessel 13 to add to the height of the latter and provided with overflow openings 18 and a support for holding an inverted bottle above the water pipe. 14th. In a bottle-cleaning device, the combination of a vessel 13, a water pipe 8 having lateral openings 14, a spreader 22 supported on pipe 8, overflow openings contained in the upwardly continued sides of vessel 13, a superposed member 24 extending with its lower part in front of these overflow openings and a support for holding an inverted bottle above the water pipe. 15th. In a bottle-cleaning device, the combination of a vessel 13, the height of which is increased by the superposition of additional members fitted thereto, a water pipe 8 having lateral openings 14 and the curved spring wire bottle supports 26 projecting upwardly and turned over the uppermost member and extending downwardly within the same. 16th. In a bottle-cleaning device, the combination of a vessel 13, a water pipe 8 having lateral openings 14, a member 17 superposed upon a vessel 13 to add to the height of the latter and provided with overflow openings 18, an annular drain gutter 19 with waste pipe 21 below them and a support for holding an inverted bottle above the water pipe. 17th. In a bottle-cleaning device, the combination of a series of vessels 13, a water pipe 8 for each, a supply pipe 11 for all these water pipes, lateral openings in these latter, means to open and close them, a connecting rod attached to these means in a manner to cause all of them to operate together and bottle supports above each vessel. 18th. In a bottle-cleaning device, the combination of a series of vessels 13, a water pipe 8 for each, a supply pipe 11 for all these water pipes, lateral openings 14 in these latter, bottle supports above each vessel, a superposed member 17 on each of the latter to increase their height, overflow openings in them and a drainage gutter with waste pipe surrounding the whole series of vessels below the overflow openings in the latter. 19th. In a bottle-cleaning device, the combination of a vessel adapted to contain the scouring medium, a water pipe communicating with the same, supporting means for holding an inverted bottle above the discharge end of the water pipe and means on this latter whereby the current is caused to discharge at an angle. 20th. In a bottle-cleaning device, the combination of a vessel adapted to contain the scouring medium, a water pipe communicating with the same, supporting means for holding an inverted bottle above the discharge end of the water pipe and a tip on this latter so mounted as to be capable of being rotated by the force of the discharging current. 21st. In a bottle cleaning device, the combination of a vessel 13, a water pipe 8 having lateral openings 14, a member 17 superposed upon vessel 13, to add to the height of the latter and provided with overflow openings 18, a guard 23 interposed in front of them and a support for holding an inverted bottle above the water pipe.

6—12

No. 60,401. Coupling for Junction Boxes for Electric Conduits. (*Boîte de jonction pour conduits électriques.*)



John Patrick Coghlin, Worcester, Massachusetts, U.S.A., 21st June, 1898; 6 years. (Filed 22nd April, 1898.)

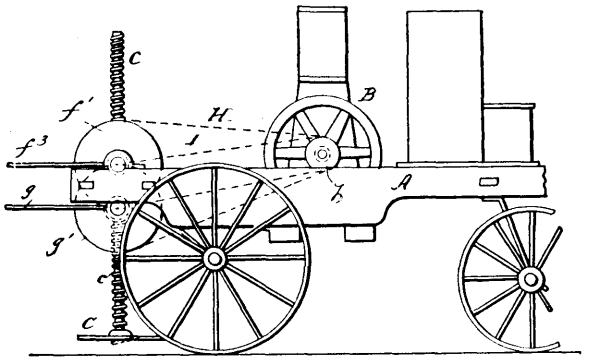
Claim.—1st. The combination in a junction box for electric conduits, of a coupling for attaching the conduit thereto, consisting of a hollow coupling bushing exteriorly screw-threaded, and interiorly smooth, substantially as described. 2nd. The combination with a junction box for electric conduits, of a coupling for attaching the conduit thereto, consisting of a coupling bushing exteriorly screw-threaded and interiorly insulated, substantially as described. 3rd. The combination with a junction box for electric conduits, of a coupling for attaching the conduit thereto, consisting of a coupling bushing exteriorly threaded and interiorly insulated, and having a head so that the bushing can be screwed to the conduit from the inside of the box, substantially as described. 4th. The combination with a junction box for electric conduits, a conduit or pipe having a coupling as 16 on the end thereof, a coupling bushing exteriorly screw-threaded and interiorly insulated, having a head and adapted to be screwed into said coupling 16 from the interior of the box, so that the coupling 16 will be drawn tightly against the outside of the box, and the head of the bushing will engage the inside of the box, and thereby tightly connect the conduit to the junction box, substantially as described. 5th. As an article of manufacture, a coupling bushing for attaching electric conduits to junction boxes, comprising a headed hollow bushing having a smooth or insulated interior, substantially as described. 6th. As an article of manufacture, a coupling bushing for attaching electric conduits to junction boxes, comprising a bushing exteriorly screw-threaded and interiorly insulated, substantially as described. 7th. As an article of manufacture, a coupling for attaching an electric conduit to a junction-box, consisting of a coupling bushing exteriorly screw-threaded, and interiorly insulated, and having a head so that the bushing can be screwed to the conduit from the inside of the box, substantially as described.

No. 60,402. Method of and means for Planting Trees and Erecting Posts. (*Methode et moyen de planter les arbes et poteaux.*)

Ignacio Panama, Santa Ana, San Salvador, Central America, 21st June, 1898; 6 years. (Filed 7th June, 1898.)

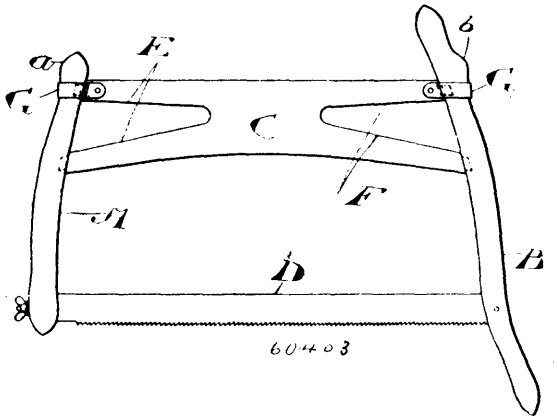
Claim.—An improved earth augur consisting of a wheeled frame provided with an engine or motor, a screw stem mounted at one end of the frame and provided with a boring tool or implement, a gear D mounted on the stem by means of a feather or spline, seated freely in a groove or key-way in the stem, a gear nut below the gear D, and stops formed by the frame above and below the gear and gear nut whereby the gear and nut are held together and prevented from moving vertically, a shaft extending transversely across one side of the front of the frame and provided with a pinion to engage the gear, a second shaft extending transversely across the opposite

side of the front of the machine and provided with a pinion to engage the gear nut, loosely mounted chain pulleys on said shafts and



clutches whereby the pinions are thown into and out of connection with the gear and gear nut.

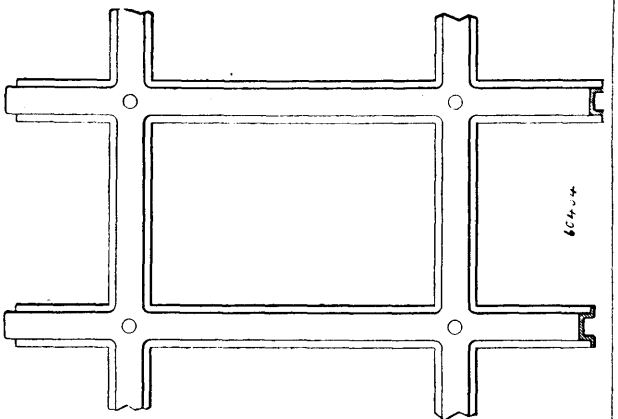
No. 60,403. Buck Saw. (*Scie de travers.*)



Silis Toles and Jerome Colwell Dietrich, both of Galt, Ontario, Canada, 21st June, 1898; 6 years. (Filed 8th June, 1898.)

Claim.—1st. In a buck saw the combination with the end pieces of a saw blade connected thereto, and a top brace with bifurcated ends mortised into the end pieces, the upper branches of the forks being further connected to the said end pieces to resist tension, substantially as and for the purpose specified. 2nd. In a buck saw the combination with the end pieces of a saw blade adjustably connected thereto, and a top brace with bifurcated ends mortized into the end pieces, the upper branches of the forks being further connected to the said end pieces to resist tension, substantially as and for the purpose specified. 3rd. In a buck saw the combination of the end pieces A and B, humped at *a* and *b*, the saw blade D, adjustably secured to the end pieces, the top brace C, having bifurcated end E and F, mortised into the said end pieces, and the clips G, passing around the end pieces A and B, below the humps *a* and *b*, and secured to the upper branches of the aforesaid forks, substantially as and for the purpose specified.

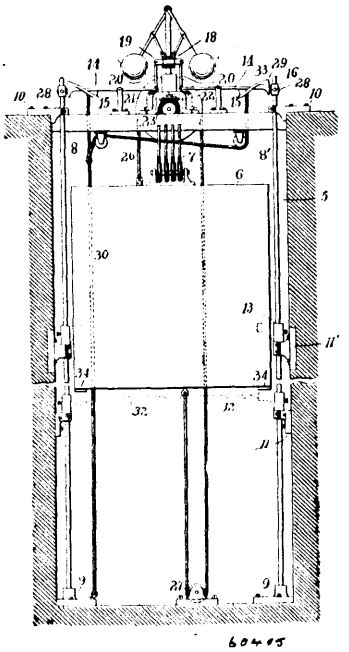
No. 60,404. Window Frame. (*Cadre de fenêtre.*)



Dogobert Timar, Berlin, N.W., Luisenstrasse, 27 and 28, Germany, 21st June, 1898; 6 years. (Filed 9th January, 1898.)

Claim.—Window frames consisting of pressed spring steel plates characterized by being made of plates of suitable thickness, in which the openings for the inserted glasses have been stamped out, the remaining cross pieces being shaped and stiffened by suitable profiles.

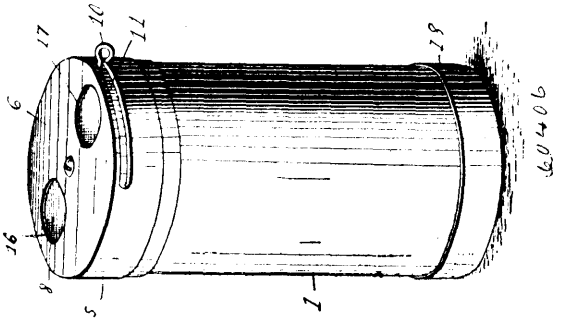
No. 60,405. Safety Check for Elevators.
(*Frein de surêté pour élevateurs.*)



James Hurrell and Robert W. Hurrell, Brooklyn, New York, U.S.A., 21st June, 1898; 6 years. (Filed 10th June, 1898.)

Claim.—1st. The combination with an elevator well, of horizontally movable stops located at intervals throughout the length of the well and normally held out of the path of the car, and means for throwing said stops into the path of the car when it attains a dangerous speed. 2nd. The combination with an elevator well, of one or more vertical shafts located therein and carrying stops or feet adapted to project into the well, and means for rotating said shafts to project said feet into the well. 3rd. The combination with an elevator well or car, of one or more vertical shafts located in the well and having each a series of stops or feet projecting therefrom, means tending to throw said feet into the path of the car, a retaining device for holding them against such tendency, and means for tripping said retaining device for the purpose set forth. 4th. The combination with an elevator well, of vertical rotary shafts therein having bearings at intervals throughout their length, feet or stops connected to said shafts and projecting laterally therefrom, and means for rotating said shafts and stops, whereby the latter may be thrown into the path of the car, for the purpose set forth. 5th. The combination with an elevator well, of a vertical rotary shaft located therein, stops or feet projecting from the shaft and having a spring connection therewith, as and for the purpose set forth. 6th. A safety catch or stop for elevator cars, substantially as herein set forth.

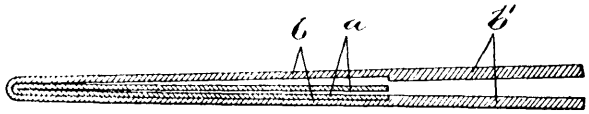
No. 60,406. Measure for Powder Boxes.
(*Mesure pour boites à poudre.*)



Sidney Franklin Austin, Baltimore, Maryland, U.S.A., 22nd June, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—A combined measuring and mixing can, comprising the cylindrical box 1, having the longitudinal partition 2, in combination with the cylindrical cover 5, formed with a slot 11 in the rim thereof and having its top plate 6 provided with oppositely-disposed segmental orifices 16, 17 and its diaphragm 7 formed with oppositely-disposed corresponding segmental orifices 14, 15 located one on each side of the partition 2 in the box, and at a right-angle to the orifices in the top plate, and the measuring disc 8 rotating in the cover between the top plate and the diaphragm and provided with the oppositely-disposed segmental pockets 12, 13, and the operating pin 10 fixed in said disc and extending through the slot in the rim of the cover to limit the movement of the said disc in either direction, whereby the pockets in said disc shall alternately register with the orifices in the top plate and diaphragm, substantially as and for the purpose set forth.

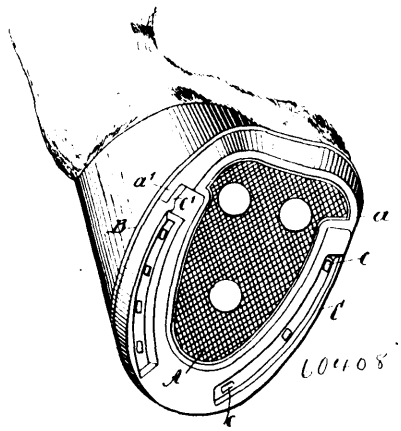
No. 60,407. Account Book. (*Livre de compte.*)



John Franklin Brown, Toronto, Ontario, Canada, and Anson O. Kittredge, New York City, U.S.A., 22nd June, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—A book, consisting of wide and narrow leaves, the wide leaves of two unequal thicknesses, the narrow leaves and that portion of the wide leaves adjacent to the narrow leaves of substantially the same thickness, and that part of the wide leaves extending beyond the edges of the narrow leaves of an increased thickness, approximately equal to the thickness of the thin part of the wide leaf and of the narrow leaves interposed between two adjacent wide leaves, substantially as specified.

No. 60,408. Horseshoe-Pad. (*Coussinet pour fer à cheval.*)

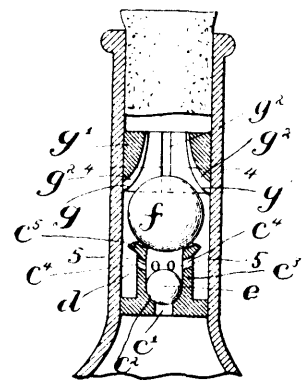


Michael Hallanan, New York City, U.S.A., 22nd June, 1898; 6 years. (Filed 11th June, 1898.)

Claim.—1st. A horseshoe-pad, having a face-block with a groove in its inner side at the heel, and rounding at the outer surface at each heel portion, and a backing-plate secured to the face-block, substantially as described. 2nd. A horseshoe-pad, having a face-plate, with a concavity in its inner side, and a plane or flat back-plate secured over the inner side of the face-plate to close the concavity and form a pneumatic cushion for the pad, substantially as described. 3rd. A horseshoe-pad consisting of a rubber face-plate hollow on the inner side, and a leather backing-plate, thereby forming a pneumatic cushion, substantially as described. 4th. A horseshoe-pad, having a rounded surface at the lower side of the heel, the said surface being spread transversely for a distance equal to the width of the heel, and being stiff and firm to form a rolling support for the horse's foot when placed on the ground, substantially as described. 5th. A horseshoe-pad, having a rounded surface at the lower side of the heel, the said surface being stiff and firm to form a rolling support for the horse's foot when placed on the ground, substantially as described. 6th. A horseshoe-pad, having a rounded surface at the lower side of the heel, the said surface being spread transversely for a distance equal to the width of the heel, and the rounded surface forming a rolling support for the horse's foot when placed on the ground, substantially as described. 7th. A horseshoe-pad, formed of flexible material and having a transversely-elongated recess at the inner side of the heel, and also having a rounded portion at the lower side of the heel, the recess extending into the rounded portion, and a back-plate arranged over the inner side of the pad and secured to the pad, the rounded portion of the pad being contracted to reduce the recess and enlarge the rounded portion, substantially as described.

No. 60,409. Anti-Refilling Stopper.

(*Bouchon pour empêcher le reémplessage.*)

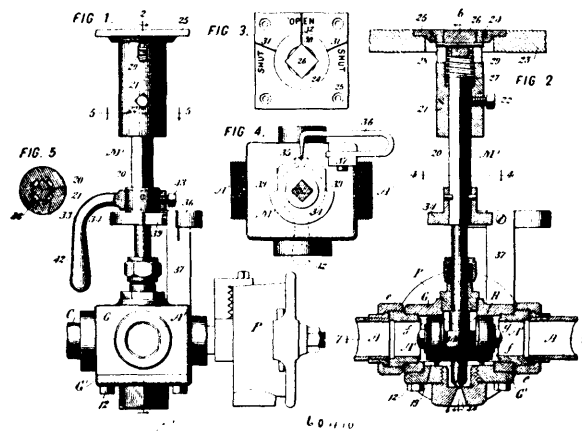


John Henry Poole, Randolph, Massachusetts, U.S.A., 22nd June, 1898; 6 years. (Filed 13th June, 1898.)

Claim.—A non-refillable bottle having, first, a casing in the inner portion of its neck, said casing being formed to present a valve seat, and a valve guide above the seat and of greater diameter than the latter, the casing being reduced externally to form the inner wall of an annular pocket surrounding the valve guide, secondly, a ball valve formed to move in said guide and fit the valve seat, thirdly, stops attached to the bottle neck above the valve seat and guide, and fourthly, a loose spherical valve guard adapted to play between said stops and the outer end of the valve guide, said guard being of greater diameter than the valve guide and adapted to deflect a wire inserted in the bottle neck into said annular pocket, the guard being proportioned to permit a liquid releasing movement of the valve and to prevent the escape of the valve from the valve-guide.

No, 60,410 Valve for Car Heating Systems.

(*Soupape pour le chauffage des chars.*)



Edward Ethel Gold, New York City, U.S.A., 22nd June, 1898; 6 years. (Filed 13th June, 1897.)

