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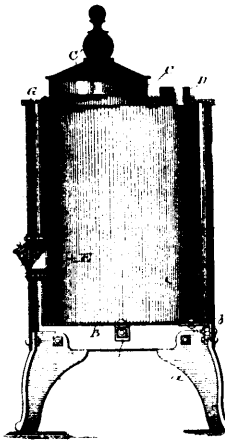
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INVENTIONS PATENTED.

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

No. 60,461. Stove. (Poêle.)



60461

Ernest H. Huebner, assignee of William Henry James, both of Cincinnati, Ohio, U.S.A., 2nd July, 1898; 6 years. (Filed June 13th, 1898.)

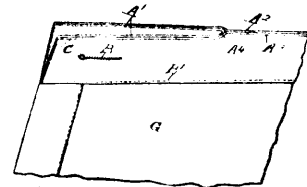
Claim.—In a wood burning heating stove, the combination of an outer jacket angular in cross-section and open at its lower end, and a fire-pot closed at its bottom and curvilinear in cross-section, the fire-pot being slightly less in diameter than the shorter diameters of the jacket thus forming restricted air-spaces at diametrically opposite points intermediate the four corners of the jacket, and enlarged air-spaces at the four corners, the jacket being perforated adjacent to the upper ends of the enlarged air-spaces, substantially as set forth.

No. 60,462. Buttonhole Band. (Bande de boutonnière.)

Alfred Poindexter, New York City, and Mosher & Curtis, Troy, assignees of George Boxley, of Troy, aforesaid, all in the U.S.A., 2nd July, 1898; 6 years. (Filed 11th June, 1898.)

Claim.—1st. The buttonhole band having a plurality of plies, a fly-opening between said plies at one end thereof, and an inner facing for the said opening consisting of a folded piece integral with

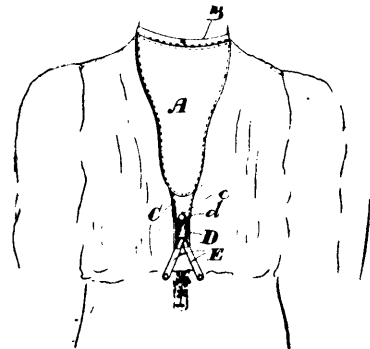
the plies and re-entrant between them, substantially as described. 2nd. A buttonhole band for garments comprising inner and outer



60462

plies of fabric separated at one end to form a fly-opening, one of the outer plies having an integral re-entrant folding facing secured along one of its edges to the outer and inner walls of the fly-opening, and having the end of one of said inner plies inclosed in the fold which connects said integral ply and facing, substantially as described.

No. 60,463. Shirt. (Chemise.)



60463

George Wells, assignee of Edwin Charles Currie, both of Montreal, Quebec, Canada, 2nd July, 1898; 6 years. (Filed 11th June, 1898.)

Claim.—1st. In a shirt, a shoulder bracing device and back support comprising the piece A, secured to the shirt, the tab secured to the bottom thereof and having a free end, the elastic strip provided with lower tabs and a fastening device between the upper tab and the strip, as and for the purpose specified.

No. 60,464. Means for Utilizing Wave Power.

(Moyen d'utiliser les vagues comme force motrice.)

The Ocean Power Company, assignee of Herbert Earnest Rider, all of New York City, U.S.A., 2nd July, 1898; 6 years. (Filed 15th March, 1898.)

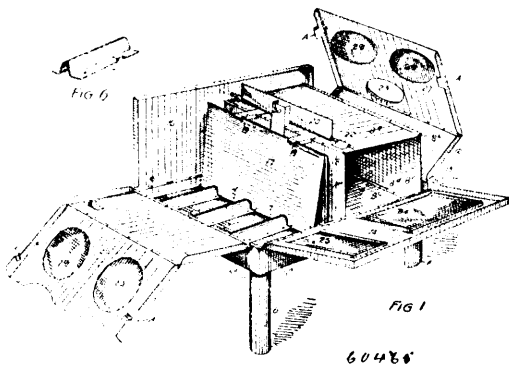
Claim.—1st. Means for utilizing the power of waves comprising a floating structure flexibly connected to a fixed body beneath the water, said floating structure including two parts constructed to be moved relatively to each other by the action of the waves and one of

body substantially parallel to the flexible connection, and a reservoir for compressed fluid to which said conduits are connected, substantially as set forth. 17th. Means for utilizing the power of waves, comprising a plurality of floating structures flexibly connected to fixed bodies beneath the surface of the water, each floating structure including two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the waves and having an inclined lower surface whereby it presents an upwardly inclined surface to the waves and the other of said parts being beneath said surface float and having an oppositely inclined surface whereby it presents a downwardly inclined surface to the waves, and each floating structure having a fluid compressing device constructed to be actuated by the relative movements of the parts of the floating structure, flexible conduits extending from each compressing device to the respective fixed body substantially parallel to the flexible connection, and a reservoir for compressed fluid to which said conduits are connected, substantially as set forth. 18th. Means for utilizing the power of waves, comprising a plurality of separately moored, independent floating structures, each provided with an air pump constructed to be actuated by the action of the waves upon the floating structure, and conduits from said air pumps to a common reservoir, and a pneumatic engine constructed to be actuated by the air pumped into said reservoir, substantially as set forth. 19th. Means for utilizing the power of waves, comprising a plurality of separately moored, independent floating structures, each provided with an air pump constructed to be actuated by the action of the waves upon the floating structure, and conduits from said air pumps to a common reservoir, a pneumatic engine constructed to be actuated by the air pumped into said reservoir, and a pressure regulator interposed between said reservoir and pneumatic engine, substantially as set forth. 20th. In a device for utilizing the power of waves, the combination with a primary air reservoir, and a pneumatic engine constructed to be actuated by the air in said reservoir, of a pressure regulator interposed between said reservoir and engine and comprising a secondary reservoir, a removable part constructed to be actuated by the pressure in said secondary reservoir and to resist said pressure, and a valve constructed to control the flow of air from the primary reservoir to the secondary reservoir and to be actuated by said movable part, substantially as set forth. 21st. Means for utilizing the power of waves, comprising a plurality of separately moored, independent floating structures, each provided with an air pump constructed to be actuated by the action of the waves upon the floating structure, and conduits from said air pumps to a common primary reservoir, a pneumatic engine constructed to be actuated by the air pumped into said reservoir, and a pressure regulator interposed between said reservoir and engine and comprising a secondary reservoir, a movable part constructed to be actuated by the pressure in said secondary reservoir and to resist said pressure, and a valve constructed to control the flow of air from the primary reservoir to the secondary reservoir and to be actuated by said moving part, substantially as set forth. 22nd. A floating structure for utilizing the power of waves, having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and having an inclined lower surface, whereby it presents an upwardly inclined surface to the waves, and the other of said parts having an oppositely inclined surface, whereby it presents a downwardly inclined surface to the waves, and power utilizing means connected to said movable parts, substantially as set forth. 23rd. A floating structure for utilizing the power of waves, having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and having an inclined lower surface whereby it presents an upwardly inclined surface to the waves, and the other of said parts having a resistance table constructed to be submerged a considerable distance below the surface of the waves, and one or more upwardly yielding portions in said resistance table and an inclined surface constructed to present a downwardly inclined surface to the waves, and power utilizing means connected to said movable parts, substantially as set forth. 24th. A floating structure for utilizing the power of waves having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and having an inclined lower surface whereby it presents an upwardly inclined surface to the waves and the other of said parts having one or more upwardly yielding portions constructed to be submerged a considerable distance below the surface of the waves and having an inclined surface constructed to present a downwardly inclined surface to the waves, and power utilizing means connected to said movable parts, substantially as set forth. 25. A floating structure for utilizing the power of waves having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and the other of said parts having one or more upwardly yielding portions constructed to be submerged a considerable distance below the surface of the waves and having an inclined surface constructed to present a downwardly inclined surface to the waves, and power utilizing means connected to said movable parts, substantially as set forth. 26th. A floating structure for utilizing the power of waves having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float on the surface of the water and having an inclined lower surface whereby it presents an upwardly inclined

surface to the waves and the other of said parts having one or more upwardly yielding portions constructed to be submerged a considerable distance below the surface of the water, and having an inclined surface constructed to present a downwardly inclined surface to the waves, and power utilizing means connected to said movable parts, substantially as set forth. 27th. A floating structure for utilizing the power of waves having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and having a substantially conical lower surface and the other of said parts having a substantially conical upper surface beneath said surface float, and power utilizing means connected to said movable parts, substantially as set forth. 28. A floating structure for utilizing the power of waves having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and having a substantially conical lower surface and the other of said parts having a resistance table constructed to be submerged a considerable distance below the surface of the waves, and an air pump constructed to be actuated by the relative movement of such parts, substantially as set forth. 29th. A floating structure for utilizing the power of waves having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and the other of said parts having a substantially conical upper surface beneath said surface float, and power utilizing means connected to said movable parts, substantially as set forth. 30th. A floating structure for utilizing the power of waves having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water, and having a substantially conical lower surface and the other of said parts having a substantially conical upper surface beneath said surface float and having a resistance table with one or more upwardly yielding portions constructed to be submerged a considerable distance below the surface of the waves, and power utilizing means connected to said movable parts, substantially as set forth. 31st. A floating structure for utilizing the power of waves, comprising a surface float and a part constructed to extend below the surface of the water, and an air compressing device actuated by the relative movements of such parts and comprising a cylinder on one of such parts, a piston on the other of such parts, the piston being smaller than the bore of the cylinder, and a flexible envelope secured air tight to the piston and to the cylinder, an induction valve leading to the space within such envelope and a conduit leading out from such space, substantially as set forth. 32nd. A floating structure for utilizing the power of waves, having two parts constructed to be moved relatively to each other by the action of the waves, one of said parts being constructed to float upon the surface of the water and having a substantially conical lower surface and the other of said parts having a pontoon with a substantially conical upper surface beneath said surface float, a downwardly extending funnel shaped part beneath said pontoon, and a resistance table with one or more upwardly yielding portions beneath said funnel shaped part, and power utilizing means connected to said movable parts, substantially as set forth. 33rd. In a floating structure for utilizing the power of waves, the combination with a part constructed to extend below the surface of the water and having guide rods extending upwardly and a cylinder 12 at the upper end thereof, of a float sliding upon said guide rods, a rod 19 extending upwardly therefrom into said cylinder, the piston 20, the flexible envelope 21, the induction valve leading into the space within said envelope and a conduit leading out therefrom, and having an eduction valve therein, substantially as set forth. 34th. In a floating structure for utilizing the power of waves, the combination with a part constructed to extend below the surface of the water and having guide rods extending upwardly and a cylinder 12 at the upper end thereof, and having the pontoon 10 and the funnel shaped parts 14, and rods extending downwardly therefrom and the resistance table 16 having leaves 17, of a float sliding upon said guide rods, a rod 19 extending upwardly therefrom into said cylinder, the piston 20, the flexible envelope 21, an induction valve leading into the space within said envelope and a conduit leading out therefrom, and having an eduction valve therein, substantially as set forth. 35th. In a floating structure for utilizing the power of waves, the combination of the pontoon 10, guide rods extending upwardly therefrom, the cylinder 12 at the upper end of the guide rods, the funnel shaped part 14, rods extending downwardly therefrom, the resistance table 16, having leaves 17, means for mooring said structure connected thereto below the resistance table, the float 18, the rod 19 extending upwardly therefrom into the cylinder, the piston 20, the flexible envelope 21, an induction valve leading into the space within said envelope and a conduit leading out therefrom, and having an eduction valve therein, said conduit extending downwardly into proximity to the point of mooring, substantially as set forth. 36th. Means for utilizing the power of waves, comprising a plurality of separately moored independent floating structures, each provided with a fluid compressing device constructed to be actuated by the action of the waves upon the floating structure and conduits from said fluid compressing device to a reservoir for compressed fluid, an engine constructed to be actuated by said compressed fluid and a pressure regulator interposed between said reservoir and engine, substantially as set forth. 37th. In a device for utilizing the power of waves, the combination with a primary reservoir for compressed fluid and an engine

constructed to be actuated by the compressed fluid, of a secondary reservoir interposed between said primary reservoir and engine, a movable part constructed to be actuated by the pressure in said secondary reservoir, adjustable means for varying the resistance of said movable part to such pressure, and a valve constructed to control the flow of compressed fluid from the primary reservoir to the secondary reservoir to be actuated by said movable part, substantially as set forth. 38th. In a device for utilizing the power of waves, the combination with a primary reservoir for compressed fluid and an engine constructed to be actuated by the compressed fluid, of a secondary reservoir interposed between said primary reservoir and engine, a cylinder thereon, a piston in said cylinder smaller than the bore thereof, a flexible envelope secured in an air tight manner to said cylinder and piston, a rod extending upwardly from said piston through the head of said cylinder, means for exerting a downward pressure on said rod and piston, and a valve constructed to control the flow of compressed fluid from the primary reservoir to the secondary reservoir and to be actuated by said movable part, substantially as set forth. 39th. In a device for utilizing the power of waves, the combination with a primary reservoir for compressed fluid and an engine constructed to be actuated by the compressed fluid, of a secondary reservoir interposed between said primary reservoir and engine, a cylinder thereon, a piston in said cylinder smaller than the bore thereof, a flexible envelope secured in an air tight manner to said cylinder and piston, a rod extending upwardly from said piston through the head of said cylinder, adjustable means for exerting a downward pressure on said rod and piston, an oscillating valve constructed to control the flow of compressed fluid from the primary reservoir to the secondary reservoir, an arm thereon and a rock lever engaging said arm and the rod of said piston, substantially as set forth. 40th. In a device for utilizing the power of waves, the combination with a primary reservoir for compressed fluid and an engine constructed to be actuated by the compressed fluid, of a secondary reservoir interposed between said primary reservoir and engine, a cylinder thereon, the piston 36 in said cylinder, the flexible envelope 38 secured to said cylinder and piston, the rod 38 extending upwardly from said piston through said cylinder, means for exerting a downward pressure on said arm, the oscillating valve 41 located in the conduit 34 between said primary reservoir and secondary reservoir, and means for connecting said valve and the rod 39, whereby the valve is actuated by the movement of said piston, substantially as set forth.

No. 60,465. Stove. (Poêle.)

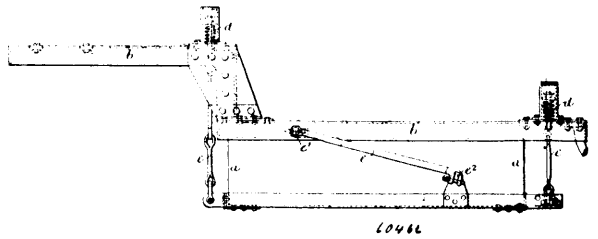


William G. Rogers and Daniel W. Bradford, both of Denver, Colorado, U.S.A., 2nd July, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. A folding stove provided with a bottom having vertical upwardly projecting flanges, and side end walls hinged to the upper edges of the flanges. 2nd. A folding stove provided with a bottom having upwardly projecting flanges, side and end walls hinged to the upper edges of the flanges, top pieces hinged to two of the said walls, ribs applied to the bottom of the stove and extending from front to rear, a folding partition or fire back separating the space enclosed by the walls into two compartments, one of which forms the fire box, and a folding oven whose bottom is made fast to the ribs of the other compartment. 3rd. A folding stove comprising a bottom having ribs extending from front to rear, and vertical flanges projecting above the ribs, side and end walls hinged to the upper edges of the flanges, a yoke having vertical arms whose lower extremities are pivoted in the side flanges of the bottom, a fire back hinged to the top of the yoke and notched to engage the ribs of the stove bottom, a folding oven whose bottom is made fast to the ribs in the rear of the fire back, and braces hinged to the fire back yoke and adapted to engage the oven. 4th. A folding stove having a bottom provided with upwardly projecting flanges, vertical walls hinged to the upper edges of the said flanges, arch-shaped ribs or corrugations attached to the bottom of the stove and extending from the front to the rear, an inverted U-shaped yoke whose vertical arms are pivoted to the side of flanges of the stove bottom, a partition hinged to the top of the yoke, its free lower edge being notched to fit the ribs of

the stove bottom, a folding oven whose bottom is made fast to the tops of the stove bottom ribs, the arrangement being such that a space is left between the oven and the fire back, and also between the oven and the rear wall of the stove, braces hinged to the fire back and engaging the oven, and a damper hinged to the top of the oven adjacent the fire back.

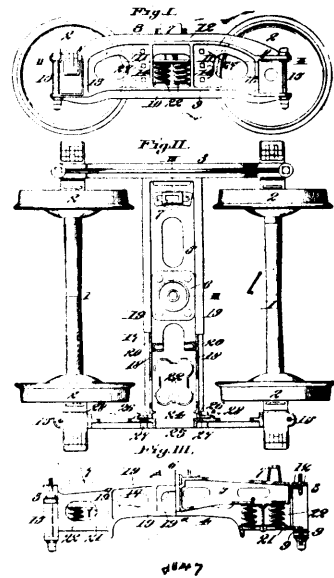
No. 60,466. Method of Suspending Batteries from Carriages. (Méthode de suspendre les batteries aux voitures.)



The Electrical Vehicle Syndicate, Limited, Juxon Street, Lambeth, London, England, assignee of the Honorable Reginald Thomas Dudley Brougham, 22^a Dorset Street, Portman Square, and Walter Charles Bersey, 28 Victoria Street, Westminster, all in England, 2nd July, 1898; 6 years. (Filed 15th December, 1897.)

Claim.—1st. The combination of the carriage frame, a box, springs suspending the box from the frame and a rod pivoted at one end to the frame and at the other to the box. 2nd. The combination of the carriage frame, springs supported by the frame, links supported by the springs, a box hung on the links and a rod pivoted at one end to the frame and at the other to the box.

No. 60,467. Truck Frame. (Cadre de châssis.)

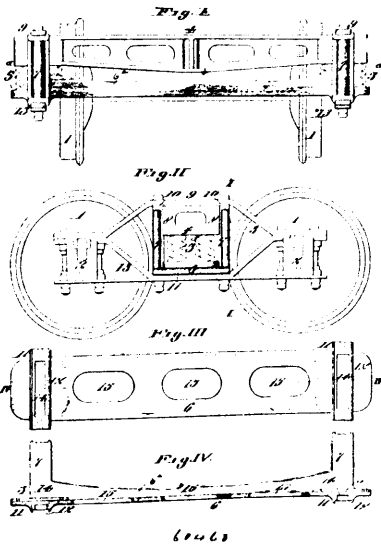


The Shickle, Harrison and Howard Iron Company, assignee of Thomas M. Gallagher, all of St. Louis, Missouri, U.S.A., 2nd July, 1898; 6 years. (Filed 2nd June, 1898.)

Claim.—1st. In a truck frame, the combination of side members, a transom secured to the side members, and a bolster carried by the transom, each side member consisting of a vertical web having upper and lower horizontal flanges and vertical flanges 14 connecting said horizontal flanges at the middle portion of the member, substantially as set forth. 2nd. In a truck frame, the combination of side members, a transom secured to the side members, and a bolster carried by the transom, said members each consisting of a web having upper and lower horizontal flanges and vertical flanges 13 and 14 connecting said horizontal flanges, substantially as set forth. 3rd. In a truck frame, the combination of side members, a transom secured to the side members and provided with spring seats, and a bolster carried by the transom, said side members consisting each of a web having upper and lower flanges connected by vertical flanges, said webs being cut away between said vertical flanges to permit the removal and renewal of the trucksprings, substantially as set forth. 4th. In a truck frame, the combination of side members, an

open top transom and a bolster fitting in the transom, said transom having sides, and ends adapted to receive and be secured to said side members, said sides and ends being made in one integral casting, substantially as set forth. 5th. In a truck frame, the combination of side members, a transom secured to the side members and a bolster carried by the transom, said transom having sides joined at the bottom by shelves to form seats to receive the bolster springs, and said transom also having ends adapted to receive and be secured to said side members, said sides, ends and shelves being formed in one integral casting, substantially as set forth. 6th. In a truck frame, the combination of the side members, a transom, and a bolster carried by the transom, said transom having sides, open at bottom to permit the bolster to be raised from beneath, and said transom having ends adapted to receive and be secured to the side members, said sides and ends being formed in one integral casting, substantially as set forth. 7th. In a truck frame, a transom having sides, and bottom shelves to form spring seats, and having ends adapted to receive the side members of the truck frame, said sides, ends and shelves being formed in one integral casting substantially as set forth. 8th. In a truck frame, a transom having sides, bottom shelves to form spring seats, and end flanges adapted to fit against and be secured to the side members of the truck frame, said sides, shelves and flanges being formed in one integral casting, substantially as set forth. 9th. In a truck frame, the combination of side members, having horizontal flanges and vertical ribs on the inner faces of their webs, and a transom having end flanges and adapted to fit between said flanges and ribs on the side members and occupying the entire space surrounded by said flanges and ribs, substantially as set forth. 10th. In a truck frame, the combination of side members, a transom secured to the side members, and a bolster carried by the transom, said transom having open ends, and said side members having vertical webs provided with openings registering with the open ends of the transom, whereby the bolster springs may be removed and replaced through said openings, substantially as set forth. 11th. In a truck frame, the combination of side members, the transom secured to the side members, and a bolster carried by the transom said transom being formed with sides having horizontal flanges, an open top and spring seats at the bottom of each end of its bottom, all made integral, substantially as set forth. 12th. In a truck frame, the combination of side members, a transom secured to the side members, and a bolster carried by the transom, said transom being formed with sides having horizontal and vertical flanges, an open top, and spring seats at the bottom of each end of the transom, all made integral, substantially as set forth. 13th. In a truck frame, the combination of side members, a transom secured to the side members, and a bolster carried by the transom, said transom having sides, and open at the top to receive the bolster and having spring seats, and said side members consisting of vertical webs and flanges, and having pockets over the journal boxes to embrace the springs, substantially as set forth. 14th. In a truck frame, the combination of side members, a transom secured to the side members, and a bolster carried by the transom, said transom having lateral flanges at the ends, and said side members having vertical ribs on their inner faces against which said lateral flanges abut, substantially as set forth.

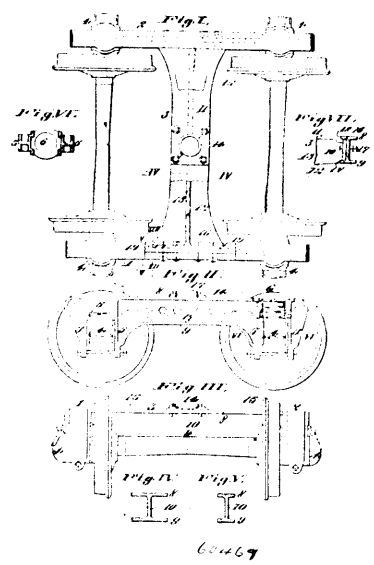
No. 60,468. Spring Seat, Bolster-Guide and Sand-Board. (*Siège à ressort, guide-tampou et planche à sable pour chars.*)



The Shickle, Harrison & Howard Iron Company, assignee of Thomas M. Gallagher, all of St. Louis, Missouri, U.S.A., 2nd July 1898; 6 years. (Filed 2nd June, 1898.)

Claim.—1st. As a new article of manufacture, a sand-board for railway cars, having integral spring seats and integral ends adapted to receive the lower chords of the truck frame, substantially as set forth. 2nd. As a new article of manufacture, a combined spring seat, bolster-guide and sand-board for railway cars, all formed integral, substantially as set forth. 3rd. As a new article of manufacture, a sand-board formed with grooved ribs on its lower surface, spring seats above said ribs, and bolster-guides rising from each end of the sand-board, all of said parts being formed integral, substantially as set forth. 4th. As a new article of manufacture, a sand-board and spring seats for railway cars, formed integral, said sand-board having integral flanges, substantially as set forth. 5th. As a new article of manufacture, a sand-board and spring seats for railway cars formed integral on the ends of the sand-board, said sand-board having integral flanges, substantially as set forth. 6th. As a new article of manufacture, a sand-board and spring seats for railway cars formed integral on the ends of the sand-board, and the column guides, said sand-board having integral flanges, substantially as described.

No. 60,469. Car Truck. (*Châssis de chars.*)



The Shickle, Harrison & Howard Iron Company, assignee of Thomas M. Gallagher, all of St. Louis, Missouri, U.S.A., 2nd July, 1898; 6 years. (Filed 2nd June, 1898.)

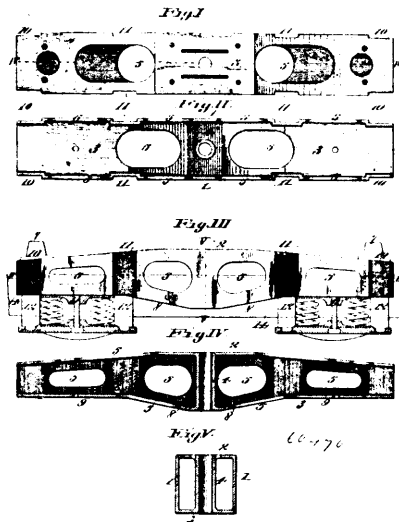
Claim.—1st. A car truck frame, consisting of side or pedestal members of I-beam form, and a cross or transom member, said cross-member having integral ends resting upon the lower integral chord of the side members and formed to fit against the webs of the side members and bolted thereto, substantially as set forth. 2nd. A car truck frame, consisting of side or pedestal members of I-beam form, a cross or transom member, said cross-member having integral ends formed to fit against the webs of the side members and bolted thereto, and having shoulders 18 that fit against the inner edges of the upper or compression chords of the side members, substantially as set forth. 3rd. A car truck frame, consisting of side or pedestal members of I-beam form, and a cross or tension member, said cross-member having integral ends formed to fit between and bear against the upper and lower integral chords of the side members, and to bear against the webs of the side members to which they are bolted, substantially as set forth.

No. 60,470. Car Bolster. (*Trauersin de chars.*)

The Shickle, Harrison & Howard Iron Company, assignee of Thomas M. Gallagher, all of St. Louis, Missouri, U.S.A., 2nd July, 1898; 6 years. (Filed 2nd June, 1898.)

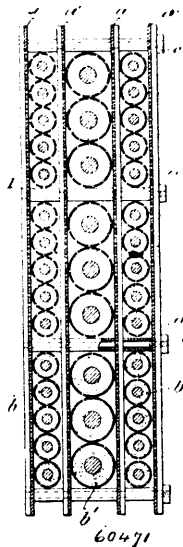
Claim.—1st. A metallic bolster for railway cars made in hollow box form with a top, sides and bottom all made integral, the top being shaped to receive the centre plate and side bearings, and the bottom being extended out and adapted to provide spring seats, substantially as set forth. 2nd. A metallic bolster for railway cars made in hollow box form with a top, sides and bottom all made integral, the top having a horizontal centre part and sloping ends providing spring seats, and the bottom having sloping central portions and horizontal ends, substantially as set forth. 3rd. A metallic bolster for railway cars made in hollow box form with a top, sides and bottom all made integral, the sides being formed with grooves to receive hangers, and the bottom being extended out to receive spring seats, substantially as set forth. 4th. A metallic

bolster for railway cars made in hollow box form with a top, sides and bottom, formed flush with each other, all made integral, and



the bottom being extended out to provide spring seats, substantially as set forth.

No. 60,471. Storage Battery. (*Accumulateur électrique.*)



The Electricitäts Gesellschaft Triberg, assignee of F. W. Schneider, Triberg, Baden, German Empire, 2nd July, 1898; 6 years. (Filed 11th June, 1897.)

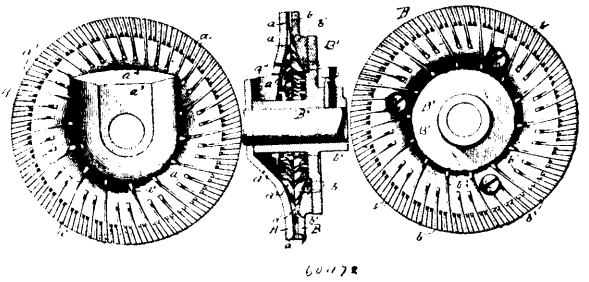
Claim.—1st. An insulating and supporting frame for secondary batteries, consisting of perforated insulating plates *a, a', a'', a'''* connected together by bolts or cross-ties *c* in such a manner that the distance between every two plates can be regulated to correspond to the width of the electrodes *b, b'* to be inserted, and having the purpose of reducing the weight of the battery, shaping the construction of the battery more favourably, increasing the durability of the battery, preventing short-circuits, reducing the weight of the electrolyte as much as possible, and facilitating the exchange of the individual electrodes. 2nd. A mode of execution of the insulating and supporting frame, in which the mutual distance of the perforated insulating plates *a, a', a'', a'''* is determined by caps *d* of the same width as the electrodes *b, b'* to be inserted, being made to enclose the cross-bolts *c*.

No. 60,472. Grinding Disc. (*Meule.*)

The Enterprise Manufacturing Company of Pennsylvania, assignee of John William Brown, jr., all of Philadelphia, Pennsylvania, U.S.A., 2nd July, 1898; 6 years. (Filed 13th June, 1898.)

Claim.—1st. The combination in a grinding mill, of two discs having flared or bevelled opposing surfaces and tangential ribs projecting towards each other from the said surfaces whereby when the two discs are placed face to face they form a channel gradually contracting towards the periphery of the discs and the ribs cross each

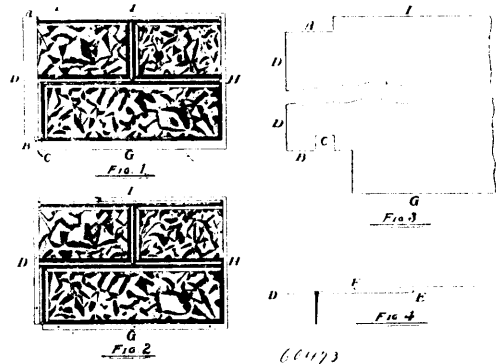
other at an angle and feed the material toward the periphery of the discs and grind and crush it as it is thus fed, substantially as



described. 2nd. The combination in a grinding mill, of two discs having flared or bevelled surfaces and tangential ribs projecting from the said surfaces and having their opposing edges at a uniform distance apart, substantially as described. 3rd. A grinding disc having a series of tangential ribs on its face, substantially as described. 4th. A grinding disc having a series of ribs on its face, the ribs being of different lengths, substantially as described. 5th. A grinding disc having a flared or bevelled surface, with ribs projecting from said surface and extending inwardly from the periphery, substantially as described. 6th. A grinding disc having flared or bevelled surface, tangential ribs projecting from the said surface and extending from the periphery inwardly, with short ribs at the periphery between the above mentioned ribs, substantially as described. 7th. The combination of two grinding discs arranged face to face, each grinding disc having a flared or bevelled surface and having ribs projecting from the said flared or bevelled surface and extending inwardly from the periphery of the discs, substantially as described. 8th. A grinding disc having three sets of ribs of different lengths projecting from its surface and all extending inwardly from the periphery, substantially as described. 9th. The combination of a pair of grinding discs, the surface of each disc being curved and having on its curved surface a series of ribs, the form of the curved surface being such that the product of a section formed by a cylinder whose axis coincides with that of the disc multiplied by the distance through which a hard object engaged at the surface of the cylinder with the ribs of both discs would be propelled by a given angular movement of the revolving grinder, shall be less than the corresponding product with the same angular movement for smaller cylinders and greater than that for larger cylinders, substantially as described.

No. 60,473. Metallic Siding.

(*Plaque métallique.*)



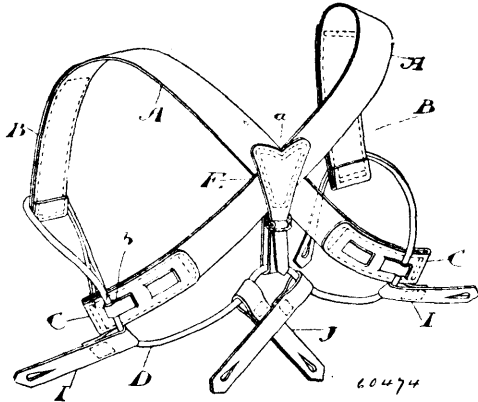
Sarah Eliza Pedlar, assignee of George Henry Pedlar, both of Oshawa, Ontario, Canada, 2nd July, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. In metallic siding or roofing a plate or plates formed with the locking folds *E* and *F* on the bottom and one side the recesses *A* and *B*, the slot *C*, and the lips *H* and *I*, substantially as and for the purposes described. 2nd. As a new article of manufacture a plate for covering the sides or roofs of buildings, formed with the recesses *A* and *B*, the slot *C*, and a locking fold or joint in the bottom and one side, and capable of being laid beginning at the top of the building to be covered, so as not to show any fastenings, substantially as and for the purposes described.

No. 60,474. Shoulder Strap. (*Bretelles.*)

Abraham Copeman of Paris, and Guthrie Ballingal of South Dumfries, both of Ontario, Canada, 2nd July, 1898; 6 years. (Filed 4th June, 1898.)

Claim.—1st. In a shoulder brace, shoulder straps crossed behind and secured together, in combination with a body strap passing



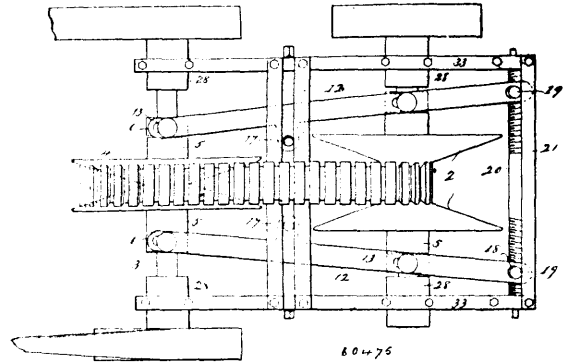
round the body, and supported by the ends of the shoulder straps, and tabs supported by the said body strap and adapted to be buttoned upon the trouser buttons, substantially as and for the purposes specified. 2nd. In a shoulder brace, shoulder straps crossed behind and secured together, in combination with a body strap passing round the body, supported by the ends of the shoulder straps, and having its ends adapted to be buttoned upon the front buttons of the trousers, and tabs supported by the said body strap and adapted to be buttoned up at the trouser buttons, substantially as and for the purposes specified. 3rd. In a shoulder brace, shoulder straps crossed behind and secured together, in combination with a body strap passing round the body, adjustably supported by the ends of the shoulder straps, and having its ends adapted to be buttoned upon the front buttons of the trousers, and tabs supported by the said body strap and adapted to be buttoned upon the trouser buttons, substantially as and for the purpose specified. 4th. In a shoulder brace, shoulder straps crossed behind and secured together in combination with a body strap passing round the body, adjustably supported by the ends of the shoulder straps, and having its ends adapted to be buttoned upon the front buttons of the trousers, side tabs slidably supported on the body strap behind the rear ends of the shoulder straps, of rear tabs supported by the body strap at the rear thereof, substantially as and for the purpose specified. 5th. In a shoulder brace, the shoulder straps A, crossed behind and secured together, in combination with the body strap D, adjustably and movably supported by the ends of the shoulder straps A, and having its ends adapted to be buttoned upon the front buttons of the trousers, the strap H, having one end secured to the point of junction of the shoulder straps, and its other end adjustably secured thereto to form an adjustable loop through which the body strap passes, the side tabs I, and the back tabs J, substantially as and for the purpose specified. 6th. In a shoulder brace, the shoulder straps A, crossed behind and secured together, ends B and C, secured thereto and provided with loops b, in combination with the body strap D, passing through the loops b, and having its ends adapted to be buttoned upon the front buttons of the trousers, a strap H, having one end secured to the point of junction of the shoulder straps, and its other end adjustably secured thereto to form an adjustable loop through which the body strap passes, the side tabs I, and the back tabs J, substantially as and for the purpose specified. 7th. In a shoulder brace, the shoulder straps A, crossed behind and secured together, ends B and C secured thereto and provided with loops b, in combination with the body strap D, passing through the loops b, and having its ends adapted to be buttoned upon the front buttons of the trousers, adjustable means of supporting the back of the body strap from the point of junction of the shoulder straps, and the side and back tabs movably supported on the body strap, substantially as and for the purpose specified. 8th. In a shoulder brace an adjustable loop formed by a strap H, connected with a stationary part, in combination with two rings F and G, supported by the stationary part, with which rings the strap H, engages, substantially as and for the purpose specified.

No. 60,475. Speed Varying Mechanism.
(*Mécanisme pour varier la vitesse.*)

The Reeves Pulley Company, assignee of Milton O. Reeves, all of Columbus, Indiana, U.S.A., 2nd July, 1898; 6 years (Filed 30th April, 1898.)