Claim.—1st. In a train-pipe valve the combination of the valve shell G having a seat *f*, a valve proper H movable therein against or from said seat, the valve shell formed with an opening laterally of the valve through which access may be had to the valve, said opening being located opposite the valve so that the latter may without displacing it be removed sidewise through the opening, and a removable plate closing said opening, and longitudinal ways or guiding faces for said valve formed partly in the valve shell and partly in said plate. 2nd. In a train-pipe valve, the combination with a valve shell having a seat, and a valve proper therein movable from an open position to close against said seat, an oscillatory valve-stem entering said shell and engaging said valve proper for operating it, and means for holding said valve in either open or closed position consisting of a spring device engaging said stem and adapted when the stem is oscillated from the open position toward the closed position of the valve to exert a pressure against it tending to throw it

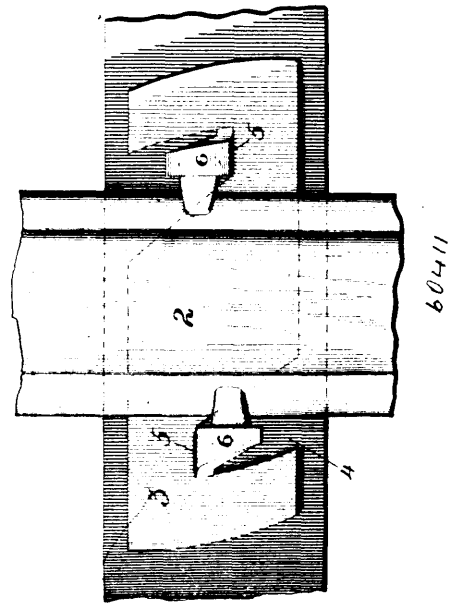
beyond its closed position, and thereby to press the valve firmly against its seat, whereby it compensates for wear. 3rd. In a train-pipe valve, the combination with a valve-shell having a seat, and a valve proper therein movable against or from said seat, an oscillatory valve-stem entering said shell and engaging said valve proper for operating it, and means for holding said valve proper in either position, consisting of a disc fixed on said stem and a spring-catch pressing toward said disc, the disc constructed with a notch coinciding with said catch when the valve is in the open position, and with an inclined side coinciding with said catch when the valve is closed, and inclined in such direction relatively to the catch that the pressure of the latter against the incline tends to turn the stem beyond the closed position of the valve, whereby it holds the valve firmly seated and serves to take up wear. 4th. In a train-pipe valve, the combination with a valve-shell having opposite seats, and a valve proper therein, movable from a mid-position to close against either seat, an oscillatory valve-stem entering said shell and engaging said valve proper for operating it, and means for holding said valve in either position, consisting of a disc 34 fixed on said stem having a middle notch 38 and two opposite notches 39, the latter formed each with an inclined side, and a spring-catch 35 pressing toward said disc to engage whichever notch is presented to it, whereby said catch by engaging the inclined sides of said notches 39 tends to turn the stem toward its extreme position and thereby to hold the valve firmly seated in either closed position thereof, and to take up wear. 5th. In a train-pipe valve, the combination with a valve-shell having opposite seats, and a valve proper therein, movable from a mid-position to close against either seat, an oscillatory valve-stem entering said shell and engaging said valve proper for operating it, and means for holding said valve in either position, consisting of a disc 34 fixed on said stem having a middle notch 38 and two opposite notches 39, the latter formed each with an abrupt side and an inclined side, and a spring-catch 35 pressing toward said disc to engage whichever notch is presented to it, whereby said catch by engaging the inclined sides of said notches 39 tends to turn the stem toward its extreme position and thereby to hold the valve firmly seated in either closed position thereof, and by striking the abrupt side of either notch 39 it serves as a stop to limit the movement of the stem. 6th. The combination with a train-pipe valve having an oscillatory stem adapted to be operated from above the floor of the car by means of a sleeve 21 fixed to said stem and turning in a floor-plate 25, of grooves or channels 33, 33 in said sleeve and around said stem for permitting dirt to descend from the socket in said sleeve to avoid choking said socket. 7th. A train-pipe valve, consisting of a valve-shell having a jet-orifice leading from the induction side or pressure-chamber to the exterior, and a main valve movable therein from an open position against a seat to close the train-pipe, combined with a separate jet-valve for closing said jet-orifice, constructed and connected to occupy a closed position when said main valve is open, and an open position when said main valve is closed, so that in the latter position it permits a constant minute flow throw said jet-orifice. 8th. A train-pipe valve, consisting of a valve-shell and a main valve movable longitudinally therein from an open position against a seat to close the train-pipe, combined with a jet-valve for closing a jet orifice in the lower part of said shell, movable transversely to said main valve, and connected directly thereto to be operated by the movement of the main valve, and constructed to occupy a closed position when said main valve is open, and an open position when said main valve is closed. 9th. A train-pipe valve, consisting of a valve-shell and a main valve movable therein from an open position against a seat to close the train pipe, combined with a jet-valve for closing a jet orifice in said shell, having a spring for closing it over said orifice, and connected to said main valve to be unseated thereby when the main valve is moved to the closed position. 10th. A train-pipe valve, consisting of a valve-shell and a main valve movable therein from an open position to a position against a seat to close the train-pipe, combined with a jet-valve for closing a jet-orifice in said shell movable transversely to said main valve, and co-acting inclines on the main and jet valves respectively, arranged to unseat the jet-valve by the movement of the main valve to the closed position. 11th. A train-pipe valve, consisting of a valve-shell having opposite seats, and a main valve movable therein from a mid-position against either seat, combined with a jet-valve for closing a jet-orifice in said shell, movable transversely to said main valve, and opposite inclines on the main valve co-acting with a projection on the jet-valve to unseat the latter by the movement of the main valve from its open position to either side. 12th. The combination with the valve-shell G having a valve-seat and a jet-orifice, of a main valve H movable against said seat, formed with a slot 15 and inclined recess 48, and a jet-valve 45 having a spring pressing it to its seat to close said jet-orifice, and arranged in said slot 15 and having a head 47 engaged by the inclines of recess 48.

No. 60,411. Spike Lock Tie and Gauge Protector.

(*Chevillette pour serrures de traverse et protecteur de jauge.*)

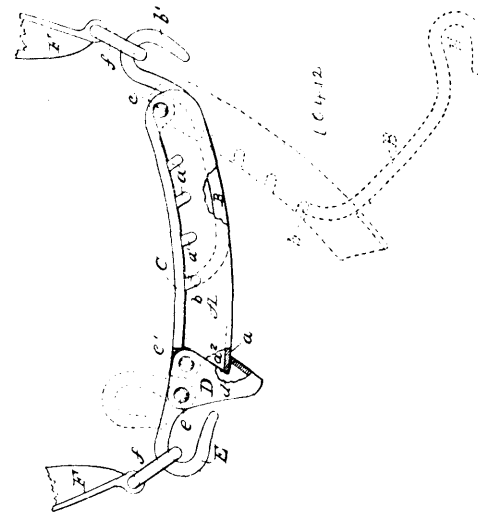
Anthyme Lucas, Edmunston, New Brunswick, 22nd June, 1898; 6 years. (Filed 15th June, 1898.)

Claim.—1st. A combined rail spike lock and gauge protector, comprising a plate having angularly-disposed recesses extending inwardly from opposite sides of said plate, and hoods formed integrally with said plate and adapted to normally extend over a portion of said recesses, substantially as described. 2nd. The combination with the tie, rail, and spikes, forming a railway track, of a plate



located between said rail and said tie, said plate having angularly-disposed recesses extending from opposite sides thereof, said recesses being adapted to receive said spikes when said plate is moved into its normal position, and hoods formed integrally with said plate, said hoods being adapted to be passed over the top of said spikes when said plate is moved into its normal position, substantially as described.

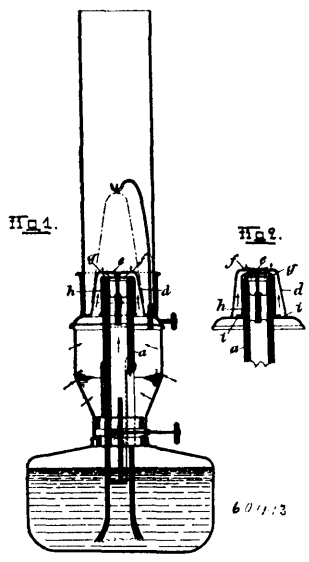
No 60,412. Hame Fastener. (*Couplière d'attelles.*)



Joseph Elie Lemyre, Manchester, New Hampshire, U.S.A., 22nd June, 1898; 6 years. (Filed 14th June, 1898.)

Claim.—1st. In a hame fastening, having a slotted case and a hooked bar adapted for adjustment within said case, the combination of a bar pivotally attached to one end of said case and carrying at the other end a pivoted clasp adapted to engage the free end of said case, and provided with a hook for engaging the ring of a hame. 2nd. In a hame fastening, comprising a slotted case formed of a single piece of steel and a hooked bar adapted for adjustment within the case by engaging its slots, the combination of a bar pivotally connected at one end of said case, a clasp pivoted to the free end of said pivoted bar and adapted to engage the free end of said case, and a hook pivotally connected to said clasp at a point where its line of draft is above the pivot connection of said clasp and the pivoted bar, substantially for the purpose set forth.

No. 60,413. Burner for Petroleum Lamps.
(*Bec pour lampes à pétrôle.*)



Georg Kron, 16 Heibergsgade, Copenhagen, Denmark, 22nd June, 1898; 6 years. (Filed 16th February, 1898.)

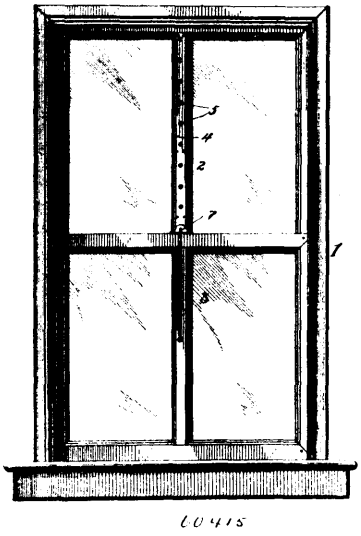
Claim.—A burner for petroleum glow-lamps, having a holster *h* pushed over the wick-case, the inward bent edge *g* of the holster covering the upper end of the wick for the purpose of producing a steadily burning Bunsen's flame and thus bring the net to glow.

No. 60,414. Medicinal Compound. (*Composé médicinale.*)

Fred C. Bond, Galt, Ontario, Canada, 22nd June, 1898; 6 years. (Filed 4th April, 1898.)

Claim.—In a medicinal compound for the cure of dyspepsia, consisting of acid nitre hydrochloric dil., tris nitrate bismuth, scale pepsin, tr. nux vomica, acid arsenicalis, liq. spes. chloroform, and pure water, in the proportions specified.

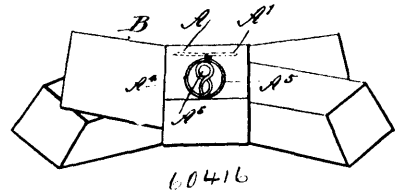
No. 60,415. Window Sash Lock. (*Arrête croisée.*)



Stephen Bjarni Jonsson, Winnigeg, Manitoba, Canada, 22nd June, 1898; 6 years. (Filed 10th June, 1898.)

Claim.—1st. The combination with the upper and lower window sash of a window, of a sash lock mounted on said lower window sash, said sash lock having a locking bolt adapted to place into and out of engagement position in openings forms in the upper window sash, said locking bolt being adapted to be locked in its operative and inoperative positions, substantially as described. 2nd. A sash lock, comprising a casing, an opening formed longitudinally thereof, a locking bolt mounted to have a longitudinal movement in said opening, means for automatically imparting movement to said locking bolt in its opposite direction, and means for locking said locking bolt in its inoperative and operative positions, substantially as described. 3rd. A sash lock, comprising a casing, an opening formed longitudinally thereof, a locking bolt mounted to have a limited longitudinal movement in said opening, means for automatically imparting movement to said locking bolt in one direction, means for moving said locking bolt in its opposite direction, and means for locking said locking bolt in its inoperative positions, substantially as described. 4th. A sash lock, comprising a casing, an opening formed longitudinally thereof, a locking bolt mounted in said opening and having a longitudinal movement therein, means for limiting the movement of said locking bolt, a spring for automatically imparting a movement to said locking bolt in one direction, means connected to said locking bolt for imparting a movement to said bolt in its opposite direction, a rocking lever pivotally secured on said casing and having a downwardly extending pin adapted to pass into operative connection with said locking bolt at each end of its limit of movement, substantially as described.

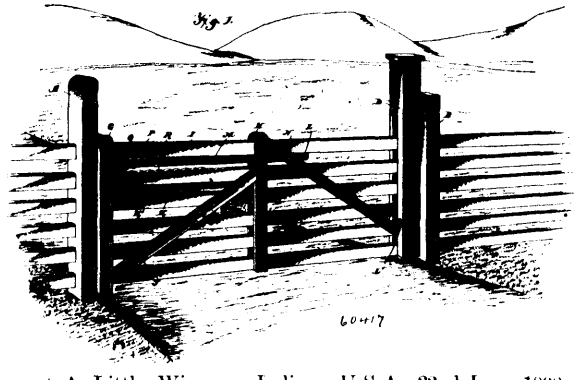
No. 60,416. Fastener for Neckties.
(*Agrafe de cravate.*)



William Alexander Bunn, Winnipeg, Manitoba, Canada, 22nd June, 1898; 6 years. (Filed 10th June, 1898.)

Claim.—1st. A fastener formed of a length of spring-wire, the terminals of which are pointed to form two pins, each having a bend at its heel, and the bends being interlocked and normally engaged with each other by the pressure of spring-wire, the intermediate portion of the wire being bent to form two arms with which the pins are respectively adjacent, and also to form a loop, substantially as described. 2nd. A fastening device consisting of a length of wire, an intermediate portion of which is bent to form a button-engaging part and the terminals of which are pointed to form pins each terminal being bent so that the terminals will run approximately in alignment with each other, the terminal being pointed oppositely and the terminals being crossed by each other so that when pushed apart the bends in the terminals will engage with each other, substantially as described.

No. 60,417. Gate. (*Barrière.*)



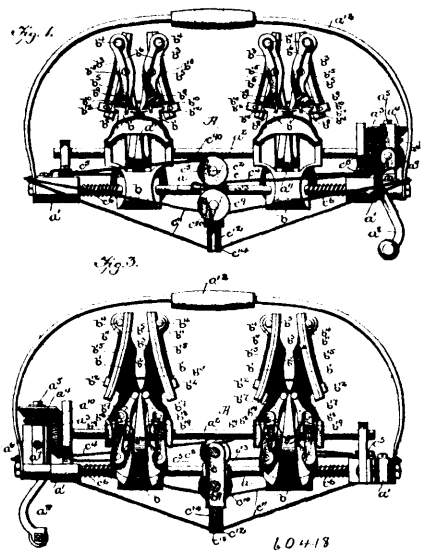
Earnest A. Little, Winamac, Indiana, U.S.A., 22nd June, 1898; 6 years. (Filed 14th June, 1898.)

Claim.—1st. The combination with the gate, comprising the usual planks or rails and connecting uprights, of the gate post B, the supplementary post hinged thereto and provided with an undercut groove E, and the end piece F, of the gate, located within and adapted to move vertically in said undercut groove, substantially as described. 2nd. The combination of the supplementary post C, hinged to the gate post B, and provided with an undercut groove, of the gate, consisting of the usual rails or planks and having the end upright, F, located within said undercut groove, the levers L, hinged at their lower ends to the supplementary post, the horizontal bar M, located between the upper and second rail of the gate, the bolt N, pivotally connecting it with the bars L, and means for moving the bar M. horizontally and securing it in position, substantially as described. 3rd. The combination of the gate post B, the supplementary post C, hinged thereto and provided with the undercut groove, the gate having the end piece F, located in said undercut

groove, the two bars L on opposite sides of the gate, hinged at their lower ends to the supplementary post, the horizontal bar M, pivotally secured to the bars L, near their upper ends and located between the upper and second rail of the gate, the guide blocks O, straddling the upper and second rails of the gate, the handle-pin P, by means of which the guide blocks are secured to the horizontal bar M, and the catch-pin Q, connecting the guide blocks O, and adapted to engage in any of a series of notches R, in the top of the rail I', of the gate, substantially as described.

No. 60,418. Cow Milking Machine,

(*Machine pour traire les vaches.*)

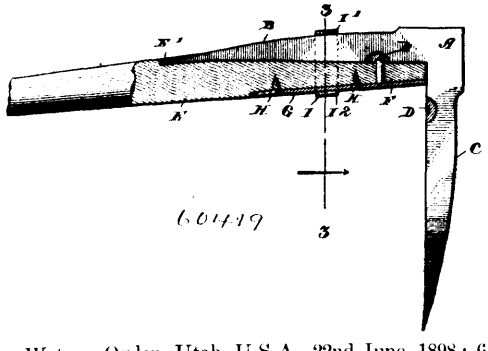


Dominat Quintal, Dupas, Quebec, Canada, 13th June, 1898; 6 years. (Filed 13th June, 1898.)

Claim.—1st. A cow milking apparatus comprising a framework, a handle to support said framework, a plurality of milking attachments located on said framework, and means for actuating said milking attachments, substantially as described. 2nd. A cow milking apparatus comprising a framework, a handle to support said framework, a plurality of milking attachments adjustably mounted on said framework, and means for actuating said milking attachments, substantially as described. 3rd. A cow milking apparatus comprising a framework, handle to support said framework, a plurality of milking attachments secured on said framework, means for adjusting the positions of said milking attachments, and means for actuating said attachments, substantially as described. 4th. A cow milking apparatus comprising a framework, said framework adjustably connected, a handle secured to said framework, milking attachments mounted on said framework, and means for actuating said attachments, substantially as described. 5th. A cow milking apparatus comprising a framework, said framework being adjustably connected, a handle to support said framework, milking attachments adjustably mounted on said framework, and means for actuating said attachments, substantially as described. 6th. A cow milking apparatus comprising a sectional framework, connections between the sections of said framework, whereby one of said sections will have an adjustable movement, milking attachments secured on each of said sections, and means secured on one of said sections for operating said milking attachments, substantially as described. 7th. A cow milking apparatus comprising a sectional framework, each section being a duplicate of the remaining section, connections between said sections for adjustably moving said sections, milking attachments mounted on each of said sections, and means for actuating said milking attachments, substantially as described. 8th. A cow milking apparatus comprising a sectional framework, connections between said sections for adjustably moving said sections, milking attachments adjustably mounted on each of said sections, and means mounted on one of said sections for actuating said milking attachments, substantially as described. 9th. A cow milking apparatus comprising a sectional framework, connections between said sections, means for varying the position of said sections on said connections, milking attachments mounted adjustably on said sections, and means for actuating said milking attachments, substantially as described. 10th. A cow milking apparatus comprising a framework formed in front and rear sections, supports leading from said front section to said rear section, means secured to said sections for moving said rear section adjustably to and from said front section, milking attachments adjustably mounted on said sections, and means for actuating said attachments, substantially as described. 11th. A cow milking apparatus comprising a framework formed in front and rear sections, supports pivotally secured on said front section and leading from said front section to said rear section, whereby the position of said rear section may be adjusted laterally, means secured to said sections for moving said rear section adjustably to and from said front section, milking attachments adjustably mounted on said sections, and means for actuating said attachments, substantially as described. 12th. A cow milking apparatus comprising a sectional framework, supports secured to one of said sections and leading to the remaining section, an arm pivotally connected to one of said sections and adapted to adjust the position of said section longitudinally of said apparatus, means for adjusting the positions of one of said sections laterally, milking attachments adjustably mounted on said sections, and means for actuating said milking attachments, substantially as described. 13th. A cow milking apparatus comprising a framework, said framework being formed with front and rear sections, connections between said sections, milking attachments mounted on said sections, independent means for adjusting the position of the milking attachments mounted on said front section and on said rear section, and means for actuating said attachments, substantially as described. 14th. A cow milking apparatus comprising a framework formed of front and rear sections, supports connected to said front section, and leading to said rear section, means connected to said sections for adjusting the movement of said rear section longitudinally, means connected to one of said supports for adjusting the position of said rear section laterally, milking attachments mounted on said sections, independent means for adjusting the position of the milking attachments mounted on said front section and on said rear section, and means for actuating said attachments, substantially as described. 15th. A cow milking apparatus comprising a framework formed of front and rear sections, connections between said sections whereby the position of said rear section may be adjusted longitudinally and laterally, milking attachments mounted on said front section, means for adjusting the position of said milking attachments on said front section, milking attachments secured on said rear section, means for adjusting the position of said attachments on said rear section, and means for actuating said attachments, substantially as described. 16th. A cow milking apparatus comprising a framework formed of front and rear sections, connections between said sections whereby the position of said rear section may be adjusted longitudinally and laterally, milking attachments mounted on said front section, means for adjusting the position of the said milking attachments on said front section, milking attachments secured on said rear section, means for adjusting the position of one of said attachments on said rear section, and means for actuating said attachments, substantially as described. 17th. In a cow milking apparatus, the combination with the framework, of milking attachments mounted on said framework, each of said attachments comprising supports mounted on said framework, making sections pivotally connected to said supports and means for imparting a movement to said milking movement, substantially as described. 18th. In a cow milking apparatus, the combination with the framework, of milking attachments adjustably mounted on said framework, each of said attachments comprising supports mounted on said framework, milking sections pivotally connected to said supports, and means for imparting movement to said milking sections to imitate the hand movement, substantially as described. 19th. In a cow milking apparatus, the combination with the framework, of milking attachments mounted on said framework, each of said attachments comprising supports connected to said framework and having a vertical movement thereon, milking sections pivotally connected to said supports, means connected to said supports for altering the lateral position of said milking sections, and means for imparting a vertical movement to said supports, said means also serving to operate said milking sections, substantially as described. 20th. In a cow milking apparatus, the combination with the framework, of milking attachments adjustably mounted on said framework, each of said attachments comprising supports connected to said framework and having a vertical movement thereon, milking sections pivotally connected to said supports, means connected to said supports for altering the lateral position of said milking sections, and means for imparting a vertical movement to said supports, said means also serving to operate said milking sections, substantially as described. 21st. In a cow milking apparatus, the combination with the framework, of milking attachments mounted on said framework, each of said attachments comprising supports connected to said framework and having a vertical and pivotal movement thereon, means mounted on said framework for imparting a vertical and pivotal movement to said supports, milking sections pivotally connected to said supports, and means connected to said supports, operated by said support operating means, for imparting a lateral movement to said milking sections, substantially as described. 22nd. In a cow milking apparatus, the combination with the framework, of milking attachments adjustably mounted on said framework, each of said attachments comprising supports connected to said framework and having a vertical and pivotal movement thereon, means mounted on said framework for imparting a vertical and pivotal movement to said supports, milking sections pivotally connected to said supports, and means connected to said supports, operated by said support operating means, for imparting a lateral movement to said milking sections, substantially as described. 23rd. In a cow milking apparatus, the combination with the framework, of milking attachments mounted on said framework, each of said attachments comprising supports connected on said framework, means for

imparting a pivotal and vertical movement to said supports, an arm pivotally connected to each of said supports, a milking section pivotally connected to each of said arms, and means pivotally connected to said supports for imparting a lateral movement to said milking section, said means being operated by said support operating means, substantially as described. 24th. In a cow milking apparatus, the combination with the framework, of milking attachments adjustably mounted on said framework, each of said attachments comprising supports connected to said framework, means for imparting a pivotal and vertical movement to said supports, an arm pivotally connected to each of said supports, a milking section pivotally connected to each of said arms, and means pivotally connected to said supports for imparting a lateral movement to said milking section, said means being operated by said support operating means, substantially as described. 25th. In a cow milking apparatus, the combination with the framework, of milking attachments mounted on said framework, each of said attachments comprising supports connected to said framework, means for imparting a pivotal and vertical movement to said supports, an arm pivotally connected to each of said supports, a milking section pivotally connected to each of said arms, means connected to said supports and operated by said supporting operating means, for imparting a lateral movement to said milking section in one direction, and means for returning said milking sections to their normal positions, substantially as described. 27th. In a cow milking apparatus, the combination with the framework, of milking attachments mounted on said framework, each of said attachments comprising supports pivotally and vertically movable on said framework, milking sections pivotally connected to said supports, mechanism for imparting movement to said supports and said milking sections to imitate the hand movement, and means for adjusting the tension of said milking sections, substantially as described. 28th. In a cow milking apparatus, the combination with the framework, of milking attachments adjustably mounted on said framework, each of said attachments comprising supports pivotally and vertically movable on said framework, milking sections pivotally connected to said supports, mechanism for imparting movement to said supports and said milking sections to imitate the hand movement, and means for adjusting the tension of said milking sections, substantially as described.