Claim.—1st. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted therein, the individual members of each pair adapted to slide towards or from each other upon their respective shafts, means for simultaneously sliding the approaching pair of discs at a gradually decreasing speed, and the receding discs at a gradually increasing speed, and a belt connecting the pair of discs, substantially as and for the purpose set forth. 2nd. In a speed varying mechanism, the combination of a frame, two parallel

shafts mounted therein, a pair of cone shaped driving elements splined to each shaft, the individual members of each pair adapted



to slide towards or away from each other upon their respective shafts, levers pivoted between the shafts connected with the driving elements so as to simultaneously slide the approaching discs at a gradually decreasing speed and the receding discs at a gradually increasing speed, a belt connecting the pairs of discs, and means for actuating the levers, substantially as and for the purpose set forth. 3rd. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted therein, a pair of cone shaped driving elements splined to each shaft, the individual members of each pair adapted to slide towards and from each other upon their respective shafts, means for simultaneously sliding the approaching pair at a gradually decreasing speed and the receding pair at a gradually increasing speed and arranged so as to slide the receding pair slower than the approaching pair through a part of their movement, and slide the receding pair faster than the approaching pair through the remainder of the movement, and a belt connecting the discs, substantially as and for the purpose set forth. 4th. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted therein, a pair of cone shaped driving elements splined to each shaft, a belt connecting the pairs, levers pivoted between the shafts and connecting thrust collars taking against the corresponding elements of each pair, said levers and pivots being out of line with the points of contact of the lever upon the thrust collars in the direction of the driving elements, substantially as and for the purpose set forth. 5th. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted therein, a pair of cone shaped driving elements splined to each shaft, a belt connecting the pairs, thrust collars mounted on the shafts taking against the driving elements and provided with diametrically projecting lugs, levers provided with slotted openings taking over said lugs and having an inwardly projecting tilt or boss between the shafts adapted to pivot on the frame, substantially as and for the purpose set forth. 6th. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted therein, a pair of cone shaped driving elements splined to each shaft, a belt connecting the pairs of trust collars mounted on the shafts taking against the driving elements and provided with diametrically projecting lugs, shoulders upon said trust collars and adjacent said lugs, levers provided with slotted openings taking over said lugs and resting upon said shoulders, caps secured to said lugs and taking over the levers and an inwardly projecting tilt or boss between the shafts adapted to pivot upon the frame, substantially as and for the purpose set forth. 7th. In a machine of the class described, a thrust collar, consisting of a cupped portion provided with diametrically projecting lugs, a hardened track supported within said cupped portion, a second hardened track adapted to take against a driving element and balls supported between said tracks and within the cupped portion, substantially as and for the purpose set forth. 8th. In a speed varying mechanism, the combination of two parallel shafts, boxes supporting said shafts, side rails connecting said boxes, bars parallel with the shafts and connecting the side rails, a pair of cone shaped driving elements mounted on said shafts, levers pivoted between the shafts and adapted to actuate the pairs of driving elements, extensions upon said levers taking over nuts 19, supported upon a right and left hand threaded shaft 20, and bars 21, taking over said levers and against said nuts, substantially as and for the purpose set forth.

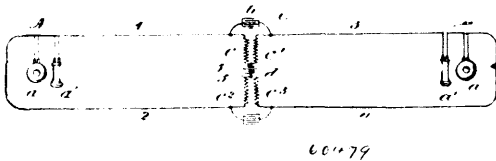
No. 60,476. Child's Folding Perambulator.
(*Voiture d'enfant pliante.*)

The Patent Folding Perambulator Company, Croydon, assignee of William Legge, 43 Limes Road, Croydon, Surrey, England, 2nd July, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—1st. In a folding perambulator, the combination with a hinged bottom or seat of a stay below the same, adapted to extend across the vehicle when open and attached to the bottom by a chain or suitable connection, so that when the bottom is raised the stay is also lifted, substantially as described. 2nd. In a folding peram-

attached to said boards or beams, and means for changing the points of attachment of said towing chains or warps to vary the shear of said boards or beams and the slip of the water, substantially as described. 7th. In combination with a trawl-net, upright boards or beams attached to the sides or wings of the net, weighted or ballasted rounded bodies on which said boards or beams are mounted, and spring brackets for the attachment of towing chains or warps to said boards or beams and to said rounded bodies, substantially as described. 8th. In combination with a trawl-net, inflator-boards attached to the sides or wings of the net, and which are tapered from their lower to their upper end, weighted or ballasted balancing spheres on which said boards are mounted, and towing chains or warps attached to said bodies and spheres, substantially as and for the purposes described.

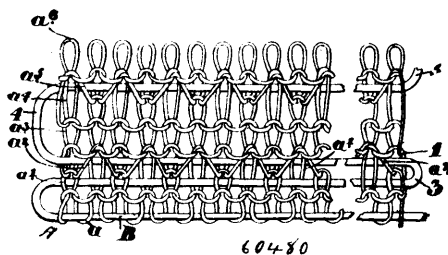
No. 60,479. Telephone Circuit. (Circuit de téléphone.)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignees of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 2nd July, 1898; 6 years. (Filed 27th May, 1898.)

Claim.—1st. In combination, a source of telephonic adulatory current and a receiving instrument therefor in a closed conducting circuit, two windings of a repeating coil serially included in the circuit, a conductor including a condenser in shunt of the windings of the repeating coil, and a bridge uniting the point of junction of the windings of the repeating coil with the other side of the circuit, as described. 2nd. The combination with a source of telephonic undulatory current and a receiving instrument therefor at different stations, of a closed circuit including the source of undulating current, another closed circuit including the receiving instrument, a winding of a repeating coil in each of the circuits, said windings being in inductive relation to each other, and conductors, including condensers, uniting the different circuits, as described. 3rd. The combination with a transmitting telephone and a receiving telephone at different stations, of a circuit including the instruments at the different stations, two windings of a repeating coil included serially in the circuit, a bridge of the circuit connected with the point of junction of the said windings, a source of current in the bridge, a conductor in shunt of the said serially connected windings, and a condenser interposed in the shunt, as described. 4th. The combination with a transmitting telephone and a receiving telephone at each two stations and a circuit including the instruments of both stations, of two windings of a repeating coil included serially in each of the line conductors of the said circuit, a bridge of the circuit from points intermediate of the said windings and a source of current included in the bridge, a shunt about each pair of serially connected windings, and a condenser in each of said shunts, as described.

No. 60,480. Bandage. (Bandage.)

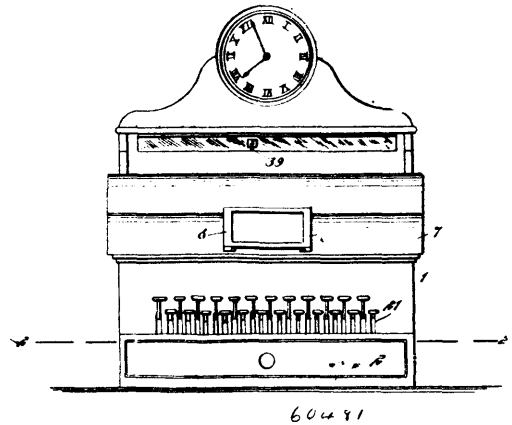


Wright R. Cartledge and James Henry Squire Kerr, both of Toronto, Ontario, Canada, 2nd July, 1898; 6 years. (Filed 23rd April, 1898.)

Claim.—1st. A bandage fabric, comprising a series of courses having the edge formed of a series of courses of loops, the intermediate loop of each row or rib having elongated alternate loops of double the length of ordinary loops and the innermost loops comprised of ordinary loops with V-shaped alternate loops through which pass the ordinary loops of the next course and an elastic thread or cord passing through the loops of each course of the edge alternately to one side of the loop and to the other end one of the elastic threads passing to the inside of the elongated loop of one course, and to the outside of the ordinary loops of such next course, and the inner elastic threads or cords passing through the alternate courses of loops and within elongated alternate loops of one course, the V-shaped loops of the next course, and outside of the ordinary loops of the last mentioned course, as and for the purpose specified. 2nd. A bandage fabric, comprising a series of courses having the edge

formed of a series of courses of loops, the intermediate loop of each row or rib having elongated alternate loops of double the length of ordinary loops, and the innermost loops comprised of ordinary loops with V-shaped alternate loops, through which pass the ordinary loops of the next course, and an elastic thread or cord passing through the loops of each course of the edge alternately to one side of the loop, and to the other and one of the elastic threads passing to the inside of the elongated loop of one course and to the outside of the ordinary loops of such next course, and the inner elastic threads or cords passing through the alternate course of loops and within elongated alternate loops of one course, the V-shaped loops of the next course, and outside of the ordinary loops of the last mentioned course, said elastic thread being continuous and looped at each end of the fabric, as and for the purpose specified.

No. 60,481. Cash Register. (Compte-monnaie.)

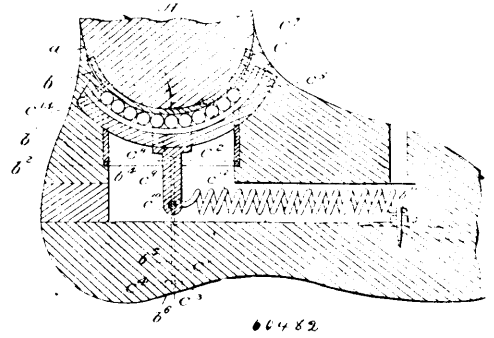


Horace Bradt and Jefferson Kindleberger, both of San Diego, California, U.S.A., 2nd July, 1898; 6 years. (Filed 29th April, 1898.)

Claim.—1st. In a cash register, a casing, a hinged cover therefor, forming a writing table and having a slot opening in its rear portion, a frame on the top of said cover and having guide pieces in line with the ends of said slots opening, hangers arranged within the casing rearward of the slot opening and having outwardly opening bearings at the lower end for receiving the journals of a memorandum strip roller, perforated lugs on the under side of the cover at opposite sides of the frame on said cover, rollers mounted to rotate in said lugs, and carbon strips having their ends secured to the rollers, the said carbon strips being passed through slot openings at the sides of the frame, substantially as specified. 2nd. In a cash register, a casing, a shaft mounted to rotate in said casing, receiving discs mounted to rotate on said shaft, a ratchet and pawl mechanism operated from a key lever for rotating said discs, another shaft mounted to rotate in said casing, deposit discs mounted to rotate on said last named shaft, means for operating the last named discs from the first named discs, lugs extended from each of the deposit discs, a stop-plate automatically swinging for engaging the said lugs, and means for locking the two shafts from backward rotation, the said means consisting of a ratchet-wheel on the extended end of each shaft, and pivoted dogs engaging therewith, substantially as specified. 3rd. A cash register, comprising a series of numbered discs mounted to rotate independently on another shaft, the said last named discs being forwards of and operated by the first named discs, key levers fulcrumed in the casing of the cash register, pawls pivotally connected to the key levers and adapted to engage with ratchet teeth attached to the first named discs, a vertically adjustable rod for supporting the free ends of said pawls, a gravity swinging plate engaging with all the pawls for holding said pawls yieldingly downward, a yoke bar engaging with all the keys, a bar extending upward from one arm of the yoke bar, a spring rod engaged by the upwardly extended rod and carrying a hammer, and a bell to be struck by the hammer, substantially as specified. 4th. A cash register, comprising a series of numbered discs mounted to rotate independently on a shaft, a series of discs mounted to rotate independently on another shaft, the said last named discs being forwards of and operated by the first named discs, key levers fulcrumed in the casing of the cash register, pawls pivotally connected to the key levers and adapted to engage with ratchet teeth attached to the first named discs, a vertically adjustable rod for supporting the free ends of said pawls, a gravity swinging plate engaging all of the pawls for holding said pawls yieldingly downward, a yoke bar engaging with all the keys, an upwardly extending bar operated by the yoke bar, a spring rod engaged by the last named bar and carrying a hammer and a bell to be struck by said hammer, and targets operated by the keys, substantially as specified. 5th. A cash register, comprising a casing, a series of independently rotating numbered discs therein, a key lever for each of the said discs, targets or indicators having stem portions engaging the ends of the

key levers, the said stem portions at their lower ends having toe portions extended beyond the ends of the key levers, a swinging supporting plate for engaging said toes and holding the targets in line with the sight opening, a yoke bar operated by the key levers and a tappet carried by the yoke bar for moving the swinging plate in one direction, substantially as specified. 6th. A cash register, comprising a casing, a drawer movable in the lower portion thereof, a locking latch for said drawer, a lever fulcrumed in the casing, a yoke bar with which the inner end of said lever is engaged, a connection between said yoke bar and the locking mechanism of the drawer, whereby the same may be released, and consisting of a pivoted rod extended upward and connected to an arm on the yoke, a pawl pivoted to said lever, and a registering disc operated by said pawl, substantially as specified. 7th. A cash register, comprising a casing, a series of key levers pivoted therein, registering discs operated independently of said key levers, a target for each key lever, comprising a plate suitably numbered and a stem extended downward from the plate through guides in the casing, a toe portion on the lower end of said stem, adapted to engage with the upper side of the key lever, a yoke bar mounted to swing by an upward movement of either one of the key levers, an arm extended rearward from said bar, an adjustable tappet on said arm, a supporting plate pivotally mounted in the casing and adapted to engage its upper edge with the extended toe portion, and a weighted arm extended forward and downward from said plate, substantially as specified. 8th. A cash register, comprising a casing, a hinged lid thereon, an arm extended rearward and inward from the hinged lid of said lid, a fulcrumed lever in the casing, having a slot at its upper end through which a pin on said arm extends, a pawl pivoted to the lower end of said lever, and a registering disc operated by the said pawl upon the closing of the lid, substantially as specified. 9th. In a cash register, the combination with a casing, a hinged lid thereon, and rotary discs, of an arm secured to the pivoted end of the lid and having a pivot at its end, a lever fulcrumed in the casing between its ends and having its upper end slotted to receive the pivot pin of the said arm, and a pawl pivoted to the lower end of the lever and engaging a ratchet-wheel carried by one of the said discs, substantially as described. 10th. In a cash register, the combination with rotary receiving discs, and pawl and ratchet mechanism operated from the key levers for operating said discs, of rotary deposit discs each provided with a lug projecting therefrom, and a swinging stop plate adjacent to the deposit discs and automatically engaging the lugs of the said discs as the discs are rotated, substantially as and for the purpose set forth. 11th. In a cash register, the combination with the key levers, a series of numbered discs and a ratchet and pawl mechanism for operating the discs from the key levers, of a pivoted yoke bar with which the rear ends of the key levers engage to swing it on its pivot, a gong, a spring hammer and an arm carried by the yoke bar and engaging the hammer to operate it, substantially as described. 12th. In a cash register, the combination with a casing, a drawer therein, the key levers, a series of numbered discs and a pawl and ratchet mechanism for operating the discs from the key levers, of a pivoted yoke bar with which the rear end of the key levers engage to swing it upon its pivot, a pivoted latch for locking the drawer, an arm carried by the yoke bar, and a rod having one end pivoted to the latch, and its other end engaging the arm of the yoke bar, substantially as described. 13th. In a cash register, the combination with a casing, a drawer therein, the key levers, and a series of numbered discs operated by the key levers, of a pivoted yoke having downwardly projecting fingers between which the rear ends of the key levers project, said yoke bar being provided with a forwardly and upwardly extending apertured arm, a pivoted latch for locking the drawer and a rod having its lower end pivoted to the rod and its upper end projecting through the aperture of the arm of the yoke bar and provided with a stop at its end, substantially as described. 14th. In a cash register, the combination with a casing a drawer therein, the key levers and a series of numbered wheels operated by the key levers, of a pivoted yoke having downwardly projecting fingers between which the rear ends of the key levers project, said yoke being provided with an upwardly and forwardly projecting arm, a pivoted latch for the drawer, a rod having one end secured to the latch and its other end engaging the arm of the yoke bar, a spring hammer, a gong and a bar projecting upwardly from one of the arms of the yoke bar and engaging the hammer, substantially as described. 15th. In a cash register, the combination with registering discs, pivoted key levers, and a pawl and ratchet mechanism for operating the discs from the key levers, of a pivoted yoke with which the rear ends of the key levers engage provided with a rearwardly projecting arm having tappets, vertically movable target rods provided with toes at their lower ends with which the key levers engage, a pivoted plate adapted to engage the toes of the target rods, and means for disengaging the said plate from the toes of the target rods and from the yoke, substantially as described. 16th. In a cash register, the combination with a casing a drawer therein, a latch for said drawer, numbered wheels operated by the key levers, a pivoted yoke engaged by the key levers, a connection between the latch of the drawer and said yoke, a gong, a hammer for the gong and a connection between the hammer and the yoke, of a drawer releasing lever pivoted on one arm of the said yoke, a ratchet-wheel on the shaft of the numbered disc and a pawl pivoted on the drawer releasing lever and engaging the said ratchet-wheel, substantially as described.

No. 60,482. Ankle Joint in Artificial Limbs.
(*Jointure pour membres artificiels.*)



Albert Carson Wright and Clayton A. Stubbins, both of Britt, Iowa, U.S.A.; 2nd July, 1898; 6 years. (Filed 31st March, 1898.)

Claim.—1st. In an artificial limb, the combination with a foot section and a leg section, a concave plate secured to the foot section, and a convex plate secured to the leg section, balls interposed between said plate, a strap secured to the plate of the leg section and embracing the plate of the foot section, an arm secured to the strap, and a spring having one end secured to the arm and the other end secured to the foot section, substantially as set forth. 2nd. In an artificial limb, the combination with a foot section and a leg section, a concave plate secured to the foot section, and a convex plate secured to the leg section, said plates being provided with grooves, balls arranged in said grooves, a strap secured to the plate of the leg section, an arm secured to the strap, and a spring having one end secured to the arm and the other end secured to the foot section, substantially as set forth. 3rd. In an artificial limb, the combination with a foot section and a leg section, said foot section provided with a chamber communicating with a longitudinal horizontal channel, said chamber being provided with an offset or shoulder, a convex plate secured to the leg section and provided with a groove, a convex plate having a depending band or collar located within the chamber and seated upon the shoulder and provided with a groove, balls arranged in said groove, a band secured to the convex plate and embracing the concave plate, an arm secured to the band, a coiled spring, one end of which is connected to the free end of the arm and has its other end projecting into the longitudinal channel and secured therein, substantially as set forth.

No. 60,483. Art of Preserving Lobsters and other Crustacea. (*Art de préserver le homar l. etc.*)

Ludwig Wurzburg, Halifax, Nova Scotia, Canada, 4th July, 1898; 6 years. (Filed 2nd August, 1897.)

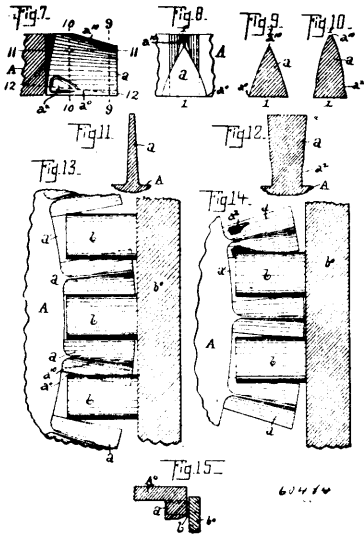
Claim.—The method or process herein described for canning crustacea meat, consisting in dipping the meat and the metal cans or other receptacles containing the same into the solution of boracic acid prepared substantially as and for the purpose specified and in about the proportions stated.

No. 60,484. Angle Gearing. (*Engrenage angulaire.*)

James Henry Sager, Rochester, New York, U.S.A.; 4th July, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. In ankle gearing, a pin gear having pins with parallel axes, in combination with a gear wheel having an axis at an angle to that of the pin gear and provided with interdental spaces, and with teeth whose working faces have warped limiting surfaces whose positions and curvatures are those generated by the surface lines of the moving pins when the pin gear and the gear wheel revolve together, whereby the contact between the pins and the teeth of the gear wheel is line contact. 2nd. In angle gearing, a pin gear having a series of cylindrical pins having parallel axes arranged in a circle about the axis of rotation of said pin gear and parallel thereto, in combination with a gear wheel having an axis at an angle to that of the pin gear and provided with interdental spaces and with teeth whose working faces have warped limiting surfaces whose positions and curvatures are those generated by the surface lines of the moving pins when the pin gear and gear wheel revolve together, whereby the contact between the pins and the teeth of the gear wheel is line contact. 3rd. In angle gearing, a face pin gear having pins with parallel axes, in combination with a gear wheel having an axis at an angle to that of the pin gear and provided with interdental spaces and with peripheral teeth whose working faces are warped surfaces generated by the surface lines of the moving pins when the pin gear and gear wheel revolve together, and the pins of said pin gear cross the periphery of the gear wheel, whereby the contact between the pins and the teeth of the gear is line contact. 4th. In angle gearing, a face gearing having a series of parallel cylindrical pins, in combination with a gear wheel having an axis set at an angle to that of the pin gear and provided with wedge-like teeth set transverse to the plane of rotation of the gear wheel, and those working faces are

warped surfaces which are curved in planes perpendicular to the axes of the pins when in contact therewith, and which are straight lines



in planes parallel to the axes of the pins when in contact therewith. 5th. In angle gearing, a face gear, having a series of parallel cylindrical pins, in combination with a gear wheel having an axis set at an angle to that of the pin gear and provided with peripheral wedge-like teeth, set transverse to the plane of rotation of the gear wheel, and whose working faces are warped surfaces which are curved in planes perpendicular to the axes of the pins when in contact therewith, and which are straight lines in planes parallel to the axes of the pins when in contact therewith, and anti-friction rollers on said pins. 6th. In angle gearing, a face gear, having a series of parallel cylindrical pins, in combination with a gear wheel having an axis set at an angle to that of the pin gear and provided with a peripheral wedge-like teeth set transverse to the plane of rotation of the gear wheel, and whose working faces are warped surfaces which are curved in planes perpendicular to the axes of the pins when in contact therewith, and which are straight lines in planes parallel to the axes of the pins when in contact therewith, and having the axes of the pin gear and gear wheel set to cause the pins to cross the periphery of the wheel, and anti-friction rollers on said pins.

No. 60,485. Treatment of Tanning Liquids.
(*Traitement de liquides pour tanner.*)

Percy Gerald Sanford, 20 Cullum Street, London, England, 4th July, 1898; 6 years. (Filed 19th November, 1897.)
Claim.—The clarifying, bleaching or decolorizing of tanning liquids by treating them with albuminous matter together with an alkaline fluoride such as ammonium fluoride or boro fluoride of an alkali, and subsequently causing coagulation of the albumen by means of heat or of picro citric acid, substantially as hereinbefore described.

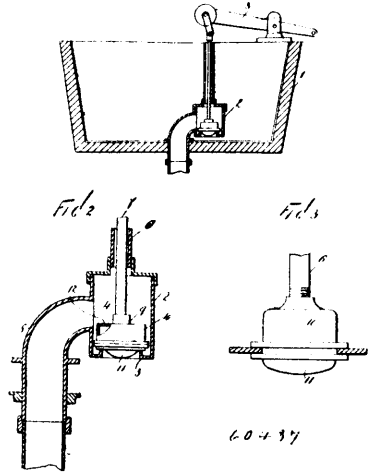
No. 60,486. Treatment of Blood and Albuminous Matter. (*Traitement de sang et de matieres albumineuses.*)

Percy Gerald Sanford, 20 Cullum Street, London, England, 4th July, 1898; 6 years. (Filed 19th November, 1897.)
Claim.—1st. The treatment of blood and other albuminous matter, both animal and vegetable, by means of an alkaline fluoride, such as ammonium fluoride, or boro-fluoride of ammonium, sodium or potassium, substantially as hereinbefore described. 2nd. As a new product, blood or other albuminous matter, both vegetable and animal, which has been treated as hereinbefore described.

No. 60,487. Valve. (*Soupepe.*)

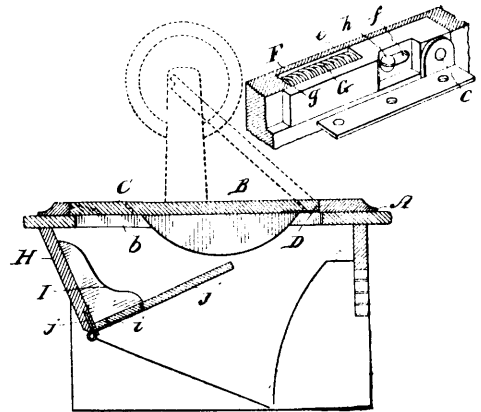
Thomas Garforth Rhodes and Raymond Gaunt, Leeds, York, England, 4th July, 1898; 6 years. (Filed 19th April, 1898.)
Claim.—1st. The combination with the casing having a bottom inlet and side outlet, of a valve situated therein and comprising two separable parts, and means for holding said parts together, substantially as set forth. 2nd. The combination with the casing having a bottom and side inlet, of a valve situated therein and comprising an inverted cup and valve proper fitting therein, an opening in said cup and a valve stem connected therewith, substantially as set

forth. 3rd. The combination with a casing, of a valve chamber having a bottom inlet, a side outlet, and an upwardly extending



tube, a valve within said chamber, and a valve stem extending from said valve upwardly and through said tube, substantially as set forth.

No. 60,488. Sewing Machine Stand.
(*Support pour machines à coudre.*)



John Gilbert Sully, Guelph, Ontario, Canada, 4th July, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. In a sewing machine stand, a top having an opening formed therein in combination with a flap, pivot blocks slidably supported in recesses in the sides of the opening, pivots secured to the sides of the flap near one end and journaled in the said blocks, and springs bearing against the said blocks and against a stationary part, substantially as and for the purpose specified. 2nd. In a sewing machine, the top A, having an opening formed therein in combination with the flap B, the pivot blocks E, slotted at f, and shouldered at c, and inserted in shouldered recesses F, formed in the sides of the opening, the springs G, between the shoulders in the recesses and the shoulders on the pivot blocks, the screws h passing through the slots f, and the plates D, secured to the flap and provided with the pivots c, substantially as and for the purpose specified. 3rd. In a sewing machine stand, the back piece H, in combination with the flap J, and the coil springs G, each having two arms extending therefrom, one secured to the said back piece, and the other to the flap, substantially as and for the purpose specified. 4th. In a sewing machine stand, the combination of the top A, having an opening formed therein, the flap B, hinged by spring pressed yielding hinges to the sides of the opening, the flap C, hinged at the other end of the opening and rabbetted at the edge to receive the similarly rabbetted edge of the flap B, and stops b limiting the downward motion of the flap C, substantially as and for the purpose specified. 5th. In a sewing machine stand, the combination of the top A, having an opening formed therein, the flap B, hinged by spring pressed yielding hinges to the sides of the opening, the flap C, hinged at the other end of the opening and rabbetted at the edge to receive the similarly rabbetted edge of the flap B, stop b

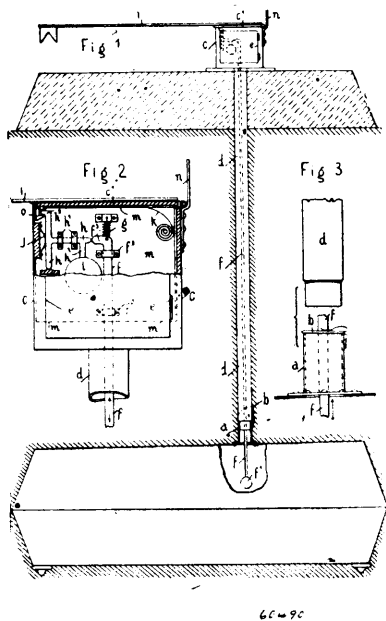
limiting the downward motion of the flap C, the back piece H, the stop I, and the spring hinged flap J, substantially as and for the purpose specified.

No. 60,489. Ointment. (Onguent.)

Alexandre Champagne, Sorel, Québec, Canada, 4 juillet, 1898; 6 ans. (Déposé 25 avril, 1898.)

Résumé.—Un onguent composé de: suif de mouton; sain-doux; cire; résine, térébenthine, huile de pétrole, graisse d'oie, le jus d'une orange et d'un oeuf dans les proportions ci-dessus décrites et pour les fins indiquées.

No. 60,490. Apparatus for Preventing the Fatal Results Arising from Premature Interment. (Appareil pour empêcher les résultats fatals d'un enterrement prématuré.)

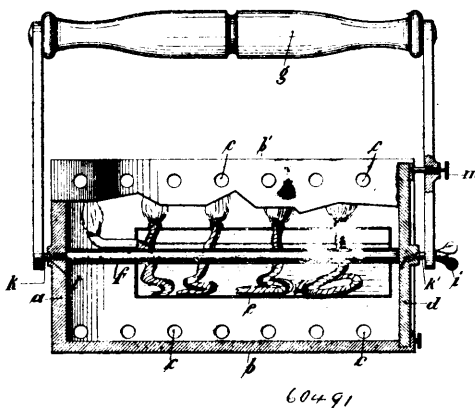


Count Michel de Karnica, Karnicki, Warsaw, Russia, 4th July 1898; 6 years. (Filed 30th April, 1898.)

Claim.—1st. A safety device for signalling the reanimation of prematurely interred persons, consisting of a signal box with lid closed against and erectable by spring pressure carrying a signal held depressed and erectable with the lid, a pipe forming a communication between the interior of said box and the coffin, a rod vertically guided, and suspended in said box by a spring and passing through said pipe into the coffin and there provided with an enlargement and at the upper end with a projection or nose, a horizontally guided slide pressed against the nose of said rod and engaging by a hook on an upright leg, a latch hook on the box lid which by a movement towards said rod is disengaged and a bell with suitable mechanism adapted to be liberated by another leg on said slide, substantially as set forth. 2nd. In a safety device for signalling the reanimation of prematurely interred persons, the combination with the coffin of an opening in the lid, a pipe socket over said opening and a hinged spring-actuated flap adapted to close the opening in said socket automatically, substantially as set forth. 3rd. In a safety device for signalling the reanimation of prematurely interred persons, the combination with the coffin of an opening in the lid, a pipe socket secured to said lid over said opening, a pipe insertible in said socket and extending to the top of the grave mound, a signal box secured to the upper end of said pipe, a rod held vertically sliding against lateral displacement and suspended in said box by a string and extending through said pipe into the coffin, a lateral projection or nose on the upper end of said rod, a slide adapted to move transversely toward said rod and abutting on said nose and having an upright leg with hook, a spring pressing said slide towards said rod, a hinged lid on said box provided with a signal rod, a latch hook on said lid adapted to be engaged by the slide hook and held down, a spring pressing said lid upwardly and a stop preventing said lid from passing the vertical position, substantially as set forth. 4th. In a signal box, the combination of an upright rod held in guides to have an up-and-down motion, a nose on said rod, a spring holding said rod suspended, a slide held in guides to have motion transversely to said rod and provided with a point adapted to be in contact with the nose on the rod, a spring pressing said slide towards said rod, a bolt or hook on said slide adapted to engage a latch hook, and a latch hook on the box lid engaging said bolt or hook, a hinged lid on said box

and a spring against the pressure of which said lid is held down by said bolt and hook, substantially as set forth. 5th. In a signal box, the combination of a hinged lid, a spring pressing said lid upwardly, a stop preventing said spring from pressing said lid beyond the vertical position, a latch hook on said lid, a bolt and hook adapted to engage said latch and keep said lid closed, a slide of which said bolt and hook forms part, a spring tending to press said slide and bolt out of engagement with said latch hook and a spring suspended rod guided vertically against lateral displacement and provided with a nose on which said slide abuts and allows said slide to be shot or projected when moved up or down so as to disengage the bolt from the latch hook, substantially as set forth. 6th. In a signal box, the combination of a hinged lid, a spring pressing said lid upwardly, a stop preventing said spring from pressing said lid beyond the vertical position, a reflector hinged to the inner face of said lid and adapted to stand at an angle of 45 degrees there to when raised to an upright position, an arm or lamp bracket on said box opposite said reflector and a lamp carried on said arm or bracket, substantially as set forth. 7th. In a signal box, the combination of hinged lid, projecting flanges near the top, a bail having retaining lips to engage said flanges, thumb screws passing through said bail and handles on said bail, substantially as set forth. 8th. In a safety device, the combination with a signal box, communication tube between it and the coffin and rod passing through said tube and adapted to release spring mechanism, a bolt secured to a chain and registering perforations in said tube and rod into which said bolt may be inserted and the tube and said rod immediately connected, substantially as set forth.

No. 60,491. Smoothing Iron. (Fer à repasser.)



Ludwig Rieder, München, Bavaria, Germany, 4th July, 1898; 6 years. (Filed 4th June, 1898.)

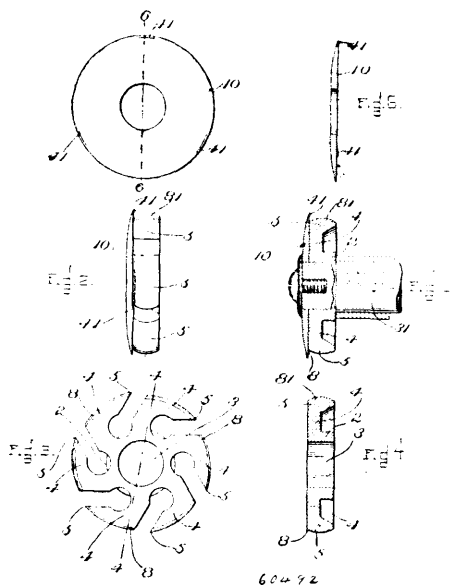
Claim.—1st. A revolving smoothing iron characterized by the arrangement that during the use thereof both of its smoothing surfaces which lie opposite, and parallel to each other, can be alternately made use of by revolving the iron 180 degrees, whilst at the same time the smoothing surface not in use lies above, and is heated by means of a suitable heating device placed in the interior of the iron, and in which the revolving of the iron can be effected at will in a handle with projecting bars of suitable construction. 2nd. The improved revolving smoothing iron constructed and operating substantially as described and shewn in the accompanying drawing.

No. 60,492. Machine for Trimming the Heels and Soles of Boots and Shoes. (Machine pour rogner les talons et les semelles des chaussures.)

Alexander McDowell, Lynn, Massachusetts, U.S.A., 4th July, 1898; 6 years. (Filed 20th June, 1898.)

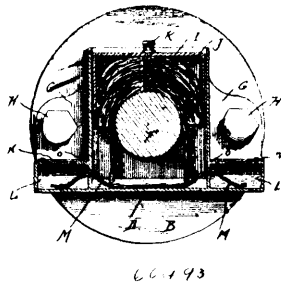
Claim.—1st. A rotary cutter comprising a plurality of cutting blades, and a cutting-lip formed integrally upon each of a number of said blades less than the whole number comprising the cutter. 2nd. A rotary cutter consisting of a plurality of cutting-blades, and a cutting-lip upon each of certain of said blades, the blades on which the cutting-lip is omitted extending to a plane coincident with the back surface of the cutting-lip. 3rd. In a rotary cutter, a central hub or annulus, and arms projecting therefrom, combined with a plurality of blades which surmount said arms, one or more blades each having a cutting-lip, such blades being less in number than the whole number of blades, the back surface of said lips to be coincident with the inner extremity of the blades on which said lips are omitted, and a front shield contiguous to said lips and to the blades without lips, substantially as described. 4th. The rand-guide or shield having the series of disconnected bevelled laterally-projecting lips 41, 41, substantially as described. 5th. The combination with a

rotary cutter having rand-cutting lips on certain of its blades, with intermediate blades devoid of such lips, of the rand-guide or shield



having the series of disconnected bevelled laterally-projecting lips 41, 41, substantially as described.

No. 60,493. Lubricator. (Graisseur.)



Francis M. Andrews, Manchester, Massachusetts, U.S.A., 47 July, 1898; 6 years. (Filed 20th June, 1898.)

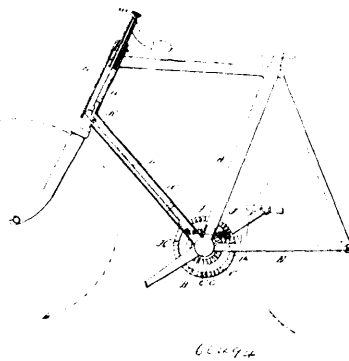
Claim. 1st In a device of the character described, a casing forming a central reservoir, said casing having U-shaped slots formed in its front and rear sides to receive a piston-rod, reservoirs formed on either side of said casing, wicks leading to the central reservoir, a cap adapted to slide in the central reservoir, a wick attached to said cap, as and for the purpose described. 2nd. In a piston-rod lubricator, a casing forming a central reservoir, said casing having U-shaped slots formed in its front and rear sides to receive a piston-rod, reservoirs formed on either side of said central reservoir, wicks leading to the central reservoir, a wick leading from the bottom of the central reservoir up over the piston-rod, means for securing said casing to the stuffing-box, as and for the purpose described. 3rd. The herein-described combination of the casing D, having a central reservoir, ears G, by which said casing may be attached to a stuffing-box, the cap I, wicks J and N, reservoirs L, and caps N pivoted to said reservoirs for closing the openings through which oil may be introduced to the reservoir, substantially as and for the purpose set forth. 4th. In a device of the character described, a casing forming a central reservoir, said casing having U-shaped slots formed in its front and rear sides to receive a piston-rod, ears formed with said casing, reservoirs formed on either side of said central reservoir, a cap adapted to slide in the central reservoir, said cap having a cut-out portion adapted to surround the piston-rod, a knob formed on said cap, a wick secured within the cap, said wick being adapted to extend down to the bottom of the reservoir, caps pivoted to the side reservoirs to close suitable openings formed therein, a wick leading from the side reservoirs to the central reservoir, as and for the purpose described.

No. 60,494. Bicycle Gear. (Engrenage de bicycles.)

Francis Henry Murphy and Mason Rounds Pierce, both of New York City, U.S.A., 4th July, 1898; 6 years. Filed 2nd May, 1898.)

Claim. -1st. An improved changeable gear of the class described, comprising a main shaft carrying bevel pinions of different diameters,

a crank shaft transversely mounted with respect to the main shaft and carrying a gear embodying gears of different diameters



respectively meshing with said bevel pinions, a clutch mounted upon the main shaft intermediately between said pinions and adapted to respectively engage the same, an operating lever transversely mounted with respect to said clutch, a longitudinally arranged worm gear engaging said lever and means for operating said worm gear, substantially as and for the purpose set forth. 2nd. An improved changeable gear for bicycles, comprising the main gear shaft carrying bevel pinions of different diameters and mounted in a longitudinal plane, a transverse crank shaft carrying a gear embodying gears of different diameters respectively meshing with the bevel pinions, a clutch mounted upon the gear shaft intermediately between said pinions and adapted to respectively engage the same, a lever transversely mounted and engaging said clutch, a worm gear longitudinally mounted and engaging the lever, and an operating shaft extending upwardly from said worm gear and embodying jointed sections, substantially as and for the purpose set forth. 3rd. In a bicycle, the combination with the frame of the machine embodying the tubular bars and carrying the main gear shaft having bevelled pinions of different diameters, a crank shaft carrying a gear having gears of different diameters respectively engaging said pinions, a clutch mounted upon the main shaft and intermediately between said pinions and adapted respectively to engage the same, a transverse lever engaging said clutch, and a longitudinally arranged worm gear engaging said lever, of a sectional operating shaft formed of sections respectively housed within the tubular frame bars and connected by rotary joints, said enclosed sectional shaft being connected with the worm gear and being provided at its terminal top end with an operating key or head, substantially as and for the purpose set forth. 4th. In a bicycle, the combination with the tubular frame bars, and with gear or brake mechanism, of a sectional operating shaft housed within said tubular frame bars and formed of sections extending through the respective tubular bars and connected by rotary joints, said sectional shaft being connected at its lower end with the gear or brake mechanism and provided with a projecting key or head at its top end, substantially as and for the purpose set forth. 5th. In a bicycle, the combination with gear mechanism, and a clutch or interlocking mechanism for throwing the same into and out of engagement, of an operating shaft or mechanism connected with said interlocking mechanism and operating to retain the same either in or out of operative position, said shaft or operating mechanism being enclosed or housed within the tubular bars of the frame and provided at its top end with a removable key, whereby said gear and its operating mechanism will serve also as a lock for the bicycle, substantially as and for the purpose set forth.

No. 60,495. Treatment of Tobacco Leaves.

(Traitement des feuilles de tabac.)

Johann Cord and F. W. Feldhusen, Bremen, Germany, 4th July, 1898; 6 years. (Filed 21st April, 1898.)

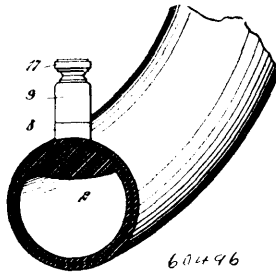
Claim. A proceeding for the expulsion of matter hindering the free combustion, from tobacco leaves, characterized by saturating such leaves with an aqueous solution of potash, to cause the nitrogen and other similar matter to combine with the potash and form easily volatilizing ammonia.

No. 60,496. Valve. (Soupape.)

William Grant Urnson, New Brunswick, New Jersey, U.S.A., 4th July, 1898; 6 years. (Filed 7th May, 1898.)

Claim. 1st. A valve, comprising a tubular portion, a valve seat extended downward in the tubular portion, a tube of yielding material in said tubular portion and a flap valve in said yielding tube, the said flap valve being extended normally at a transverse incline whereby it is caused to have an equal pressure at all its bearing points on the valve seat, substantially as specified. 2nd. A valve, comprising a tubular casing having an interiorly threaded portion, a valve carrier having an exterior thread engaging thereon,

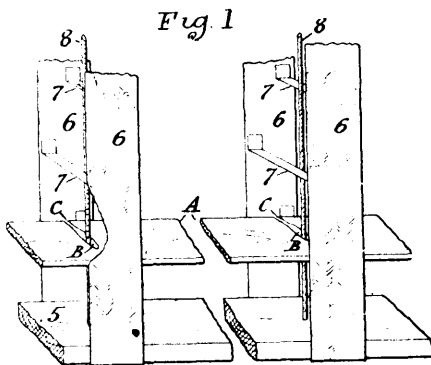
the said carrier having an inwardly extending valve seat, a tube of yielding material in said valve carrier, and a flap valve in said tube



60496

and having a hinge connection therewith at one side, the said flap valve being normally extended at a transverse incline, whereby the pressure is equalized on the valve seat, substantially as specified. 3rd. A valve, comprising a casing having annular ribs on its outer side, and a thimble for engaging over the nipple extended from a pneumatic tire into which the valve casing is extended, the said thimble having its outer end turned over the end of the nipple, substantially as specified. 4th. A valve, comprising a tubular casing having its inner portion reduced, forming an exterior annular shoulder at the junction of the outer portion, the outer portion of said casing being provided with an interior screw thread at the base of which an annular shoulder or seat is formed, a valve carrier having an exterior screw thread engaging with said interior screw thread and adapted to engage its inner end against the shoulder or seat in the valve casing, the said valve carrier having an inwardly extending valve seat, and a flap valve for engaging against said seat, the said flap valve being normally extended at a transverse incline, substantially as specified. 5th. A valve for a pneumatic tire, comprising a tubular casing having an interiorly screw threaded portion, a flap valve arranged therein, a plug cap having an exteriorly screw threaded portion for engaging the thread of the of the casing, the said screw threaded portion having a longitudinal opening or slit, and a tongue pivoted to swing into and out of the slit, substantially as specified. 6th. A valve for a pneumatic tire, comprising a tubular casing having an interiorly screw threaded portion, and having an annular flange at its outer end, and also a projection outward from said flange forming a bearing, a plug cap for engaging in said screw threaded portion and having an annular channel in the inner side of its finger piece, a flexible packing in said channel for engaging on the end of the valve casing, a tongue pivoted to swing into and out of a slit in the threaded portion of the plug, and a valve in the valve casing, substantially as specified.

No. 60,497. Venetian Blind. (Parsienne.)

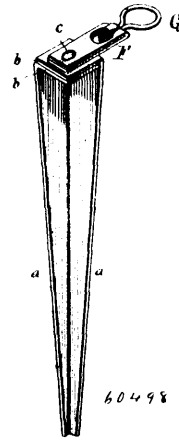


60497

William Martin Green, Melbourne, Victoria, Australia, 6th July, 1898; 6 years. (Filed 21st June, 1898.)

Claim.—1st. In a Venetian blind, laths or slats having openings for the passage of the supporting cords, said openings extending completely to an edge of the lath, substantially as and for the purposes set forth. 2nd. In a Venetian blind, laths or slats having openings through which the supporting cords pass laterally, the outer portion of each recess being made narrow and the inner portion thereof wider, substantially as and for the purposes set forth. 3rd. In a Venetian blind, the combination with a lath, of recesses to permit of the insertion or removal of each lath independently and a strengthening clip, band, or the like, at the region of each recess, substantially as and for the purposes set forth.

No. 60,498. Tethering Pin. (Piquet pour parquer.)



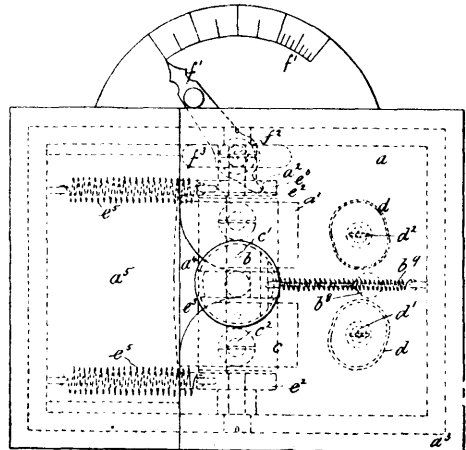
60498

Reuben Cadwell Eldridge, Niagara Falls, Ontario, Canada, 6th July, 1898; 6 years. (Filed 23rd June, 1898.)

Claim.—1st. A sheet metal tethering pin, composed of longitudinal flanges arranged at an angle to each other and forming the body of the pin, and connected lips or ears arranged at the upper ends of said body flanges and forming the head of the pin, substantially as set forth. 2nd. A sheet metal tethering pin, composed of longitudinal flanges arranged substantially at right angles to each other and tapering toward the lower end of the pin and each provided at its upper end with a horizontal lip or ear, said ears overlapping each other and forming the flat head of the pin, and means for securing said ears together, substantially as set forth. 3rd. A tethering pin, constructed from a tapering blank of sheet metal having a central longitudinal slit extending inwardly a short distance from its large end and having the portions thereof on opposite sides of said slit provided with rivet holes, substantially as set forth.

No. 60,499. Golf Practicing Apparatus.

(Appareil pour pratiquer le jeu de golf.)

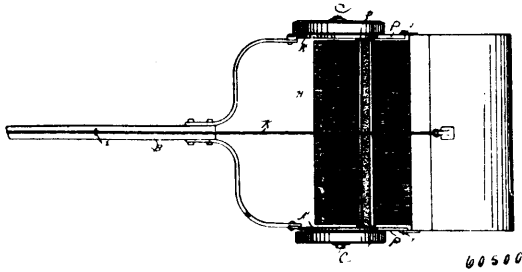


60499

John Grant Warren, Gravesend, Kent, England, 6th July, 1898; 6 years. (Filed 9th May, 1898.)

Claim.—In golf practice apparatus, in combination a tee or practice board having a covered cavity below its level in advance of the normal position of the ball to be struck, a practice ball adjustably mounted in relation to its distance from the tee, and so mounted in relation to its centre of movement as to be adapted to receive both right ahead and laterally deviating movements according to the direction of the blow of the club by which it is struck, and as to be caused, when struck by the club, to descend into the cavity below the level of the tee and out of the path of the club, a spring controlled bell hammer applied to the ball centre and serving to guide its movements and to audibly indicate laterally deviating movements thereof and to retain the ball in its normal position ready for actuation, and a spring controlled cradle adapted to take up the impetus of the ball from the moment it descends below the level of the tee, and to actuate a pointer by which the range of the ball due to the blow of the club is visibly indicated on a dial, and to automatically return the ball to its normal position, as set forth.

No. 60,500. Lawn Sweeper. (Balayeuse de pelouses.)

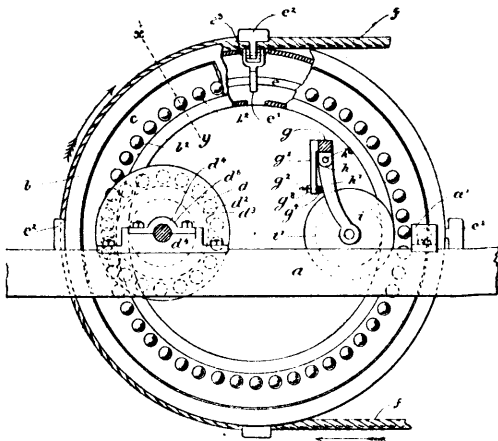


60500

George Martin Warfel, Springfield, Ohio, U.S.A., 6th July, 1898; 6 years. (Filed 20th June, 1898.)

Claim.— In a lawn-sweeper, the combination with the lateral frame-plates A, A', having each at its front edge an upper, forwardly projecting arm P, and a lower arm P', and a forked handle attached to said plates, of a grass-pan pivotally connected with the said arm P and normally resting against the arms P', which form a stop to hold said pan in proper position, a rod loosely attached to the upper central portion of said pan and extending to and along said handle, a rotary brush journalled in said plates directly behind said pan, and clutch-controlled gear for opening said brush, substantially as specified.

No. 60,501. Pulley. (Poulie.)



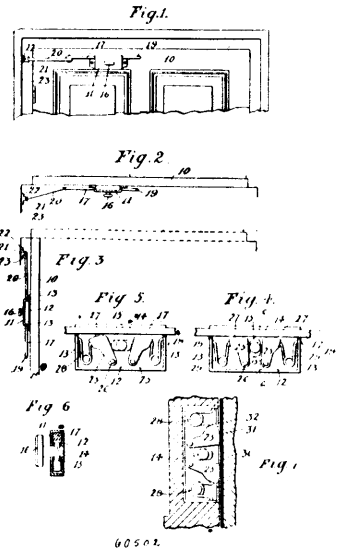
60501

John H. Watts, St. Thomas, North Dakota, U.S.A., 6th July, 1898; 6 years. (Filed 21st June, 1898.)

Claim.— 1st. In power transmission, a series of balls partially embedded in the surface of the driver member and adapted to intermesh with corresponding balls partially embedded in the opposing surface of the driven member, substantially as shown and described. 2nd. In power transmission, a series of balls partially embedded in the surface of the driver member and adapted to intermesh with corresponding balls partially embedded in the opposing surface of the driven member, one of said sets of balls being revoluble, substantially as shown and described. 3rd. In power transmission, a series of balls partially embedded in the surface of the driver member and adapted to intermesh with corresponding balls partially embedded in the opposing surface of the driven member, one or both of the said sets of balls being revoluble, substantially as shown and described. 4th. In power transmission, the driver member formed in ring shape and supported upon idler pulley, and pinion mounted to be revolved adjacent to said driver member, a series of balls partially embedded in the surface of the driver member, a series of balls partially embedded in the surface of the driven member and a series of balls partially embedded in the surface of the driven member and adapted to intermesh with the said series of balls in the driver member, substantially as shown and described. 5th. In power transmission, a driven member having a series of balls partially embedded in one or more of its surfaces, a driven member having flanges projecting past the said surface having the said balls, a series of balls partially embedded in said flanges and adapted to intermesh with said balls in said driver member, substantially as shown and described. 6th. In power transmission, a driver member having a series of balls partially embedded in one or more of its surfaces, a driven member having flanges projecting past the said surfaces having said balls, a series of balls partially embedded in said flanges and adapted to intermesh with the said balls in said driver member and rings adapted to

encompass a portion of the surface of the balls in said flanges to retain them in place, substantially as shown and described. 7th. In power transmission, a driver member having a series of opposing gripping jaws pivoted at the meeting of the joints and projecting from the outer surface and with projections thereon, angular plates on which such angular projections rest, a ring encircling the interior of said driver member and connected by clips to the pivots of said opposing jaws whereby when said gripping jaws are embraced by the cable, the tension will compress the said jaws upon the cable on one side and distend the jaws and release the cable on the opposite side, as shown and described. 8th. In power transmission, a pinion mounted upon a revoluble shaft, a ring pulley encircling said pinion loosely and adapted to transmit motion thereto and means whereby motion may be imparted to said ring pulley, substantially as shown and described.

No. 60,502. Lock. (Serrure.)

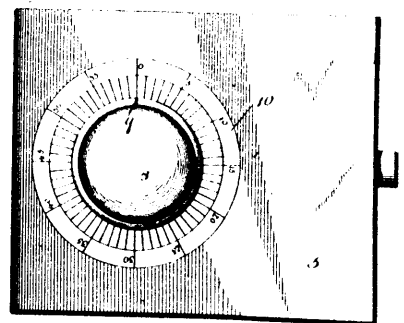


60502

Ludger Hébert, Plamondon's Mills, Quebec, Canada, 6th July, 1898; 6 years. (Filed June 22nd, 1898.)

Claim.— 1st. In a lock for windows and doors, the combination with a rod pivoted by one end to the jamb of the door or window, a sliding rod pivoted to the other end of the said rod, sliding in a casing, of jaws pivoted in the said casing, adapted to engage the said sliding rod, when pressed together, springs pressing the said jaws towards each other, a knob spindle journalled in the said casing, wings on the opposite sides of the said spindle adapted when the spindle is turned to press the said jaws apart, substantially as set forth. 2nd. In a lock for doors and windows, the combination with the rod 17, sliding in a casing, of the jaws 25 pivoted in said casing and having their free ends excentric to the pivoted point, the springs 28, and the wings 15, on a spindle journalled in the said casing, substantially as set forth. 3rd. In a lock for doors and windows, the combination with the jaws 25, pivoted in a casing and having their free ends excentric to the pivoted point of the knob spindle 14, journalled in the said casing, wings 15 on the said spindle adapted to press the said jaws apart, and springs 28 tending to press the said jaws together, substantially as set forth.

No. 60,503. Lock. (Serrure.)

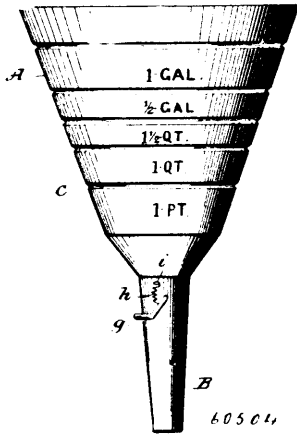


60503

John Alexander McKellar, Alvinston, Ontario, Canada, 6th July, 1898; 6 years. (Filed June 18th, 1898.)

Claim.—1st. A lock comprising a casing, a rod mounted transversely therein, a rod being provided with a knob and indicating plate, a tumbler mounted fixedly on said rod, auxiliary tumblers loosely on said rod on opposite sides of said fixed tumbler, means connected to said fixed tumblers for moving said auxiliary tumblers, mounted recesses formed on said tumblers, and a locking bolt adapted to be automatically brought into said recesses when in alignment, substantially as described. 2nd. A lock comprising a casing, a rod mounted transversely therewith, said rod having a knob and indicating plate, a tumbler mounted fixedly on said rod, said tumbler being provided with pins adjustably mounted on opposite sides thereof, auxiliary tumblers loosely mounted on said rod on opposite sides of said tumblers, each of said auxiliary tumblers being provided with concentric elongated slots, said slots being adapted to receive said pins, recesses formed on the face of said tumblers, and a locking bolt adapted to be automatically passed into said recesses when in alignment, substantially as described. 3rd. A tumbler for permutation, locks comprising a disc adapted to be loosely mounted on the actuating rod of the lock, a recess formed on the face thereof and adapted to receive one end of the locking bolt, and a concentric slot elongated therein, said slots being adapted to limit the period of rest of said tumbler on the actuating rod, substantially as described.

No. 60,504. Measuring Funnel. (*Entonnoir à mesurer.*)



George B. Walker and John Laurence Walker, both of Pensacola, Florida, U.S.A., 6th July, 1898. (Filed 30th December, 1897.)

Claim.—A funnel of the character set forth, comprising a body portion provided with graduations, a spout, an oscillatory shaft having bearings in the spout and extended exteriorly at one end to form an arm, a valve tiltingly mounted on said shaft, and a spring acting on said shaft arm to normally hold the valve closed.

No. 60,505. Curtain Pole and Hanger. (*Baton de rideau et support.*)

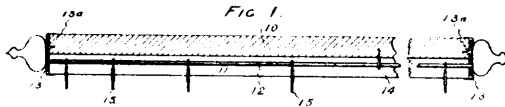
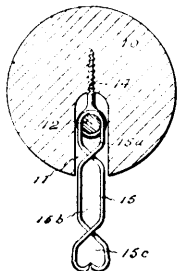


Fig 2



60505

Hugh Featherston and John H. Lucas, both of Vancouver, British Columbia, Canada, 6th July, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. In a curtain pole and hanger, the combination with a stick 10 having a groove 11 therein, a rod 12 secured in such groove and suspended at a suitable distance from the walls of the same, and hanger devices loosely depending from the said rod, as set forth. 2nd. In a curtain pole hanger, the combination with a pole having a groove 11 therein, plates 13 secured to the opposite ends of the said pole, apertures in said plates, a supporting eye 14 secured at the centre of the pole within the groove, and a rod 12 passing through the eye 14 and through the apertures in the plates at the opposite ends of the pole, and of curtain supporting devices 15 depending from the rod 12, as and for the purpose hereinbefore set forth.

No. 60,506. Bucket and Shoot for Cranes. (*Godet pour grues.*)

Fig 3

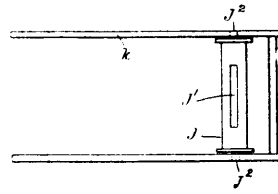
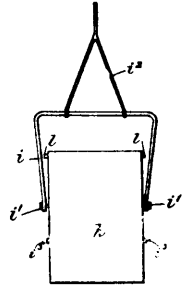


Fig 4

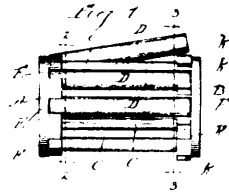


60506

David Roche, Ealing, London, England, 6th July, 1898; 6 years. (Filed 27th May, 1898.)

Claim.—1st. In means for raising, tipping and lowering a bucket or the like, in combination, a platform, a structure comprising limbs pivoted to said platform, wheels, a bearing carried by said wheels and slidably engaging said limbs, blocks and tackle for operating said bearing, plates slidably engaging said platform for the reception of said wheels, a bucket, a tilting frame, a pivoted slotted guide carried by said frame, a shute slidably carried upon a frame pivotally attached to the structure, said frame and shute being adapted to be operated by blocks and tackle, guides upon said shute, pins or studs upon a tipping bucket adapted to engage upon said guides for the purpose of tipping the bucket, stoppins or studs upon said bucket, a bar upon the shute upon which said tipping bucket engages, a forked cord or rope attached to said tipping bucket and engaging in the slotted pivoted guide aforesaid, substantially as set forth. 2nd. In means for tipping buckets or the like, a tilting frame having a pivoted slotted guide piece, curved guides adapted to engage upon pins or studs upon a pivoted bucket, a forked rope or cord engaging in the slot in the pivoted guide piece aforesaid and secured to the bucket through the medium of a bent handle for the purpose of bringing the bucket into position for tipping.

No. 60,507. Roller Bearing. (*Coussinet anti-frottant.*)



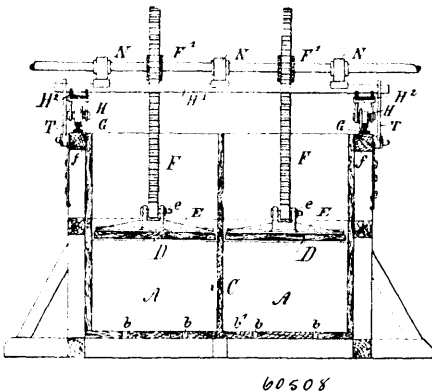
60507

William F. Bauc, Springfield, Ohio, U.S.A., 6th July, 1898; 6 years. (Filed 10th May, 1898.)

Claim.—1st. In a roller bearing, a cradle or bracket comprising end rings and connecting rods cast integrally therewith, one of said rings provided with cylindrical seats and the other of said rings provided with seats having flared lips, in combination with rollers having one end adapted to be received endwise in the cylindrical seats in one of said rings and the other end adapted to be passed

between said flared lips into the seat formed in the other of said rings, whereby when said lips are hammered down said rollers are held in said cradle, as and for the purpose set forth. 2nd. In a roller bearing, a cradle or bracket comprising end rings and connecting rods cast integrally therewith, one of said end rings provided on the inner face thereof with cylindrical seats, and the other of said rings provided on the inner face thereof with seats having flared lips, in combination with plane cylindrical rollers of a diameter greater than the radial thickness of said rings, one end of said rollers arranged to be received endwise in said cylindrical seat, and the other end arranged to be passed laterally between the flared lips of the corresponding seat in the other ring, whereby the peripheries of said rollers extend slightly beyond the inner and outer peripheries of said rings, said rollers being held in place by forcing said lips down and partially around the end of said rollers, as and for the purpose set forth.

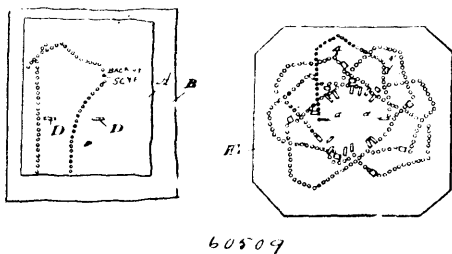
No. 60,508. Packing Press. (Presse d'empaquetage.)



Ivan Bayer, 10 Paulstrasse, Berlin, Germany, 6th July, 1898; 6 years. (Filed 17th June, 1898.)

Claim.—1st. A bale press for the production of one large, or a series of smaller bales, consisting of a pressure box provided with one or more movable partitions, and a series of pressure plates, corresponding in size to the compartments formed by the said partitions, each plate being operated by a separate driving means, such as rack and pinion, hydraulic piston or the like, and means for causing the operating medium for the plates to work in unison, substantially as described.

No. 60,509. Garment Pattern. (Patron de vêtement.)



Robert John Smith, Ottawa, Ontario, Canada, 6th July, 1898; 6 years. (Filed 12th March, 1898.)

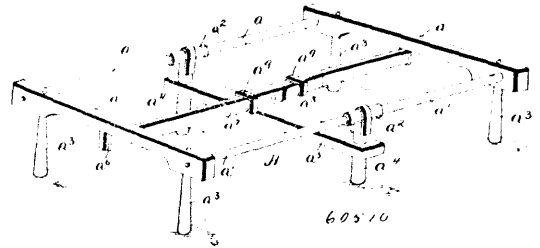
Claim.—1st. As a new article of manufacture, a chart comprising a plurality of delineated outlines or patterns formed in one sheet provided with suitable aligned perforations to adjust the chart, thereby as described and for the purpose specified. 2nd. In combination with the perforated sheet pattern A, and slots therein, of a chart comprising a plurality of delineated outlines or patterns formed in one sheet, square perforations and slots therein, the whole to be used together, as set forth and for the purpose specified.

No. 60,510. Bed. (Lit.)

William Jamieson Curry, Nanaimo, British Columbia, Canada, 6th July, 1898; 6 years. (Filed 16th March, 1898.)

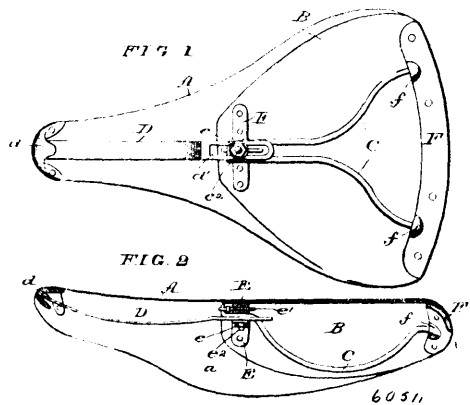
Claim.—1st. A collapsible bed, comprising end pieces, sectional side rails removably connected to said end pieces, and a canvas bottom having an integral pillow, mounted on said side rails. 2nd. A collapsible bed, comprising end pieces, sectional side rails removably connected to said end pieces, legs removably connected to said end pieces, and a canvas bottom, having an integral pillow slidably mounted on said side rails. 3rd. A collapsible bed, comprising end pieces, sectional side rails removably connected to said end

pieces, legs removably connected to said end pieces, supplemental legs removably secured to said side rails, and a canvas bottom, hav-



ing an integral pillow, mounted on said side rails. 4th. A collapsible bed, comprising end pieces, sectional side rails removably connected to said end pieces, legs removably connected to said end pieces, a sectional support removably secured longitudinally of said bed, and a canvas bottom, having an integral pillow, mounted on said side rails. 5th. A collapsible bed, comprising end pieces, sectional side rails removably connected to said end pieces, legs removably connected to said end pieces, supplemental legs removably mounted on said side rails, a sectional central support removably secured longitudinally of said bed, a canvas bottom, having an integral pillow, mounted on said side rails. 6th. The combination with the frame of collapsible bed, of a collapsible awning removably secured to said frame. 7th. An awning for beds, comprising uprights removably secured to the end pieces of the bed, a sectional ridge pole removably mounted on said uprights, guy ropes removably connected to the side rails of the bed, and slidably mounted on said ridge pole, and a canvas covering adapted to be passed over said ridge pole and said guy ropes. 8th. The combination with the frame of a collapsible bed, of a collapsible table attachment removably secured to said frame. 9th. A table attachment for beds, comprising a canvas, having its edges provided with suitable supports removably connected therewith, and clamp supports removably connected to said canvas edge supports, and to the side rails of the bed. 10th. A clamp comprising two members hingedly secured together at one end, semi-circular portions formed in each member, adapted to embrace the object to which the clamp is attached, and an angular extension, adapted to hold said members in their clamped positions.

No. 60,511. Bicycle Seat. (Selle de bicyclette.)



Frederick Christopher Avery, Toledo, Ohio, U.S.A., 6th July, 1898; 6 years. (Filed 16th May, 1898.)

Claim.—1st. A bicycle saddle comprising a cover extending continuously with divergent edges from the front end of the pommel to the cantle, a separate rear seat portion, a rigid middle plate at the front part of the latter, and a separate pommel spring adjustably attached to and extending from said middle plate to the front end of the pommel, substantially as and for the purpose described. 2nd. A bicycle saddle comprising a cover extending continuously from the front end of the pommel to the cantle, a subjacent rear seat portion having a rigid plate at its front end, a pommel spring extending from this rigid plate to the front end of the pommel, and a seat support connection secured at its rear end to the cantle and at its front end to the rigid plate on the front of the rear seat portion, a screw nut or bolt for securing both the pommel spring and seat support connection, and an adjusting screw for putting a tension on the rear seat portion, substantially as shown and described. 3rd. The combination with a suspension saddle, of a foundation seat, an extensible stretcher to produce a tension in said seat, and a seat cover extended over said foundation seat and held anteriorly in sliding connection therewith, whereby said foundation seat may be stretched without stretching the seat leather, as shown and described. 4th.

A yielding-horn saddle, comprising a rear seat portion, a support for the rear seat portion connected thereto at its front and back ends, a covering for the rear seat portion extended forward and provided with a pommel clip or socket, and a supporting spring having its front end seated in said clip, and its rear end perforated and provided with a clamp-screw connecting both the rear end of the pommel spring and the front end of the seat support connection to the front portion of the seat support, substantially as shown and described.

5th. A yielding-horn saddle comprising a rear seat portion having downwardly flanged sides, a covering extending over the same and beyond its front end and provided with a pommel clip or socket, a seat support connection connected at its two ends to the seat portion within its downwardly flanged sides, and a horn spring having its front end seated in the pommel clip or socket, and its rear end attached to the seat portion between its downwardly flanged sides and secured by the same screw nut that fastens the seat portion connection, substantially as and for the purpose described.

6th. A bicycle saddle having a flexible pommel part, a pommel spring, and means for limiting the range of the pommel movement in both upward and downward direction, substantially as shown and described.

7th. A bicycle saddle having a flexible pommel part, a spring for forcing the pommel upward, a loop or stirrup attached to the pommel, and an arm rigidly attached to a part of the saddle and extending forward and within the loop, substantially as shown and described.

8th. A bicycle saddle having a flexible pommel part, a leaf spring composed of two or more parts, the front end of which bears against the under end of the pommel, and the rear end being clamped to the saddle, and one section of said leaf spring being slotted and longitudinally adjustable to vary the tension of the spring, substantially as shown and described.

9th. A bicycle saddle having a flexible pommel, a saddle support rigidly attached to the under side of the saddle and extended beyond its front connection in the form of an arm, a spring located between the arm and the pommel, and a retaining loop or stirrup attached to the pommel and enclosing said arm, substantially as shown and described.

10th. A bicycle saddle having a flexible pommel, a spring supporting said pommel, and means for limiting the upward movement of said pommel, substantially as shown and described.

11th. A bicycle saddle having a flexible pommel, a spring supporting said pommel, and means for limiting the downward movement of said pommel to avoid breaking strain on the spring, substantially as shown and described.

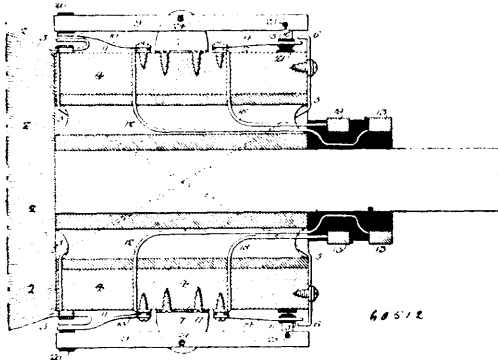
12th. A bicycle saddle base for a compound or built-up saddle, said base being made in two parts permanently fastened together, namely, a rear rigid seat portion, and a flexible horn or pommel portion, substantially as shown and described.

13th. A bicycle saddle base for a compound or built-up saddle, said base being composed of a rear rigid seat portion and a flexible horn or pommel portion extending back with a forked divergence along each edge of the rigid portion, substantially as shown and described.

14th. A bicycle saddle base consisting of a rigid rear part *A*, flexible pommel part *B*, and independent flexible side pieces *C*, *C'*, substantially as and for the purpose described.

No. 60,512. Electric Current Collector.

(Collecteur de courant électrique.)



George William Nell, Philadelphia, Pennsylvania, U.S.A., 6th July, 1898; 6 years. (Filed 20th April, 1898.)

Claim.—1st. In a current collector for dynamo electric machines, the combination of the armature coils, current distributors, one or more magnets, levers rotating with the armature and controlled by said magnet or magnets, and contact devices operated by said levers, whereby the connection of the opposite ends of the armature coils with the current distributors will be effected at the proper time.

2nd. In a current collector for dynamo electric machines, the combination of the armature coils, current distributors, one or more magnets located above the collector, levers rotating with the armature and controlled by said magnet or magnets, and contact devices operated by said levers, whereby the connection of the opposite ends of armature coils with the current distributors will be effected at the proper time, and both connections will be made at the top of the collector.

3rd. In a current collector for dynamo electric machines, the combination of armature-coils, one or more magnets,

levers rotating with the armature and controlled by said magnet or magnets, connectors operated by said levers and moved thereby into contact with the terminals of the armature coils, and collector rings receiving the current from said connectors.

4th. In a current collector for dynamo electric machines, the combination of the armature coils, current distributors, one or more magnets, levers rotating with the armature and controlled by said magnet or magnets, connectors operated by said levers and moved thereby into contact with the terminals of the armature coils, collector rings receiving the current from said connectors, and electrical connections between said collector rings and the current distributors.

5th. In a current collector for dynamo electric machines, the combination of the armature coils, current distributors, one or more magnets, levers rotating with the armature and controlled by said magnet or magnets, connectors operated by said levers and moved thereby into contact with the terminals of the armature coils, said connectors having such resiliency as normally to be retained out of contact with said terminals, and electrical connections between said connectors and the current distributors.

6th. In a current collector for dynamo electric machines, the combination of one or more magnets, levers rotating with the armature shaft and successively brought under the influence of said magnet or magnets, armature coils, each having one terminal adjacent to the other arm of the lever, current distributors, and contact devices operated by the levers.

7th. In a current collector for dynamo electric machines, the combination of one or more magnets, levers rotating with the armature shaft and carried successively under the influence of said magnet or magnets, armature coils having at each end terminals adjacent to each end of said levers, current distributors, and contact devices operated by said levers.

8th. In a current collector for dynamo electric machines, the combination of a lever having a recess in one side of the same, and a pin seated in said recess and retained therein by portions of the opposite walls of the recess swedged down upon the pin.

No. 60,513. Fireproof Material.

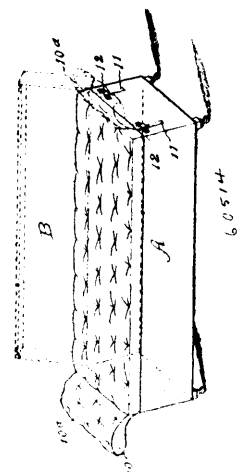
(Matière à l'épreuve du feu.)

David H. Ferguson, Richard Wilson Smith, and Robert Thomas Hopper, Montreal, Quebec, Canada, 7th July, 1898; 6 years. (Filed 24th December, 1897.)

Claim.—1st. A material for the manufacture of moulded articles such as doors, shutters, wainscoting and the like, composed of asbestos hard and non-hydroscopic, substantially as described and for the purpose set forth.

2nd. In the manufacture of a material for the purpose set forth, forming asbestos fibre into pulp, binding with a substance such as silicate of soda, pressing said composition, immersing in a solution of calcium chloride and then drying, substantially as set forth.

No. 60,514. Ottoman. (Ottomane.)

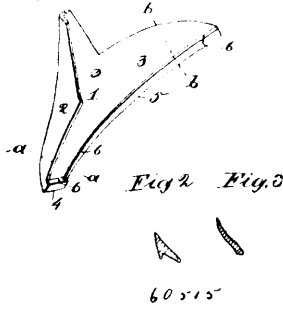


Thomas Sinclair, Vancouver, British Columbia, Canada, 7th July, 1898; 6 years. (Filed 18th June, 1898.)

Claim.—1st. In an article of manufacture, a seat or ottoman *A*, having a hinged top *B*, in combination with a detachable head-rest *10*, as set forth.

2nd. In an article of manufacture, in combination with an ottoman, having a lower receptacle, and an upper hinged portion, a detachable head-rest *10*, stanchions *11* secured to and curving downwards from the said head-rest, strap-sockets *12* secured to each end of the lower receptacle, the same being designed to receive the stanchions *11*, whereby the same will be held in position, as shown, substantially as and for the purposes set forth.

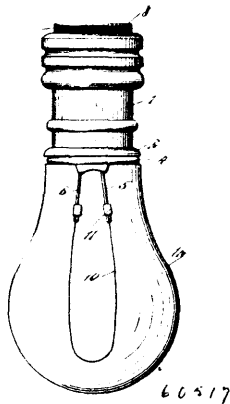
No. 60,515. Ploughshare. (*Soc. le charrue.*)



Wellington Mills, Norwalk, Ohio, U.S.A., 7th July, 1898; 6 years. (Filed 12th January, 1898.)

Claim.—As an article of manufacture a ploughshare 1, having the land side 2, the cutting side 3, the reinforcing point 4, and the reinforcing edge 5, formed and tempered as shown and set forth.

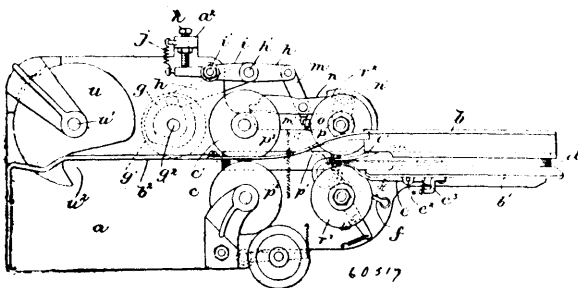
No. 60,516. Electric Lamp. (*Lampe électrique.*)



O. H. Michaelson, Charleston, West Virginia, U.S.A., 7th July, 1896; 6 years. (Filed 23rd May, 1898.)

Claim.—In an incandescent lamp, a base of insulating material having an annular groove in its outer end, a metal shell in which the base is secured, conductor wires extended through the base piece, a ring of insulating material in the shell, a metal ring on said insulating ring and with which one of the wires connects, a metal ring in the insulating ring and with which the other wire connects, a globe having a channel around the wall of its open end, and a packing ring engaging said channel and in the groove of the base, substantially as specified.

No. 60,517. Mail Marker. (*Appareil à marquer la maille.*)



Henry Edward Waite, Newton, Massachusetts, U.S.A., 7th July, 1898; 6 years. (Filed 21st April, 1897.)