No. 60,419. Reversible Pick. (*Pic tournant.*)



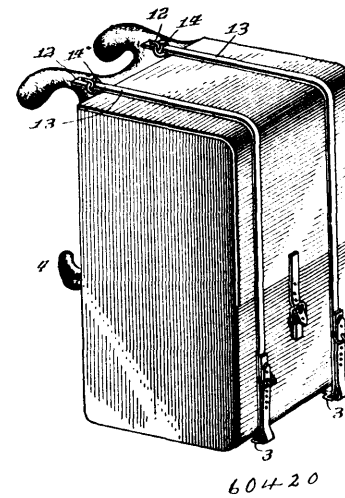
Nicholas Wetsue, Ogden, Utah, U.S.A., 22nd June, 1898; 6 years, (Filed 14th June, 1898.)

Claim.—1st. A reversible pick, comprising a head having two solid points formed integral therewith at right angles to each other, a handle adapted to receive either of these points, and means for securing the point and handle together, substantially as described. 2nd. A reversible pick, comprising a head having two solid points formed integral therewith at right angles to each other, each point having a socket or depression in its inner face, and a handle provided with a projecting pin to engage the socket in the pick-point secured to the handle, substantially as described. 3rd. A pick-handle provided with an inclined recess at its outer end, the pin projecting through the handle into said recess, the plate on the underside of the handle secured thereto and holding said pin in position, the pick having the point located in said recess, the pin engaging the socket in the inside face thereof, and the clamping-ring around the pick-point, the handle and the plate, substantially as described.

No. 60,420. Pack Harness. (*Harnais pour partager.*)

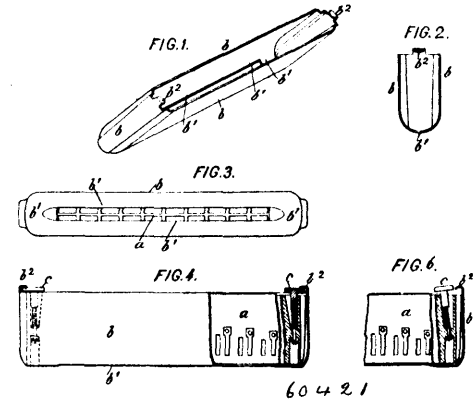
Albert Swenson and Alfred M. Brindos, both of Duluth, Minnesota, U.S.A., 23rd June, 1898; 6 years. (Filed 5th March, 1898.)

Claim.—1st. A pack harness, comprising a base upon which to support the pack, standards extending upward from said base and an adjustable neck-yoke projecting from said standards by which to support the harness upon the person, substantially as described.



2nd. A pack harness constructed from a single piece of wire, comprising the side standards, the base and shoulder supports, substantially as described. 3rd. A pack harness constructed from a single piece of wire, comprising the side standards, the base and the hip and shoulder supports, substantially as described. 4th. In a pack harness, the combination with the standards, base, shoulder supports and neck-yoke constructed from a single piece of wire, of a brace adjustable on the standards and connected to the neck-yoke, substantially as described. 5th. In a pack harness, the combination with a base, side standards, shoulder and hip supports and a neck-yoke constructed from a single piece of wire, of an adjustable brace on the standards connected to the neck-yoke and an adjustable brace connecting the lower ends of said standards, substantially as described.

No. 60,421. Harmonica. (*Harmonica.*)



Ferdinand Strauss, assignee of Charles Lee Curtis, both of New York City, U.S.A., 23rd June, 1898; 6 years. (Filed 4th March 1898.)

Claim.—A harmonica composed of a reed-block, a continuous cover having closed sides and ends and a slotted front, and means for locking the block within and in invariable relation to the cover, substantially as specified. 2nd. A harmonica composed of a reed-block, a continuous cover having closed sides and ends, a slotted front, and inwardly extending hooks, and catches secured to the block and adapted to be engaged by said hooks, substantially as specified.

No, 60,422. Albumen Preparation.

(*Preparation d'albumen.*)

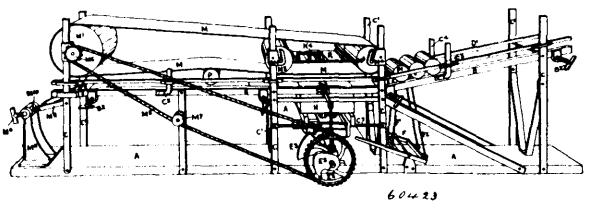
Bauer & Cie, Berlin, assignees of Albert Busch and Felix Bauer, both of Elberfeld, Prussia, all in Germany, 23rd June, 1898; 6 years. (Filed 9th February, 1898.)

Claim.—1st. A process of manufacturing albumen preparations soluble in water from glycerine phosphates and albuminoids, albuminates, caseine of milk, vegetable caseine, consisting in mixing the albuminoids suspended in dilute alcohol or similar indifferent liquids with the quantities of glycerino phosphates necessary for dissolving them, as the case may be, in heating the mixture, in eliminating the water by suitable means and in drying the product, substantially as described. 2nd. A process of manufacturing albumen preparations

soluble in water from glycerino phosphates and albumenoid, consisting in mixing the albumenoids in excess with acqueous solutions of glycerino phosphates, allowing to stand, removing the undissolved albumen, evaporating the filtrate in vacuo or precipitating it by means of alcohol, substantially as described. 3rd. The product of the process described consisting of a white powder without smell or taste and which when stirred up in cold water swells slightly and dissolves when heated to a slightly milky fluid, substantially as described.

No. 60,423. Machine for Labelling Articles.

(*Machine pour étiquetter des objets.*)



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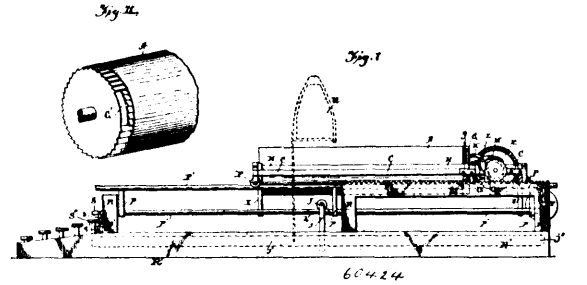
James Richard Bradley, Rose Street, North Unley, Hubert Giles, Grenfell Street, Adelaide, and Francis Villiers Sanderson, Waymouth Street, Adelaide, all of South Australia, 23rd June, 1898; 6 years. (Filed 21st February, 1898.)

Claim.—1st. A feeding device, consisting essentially of an inclined platform, at the lower end of which are two retaining forks, one of which is connected to each end of a rocking frame pivoted beneath the inclined platform, the rocking frame having an arm projecting therefrom whereby it is operated by a cam upon the main shaft of the machine, the return of the rocking frame being secured by means of a spring, substantially as described and for the purposes set forth. 2nd. A label case, having a movable bottom attached to the upper end of a vertical threaded shaft fitted with an internally screwed gear-wheel, whereby as the gear-wheel is rotated upon the shaft the bottom of the case is raised, substantially as described and for the purpose set forth. 3rd. A label case, having a movable bottom supported by a vertical threaded shaft fitted with an internally screw-threaded cog-wheel which gears with another cog-wheel secured upon the upper end of a spindle upon the lower end of which is a worm-wheel operated by a worm upon the main shaft of the machine, substantially as described and for the purpose set forth. 4th. A label-retaining device, consisting of a presser-foot upon one end of a pivoted lever, the other end of the lever being connected to a vertical sliding rod, the lower end of which is operated by a cam upon the main shaft, substantially as described and for the purpose set forth. 5th. A pasting device, consisting essentially of a carriage having at its forward part paste-carrying rollers travelling alternately on the label and in paste-containing trays, the carriage being moved backwards and forwards by suitable connections from the main shaft, substantially as described and for the purposes set forth. 6th. A pasting device, consisting essentially of a carriage having at its forward part paste-carrying rollers upon weighted pivoted arms, the rollers travelling alternately on the label and in paste-containing trays, the carriage being actuated by a pivoted frame connected to the upper end of a rocking lever, the lower end of which is operated through a link and connecting-rod by a crank which is rotated by the main shaft through bevel gear-wheels, substantially as described and for the purpose set forth.

No. 60,424. Typewriter. (*Clavigraphe.*)



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Arthur Anthony Morse and Clark W. Thompson, both of Lacrosse, Wisconsin, U.S.A., 23rd June, 1898; 6 years. (Filed 14th February, 1898.)

Claim.—1st. In a continuous writing typewriter, a carriage, a platen cylinder journalled therein, and which is adapted to rotate continuously in one direction as the type-bars are operated, and a spring placed in the cylinder to cause it to so rotate, combined with a mechanism for rewinding the spring as the carriage is drawn backward to the starting point, substantially as shown. 2nd. In a continuous writing typewriter, a reciprocating carriage, a platen cylinder journalled therein, a spring placed in the cylinder for causing it to revolve continuously in the same direction as the type-bars are operated combined with a shaft placed in the cylinder, and to which one end of the spring is secured, and a mechanism for rewinding the spring as the cylinder is drawn back to its starting point, substantially as described. 3rd. In a continuous writing typewriter, a reciprocating carriage, a platen cylinder journalled therein, a shaft extending through the cylinder, and a spring placed in the cylinder and having one end secured to the cylinder and the other to the shaft, combined with a pinion placed upon the shaft, a gear-wheel for meshing with the pinion, and a ratchet-wheel, both loosely placed upon the shaft, a shaft upon which these wheels are loosely placed and which is provided with a pinion at one end, and a stationary rack with which the pinion on the end of the shaft engages, and suitable pawls which engage with the ratchet-wheel, substantially as set forth. 4th. In a continuous writing typewriter, a carriage, a platen cylinder journalled therein, a shaft passing through the cylinder, and a spring placed in the cylinder and having one end attached to the cylinder and the other to the shaft, combined with a suitable mechanism for rewinding the spring as the carriage is drawn back to its starting point, the spring being at its highest tension at the starting point, and at its lowest tension when the carriage has reached the length of its movement, substantially as specified. 5th. In continuous writing typewriter, a hollow platen cylinder, which is adapted to rotate continuously in the same direction as the type-bars are operated, a spring placed in the cylinder for causing it to so rotate, the type-bars and suitable escapement pawls connected with the type-bars for releasing and stopping the action of the spring, combined with a suitable mechanism for rewinding the spring, as the carriage is returned to its starting point, substantially as described. 6th. In a continuous writing typewriter, a carriage, a platen cylinder journalled therein, a spring placed inside of the said cylinder to cause it to rotate continuously in the same direction as the type-bars are operated, a spur or projection extending from the end of the cylinder, a mechanism which is operated by this spur or projection at each revolution of the cylinder, and a spring for moving the carriage endwise, each time the mechanism is operated, the bars being combined and arranged to operate, substantially as set forth. 7th. In a continuous writing typewriter, an endwise moving carriage, a cylinder journalled therein, and which is adapted to revolve continuously in the same direction as the type-bars are operated, a spur or projection upon the cylinder, a partially rotating shaft, provided with an arm which is operated at each revolution of the cylinder so as to partially revolve said shaft, an escapement also secured to the shaft, a second shaft provided with a ratchet and a toothed-wheel, and a rack with which the toothed-wheel engages, combined with a spring for drawing the carriage endwise, at each revolution of the cylinder, substantially as specified. 8th. In a continuous writing typewriter, an endwise moving carriage, a platen cylinder journalled therein, a spring placed inside of the said cylinder to cause it to revolve continuously in the same direction as the type-bars are operated, a ratchet-wheel upon the cylinder, having a portion from which the teeth are removed, and an escapement which engages with said ratchet-wheel, combined with a suitable mechanism connected with the type-bars by means of which the escapement is operated, when the end of the line is reached, substantially as shown. 9th. In a continuous writing typewriter, the key levers, a frame that is operated vertically, a shaft, and a lever journalled upon the shaft and which is connected at its lower end to the frame so as to be operated thereby, combined with an escapement pawl which is secured to the same shaft as the lever, a carriage, a partially rotating lever journalled upon the carriage to which both the lever and escapement pawl are secured, and a type cylinder having a spring which continuously revolves the cylinder in the same direction when the type-bars are operated, a ratchet-wheel formed on the end of the cylinder and with which the escapement pawls engage, and mechanism for moving the carriage endwise at the end of each line, so as to form the space between the lines, substantially as described.

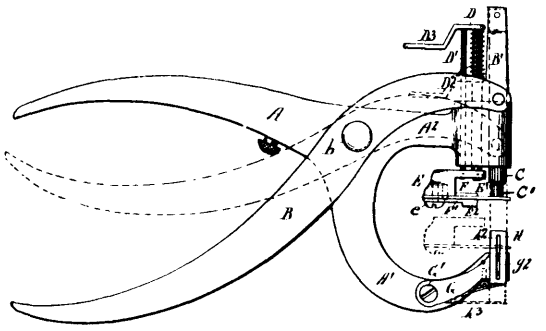
No. 60,425. Button Attaching Implement.

(*Instrument pour assujetir les boutons.*)

The McKenney Button Fastening Company, assignee of Franklin S. McKenney, of Detroit, Michigan, U.S.A., 23rd June, 1898; 6 years. (Filed 12th February, 1898.)

Claim.—1st. In a button attaching implement, the combination with two pivotally connected jaws, of a seat for a fastening carried by one of said jaws, clamping spring arms adjacent to said seat, and spring guard arms having a vertically movable connection upon said clamping arms, said spring arms and said guard arms carried by the jaws which carried said seat, substantially as set forth. 2nd. In a button attaching implement, the combination with two pivotally connected jaws, of spring clamping arms carried by one of said jaws, and spring guard arms constructed with elongated slots having a vertically movable engagement upon the clamping arms, the clamping arms provided with guide shoulder entering said slots, substantially as set forth. 3rd. In a button attaching implement, a jaw provided with a chambered operating handle, a gate fulcrumed intermediate its ends to said handle, and a spring engaging one extremity of said gate, substantially as and in the manner set forth. 4th. In a button attaching implement, a button holding plate formed with a recess at one edge thereof, said plate provided with spring clamping arms projecting over said recess, substantially as set forth. 5th. In a button attaching implement, a button holding plate formed

with a recess at one edge thereof, the face of said plate being countersunk about said recess and provided with a stop to limit the



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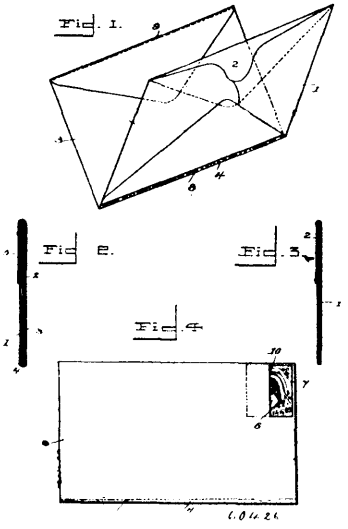
insertion of the button shank and centre the end of the shank, substantially as set forth. 6th. In a button attaching implement, a button holding plate formed with a recess at one edge thereof, the face of the plate about said recess being stamped down to form a countersunk portion on the upper face of the plate, the countersunk portion on the upper face of the plate being milled out adjacent to the front portions of said recess to form a stop to centre the shank of the button, substantially as set forth. 7th. In a button attaching implement, the combination with two pivotally connected jaws, of a seat for a fastening having its lateral edges bevelled, spring clamping arms, and vertically movable spring guard arms, the upper ends of said clamping arms and of said guard arms constructed with inwardly turned bevelled flanges to contact with the bevelled edges of the fastener seat, substantially as set forth. 8th. In a button attaching implement, the combination with two pivotally connected jaws, of a reciprocatory spindle carried by one of said jaws, a button plate holder attached to said spindle, a laterally movable button holding plate connected with said button plate holder, and a spring actuated pin carried by the button plate holder to engage the button holding plate and hold the plate in a given position, substantially as set forth. 9th. In a button attaching implement, the combination with two pivotally connected jaws, of a reciprocatory spindle carried by one of said jaws, a button plate holder attached to said spindle, a laterally movable button holding plate connected with said button plate holder, and a locating device carried by the button plate holder to engage the button holding plate and hold the plate in a given position, substantially as set forth. 10th. In a button attaching implement, the combination with two pivotally connected jaws, of a reciprocatory spindle carried by one of said jaws, a chambered button plate holder attached to said spindle, a laterally movable button holding plate connected with said button plate holder, a pin located within the chamber of the button plate holder, and a spring in said chamber to actuate the pin, said button holding plate provided with stops to engage the end of said pin, substantially as set forth. 11th. In a button attaching implement, the combination with two pivotally connected jaws, of a reciprocatory spindle carried by one of said jaws, a button plate holder attached to said spindle, a button holding plate formed with recesses on its outer edge, and a spring actuated locating device carried by the button plate holder, said button holding plate provided with locating stops arranged radially in line with said marginal recesses to engage said spring actuated device, substantially as set forth. 12th. In a button attaching implement, a button holding plate provided with marginal recesses, and an independent button holder spring engaged upon said plate, said spring provided with clamping arms adjacent to one of the marginal recesses, substantially as set forth. 13th. The combination with a button attaching implement, of a button hub holder, substantially as set forth. 14th. In a button attaching implement, a button holding plate provided with marginal recesses, and a button hub holder, substantially as set forth. 15th. In a button attaching implement provided with operating handles, the combination of a button holding device, and a button hub holder, said button holding device and said button hub holder both carried by one of said handles, substantially as set forth. 16th. The combination with a button attaching implement provided with operating handles, of a button hub holder to hold a separable hub or shank, said button hub holder carried by one of said handles, substantially as set forth. 17th. The combination with a button attaching implement, of a holder F¹ formed with spring clamping arms, substantially as set forth. 18th. In a button attaching implement, a button holding device, a movable button hub holder, and means to hold the button hub holder and button holding device in a given position of adjustment, substantially as set forth. 19th. In a button attaching implement, a button holding plate, and a movable button hub holder, said holder and plate, one provided with indentations or recesses and the other with a corresponding rib or projection, substantially as set forth. 20th. In a button attaching implement, the combination with two pivotally connected jaws, spring clamping arms having inwardly turned flanges at their upper ends carried by one of said jaws, and a fastener seat bevelled on its margin carried by one of said jaws, said seat held in place by said clamping arms, substantially as set forth. 21st. In a button attaching implement, the combination of a movable button holding plate, and an automatic stop to hold said plate in a given position, substantially as set forth. 22nd. In a button attaching implement, the combination of a movable button holding plate, a support therefor, and an automatic stop carried by said implement to hold said plate in a given position, substantially as set forth. 23rd. In a button attaching implement, the combination with two pivotally connected jaws, of a seat for a pronged fastening, a reciprocatory spindle carried by one of said jaws, a button holding plate, an intermediate support connecting said plate with said spindle, said plate being adjustable upon said support, and means to hold the plate in a given position of adjustment, substantially as set forth.

No. 60,426. Envelope. (*Enveloppe.*)



Edward W. Russey, assignee of Jesse Mercer Carter, both of Bowie, Texas, U.S.A., 23rd June, 1898; 6 years, (Filed 31st January, 1898.)

Claim. 1st. A return envelope 1, provided with an attached auxiliary back 3 formed with a sealing flap 5, as and for the purpose set forth. 2nd. The envelope 1, provided with the flap 2, the auxiliary back 5 detachably secured thereto and provided with the vertical slit 6, in combination with the stamp 7, formed with a vertical row of perforations 10 and adapted to be inserted partway through said slit and simultaneously secured to the envelope 1 and the auxiliary back 5, substantially as set forth.

No. 60,427. Brick Making Composition.
(*Composition pour faire la brique.*)

William Henry Dufree and John McClellan Murphy, both of Elgin, Illinois, U.S.A., 23rd June, 1898; 6 years. (Filed 7th February, 1898.)

Claim.—1st. The herein described composition of matter, consisting of water (for one thousand brick) about fifty (50) gallons; sand, forty-one (41) cubic feet; cement (Portland) one and one-fourth barrels; oil of vitrol, one pint; ammonia water, two quarts; pulverized alum, one and one-half pounds, substantially as described and for the purpose specified.

No. 60,428. Aluminum Soldering Flux.
(*Fusion pour souder l'aluminum.*)

Grant Hammond, San Francisco, and Thomas Flint, San Juan, both in California, U.S.A., 23rd June, 1898; 6 years. (Filed 28th January, 1898.)

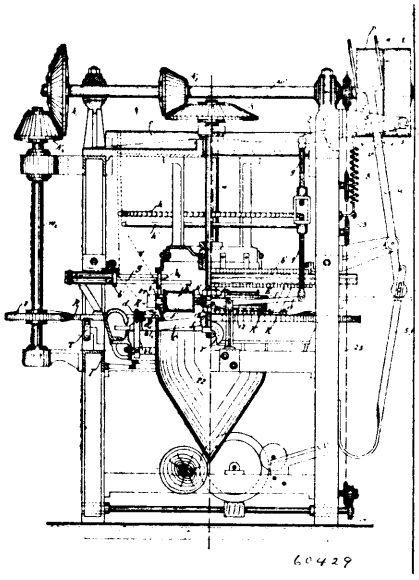
Claim.—1st. A flux for soldering and brazing aluminum, consisting of iodine and a hydro-carbon. 2nd. Iodine and iodides of tin and mercury as a flux for soldering and brazing aluminum. 3rd. A flux for soldering aluminum, consisting of iodine, iodides of tin and mercury, and a hydro-carbon of the character of vaseline.

No. 60,429. Circular Loom. (*Métier circulaire.*)

Rundwebstuhlfabrik Herold & Richards, Zeile 44, Brunn, Austria, 23rd June, 1898; 6 years. (Filed 24th January, 1898.)

Claim.—1st. In a circular loom, the combination of an electro-magnetic driving gear, which, in order to prevent the displacement of the shuttles with regard to the warp threads is so arranged that

the boss N of the electro-magnets E is provided with arms extending between the rings *f*, *f*¹ which attract the shuttle rollers *s r*, substan-



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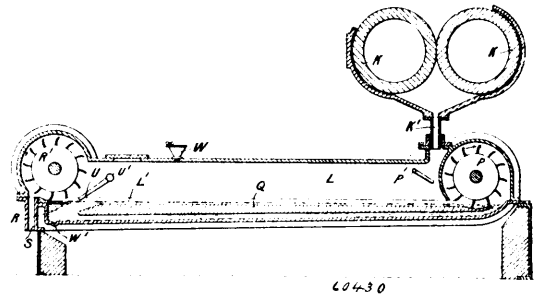
tially at right angles and through the inner warp threads, the said rollers *s*, *r* being forced to turn on their axles and to run on the rings *f*, *f*¹, whilst the rollers *s*, *r*² run on the reeds *a*⁵ and the plates M attached to the poles of the magnets to return any loosely hanging warp threads to the plane of the inner warp threads and the angular projections of the shuttles press any crossed warp threads back into the plane of the tightly stretched warp threads, substantially as described in figures 2, 3 and 4. 2nd. In a circular loom, the combination of a weft guard, consisting of a lever a^1, which, on the one hand is connected with a contact pin d^1 and on the other hand extends into the shed, said lever being adapted to be turned by a thread guiding spring g^2 if the weft breaks or gets displaced and thus to make contact between two contact pins d^1 and d^{11}, thus causing the iron core *h*, s^1, to be drawn into the solenoid-spool *s*, E against the magnet plug *s*, E¹, in order to release the spring G, *f* and allow the same to throw over the belt fork *u*, so that the roller *r* attached to the latter will allow the spring 8 to actuate the levers 3 and 7 and thus apply the brake 12 to the ring of teeth R, substantially as described. 3rd. In a circular loom, the combination of a shuttle guard, consisting of the projection 19, on the shuttle, which retains the spring pressed piston 15 of the cylinder 14, by means of the piston rod 17 with the roll 18 in a position to prevent the completion of the circuit as 21 as long as the magnet operates its shuttle properly, but closes the circuit at 21 if a magnet looses its shuttle in order to apply the brake and stop the loom, substantially as described. 4th. In a circular loom, the device for beating up the weft picks to the cloth, which consists in combining the reeds a^5 to a slay a^7, attached to the lever arms *b*, l^2 by the top *d* and screws, in order to enable a reduction of the lever arms *b*, l^2 and *b*, l^1 and to render the production and manipulation of the same more easy. 5th. In a circular loom, the combination of heddle leaves b^1, b^2, arranged in the ordinary manner of loom heddles, but in a circle and having radially arranged reeds *b*, substantially as described. 6th. In a circular loom, the combination of the templet ring C, having an uniform diameter and being circular at the top and pointed at the bottom, in order to properly fold the finished goods and feed the same to the delivery rollers, substantially as described.

No. 60,430. Method of and Apparatus for Extracting Metals from their Ores. (*Méthode et appareil pour extraire les métaux des minerais.*)

The Mudros Syndicate Limited, 10 Walbrook, London, England, assignee of James John Shedlock, of 10 Walbrook aforesaid, 23rd June, 1898; 6 years. (Filed 6th July, 1897.)

Claim.—1st. The improved process of treating ores of the character described which consists in delivering finely divided ore in an even shower into a calcining or decomposing chamber, C, heating same to the required degree as it falls and also subjecting it to the action of sprays of steam, air, gas or vapours or combinations thereof as it descends, then passing the ore between suitable grinding and feeding rolls or equivalent, then delivering the ore in an even stream into an absorbing vessel L containing a fluid metal or other suitable menstruum in which latter the precious or other metal (or metals) to be recovered is absorbed, separating the recovered metal or metals from the menstruum in any well known or suitable manner, and removing the gangue or tailing from said vessel, substantially in the manner and for the purposes hereinbefore set forth. 2nd. In the extraction of metals from their ores, the use and application of a flowing menstruum in an alloying or absorbing vessel substantially as



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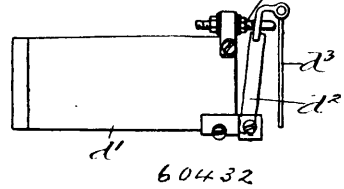
and for the purposes described. 3rd. In an apparatus for extracting metals from their ores, the combination of an absorbing or alloying vessel L, a division or partition Q, fluid metal or liquid in said vessel and means to cause said fluid metal or liquid to flow over the said partition or division Q and return under same, substantially as and for the purposes described. 4th. In an apparatus for extracting metals from their ores the combination of an absorbing or alloying vessel L, a division or partition Q, fluid metal or liquid in said vessel and means to cause said fluid metal or liquid to flow over the said partition or division Q and return under same and the bladed wheel R¹ to remove the gangue or tailings, substantially as and for the purposes described. 5th. In the extraction of metals from their res, the use and application of a seres of gas jets V V in combination and acting in conjunction with moulten metal as the menstruum in an alloying or absorbing vessel, substantially as and for the purposes described. 6th. In the extraction of metals from their ores, the use and application of jets of water, air or gas or combinations thereof acting in conjunction with mercury as the menstruum or alloying or absorbing vessel, substantially as and for the purposes herein before described.

No. 60,431. Paint. (*Peinture.*)

Charles L. Garland and Alexander Ogden, both of Sydney, New South Wales, assignee of Frederick Boyling, Brisbane, Queensland, all in Australia, 23rd June, 1898; 6 years. (Filed 18th June, 1897.)

Claim.—1st. The herein described improved enamel paint, consisting of a mixture of shellac, methylated spirits, coloured pigment and varnish, in the proportions and mixed in the manner herein specified. 2nd. The herein described improved enamel paint for leather, consisting of a mixture of shellac, methylated spirits, coloured pigment, varnish and raw linseed oil, in the proportions and mixed in the manner herein specified. 3rd. Applying the herein described improved enamel paint, consisting of a mixture of shellac, methylated spirits, coloured pigment, varnish, with or without the admixture of raw linseed oil, in the proportions and prepared as herein set forth, to the surface of the article to be coated, and then subjecting the article to a suitably high temperature in an oven or closed chamber, as specified.

No. 60,432. Annunciator for Telephone Lines. (*Annunciateur pour lignes de téléphones.*)



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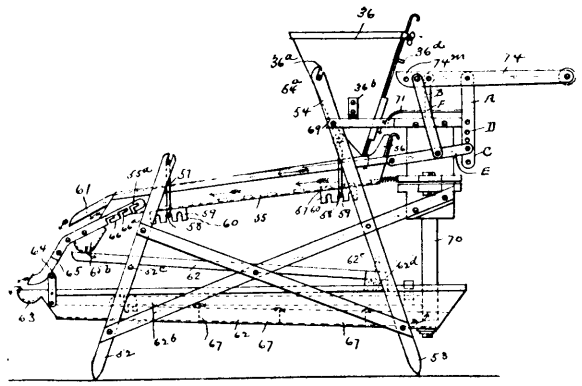
The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 23rd June, 1898; 6 years. (Filed 2nd March, 1897.)

Claim.—1st. The combination, with a closed signalling-circuit, of an annunciator having its winding, together with a resistance-coil, in the signalling-circuit, a source of current in a normally open shunt about the resistance-coil, switch-contacts in the annunciator actuated by the excitement thereof to close the said shunt, and a switch adapted to break the circuit of the battery through the annunciator, as described. 2nd. The combination with a telephone line, having at its substation means for producing in the line a momentary signalling-current and at a central station an annunciator in the line-circuit, and a spring-jack connected with the line, of switch-contacts controlled by an electro-magnet responsive to such momentary signalling-currents, a local source of current, circuit connections controlled by the switch-contacts adapted to bring the local source of current into circuit with the annunciator, and other switch-contacts in the spring-jack adapted to interrupt the

circuit of said local source of current when a plug is inserted into the spring-jack, substantially as described. 3rd. The combination with a telephone line, having a generator of momentary signalling-current at its substation and an annunciator and a spring-jack switch in the line at the central station, of switch-contacts controlled by the armature of the annunciator, a local source of current and circuit connections, including said switch-contacts, adapted to bring said local source of current into the line-circuit when the switch-contacts are closed, whereby the indicator of the annunciator is displayed when the substation generator is operated and remains displayed until a plug is inserted in the spring-jack, as described. 4th. The combination with a telephone line, having at its substation a generator of signalling-current and at its central station a spring-jack switch and an annunciator in the line, of a resistance-coil interposed in the line between two windings of the annunciator, a local source of current in a normally open shunt or parallel circuit with the resistance-coil, and switch-contacts controlled by the armature of said annunciator adapted to close the break in the normally open circuit, substantially as described.

No. 60,433. Gold Washing Pan (*Bassin pour laver l'or.*)



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James Harding Lancaster, New York City, U.S.A., 24th June, 1898; 6 years. (Filed 4th March, 1898.)

Claim.—1st. In a washing and separating apparatus, the combination with washing and separating devices, of a passage for transferring the water between the ends thereof and without passing it across said parts. 2nd. In washing and separating apparatus, the combination with washing and separating devices, of a passage situated below the same and having one end arranged to receive water from one end thereof, and means for transferring water from the other end of said passage to the other end of said washing and separating devices. 3rd. In a washing and separating apparatus, the combination with washing and separating devices, of a passage for transferring the water between the ends thereof without passing it across said parts, and means for raising the temperature of the water as it is being transferred. 4th. In washing and separating apparatus, the combination with washing and and separating devices, and a section of woven fabric below the same, of a passage for transferring the water between the ends thereof and without passing it across said parts. 5th. In washing and separating apparatus, the combination with washing and separating apparatus, the combination with a washing and separating apparatus, of a passage for transferring the water between the ends thereof and without passing it across said parts, and a section of woven fabric in said passage. 6th. In washing and separating apparatus, the combination with washing and separating devices, of a passage situated below the same and having its tail end arranged to receive water from the tail end thereof, an inclined screen over the tail end of said passage and below the tail end of the washing and separating devices, and means for transferring water from the other end of said passage to the other end of the washing and separating devices. 7th. In a washing and separating apparatus, a vibratory riffle surface and superposed screen, and a passage for transferring water between the ends thereof without passing it across said parts. 8th. In a washing and separating apparatus, a vibratory riffle surface and superposed screen, the tail end of said screen projecting beyond the tail end of the riffle surface, and a passage for transferring water between the ends of said riffle surface and screen without passing it across said parts. 9th. In a washing and separating apparatus, a vibratory riffle surface and superposed screen, a pan situated beneath the same to receive water from one end thereof, and means for delivering such water to the other end thereof. 10th. In washing and separating apparatus, a vibratory riffle surface and superposed screen, a passage for transferring water between the ends thereof without passing it across the same, and means for raising the temperature of the water as it is being transferred. 11th. In washing and separating apparatus, a vibratory riffle surface and superposed screen, a section of woven fabric situated below the riffle surface, and means for transferring water between the ends of said parts without passing it across same. 12th. In washing and separating apparatus, a vibratory riffle surface and superposed screen, a passage for transferring water between the ends thereof without passing it across the same, and a section of woven fabric in said passage. 13th. In washing and separating apparatus, a vibratory riffle surface and superposed screen, a pan situated beneath the same to receive water from one end thereof, a section of woven fabric upon the bottom of said pan, and means for delivering the water to the other ends of the riffle surface and screen. 14th. In washing and separating apparatus, the vertically adjustable washing and separating devices. 15th. In washing and separating apparatus, a supporting frame provided with vibratory rests, and washing and separating devices mounted thereon. 16th. In washing and separating apparatus, a supporting frame provided with adjustable vibratory rests, and washing and separating devices mounted thereon. 17th. In washing and separating apparatus a supporting frame provided with adjustable vibratory rests, and washing and separating devices mounted thereon, the connection between said rests and washing and separating devices mounted thereon, the connection between said rests and washing and separating devices being adjustable. 18th. In washing and separating apparatus, the supporting frame provided with vibratory rests having cross bars, and washing and separating devices provided with depending notched portions to receive said cross bars. 19th. In washing and separating apparatus, a vibratory riffle surface, and a superposed and detachable screen. 20th. In washing and separating apparatus, the vibratory riffle surface and superposed screen, a stationary pan situated below the same, an inclined screen extending from the tail ends of said riffle surface and screen over the tail end of said pan, and means for transfering the water from the head of the pan to the head of said screen. 21st. In washing and separating apparatus, the vibratory riffle surface and superposed screen, a stationary pan situated below the same, an inclined screen secured at its upper end to the said vibratory parts and extending from the tail ends of the same over the tail end of said pan, and means for transferring the water from the head of the pan to the head of said screen. 22nd. In washing and separating apparatus, the vibratory riffle surface and superposed screen, a stationary pan situated below the same and provided with a transverse rest near its tail end, an inclined screen extending from the tail end of the riffle surface and screen and secured to said vibratory parts, said inclined screen resting upon said transverse rest and extending over the tail end of the pan, and means for transferring the water from the head of the pan to the head of said screen. 23rd. In washing and separating apparatus, the vibratory riffle surface and superposed screen, the tail end of said screen overhanging the tail end of the riffle surface, a stationary pan situated below the same, an inclined screen secured at its upper end to said vibratory parts and extending from the tail ends of the same over the tail end of the pan, and means for transfering the water from the head of the pan to the head of said screen. 24th. In washing and separating apparatus, the vibratory washing and separating devices, a pan situated below the same and provided at its tail end with a trough, an inclined screen leading from the tail ends of the washing and separating devices over the tail end of the pan and above said trough, and means for transferring the water from the head of the pan to the head of said washing and separating devices. 25th. In washing and separating apparatus, the vibratory washing and separating devices, a stationary pan situated below the same to receive water from one end thereof, transverse obstructions in said pan, and means for transferring the water from the head of the pan to the head of said washing and separating devices. 26th. In washing and separating apparatus, the vibratory washing and separating devices, a stationary pan situated below the same to receive water from one end thereof, transverse reticulated obstructions in said pan, and means for transferring the water from the head of the pan to the head of said washing and separating devices. 27th. In washing and separating apparatus, the vibratory washing and separating devices, a stationary pan situated below the same and adapted to receive water from one end thereof, and a pump having its intake situated within one end of the pan and its delivery over one end of the washing and separating devices. 28th. The combination with the vibratory washing and separating devices, the stationary pan, and pump for raising the water from the pan to said washing and separating devices, of a common actuating device for vibrating said devices and for operating said pump. 29th. The combination with the vibratory washing and separating devices, the stationary pan, and pump for raising the water from the pan to said washing and separating devices, of a common actuating device for vibrating said devices and for operating said pump, said device being arranged to vibrate said washing and separating devices faster than it vibrates the pump piston. 30th. In washing and separating apparatus, the vibratory washing and separating devices, a stationary pan, a pump to raise water from the pan to the washing and separating devices, an operating lever for said pump, a toggle lever connected with said pan and with a stationary support, and a connection between said operating lever and the knee of said toggle lever. 31st. In washing and separating apparatus, the vibratory washing and separating devices a stationary pan, a pump to raise water from the pan to the washing and separating devices, an operating lever for said pump, a toggle lever connected with said pan and with a stationary support and a connection between said operating lever and the knee of said toggle lever, said connection being adjustable with relation to the operating lever. 32nd. The combination with the supporting frame,