Claim.—1st. In a mail-marking machine, in combination, printing devices, a timing stop, co-acting independently and positively driven rotary devices for starting a mail-piece past said stop, and supplemental rotary devices for further advancing said letter to the printing devices. 2nd. In a mail-marking machine, in combination, a travelling flat conveyer supported and driven by pulleys having their axes horizontal, printing devices above said conveyer, a timing stop extending over said conveyer and located in advance of the printing devices, and intermittently acting oppositely disposed

rotary members actuated positively and independently and rotated continuously in a forward direction for gripping a mail-piece and starting it past said stop, said members each extending partially over the conveyer, whereby they may grip the letter on both faces to advance it. 3rd. In a mail-marking machine, in combination, rotary printing devices, rotary feeding devices adapted to rotate in equal times with said printing devices, a flexible stop normally in the path of the mail-pieces, and means for locking and unlocking said stop once in every rotation of said printing and feeding devices. 4th. In a mail-marking machine, the combination with a movable stop normally in the path of the mail-pieces, of two shafts, one arranged on each side of said path, rotary feeding members on said shafts having relatively short carrying surfaces for starting a mail-piece past said stop, and means for further advancing said mail-piece, comprising a rotary member mounted on one of said shafts and driven thereby, and having a relatively long carrying surface, and a member adapted to co-act with the last said member. 5th. In a mail-marking machine, the combination with feeding devices, a stop, and a travelling conveyer adapted to advance the mail-pieces to said feeding devices, of means independent of the stop for guiding said mail-pieces toward the feeding devices, said means comprising two converging arms arranged in the path of the mail-pieces, one of said arms being fixed, and the other being pivotally mounted and adapted to be displaced only by the mail-pieces. 6th. In a mail-marking machine, the combination with a flexible stop normally extending across the path of the mail-pieces, of a feeding mechanism comprising rotary members having sockets, spring-pressed plungers in said sockets adapted to co-act in gripping a mail-piece to start the same past said stop, and means for further advancing said mail-piece. 7th. In a mail-marking machine, the combination of rotary members having sockets angularly disposed for the purposes specified, spring-pressed timing plungers in said sockets adapted to co-act in gripping a mail-piece and advancing the same a relatively short distance, a gripping disc arranged below one of said members and on the same shaft therewith, the said disc having a relatively long segment carrying surface, a yieldingly mounted idler-disc co-acting with said gripping disc, a flexible stop arranged in the path of the mail-pieces, and means for locking and unlocking said stop once in every revolution of the said timing plungers. 8th. In a mail-marking machine, in combination, printing devices, a timing stop, co-acting independently and positively driven rotary devices for starting a mail-piece past said stop, supplemental rotary devices for further advancing the letter, and a rotary packer formed with a cylindrical periphery and having a recess for the purpose specified.

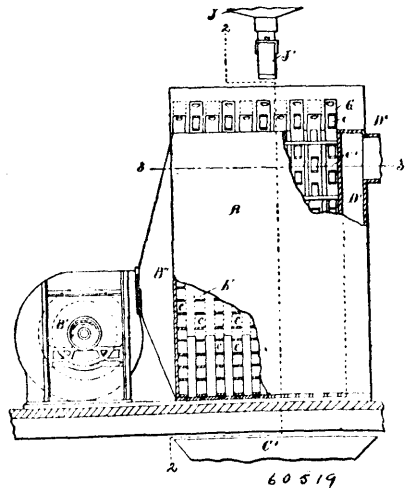
No. 60,518. Medicinal Compound. (*Composé médécinal.*)

Heinrich Bohne, 19 Grosse-Brauhans Strasse, Halle-on-the-Saale, Germany, 7th July, 1898; 6 years. (Filed 30th June, 1897.)

Claim.—1st. As a new composition of material, a base for medicinal salves consisting of butter, turpentine and bees-wax, substantially as described. 2nd. As a new composition of material, a base for medicinal salves composed of butter, turpentine and wax in about the proportion of 500 grains of butter to 125 grains of turpentine, and 100 grains of wax, substantially as described.

No. 60,519. Grain Drying Device.

(*Appareil à sécher le grain.*)



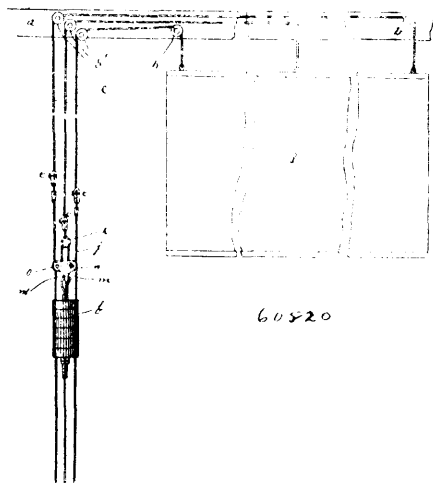
Wynn E. Ellis, Milwaukee, Wisconsin, U.S.A., 7th July, 1898; 6 years. (Filed 23rd June, 1898.)

Claim.—1st. In a grain drier, the combination with the inclosing case, the drier located within said case consisting of two opposed independent divisions, a central pressure chamber between said divisions, the exhaust chamber on opposite sides of said divisions, a

series of alternating grain and air spaces crossing said divisions of the drier transversely and separated by a perforated wall, the grain spaces being closed at their ends and open at the top and having a discharge opening at the bottom, said air spaces communicating at one end with said pressure chamber and at the opposite end with said exhaust chambers, and means for supplying a blast of air to said central pressure chamber, substantially as set forth. 2nd. In a grain drier, the combination with the inclosing case, the pressure chamber on one side of said case and the exhaust chamber on the opposite side thereof, a series of alternating grain and air spaces crossing said case transversely and separated by a perforated wall, said grain spaces being closed at their ends and provided with a discharge opening at the bottom, said air spaces being closed at the top and bottom and communicating at their opposite ends with said pressure chamber, and said exhaust chamber, said pressure chamber being tapering in shape and of smaller area remote from the entrance of the air blast, said exhaust chamber being also tapering in shape and of larger area at the discharge end thereof, and a fan or other means for forcing an air blast into said pressure chamber. 3rd. In a grain drier, the combination with the air induct and educt chambers, a series of parallel grain and air spaces arranged alternately and having screens or perforated walls between them, the grain spaces being closed at their ends and open at the top and having a discharge opening at the bottom, the air spaces consisting of a series of horizontal ducts communicating at opposite ends with the air induct and air educt, said air flues or ducts communicating with the grain spaces through said screens or perforated partitions, a series of vertically movable slides located at the ends of said air ducts having apertures therein which register with each alternate air duct or flue to afford communication between the opposite ends of each alternate air duct and the air induct and educt, respectively, whereby an air blast is caused to cross the grain spaces from side to side in reciprocal succession. 4th. In a grain drier, the combination with a pressure chamber and exhaust chamber, a series of alternating grain and air spaces extending between said chambers, said grain spaces being closed at their ends and provided with a discharge opening at the bottom, screens or perforated walls separating said grain and air spaces, a series of horizontal strips dividing said air spaces into a series of horizontal air flues or ducts communicating at opposite ends with the pressure chamber and with the exhaust chamber, a series of vertical movable slides closing the end of each vertical series of said air ducts, said slides having apertures which register with each alternate air duct, as and for the purpose set forth. 5th. In a grain drier, the combination of an inclosing case, of a series of alternating grain and air spaces crossing said case transversely and separated by perforated partitions, a pressure chamber and an exhaust chamber on opposite sides of said case, said air spaces being divided into a series of horizontal air flues, half of which flues are pressure flues and communicate with the pressure chamber, the other half being exhaust flues which communicate with the exhaust chamber, said pressure flues being arranged horizontally on each side of the grain spaces, so that the blasts entering from said pressure flues meet in the centre of the grain spaces and exhaust into the exhaust flues immediately above and below said pressure flues. 6th. In a grain drier, the combination of a grain space, a series of horizontal air flues arranged on opposite sides of said grain space and communicating therewith, said air flues consisting of pressure flues and exhaust flues which alternate vertically, said pressure flues and said exhaust flues on opposite sides of said grain space being arranged in the same horizontal plane, a pressure chamber and an exhaust chamber communicating with the opposite ends of said pressure flues and said exhaust flues respectively, to cause the air blasts to meet in the centre of said grain space from opposite sides and escape into said exhaust flues above and below. 7th. In a grain drier, the combination of an inclosing case, of a series of alternating grain and air spaces crossing said case transversely and separated by perforated partitions, a pressure chamber and an exhaust chamber on opposite sides of said case, the air spaces communicating at opposite ends with said pressure chamber and air exhaust respectively, a blast fan communicating with said pressure chamber, a heater connected with said fan, a casing inclosing said heater, and means for cutting off the heater from the fan and directing cold air therethrough, substantially as and for the purpose specified. 8th. In a grain drier, the combination with the air induct and educt, the series of parallel grain and air spaces arranged alternately and having a screen or perforated wall between them, the grain spaces being closed at the ends and open at the top and having a discharge opening at the bottom, the air spaces consisting of a series of horizontal flues having alternately open and closed ends and communicating alternately at opposite ends with the air induct and the air educt, said air flues communicating with the grain spaces through said screen or perforated partition, by which arrangement an air blast is caused to cross the grain space from side to side in reciprocal succession. 9th. In a grain drier, the combination with the inclosing case having the air induct and air educt, the series of alternating grain and air spaces crossing said case, said grain spaces being closed at the ends and provided with a discharge at the bottom, screens or perforated walls separating said grain and air spaces, a series of horizontal strips dividing said air spaces into a series of horizontal flues alternately communicating at one end with the air induct and alternately communicating at the opposite end with the air educt, and communicating with the grain spaces through said screens or perforated

partitions. 10th. In a grain drier, the combination with the inclosing case, a series of alternating grain and air spaces crossing said case transversely and extending vertically thereof, said grain spaces being closed at their outer ends, open at the top, and provided with a discharge at the bottom, the screens or perforated partitions dividing said grain and air spaces, said air spaces being divided into a series of independent horizontal air flues whose opposite ends are alternately closed, forming alternating air blast and air exhaust flues, the air blast chamber on one side of said case communicating with and common to all of said blast flues, the air educt chamber on the opposite side of said case communicating with and common to all of said air exhaust flues, whereby the air blast is caused to cross the grain spaces laterally from the air blast flues to the air exhaust flues in vertical reciprocal succession. 11th. In a grain drier, the combination of the inclosing case, the series of vertical alternate grain and air spaces divided by perforated walls and crossing said case transversely, said air spaces being closed at the top and bottom and open at their opposite ends, said grain spaces being closed at their ends and open at their top and provided with a discharge opening at the bottom, the induct air chamber on one side of said case extending from the bottom to the top thereof and common to all of said air spaces, the educt air chamber on the opposite side of said case also extending from the bottom to the top thereof and common to all of said air spaces, and the series of vertical slides controlling the openings of said air spaces into said induct and educt chambers respectively. 12th. In a grain drier, the combination of the inclosing case, the series of vertical alternate grain and air spaces divided by perforated walls and crossing said case transversely, said air spaces being closed at the top and bottom and open at their opposite ends, said grain spaces being closed at their ends and open at their top and provided with a discharge opening at the bottom, the induct air chamber on one side of said case extending from the bottom to the top thereof and common to all of said air spaces, the educt air chamber on the opposite side of said case also extending from the bottom to the top thereof and common to all of said air spaces, and means for controlling the openings of said air spaces into said induct and educt chambers respectively, whereby the blast may be caused to enter at one end of said air spaces, passing through the body of the interposed grain and out of the opposite end of the succeeding air space into the educt chamber.

No. 60,520. Device for Counterbalancing Theatrical Scenery. (Appareil pour contre-balancer les décors.)



Henry P. Cashion, Newark, New Jersey, U.S.A., 7th July, 1898 :
6 years. (Filed 9th April, 1898.)

Claim.—1st. The improved theatrical curtain and fixtures which is combined with the fixture *a*, having sheaves or wheels *b*, *b*, *b*, *b*¹, *b*², *b*³, a curtain *d*, to the upper part of which a series of ropes or lines *c*, *c*, *c*, are attached, said ropes extending from said curtain upward, over said sheaves *b*, and thence to the sheaves *b*¹, thence downward, an equalizing-chain attached at its ends to the suspended portions of the end ropes of those referred to, a pulley *k*, attached to the centre or intermediate rope or line, over which pulley the said equalizing-chain is turned, a carrier arranged on the equalizing-chain and a weight suspended from said carrier, all substantially as set forth. 2nd. The improved theatrical drop-curtain and fixtures in which is combined with the fixture *a*, having sheaves *b*, *b*, *b*, and *b*¹, *b*², *b*³, the curtain *d*, ropes or lines *c*, *c*, *c*, attached to said curtain, a pulley removably attached to the centre or intermediate rope, an equalizing tacking or chain arranged over said pulley and at its opposite ends removably attached to the other lines or ropes, a carrier having sheaves arranged on said chain or tacking and a weight, all arranged and operating, substantially as set forth. 3rd. In a theatrical drop-curtain appliance, the combination of a pulley *k*,

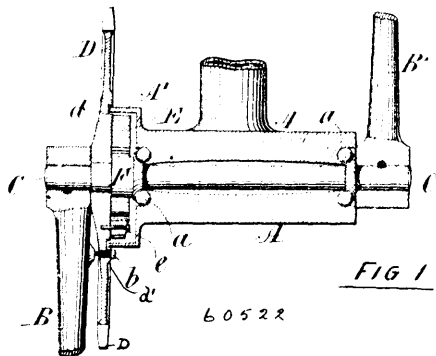
having a rope-clamp admitting a ready attachment and removal of said pulley to and from a curtain-operating rope, a tackling or chain having rope-clamps at its opposite ends admitting an attachment to and removal from other curtain-operating ropes, a carrier having a plurality of sheaves of said chain or tackling, and a weight attached to the carrier and removable therefrom, substantially as set forth.

No. 60,521. Railway Tie. (*Traverse de chemin de fer.*)

Francis T. Wright, Edinburg, Indiana, U.S.A., 7th July, 1898; 6 years. (Filed 25th June, 1898.)

Claim.—1st. The herein described composition of matter, consisting of wood particles or wood fibre, glue, resin, red ochre, and water, substantially as described and for the purpose specified. 2nd. The herein described composition of matter for constructing railroad ties, consisting of wood, 9 parts, glue, 5 parts, resin, 4 parts, red ochre, 2 parts, and water to reduce the whole to a pulp, substantially as described. 3rd. A railroad tie, consisting of wood fibre, glue, resin, ochre, and water formed into the required shape under hydraulic or similar pressure, and coated with boiled linseed oil mixed with charcoal, substantially as described.

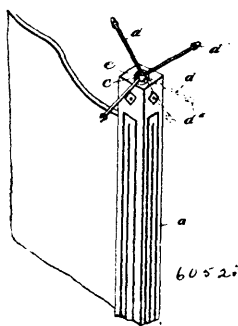
No. 60,522. Bicycle Brake. (*Frein de bicyclette.*)



John Mitchell Downer, Archibald Anderson Dickson and John King, all of Toronto, Ontario, Canada, 7th June, 1898; 6 years. (Filed 23rd December, 1896.)

Claim.—1st. In a bicycle brake, the combination with the frame, the crank axle, pedal-cranks and sprocket, of a brake-shoe carried by the sprocket and acting upon a stationary part of the frame, and a cam or projection fixed upon the crank axle and brought into action against said brake-shoe by back-peddalling, substantially as and for the purpose set forth. 2nd. In a bicycle brake, the combination with the frame, the crank axle, pedal-cranks and sprocket, of two or more brake-shoes independently pivoted upon and carried by the sprocket and acting upon a stationary part of the frame, a cam or projection fixed upon the crank axle for expanding or throwing said brake-shoes against such frame, so as to form frictional contact therewith, and a spring for returning same out of action when the cam is released, or turned in the reverse direction, substantially as and for the purpose set forth.

No. 60,523. Clothes Rack. (*Porte-vêtement.*)



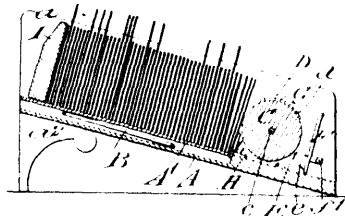
Joseph Manny, Butler, Pennsylvania, U.S.A., 7th July, 1898; 6 years. (Filed 23rd June, 1898.)

Claim.—1st. In a clothes rack, the combination with a bed post provided with a longitudinal recess, a ring *c*, operating in said recess, a series of arms secured to and circumferentially adjustable on said ring *c*, a ring *a*, secured in the upper end of said recess whereby the ring *c* is retained in the same, substantially as herein shown and described. 2nd. In a clothes rack, the combination of a bed post provided with a longitudinal recess *b*, a ring *c*, secured in

the upper end of said recess, the internal diameter of which is less than the diameter of the recess, a ring *e*, operating in said recess, a series of arms secured to said ring *e*, the engaging ends of said arms being circumferentially adjustable in relation to each other, substantially as shown and described.

No. 60,524. Stamp Cancelling Machine.

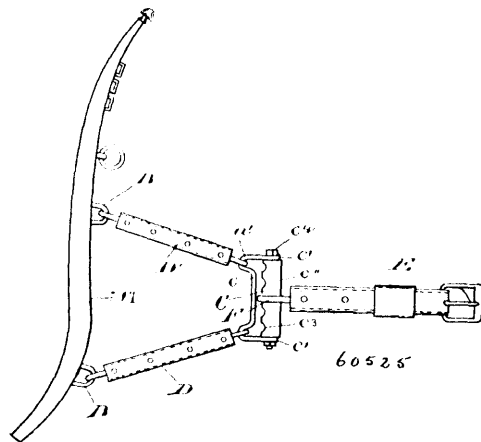
(*Machine à maculer les timbres poste.*)



Seymour Crane, Dalton, Massachusetts, U.S.A., 7th July, 1898; 6 years. (Filed 22nd June, 1898.)

Claim.—1st. A stamp cancelling machine comprising a cancelling roll, a chute for receiving a stack of envelopes, the said chute having an inclined bottom for directing the envelopes, the flatwise against the roll, and a cancelling die and envelope withdrawing means carried by the roll in position to simultaneously cancel the front envelope of the stack and positively withdraw it from the stack as the roll is rotated, substantially as set forth. 2nd. A stamp cancelling machine, comprising a chute, a cancelling roll mounted therein, a bottom, upon which the stack of envelopes is adapted to rest, hinged within the chute, and means for engaging said bottom for automatically increasing its angle of inclination as the stack decreases in size for directing the envelopes against the cancelling roll with the required degree of pressure, substantially as set forth. 3rd. A stamp cancelling machine, comprising a cancelling roll, a chute for receiving the stack of envelopes and directing them against the roll, a cancelling die upon the roll, and a series of pins on the roll, the said pins and die being so arranged that as the roll is rotated, the front envelope of the stack is cancelled and positively removed, substantially as set forth.

No. 60,525. Draught-hame. (*Attelles de tirage.*)

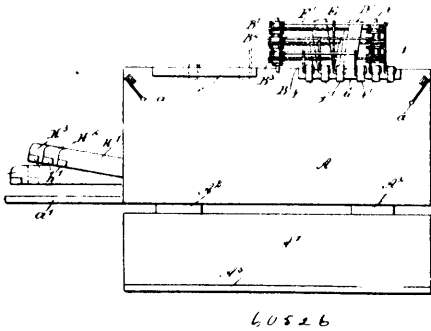


Henry Bovair, Temperanceville, Ontario, Canada, 7th July, 1898; 6 years. (Filed 27th June, 1898.)

Claim.—1st. A draught-hame embracing in its construction a hame, a clevis, links connecting the clevis to the hame, and a hame-tug connected to the clevis, substantially as specified. 2nd. A draught-hame embracing in its construction a hame-tug, a hame, two staples connected to the hame at substantially equi-distant points from each other, and from the top and bottom of the hame a link connected to each staple, a clevis connected to the links to which is attached the hame-tug, substantially as specified. 3rd. A draught-hame embracing in its construction a hame-tug, a hame, two staples connected to the hame at substantially equi-distant points from each other and from the top and bottom of the hame, a link connected to each staple, a clevis connected to the links to which is attached the hame-tug, consisting of a substantially stirrup-shaped strap, each end of which terminates in an eye, a coupling plate interposed between the eyes, a pivot-bolt passing through the eyes and plate, and a series of supports for the loop of the hame-tug, substantially as specified.

No 60,526. Music Leaf Turner.

(*Pourne-feuille de musique.*)

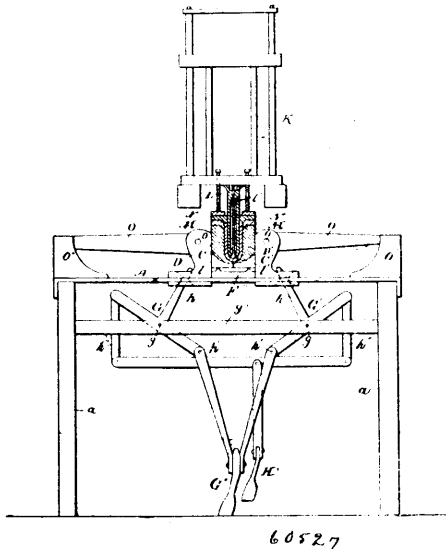


James Fletcher, Paterson, New Jersey, U.S.A., 7th July, 1898; 6 years. (Filed 22nd April, 1898.)

Claim.—1st. In a music-leaf turner, the combination of a pivot having a plurality of cylinders loosely pivoted thereon, an arm fixed to each of these cylinders and provided with leaf-holding devices, with an auxiliary pivot separated from the first pivot, complementary rollers thereon co-operating with the cylinders, belts passing about said cylinders and rollers, and levers connected to the side of said belts, substantially as described. 2nd. In a music-leaf turner, the combination of a pivot having a plurality of cylinders loosely pivoted thereon, an arm fixed to each of these cylinders and provided with leaf-holding devices, an auxiliary pivot separated from the first pivot, complementary rollers thereon co-operating with the cylinders, belts passing about said cylinders and rollers, with a pivoted arm attached to each of said belts, and an operating lever and connections attached to each of said pivoted arms, substantially as described. 3rd. In a music leaf turner, the combination of a pivot having a plurality of cylinders loosely pivoted thereon, an arm fixed to each of these cylinders and provided with leaf-holding devices, an auxiliary pivot separated from the first pivot, complementary rollers thereon co-operating with the cylinders, belts passing about said cylinders and rollers, with a pivoted arm attached to each side of each belt, operating levers one in excess of said belts, and separate flexible connections from each of said operating-levers to one-half the pivoted arms, said connections being to successive arms and to different ones for each operating-lever, substantially as described. 4th. In a music-leaf turner, the combination of a pivot having a plurality of cylinders loosely pivoted thereon, an arm fixed to each of these cylinders and provided with leaf-holding devices, an auxiliary pivot separated from the first pivot, complementary rollers thereon co-operating with the cylinders, belts passing about said cylinders and rollers, and levers connected to opposite sides of said belt, whereby the arms may be turned in either direction, substantially as described.

No. 60,527. Machine for Making Glass Vessels.

(*Machine pour faire de la verrerie.*)

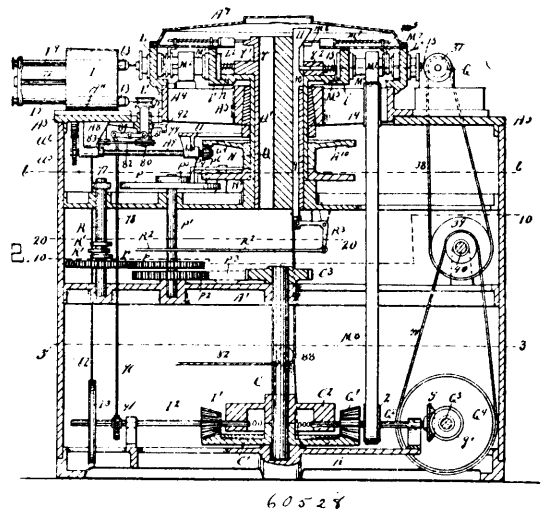


Robert Good, Poughkeepsie, New York, and Robert Good, jr., Denver, Colorado, all in the U.S.A., 7th July, 1898; 6 years. (Filed 23rd June, 1898.)

Claim.—1st. In a machine for forming glass vessels, the combination with the supporting table having a fixed bottom at the centre of its top for the finishing mould, slots lying at right angles with one another about said fixed bottom of the finishing mould, riders C, C' carrying the two-part parison-mould D, D', riders E, E' carrying two of the three parts of the finishing mould, the movable parts of said finishing mould being attached to their riders to slide over the fixed bottom of the finishing mould, substantially as specified. 2nd. In a machine for forming glass vessels, the combination of a two-part parison-mould, a sectional-finishing mould, and means substantially as described for operatively connecting the two-part parison-mould with the corresponding side sections of the finishing mould, and means substantially as described for imparting motion to one of said moulds, substantially as described. 3rd. In a machine for forming glass vessels, the combination of a three-part finishing mould having a stationary bottom-section and two movable side sections, arranged to register with each other and with the stationary bottom section, with a two-part parison-mould movable in a path at an angle to the movable sections of the finishing mould, and connections, substantially as described, between the parison-mould and the corresponding sections of the finishing mould to present the latter to the fixed bottom section when the parison-mould sections are withdrawn therefrom, as and for the purpose specified. 4th. In a machine for forming glass vessels, the combination of a table provided with slots which lie at right angles to each other, two sets of riders slidably fitted in said slots, a two-part parison-mould attached to one set of riders, a three-part finishing mould having its bottom section fixed to the table and its two movable sections carried by the other set of riders, the levers connected to one set of riders, and having means to actuate the same, and a toggle-joint connecting the two sets of riders, as and for the purpose described. 5th. In a machine for forming glass vessels, the combination with a parison-mould and a finishing mould, of a vertically reciprocating press carrying a follower-ring, a divided neck mould attached to said follower-ring, and a hollow plunger carried by the press and arranged to play through the follower-ring and the neck-mould, substantially as and for the purpose described. 6th. In a machine for forming glass vessels, the combination with a parison-mould, and a finishing mould, of a vertically reciprocating press carrying a follower-ring, a neck-mould on said follower-ring, and a hollow plunger provided with a port at its lower end and with an automatic valve which tends to normally close said port, as and for the purposes described.

No. 60,528. Button Making Machine.

(*Machine pour faire des boutons.*)



William Allen Pendry, Detroit, Michigan, U.S.A., 8th July, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—1st. In a button making machine, the combination of a series of horizontally projecting rotatable chucks to hold the button blanks, means to lock the chucks from rotating on their axes at certain predetermined points of their axial rotation, and a set of operative devices to work upon said blanks, said chucks and said set of operative devices, the one being movable relative to the other to bring the work and the several operative devices together in succession, substantially as set forth. 2nd. In a button making machine, the combination of a table, and a turret the one being stationary and the other revoluble, said table and turret the one bearing operative devices to work upon the button blanks, and the other provided with horizontally projecting rotatable chucks to

hold the blanks to the work, and means to lock the chucks from rotating on their axes in desired positions, substantially as set forth. 3rd. In a button making machine, the combination of a set of operative devices to work upon the button blanks embodying feeding, grinding, buffing and drilling mechanisms, a series of horizontally projecting rotatable chucks to hold the blanks to the work, and means to lock the chucks from rotating on their axes at certain predetermined points of their axial rotation, said chucks and operative devices the one movable relative to the other to bring the work and the several operative devices together in succession, substantially as set forth. 4th. In a button making machine, the combination of a set of operative devices to work upon the button blanks, embodying feeding, grinding, reversing, buffing and drilling mechanism, a series of horizontally projecting rotatable chucks to hold the blanks to the work, and means to lock the chucks from rotating on their axes at certain predetermined points of their axial rotation, said chucks and operative devices the one movable relative to the other to bring the work and the several operative devices together in succession, substantially as set forth. 5th. In a button making machine, the combination of a stationary table, operative devices mounted thereupon for working the button blanks, a horizontally revoluble turret located within said table, horizontally projecting rotatable chucks carried by said turret to hold the button blanks to the operative devices upon the surrounding table, and means to lock the chucks from rotating on their axes in desired positions, substantially as set forth. 6th. In a button making machine, the combination of a stationary table, a track, a turret rotatable upon said track within said table, operative devices upon said table to work upon the button blanks, horizontally projecting chucks carried by said turret to hold the button blanks to the operative devices upon the surrounding table, and means to lock the chucks from rotating on their axes in desired positions, substantially as set forth. 7th. In a button making machine, the combination of a stationary table, operative devices mounted thereupon for working upon the button blanks, a revoluble turret within the table, rotatable horizontally projecting chucks carried by said turret to hold the button blanks to the operative devices upon the surrounding table, and means to lock the chucks from rotating on their axes in desired positions, said operative devices and said chucks the one arranged to advance toward the other, substantially as set forth. 8th. In a button making machine, the combination of a stationary table, operative devices mounted thereupon for working upon the button blank, a revoluble turret within the table having a step by step movement, horizontally projecting rotatable chucks carried by said turret to hold the button blanks to the operative devices upon the surrounding table, and means to lock the chucks from rotating on their axes in desired positions, substantially as set forth. 9th. In a button making machine, the combination of a stationary table, operative devices mounted thereupon for working upon the button blanks, a revoluble turret within the table having a step by step movement, horizontally projecting rotatable chucks carried by said turret to hold the button blanks to the operative device upon the surrounding table, means to lock the chucks from rotating on their axes in desired positions, and means to locate said turret at each step by step movement, substantially as set forth. 10th. In a button making machine, the combination of a stationary table, grinding, buffing and drilling devices located upon said table, a rotatable turret within said table, horizontally projecting chucks carried by said turret, to hold the button blanks to the operative devices upon the surrounding table, means to lock the chucks from rotating on their axes in desired positions, and means to rotate said chucks and said grinding, buffing and drilling devices, substantially as set forth. 11th. The drilling device herein described, having in combination two drill spindles, drill rods carried by said spindles, a grinding device to sharpen said drill rods, and means to operate said spindles to bring them alternately to the grinding device and to the work, substantially as specified. 12th. The drilling device herein described, having in combination two drill spindles, a carrying device for said spindles, automatic means to intermittently cause a half-revolution of said carrying device and thereby interchange the positions of said drill spindles, mechanism to automatically rotate the spindles, and means to lock the spindles in alternately reversed position, substantially as set forth. 13th. In a button making machine, the combination of a stationary table, drills interchangeable in position located thereon, a rotatable turret within the table, having a step by step movement, horizontally projecting rotatable chucks carried by said turret, means to lock the chucks from rotating on their axes in predetermined positions, means to lock said turret, and additional means to lock said drills at each step by step movement of the turret, substantially as set forth. 14th. In a button making machine, the combination of a rotatable turret, having a step by step movement, rotatable chucks carried by said turret and provided with a hollow reciprocatory mandrel or shaft, a sleeve within said mandrel provided with clamping jaws to hold the button blanks, means to hold the sleeve in a longitudinally fixed position, a reciprocatory spindle within said sleeve to eject the blanks, and means to release said jaws at desired intervals, substantially as set forth. 15th. In a button making machine, the combination of a rotatable turret, rotatable chucks carried by said turret, means to lock the chucks at certain predetermined points of their axial rotation, and automatically operated reciprocatory slides to actuate the jaws of said chucks, substantially as set forth. 16th. In a button

making machine, the combination of a rotatable turret, chucks carried thereby, interchangeable in position, said chucks provided with a reciprocatory spindle, a hollow mandrel or shaft, a sleeve within said mandrel provided with a clamping device, said mandrel and said sleeve reciprocatory the one relative to the other, and means to lock the chucks at certain predetermined points of their axial rotation, substantially as set forth. 17th. In a button making machine, the combination of a table, a series of operative devices located thereupon to work upon the button blanks, arranged in successive order, a plurality of horizontally projecting rotatable chucks to hold the button blanks to the operative devices, means to bring said chucks in succession to said operative devices, driving mechanism to actuate said chucks and operative devices, and means to lock the chucks at certain predetermined points of their axial rotation, substantially as set forth. 18th. In a button making machine, the combination of a rotatable turret having a step by step movement, chucks carried thereby, means to lock said chucks from rotating on their axes in desired positions, a stationary table, a series of drilling devices carried by said table, each having drill rods, interchangeable in position, and means to simultaneously lock said table at each step by step movement thereof, and the drill rods at each reversion thereof, substantially as set forth. 19th. In a button making machine, the combination of a rotatable turret having a step by step movement, a disc N^1 , upon the axle of the turret, chucks carried by said turret, a stationary table, means to lock said chucks from rotating on their axes in desired positions, a series of drilling devices carried by said table, each having drill rods, interchangeable in position, means to give a step by step movement to said disc, and a device to release and lock said disc at each movement thereof, substantially as set forth. 20th. In a button making machine, the combination of a rotatable turret, horizontally projecting chucks carried thereby, a surrounding stationary table, a series of drilling devices thereon, grinding and buffing devices located upon said table, and means to lock the chucks from rotating on their axes in position for the blanks carried thereby to be drilled and to unlock said chucks when in position for the grinding and buffing devices to work upon said blanks, substantially as set forth. 21st. In a button making machine, the combination of a rotatable turret, horizontally projecting chucks carried thereby, a surrounding stationary table, drilling, grinding and buffing devices carried by said table, means to rotate said chucks when opposite the grinding and buffing devices, and to lock said chucks from rotating on their axes when opposite said drilling devices, substantially as set forth. 22nd. In a button making machine, the combination of a rotatable turret horizontally projecting chucks carried thereby, a surrounding stationary table, drilling devices carried thereby, means to lock said chucks from rotating on their axes when opposite the drilling devices, and to give a partial rotation to said chucks between said drilling devices, substantially as set forth. 23rd. In a button making machine, the combination of a rotatable turret, rotatable chucks carried thereby, a surrounding stationary table, drilling, grinding and buffing devices carried by said table, a locking device to control the rotation of each of said chucks upon its axis, and means at desired points to release said locking device and to rotate the chucks when the locking device is released, substantially as set forth. 24th. The drilling device herein described, provided with two drills, and a grinder to grind said drills, said drills being interchangeable in position to bring them alternately to the grinder and to work, substantially as set forth. 25th. The drilling device herein described, having in combination a spool, two rotatable drills carried by said spool, a grinder, and means to rotate said spool to bring said drills alternately to said grinder and to the work, substantially as set forth. 26th. The drilling device herein described, having in combination two drills, a grinder, and means to advance said drills to the work, said drills being interchangeable in position to bring them alternately to the grinder and the work, substantially as set forth. 27th. The drilling device herein described, having in combination two drill spindles, sleeves advanceable in said spindles, drill rods carried in said spindles and sleeves, means to advance said drill rods to the work, and a grinding device, said spindles being interchangeable in position to bring the drill rods alternately to the work and to the grinding device, substantially as set forth. 28th. The drilling device herein described, having in combination a rotatable spool, and rotatable drills carried by said spool, and a grinding device located adjacent to one of said drills, said drills interchangeable in position, to bring the drills alternately to the work and to the grinding device, substantially as set forth. 29th. The drilling device herein described, having in combination a horizontal rotatable spool, rotatable drills carried by the spool, and a grinding device located adjacent to the lower drill, said drills interchangeable in position, and said spool advanceable to the work, substantially as set forth. 30th. The drilling device herein described, having in combination rotatable drills interchangeable in position, means for carrying said drills, and means to adjust the drills at a desired angle, substantially as set forth. 31st. The drilling device herein described, having in combination a rotatable spool having a step by step movement, rotatable drills carried thereby, interchangeable in position, a grinding device adjacent to one of said drills, and means to lock the spool at each step by step movement, substantially as set forth. 32nd. The drilling device herein described, having in combination a reciprocatory spool, two drills carried by said spool, interchangeable in position, means to alternately sharpen said drills, substantially as set forth. 33rd. Th

drilling device herein described, having in combination a rotatable spool having a step by step movement, rotatable drills carried thereby, an agitatable grinding device, means to lock the spool at each step by step movement thereof, thereby said drills may be brought alternately to the grinding device and to the work, said spool being adjustable to bring the drills of the work at a desired angle, substantially as set forth. 34th. In a button making machine, the combination of a horizontal rotatable turret, a horizontal stationary table surrounding said turret, operative devices carried by said table, and chucks carried by said turret, each of said chucks having a reciprocatory hollow mandrel or shaft, a sleeve within said mandrel provided with jaws to clamp a button blank, means to hold the sleeve from longitudinal movement, and a reciprocatory spindle within said sleeve, substantially as set forth. 35th. In a button making machine, the combination of a stationary table, a revoluble turret within the table, chucks located upon said turret, means to lock said chucks from rotating on their axes in desired positions, a rotatable feed-wheel located upon the table, plungers or spindles within said wheel, and means to advance the feed wheel to the chucks and to actuate said plungers, substantially as set forth. 36th. In a button making machine, the combination of a stationary table, a rotatable feed-wheel thereupon, a revoluble turret within the table, chucks located upon said turret, means to lock said chucks from rotation on their axes in desired positions, plungers within said wheel, a carriage located upon said table carrying the feed-wheel, and means to advance the carriage, and to actuate the said plungers, substantially as set forth. 37th. The feeding mechanism herein set forth, having in combination a rotatable feed-wheel, plungers within said wheel, a carriage carrying said feed-wheel, and an oscillatory arm arranged to first advance said carriage and then to actuate said plunger, substantially as set forth. 38th. The feeding mechanism herein set forth, having in combination a rotatable feed-wheel having a step by step movement, plungers within said wheel, a carriage carrying said feed-wheel, and an oscillatory arm arranged to advance said carriage and to actuate said plungers, substantially as set forth. 39th. The feeding mechanism herein set forth having in combination a rotatable feed-wheel, gears to rotate said feed-wheels, plungers within said feed-wheel, a carriage carrying said wheel and gears, an oscillatory arm to advance said carriage and to actuate said plungers, and means to give a step by step movement to said gears, substantially as set forth. 40th. The feeding mechanism herein set forth, having in combination a feed-wheel, gears to rotate said wheel, plungers within said wheel, a carriage carrying said wheel and gears, a cam actuated pawl to give a step by step movement to said gears, and a cam actuated oscillatory arm to advance said carriage and to actuate said plungers, substantially as set forth. 41st. The reversing mechanism herein set forth having in combination a vertically rotatable button blank holding device, means to advance said device to the work and to retract it therefrom, and to reverse said button holding device, and a horizontally reciprocatory plunger, all arranged substantially as and in the manner described. 42nd. The reversing mechanism herein set forth, having in combination a vertically rotatable ring to receive a button blank, means to advance said ring to the work and to retract it therefrom, and a reciprocatory plunger advanceable within said ring and retractable therefrom, substantially as and in the manner described. 43rd. The reversing mechanism herein set forth, having in combination a vertically rotatable ring to receive a button blank, means to move the ring forward and backward to and from the work, and to reverse the ring, a plunger or spindle advanceable within the ring and retractable therefrom, and means to move the plunger forward and backward, said plunger movable forward into the ring and backward therefrom before the reversion of the ring, and again movable forward into the ring after the reversion of the ring, substantially as and for the purpose described. 44th. The reversing mechanism herein set forth having in combination a split ring to receive a button blank and exert a tension upon the periphery thereof, a vertical rotatable spindle carrying said ring, means to move the ring forward and backward and to rotate the ring, and a reciprocatory plunger horizontally advanceable into the ring and retractable therefrom, substantially as and in the manner described. 45th. The reversing mechanism herein set forth, having in combination a reciprocatory housing or carriage, a reversible ring, a vertical rotatable spindle carrying said ring, and a horizontally reciprocatory plunger carried thereby, said plunger movable forward into the ring and backward therefrom, substantially as and in the manner described. 46th. The reversing mechanism herein set forth, having in combination a reciprocatory housing or carriage, a reversible ring, gears to reverse the ring, cam mechanism to actuate said gears, a plunger to advance into said ring and retractable therefrom, and cam actuated mechanism to reciprocate said plunger, substantially as and in the manner described. 47th. A drilling device having a step by step movement, embodying in combination drill rods advanceable at each step by step movement, a rotatable spool carrying said drill rods, and a grinding device, said drill rods interchangeable in position to bring them alternately to said grinding device, substantially as set forth. 48th. A drilling device having two advanceable drill rods interchangeable in position, a rotatable spool carrying said drill rods, a spindle intermediate said drill rods connected with each of said drill rods, ratchets 69 and 70, having a different number of teeth to cause a differential feed of the spindle to advance said drill rod, and means to intermittently cause a half-revolution of said

spool and thereby interchange the positions of said drill rods, substantially as set forth. 49th. A drilling device having in combination advanceable drill rods interchangeable in position, a spindle connected with said drill rods, means to sharpen the drill rods, and a differential feed to advance the spindle and drill rods, substantially as set forth. 50th. A drilling device having in combination a rotatable wheel provided with drill rods, interchangeable in position, a hub engaged with said spool, a threaded spindle connected with said drill rods and engaging said hub, and a differential feed to advance said spindle and drill rods, substantially as set forth. 51st. In a button making machine, the combination of a rotatable turret, a plurality of rotatable chucks carried thereby, means to lock the chucks at certain predetermined points of their axial rotation, and means to automatically feed the button blanks to said chucks one after another, substantially as set forth. 52nd. In a button making machine, the combination of a rotatable turret, a plurality of rotatable chucks carried thereby to hold the button blanks, means to lock the chucks from rotating on their axes in the desired positions, and means to reverse the button blanks carried by said chucks, substantially as set forth. 53rd. In a button making machine, the combination of a stationary table, a rotatable turret, having a step by step movement and surrounded by said table, multiple chucks carried by said turret, means to lock said chucks from rotating on their axes in desired positions, a feeding device to feed the button blanks to said chucks, grinding and buffing devices, drilling devices to drill said blanks, and means to discharge the button blanks from the chucks, the feeding, grinding, buffing and drilling devices arranged upon said table adjacent to the turret, whereby the blanks may be carried by the chucks from one to another of said devices in succession to complete the work upon the button blanks, substantially as set forth. 54th. In a button making machine, the combination of a rotatable turret, a plurality of chucks carried thereby to hold the button blanks, means to lock said chucks from rotating on their axes at desired positions, and reversing mechanism to reverse the button blanks in said chucks, substantially as set forth. 55th. In a button making machine, the combination of a rotatable turret, a plurality of chucks carried thereby to hold the button blanks, means to lock said chucks from rotating on their axes in certain predetermined positions, and a cutting or grinding device arranged adjacent to the turret whereby the blanks may be operated upon by the grinding or cutting device one after another, substantially as set forth. 56th. The drilling device herein described, having in combination two rotatable drill spindles, interchangeable in position, a grinder adjacent to one of said spindles, and means to lock the spindle adjacent to the grinder to prevent its rotation while being ground, substantially as set forth. 57th. In a button making machine, the combination of a series of rotatable chucks to hold the button blanks, an automatic numbering device, and means to lock the chucks from rotating on their axes in connection with said device, at certain predetermined points of their axial rotation, substantially as set forth. 58th. In a button making machine, the combination of a series of rotatable chucks to hold the button blanks, a series of drills located in successive order, said chucks and said drills the one being movable relative to the other to bring the work and the drills into operative position, means to rotate the chucks between two adjacent drills, and to lock said chucks from rotating on their axes in certain predetermined points of their axial rotation in front of the drills, substantially as set forth. 59th. In a button making machine, a rotatable chuck having in combination a hollow mandrel, a sleeve within said mandrel provided with clamping jaws to hold the button blanks, a reciprocatory spindle within said sleeve to eject the blanks, and means to release said jaws at desired intervals, said spindle provided with a head forming a support for the back of the button blank, whereby any chipping of said back will be prevented in the act of drilling the blank, substantially as described. 60th. The drilling device herein described, having in combination two drill spindles, a carrying device for said spindles, automatic means to intermittently cause a half-revolution of said carrying device and thereby interchange the positions of said drill spindles, mechanism to automatically rotate the spindles, means to lock the carrying device in alternately reversed position, and means to also lock the spindles in alternately reversed position, substantially as set forth. 61st. The drilling device herein described, having in combination two drill spindles, a carrying device for said spindles, a grinding device, automatic means to intermittently cause a half-revolution of said carrying device and thereby interchange the positions of said drill spindles, mechanism to automatically rotate the spindles, and means to lock the spindle adjacent to the grinding device from rotating on its axis, substantially as set forth.