of vibratory washing and separating devices, and devices for causing irregular and itermittent vibration thereof. 33rd. The combination with the supporting frame, of vibratory washing and separating devices, a toggle lever having its ends connected with said washing separating devices and with a stationary support, and an operating lever connected with the knee of said toggle lever. 34th. The combination with the supporting frame, of vibratory washing and separating devices, a toggle lever having its end connected with said washing and separating devices and with a stationary support and an operating lever connected with the knee of said toggle lever, said connection embracing a lost motion. 35th. The combination with the supporting frame, of vibratory washing and separating devices, a toggle lever having its end connected with said washing and separating devices and with a stationary support, an operating lever connected with the knee of said toggle lever, said connection embracing a lost motion, and a spring connection with said washing and separating devices and with a stationary support. 36th. The combination with the supporting frame, of vibratory washing and separating devices, a toggle lever having its ends connected with said washing and separating devices and with a stationary support, and operating lever, a link connected therewith and having a slot in which the pivot of said toggle lever is situated. 37th. In washing and separating apparatus, a supporting frame, vibratory washing and separating devices suspended therefrom, and a projection upon said washing and separating devices to limit the movement thereof in one direction. 38th. In washing and separating apparatus, supporting frame, washing and separating devices suspended therefrom, and an adjustable cam carried by the latter to come in contact with a portion of the frame to limit the movement of said washing and separating devices in one direction. 39th. In washing and separating apparatus, a riffle surface comprising a trough having a series of riffle bars located therein, each of said riffle bars having an extended gutter and shorter parallel and irregularly disposed gutters. 40th. In washing and separating apparatus, a riffle surface comprising a trough having transverse riffle bars having end rests supporting the same at an inclination to provide a series of risers. 41st. In washing and separating apparatus, a riffle surface comprising a trough having a series of transverse riffle bars located therein, and each having end rests provided with lugs at one end and recesses at the other, the recesses of one receiving the lugs of the contiguous bar. 42nd. The within described riffle bar for a washing and separating apparatus, the same presenting in the single piece a transverse inclined riffle surface, end rests and small lugs 29, and larger recessed lugs 30. 43rd. In washing and separating apparatus, the combination with the trough, of a series of transverse riffle bars supported therein, and a section or layer of woven fabric interposed between said riffle bar, and the bottom of said trough. 44th. In washing and separating apparatus the combination with a trough having suitable washing and separating provisions and rising head portion, of a detachable hopper removably located at the latter, and having a controlling valve. 45th. A riffle surface for a separating apparatus, comprising a longitudinal series of individual removable transverse bars having flat upper faces presenting a series of successive risers. 46th. A riffle surface for a separating apparatus, comprising a longitudinal series of individual removable transverse bars, each bar having a portion or portions for overlapping a contiguous bar. 47th. In washing and separating apparatus, the combination with a trough detachable and pivotally mounted upon a suitable support, a removable riffle surface and screen providsion therein, of a removable hopper located at the head of said trough. 48th. In washing and separating apparatus, a trough provided with lateral and longitudinally extending guides practically parallel with the bottom thereof, and a longitudinal series of riffle bars held between said guides and the bottom of the trough. 49th. In washing and separating apparatus, the combination with the vibratory washing and separating devices and stationary pan, of a heating service situated below said pan. 50th. In washing and separating apparatus, the combination with the vibratory washing and separating devices and stationary pan, of a heating device situated below said pan and provided with a receptacle at one side thereof. 51st. In washing and separating apparatus, the vibratory washing and separating devices, and a stationary pan situated below the same and provided with a closely fitting removable pan. 52nd. In washing and separating apparatus, the vibratory washing and separating devices, a stationary pan, a pump to raise water from the pan to the washing and separating devices, a rotatable crank shaft, a lever operated by said crank shaft and operating said pump, a toggle lever connected with said pan and with a stationary support, and a connection between said lever and toggle lever. 53rd. The process herein described, which consists in employing an anti-freezing solution in a washing and separating apparatus. 54th. The process herein described, which consists in re-using the liquid in a washing and separating apparatus, said liquid consisting of an anti-freezing solution. 55th. The process herein described, which consists in employing heated water in a washing and separating apparatus. 56th. The process herein described, which consists in employing an anti-freezing solution in a washing and separating apparatus, said solution consisting of water treated with salt or analagous ingredients. 57th. In washing and separating apparatus, the vibratory riffle surface and superposed screen, a stationary pan situated below the same, an inclined screen adjustably connected with said vibratory parts and extending from the tail ends thereof over the tail end of the pan, and means for transferring water from the head of the pan to the head of said superposed screen. 58th. In washing and separating apparatus, the vibratory riffle surface and superposed screen, a stationary pan situated below the same, a vibratory screen extending from the tail end of the riffle surface over the tail end of the pan and provided with a transverse pocket, the tail end of said superposed screen extending beyond said pocket, and means for transferring water from the head of the pan to the head of the superposed screen. 59th. In washing and separating apparatus, the vibratory riffle surface and superposed screen, a stationary pan situated below the same, a vibratory inclined screen extending from the tail end of the riffle surface over the tail end of the pan and provided with a transverse pocket, the tail end of said superposed screen extending beyond said pocket, a plurality of inclined troughs extending from below said pocket to the tail end of the pan, and means for transferring water from the head of the pan to the head of the superposed screen. 60th. In washing and separating apparatus, the vibratory riffle surface and superposed screen, a stationary pan situated below the same, a vibratory inclined screen extending from the tail end of the riffle surface over the tail end of the pan and provided with a transverse pocket, a plurality of adjustably inclined troughs extending from below said pocket to the tail end of the pan, and means for transferring water from the head of the pan to the head of the superposed screen. 61st. In washing and separating apparatus, the vibratory washing and separating devices, and the vibratory hopper situated above the same. 62nd. In a washing and separating apparatus, the vibratory washing and separating devices, and the vibratory hopper situated above the same, and in the path of a projection upon said washing and separating devices. 63rd. In washing and separating apparatus, the supporting legs carrying the washing and separating device, a hopper pivotally supported by extensions of said legs, stops to limit the downward movement of the hopper, and projections on the vibratory washing and separating devices to engage and vibrate said hopper. 64th. In washing and separating apparatus, the combination with the washing and separating devices, of a hopper having a supply opening, and a water supply spout passage situated adjacent said hopper supply openings, whereby the material to be treated and the water meet before reaching the washing and separating devices. 65th. In washing and separating apparatus, the combination with the washing and separating devices, of a hopper situated at the head thereof and having a supply opening in its front side, and a water supply spout or passage situated adjacent said hopper supply opening, whereby the material to be treated and the water meet before reaching the washing and separating devices. 66th. The combination with the supporting frame, of vibratory washing and separating devices, a toggle lever having its legs connected with the washing and separating devices and with a stationary support, the latter leg being longest, and an operating lever connected with the knee of the toggle. 67th. In washing and separating apparatus, a vibratory pan having transverse bars, and an opening in the ends of alternative riffle bars. 68th. In washing and separating apparatus, a vibratory pan having transverse riffle bars, an opening at the ends of alternative riffle bars, and a lug at such end to form a pocket. 69th. In washing and separating apparatus, a vibratory pan having transverse riffle bars provided with overhanging upper sides.

No. 60,434. Acetylene Gas Making Machine.

(*Machine à faire le gaz acétylène.*)

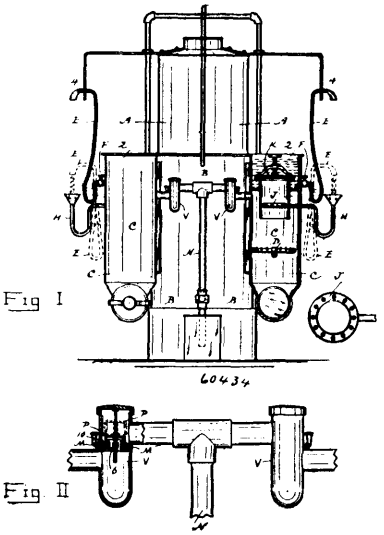

Fig I

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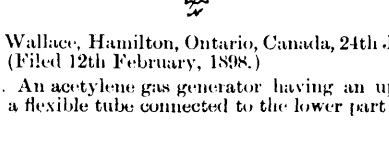


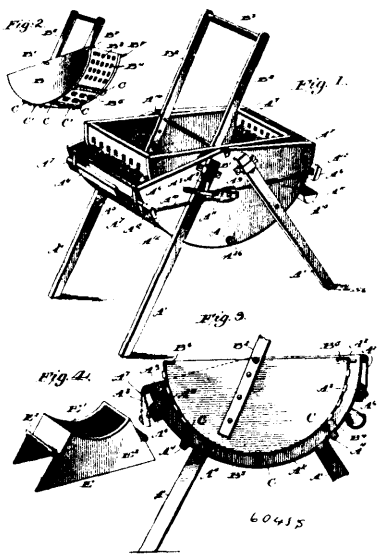
Fig II

Hugh Steven Wallace, Hamilton, Ontario, Canada, 24th June, 1898; 6 years. (Filed 12th February, 1898.)

Claim.—1st. An acetylene gas generator having an upper water compartment, a flexible tube connected to the lower part thereof by

tap connection, and the other end suspended from a gasometer, said suspended end cable of pouring water into a flared out opening of a water tap when gasometer falls a certain distance, the inner end of said water tap connected to a perforated ring, in the generator, to spray water on the carbide. 2nd. In an acetylene gas machine a check valve connected to the generator below the water compartment thereof, and to the gasometer, by means of pipes, mercury or other suitable element, as a seal, whereby the outflow of gas from the ometer is authomatically prevented from returning to the generator, by means of a floating cap, the lower rim of which is surrounded by the mercury of suitable depth therefore completely covering the gas outlet, which is opened by pressure from the generator and completely closed by pressure of gas from the gasometer as described. 3rd. In an acetylene gas machine of the character described, a gas generator having an upper water compartment and a lower calcium-carbide grate, a flexible tube connected to the lower part of said water compartment by tap connection, a water trap having flared out upper inlet to receive water from the suspended end of said flexible tube when the gasometer falls a certain distance, the inner end of said water trap provided with a perforated ring to spray water on the carbide, in construction with a check valve connected to the generator and to the gasometer by means of pipes, a floating cap having lower rim surrounded by mercury or other suitable element in a recess formed around the outlet opening in said valve, said cap capable of being raised and outlet opened by pressure of gas from the generator and closed by pressure of gas from the gasometer, as described.

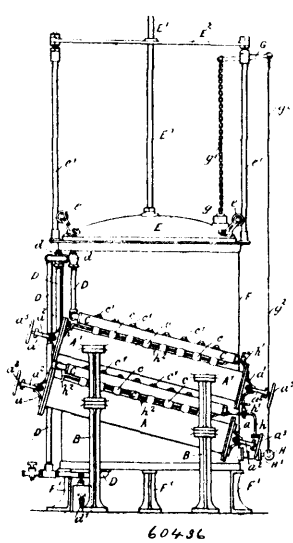
No. 60,435. Ore Washer. (*Machine à laver l'or.*)



Edwin Jeffry Beverstock, Washington, Columbia, U.S.A., 24th June, 1898; 6 years. (Filed 24th January, 1898.)

Claim. 1st. In a machine of the class described, a pivotally suspended basket having a curved screening bottom in combination with a tank having a bottom of similar curvature, substantially as specified. 2nd. A machine of the class described, comprising a screening basket having a curved bottom and a tank having a bottom similarly curved except at the discharge end thereof. 3rd. A machine of the class described, comprising in its make-up a screening basket having transverse splasher bars. 4th. In a machine of the class described, a pivotally suspended screening basket having a perforated bottom curved in a circle derived from the centre of support of the basket, whereby the load carried by the basket is supported below its centre of motion. 5th. In a machine of the class described, a basket pivotally supported for swinging and having a curved bottom formed substantially on a circle derived from its centre of support, in combination with a tank having a bottom curved substantially parallel with that of the basket, substantially as specified. 6th. In a machine of the class described, a perforated basket provided with splasher bars having separating devices projecting therefrom. 7th. The combination of a basket having a curved perforated bottom provided with splasher bars and agitating devices projecting therefrom, and a tank having a similarly curved bottom provided with riffles. 8th. The combination with a swinging basket having a curved bottom provided with flanged perforations and with agitating devices projecting below said flanges, substantially as specified. 9th. The combination of a basket having a curved perforated bottom, with a tank having a similarly curved bottom provided with openings, and means for closing said openings, substantially as specified. 10th. The combination with a swinging basket having a curved perforated bottom provided with agitators projecting therefrom, of a tank having a curved bottom with openings therein at opposite sides, doors for closing said openings, and means for opening and closing the doors. 11th. A machine of the class described, comprising a swinging basket, a tank, and a fire box. 12th. In a machine of the class described, a swinging basket having a curved perforated bottom, a tank having a curved bottom, and a fire box adapted to fit the tank, substantially as specified. 13th. In a machine of the class described, a screening basket, a tank, and a fire box constructed and arranged to confine the heat of the fire to the tank, substantially as specified. 14th. The combination with a screening basket, of a tank, and a fire box adapted to fit the tank and provided with troughs. 15th. The combination with a tank having openings, of doors for said openings, rods extending from the doors, and a lever for operating said rods, substantially as specified. 16th. The combination with a tank, of a swinging basket mounted therein and provided with lugs projecting from the ends of the basket, substantially as specified. 17th. The combination with a tank having openings, pivoted doors for said openings, rods adjustably secured to the doors and operatively connected with a lever, substantially as specified. 18th. The combination of a perforated hanging screening basket and a stationary tank, the same being arranged with a space between them, whereby screened matter may be thrown from the tank by the movements of the basket, substantially as specified.

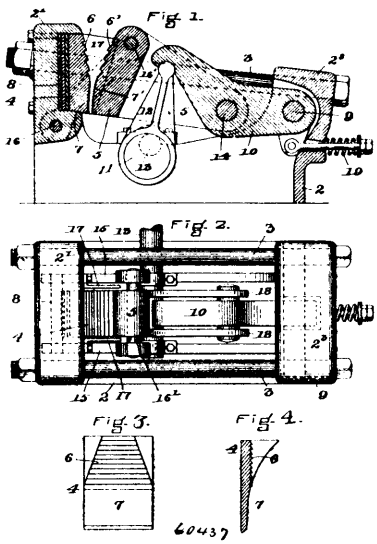
No. 60,436. Acetylene Gas Generating and Storing Apparatus. (*Appareil pour générer et emmagasiner le gaz acétylène.*)



Archibald Kay, Salford, Manchester, England, 24th June, 1898; 6 years. (Filed 27th December, 1897.)

Claim. 1st. In an apparatus for the generation and storage of acetylene gas, the combination comprising the gas-holder E, the generator or generators A arranged at an angle, each connected to a condenser C and fitted with removable doors *a* at each end, and water-supplying devices, all substantially as set forth. 2nd. In an apparatus for the generation and storage of acetylene gas, the combination comprising the generator or generators A set at an angle and fitted with removable doors *a*, each connected to a condenser C and a gas-holder E, all substantially as set forth. 3rd. In an apparatus for the generation and storage of acetylene gas, the combination comprising the gas-holder E and the generator or generators A placed in a sloping position and fitted with doors *a* at each end, all substantially as set forth. 4th. In an apparatus for the generation and storage of acetylene gas, the combination comprising the generators A, A^1, the condensers C, the pipes D, valve *d*, the gas-holder E and the tank F, substantially as set forth. 5th. In an apparatus for the generation and storage of acetylene gas, the combination comprising the generating devices and the water-supplying fittings, lever H, valve H^1, and pipes *h* with the lever C, weight *g*, chain g^1, and connecting cord g^2, substantially as set forth. 6th. In an apparatus for the generation and storage of acetylene gas, the combination comprising the generating devices and the water-supplying valve H^1 and pipes *h* with the float J, rod *h*, plate h^1 and chain g^2, substantially as set forth. 7th. In an apparatus for the generation and storage of acetylene gas, the combination of the gas-conveying pipes D with the valve *d*, substantially as set forth. 8th. In a non-return valve, the combination of dome-shaped valve d^2, valve-seat d^1, guide-rod d^3 and casing *d*, all substantially as set forth.

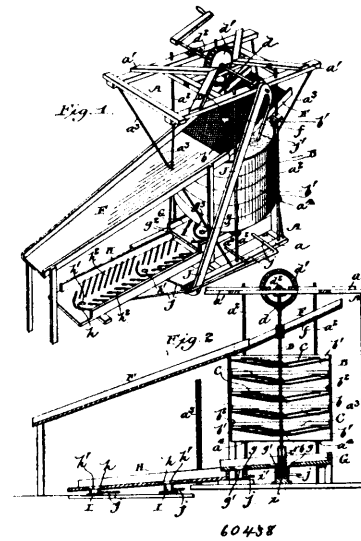
No. 60,437. Crushing Machine. (*Machine à broyer.*)



Thomas Leggett Sturtevant, Quincy, and Thomas Joseph Sturtevant, Framingham, both in Massachusetts, U.S.A., 24th June, 1898; 6 years. (Filed 20th November, 1897.)

Claim.—1st. In a crushing machine, the combination with a movable and a fixed jaw having diverging toothed or roughened upper portions to form a hopper to receive coarse material, and adjacent lower portions, the lower portion of said fixed jaw being formed concave and the lower portion of said movable jaw being formed convex, and operating mechanism for the said movable jaw to cause the convex portion thereof to have a rolling action relative to the concave portion of said fixed jaw. 2nd. A crusher comprising the combination with a fixed jaw, of an active rocker-jaw, a toggle-lever, and means for operating said lever, a portion of the face of the said fixed jaw being formed concave in the arc of a circle of which the fulcrum of the said toggle-lever is the centre. 3rd. In a crushing machine, the combination with a movable and fixed jaw, which jaws have diverging toothed or roughened upper portions to form a hopper to receive the coarse mateal, and adjacent lower portions, the lower portion of one jaw being formed concave and the lower portion of the other of said jaws being formed convex, and operating mechanism for the said movable jaw, said operating mechanism comprising a toggle-lever to the middle portion of which the said movable jaw is pivoted, and an operating device connected with the forward or free end of said lever between the point of connection of said movable jaw with said lever and the crushing face or active portion of said jaw. 4th. In a crushing machine, the combination with fixed and movable jaws, said fixed jaw having the lower portion of its face concave and said movable jaw having the lower portion of its face convex, combined with a toggle-lever for operating said movable jaw, the fulcrum of said lever being the centre of a circle of which the concave surface of said fixed jaw is an arc, and the pivotal connection of said lever with said movable jaw being the centre of a circle of which the convex surface of said movable jaw is an arc. 5th. In a crushing machine, the combination with a movable and a fixed jaw having diverging toothed or roughened upper portions, to form a hopper to receive coarse material, and adjacent lower portions, the lower portion of said fixed jaw being formed concave in the arc of a circle of a given radius and the lower portion of said movable jaw being formed convex in the arc of a circle of a smaller radius than the circle to which the concave part of said fixed jaw corresponds, a toggle-lever pivotally connected between its ends to an arm or rearward extension of said movable jaw, and an operating device connected with the free end of said toggle-lever to cause the convex portion of said movable jaw to have a rolling movement relative to the concave portion of said fixed jaw. 6th. In a crushing machine, the combination with a fixed jaw having a portion of its crushing surface concave, of a movable jaw having a portion of its crushing surface convex, a toggle-lever connected with said movable jaw, guide-links securing said movable jaw to the frame-work of the machine, and an operating mechanism for said toggle-lever, said lever and links forcing said movable jaw to move in a predetermined manner relative to said fixed jaw, the fixed pivotal connection of said toggle-lever being the centre of the circle from which the arc of the concave surface of said fixed jaw is struck. 7th. In a crushing machine, the combination with a fixed jaw and a movable jaw, of a toggle-lever to which said movable jaw is pivoted between the fulcrum of said lever and the working face of said movable jaw, and an operating device connected to said toggle-lever between the pivotal connection of the latter with the said movable jaw and the working face of the said movable jaw. 8th. In a crushing machine, the combination with a fixed jaw a movable jaw, of a toggle-lever to which said movable jaw is pivoted between the fulcrum of said lever and the working face of said movable jaw, an operating device connected to said toggle-lever between the pivotal connection of the latter with the said movable jaw and the working face of the said movable jaw, and guide links joining the forward part of said movable jaw with the frame work of the machine and thereby serving to support and guide the forward end of said jaw. 9th. In a crushing machine, the combination with a fixed jaw and a movable jaw, of a toggle-lever to which said movable jaw is pivoted between the fulcrum of said lever and the working face of said movable jaw, an operating device connected with the free end of said toggle-lever, and guide links joining the said movable jaw with the framework of the machine, and thereby serving to support and guide said jaw. 10th. In a crushing machine, the combination with the fixed jaw and a movable jaw, of a toggle-lever to the central portion of which the said movable jaw is pivotally connected, and to the free end of which the operating device for said lever is joined, and a spring for assisting in the downward or return movements of the said toggle-lever. 11th. In a crushing machine, the combination with the frame or base-plate 2, having the end portions or abutments 2^1, 2^3, of the tie rods 3, 3, joining the said end portions or abutments, the fixed jaw supported upon the end portion or abutment 2^1, the toggle-lever 10 pivoted to said end portion or abutment 2^3, the movable jaw 5 pivotally connected with the said toggle-lever between the ends of the latter, and an operating device for said toggle-lever joined to the forward or free end thereof. 12th. The combination with the base-plate or frame 2 having the end portions or abutments 2^1, 2^3, the former being provided with the side plates 17, of the fixed and movable jaws between the said side plates, and means for operating said movable jaw, said operating means consisting of the toggle-lever 10, to the central portion of which said movable jaw is jointed, and an operating device for said toggle-lever jointed to the forward or free end thereof.

No. 60,438. Gold Separator. (*Séparateur pour l'or.*)



Amos Trout Fox, Summer, Washington, U.S.A., 24th June, 1898; 6 years. (Filed 12th November, 1897.)

Claim.—1st. In a gold separator, the combination with a suitable frame, of a feed trough or chute, a series of stationary bowl provided with central apertures, an intermediate series of bowls, interposed between said stationary bowls, means for supporting said intermediate bowls and suitable sluice boxes for receiving the discharge of said bowls, substantially as described. 2nd. In a gold separator, the combination with a suitable frame, of a feed trough, a series of stationary bowls provided with central apertures, a series of intermediate bowls interposed between the fixed bowls, a vertical shaft passing up through the apertures in the stationary bowls, and supporting the intermediate bowls, means for revolving said shaft and intermediate bowls, when desired, and sluices for receiving the discharge from the bowls, substantially as described. 3rd. In a gold separator, the combination with a suitable frame, of a feed trough or chute, a series of circular bowls, placed one above the other, and supported in said frame, said bowls being provided with central openings, a shaft revolvably supported in the frame, a series of intermediate bowls, secured to said shaft, between said circular bowls means for revolving said shaft and intermediate bowls when desired and sluice boxes for receiving the discharge of said bowls, substantially as described. 4th. In a gold separator, the combination with

a suitable frame, of a feed trough, a series of fixed bowls, adapted to be supported one above another in the frame, a series of intermediate bowls interposed between said fixed bowls, means for supporting and revolving the same, sluice boxes provided with apertured depressed revolving portions, and mercury cups beneath said apertures for catching the mercury and gold, substantially as described. 5th. In a gold separator, the combination with a suitable frame, of a suitable feed trough, a series of fixed bowls, adapted to be supported one above another in the frame, a series of intermediate bowls interposed between said fixed bowls, means for supporting and revolving the same, sluice boxes for receiving the discharge of the bowls, provided with mercury holding cups, and elevating means for raising the mercury to the top of the operator, substantially as described. 6th. In a gold separator, the combination with a suitable frame, of a feed trough, a series of stationary bowls, adjustably mounted in the said frame, and provided with central apertures, said bowls converging toward said central apertures, a series of intermediate bowls interposed between said stationary bowls and converging toward the centre, means for supporting and revolving the discharge from said bowls, provided with suitable riffles, and depressed portions, said depressed portions being provided with apertures, mercury cups beneath said apertures, an elevator for converging the mercury to the top of the separator and discharging it into the same, pipes connecting the mercury cups with the elevator, and means for operating the elevator, substantially as described.

No. 60,439. Method of Manufacturing Leather Articles Plated with India Rubber. (*Méthode de fabrication d'objets en cuire plaques en caoutchouc.*)

Raphael Schuarzwald, Grosse Bleichen 33, Hamburg, Germany, 24th June, 1898; 6 years. (Filed 7th September, 1897.)

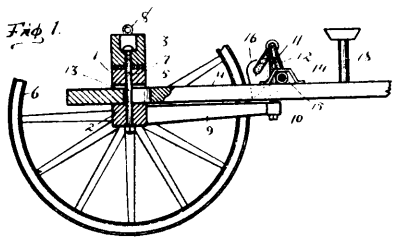
Claim.—1st. The improved method of manufacturing leather articles plated with india rubber by covering said articles when formed of leather with india rubber sheeting entirely or partly and subjecting them to the vulcanising process in a hot air bath, constructed and arranged as hereinbefore described. 2nd. The improved process of manufacturing foot coverings by vulcanising in a hot air chamber bark tanned leather cut into the required shapes, fixed on lasts and covered with coloured smooth or embossed india rubber sheeting, free on the lasts without being wrapped up or enclosed, constructed and arranged substantially as hereinbefore described.

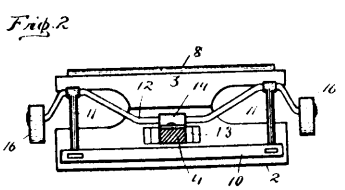
No. 60,440. Carbon. (*Carbone.*)

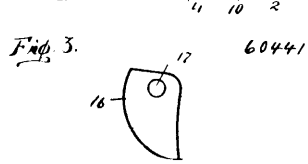
George William de Tunzelman, Earlscourt, Middlesex, England, 24th June, 1898; 6 years. (Filed 24th July, 1898.)

Claim.—The carbons or electrodes for electric welding, brazing and the like purposes, the incorporation or admixture therewith of a metallic oxide or oxides for the purpose of reducing the excess of free carbon in the arc, and also producing an arc in which the heat is more equally diffused, owing to the presence of metallic vapour therein.

No. 60,441. Waggon Brake. (*Frein de wagon.*)







Charles Garver, Fort Wayne, Indiana, U.S.A., 24th June, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—1st. A brake for waggons, consisting of the beam 12 mounted upon the supporting posts 11, and having depending ends forming mountings for the respective shoes 16, and a depending loop between said posts, the said loop passing through the swivel-eye on the coupling-pole, and being adapted to be actuated by the longitudinal movements of said pole, substantially as shown and described. 2nd. In a brake for waggons, a swinging brake-beam mounted upon the forward truck of the waggon, and having a connection with the coupling pole of said waggon, and being adapted to be actuated by the longitudinal movement of said coupling-pole, substantially as shown and described.

No. 60,442. Ammonia Producing Method.

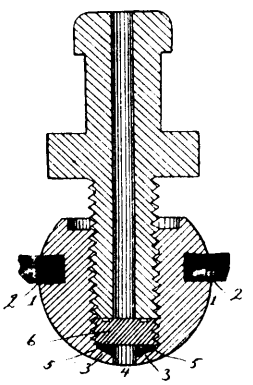
(*Méthode de production d'ammoniaque.*)

Hermann Mehner, Charlottenburg near Berlin, German Empire, 24th June, 1898; 6 years. (Filed 13th March, 1897.)

Claim.—1st. The hereindescribed process for producing ammonia which consists in exposing a mixture of coal and alkali or earth alkaline metal carbonate to the heat of an electric furnace while air is caused to pass through the same, allowing the cyanide vapours produced to escape into a receiver, causing them to condense therein upon coal, decomposing the condensed cyanide into ammonia and alkali or alkaline earth metal carbonate by admitting steam into the condenser, and returning the residual mixture of alkali or alkaline earth metal carbonate and coal with the furnace, substantially as and for the purpose stated. 2nd. The described process for producing ammonia which consists in exposing a mixture of coal and alkali or alkaline earth metal carbonate to the heat of an electric furnace while air is caused to pass through the same, allowing the cyanide vapours to escape at the zone of the electrodes into a receiver, causing them to condense therein upon coal, decomposing the condensed cyanide into ammonia and alkali or alkaline earth metal carbonate by admitting steam into the condenser, and returning the resulting mixture of carbonate and coal into the furnace, substantially as and for the purpose stated. 3rd. The improvement in the production of ammonia consisting in producing the cyanide in a state of vapours, condensing them in contact with the coal required for a subsequent operation, steaming the thus obtained mixture of cyanide, and employing the mixture thus obtained for a repitition of the operation, substantially as described.

No. 60,443. Valve for Pneumatic Tires.

(*Soupape pour bandages pneumatiques.*)

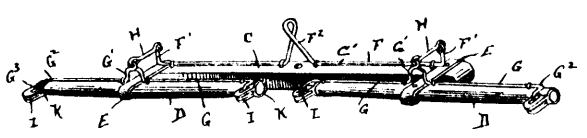


60443

Irwin F. Kepler, Akron, Ohio, U.S.A., 24th June, 1898; 6 years. (Filed 3rd May, 1898.)

Claim. The combination in a pneumatic tire valve with the case having a screw-threaded opening and a reduced extension of said opening to form a gasket-seat, of a screw-threaded plug to fit said screw-threaded opening, having a radial notch in combination with an air pump tube tip to fit said screw-threaded opening and having an oppositely disposed radial notch to engage the notch of said plug, substantially as shown and described.

No. 60,444. Singletree. (*Palonnier.*)



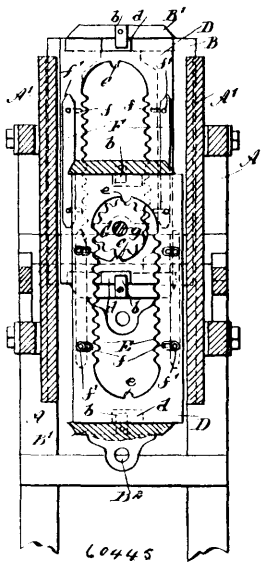
60444

Joseph P. Ponton, Lexington, Texas, U.S.A., 24th June, 1898; 6 years. (Filed 3rd May, 1898.)

Claim.—A combined horse-detacher and whiffletree attachment comprising the draft-pole B, the doubletree C mounted upon said

pole, the singletrees D connected with the doubletree by the clip-irons E arranged on opposite ends of the doubletree, and in which the singletrees are pivoted, a rocking-bar F, mounted on the top of the doubletree provided with the crank-arms F^1 at each end, the central lever portion F^2, a bar G on the whiffletree, the central portion G^1, the link connection H, the guide-plates I carried by the ferrule K, to fit on the end of the whiffletree, a coil-spring L attached to the draft-pole B connected at its upper end to the lever member F^2, and an operating-cord M attached to said member F^2, as and for the purposes set forth.

No. 60,445. Mechanical Movement.
(*Mouvement mécanique.*)



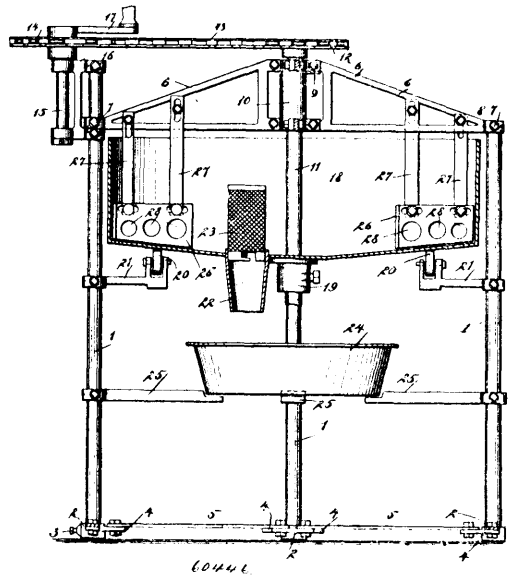
Edward Cadimus Riddle, Browning, Missouri, U.S.A., 24th June, 1898; 6 years. (Filed 2nd May, 1898.)

Claim. 1st. A device for converting reciprocating into rotary motion and the contrary, comprising a frame having two sets of parallel guideways therein, two reciprocating frames or guides sliding longitudinally in said guideways and provided with lateral guides, a rack mounted to slide laterally in said guides, said frame and rack being provided with stops limiting said lateral movement, said racks consisting of two bars connected at their ends and having the inner or opposed surfaces of the side bars tooth, ribs fixed to each of the side bars upon the side facing the other rack and adapted to slidingly engage each other, a single tooth upon the cross-bars at each end of the racks, and a pinion mounted upon a shaft and engaging opposite sides of each rack, substantially as specified. 2nd. A device for converting reciprocating into rotary motion and the contrary, comprising a frame having two sets of parallel guideways therein, two reciprocating frames or gates sliding on said guideways and provided with lateral guides, a rack mounted to slide in said lateral guides, said frame and rack being provided with stops limiting said lateral movement, said rack consisting of two bars connected at their ends and having the inner or opposed surfaces of the side bars toothed, ribs fixed to each bar upon the side facing the other rack and adapted to slidingly engage each other, said ribs being secured by bolts passing through laterally extending slots so as to be laterally adjustable, a single toothed upon the cross-bars at each end of the racks, and a pinion mounted upon the shaft and engaging opposite sides of each rack, substantially as specified. 3rd. A device for converting reciprocating into rotary motion and the contrary, comprising a frame having two sets of parallel guideways therein, two reciprocating frames or gates sliding in said guideways and provided with lateral guides, a rack mounted to slide in said lateral guides, said frames and racks being provided with stops to limit said lateral movement consisting of a lug upon the gate entering a recess upon the rack, said racks consisting of two bars connected at their ends and having inner or opposed surfaces of the side bars toothed, ribs fixed to each bar upon the side facing the other rack and adapted to slidingly engage each other, and of such length as to pass by each other at the limit of their stroke, means for laterally adjusting said ribs, a single tooth upon the cross-bars at each end of the racks, and a pinion mounted upon the shaft and engaging opposite sides of each rack, substantially as specified.

No. 60,446. Amalgamator. (*Amalgamateur.*)

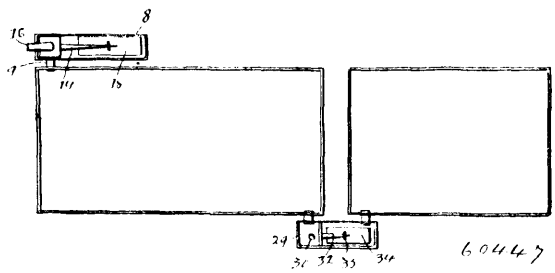
Alexander Pinover, New York City, N.Y., U.S.A., 24th June, 1898; 6 years. (Filed 30th December, 1897.)

Claim.—1st. An amalgamator, comprising a pan mounted to rotate and having an outlet through its bottom, a perforated tube extended upward from said outlet into the pan, and stationary agitator plates extended into the pan, substantially as specified.



2nd. An amalgamator, comprising a pan mounted to rotate, a frame supporting said pan, another pan supported by the frame underneath the first named pan and adapted to receive material that passes through an opening in the bottom of the first named pan, and agitator plates extended into the first named pan, substantially as specified. 3rd. An amalgamator, comprising a rotary pan, means for rotating said pan, a frame supporting the pan, and agitator plates supported by the frame and extending into the pan, the said plates being adjustable vertically and also transversely of the pan, substantially as specified. 4th. In an amalgamator, a frame comprising uprights, frame clips removably secured to said uprights, bottom brace bars removably attached to the clips, truss frames removably secured to the upper portions of the uprights, a bearing sleeve supported by said truss frames, a shaft extended through the bearing sleeve, a pan removably supported on said shaft, means for rotating the shaft and pan, agitator plates in the pan, hangers removably secured to the truss frames and supporting said agitator plates, another pan under the first named pan, and arms removably attached to the uprights for supporting said other pan, substantially as specified.

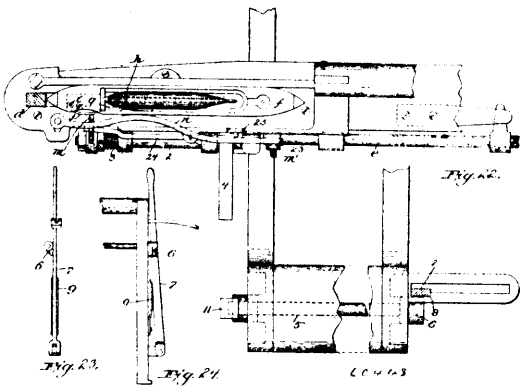
No. 60,447. Evaporator. (*Evaporateur.*)



Reid Paige Small, Dunham, Quebec, Canada, 24th June, 1898; 6 years. (Filed 14th June, 1898.)

Claim.—1st. In combination with an evaporator, of means for maintaining a constant level of the fluid in the evaporator, consisting of a receptacle independent of the evaporator and communicating therewith and with the fluid supply, and a valve in said receptacle and actuated by said fluid to control the flow thereof from the supply. 2nd. A controller for controlling the passage of fluid from one receptacle to another consisting of a chamber having a port communicating with each of said receptacles, a lever fulcrumed to the inside of one of the walls of said chamber, a valve carried by said lever and adapted to open or close one of said ports, a float located within said receptacle and actuated by the fluid passing therethrough and means for adjustably connecting said lever to said float, for the purpose set forth. 3rd. A controller for controlling the passage of syrup from the first to the second pan of an evaporator, consisting of a receptacle 26, divided into main and sub-chambers 28 and 29 respectively, the sub-chamber 29 communicating with the first pan and the main chamber 28 communicating with the second pan, a port 30 in the dividing wall of said chambers, a valve 31, lever 32, float 34 having a perforated arm 35, all arranged substantially as described and for the purpose set forth.

No. 60,448. Shuttle. (*Navette.*)



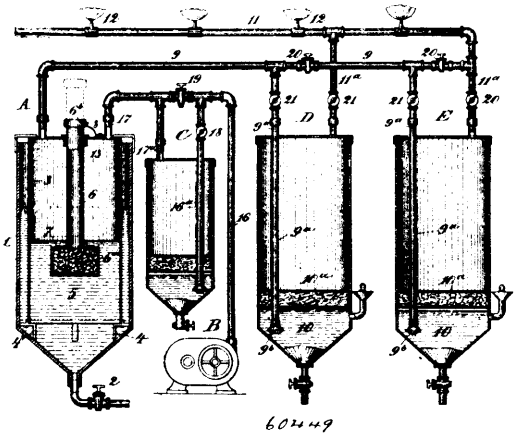
George Fair, Boston, Massachusetts, U.S.A., 24th June, 1898; 6 years. (Filed 28th March, 1898.)

Claim.—1st. A shuttle provided with a feeler-finger having one end pivotally connected with the shuttle, and the other and free end resting upon the yarn on the base of the bobbin or cop, the body portion of the feeler being formed with a swell extending beyond the outline of the body of the shuttle, when considerable yarn remains wound upon the spindle or bobbin. 2nd. A shuttle provided with a feeler finger having one end pivotally connected with the shuttle, and the other and free end resting upon the yarn on the base of the bobbin or cop, the body portion of the feeler being formed wtth a swell extending beyond the outline of the body of the shuttle, combined with a finger against which the swell on the feeler is adapted to act, until substantially all of the yarn is withdrawn from under the free end of said feeler-finger. 3rd. The combination with the shuttle provided with a feeler-finger *g*, as shown and described, of the rock-rod *e*, the shuttle-box and its swell, and a finger connected with the rock-rod and extending up from the latter between the swell and the shuttle, as hereinbefore described. 4th. The combination with a shuttle provided with a movable feeler-finger device pressed outward by the yarn last to be drawn off from the shuttle, of a spring-pressed rock-rod, a finger *m*, connected therewith and normally pressed inward against the said feeler-finger or device, and a dagger connected with the said rod, constructed and arranged when the yarn fails to be moved into operative position, to stop the loom. 5th. The combination with a shuttle provided with a movable feeler-finger or device, pressed outward by the yarn last to be drawn off from the shuttle, of the swell on the shuttle box, a spring-pressed rock-rod, a finger *m*, connected therewith and extending up between the shuttle and swell, means intermediate of the swell and finger *m*, to act with a tendency of pressing the finger outward or away from the said movable feeler-finger or device, and a dagger connected with the said rod, constructed and arranged, when the yarn fails to be moved into operative position, to stop the loom. 6th. The combination with a shuttle provided with means bearing upon the yarn last to draw off from the shuttle, said means being adapted to yield when the yarn is so drawn off, of a finger *m*, adapted to bear upon said means, a spring-pressed rock-rod to which said finger is secured, a dagger 4, secured to the said rod, the shipper-rod, and means connected with the shipper-rod, with which the dagger is adapted to engage when it is brought to operative position. 7th. A shuttle for looms provided with a pivoted dog 16, a slide 20, adapted to be engaged and held back by the last coils of yarn to be drawn from the shuttle, and operative connections between the dog and slide, whereby the dog is held outward when the slide is held back, as described, and when the yarn fails the dog may be moved inward and move the slide forward. 9th. The combination with a rock-rod and dagger 4, and means for operating the same, of the shipper-rod, the block 10, secured thereto, and a spring-pressed dog pivoted upon said block with which the dagger is adapted to engage.

No. 60,449. Gas Manufacture. (*Fabrication de gaz.*)

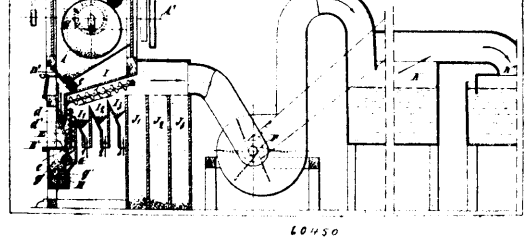
William Henry Russell and George Ellsworth Russell, both of Hasbrouck Heights, New Jersey, U.S.A., 24th June, 1898; 6 years. (Filed 1st December, 1897.)