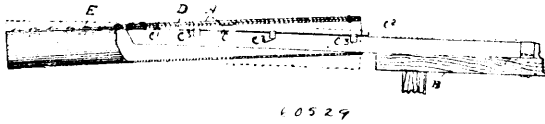
No. 60,529. Rivetting Mandrel. (Mandrin à river.)

John F. Mantey, Patterson, Texas, U.S.A., 8th July, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. A rivetting-mandrel, comprising an anvil-bar having a flat and unbroken upper surface, and a movable rivet-holder, said holder being adapted to be moved over the bar to bring a rivet in position, to enter the openings in the parts to be rivetted together and after the rivet has entered the openings to be disengaged therefrom and leave its head resting upon the anvil-bar ready to be rivetted, substantially as described. 2nd. A rivetting mandrel, comprising an anvil-bar, and a swinging rivet-holder constructed and

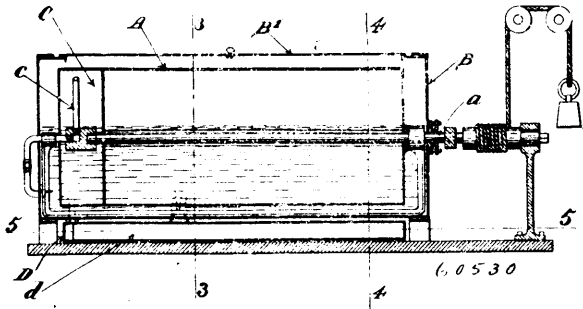
arranged to swing over upon the mandrel to permit the rivet to enter the openings in the parts to be rivetted together, and then swing

series being formed simultaneously by a single rolling of the die plates, then drying and curing the rods. 4th. The process of form-



away from the same, substantially as described. 3rd. A rivetting-mandrel, comprising an anvil-bar, and a plurality of rivet holders pivotally supported at one side of the bar to be swung over upon the same, substantially as described. 4th. In a rivetting-mandrel, the combination with an anvil-bar, of a bar mounted in bearings on one side of the anvil-bar and provided with a handle at one end, and a plurality of rivet-holders secured to and projecting from said bar, substantially as herein shown and described.

No. 60,530. Manufacture of Inflammable Gas.
(Fabrication de gaz inflammable.)



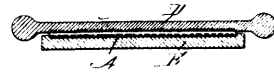
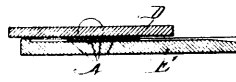
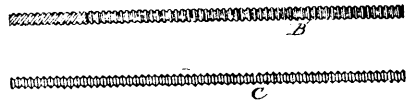
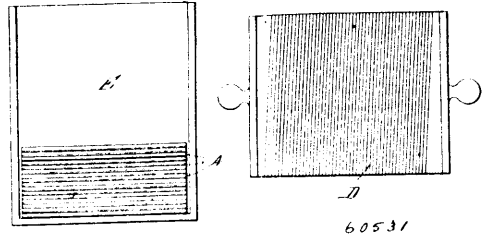
George Washington Lee, Frank Elliott and George Tatham, all of Sydney, New South Wales, Australia, 8th July, 1898; 6 years. (Filed 20th January, 1898.)

Claim.—1st. The herein described process for the manufacture of inflammable gas, consisting essentially in impregnating atmospheric air with aqueous moisture and passing it through or over a special composition, in the manner and for the purposes specified. 2nd. The special composition for use in manufacture of inflammable gas, consisting of a mixture of C², H², 20, commercial sulphuric ether, citronella oil and water in or about the relative proportions specified. 3rd. Apparatus for the manufacture of inflammable gas, comprising an air supplier and moistener or pump and a generator so constructed and arranged as to automatically manufacture the gas only as required, substantially as herein explained. 4th. In apparatus for the manufacture of inflammable gas, a receiver as A, with vanes as A¹, A², and adapted to rotate in a water trough as B, and having air inlet holes as a¹, a², and air outlet holes as a³, a⁴, substantially as herein described. 5th. In apparatus for the manufacture of inflammable gas, a receiver as A, with vanes as A¹, A², and adapted to rotate in a water trough as B, and having air inlet holes as a¹, a², and air outlet holes as a³, a⁴, in combination with an air chamber as C, partitioned off from said receiver and provided with a discharge pipe extending above the level of the water, substantially as herein explained.

No. 60,531. Lead Pencil. (Crayon.)

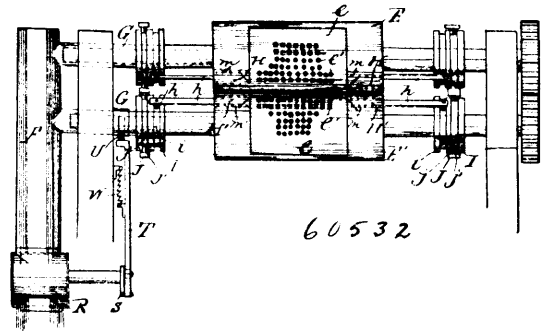
Frederick William Musson, Chicago, Illinois, U.S.A., 8th July, 1898; 6 years. (Filed 29th April, 1898.)

Claim.—1st. The process of forming leads for movable lead pencils, which consists in producing the leads in a series of plastic rods, rolling these while arranged in a series side by side in association with a straight edge, so as to bring them all into parallelism and straightness, then rolling them between die plates so as to roll circumferential grooves therein, with broad, flat bearing surfaces between such grooves, then drying and curing said leads to form the finished product. 2nd. The process of forming leads for movable lead pencils, which consists in reducing the lead substance in a plastic mass, then producing therefrom a series of plastic leads, then bringing such leads in a mass or series into straightness and parallelism on a proper surface, then subjecting said leads on masse to the rolling action of die plates so as to form on each circumferential groove, said successive grooves separated in the first instance by a broad, flat bearing surface to permit such rolling process, then successively rolling said leads in like dies until the grooves are properly formed, then drying and curing the leads. 3rd. The process of forming leads for movable lead pencils, which consists in reducing the lead substance to plastic rods, then bringing such rods in a mass or series into straightness and parallelism on a proper surface, or a die then subjecting the entire series of rods to the rolling action of die plates so as to form on each circumferential groove, substantially along its entire length, the grooves on all of the



ing leads for movable lead pencils, which consists in producing the leads in a series of plastic rods, then rolling a series of these rods in association with a straight edge so as to bring them all into parallelism and straightness, then rolling them between the die plates so as to roll circumferential grooves therein and without changing the length of said leads, said circumferential grooves extending substantially the entire length of said leads, and being formed by one operation of the dies.

No. 60,532. Paper Bag Making Machine.
(Machine à faire des sacs en papier.)

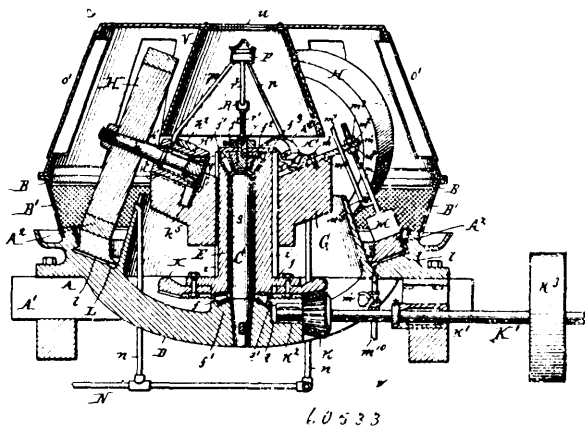


Sylvanus T. Murchie, Batavia, Illinois, U.S.A., 8th July, 1898; 6 years. (Filed 26th April, 1898.)

Claim.—1st. In a paper-bag machine, the herein described means for opening the leading end of the paper tube consisting of hollow rotary formers having perforated portions and adapted by their rotation to separate the sides of the tube and thereby open its leading end, substantially as described. 2nd. In a paper-bag machine, the combination with rotary suction-formers of laterally-reciprocating blades or holders adapted to impinge the sides of the tube and define the corner folds thereof, substantially as described. 3rd. In a machine for making satchel-bottom bags from flat paper tubes having bellow's folds, the combination with a pair of rotating hollow cylinders having perforated portions, of means for exhausting the interiors of said cylinders and laterally-moving blades mounted to slide upon the peripheries of said rolls and to enter the bellow's fold of the tube and thereby assist in the formation of the side laps of the satchel-bottom, substantially as described. 4th. In a paper-bag machine, the combination with rotary cylinders having perforated portions, longitudinal ways in the surfaces of said cylinders, blades adapted to reciprocate in said ways, means for intermittently exhausting the interiors of said cylinders and means for operating said blades. 5th. In a paper-bag machine, the combination with two hollow rotary cylinders having circumferential depressions, perforations in said depressed portions, means for exhausting the interiors of said cylinders and laterally-movable blades adapted to co-operate with said cylinders in the formation of a bag-bottom

substantially as described. 6th. In a paper-bag machine, the combination with rotary suction-rolls and laterally-movable blades of a delivery-roll operating also by suction, substantially as described.

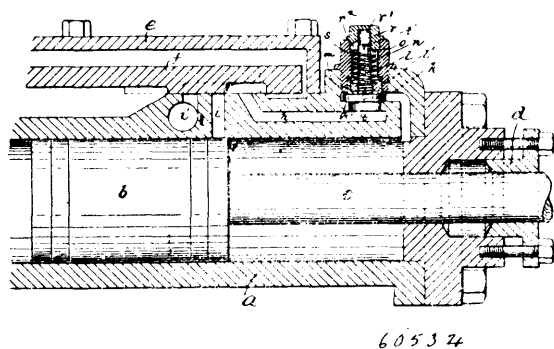
No. 60,533. Ore Crusher. (Machine à broyer le minéral.)



John Peter Hanson, Butte, Montana, Abraham T. Kerr, Buffalo, New York, and James H. Kerr, Helena, Montana, all in the U.S.A., 8th July, 1898; 6 years. (Filed 31st May, 1898.)

Claim.—1st. The combination with the pan, of an upright stationary shaft or arbour secured centrally to the pan, a hub capable of turning on said arbour, but held against vertical movement thereon, means for rotating said hub, a driving-head capable of sliding vertically on said shaft but held against turning thereon, and crushing rollers running in said pan and journaled on said head, substantially as set forth. 2nd. In an ore crusher, having an annular pan crushing rollers running in said pan, the combination with an upright shaft supported centrally on the pan, a non-tapering hub journaled on said shaft, a roller-carrying head capable of sliding vertically on said hub and having a corresponding bore, and non-tapering pins or keys interposed between said hub and said head and interlocking with both of said parts, substantially as set forth. 3rd. In an ore crusher, having an annular pan and crushing rollers running in said pan, the combination with an upright shaft supported centrally on the pan, a non-tapering hub journaled on said shaft, a roller carrying head capable of sliding vertically on said hub and having a corresponding bore and non-tapering pins or keys interposed between said hub and said head and interlocking with both of said parts, a retaining cap applied to the upper portion of said shaft and overlapping the upper ends of said pins or keys but constructed of smaller dimensions than the bore of said driving-head whereby the head can be removed from said hub without disturbing said cap and keys, substantially as set forth. 4th. The combination with the pan having a bed or annular series of dies provided with vertical inner and outer edges and an inclined upper surface which slopes toward the axis of the pan and extends from the outer to the inner edge of the dies, of a rotary driving-head or carrier capable of moving freely up and down, crushing rollers having their periphery arranged parallel with their axis and running upon the sloping faces of said dies, and shafts carrying said rollers and capable of oscillating vertically on said head or carrier, substantially as set forth. 5th. The combination with the pan and the crushing rollers of an upright rotary hub, a driving-head arranged to slide vertically on said hub and carrying bearing boxes in which the shafts of the crushing rollers are journaled, each of said bearing boxes being provided at its outer end with an oil inlet and at its inner end with an oil outlet and oil passages arranged in said driving-head and leading from said oil outlets to the bore of said driving-head, substantially as set forth. 6th. The combination with the pan and the crushing rollers of an upright stationary shaft or arbour supported centrally on the pan and a hub surrounding said arbour, having bearings at its upper and lower ends and separated from the arbour by an intervening oil passage which connects said upper and lower bearings, said arbour having an oil passage leading from the upper end thereof to said upper bearing, substantially as set forth. 7th. The combination with the pan and the crushing rollers, of an upright stationary shaft or arbour supported centrally on the pan, a hub surrounding said arbour, having bearings at its upper and lower ends and separated from the arbour by an intervening oil passage which connects said upper and lower bearings, a stationary oil cup connected with said upper bearing, a driving-head mounted on said hub and carrying bearing boxes in which the shafts of said crushing rollers are journaled, and an oil reservoir arranged axially above said arbour and supported by oil pipes leading to the several bearing boxes and having a discharge pipe leading to said stationary oil cup, substantially as set forth.

No. 60,534. Engine. (Machine à vapeur.)



The Sullivan Machine Company, assignee of Albert Bale, all of Claremont, New Hampshire, U.S.A., 8th July, 1898; 6 years. (Filed 7th May, 1898.)

Claim.—1st. In a direct acting engine, the combination with a cylinder having inlet and exhaust ports, of a main valve controlling same, a piston working in said cylinder, an auxiliary valve located so as to control the inflowing air to the front end of said cylinder, and means for regulating the movement of said auxiliary valve by the cushioned air, substantially as set forth. 2nd. In a direct acting engine, the combination with a cylinder having inlet and exhaust ports, of a main valve controlling same, a piston working in said cylinder, an auxiliary valve located so as to control the inflowing air to the front end of said cylinder, said auxiliary valve having an air chamber back of same, the said chamber communicating with said cylinder, substantially as set forth. 3rd. In a direct acting engine, the combination with a cylinder having inlet and exhaust ports, of a main valve controlling same, a piston working in said cylinder, an auxiliary valve located so as to control the inflowing air to the front end of said cylinder, said auxiliary valve having an air chamber back of same, said chamber communicating with said cylinder, and means for reducing the pressure in said chamber, substantially as set forth. 4th. In a direct acting engine, the combination with a cylinder and a piston working therein, of a check-valve controlling the inlet port of said cylinder, said valve having an air chamber back of same, said check-valve having a port forming communication between said cylinder and said chamber, substantially as set forth. 5th. In a direct acting engine, the combination with a cylinder and a piston working therein, a check-valve controlling the inlet port of said cylinder, said valve having an air chamber back of same, said check-valve having a port forming communication between said cylinder and said chamber, and said port having a contracted opening, substantially as set forth. 6th. In a direct acting engine, the combination with a cylinder and a piston working therein, of a check-valve controlling the inlet port of said cylinder, said valve having an air chamber back of same, a stem, said valve having a port formed therein and in the stem, said port forming communication between said cylinder and chamber, substantially as set forth. 7th. In a direct acting engine, the combination with a cylinder and a piston working therein, of a check-valve controlling the inlet port of said cylinder, said valve having an air chamber back of same, said chamber communicating with said cylinder, and a packing cup on said valve engaging the walls of said chamber, substantially as set forth. 8th. In a direct acting engine, the combination with a cylinder and a piston working therein, of a check-valve controlling the inlet port of said cylinder, said valve having an air chamber back of same, said chamber communicating with said cylinder, and a packing cup inserted between said valve and a head on the stem thereof and engaging the walls of said chamber, substantially as set forth.

No. 60,535. Method of Lining and Coating Metallic Tubes with Lead. (Méthode de revêtir et garnir les tubes métalliques de plomb.)

Henry Wall Davis, Hallermbel Salzberg, assignee of Jacob Froeschauer, Gratz, all in Austro-Hungary, 8th July, 1898; 6 years. (Filed 19th April, 1898.)

Claim.—The hereinbefore described method of lining or coating hard metallic tubes with lead which consists in tinning the contiguous surfaces of the supporting tube and of the lead lining or covering tube, arranging the tubes one within the other, forcing them into intimate contact and subjecting them to a temperature sufficient to melt the tin without melting the lead whereby the two tubes are homogeneously joined together.

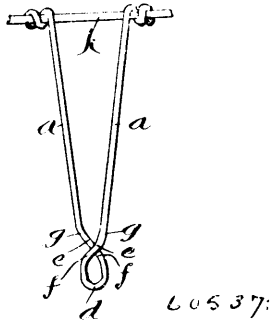
No. 60,536. Treatment of Sheet Metal.

(Traitement de metal en feuille.)

William Edwin Harris, Niles, Ohio, U.S.A., 8th July, 1898; 6 years. (Filed 17th June, 1898.)

Claim.—The herein described composition of matter for treating sheet metal, consisting of pulverized iron ore, plumbago, and the mineral known as diamond dust, which contains substantially the following substances:—Moisture, 2.21 per cent; silica, 73.06 per cent; oxide of iron aluminum, 14.02 per cent; lime, 1.02 per cent; magnesia, .17 per cent; potash, 5.35 per cent; soda, 3.31 per cent; other materials undetermined, .86 per cent—substantially as described.

No. 60,537. Wire Fence. *(Clôture en fil de fer.)*



Janet Maud Jeffrey, assignee of Robert Louis Frederick Strathy, Montreal, Quebec, Canada, 8th July, 1898; 6 years. (Filed 20th April, 1896.)

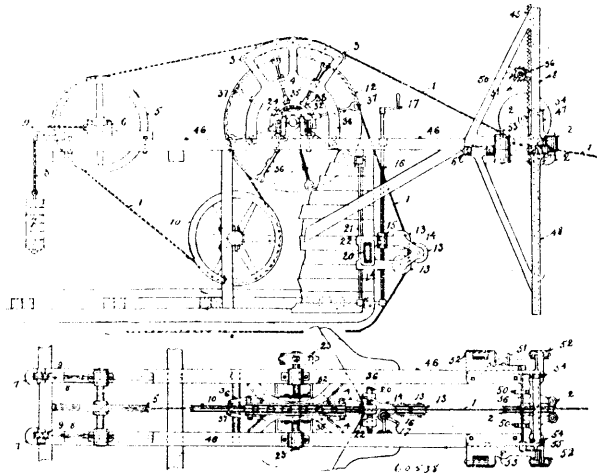
Claim.—1st. A wire fence, composed of uprights connected by horizontal strands of wire, such horizontal strands of wire being connected together by independent connecting sections, several of which are set in each of a series of vertical lines, said independent sections consisting each of a piece of wire bent into V-form and having its apex set in an oblique plane to the plane of the ends of the legs of said section, the portions of said legs immediately contiguous to said apex being bent to form inclined portions *c, c*, which cross each other on one side only of the other and terminate in the leg portions proper which extend in the same plane relatively to the longitudinal strand, and are free to be sprung apart from each other by the longitudinal strand and to furnish shoulders adapted to retain said strand against displacement and the ends of said legs being twisted about an adjacent strand, substantially as and for the purpose set forth. 2nd. A guard to be used in the construction of wire fences, said guard consisting of a piece of wire bent into open V-form, with the ends of the legs thereof adapted to be separately connected with the fence wire, and having its apex set in an oblique plane to the plane of the ends of the legs of said guard, the portions of said legs immediately contiguous to said apex being bent to form inclined portions *c, c*, which cross each other on one side only of the other and terminate in the leg portions proper, which extend in the same plane relatively to the longitudinal strand, and to furnish shoulders *f, f* and *g, g*, substantially as described and for the purpose set forth. 3rd. A wire fence, composed of uprights connected by horizontal strands of wire, and a horizontal rail suitably braced, such horizontal strands of wire being connected together by independent connecting sections, several of which are set in each of a series of vertical lines, for the purpose set forth. 4th. A wire fence, composed of uprights connected by horizontal strands of wire, and a horizontal rail suitably braced, such horizontal strands of wire being connected together by independent connecting sections, several of which are set in each of a series of vertical lines, for the purpose set forth. 5th. A guard, consisting of a piece of wire bent into open V-form, having legs *a, a*, the ends of which are adapted to be separately connected with the fence wire, a curved portion or apex proper *d*, adapted to cross the line of said two legs obliquely, two short inclined portions *c, c* intermediate of said curved portion *d* and the legs, and which portions *c, c* cross each other on one side only of the other and terminate in the leg portions proper, which extend in the same plane relatively to the longitudinal strand and are free to be sprung apart from each other by the longitudinal strand, and said inclined portions forming two pairs of shoulders *f, f* and *g, g* respectively, adapted to form a complete inclosure without twisting, substantially and for the purpose set forth.

No. 60,538. Boat Hauling and Navigating Machine.

(Machine à propulser et haler les vaisseaux.)

John Quagliotti, Seattle, Washington, U.S.A., 9th July, 1898; 12 years. (Filed 13th January, 1898.)

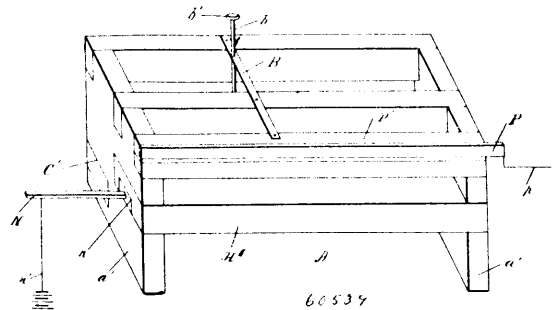
Claim.—As a grip cable hauling device, consisting of a hauling sheave 12 in the groove of the periphery of which the cable is



gripped by jaws 37 acting on the ends of levers 36 operated by means of moving or stationary cams, as and for the purposes set forth.

No. 60,539. Telegram Transmitter.

(Transmetteur de télégramme.)

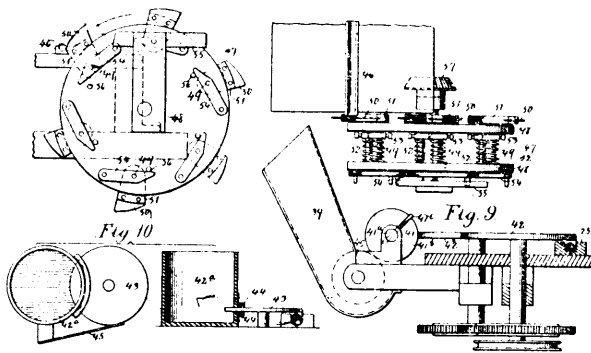


Edward Porter, Belmont Street, Mossman, near Sydney, New South Wales, Australia, 9th July 1898; 6 years. (Filed 22nd May, 1897.)

Claim.—1st. In a telegram transmitter, the combination with a slidable key having a code-plate, of a slide having an operative connection with said code-plate during its downward movement, a circuit make and break device operated by said slide, and means, operated by said key for holding said slide in fixed inoperative position during the return movement of said key, substantially as set forth. 2nd. In a telegram transmitter, the combination with a slidable key having a code-plate, of a slide having an operative connection with said code-plate during its downward movement, a circuit make and break device operated by said slide, a slidably-mounted stop-plate having a contact with said slide upon the return movement of said key, said stop-plate serving to retain said slide in a fixed inoperative position, and means, connected with said key, for moving said stop-plate at each end of the movement of said key, substantially as set forth. 3rd. In a telegram transmitter, the combination with a slidable key, having a code-plate, of a slide operatively connected to said code-plate during the downward movement of said key, a circuit make and break device operatively connected to said slide, a slidably mounted stop-plate having a positive contact with said slide during the upward movement of said key, whereby said slide will be retained in fixed position away from said code-plate, and tappers secured to said key for moving said stop-plate into and out of operative connection with said slide, at each end of the movement of said key, substantially as set forth. 4th. In a telegram transmitter, the combination with a slidable key having a code-plate, of a slide operatively connected with said code-plate during the downward movement of said key, an electrical contact piece operatively connected to said slide and adapted to contact with said contact-plate, and means, operated by said key, for holding said slide in fixed inoperative position during the upward movement of said key, substantially as set forth. 5th. In a telegram transmitter, the combination with a series of keys, each provided with code-plates, of a series of slides operatively connected with said code-plates during the downward movement of said keys, an electrical contact-plate, a series of contact pieces, each having an operative connection with corresponding slide and each having an independent contact with said contact-plate, and means

connected with said keys for holding said slides in a fixed inoperative position during the upward movement of said key, substantially as set forth. 6th. In a telegram transmitter, the combination with a slidable code-plate, of a slide operated by the code-plate when the said plate is moved in one direction, a slidable stop-plate operatively connected with the code-plate and preventing the slide from being operated when the code-plate is moved in the reverse direction, and a circuit make and break device operated by the said slide, substantially as set forth. 7th. In a telegram transmitter, the combination with a slidable key rod provided with a code-plate and tappet plates, of a slide operated by the said code-plate, a slidable stop plate operated by the said tappet plates at the ends of the strokes of the key rod and only permitting the code-plate to operate the slide when the key rod is moved in one direction, and a circuit make and break device operated by the said slide, substantially as set forth. 8th. In a telegram transmitter, the combination with a slide for operating a circuit make and break device, of a spring-supported stop-plate, and a slidable key rod provided with a code-plate for operating the slide, and tappet plates for operating the stop-plate, whereby the said slide is only operated when the key rod is moved in one direction, substantially as set forth.

No. 60,540, Cigarette Machine (Machine à cigarettes.)



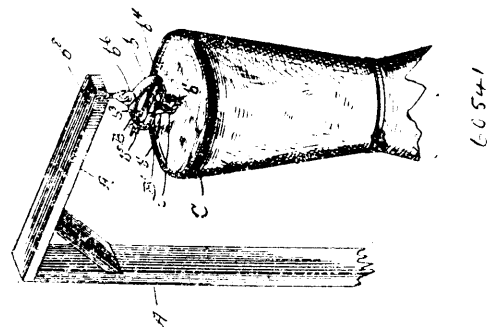
Charles Clifton, Satterwhite, Richmond, Virginia, U.S.A., 9th July, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. In a cigarette machine, a filler forming conduit whose lateral walls are formed by two opposing endless belts flanged at their upper inner edges, and inclined laterally for a portion of their operative lengths to form a trough for the receipt of tobacco, substantially as specified. 2nd. In a cigarette machine, the carrier and former belts having each a lip or flange at its upper inner edge portion, means for carrying and driving said belts, means for inclining outwardly the said belts for a portion of their operative lengths whereby they form a trough for the receipt of tobacco, and for subsequently bringing them to and maintaining them in adjacent vertical planes, and means between the lower portions of the belts for forming a bottom support for the tobacco, substantially as specified. 3rd. In a cigarette machine, a filler forming conduit having its side walls formed by opposing separate longitudinal belts, each of which is formed at its upper inner edge portion with a continuous lip or flange, means for inclining outwardly said belts for a portion of their operative lengths to form a trough for the receipt of tobacco, and means for effecting lateral pressure upon said belts, together with means for constituting a bottom support for the tobacco in said conduit, substantially as specified. 4th. In a cigarette machine, a filler forming conduit having its side walls formed by opposing separate longitudinal belts, each of which has a lip or flange, at its upper edge portion, and which are held in trough form for a portion of their operative lengths, and a third endless belt, a portion of which forms the bottom of said conduit, substantially as specified. 5th. In a cigarette machine, the combination of tobacco feeding mechanism a pair of belts constituting the lateral walls of a filler forming conduit and which are held in trough form for a portion of their operative lengths to receive the tobacco from the feeding mechanism, means for carrying, driving and guiding said belts, paper holding and feeding mechanism, means for guiding the filler rod onto the paper, and pasting, wrapping and cutting mechanisms, substantially as specified. 6th. In a cigarette machine, the combination with tobacco feeding mechanism of suitable character, of a filler forming conduit whose lateral walls are formed by two separate opposing endless belts, each of which has a flange or lip, means for forming the bottom of said conduit, means for carrying, guiding and driving the said belts, and means for effecting proper pressure upon the tobacco held between said belts, substantially as specified. 7th. In a cigarette machine, the combination with the filler forming

devices, the paper feeding mechanism, and the complementary mouth piece rollers, adapted to shape the paper into trough form, and to guide the filler rod therein, of an open trough or channel in a vance of the mouth piece rollers, and having oppositely disposed folding lips, an endless tape belt which travels through said trough or channel, paste-applying devices between the said lips, and cutting mechanism at the end of the trough or channel, substantially as specified. 9th. In a cigarette machine, the combination of tobacco feeding mechanism, a filler forming conduit formed by two opposing edgewise disposed flanged belts separated for a portion of their operative lengths, a bottom support for the tobacco in said conduit, paper feeding mechanism, devices for giving a trough form to the paper and for guiding the filler rod into the trough so formed, a folding or wrapping trough or channel having oppositely arranged folding means, means for applying paste to one edge of the paper, cutting mechanism, and means whereby the tobacco from the time it is received into said conduit until it is wrapped and cut into cigarettes is fed through the machine at a continuous uniform speed, substantially as specified. 10th. In a cigarette machine, pasting mechanism, comprising a paste receptacle, a paste wheel or roll arranged to turn therein, a cylinder or roller in contact with said wheel or roll, means for causing edgewise vibration thereof, and means for transferring paste therefrom to the paper, substantially as specified. 11th. In a cigarette machine, pasting mechanism comprising a paste receptacle, a paste wheel arranged to turn therein, a shaft, a cylinder or roller in frictional contact with said paste wheel and loose upon said shaft, said cylinder or roller having cam shaped ends, and pins or projections carried by said shaft and engaging said ends, together with means for transferring the paste from said cylinder or roller to the paper, substantially as specified. 12th. In a cigarette machine, cutting mechanism comprising a rotary carrier, a series of spring actuated cutters pivoted thereto and capable of independent movement in the plane of rotation, and means for putting the actuating springs under tension at the proper time and for suddenly releasing the same, substantially as specified. 13th. In a cigarette machine, cutting mechanism, comprising a rotary carrier mounted to rotate in a plane transverse to the feed of the cigarette rod, a series of cutters carried thereby and free to move independently in the plane of their rotation, actuating springs engaging the cutters and normally inactive, and means for putting said springs under tension and releasing the same at the proper times, substantially as specified. 14th. In a cigarette machine, cutting mechanism, comprising a rotary carrier mounted to rotate in a plane transverse to the feet of the cigarette rod, a series of equi-distant peripherally located cutter holders pivoted journaled to said carrier, knives carried by said holders, springs attached to said holders, and means for putting said springs successively under tension and for successively releasing the same at proper times, substantially as specified. 15th. In cutting mechanism for cigarette machines, the combination with a rotary carrier, of a cutter pivotally connected thereto, and capable of an independent movement in the plane of rotation, together with means whereby said cutter is momentarily advanced at a speed in excess of the rotary movement of the carrier, substantially as specified. 16th. In a cigarette machine, cutting mechanism comprising a flanged cutter head journaled to rotate in a plane transverse to the line of feed of the machine, a series of equi-distant shafts loosely journaled therein, a cutter affixed to one end portion of each of said shafts, a spring coiled around the intermediate portion thereof, and fastened at one end thereto and at the opposite end portion to said shaft, and a stationary cam arranged to engage each of said arms as the head rotates, substantially as specified.

No. 60,541. Mail Pauch Hook.

(Crochet pour sacs de malle.)

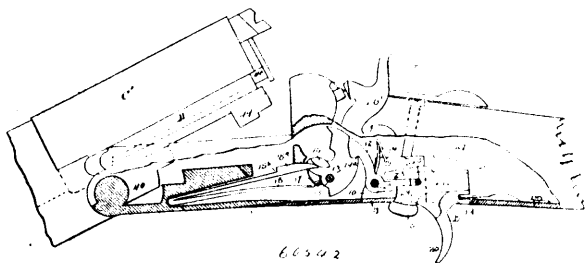


George A. Whitehead, Cincinnati, New York, U.S.A., 9th July, 1898. (Filed 13th April, 1898.)

Claim.—1st. In a mail-sack, the combination with a spring-loop having clamping-lugs, of means for adjusting the tension of said loop at will, substantially as described. 2nd. In a mail-sack clump, the combination with a spring-loop having suspending means and clamping-lugs, of a bolt passing through said loop and provided with a thumb-nut, whereby said lugs may be adjusted in relation to

each other at will, substantially as described. 3rd. In a mail-sack clamp, the combination with a spring-loop, of lugs mounted upon the same and having grooves cut in their sides which form when together a dovetail recess adapted to receive and hold a ring, substantially as described. 4th. In a mail-sack clamp, the combination with a spring-loop having lugs mounted thereon and adapted to receive and hold the ring of the mail-sack, of a guard-plate connected to one end of said spring and lapping over the other to prevent the sack-ring from accidentally passing into the loop, substantially as described. 5th. In a mail-sack clamp, the combination with a spring-loop having lugs having grooved sides which form when together a dovetail recess, of supporting means for said loop, a bolt passing through said loop and a thumb-nut on said bolt for drawing the loop together and adjusting the lugs in relation to each other, substantially as described. 6th. In a mail-sack clamp, the combination with a spring-loop, of means for supporting the same, lugs mounted on said loop and having grooved sides which form when together a dovetail recess for the reception of a sack-ring, and a guard-plate connected to one end of said spring-loop and lapping over the other to prevent the sack-ring from accidentally passing into the loop, and means for adjusting the spring-loop, whereby the relative positions of the lugs may be altered at will, substantially as described.