Claim.—1st. The manufacture of gas, which consists in generating gas in a continuous manner from acidulated water by the combined agencies of chemical reaction and electrolysis, whereby heat is produced in the generating apparatus, and simultaneously and continuously forcing air into the said generating apparatus, whereby the gases are combined under the influence of heat before being led to the point of ignition, as shown and described. 2nd. The manufacture of gas for illumination, which consists in generating gas in a continuous manner from acidulated water by electrolysis and chemical reaction, and continuously forcing carburetted air into the hot generating apparatus, whereby the gases are combined and fixed under the influence of the heat before being led to the point of ignition, as shown and described. 3rd. The manufacture of gas for illumination, which consists in generating gas in a continuous manner from acidulated water by electrolysis and chemical reaction, forcing carburetted



air in a continuous manner into the hot generator where the gases are mixed, and finally recarburetting the mixed gases before they pass to the point of ignition, as shown and described. 4th. The combination to form a gas apparatus, of an electrical generator adapted for decomposing the electrolyte and comprising a holder for the resulting gases, a pipe leading from said generator for carrying the gas to the point of ignition, an air forcing apparatus, connected with the gas holder of the generator and adapted to supply air thereto, and a carburetter adapted to carburet the gas, substantially as set forth. 5th. In a gas apparatus the combination with the electrical generator A, the carburater B, the pipe connecting said carburetter and generator, the air supply apparatus C, comprising an air forcing mechanism, a carburetter, and a pipe connecting the said carburetter and air forcing mechanism, and a pipe connecting said carburetter with the generator A, for supplying carburetted air thereto, substantially as set forth. 6th. In a gas apparatus, an electrical generator A, for decomposing the acidulated water forming the electrolyte of the generator, said generator comprising a vessel 1, a holder and electrode 3, inverted in said vessel, a tube 6, mounted in the top of the holder 3, and insulated therefrom, said tube being adapted to play longitudinally in its bearing, a foraminous holder or basket 6^a on the lower end of the tube 6, and containing an electrode 7 the said electrode, the liquid electrolyte, and means for producing an electrical connection between the tube 6 and the cup 3, substantially as set forth.

No. 60,450. Ore Sorter. (*Appareil à assortir le minerai.*)



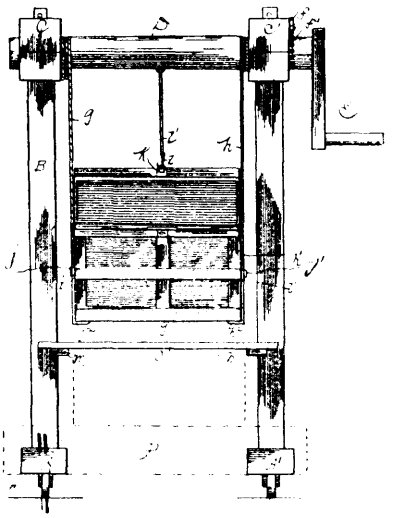
Jacques Ancel, Paris, France, 24 juin 1898; 6 ans. (Déposé le 23 octobre, 1897.)

Resumé.—1° En combinaison avec les organes decrits, produisant la classification par grosseur, et pour chacune des quatre premières ouvertures recevant le minerai à sa sortie du cylindre supérieure, un couloir vertical muni d'un régistre permettant de régler la quantité de minerai et amenant ce dernier sur un arbre à hélice verticale, tournant sur lui même sous l'action d'un courant d'air produit par un ventilateur, qui aspire l'air venant d'un orifice à dimensions réglables à volonté, placé à la partie inférieure de l'arbre à hélice. 2° En combinaison avec les organes decrits, un deuxième arbre à hélice inclinée, qui tourne d'un mouvement de rotation continu, sous l'action du courant d'air et sur lequel viennent passer les parties les moins denses du minerai, qui se sont séparées des plus denses sur le premier arbre à hélice, ces parties les plus denses étant recueillies au bas de l'appareil et transportées en dehors par une vis d'Archimède. 3° En combinaison avec les organes décrits, une série de compartiments dont les fonds sont munis de registres et qui recoivent les parties de minerai qui ne sont pas assez legère pour être entrainées par le courant d'air pendant leur passage autour des arbres à hélice inclinée, les registres placés sur les fonds des dits compartiments ayant pour but de permettre de faire un appel d'air pour remettre en circulation les

poussières qui pourraient se loger dans les compartiments. 4e En combinaison avec les organes décrits, des chambres à poussières, placées à la suite les unes des autres et logées avant le ventilateur, ainsi qu'il a été ci-dessus spécifié.

No. 60,451. Trunk-Lifting Device.

(*Appareil à soulever les coffres.*)



60451

Elias Edwards, Rural Hill, Mississippi, U.S.A., 27th June, 1898; 6 years. (Filed 15th June, 1898.)

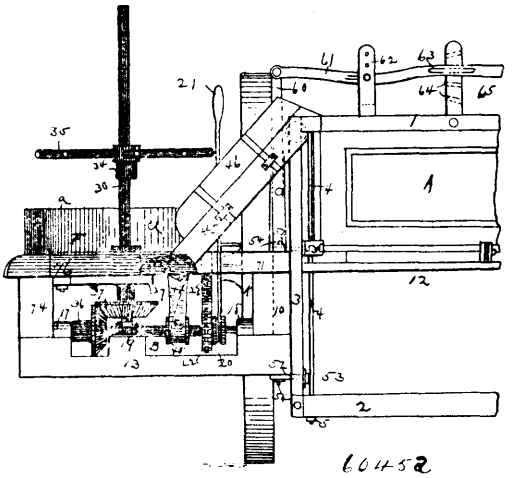
Claim.—1st. A trunk-lifting device, comprising a windlass having two pendant cords or ropes, each provided at its free end with a bail-shaped hook to engage the bottom of the trunk at the ends thereof, and engaging members to take beneath the end hand-holds of the trunk, substantially as described. 2nd. In a trunk-lifting device, the combination with a windlass to lift the trunk, of a hook to engage the trunk lid and hold it open, substantially as described. 3rd. In a trunk-lifting device, the combination with a windlass to lift the trunk, of bail-shaped hooks to engage the bottom of the trunk at the ends thereof, and a hook to engage the trunk lid and hold it open, substantially as described. 4th. In a trunk-lifting device, the combination with a windlass to lift the trunk, of bail-shaped hooks to engage the bottom of the trunk at the ends thereof, engaging members to take beneath the hand-holds on each end of the trunk, and a hook to engage the trunk lid and hold it open, substantially as described. 5th. In a trunk-lifting device, the combination with a windlass-frame mounted on casters, of a windlass, hook members pendant therefrom to engage the trunk, and a push-block adapted to engage the windlass-frame and provided with handles whereby the said frame may be moved upon its casters, substantially as described. 6th. In a trunk-lifting device, the combination of base-blocks, standards rising therefrom, a crank-driven windlass journalled at the upper ends thereof, hooks pendant from the windlass to engage the trunk, and a rest-board supported between the standards and adapted to assist in supporting the trunk, substantially as described. 7th. In a trunk-lifting device, the combination with a windlass-frame, of a windlass, hook members pendant therefrom to engage the trunk, a hook to engage the trunk lid and hold it open, and a pawl to hold the windlass immovable, substantially as described. 8th. In a trunk-lifting device, the combination of a windlass-frame mounted on casters, a crank-driven windlass, bail-shaped hooks pendant therefrom to engage the trunk at the ends thereof, engaging members to take beneath the hand-holds on the end of the trunk, a pawl to hold the windlass immovable, and a rest-board supported in the frame and adapted to assist in supporting the trunk, substantially as described.

No. 60,452. Corn Header.

(*Apparel pour enlever les têtes de blé d'inde.*)

Joseph B. Tilley, John B. Tilley and L. F. Tilley, all of Keighley, Kansas, U.S.A., 24th June, 1898; 6 years. (Filed 15th June, 1898.)

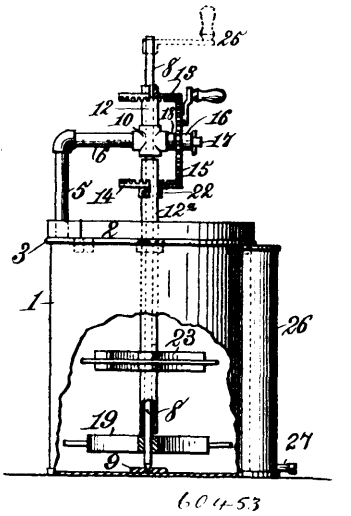
Claim.—The combination, in a corn-header adapted to be used in connection with an ordinary waggon, of the following instrumentalities, to wit: a supporting-frame adjustably secured to said waggon, the gathering-arms 15 and 16, secured to said frame, the main operating-shaft B, suitably journalled within said supporting-frame, the clutch-section 20, working upon said shaft, the clutch-section being actuated by the lever 21, the loose chain-pulley 22, secured to said shaft adjacent to said clutch-pulley, said loose chain-pulley being in chain connection with one of the wheels of said waggon,



60452

the approximately circular trough D, positioned above said shaft B, the flange *a*, forming part of said trough, the rotating cutting-knife F, within said trough, said knife projecting beyond the union of said gathering-arms, 15 and 16, the shaft 30, secured to said cutter and further being provided with the bevel-gear 31, the reel 35, upon said shaft 30, the elevator H, positioned below said reel 35, the bevel-gear 36, secured to the shaft B, meshing with said gear 31, the spool 40, secured to said shaft B, the shaft 41, positioned at right angles above said spool 40, said shaft 41, being provided with a spool 43, and the belt 44, working upon said spools, 40 and 43, all arranged to operate substantially in the manner set forth.

No. 60,453. Churn. (*Baratte.*)



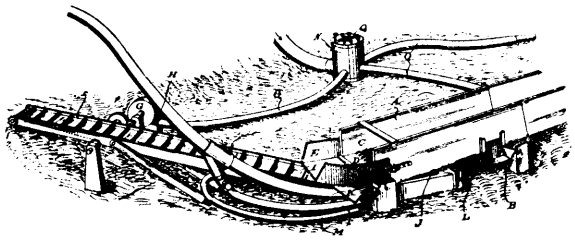
60453

John Sidenham Munaugh, Lima, Ohio, U.S.A., 27th June, 1898; 6 years. (Filed 16th June, 1898.)

Claim.—1st. In a churn, the combination with a support mounted on the churn-cover, of a four-way pipe-coupling fixed on said support, a central shaft journalled in said coupling and carrying a dasher at its lower end, a short sleeve loosely arranged on said shaft above the coupling, a long sleeve arranged on the shaft below the coupling and resting at its lower end on the hub of the said dasher, a gear resting on said short sleeve and rigid on the shaft, a gear mounted on the long sleeve, a bearing projecting laterally from the four-way coupling, an intermediate gear journalled on said bearing and meshing with said gears, and a dasher fixed on the long sleeve, substantially as described. 2nd. In a churn, the combination with two tubular arms, and a right-angled pipe-coupling uniting said arms, one of the arms being rigidly mounted on the churn, of a four-way pipe-coupling mounted on the other arm, a churn-shaft journalled in said four-way coupling, a short sleeve loosely arranged on the shaft above the four-way coupling, a long sleeve arranged on the shaft below the coupling, a gear resting on said short sleeve and

rigid on the shaft, a gear mounted on the long sleeve, a bearing projecting laterally from the four-way coupling, an intermediate gear journalled on said bearing and meshing with said gears, and dashers fixed on said shaft and long sleeve, substantially as described. 3rd. In a churn, the combination with a support mounted on the churn-cover, of a four-way pipe-coupling fixed on said support, a dasher-shaft journalled in said coupling and having a gear mounted therefrom, a bearing projection laterally from the four-way coupling, and a gear journalled on said bearing and meshing with the gear on the dasher-shaft, substantially as described.

No. 60,454. Mining Apparatus. (*Appareil à miner.*)



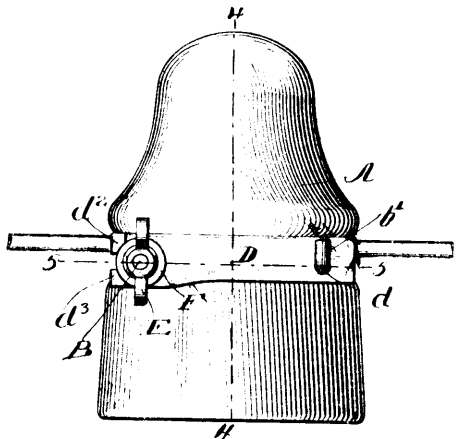
60454

Simon W. Wible, Bakersfield, California, U.S.A., 27th June, 1898; 6 years. (Filed 24th February, 1898.)

Claim.—1st. In a mining apparatus of the character described, a sluice through which the material passes, a device at the lower end of the sluice for separating the larger and finer material, a receiver beneath the sluice into which the fine material is delivered, said receiver consisting of a concaved tray, an hydraulic elevator, the mouth of which is in line with one end of the bottom of the tray, an hydraulic nozzle discharging water in line with said pipe at the opposite end of the tray whereby the material falling therein is continuously carried by the momentum of the water into the elevator pipe, and converging wings at the bottom of the sluice whereby the material delivered therein is constantly concentrated to the centre of the tray, substantially as described. 2nd. In a mining apparatus of the character described, a sluice or sluices with devices at the lower end to separate the coarser from the fine material, a conveyer for the larger material, a receiving and collecting tray for the finer material beneath the sluice, a hydraulic elevator pipe connecting with one end of the tray, a hydraulic nozzle discharging water into the opposite end, in line with the elevator pipe, one or more supplemental hydraulic pressure pipes discharging into the main elevator pipe at intervals beyond the receiving opening.

No. 60,455. Electric Wire Clamp.

(*Lien pour fils électriques.*)



60455

Sylvester S. Leonard, Chicago, Illinois, U.S.A., 27th June, 1898; 6 years. (Filed 7th March, 1898.)

Claim.—1st. A clamp of the class described consisting of a flexible loop adapted to embrace the glass insulator and a pair of clamping blocks loosely secured to the loop at one end and each provided at the other end with a notch adapted to receive the free end of the wire, said free end being provided with means for clamping it upon said blocks, substantially as described. 2nd. A clamp of the class described consisting of a pair of clamping blocks formed upon their adjacent surfaces to receive and hold a wire or cable, the block next to the glass insulator having its rear surface fitted thereto sufficiently to prevent longitudinal movement thereupon and both of said blocks being notched at one end from their edges inward, a flexible loop loosely secured at one end to the other end of said blocks and adapted at its free end to enter said notches and a clamping nut threaded to the free end of the loop adapted to be screwed down upon the blocks, substantially as described. 3rd. The combination with the blocks C, D, having the perforation c, d, the notches c^1, d^1, the grooves c^2, d^2, and the rib c^3, of the loop B, extending through the perforations and clinched at b^1, and having at the other end the nut E, substantially as described. 4th. A clamp for attaching electric wires and the like to the ordinary insulator consisting of an inner block longitudinally concave and laterally convex on one side, to fit the customary circumferential groove in the insulator, and adapted upon its opposite side to engage with the wire, an outer block having its inner surface also adapted to engage said wire, a rib or elevation upon one of said blocks at a distance from the line of engagement with the wire and adapted to bear upon the other block and a clamping loop adapted to embrace the insulator and engage at its opposite ends the opposite ends of the blocks between the wire and the rib, substantially as described.

No. 60,456. Sleeping Bag. (*Sac à coucher.*)

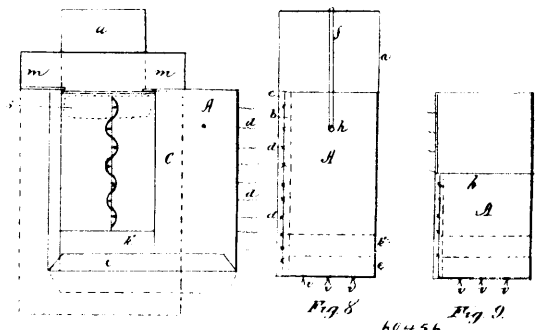


Fig 7 Fig 8 Fig 9

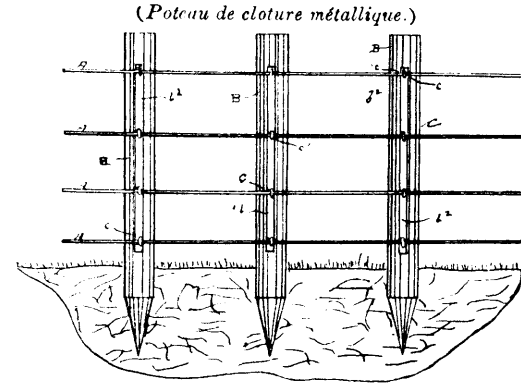
60456

George William Bartmann, Hamilton, Ontario, Canada, 27th June, 1898; 6 years. (Filed 19th March, 1898.)

Claim.—1st. As a new article of manufacture, a sleeping bag having the outer water proof covering formed with a head guard and devices for operating it, a foot guard, a tongue on one side and a fly on the opposite side to engage with each other, the straps attached to the sides to hold the same together when folded, all constructed to form a wind, rain and snow proof cover for the inner blankets, substantially as and for the purpose specified. 2nd. A sleeping bag having the outer water proof covering A, formed with a head guard a, a cord f, and ring h, (or the equivalent) to operate it, a foot guard e, a tongue c on one side and a fly b, on the opposite side, to receive the tongue when folded, tie straps d, d, &c., attached to the sides to hold them together when folded, to form a wind, rain and snow proof cover for the inner blankets, all constructed, substantially as and for the purpose specified.

No. 60,457. Metallic Fence Post.

(*Poteau de cloture métallique.*)



60457

Thomas Bernhardt Johnson, Luling, Texas, U.S.A., 27th June, 1898; 6 years. (Filed 9th April, 1898.)

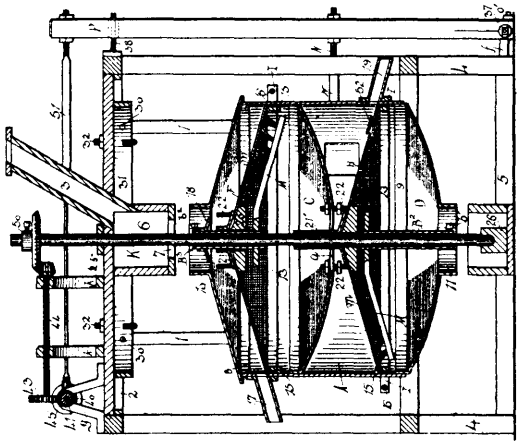
Claim.—A metallic post, for wire-rail fences, provided with the tubular body b, vertical slot b^2, solid point b^1, and cross notches b^3, whereby it may be used with staples and wire rails in the manner and for the purpose set forth.

No. 60,458. Separator. (*Séparateur.*)

Edward Hards, Fremont, Nebraska, U.S.A., 27th June, 1898; 6 years. (Filed 15th April, 1898.)

Claim.—1st. The combination with a suspended casing, of mechanism to reciprocate said casing in opposite directions about its axis.

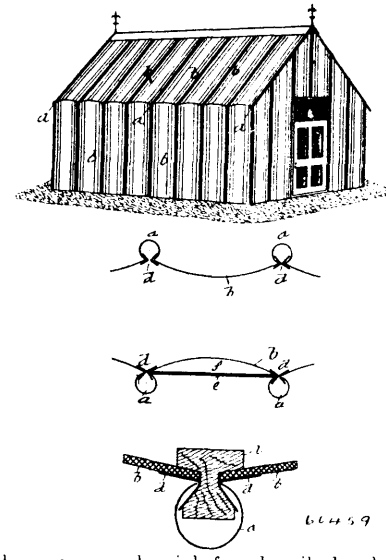
2nd. The combination with a suspended casing, of mechanism to alternately rotate said casing in opposite directions. 3rd. The combination with a suitable support of hangers adjustable depending from said support, and a casing removably secured to said hangers. 4th. The combination with a suitable support, of a plurality of hangers adjustably depending from said support, a casing removably secured to said hangers, and mechanism to alternately partly rotate said casing in opposite directions so as to impart an intermittent alternate rotary movement about its axis, and simultaneously a pendulum movement about its axis. 5th. The combination with a supporting ring, of a plurality of hangers fixed to and depending from said ring, and a clamping ring at the lower end of said hangers. 6th. The combination with a suitable ring, of mechanism to adjustably secure said ring to a suitable support, a plurality of hanger fixed to and depending from said ring, brackets at the lower ends of said hangers, and superposed clamping rings secured to said brackets. 7th. The combination with a suitable support, of a frame adjustably secured to said support, a plurality of hangers fixed to and depending from said frame, a clamping ring fixed to said hangers, and a casing held suspended by means of said clamping ring, substantially as and for the purpose set forth. 8th. The combination with a casing, of a sieve within said casing, and a clamping ring upon the exterior of said casing to bind said casing upon said sieve. 9th. The combination with a casing, of a sieve held and positioned within said casing, rods secured to said sieve and extending outward, and screws so that these sieve connected rods may be raised or lowered in crowning the sieve. 10th. The combination with a plurality of adjustably supported hangers, of a casing supported by and secured to said hangers, a sieve within said casing, mechanism to partially rotate said casing in opposite directions about its axis, said hangers imparting a raising and falling movement to said casing about its own axis a shaft passing through said casing and supported independently of said casing, and a brush adjustably secured to said shaft and working said sieve. 11th. The combination wtih a suitable support, of a frame adjustably held by said support, hangers depending from and secured to said frame, a casing suspended and adjustably secured to said hangers, mechanism to partially rotate said casing in opposite directions about its own axis, a sieve within said casing, a shaft independently supported and passing through said casing, means to rotate said shaft, and a bush adjustably secured to said shaft and working against said sieve in such a manner that said rotating brush is intermittently carried against said sieve with a variable impact. 12th. In a middlings purifier, the combination of a sieve casing, of mechanism to oscillate said sieve about its centre. 13th. The combination with a suitable supporting structure, of a frame adjustably secured to said structure, hangers secured to and depending from said frame, a casing secured to and suspended from said hangers, a sieve within said casing, an intake within said casing above said sieve, an escape spout extending from said casing in line with said sieve, mechanism to partially rotate said suspended casing in opposite directions, all arranged substantially as and for the purpose set forth. 14th. The combination with a suspended casing, of mechanism to oscillate said casing about its axis. 15th. The combination with a suspended casing, of a hanger supporting said casing, said hanger permitting a pendulum movement of said casing, and mechanism to alternately rotate said casing in opposite directions.



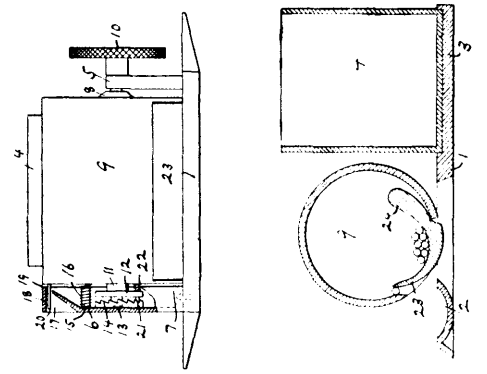
No. 60,459. Method of Constructing Floors, Walls, etc. (*Méthode de construire des planchers, murs, etc.*)

Edward Lloyd Pease, Hurworth-on-Tees, Durham, England, 27th June, 1898; 6 years. (Filed 25th May, 1898.)

Claim.—1st. A construction of roofs, walls, tanks or the like, structural parts or structures characterized by a series of open tubular vessels of the forms illustrated in the drawings hereto annexed, or their equivalents interlocked with intervening sheets of iron or other strain-resisting material, including canvas, the interlocking being effected by inset flanges or by detachable angle strips threaded into the open tubular vessels with or without the use of distance blocks or distance pieces or their equivalents, substantially as and for the purpose as hereinbefore described and illustrated by way of example in the accompanying drawings. 2nd. A construction of roofs, walls, tanks or the like structural parts in which outer sheets of iron, wood or strain-resisting material, whether curved or flat, are interlocked with tubular vessels or their equivalents, in combination with canvas lining in the form of a double wall, substantially as hereinbefore described and illustrated.



No. 60,460. Match Box. (*Boite à allumettes.*)



William Henry Hooker, Belleville, New Jersey, U.S.A., 27th June, 1898; 6 years. (Filed 6th June, 1898.)

Claim.—1st. An improved match safe, comprising a rotary cylinder having an opening in its wall, one edge of which opening forms a shoulder, and a segmental jaw fulcrumed in said opening and provided with a shoulder adapted to bear against the shoulder edge of the latter, said jaw having a weighted end in rear of its fulcrum and a lip at its front end adapted to bear with relation to the front edge of the cylinder opening, substantially as shown and described. 2nd. An improved match safe embodying a revolving cylinder adapted to deliver one match at a time, a base having uprights supporting said cylinder and a receptacle attached to said base, substantially as shown and described. 3rd. An improved match safe embodying a revolving cylinder adapted to deliver one match at a time, means for preventing the rearward rotation of the cylinder and a receptacle attached to the base supporting said cylinder, substantially as shown and described. 4th. An improved match safe embodying a revolving cylinder adapted to deliver one match at a time, supports therefor, a ratchet adapted to prevent the rearward rotation of the cylinder and means carried by said cylinder for cutting cigar tips, substantially as shown and described. 5th. An improved match safe embodying a revolving cylinder, supports therefor means for retarding the action thereof, a knife, a blade carried by said cylinder adapted to cut the ends of the tips of cigars, and a receptacle for ashes or burnt matches, said receptacle being removably attached to the base supporting said cylinder, substantially as shown and described. 6th. An improved match safe, embodying a revolving cylinder, a ratchet carried thereby, a spring bearing upon said cylinder, a knife blade carried by said cylinder and acting in conjunction with a suitable hole in one of the supports for said cylinder, and a receptacle attached to the base supporting said cylinder, substantially as shown and described.

TRADE-MARKS

Registered during the month of June, 1898, at the Department of Agriculture -- Copyright and Trade-Mark Branch.

6509. THE CANADIAN DAIRY SUPPLY COMPANY, Montreal, Que. Lubricating Oils, 3rd June, 1898.

6510. THE CROIL AND McCULLOUGH DAIRY COMPANY, LIMITED., Montreal, Que. Butter and Cheese, 3rd June, 1898.

6511. CHARLES WILLIAM CURTIS, 74 Lombard Street, London ; and Hounslow, Middlesex, England trading as CURTIS'S & HARVEY. Gunpowder, 6th June, 1898.

6512. THE CROIL AND McCULLOUGH DAIRY COMPANY, LIMITED., Montreal, Que. Butter, Cream, Milk and Butter-milk, 7th June, 1898.

6513. ERNEST EVANS, Vancouver, B.C. Canned Fish, 8th June, 1898.

6514. ROBERT TERRY, Toronto, Ont. A Non-intoxicating Beer, 9th June, 1898.

6515. LA COMPAGNIE DE CIGARES DE SHERBROOKE, Sherbrooke, Qué. Cigares, 9 juin, 1898.

6516. SIR TITUS SALT, BARONET, SONS AND COMPANY, LIMITED., Saltaire, Yorkshire, England. Cloths and Woolen Fabrics, such as Serges and Worsted Suitings, 11th June 1898.

6517. JOSEPH TASSÉ, Montreal, Que. Cigars, Cigarettes and Tobaccos, 13th June, 1898.

6518. HORMISDAS LAPORTE, Montreal, Que. Groceries, 14th June, 1898.

6519. J. D. MACKAY, Secretary Treasurer of the TRURO CONDENSED MILK AND CANNING COMPANY, LIMITED, Truro, N.S. Evaporated Cream, Condensed Milk, Condensed Coffee and Milk, Condensed Cocoa and Milk, and similar preparations, 14th June, 1898.

6520. THE METALLIC ROOFING COMPANY OF CANADA, LIMITED., Toronto, Ont. Paper, Strawboard or Felt, 15th June, 1898.

6521. THE METALLIC ROOFING COMPANY OF CANADA, LIMITED., Toronto, Ont. Ventilators, Chimney Cowls, Skylights, or any like device, 15th June, 1898.

6522. THE IMPERIAL EMBROCATION COMPANY, Montreal, Que. An Embrocation for external uses, 15th June, 1898.

6523. THE COWAN-RAMSAY COMPANY, LIMITED., Toronto, Ont. Tea, 16th June, 1898.

6524. WILLIAM WIGHT, Toronto, Ont. Bacon, Hams, Lard and Sausages, 17th June, 1898.

6525. BENJAMIN ALTMAN, New York, N.Y., U.S.A. Gloves, 20th June, 1898.

6526. CHEMISCHE FABRIK AUF ACTIEN, vorm, E. SCHERING, 170-171 Muellerstrasse, Berlin, Germany. Pharmaceutical Preparations, 20th June, 1898.

6527. CHEMISCHE FABRIK AUF ACTIEN, vorm, E. SCHERING, 170-171 Muellerstrasse, Berlin, Germany. General Trade Mark, 20th June, 1898.

6528. MICHAEL GEORGE BRISTOW, Ottawa, Ont. Typewriters and Supplies thereof, 21st June, 1898.

6529. THORPE & COMPANY, LIMITED., Victoria, B.C. Mineral Water, 23rd June, 1898.

6530. THE RATHBUN COMPANY, Deseronto, Ont. Wood Joinery, 24th June, 1898.

6531. THE PRATT FOOD COMPANY, Philadelphia, Pennsylvania, U.S.A. Prepared Food for Animals, 25th June, 1898.

6532. J. M. GROSVENOR & COMPANY, Boston, Massachusetts, U.S.A. Improved Capsules for Administering and Dispensing Powdered Drugs and Medicines in a Tasteless Form, 29th June, 1898.

COPYRIGHTS

Entered during the month of June, 1898, at the Department of Agriculture – Copyright and Trade-Mark Branch.

9970. FACES THAT FOLLOW. By Mrs. E. M. Mason. William Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 1st June, 1898.

9971. THE LIFE AND WORK OF W. K. SNIDER, G. T. R. CONDUCTOR. By the Rev. D. W. Snider; also Sermons and Lecture. With Introduction by Rev. W. S. Griffin, D.D. William Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 1st June, 1898.

9972. AS IN A MIRROR. By Mrs. G. R. Alden, "Pansy." William Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 1st June, 1898.

9973. CYCLIST'S ROAD MAP OF WESTERN ONTARIO. (Scale: 8 miles 1 inch). Joseph Lloyd, Toronto, Ont., 2nd June, 1898.

9974. A DREAM OF PARADISE. (Song.) Words by Claude Lyttleton. Music by Hamilton Gray. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 2nd June, 1898.

9975. THE HEAVENLY SONG. Words by Claude Lyttleton. Music by Hamilton Gray. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 2nd June, 1898.

9976. THE STREET CAR TICKET EXCHANGE COUPON SYSTEM. (Chart, System and Coupon.) George Anderson and Charles William Horne, Toronto, Ont., 2nd June, 1898.

9977. THE FLEWELLYN CURRICULUM AND TRANSPOSING MUSICAL CHART. T. G. Flewellyn, Ottawa, Ont., 2nd June, 1898.

9978. MODERN VERTICAL WRITER. The London Printing and Lithographing Company (Ltd.), London, Ont., 3rd June, 1898.

9979. PRIVATE POST CARD *RE* BRITANNIA AND COLUMBIA. James Crockett Wilson, Montreal, Que., 3rd June, 1898.

9980. PRIVATE POST CARD *RE* BRITANNIA. James Crockett Wilson, Montreal, Que., 3rd June, 1898.

9981. PRIVATE POST CARD *RE* THE UNION JACK. James Crockett Wilson, Montreal, Que., 3rd June, 1898.

9982. PRIVATE POST CARD *RE* THE STARS AND STRIPES. James Crockett Wilson, Montreal, Que., 3rd June, 1898.

9983. THE STENOGRAPHER'S COMPANION. (Vol. I, No. 3, June, 1898.) R. Goltman, Montreal, Que., 3rd June, 1898.

9984. WOMAN: MAIDEN, WIFE AND MOTHER. (Illustrated.) Special Preface by the Countess of Aberdeen, LL.D., and an Introduction by Miss Frances E. Willard. Edited by Rev. B. F. Austin, M.A., B.D. The Bradley-Garretson Company (Ltd.), Toronto, Ont., 6th June, 1898.

9985. CANADA: AN ENCYCLOPÆDIA OF THE COUNTRY. Edited by J. Castell Hopkins. (Illustrated.) Vol. II. The Bradley-Garretson Company (Ltd.), Toronto, Ont., 6th June, 1898.

9986. OUR SILENT SALESMAN. (Condensed Catalogue and Price-List of Musical Instruments and Trimmings for same.) Whaley, Royce & Co., Toronto, Ont., 6th June, 1898.

9987. MARITIME PROVINCES ROAD BOOK. J. M. Barnes, St. John, N.B., 8th June, 1898.

9988. STUDENT'S CLINICAL CASE BOOK. (In use at the Royal Victoria Hospital, Montreal.) E. M. Renouf, Montreal, Que., 8th June, 1898.

9989. THE PRICELESS GIFT. (Song.) Words by Alison Dene. Music by Hamilton Gray. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 9th June, 1898.

9990. TORONTO; OR, THE PRIDE OF THE NORTH. Words and Music by H. H. Godfrey. Whaley, Royce & Co., Toronto, Ont., 10th June, 1898.

9991. THE DELINEATOR. (A Journal of Fashion, Culture and Fine Arts. July, 1898.) The Butterick Publishing Company (Ltd.), New York, N.Y., U.S.A., 11th June, 1898.

9992. THE GLASS OF FASHION UP TO DATE. (July, 1898.) The Butterick Publishing Company (Ltd.), New York, N.Y., U.S.A., 11th June, 1898.

9993. METROPOLITAN FASHIONS. (July, 1898.) The Butterick Publishing Company (Ltd.), New York, N.Y., U.S.A , 11th June, 1898.

9994. THE LAND OF LANORAIE. (A Canadian Legend.) By Richard Griffin Starke, Westmount, near Montreal, Que., 11th June, 1898.

9995. THE GOLDEN PATHWAY. (Song.) Words by Arthur St. Ives. Music by Hamilton Gray. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 13th June, 1898.

9996. THE LAND OF HOME. (Song.) Words by Edward Teschemacher. Music by Hamilton Gray. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 13th June, 1898.

9997. STAR OF THE DESERT. Song with Violin Accompaniment. Words by George A. Binnie. Music by Theo. Bonheur. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England. 13th June 1898.

9998. L'INDICATEUR DE QUÉBEC ET LÉVIS, 1898-99. Boulanger & Marcotte, Québec, Qué., 13 juin, 1898.

9999. REVISED BOOK OF DESIGNS OF ASSESSMENT NOTICES. R. D. Richardson & Co., Winnipeg, Man., 14th June, 1898.

10000. THE MEYERS' SUPPLY CARD. (Private Post Card.) The Bulletin Publishing Company of Toronto (Ltd.), Toronto, Ont., 15th June, 1898.

10001. LONDON MUSICAL. (Book.) The London Printing and Lithographing Company, (Ltd.), London, Ont., 17th June, 1898.

10002. GROUPE PHOTOGRAPHIQUE DES RÉVÉRENDS PÈRES FRANCISCAINS AVEC MONSEIGNEUR BRUCHÉSI AU CENTRE. Laprès et Lavergne, Montréal, Qué., 17th juin, 1898.

10003. VIEW OF THE CITY OF VANCOUVER, BRITISH COLUMBIA. Edwards Bros., Vancouver, B.C., 18th June, 1898.

10004. THE CANADIAN MAGAZINE. (April, 1898.) Ontario Publishing Co., (Ltd.), Toronto, Ont., 18th June, 1898.

10005. THE CANADIAN MAGAZINE. (May, 1898.) Ontario Publishing Co., (Ltd.), Toronto, Ont., 18th June, 1898.

10006. THE CANADIAN MAGAZINE. (June, 1898.) Ontario Publishing Co., (Ltd.), Toronto, Ont., 18th June, 1898.

10007. TWO CITIES. (Song.) Words by Alison Dene, Music by Hamilton Gray. The Anglo-Canadian Music Publishers' Association, (Ltd.), London, England, 20th June, 1898.

10008. HE SHALL GIVE HIS ANGELS CHARGE. (Song.) Words by Stanley Rivers, Music by Hamilton Gray. The Anglo-Canadian Music Publishers' Association, (Ltd.), London, England, 20th June, 1898.

10009. INSURANCE PLANS OF ALEXANDRIA, ALFRED, AVONMORE, CARP, FORT WILLIAM, HAMILTON, VOLUME I; MANOTICK, NORTH GOWER, PLANTAGENET, RAT PORTAGE, ST. EUGENE, TORONTO, VOLUME VI; AND WILLIAMSTOWN, IN ONTARIO. Charles Edward Goad, Montreal, Que., 21st June, 1898.

10010. INSURANCE PLANS OF BRANDON, CARMAN, HOLLAND, MANITOU, MORDEN, PILOT MOUND, PORTAGE LA PRAIRIE, RAPID CITY, AND TREHERNE, IN MANITOBA. Charles Edward Goad, Montreal, Que., 21st June, 1898.

10011. INSURANCE PLANS OF AYLMER, BELLERIVE, COTEAU LANDING, GATINEAU POINT, GRACEFIELD, MANIWAKI, MONTEBELLO, MONTREAL, NORTH WEST EXTENSION; QUYON, RIGAUD, ST. ANDREWS, ST. GABRIEL DE BRANDON, SHAWVILLE, AND WAKEFIELD, IN QUEBEC. Charles Edward Goad, Montreal, Que., 21st June, 1898.

10012. INSURANCE PLANS OF BEAR RIVER, HANTSPORT, LAWRENCETOWN, MIDDLETON, OXFORD, TATAMAGOUCHE, AND WOLFVILLE, IN NOVA SCOTIA; CRAPAUD, TIGNISH, AND TYNE VALLEY, IN PRINCE EDWARD ISLAND. Charles Edward Goad, Montreal, Que., 21st June, 1898.

10013. BRANTFORD. (Card.) The Toronto Lithographing Co., (Ltd.), Toronto, Ont., 21st June, 1898.

10014. GANANOQUE. (Card.) The Toronto Lithographing Co., (Ltd.), Toronto, Ont., 21st June, 1898.

10015. ST. JOHN, N.B. (Card.) The Toronto Lithographing Co., (Ltd.), Toronto, Ont., 21st June, 1898.

10016. TORONTO. (Card.) The Toronto Lithographing Co., (Ltd.), Toronto, Ont., 21st June, 1898.

10017. TORONTO. (A). (Card.) The Toronto Lithographing Co., (Ltd.), Toronto, Ont., 21st June, 1898.

10018. TORONTO (INDUSTRIAL EXHIBITION.) (Card.) The Toronto Lithographing Co., (Ltd.), Toronto, Ont., 21st June, 1898.

10019. WINNIPEG. (Card.) The Toronto Lithographing Co., (Ltd.), Toronto, Ont., 21st June, 1898.

10020. THE SECOND LETTER OF BARUCH. (A Translation from the Syriac.) By the Right Rev. William Carpenter Bompas, D.D., Bishop of Selkirk. R. D. Richardson & Co., Winnipeg, Man., 23rd June, 1898

10021. SWEETHEART LOO. (Two-Step.) By Louis Field. Louise Sanfield Macdonald, Lancaster, Ont., 23rd June, 1898.

10022. THE COMMON SENSE COLLECTING SYSTEM. John Enoch Thompson, Toronto, Ont., 25th June, 1898.

10023. A FRIEND IN NEED IS A FRIEND INDEED. (Health Hints). Thomas Simpson, M.D., Montreal, Que., 25th June, 1898.

10024. ON CONNAIT L'AMI AU BESOIN. (Conseils de Santé.) Thomas Simpson, M,D. Montréal, Qué., 25 juin 1898.

10025. THE MAINE DISASTER. Words and Music by John Gilheeney, Newton Robinson, Ont., 25th June, 1898.

10026. DIRECTIONS FOR USING DR. WILLIAMS' PINK PILLS FOR PALE PEOPLE. (Circular.) G. T. Fulford & Co., Brockville, Ont., 28th June, 1898.

10027. OFFICIAL TELEPHONE DIRECTORY DISTRICT OF EASTERN ONTARIO, JUNE, 1898. The Bell Telephone Company of Canada (Ltd.), Montreal, Que., 28th June, 1898.

10028. A CANADIAN'S TOAST. (Patriotic Song and Chorus.) Words and Music by Jas. Fax. Arranged by Arthur Blakely. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 28th June, 1898.

10029. TIMELY HINTS; OR WHAT TO DO UNTIL THE DOCTOR COMES. (Chart.) Alfred Hewett, Toronto, Ont., 30th June, 1898.

10030. JOHN MARMADUKE. A Romance of the English Invasion of Ireland in 1649. By Samuel Harden Church. The Copp, Clark Co., (Ltd.), Toronto, Ont., 30th June, 1898.