No. 60,542. Firearm. (Arme à feu.)

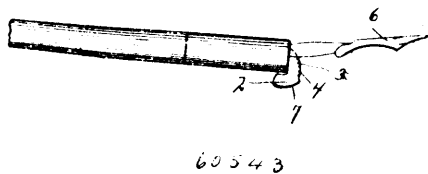


Charles E. Whilden, Charleston, South Carolina, U.S.A., 9th July, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. In the construction of firearms, double shot-barrels provided with a socket at their breech end, a rifle-barrel removably secured in said socket, and a locking connection between the rifle-barrel and the bottom portion of the shot-barrels near their forward ends, as and for the purpose specified. 2nd. In the construction of firearms the combination with double shot-barrels provided with a socket at their breech end and with a longitudinal dovetail recess at their muzzle end, of a rifle-barrel fitting in the said socket and provided with a dovetail projection fitting in the said recess, substantially as described. 3rd. In the construction of firearms, the combination with shot-barrels, of a removable rifle-barrel on the under side of the shot-barrels and provided with a depending lug, and a rifle-lock and forked double-armed mainspring with which the said lug engages to compress the same, substantially as described. 4th. In the construction of firearms, the combination with shot-barrels, of a rifle-barrel detachably secured to the under side of the shot-barrels and provided with a depending shouldered lug and a rifle-lock and a double-armed main-spring having a shoulder near the end of one of its members, and with which member the lug of the rifle-barrel engages to compress the said spring, substantially as described. 5th. In a firearm, the combination of a hammer located in the centre of action and provided with abutments on opposite faces, and a mainspring having its lower member pivotally connected with the hammer and its upper member forked, the members of which project on opposite sides, of the hammer below the abutments thereof, whereby when the spring is relieved of pressure the forked member of the spring will engage the abutments of the hammer and throw it into cocked position, substantially as described. 6th. In a three-barrel firearm, the combination with the shot-barrels, a rifle-barrel, and the sear of one of the shot-barrels, of a hammer arranged in the centre of action and adapted to fire the rifle-barrel, a spring controlling the said hammer, a sear engaging the hammer, and a trigger formed of a body-section and a tripping-section sliding on one side of the body-section so as to project beyond the rear end of the same and extend into the path of one of the sears when moved rearwardly, the said tripping-section extending into the path of the other sear when moved forwardly, substantially as described. 7th. In a three-barrel firearm, the combination with the shot-barrels, a rifle-barrel, and the sear of one of the shot-barrels, of a hammer arranged in the centre of action and adapted to fire the rifle-barrel, a sear engaging the hammer, and a trigger, consisting of a body-section having a longitudinal channel in one side, and a tripping-section sliding in the channel of the body-section so as to project beyond the rear end of the same and extend into the path of one of the sears when moved rearwardly, the said tripping-section being provided with a thumb-piece for manipulating it and extending into the path of the other sear when moved forwardly, substantially as described. 8th. In a firearm, comprising a body-section, and a tripping-section sliding on one side of the body-section so that its rear end will project beyond the end of the said body-section for

engagement with one sear when moved rearwardly, the said tripping-section being provided with a thumb-piece for manipulating it and adapted to extend into the path of the other sear when moved forwardly, substantially as described. 9th. In a firearm, a trigger, consisting of a body-section having a longitudinally-extending channel in one side and provided with laterally-projecting pivot-pins, and a tripping-section fitting in the channel of the body section and provided with a longitudinal slot to receive one of the pivot-pins of the body-section, and at its forward end with a thumb piece projecting below the said body-section, said tripping-section extending into the path of one sear when moved forwardly and having its rear end projecting beyond the rear end of the body-section for engagement with the other sear when moved rearwardly, substantially as herein shown and described. 10th. In a three-barrel gun, a trigger, comprising a body-section having a finger-piece and provided with a channel in one side, and a slide or tripping-section fitted to slide in the channel of the body-section and provided with a lip at its forward end, said lip extending over the upper edge of the said body-section, and adapted to engage a rifle-lock sear, the rear end of the tripping-section being adapted to engage the sear of a shot-gun lock, substantially as herein shown and described. 11th. In a three-barrel gun, a trigger, comprising a body having a finger-piece and provided with a channel in one side, and a pin projecting from each side whereby it is adapted to be pivoted, a sliding section mounted in the channel and provided at its forward end with a lip projecting over the upper edge of the body and with a slot to receive one of the pins of the body, and means for locking the parts together, substantially as described. 12th. In a three-barrel gun, the combination with the shot-barrels, a rifle-barrel on the under side of the shot-barrels, and the sear of one of the shot-barrels, of a hammer arranged within the centre of action and adapted to fire the rifle-barrel, a spring controlling the hammer, a sear engaging the hammer, and a trigger formed of a pivoted body-section having a finger-piece, and a sliding section mounted on the body-section and provided with a lip at its forward end and adapted to engage the rifle-lock sear, the rear end of the said sliding section being adapted to engage the shot-gun lock sear, substantially as described. 13th. In a three-barrel gun, the combination with the shot-barrels, and a rifle-barrel on the under side of the shot-barrels, of a hammer arranged in the centre of action and adapted to fire the rifle-barrel, a spring controlling the hammer, a sear engaging the hammer and provided with a lateral arm, a sear for one of the shot-gun locks provided with a lateral arm, and a trigger formed of a pivoted body having a finger-piece and provided with a channel in one side, and a sliding section mounted in the channel of the body and provided with a lip at its forward end and with a thumb-piece, the lip and rear end of the said sliding section being adapted to be moved to be alternately engaged by the arms of the sears of the rifle and shot-barrel locks, substantially as described.

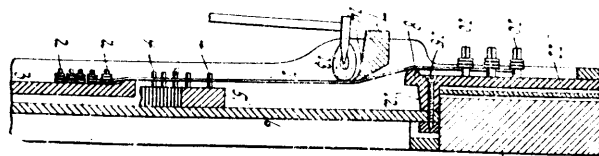
No. 60,543. Pen Ejector. (Arrache-plumes.)



Steen J. Sims, Thayer, Kansas, U.S.A., 9th July, 1898; 6 years. (Filed 27th April, 1898.)

Claim.—A pen-holder having a tubular portion, in combination with a pen-ejector, pivoted in the forward end of said tubular portion, formed with a circular outer surface, and provided with teeth or projections along said outer surface, a milled outer end or handle upon said ejector whereby the same may be turned on its pivotal point, and a shoulder adapted to be engaged by the end of the pen-point as the latter is being inserted, substantially as and for the purpose described.

No. 60,544. Piano. (Piano.)

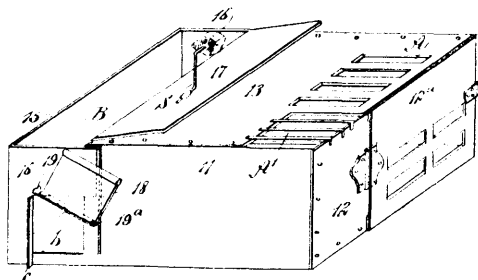


Otto Wissner, Brooklyn, New York, U.S.A., 9th July, 1898; 6 years. (Filed 6th May, 1898.)

Claim.—1st. A piano or stringed instrument provided with a lower bridge engaging the front faces of the strings above the hammers, a wrest-plank, an upper bridge engaging the rear faces of the strings and having an angle-plate made to overlap the wrest-

plank and to sustain the upper bridge clear of or below said wrest-plank, and a sounding-board extended beyond said bridges and secured to the overlapping part of the bridge plate, substantially as described. 2nd. A piano or stringed instrument provided with a lower bridge engaging the front faces of the strings above the hammers, a wrest-plank, an upper bridge engaging the rear faces of the strings and having an angle-plate made to overlap the wrest-plank and to sustain the upper bridge clear of or below said wrest-plank, and a sounding-board extended beyond said bridges and secured to the overlapping part of the bridge-plate, said lower bridge being placed close to the hammer and having its hammer-facing side curved or rounded to correspond to the swing and shape of the hammer, substantially as described.

No. 60,545. Animal Trap. (Pidge.)



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Job Thorniley Wells, Cando, North Dakota, U.S.A., 9th July, 1898; 6 years. (Filed 16th May, 1898.)

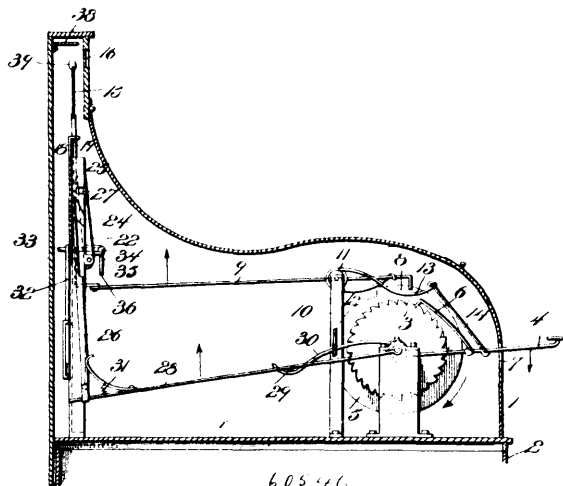
Claim.—1st. The combination with a trap body or cage having a gangway at one end, a side passage connecting the cage and gangway, and two rockable gates that when pendent close the ends of the gangway, of a tilting table, a rockable platform, a device extending from the pivot support of the platform to engage one end of the tilting table, and means connecting the gates and platform, that adapt the movement of said platform to control the gates and tilting table, substantially as described. 2nd. The combination with a trap body or cage having a transverse gangway at one end, and a narrow compartment at one side connecting the cage and gangway, of two gates mounted on the ends of a rock-shaft and adapted when pendent to close the ends of the gangway, a tilting table located in the said compartment, a connection between the said rock-shaft and one end of the said table, whereby when the said end of the table is elevated, the rock-shaft will be oscillated to lift the gates, and a rockable spring-pressed platform in the gangway, the said platform being provided with means for engaging and supporting the end of the tilting table when the latter is elevated, the depression of the said platform releasing the end of the table and permitting the gates to fall by gravity, and the table to tilt, substantially as described. 3rd. The combination, with a trap body or cage having a transverse gangway at one end, and an apertured longitudinal partition in the cage forming a narrow compartment at one side thereof, of a tilting table pivoted in the narrow compartment and guarding the passage from the gangway into the cage, a spring-pressed platform attached at one edge on a rockable shaft, a finger on said shaft adapted to support one end of the tilting table elevated, a rock-shaft journaled in the gangway end wall, a gate secured on an angular bent arm at each end of the rock-shaft and adapted to close the ends of the gangway, a rock-arm on the rock-shaft, an arm on the end of the tilting table nearest to said rock-arm, and a link pivotally connected to the arm of the table and the rock-arm on the shaft, substantially as described.

No. 60,546. Cash Drawer. (Tiroir à monnaie.)

Alexander K. Suddoth, Memphis, Tennessee, U.S.A., 9th July, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—1st. In a device of the class described, the combination of an indicator, a ratchet-wheel, a key adapted to engage and actuate the ratchet-wheel, a cam-disc carried by the ratchet-wheel, and a lever adapted to actuate and expose the indicator and connected with and operated by a cam-disc, substantially as described. 2nd. In a device of the class described, the combination of an indicator, a lever fulcrumed intermediate of its ends and having one end arranged to engage the indicator, a cam-disc receiving the other end of the lever and adapted to actuate the lever to expose the indicator, and means for operating a cam-disc, substantially as described. 3rd. In a device of the class described, the combination of a casing, an indicator-operating lever, a cam-disc engaging the lever, a ratchet-wheel connected with the cam-disc, a key adapted to actuate the ratchet-wheel, and a spring connected with the lever and adapted to actuate the same when released by the cam of the disc, substantially as described. 4th. In a device of the class described, the combination of an indicator-operating lever, a cam-disc engaging the same, a ratchet-wheel connected with the cam-disc, a key carrying an actuating pawl engaging the ratchet-wheel, and a spring

having one arm engaging the lever and another arm for supporting the key, substantially as described. 5th. In a device of the class

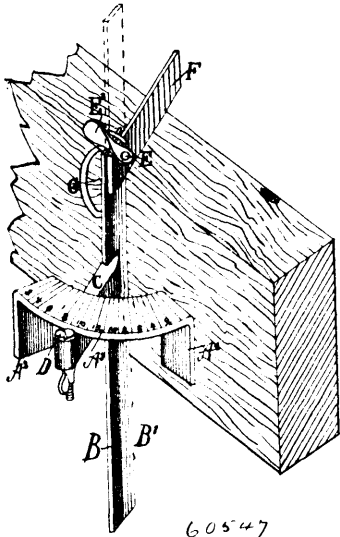


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described, the combination of a vertically-movement indicator, a spring-actuated lever arranged to engage the indicator and move the same upward, a clamp arranged to engage the indicator to hold the same elevated, a cam-disc engaging and controlling the spring-actuated lever, a ratchet-wheel carrying the cam-disc, a key for actuating the ratchet-wheel, and a releasing device operated by the key and adapted to throw the catch out of engagement with the indicator to permit the latter to fall, substantially as and for the purpose described. 6th. In a device of the class described, the combination of a support provided with guides, an indicator having a stem mounted in the guides and composed of independently movable upper and lower sections, a lever arranged to engage the lower section to raise the indicator, a catch arranged to engage the upper section of the stem of the indicator to hold the latter elevated, and a shifting device arranged to engage the lever to swing the same laterally of the lower section to cause the latter to fall, whereby the indicator will be free to fall when released from the catch, substantially as and for the purpose described. 7th. In a device of the class described, the combination of a support, a series of vertically-movable indicators mounted thereon, a horizontally disposed spring-actuated catch extending across the series of indicators and arranged to engage the same to hold them elevated and provided at one end with a horizontal stud, a vertically-reciprocating releasing device provided with an inclined arm arranged to engage the stud to throw the catch outward from the indicators when moving upward, and adapted to ride over the stud in its downward movement, and means for operating the indicators and releasing device, substantially as described. 8th. In a device of the class described, the combination of a support, a vertically-movable indicator having a stem mounted in suitable guides and provided with independently-movable upper and lower sections, a spring-actuated catch arranged to engage the upper section of the stem, a releasing device adapted to throw the catch outward, a lever arranged to engage the lower section of said stem to raise the indicator, a shifter arranged to engage the lever to swing the same out of engagement with the lower section of the stem, and means for operating the lever, the releasing device and the shifter, substantially as described. 9th. In a device of the class described, the combination of a support, a vertically-movable indicator, a catch arranged to engage the indicator to hold the same elevated, a reciprocating releasing device arranged to engage the catch, a lever for operating the indicator, a cam-disc engaging the lever, a ratchet-wheel connected with the cam-disc, a lever-frame connected with and adapted to reciprocate the releasing device and a key adapted to actuate the ratchet-wheel and provided with an arm engaging the lever-frame, substantially as and for the purpose described. 10th. In a device of the class described, the combination of a support, a series of vertically-movable indicators mounted thereon, each provided with a stem composed of independently-movable upper and lower sections, a series of levers arranged to engage the lower sections of the stems to actuate the indicators, a catch arranged to engage the upper sections of the indicators, a reciprocating shifting device provided with a series of arms arranged to engage said levers and adapted to move the same away from the lower sections of the stems, a vertically-movable releasing device arranged to engage the catch, and a bell-crank lever fulcrumed on the support and having one arm connected with the releasing device and its other arm connected with the shifting device, substantially as and for the purpose described. 11th. In a device of the class described, the combination of a support, a series of vertically-movable indicators mounted on the support, a substantially rectangular spring-actuated catch hinged to the support and engaging the indicators and provided with a stud, a vertical way mounted on the support and receiving the stud, and a reciprocating releasing device consisting of an inclined arm having inclined upper and lower

edges, the upper edge being capable of throwing the stud outward and the lower edge being adapted to ride over the same, substantially as and for the purpose described. 12th. In a device of the class described, the combination of a frame or support, a series of ratchet-wheels, cam-discs actuated with the ratchet-wheels and carried by the same, a series of spring-actuated levers engaging the cam-discs at their front ends and fulcrumed intermediate of their ends, a series of indicators arranged to be engaged by the rear ends of the levers, a shifting device arranged to move the levers away from the indicators, a catch for holding the indicators elevated, a releasing device for throwing the catch out of engagement with the indicators, a lever-frame carrying the releasing device and connected with the shifting device, and keys arranged to actuate the ratchet-wheels and provided with arms for operating the lever frame, substantially as described.

No. 60,547. Roofing Tool. (*Outil pour couvreurs.*)



John Parkhill, Rochester, Minnesota, U.S.A., 9th July, 1898; 6 years. (Filed 8th June, 1898.)

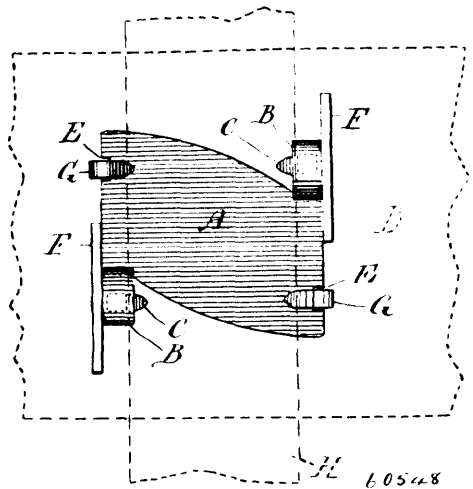
Claim.—1st. A tool, the same comprising a member having a bearing and a marking edge in the plane of said bearing, and a finger pivoted to said member about an axis arranged transversely of the direction of the marking edge, to swing in line with the marking edge and at angle to the plane of the bearing, substantially as described. 2nd. A tool, the same comprising a member having a bearing-body provided with converging end surfaces, and a marking edge coinciding with the line of intersection of the planes of said end surfaces, and a finger pivoted to the said member adjacent to the marking edge, substantially as described. 3rd. A tool, the same comprising a member having a marking edge and a slideway, a curved bearing-plate movable in said slideway the centre of curvature being upon the marking edge, means for locking the bearing-plate in the slideway of said member, and a finger pivoted to said member adjacent to the marking edge, substantially as described. 4th. A tool, the same comprising a member having a marking edge, a finger pivoted to said marking edge, and a bearing body adjustably secured to said member to permit of adjusting the angle formed between the end surface of said bearing-body and the plane in which the pivoted finger swings, substantially as described.

No. 60,548. Railway Tie-Plate. (*Lien pour plaques de chemin de fer.*)

Joseph F. Dionne and J. Adolphe Guy, both of Edmunston, New Brunswick, Canada, July 9th, 1898; 6 years. (Filed 9th June, 1898.)

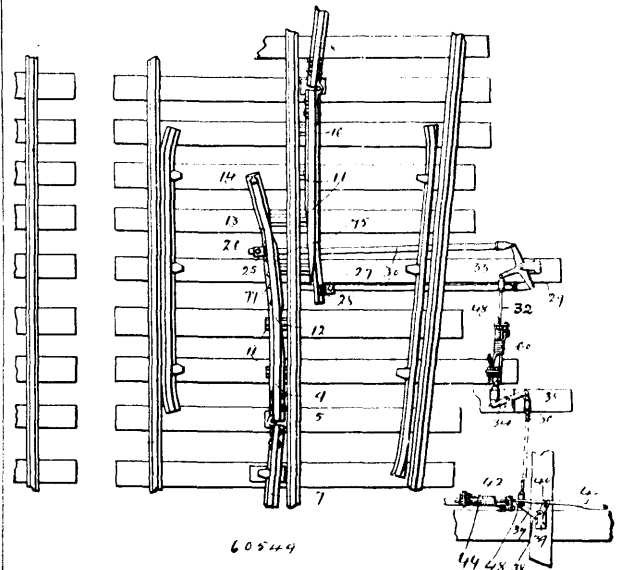
Claim.—1st. A railroad tie safety-plate adapted to receive the base of a rail and having toes or caps B, B, at diagonally opposite corners, each bent in opposite directions, and upturned flanges E, E, at the ends of said plate to hammer the same from a skewed to a square position with respect to the rail, whereby said toes or caps will more or less cover the heads of spikes in position holding the rail to a tie, as set forth. 2nd. A rail and tie safety-plate comprising a quadrangular sole plate A, having at two diagonal corners, toes or caps B, bent upwardly from the plate and then parallel thereto in opposite directions, and adapted to cover or partly cover the heads of spikes correspondingly driven into a tie, said spikes driven at opposite sides of the rail, substantially as set forth. 3rd. A rail and tie safety-plate, comprising a quadrangular or a parallel-

ogramic sole plate A, having toes or caps B, B, at the ends and bent in reverse directions at two diagonally opposite corners, and flanges



E, E, bent upwardly against said caps, said ends provided with a notch F, as and for the purpose set forth.

No. 60,549. Railway Switch. (*Aiguille de chemin de fer.*)



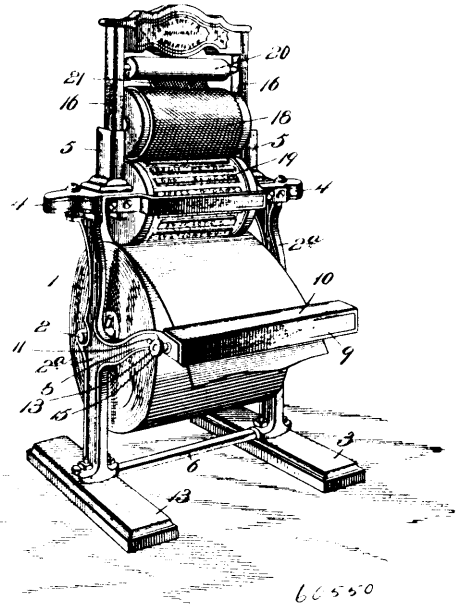
Duncan MacPherson, Montreal, Quebec, Canada, 9th July, 1898; 6 years. (Filed 8th June, 1898.)

Claim.—1st. The short frog rail for railway switches having a horizontal band and also bent vertically at two points, the head being planed off at an angle near its free end and recessed on one side of such portion, for the purpose set forth. 2nd. The long frog rail for railway switches having two horizontal bends and a vertical bend with the top set down or planed to an oblique angle at its free end, for the purpose set forth. 3rd. In combination with a frog rail adapted to overlap a main rail, means carried by the frog rail for preventing canting of the latter when in working position and borne upon, as set forth. 4th. In combination with a frog rail adapted to overlap a main rail, means consisting of a projection carried by the frog rail and adapted to rest upon the main rail to prevent canting of the frog rail when in working position and borne upon, as set forth. 5th. In combination with a frog rail adapted to overlap a main rail, means consisting of a metal strap secured to the side of the frog rail and adapted to rest upon the main rail to prevent canting of such frog rail when in working position and borne

upon, as set forth. 6th. In combination with a frog rail adapted to overlap a main rail, means consisting of rivets projecting from the underside of the frog rail and adapted to rest upon the main rail to prevent canting of such frog when in working position and borne upon, as set forth. 7th. In combination with the stationary and movable portions of a frog rail, hinge plates located on one side of the rails and bracing plates on the opposite side of the rails with suitable connecting bolts, one of said bracing plates being set with its inner end a short distance back from the hinge end of the stationary rail and the other bracing plate projecting beyond the hinge end of the movable rail to overlap the stationary rail, for the purpose set forth. 8th. A connection easily changed from rigid to flexible for connecting together certain of the parts of switch operating mechanism and consisting of a pair of off-set bars, a sliding connection between the main portions of said bars, a yielding connection between the off-set portions thereof, a frangible rigid connection between said off-set portions, and said bars being connected respectively to the switch stand and switch, for the purpose set forth. 9th. A connection easily changed from rigid to flexible for connecting together certain of the parts of switch operating mechanism and consisting of a pair of off-set bars, a sliding connection between the main portions of said bars, a coiled spring connecting the off-set portions thereof, means for varying the tension of said spring, a frangible rigid connection between said off-set portions, and said bars being connected respectively to the switch stand and switch, for the purpose set forth. 10th. A connection easily changed from rigid to flexible for connecting together certain of the parts of switch operating mechanism and consisting of a pair of off-set bars, a sliding connection between the main portions of said bars, a coiled spring connecting the off-set portions thereof, a screw-threaded rod connected through intermediaries to the switch stand and taking freely through perforations in said off-set portions, a pair of nuts taking upon said rod and located one on each side of the off-set portion of one of said bars, a nut taking upon said rod and located at one side of the off-set portion of the other of said bars and a pin taking through said rod adjacent to the other side thereof, this last mentioned bar being connected through intermediaries to the switch, substantially as and for the purpose set forth. 11th. In combination with an unbroken main rail and portions of a broken turnout rail arranged upon opposite sides of the main rail, a frog comprising a member connected in a hinged manner with the end of the inner turnout rail portion, and bent so that when it is adjusted against said main rail, its central portion will set parallel to the main rail and its free end rest away from same, means adapted to prevent the canting of said member, and a second member connected in a hinged manner with the end of the outer turnout rail portion and adapted to be adjusted against the opposite side of the main rail with respect to the first mentioned member, and means for adjusting said members, substantially as and for the purpose set forth. 12th. In combination with an unbroken rail and portions of a broken turnout rail arranged upon opposite sides of the main rail, a frog comprising a member connected in a hinged manner with the end of the inner turnout rail portion, and bent so that when it is adjusted against said main rail, its central portion will set parallel to the main rail and its free end rest away from same, means adapted to prevent the canting of said member, and a second member connected in a hinged manner with the end of the outer turnout rail portion and adapted to be adjusted against the opposite side of the main rail with respect to the first mentioned member, said second member having the portion thereof that comes in contact with the main rail upwardly off-set in an inclined plane and bent horizontally, and means for adjusting said members, substantially as and for the purpose set forth. 13th. In combination with an unbroken main rail and portions of a broken turnout rail arranged upon opposite sides of the main rail, a frog comprising a member connected in a hinged manner with the end of the inner turnout rail portion, and bent so that when it is adjusted against its main rail, its central portion will set parallel to the main rail and its free end rest away from said main rail, means adapted to prevent the canting of said member, consisting of a device carried rigidly by said member and adapted to rest upon the main rail, and a second member connected in a hinged manner with the end of the outer turnout rail portion and adapted to be adjusted against the opposite side of the main rail with respect to the first mentioned member, and means for adjusting said member, substantially as and for the purpose set forth. 14th. In combination with an unbroken main rail and portions of a broken turnout rail arranged upon opposite sides of the main rail, a frog comprising a member connected in a hinged manner with the end of the inner turnout rail portion, and bent so that when it is adjusted against said main rail, its central portion will set parallel to the main rail and its free end rest away from said main rail, means adapted to prevent the canting of said member, and a second member connected in a hinged manner with the end of the outer turnout rail portion and adapted to be adjusted against the opposite side of the main rail with respect to the first mentioned member, said hinges consisting of hinge plates 64 and 65, connected to the webs of the turnout rails and frog rails respectively, having plates 69 and 70, 69 being secured to one of said webs and set with its end a short distance back from the end of said web and 70 being secured to the other of said webs and set with its end 71, projecting beyond the web to overlap the adjacent end of said first mentioned web, and means for adjusting said members, substantially as and for the purpose set forth.

No. 60,550. Printing Device for Paper Roll Holders.

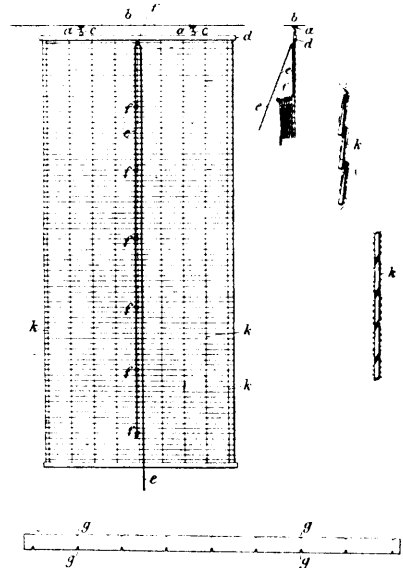
(Appareil à imprimer pour porte-rouleaux de papier.)



Joseph Spillinger, Philadelphia, Pennsylvania, U.S.A., 9th July, 1898; 6 years. (Filed 16th June, 1898.)

Claim.—In a device of the class described, the combination with a paper-roll holder, of a vertically-movable automatically-adjustable frame mounted on the same, printing and inking rolls carried by the vertically-movable frame, an ink-reservoir provided at its bottom with perforations and having cranks at its ends journaled on the vertically-movable frame, a handle connected with one of the cranks and adapted to rotate the reservoir to invert the same, stops mounted on the vertically-movable frame for holding the reservoir in its operative and inverted positions, and an adjustable rod arranged within the reservoir and adapted to open and close the perforations thereof, substantially as described.

No. 60,551. Blind. (Persienne.)

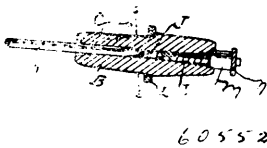


John Francis Adams, Taplow, Buckinghamshire, and Charles Risbee Iorns, Riverdale Road, Stoke Newington, London, all in England, 9th July, 1898; 6 years. (Filed 20th June, 1898.)

Claim. 1st. In lath blinds, forming notches in the edges of the laths, for the reception of the cords or the like, by means of which the laths are connected together. 2nd. In lath blinds, bevelling the edges of the laths for the purpose set forth. 3rd. In lath blinds, making the laths wedge-shaped in cross-section, for the purpose set forth. 4th. In lath blinds, the employment of a cord, passing through rings fixed to the laths, for the purpose of drawing up the blind in laps.

No. 60,552. Hat Pin Guard.

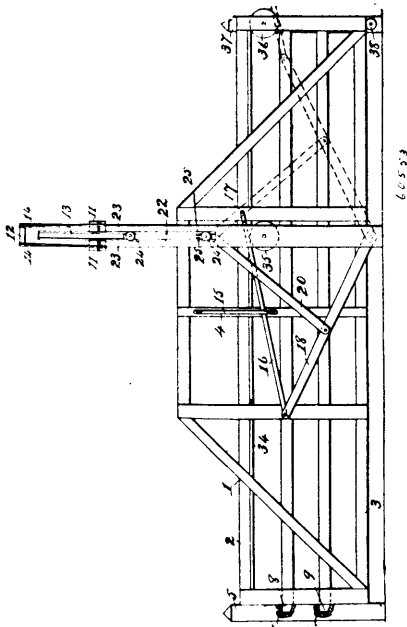
(*Garde pour epingles à chapeaux.*)



William F. Kessinger, Blanchard, Pennsylvania, U.S.A., 9th July, 1898; 6 years. (Filed 20th June, 1898.)

Claim.—1st. A clamp or securer for hat-pins, comprising two jaws substantially semi-cylindrical in form, each end being slightly tapered and one end smaller than the other, the two diameters being joined by a shoulder, a ring adapted to be slipped upon the smaller diameter, a threaded rod inserted between the jaws, bearing upon the ring and projecting beyond the rear ends of the jaws, and a tapered nut engaging the projecting end of the threaded rod for forcing the rear ends of the jaws apart, substantially as described. 2nd. The combination of the jaws, B and C, each provided with recesses D and E, which, when the jaws are placed together, form a central bore with an increasing diameter from the middle to the ends, each jaw being formed with a shoulder H, on its outside, the ring L, adapted to embrace the smaller ends of the jaws and resting against the shoulder H, the threaded rod I, forked at J and provided with outwardly-projecting toes K, and the tapering nut M, adapted to be inserted in the larger end of the central recess and to engage the threaded end of the rod I, substantially as described.

No. 60,553. Gate. (Barrière.)

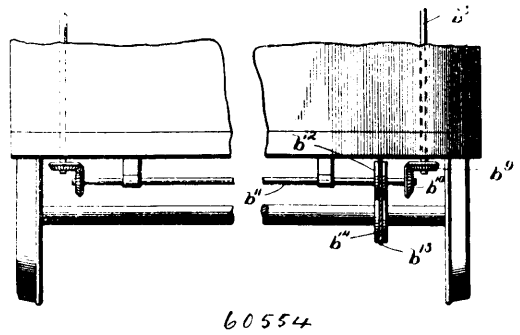


Alexander Mason, Fort Madison, Iowa, U.S.A., 9th July, 1898; 6 years. (Filed 20th June, 1898.)

Claim.—1st. In a lever-operated sliding gate, the combination of a gate portion or structure, gate posts, wheels borne by two of said posts and adapted to support and guide said gate, a pivoted arm, a bar pivotally connected with said arm and gate, a weight, devices for raising said weight, a bar pivotally connecting said arm and weight, said weight raising and falling during each opening and each closing movement of the gate, substantially as described. 2nd. In a lever-operated sliding gate, the combination of a gate portion or structure, gate posts, wheels borne by two of said posts and adapted to support and guide said gate, a pivoted arm, a bar pivotally connected with said arm and gate, and upright attached to said gate, a rod 15, having bent ends secured to said upright and forming a retaining guide for said connecting bar, a weight, one of said posts being relatively longest and having a vertical slot capable of receiving said weight, angle irons edging said slot, rollers borne by the weight, a bar pivotally connecting said arm and weight, cross pieces fixed upon said longest post, levers fulcrumed upon said cross pieces, links pivotally joining said weight and said levers, and hand rods shackled to the free ends of the levers, said weight raising and falling during each opening and each closing movement of said gate, as set forth.

No. 60,554. Car Advertising Device.

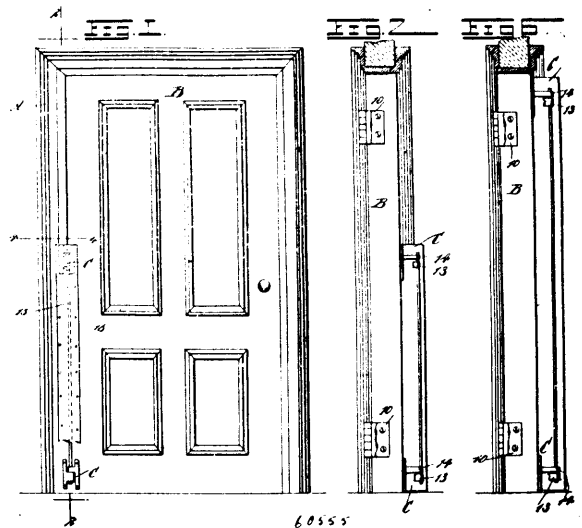
(*Appareil d'annonce pour chars.*)



William Keys, Montreal, Quebec, Canada, 11th July, 1898; 6 years. (Filed 9th April, 1898.)

Claim.—1st. The combination with a car, of rollers pivotally mounted in the opposite ends of said car, an endless belt containing advertisements mounted on said rollers, and means connected to the axle of said car and to one of said rollers, for imparting a rotary movement to said rollers, whereby said endless belt will be moved along said car. 2nd. The combination with a car, of rollers pivotally mounted in the ends of said car, an endless belt provided with advertisement matter mounted on said rollers, a shaft pivotally mounted on the bottom of said car, connections between the axle of said car and said shaft for rotating said shaft, and means operated by said shaft and connected to one of said rollers for rotating said rollers, whereby said endless belt will be moved lengthwise of said car, substantially as described.

No. 60,555. Door Guard. (Garde pour portes.)

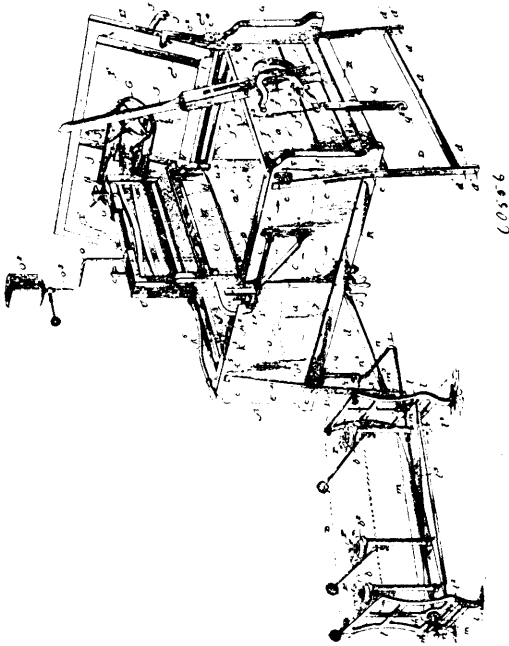


Jefferson Jackson Nagley, Marysville, Washington, U.S.A., 11th July, 1898; 6 years. (Filed 24th June, 1898.)

Claim.—1st. An improved door guard, consisting of a flexible sheet adapted to be secured to the door and to its frame or jamb, crossing the opening at the place where the door is hinged, and auxiliary hinges attached to the door and jamb, members of the said hinges being carried at an angle to the door and jamb within the said flexible sheet for the purpose specified. 2nd. A door guard, consisting of hinges adapted for attachment to a door and the door frame or jamb, each hinge consisting of body plates, and pivoted arms horizontally projected from the said plates, one above the other, a rod connecting the arms of the hinges, and a cover sheet or strip adapted for attachment to the door frame or jamb and the door, the said sheet or cover strip receiving within it the said hinges, for the purpose specified. 3rd. An improved door guard, consisting of a flexible sheet secured to the door and its frame or jamb for the purpose of covering the opening at the place where the door is hinged, and hinges, each hinge consisting of two body plates, one adapted for attachment to the door jamb and the other to the door, each body plate being provided with a horizontal pivoted arm, the arms of the plates being arranged one above the other, knuckles formed at the free ends of the arms of the hinges, and a rod passed

through the said knuckles connecting the hinges, the hinges and connecting rod being within the space enclosed by the said flexible strip or sheet, for the purpose set forth.

No. 60,556. Washing Machine. (Machine à laver.)

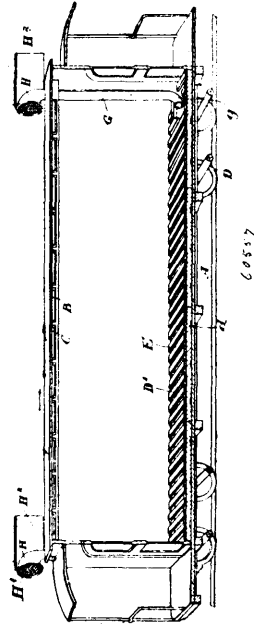


Rev. John Junkin Francis D.D. and Louise Cummins Francis, both of Cincinnati, Ohio, U.S.A., 11th July, 1898; 6 years. (Filed 24th June, 1898.)

Claim.—1st. The combination of a receptacle having separate compartments, and a wringer-carrier arranged exteriorly to the receptacle and movable bodily in a horizontal direction thereon to a position opposite an end wall of either compartment of said receptacle, as and for the purposes described. 2nd. The combination with a receptacle divided by a partition into two compartments, of a wringer-carrying bar, and means substantially such as described for supporting said bar whereby the bar may be held over the partition or over an end wall of the receptacle, substantially as and for the purposes described. 3rd. The combination of a receptacle, of a pivoted wringer-carrying bar adapted to be turned vertically and an adjustable support for said wringer bar to hold the same over the partition or one end of the tub, substantially as and for the purposes described. 4th. The combination with a divided receptacle, of a crane, a swiveled bracket carried thereby, and a wringer-bar attached to said bracket, substantially as and for the purposes described. 5th. The combination with a divided receptacle, of a swinging crane pivoted to the receptacle, means for lock said crane in either of its adjusted positions, and a wringer-bar carried by the crane, substantially as described. 6th. The combination with a divided receptacle, of a pivoted reversible crane, a bracket swiveled to the crane, and a wringer bar carried by the bracket, substantially as and for the purposes described. 7th. The combination with a divided receptacle, of a notched or recessed lid for said receptacle, a pivoted wringer bar adapted to fit in the notch or recess of said lid and having fasteners for engaging with the receptacle to detachably connect said bar to said receptacle, and a movable support for the wringer-bar, substantially as described. 8th. The combination with a receptacle having a transverse partition, of a reversible crane pivotally supported in the receptacle between one end thereof and the partition, a vertical bracket swiveled by a vertical bolt on the free end of the crane and supported thereon to turn in a horizontal plane, and a wringer-bar pivoted to the bracket by a horizontal bolt to adapt said bar to turn in a vertical plane, whereby the wringer-bar may be turned on its pivotal bolt to clear the receptacle and the bracket can be adjusted to fold with the wringer-bar alongside of the receptacle, substantially as and for the purposes described. 9th. The combination of a receptacle, provided with a notched cleat, *f*, near its upper end, a perforated false bottom fitted on the bottom of said receptacle and having a notch, *k*, a vertical locking bar having its lower end fitted in the notched false bottom and its upper end seated in the notched cleat, and a catch to drop over the upper end of the locking bar and hold the same within the notched cleat, substantially as and for the purposes described. 10th. The combination with a receptacle, of the pendent hanger, *g*, attached to said receptacle, a supply pipe attached to the receptacle and having its lower end fitted in the hanger, *q*, another hanger attached to the opposite end of the receptacle and

provided with a seat at its lower end, a heater having a horizontal pipe which, when the heater is adjusted below the receptacle, fits in the seat of the last mentioned hanger, and a swiveled coupling which unites the supply pipe and the heater pipe and furnishes a hinge on which the heater may be swung out bodily from the receptacle, substantially as and for the purposes described.

No. 60,557. Ventilated Car. (Char ventilé.)

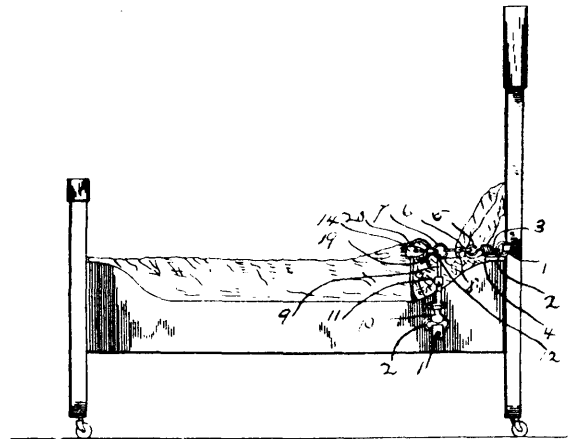


John Clarke, Orangeville, Ontario, Canada, 11th July, 1898; 6 years. (Filed 25th June, 1898.)

Claim.—1st. In a ventilated car, the combination with the bottom provided with longitudinal timbers and slatted false bottom, of the end pipes extending into the passage-ways and out of the top of the car and the revoluble cowls held in the upper end thereof and provided with vanes diametrically opposite the cowl openings and the ventilating openings at the top of the car, as and for the purpose specified. 2nd. In a ventilated car, the combination with the bottom provided with longitudinal timbers and slatted false bottom, of the end pipes extending into the passage-ways and out of the top of the car and the revoluble cowls held in the upper end thereof and provided with vanes diametrically opposite the cowl openings, the wire mesh covers for the mouths of the cowls and the ventilating openings at the top of the car, as and for the purpose specified.

No. 60,558. Bedclothes Holder.

(*Accroche-couvertures de lits.*)

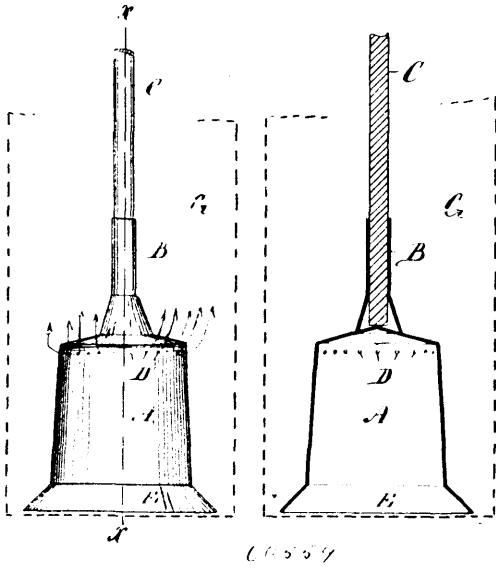


Irving D. Cresson, Crown Point, Indiana, U.S.A., 11th July, 1898; 6 years. (Filed 25th June, 1898.)

Claim.—In a device of the character set forth, the combination of securing devices adapted to be attached to the headboard and side

rails of a bed, a yielding member including a spring having a ring attached thereto, a clasp attached to the opposite side of the ring, and a vertically-adjustable retaining-trap having its upper end secured to the ring and its lower end movably connected to the bed. the securing device for attachment to the adjacent side rail of the bed.

No. 60,559. Milk Aerator. (*Aérateur de lait.*)

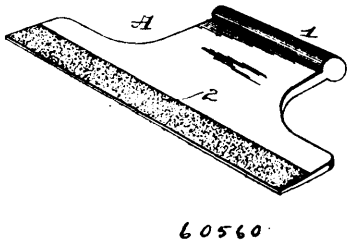


Charles Henry Whitworth, Westport, Ontario, Canada, 11th July, 1898; 6 years. (Filed 27th June, 1898.)

Claim.—A milk aerator, comprising a bell-shaped, open-mouth hollow vessel A, having a series of perforations D, around the top, and provided with a socket B, at the top to receive a handle C, as set forth.

No. 60,560. Lawn Mower Blade Sharpener.

(*Aiguiseur pour faucheuses de pelouses.*)



Charles Warren Goodrich, Gardiner, Maine, U.S.A., 11th July, 1898; 6 years. (Filed 28th June, 1898.)

Claim.—As an article of manufacture, a lawn mower sharpener comprising a straight-blade portion provided with a grinding-surface and having a handle at one end by which it is tilted and held in the required position for sharpening the knives as they are revolved against the grinding-surface.

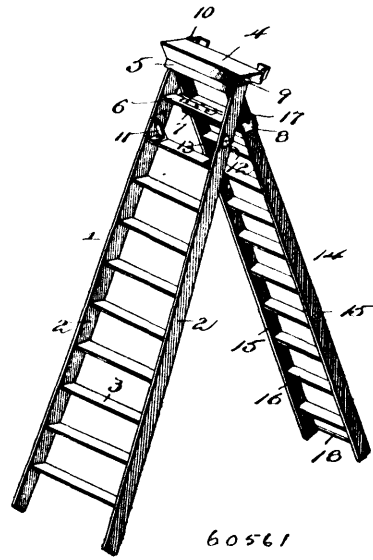
No. 60,561. Combined Step and Extension Ladder.

(*Echelle à marches et rallonge.*)

Emilio Cardarelli, Boston, Massachusetts, U.S.A., 11th July, 1898; 6 years. (Filed 29th June, 1898.)

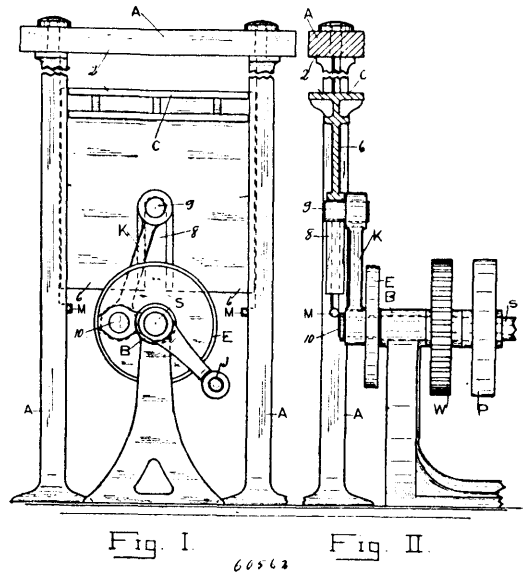
Claim.—1st. In a ladder, the combination of a main section having a step secured upon the upper ends of its side rails, clips hinged to the main section below the top step, a supplementary section slidably supported between the clips, and its upper end engaging the lower face of said upper step when the lower ends of the sections are spread apart, and means to limit the inward movement of the upper end of the supplementary section, substantially as described. 2nd. In a ladder, the combination of a main section having a step secured upon the upper ends of its side rails, and provided with a downwardly extending flange, clips hinged to the main section below the top step, and a supplementary section slidably supported between the clips, and its upper end engaging the said upper step and flange when the lower ends of the sections are spread apart, substantially as described. 3rd. In a ladder, the combination of a main section, clips hinged thereto near its upper end, clips rigidly secured thereto

above the hinged clips and having vertically disposed grooves, a supplementary section slidably supported by the said clips, pin pro-



jecting from the side rails of the supplementary section near its upper end and adapted to engage the hinged clips and to pass through the grooves in the fixed clips, and a catch on the lower end of the supplementary section adapted to engage the step on the main section, when the ladder is extended, substantially as described. 4th. In a ladder, the combination of a main section having inclined shoulders on the inner faces of said side rails between two steps near its upper end, a supplementary section adapted to pass between the rails, of the first section and be supported on said shoulders, and set set screws in the rails of the main section above said shoulders adapted to engage the rails of the supplementary section, substantially as and for the purpose specified.

No. 60,562. Press. (*Presse.*)

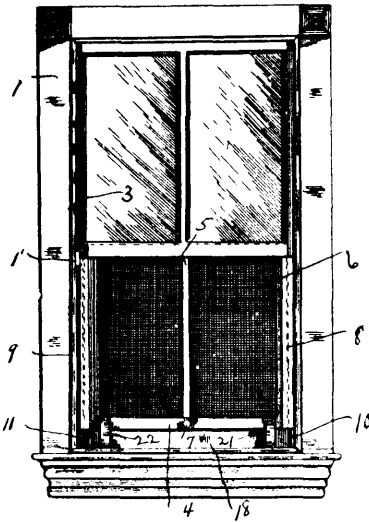


Fred Lee, Hamilton, Ontario, Canada, 11th July, 1898; 6 years. (Filed 30th June, 1898.)

Claim.—1st. A press of the character described comprising a vertical framework having upper rigid press-plate, a lower press-plate capable of sliding vertically between the sides of said frame and operated by a crank-wheel having a pivoted lever link with a transverse pin to operate in and with the upper part of the vertical slot in the lower body part of said sliding press-plate, stops to retain the press-plate in a midway position whilst crank-wheel is revolving and means to revolve said crank-wheel, as described. 2nd. A press machine of the character described, consisting of a press-plate

capable of operating vertically between the sides of the framework of the machine, and stopping a certain distance from the upper rigid press-plate to replace the moulds whilst the driving mechanism is operating the transverse pin in the vertical slot of the sliding press-plate, as described.

No. 60,563. Window Screen. (Store de fenêtre.)

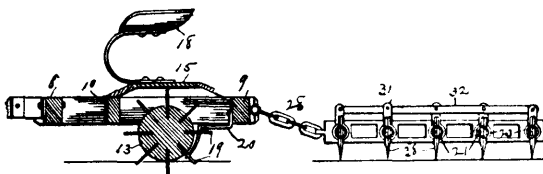


60563

William Hal-ey, Afton, New Jersey, U.S.A., 11th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—In a window-screen, the combination with an upper locking-string provided with a rabbet and having lugs which overhang the said rabbet and also provided with pockets at its ends, which ends are received in the window-frame grooves, of a lower locking-strip having flanges at its ends which project both upwardly and outwardly from said ends and which flanges are also received in the window-frame grooves, fastening-buttons on said lower locking-strip, a frame comprising the screen proper, which frame has vertically disposed guide-strips secured to one side thereof and projecting out laterally from its ends and the frame having its upper edge received in the rabbet of the upper locking-strip and held by the lugs and its lower edge resting on the lower locking-strip and held against the end flanges thereof by the buttons, and independent detachable side guide-strips fitted in the grooves of the window-frame and lying against the ends of the screen-frame and the projecting portions of the guide-strips thereof, and said guide-strips having their upper ends received in the pockets of the upper locking-strip and their lower ends resting against the projecting portions of the flanges and the lower locking-strip.

No. 60,564. Pulverizer. (Broyeur.)



60564

William H. Howe and Peter Stiefferman, Kliever, Missouri, U.S.A., 11th July, 1898; 6 years. (Filed 2nd July, 1898.)

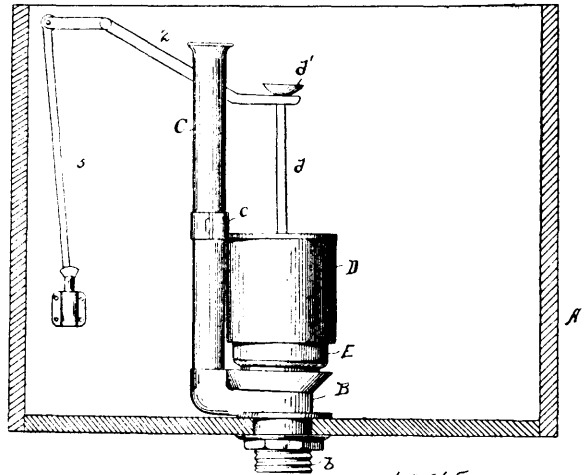
Claim.—In a pulverizer, a pair of bars provided with horizontally-aligned bearings, pipes rotably mounted in said bearings, set-collars located upon said pipes to prevent their lateral movement, harrow-teeth passing vertically through said pipes, in which harrow-teeth are formed notches, triangular bars passing through said pipes and engaging in the notches of the harrow-teeth, collars fixed upon all of the pipes, fingers extending upwardly from each of said collars, a bar connecting the upper end of all fingers, and means for rotating the forward one of said pipes and locking it after being rotated to the desired position, substantially as described.

No. 60,565. Valve. (Soupape.)

Hiram T. Bush, Detroit, Michigan, U.S.A., 11th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. In a valve for flush tanks, the combination of an adjustable guide closed at the top, a hollow open-mouthed valve

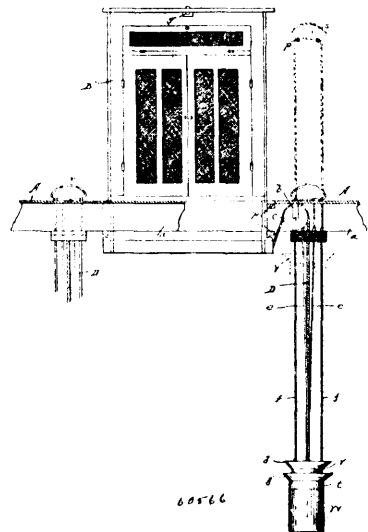
engaged by the guide, a bramah packing carried by the valve and adapted to engage the valve seat, substantially as described. 2nd.



60565

In combination with an overflow pipe and an outflow fitting for flush tanks, a valve, cylindrical guide closed at the top and adjustable along said overflow pipe, a hollow valve adapted to hold a supply of air therein, and to be supported in water by the air contained therein, substantially as described. 3rd. In combination with a valve and means for lifting the valve from its seat, a guide arranged to furnish a water cushion to the valve, substantially as described. 4th. In combination with a tank, a guide shell open on its under side, a bell valve arranged within the shell to admit circulation of water between it and the guide shell, a seat for the bell valve and means for lifting the bell from the valve, the parts being arranged so that the bell valve retains a quantity of air on its interior, which is confined therein by the water beneath it when the valve is lifted off its seat to allow the water to flow out, and the air so confined prevents the bell from filling with water, and causes it to rise through the water in the tank, substantially as described. 5th. In a flushing apparatus, the combination of an outer guiding shell, a bell-shaped valve located within the shell, means for detaching the bell valve from its seat, and means whereby after being so detached the valve is automatically lifted and dropped to its seat, substantially as described. 6th. In a flushing apparatus, in combination with a bell-shaped valve, a guiding casing surrounding the bell-shaped valve and arranged to protect the same from currents of moving water, substantially as described. 7th. In a flushing apparatus, the combination of a float valve, a guard encasing said float valve arranged to confine water within the guard and outside the valve a quantity of water through which the valve automatically rises and floats so long as water remains within the interior of the guide shell, substantially as described.

No. 60,566. Dumb Waiter. (Dressoir.)



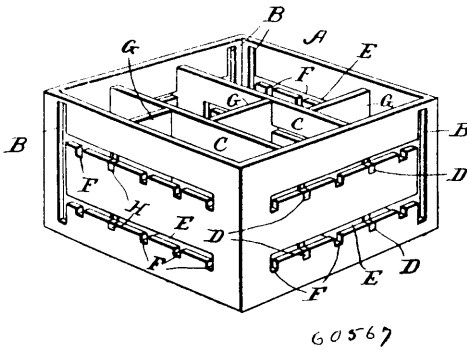
60566

William R. Fitchet, Pinnebog, Michigan, U.S.A., 11th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. The combination with a provision safe, a main counterweight for said safe, a cord connecting said safe and counter-

weight, and a sheave over which said cord passes, of an auxiliary weight adapted to be added to said main counter-weight, cords whereby said auxiliary weight may be lifted from said main weight, means for sustaining said auxiliary weight in this lifted position, and a dish on said auxiliary weight arranged to take up the lifting cords of said auxiliary weight as they are slackened, substantially as described.

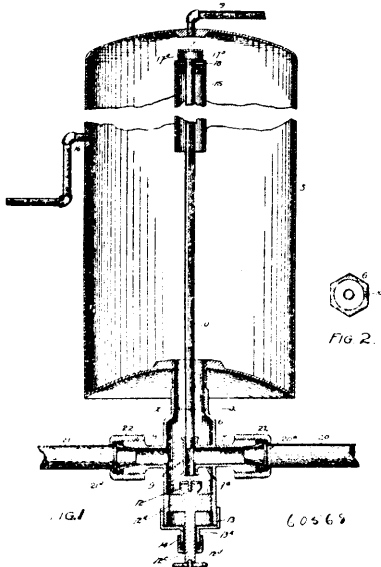
No. 60,567. Box or Crate. (Boite ou caisse.)



Edgar Ellsworth Hamilton, East Berlin, Connecticut, U.S.A., 11th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. A packing-box having vertical slots formed in its sides, horizontal slots leading therefrom and notches formed in the horizontal slots, partitions adapted to pass through the vertical slots, said partitions having tenons thereon for fitting in the notches, as and for the purpose set forth. 2nd. In combination, a box having vertical slots, horizontal slots leading therefrom and notches formed in said horizontal slots, partitions adapted to pass through the vertical slots, and tenons formed upon the partitions adapted to fit within said notches whereby the partitions will be held in various positions, as specified. 3rd. In combination, a box having its sides formed with vertical slots therein and horizontal slots leading from the first named, partitions adapted to pass through vertical slots, tenons formed on the ends of said partitions adapted to fit within notches formed in the horizontal slots, said partitions being slotted and notched similar to the sides, and cross partitions having tenons similar to the first named to fit the slots thereof, as and for the purpose described. 4th. In a box having vertical slots formed in the sides thereof and horizontal slots leading therefrom, partitions adapted to be passed through the vertical slots, tenons on the ends of the partitions adapted to slide within the horizontal slots, and means for holding the partitions rigidly in position, substantially as described.

No. 60,568. Hot Water Cylinder and Valve. (Cylindre et soupape pour eau chaude.)

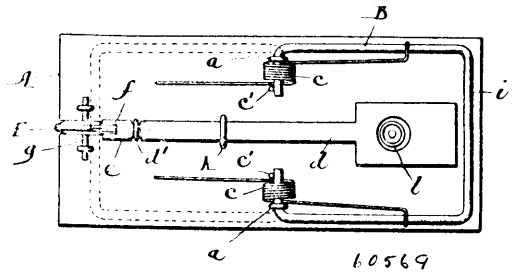


Robert A. Brooks, Chicago, Illinois, U.S.A., 11th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. The combination with a hot water cylinder, of a casing having two openings, one being adapted to communicate with

the cylinder, a device located within said casing and having two openings one of which registers with the other opening in the casing, and a valve for controlling the other opening of said device. 2nd. The combination with a hot water cylinder and a conduit leading from the heater to the boiler, of a casing attached to the bottom of the cylinder and communicating therewith, said casing being provided with an inlet for the cold water from the service pipe, and an exit to allow the water to pass to the range or heater, a device located within the said casing and having three openings, one of which registers with the cold water inlet, a valve normally closing another opening of said device, a pipe communicating with the third opening of said device and passing upwardly into the cylinder to a point in suitable proximity to the top thereof, and a conduit communicating with the top of the said pipe and leading downwardly to a point below the hot water entrance to the cylinder, the upper part of the pipe being vented to prevent siphonage. 3rd. The combination with a hot water cylinder and a conduit leading from the heater to the boiler, of a casing attached to the bottom of cylinder and communicating therewith, said casing also having an inlet for the cold water from the service pipe, and an outlet to allow the water to pass to the range or heater, a device located within the said casing and having three openings, one of which registers with the opening in the casing for the entrance of the cold water, a valve located in the casing for closing another of said openings, a pipe communicating with the third opening of said device and passing upwardly into the cylinder to a point in suitable proximity to the top thereof, and outer pipe surrounding the first named pipe and extending downwardly to a point below the hot water entrance to the cylinder, the said outer pipe communicating with the upper extremity of the inner pipe, the said pipes being vented to prevent siphonage, and suitable means for connecting the two pipes. 4th. The combination with a cylinder and a conduit leading from the heater thereto, of a casing having an opening communicating with the cylinder, an inlet pipe for the cold water from the service pipe, an exit pipe to allow the water to pass to the range or heater, a device located within said casing and having three openings, one of which registers with the cold water inlet pipe of the casing, a valve adapted to close another opening of said device, and a cold water pipe leading upward into the cylinder and communicating with the third opening in the casing. 5th. The combination with a hot water cylinder, of a casing having an opening adapted to communicate with the cylinder, and an inlet opening for the cold water from the service pipe, a device located within said casing and having three openings, one of which registers with the casing inlet, a valve for controlling another opening of said device, and a cold water pipe leading upward into the cylinder and communicating with the third opening of the casing.

No. 60,569. Animal Trap. (Piège.)



James Willson West, DeLong, Illinois, U.S.A., 11th July, 1898; 6 years. (Filed 9th May, 1898.)

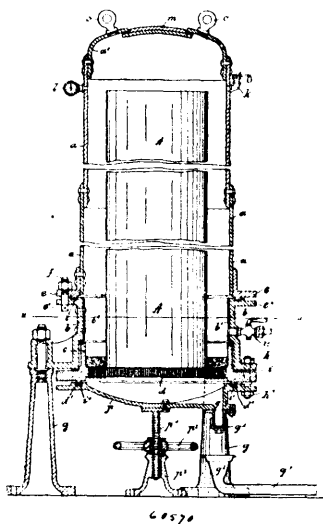
Claim.—1st. In animal traps, the combination with the base, of the recoil spring striker-loop mounted thereon, the trigger lever extended lengthwise within the loop, fulcrumed near the outer or set position of the striker and having a projecting tip beyond the trigger fulcrum, and the pivoted dog furnished at its upper part with a detent and its lower with a heel extended over the trigger tip, the relation of the several parts being such that on shift of the striker loop to set position, said loop contacts with the dog to bring the detent thereon into the return path of the loop and co-actively depresses the trigger tip so as to cock the free end of said trigger, substantially as described.

No. 60,570. Apparatus for Impregnating and Dyeing Wood. (Appareil pour imprégner et teindre le bois.)

Georges Frédéric Lebioda, Paris, France, 12th July, 1898; 6 years. (Filed 15th June, 1898.)

Claim.—1st. An apparatus for impregnating wood, comprising a vessel adapted to receive the wood to be treated, a perforated bottom plate to support the wood and a removable under part beneath said perforated bottom and forming a chamber, and admission and exit valves for the treating fluid, substantially as described. 2nd. In combination, the vessel adapted to receive the wood to be treated, a perforated bottom plate therefor to support the wood, said perforations not covered by the wood being designed to be closed by a

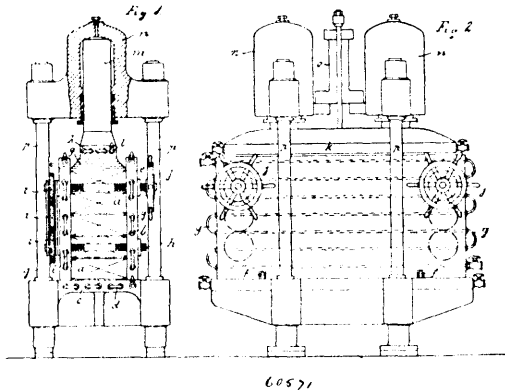
suitable cement, a chamber beneath the perforated plate to receive the fluid passing through the wood, and a steam channel in proximi-



ity to the perforated plate for softening the cement after the wood has been treated, substantially as described. 3rd. In combination, the vessel adapted to receive the wood to be treated and having a perforated bottom to support the wood, the removable under part *p* adapted to form a chamber beneath the perforated bottom, the threaded standard and hand wheel for raising and lowering said part *p*, and the admission and exit valves to said vessel and chamber for the treating fluid, substantially as described. 4th. In combination, the two-part upper vessel for the wood, the perforated bottom plate removably connected thereto, the under part *p* removably supported beneath said bottom plate and forming a chamber beneath the perforated bottom, and the admission and exit valves to said chamber and vessel, substantially as described. 5th. In combination, the vessel for the wood composed of two parts *a b* detachably connected together, the perforated bottom plate abutting against the lower edge of said vessel and having an annular flange extending up within the vessel and abutting against an annular shoulder within the vessel, said flange forming with wall of the vessel an annular steam channel, steam inlet and exhaust ports to said chamber, a removable under part *p* forming a chamber beneath the perforated plate, and admission and exit valves for the treating liquid, substantially as described.

No. 60,571. Apparatus for Drying and Hardening Wood.

(Appareil pour secher et durcir le bois.)

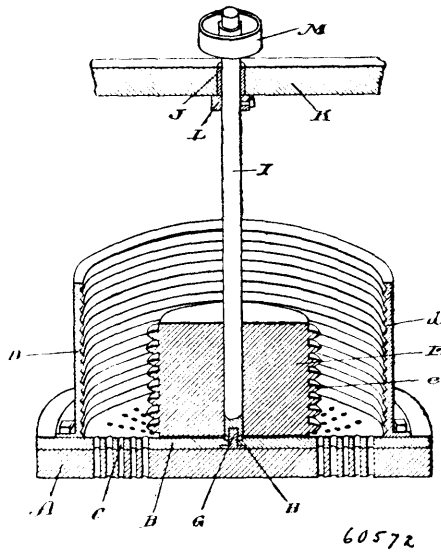


Georges Frederick Lebioda, Paris, France, 12th July, 1898; 6 years. (Filed 15th June, 1898.)

Claim.—In apparatus for drying and hardening wood the combination of a heated press table, plates resting on said table and mutually adjustable by means of gearing, screw spindle and hand wheels, and an upper press plate connected with metallic pistons, which exert a strong pressure on the wood substantially as hereinbefore described.

No. 60,572. Hide Tanning Machinery.

(Machine pour tanner le cuir.)

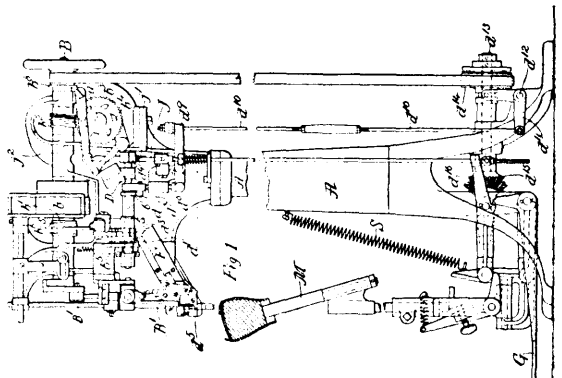


William Sutherland Shaw, Bracebridge, Ontario, Canada, 12th July, 1898; 6 years. (Filed 11th November, 1898.)

Claim.—1st. In a hide tanning or milling machine, the combination of a bin to receive and contain the hides to be milled, a hammer or beater rotatably mounted within the bin, and means for rotating the hammer or beater, substantially as specified. 2nd. In a hide tanning or milling machine, the combination of a bin having its inner face corrugated, a hammer having its outer face corrugated, rotatably mounted centrally within the bin, and means for imparting a rotary motion to the hammer, substantially as specified. 3rd. In a hide tanning or milling machine, the combination of a bin, consisting of a perforated base, and a vertical wall surrounding the base having its inner face corrugated, a hammer centrally located within the bin having its outer face corrugated or provided with pins, a central pivot for the hammer fitting into a pivot socket in the base of the bin, a vertical shaft passing centrally through the hammer, a cross beam, bearings in the cross beam for the vertical shaft, and means for imparting motion to the vertical shaft, and means for fastening the hammer to the shaft, substantially as specified. 4th. In a hide tanning and milling machine, the combination of a bin, consisting of a circular shaped perforated base a circular vertical wall extending upwardly from the base having its inner face corrugated, a central pivot bearing fitted in the base, a hide hammer having its outer face corrugated or provided with pins, a pivot for the under side of the hammer mounted in the pivot bearings, a vertical shaft extending centrally through the hammer, means for fastening the hammer to the vertical shaft, a cross beam, a vertical bearing mounted in the cross beam for the shaft, a collar fitted to the shaft on the under side of the bearing, and a belt pulley mounted on the shaft on the upper side of the cross beam by means of which motion is imparted to it, substantially as specified.

No. 60,573. Fastening Driving Machine.

(Machine à chasser la broquette.)

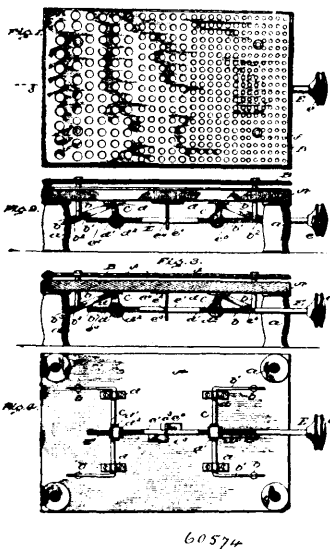


Walter Shaw, Boston, Massachusetts, U.S.A., 12th July, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—1st. A machine comprising a fastening-driving mechanism, a jack, mechanism for presenting the jack and mechanism to

automatically connect and disconnect the jack-presenting mechanism and its driving-shaft to cause the jack to be presented to the fastening-driving mechanism when the fastening-driving mechanism drives a fastening, substantially as described. 2nd. In combination a fastening-driving mechanism, a jack, mechanism for presenting the jack, automatic mechanism to connect and disconnect the jack-presenting mechanism and its driving-shaft and means whereby the operator can control the operation of the automatic mechanism.

No. 50,574. Capsule Holding Machine.
(Machine à contenir des capsules.)



60574

Theodore E. Thrig, Pittsburg, Pennsylvania, U.S.A., 12th July, 1898; 6 years. (Filed 4th April, 1898.)

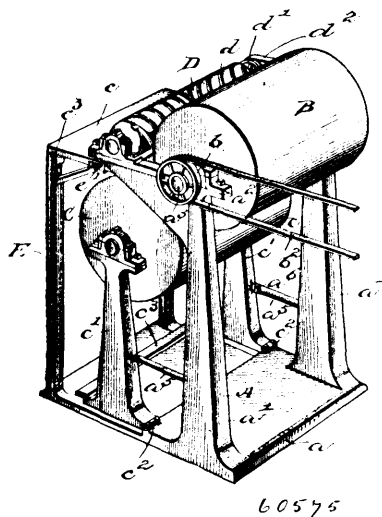
Claim.—1st. A capsule-holding machine having a stationary bed, a vertically-adjustable table-top above said bed having a series of holes therein, means mounted on said bed for raising and lowering said table-top, and guides for the latter, substantially as set forth. 2nd. A capsule-holding machine having a stationary bed, a perforated table-top above said bed, guide-rods secured to said table-top extended down through said bed, and means connected to the latter for engaging said side-rods, whereby said table-top can be raised and lowered. 3rd. A capsule-holding machine having a stationary bed, a perforated table-top above said bed, guide-rods secured to said table-top extended down through said bed, a single operating rod, and connections between the latter and said guide-rods, whereby said table-top can be adjusted relatively to said bed, substantially as set forth. 4th. A capsule-holding machine having a perforated board for the capsules, and means for raising and lowering said board comprising a rod having right and left-hand screw-threads, nuts thereon, and connections between said nuts and said board, substantially as set forth. 5th. A capsule-holding machine comprising a solid bed, a table-top having perforations, guide-rods depending from said table-top through said bed, rock-shafts on the latter engaging said guide-rods, an operating rod having opposite screw-threads, nuts on the latter, and pivoted connections between said nuts and said rock-shafts, substantially as set forth. 6th. The combination with the bed, of the perforated table-top, the guide-rods depending therefrom, the rock-shafts mounted on said bed having slotted arms engaging said guide-rods, arms or links extending from said rock-shaft, an operating rod having opposite screw-threads, nuts thereon to which said arms or links are pivoted, and a forked plate with which said screw-rod engages, substantially as set forth.

No. 60,575. Leather Dressing Machine.
(Machine à préparer le cuir.)

Otto Felix Faix, Gloversville, New York, U.S.A., 12th July, 1898; 6 years. (Filed 30th June, 1898.)

Claim. 1st. In a leather-dressing machine, the combination with an abrasive roller, of a pressure-roller contacting with the same, a straightening-roller having spiral grooves formed in its periphery, a spring-pressed table mounted under the straightening-roller and adapted to press the leather up against the same so as to feed it forward and hinges connecting one end of said table to the frame of the machine, substantially as described. 2nd. In a leather-dressing machine, the combination with a base, of an abrasive roller, a feeding-roller, two connected standards hinged upon the base and pro-

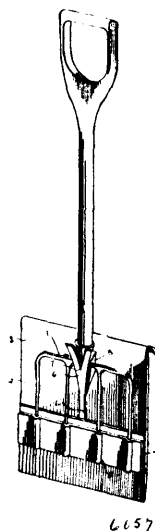
vided at their upper ends with journal-boxes, a pressure-roller journaled in said journal-boxes, and springs mounted under the



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free ends of the standards for tipping the same to bring the pressure-roller in contact with the abrasive roller, substantially as described. 3rd. In a leather-dressing machine, the combination with a base, an abrasive roller, a feeding-roller, standards hinged upon the base, a pressure-roller journaled in the upper end of said standard, springs mounted under the free ends of said standards for tipping them to bring the pressure-roller in contact with the abrasive roller, and adjustable stops for limiting the movement of said standards, substantially as described.

No. 60,576. Fork Blade. (Lame de fourches.)



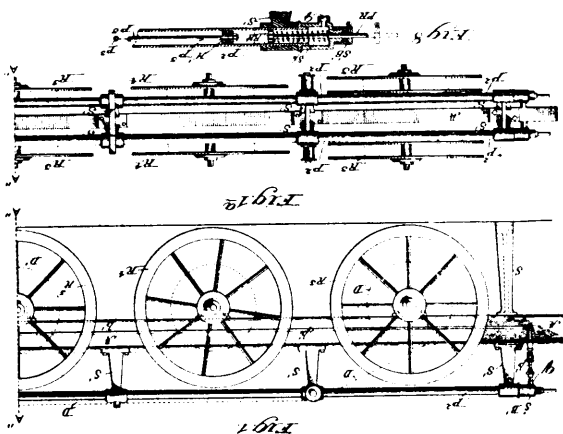
60576

Edward P. Overson, Nash, North Dakota, U.S.A., 12th July, 1898; 6 years. (Filed 9th April, 1898.)

Claim. 1st. The combination with a fork having a handle, of a detachable shovel-blade provided with a series of independent recesses to receive the ends of the tines of the forks, a catch having a bifurcated end, and a transverse groove and a yielding bifurcated keeper normally standing out from and over the said catch, substantially as and for the purposes specified. 2nd. The combination with a fork having a handle, of a detachable shovel-blade provided with a series of independent recesses to receive the ends of the tines, a catch having a bifurcated end, and a transverse groove, the opposite portions of the bifurcation being bevelled, and a keeper having an upper bifurcated end extending over and standing outward from the said catch, substantially as and for the purposes specified.

No. 60,577. Mechanism for Lining Metal Tubes with pliable or fibrous material. (Mecanisme pour doubler les tubes metalliques.)

4499



Edwin Truman Greenfield, New York City, U.S.A., 12th July, 1898; 6 years. (Filed 25th April, 1898.)

Claim.—1st. Mechanism for lining tubes with pliable or fibrous material, consisting of means for forming a tube from strips thereof, means for inserting said tube within the tube to be lined and then inflating it, a carriage for carrying said tube and a controlling valve for regulating the operation of said parts, in combination with valve controlling means carried by the carriage. 2nd. Mechanism for lining tubes with pliable or fibrous material such as paper, consisting of means for forming the tube lining of the pliable material, and additional means consisting of an expandible mandrel or tube for causing the previously formed tube to adhere to the inner wall of the tube to be lined, in combination with regulating or governing mechanism for regulating the speed at which the mechanism shall operate. 3rd. Tube lining mechanism, consisting of means for inserting a previously formed tube of pliable or fibrous material, such as paper within a tube to be lined, in combination with additional means for holding or maintaining the lining in its tubular form while it is being formed and inserted into the tube to be lined. 4th. In a tube lining machine, a series of eyes or rings adapted to surround the lining as it is being drawn, said rings being joined together but having independent movement. 5th. Mechanism for forming a tube of pliable or fibrous material such as paper, consisting of a die adapted to give to said material a tubular shape or conformation as it is drawn forward, means for heating this completed tube so as to iron it into shape, means for coating additional strips of fibrous material with paste, and additional means for giving to the additional strips a tubular form, in combination with means for cooling the first named tube so as to delay the action of the adhesive agent. 6th. In a tube lining machine, means for constructing the lining from pliable or fibrous material and inserting it into a tube to be lined, in combination with means for causing the inserting mechanism to partially advance the lining within the tube before the latter is forced forward to its extreme limit around the lining, whereby a waste of lining material is avoided and each tube supplied with the required length thereof. 7th. In a tube lining machine, an expandible sleeve provided with means for preventing injury thereto. 8th. In a tube lining machine, an expandible sleeve secured at its opposite ends to a hollow perforated piston, in combination with protecting means surrounding said sleeve and expandible therewith and adapted to protect the same from injury. 9th. A tube lining machine, consisting of pneumatically controlled mechanism adapted to form and expand a lining of pliable or fibrous material within a tube to be lined, in combination with a carriage adapted to carry said tube over the lining, and means operatively connected with the carriage adapted to govern the speed at which the lining tube shall be drawn. 10th. A tube lining machine, consisting of pneumatically controlled mechanism for forming and lining a tube with pliable or fibrous material, in combination with pneumatically controlled governing mechanism adapted to control the speed at which the tubular lining shall be drawn. 11th. A tube lining machine, consisting of pneumatically controlled mechanism adapted to form a tubular lining and expand the same within a tube to be lined, in combination with a single controlling valve and a pneumatically controlled speed governor, all of said parts being controlled in their movement by said valve.

No. 60,578. Method of Reducing Cutlery Blades by Electricity. (Methode d'aiguiser la coutellerie par l'electricité.)

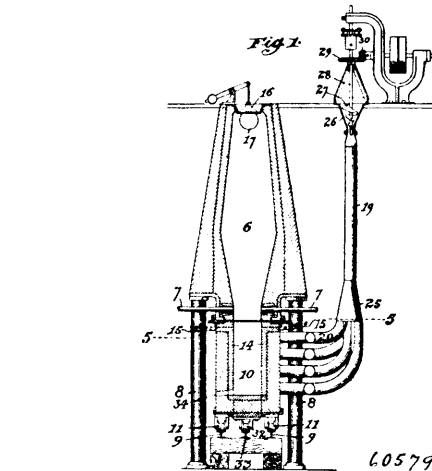
Ferdinand Grab, Sheffield, England, 12th July, 1898; 6 years. (Filed 11th August, 1897.)

Claim.—1st. A process for reducing razor and cutlery blades by electricity instead of grinding which consists in subjecting the

blades to the action of a current of electricity while such blades are hung in an acidulated bath and connected with the positive pole of a dynamo or battery and in proximity to negative terminal plates which have surfaces equal to those of the blades to be reduced and are connected with the negative pole of the generator, substantially as described. 2nd. A process for reducing razor and cutlery blades by electricity instead of grinding, as set forth.

No. 60,579. Calcium Carburettng Apparatus.

(Appareil à carburer le calcium.)



Herman Lewis Hartenstein, Bellair, Ohio, U.S.A., 12th July, 1898; 6 years. (Filed 1st March, 1898.)

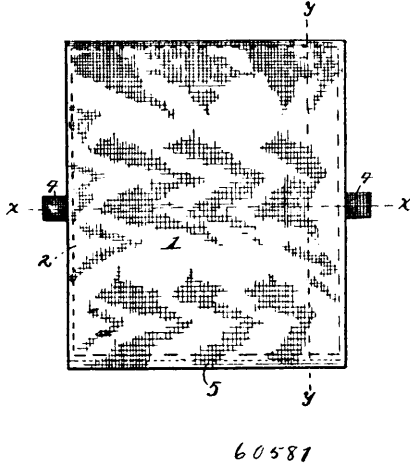
Claim.—1st. The herein described process of carburettng calcium which consists in calcining limestone and then forcing into the calcined mass while in a heated condition a carbonaceous material by the aid of a combustible gas under pressure and subjecting the mass to the action of an electrical current, substantially as described. 2nd. The herein described process of carburettng calcium which consists in mixing raw limestone with a solid fuel and firing the same whereby to drive off its carbon dioxide, then forcing into the calcined stone a pulverized carbonaceous material and simultaneously treating the mass with an electrical current, substantially as and for the purpose described. 3rd. The herein described process of carburettng calcium which consists in mixing the limestone with a solid fuel, firing the mass to drive off its carbon dioxide, then forcing into the calcined stone while heated a carbonaceous material and simultaneously subjecting the mass to the action of an electrical current, substantially as and for the purpose described. 4th. The herein described continuous process of carburettng calcium, which consists in mixing raw limestone with a solid fuel and firing the mass in the presence of an air blast, then passing the calcined stone in a heated condition between two electric poles and simultaneously forcing into the calcined stone a carbonaceous material by the aid of a combustible gas under pressure and subjecting the mass to the action of an electrical current, substantially as described. 5th. The herein described apparatus, comprising a furnace having a calcining chamber and a smelting chamber, the latter having separated electrodes arranged in its walls, feed pipes perforating said walls and arranged in horizontal series, a plurality of branch pipes connecting with said feed pipes and trunk connecting with the several branches and means for forcing a pulverized carbonaceous material through said trunk, the branches thereof and the several feed pipes into the smelting chamber, substantially as described. 6th. In a smelting furnace, the combination with a smelting chamber having separated electrodes arranged in its inner walls, pipes or passages piercing said walls, branch pipes communicating with the outer ends of said feed pipes or passages, a trunk communicating with the several branches, and means for delivering a carbonaceous material into said trunk and a means for delivering a gaseous vehicle under pressure into the trunk whereby to carry the pulverized carbonaceous material into the furnace, substantially as described. 7th. In an electrical smelting furnace, the combination with a calcining chamber supported in an elevated position and having an open bottom, of a plurality of smelting chambers each open at its upper end and capable of being moved into and out of operative relation to the calcining chamber and each having electrodes in its walls, substantially as described. 8th. In an electric smelting furnace the combination with a calcining chamber supported in an elevated position, of a track arranged beneath said elevated portion and between its supports and a base portion movably mounted on said track, electrodes mounted in the walls of the movable portion and pipes or passages opening into the chamber thereof adjacent to the electrodes, substantially as described.

No. 60,580. Acetylene Black. (Noir d'acétylène.)

Ernest Hubon, Raincy, France, 12 juillet 1898; 6 ans. (Déposé 21 avril 1898.)

Résumé.—1° L'utilisation nouvelle du noir d'acétylène comme noir commercial susceptible des mêmes emplois que les noirs déjà connus. 2° La fabrication industrielle, en vue de cette utilisation, du noir d'acétylène obtenu immédiatement en décomposant l'acétylène à l'abri de l'air sous l'action d'une source d'énergie électrique, chimique ou calorifique.

No. 60,581. Copying Pad. (Livret.)

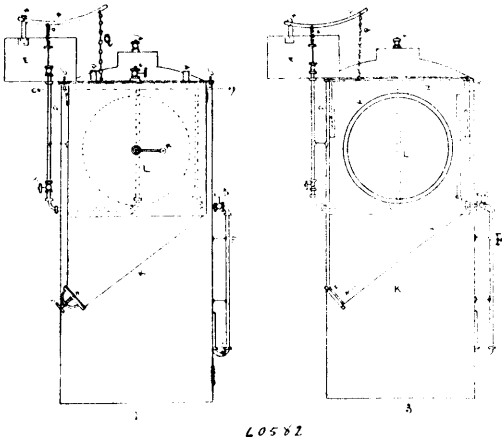


Edward R. Hodges, Indianapolis, Indiana, U.S.A., 12 July, 1898; 6 years. (Filed 15th June, 1898.)

Claim.—1st. A flexible letter-press copying pad consisting of an absorbent moisture retaining sheet 2, having a fabric facing 1 on both sides thereof, secured in the manner shown, for the purpose of checking the flow of moisture from the sheet 2, when under pressure, retarding evaporation and protecting it in handling, said facing having the tapes 4, upon opposite sides thereof secured between said facings, whereby the pads may be lifted, substantially as set forth. 2nd. As an article of manufacture, the flexible copying-pad consisting of the absorbent moisture-retaining pad 2 loosely incased between the facings 1, the facings 1 on either side of said pad, formed from muslin fabric with the raw edges turned inwardly to prevent their fraying and having lifting-tapes 4 secured between opposite edges of said facings, all as shown and described. 3rd. As a flexible letter-copying pad, the combination with the absorbent moisture retaining pad 2, of the loosely-secured facings 1, having their raw edges secured together by stitching and turning inwardly to prevent fraying, and having the projecting lifting tapes 4, secured between said facings at opposite edges, all as and for the purposes shown and described.

No. 60,582. Machine for Making Acetylene Gas.

(Machine pour la fabrication de gaz acétylène.)



Lewis Jacob Ruth and Henry William Shaw, both of Leamington, Ontario, Canada, 12th July, 1898; 6 years. (Filed 12th March, 1898.)

Claim.—The combination with the revolving gate Y of the water vessel E, the generator L, and the gasometer K, the water vessel

and generator being connected by pipe C, and the generator and gasometer by pipe F, substantially as and for the purpose hereinbefore set forth.

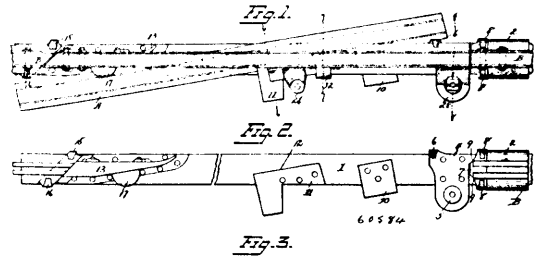
No. 60,583. Cement Paint. (Peinture.)

Meritt Augustine Benjamin, Toronto, Ontario, Canada, 12th July, 1898; 6 years. (Filed 1st April, 1898.)

Claim.—An elastic fire and waterproof cement paint being a composition of pulverized pitch, yellow ochre, mineral red, refined coal tar, slackened stone lime, sifted Portland cement and benzine mixed and treated as above set forth, substantially in the proportions and for the purposes set forth.

No. 60,584. Railway Switch.

(Aiguille de chemin de fer.)



Edward William Coughlin, Baltimore, Maryland, U.S.A., 13th July, 1898; 6 years. (Filed 23rd June, 1898.)

Claim. 1st A railway frog comprising a base section, and a swing section, the base section consisting of a base plate, a seat for supporting the tongue of the swing section, a hinge plate, and a raising plate, and the swing section consisting of a body portion pivotally secured to the base section, a tongue adapted to overlap the main rail and an inclined reinforced stop. 2nd. The combination with the base plate provided with a seat, of a switch section pivotally secured to the base plate, and comprising a body portion, a tongue, an inclined stop formed by slitting and bending a portion of said body portion, and a fillet for reinforcing said stop. 3rd. The combination with the base plate, and its seat and raising plates, of a hinge plate projecting beyond the base plate at one side and provided at its opposite side with a hook and a swing section comprising a body portion pivotally secured to said hinge, a tongue adapted to overlap the main rail, and an inclined stop. 4th. The combination with a base section, of a swing section pivotally secured thereto and comprising a body portion, a tongue, an inclined stop, a fillet for said stop, and a clamp adapted to extend under the base section. 5th. A swing section for a railway frog, comprising a T-rail having a portion of its web and flange removed to form a tongue, and longitudinally slitted and bent to form an inclined stop, and having a portion of one of its flanges longitudinally inclined. 6th. A swing section for a railway frog, comprising a T-rail having a portion of its web and flange removed to form a tongue, and longitudinally slitted and bent to form an inclined stop, in combination with a fillet secured to said stop, to support the tongue and a hinge plate secured to the web of the rail. 7th. A swing section for a railway frog, comprising a T-rail having a portion of its web and flange removed to form a tongue, and longitudinally slitted and bent to form an inclined stop, and having a portion of one of its flanges longitudinally inclined, in combination with a fillet secured to said stop, and provided with a rib or lateral projection, a clamp secured to the web of the rail, and a bracket or hinge plate secured to the web and counter-sunk on its under side. 8th. The combination with a base section, and a swing section pivotally secured together, of a seat arranged on the base section and provided with a rib to engage the main rail, a raising plate undercut at its inner edge to overlap the main rail, a hinge plate secured to the base section and provided with a hook to engage the swing section, and provided with an oppositely bevelled extension having hooks to engage the adjacent rail end.

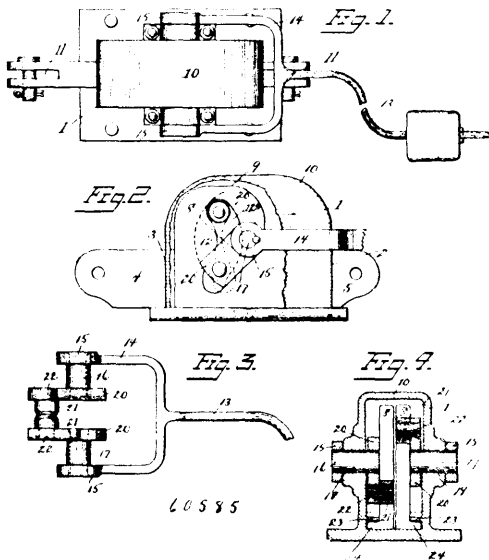
No. 60,585. Railway Switch Box.

(Boîte pour aiguilles de chemin de fer.)

Edward William Coughlin, Baltimore, Maryland, U.S.A., 13th July, 1898; 6 years. (Filed 23rd June, 1898.)

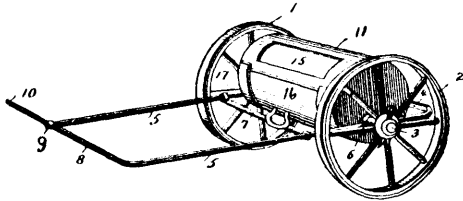
Claim.—1st. In a switch box the combination with a housing or casing of movable slides provided with oppositely curved cam slots, an operating lever comprising a yoke and a handle, shafts keyed to the arms of said yoke and lying in the same horizontal plane, arms mounted on said shafts in parallel vertical planes, but at different angles from the yoke, and rollers carried by said arms and extending into said cam slots. 2nd. In a switch box, the combination

with a housing or casing provided with horizontal guide-ways, of oppositely movable slides provided with oppositely curved cam



slots, and horizontal guide flanges, an operating lever comprising a yoke and a handle, shafts keyed to the arms of said yoke and lying in the same horizontal plane, arms mounted on said shafts in parallel vertical planes, but at different angles from the yoke, and rollers carried by said arms and extending into said cam slots.

No. 60,586. Poison Distributor. (Distributeur de poison.)

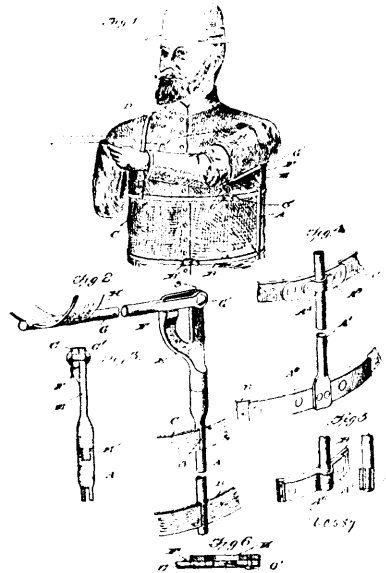


Stephen Bird, Bird Point, Missouri, U.S.A., 13th July, 1898; 6 years. (Filed 9th May, 1898.)

Claim.—1st. In a poison-distributor, the combination of ground-wheels, an axle connecting and arranged to turn with the wheels, a draft-frame wherein the axle is arranged to turn a cylindrical poison-receptacle carried on the axle and secured against turning thereon, said receptacle having perforations in its lower side for the discharge of the poison, and a filling-aperture in its upper side, a curved cover supported in ways to slide circumferentially on the receptacle to close either the filling-aperture or the discharge-openings, substantially as described. 2nd. In a poison-distributor, the combination of ground-wheels, an axle connecting and driven from said ground-wheels, a draft-frame in which the axle is arranged to turn, a poison-receptacle consisting of a drum having perforations in its bottom for the discharge of the poison and having a filling-aperture in its top, the opposite ends of the drum being perforated for the passage of the axle through the drum, an agitator inside the drum and driven from the axle, guides extending along the ends of the drum on the outer surface thereof, and a slide-cover mounted in said guides and adapted to close the perforations in the bottom of the drum, said cover being also adapted to close the filling-aperture in the drum, substantially as set forth. 3rd. In a poison-distributor, the combination of ground-wheels, an axle connecting and driven from said wheels, a draft-frame wherein the axle is mounted to turn, a poison-receptacle having openings in its ends for the passage of the axle, said receptacle having perforations in its bottom for the discharge of the poison, and agitator blades extending longitudinally of the axle inside the drum and having their end portions bent and secured to the axle, substantially as set forth. 4th. In a poison-distributor, the combination of ground-wheels, an axle connecting and driven from said wheels, a draft-frame formed of a metal wire or rod bent to form a rear cross-bar and side bars, each of said side bars being bent to form a loop embracing the axle, a poison-receptacle having a perforated bottom and provided in its ends with openings through which the axle extends, and an agitator in the receptacle and driven from the axle, substantially as set forth. 5th. In a poison-distributor, the combination of ground-wheels, an axle

connecting and driven from the ground-wheels, a draft-frame comprising side bars connected to the axle, and a cross-piece connecting said side bars at their forward ends and having one extremity projecting beyond one of the side bars to one side of the path of the distributor, a poison-receptacle having perforations for the discharge of the poison, and an agitator in the receptacle driven from the axle, substantially as set forth.

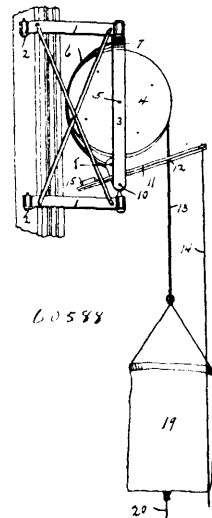
No. 60,587. Arm Rest. (Appui-bras.)



George C. Eckman, Fayette City, Pennsylvania, U.S.A., 13th July 1898; 6 years. (Filed 6th June, 1898.)

Claim.—An arm rest or support consisting of a standard, a waist-strap secured thereto, and the breast-strap C, said straps passing around the body and provided with the buckles D¹, and C¹, and a bracket E, having a laterally-projecting lug F, an arm or support G, pivoted to the side of said bracket so that the arm or support can have a slight lateral movement so as not to come in contact with the shoulder F, when it is desired to drop the arm by the side of the standard A, substantially as set forth.

No. 60,588. Fire Escape. (Sauveteur d'incendie.)

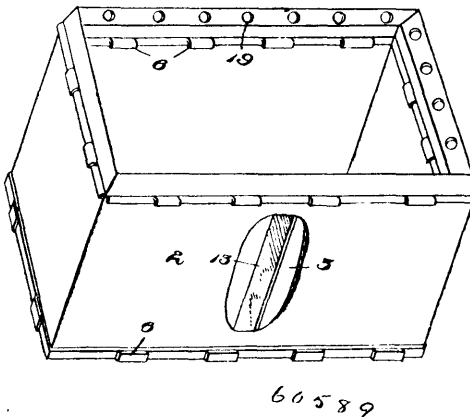


Job B. Wetmore, Wellsborough, Pennsylvania, U.S.A., 13th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. In a fire-escape, the combination with a reel, a flexible tape wound thereon and a receptacle for a person or baggage at the free end of the tape, of a brake adapted to control the unwind-

ing of the tape, said brake consisting of a friction-band pivoted at its upper end to the reel-frame, and loosely following the circumference of the reel proper, a pair of limbs whose lower ends are pivoted to the reel-frame and to whose upper ends said band is pivoted, a brake-lever fixed between the links midway of their length, and a trip-rope fastened to the free end of the brake-lever. 2nd. A fire-escape consisting of a reel, adapted to be swung to a window-frame or other support, a band pivoted at its upper end to the reel-frame above the reel, loosely following the circumference of the reel, a pair of links whose lower ends are pivoted to the reel-frame below the reel and to whose upper ends said band is pivoted, a count-balanced brake-lever fixed to the pair of links, a flexible tape wound on the reel, a receptacle for a person or baggage, and a coiled spring located within the reel, adapted to wind up as the reel unwinds.

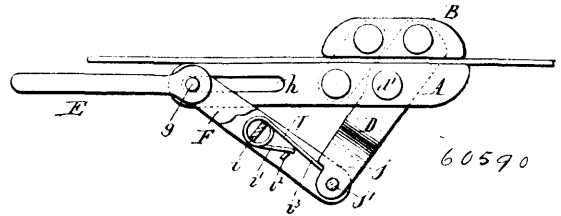
No. 60,589. Flue. (Tuyau.)



George Rome, Carnegie, Pennsylvania, U.S.A., 13th July, 1898; 6 years. (Filed 27th June, 1898.)

Claim.—1st. In a flue pipe, the combination of a warm air and ventilating flue, means for preventing the ventilating flue from collapsing, and means whereby the foul air from the living room is used as a cooling medium for the warm air flue, substantially as shown and described. 2nd. A warm air flue or pipe, composed of sections comprising inner and outer walls between which an air space used for ventilating purposes and as a cooling medium is formed, the ends of the said walls being in different relative planes, said walls being also formed on their ends with lips, a closure consisting of strips provided with suitable slots adapted to receive the lips formed on the walls, said strip having its edges folded upon itself to form a groove to receive the end of the said wall, and having an intermediate portion inclining across the face formed between the walls, and provided with openings, said intermediate portion forming a tapering space, and a closure or strip secured at its edges to the extremities of the walls of the engaging sections which is secured in a similar manner to the strip at the opposite section, and having a tapering projection to enter the aforesaid tapering space of the first mentioned section to secure a snug fit there with said latter strip, being formed with opening corresponding with the openings in the inclined portion of the first mentioned strip, substantially as herein shown and described. 3rd. A warm air pipe or flue, comprising an inner and outer part formed of a like number of walls arranged parallel with one another and forming between them an air space, said walls when formed having their two ends overlapped and folded together in a manner to provide a vertical rib extending across the air space between the two walls, the ends of said walls being in different relative planes and having lips formed integral therewith which are adapted to engage through slots provided in closure strips formed to receive the ends of the said walls and provided with an intermediate portion which is inclined across the air space and formed with openings, the closing strips on the end of one section being adapted to match with the closure strip on the end of the engaging section, and the openings formed in the said closure strip corresponding so as to give a passage for the air through the air space provided between the walls, substantially as herein shown and described. 4th. A warm air pipe or flue, comprising an inner and outer part formed of a like number of walls arranged parallel with one another to form an air space between them, the ends of said walls being of different relative planes, closure strip adapted to engage the end of the said walls and provided with slots which receive lips formed on the walls, said lips being folded against the closure strip after passing through the slot, said closure strip being formed with inclined intermediate portions extending across the air space and provided with openings, the strip on one end of the walls projecting outwardly away from the air space, and on the opposite ends projecting inwardly into the air space so that the sections will match perfectly together, in combination with the vertically arranged ribs arranged between the walls to prevent the crushing of the outer wall against the inner wall, substantially as herein shown and described.

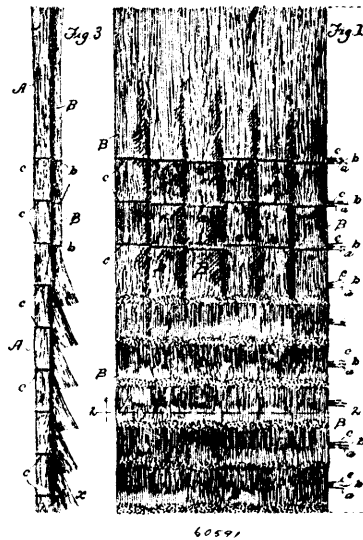
No. 60,590. Wire Grip. (Tenaille pour fils de fer.)



Claes Albert Svensson, Buffalo, New York, U.S.A., 13th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. The combination with the stationary jaw, of the movable jaw connected with the stationary jaw by parallel links, a lever for operating the movable jaw fulcrumed on the stationary jaw, a draft loop or attachment movable lengthwise on the stationary jaw and connected with said lever, and a spring which tends to hold the movable jaw in its closed position, substantially as set forth. 2nd. The combination with the stationary jaw, of the movable jaw connected with the stationary jaw by parallel links, a lever for operating the movable jaw fulcrumed on the stationary jaw, a draft loop or attachment movable lengthwise on the stationary jaw, a coupling bar or link connecting said lever with said draft loop, and a two-armed spring bearing with one of its arms against a lug of said coupling bar and with its other arm against said operating lever, substantially as set forth. 3rd. The combination with the stationary jaw, of the movable jaw connected with the stationary jaw by parallel links, an operating lever for said movable jaw fulcrumed on the stationary jaw, and provided with a shoulder, a draft loop movable lengthwise on the stationary jaw, a pair of coupling bars connecting said operating lever with said draft loop and provided with a transverse pin, and a spring coiled around said pin and provided with two arms, one of which bears against the shoulder of said operating lever and the other against a lug arranged on one of said coupling bars, substantially as set forth.

No. 60,591. Thatch Roofing. (Toiture de chaume.)

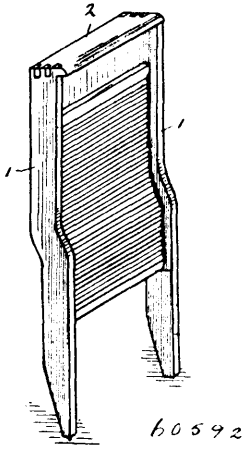


Charles N. Bushnell, Oquawka, Illinois, U.S.A., 13th July, 1898; 6 years. (Filed 4th July, 1898.)

Claim.—1st. A portable thatch-roofing, consisting of wisps of straw or analogous material fastened together by warp wires or cords arranged in series of groups each group containing three or more of said wires or cords to form an imperforate rain shedding fabric, substantially as shown and described. 2nd. A portable thatch-roofing consisting of wisps of straw or analogous material fastened together in overlapping layers and bound together by wires or cords transversely to the length of the wisps, substantially as shown and described. 3rd. A portable thatch-roofing consisting of wisps of straw or analogous material, fastened together by wires or cords transversely to the length of the wisps, the body part of said wisps being arranged two ply, or with one wisp in one layer opposite the space between two wisps of the other layer and the butt-ends of the wisps being arranged in overlapping shingle like layers, substantially as shown and described. 4th. A portable thatch-roofing consisting of wisps of straw or analogous material, a series of warp

wires or cords arranged in sets of three connecting the body of the wisps in two ply relation, the butt ends of the wisps being arranged in overlapping shingle like layers, substantially as described.

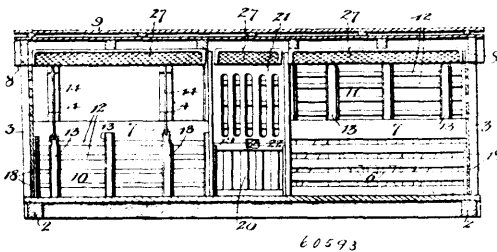
No. 60,592. Washboard. (*Planche à laver.*)



Anna Pochlman, South Bend, Indiana, U.S.A., 13th July, 1898; 6 years. (Filed 5th July, 1898.)

Claim.—1st. A washboard comprising side pieces and a rub-surface having a flat section at the upper and lower ends thereof, and an intermediate reverse-curved section, substantially as described. 2nd. A washboard comprising side pieces, a corrugated rubbing surface with the lower and upper ends on a plane and connected by an intermediate reverse-curved section, a depression in the upper end of the board, and a soap retaining strip above the rub-surface with a water-channel between the same and the back of the board for the purpose, substantially as described.

No. 60,593. Car. (*Char.*)

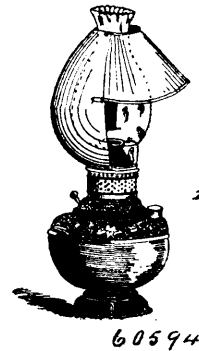


Mason F. White, Bloomington, Illinois, U.S.A., 13th July, 1898; 6 years. (Filed 5th July, 1898.)

Claim.—1st. In combination with a car slatted horizontally, a series of vertically movable slatted frames, the slats of which are adapted to fit between the slats of the car, weights in hollow posts of the car and cables attached to the weights and to the frames, as and for the purpose described. 2nd. A car having an intermediate horizontal rail between its top and bottom and having the lower portion of the car slatted horizontally, in combination with a series of vertically movable slatted frames, the slats of which are adapted to fit between the fixed slats at the lower portion of the car, the said frames being suspended by cables passing over pulleys and having weights attached thereto, the said weights travelling up and down in hollow uprights forming a portion of the frame of the car body, substantially as described. 3rd. In a combination car, a body provided with horizontal rail intermediate the top and bottom thereof, and having the bottom portion below the intermediate rail slatted horizontally, and the upper portion thereof above the intermediate rail open, in combination with a series of vertically movable slatted frames, the slats of which are adapted to fit between the stationary slats of the car body, means for elevating and suspending the slatted frames and screen frames forming auxiliary closing means for the upper portion of the car sides, substantially as described. 4th. The combination with a car body provided with horizontal rails intermediate of its top and bottom and having the space above the rails left open, of a series of screen frames pivotally hung from a point above said opening, the said frames being adapted to cover the openings and be swung upward against the roof or the top of the car, and means for holding the frames in their folded position, as and for the purpose described. 5th. In a car, the combination with a car door having a recessed upper portion, of a vertically slatted frame removably fitted in the said upper portion of the

door, and fixed inclined ways secured to the inner adjacent surfaces of the door posts for the purpose of receiving said slatted frames, substantially as described.

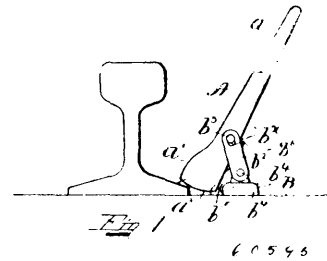
No. 60,594. Lamp Reflector. (*Reflecteur de lampes.*)



John S. Thomas, Elliston, Virginia, U.S.A., 13th July, 1898; 6 years. (Filed 1st April, 1898.)

Claim. The combination with a lamp-reflector made of sheet metal having a concaved polished inner surface cut away at its upper and lower ends and provided with means whereby it may be attached to an ordinary lamp-chimney, the said reflector being further provided with openings at its upper end and with loops at points adjacent to its longitudinal centre, of a reflecting-hood made of sheet metal and having a polished inner surface slightly flaring at its lower end, the upper and lower edges of said hood having strips of wire secured to them, said strips of wire being adapted to be inserted into said openings and loops, respectively, substantially as and for the purpose described.

No. 60,595. Device for Drawing Spikes, Bolts, etc. (*Appareil pour extraire les chevilles, boulons, etc.)*



Van Rensselaar Paige, Hopkinton, New Hampshire, U.S.A., 13th July, 1898; 6 years. (Filed 11th May, 1898.)

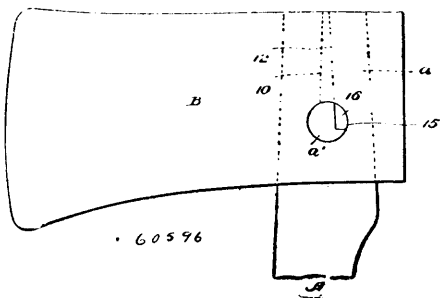
Claim.—1st. In a drawing device of the class described, the combination of a draw-bar having a bevelled stop on its lower side, a shifting fulcrum-piece provided with an upper tapering edge engaged by said bevelled stop, and the shackles connected to said fulcrum piece and draw-bar, substantially as set forth. 2nd. In a drawing device of the class described, the combination of a draw-bar having a stop on its lower side, a shifting fulcrum-piece provided with an upper tapering edge engaged by said stop, a stop at the base of the fulcrum piece for the forward end of the draw-bar, and shackles connected to said fulcrum piece and draw-bar, substantially as described. 3rd. The combination with a draw-bar of the class described, provided with a shoulder on its underside, a shifting fulcrum piece having a fulcrum edge engaging said shoulder, and a shackle connecting between said fulcrum piece and bar, substantially as described.

No. 60,596. Tool Handle. (*Manche d'outils.*)

Hugo Aaron Zeckendorf, Tucson, Arizona, U.S.A. 13th July, 1898; 6 years. (Filed 12th May, 1898.)

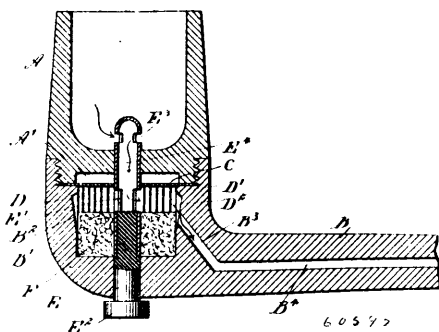
Claim.—1st. The combination, with a tool handle having a tapering slot produced in its upper end and extending diagonally inwardly from said upper end, the said handle being likewise provided with a socket or opening in direct communication with the said tapering slot, of a locking wedge the body of which is of such dimensions and inclinations as to fit into the tapering slot of the helve, the locking wedge being also provided with a head extending beyond opposite sides of the body, the extended inner portions of the head forming shoulders, the outer shoulders of the head conforming to the contour of a portion of the slot or socket in the helve, and keys having their inner bottom faces shaped respectively for engagement with the sides and the shoulders of the locking

wedge, the outer side surfaces of the keys conforming to the contour of the side portions of the slot or socket in the said helve, as



and for the purpose specified. 2nd. The combination, with a handle, the upper part of which is provided with a tapering slot terminating in a socket at its lower end, the socket and slot extending from side to side of the helve, and a locking wedge having its body of corresponding taper and dimensions to the taper and dimensions of the said slot, the locking wedge being provided with a shouldered head, which head conforms to a portion of the margin of the aforesaid socket, of a tool, into the eye of which the helve is introduced, the said tool being provided with opposing openings of corresponding contour to that of the socket in the helve, the openings in the tool being arranged to register with the socket in the helve, and keys passed through the openings in the tool and the socket in the helve, the said keys engaging with opposite sides of the locking wedge, and filling up the space in the helve socket not occupied by the head of the locking wedge, the said keys being also in close engagement with the walls of the opening in the tool, as and for the purpose specified. 3rd. The combination with a tool having a transverse opening in its eye, of a handle provided with a circular opening and a tapering slot leading therefrom to the end of the handle, a wedge having a curved outer surface to fit the wall of the circular opening of the handle, and keys quadrantal in shape in cross section and fitting in the apertures of the tool and handle and cramping the wedge between them, substantially as herein shown and described.

No. 60,597. Tobacco Pipe. (Pipe à tabac.)

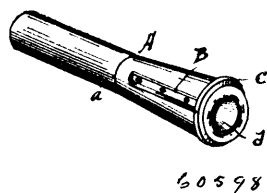


William Sale Hannaford, Pasadena, California, U.S.A., 13th July, 1898; 6 years. (Filed 2nd June, 1898.)

Claim 1st. A tobacco pipe, provided with a convolitional spiral passage connected at one end with the bowl and at the other end with the pipe stem, to cause the smoke to pass through the said convolitional spiral passage on its way from the bowl to the stem, to cool and purify the smoke, substantially as shown and described. 2nd. A tobacco pipe, provided with a convolitional spiral passage having its wall disposed vertically and connected at its centre with the bowl and at its outer end with the pipe stem, to cause the smoke to pass through the passage on its way from the bowl to the stem, to cool and purify the smoke, substantially as shown and described. 3rd. A tobacco pipe, provided with a draft plug, and a convolitional spiral passage connected at one end with the bowl and at the other end with the pipe stem, to cause the smoke to pass through said plug and spiral passage on its way from the bowl to the stem, to cool and purify the smoke, substantially as shown and described. 4th. A tobacco pipe, provided with a draft plug, and a convolitional spiral passage having its wall disposed vertically and con-

nected at its centre with the said draft plug opening into the bowl, the outer end of the passage being connected with the pipe stem, to cause the smoke to pass through the passage on its way from the bowl to the stem, to cool and purify the smoke, substantially as shown and described. 5th. A tobacco pipe, provided with a convolitional spiral passage having an inlet opening at one end connected with the bowl and an exit opening at the other end connected with the stem, whereby the smoke is caused to pass through the passage on its way from the bowl to the stem, to cool and purify the smoke, and an absorbent material over which the smoke passes during its travel through the spiral passage, substantially as shown and described. 6th. A tobacco pipe, comprising a bowl, a stem formed with a chamber and adapted to receive the said bowl, a convolitional spiral passage arranged in the said chamber and having its wall disposed vertically, the said passage being covered at the top and bottom, the centre of the passage being connected with the outlet of the bowl, and the outer end of the passage being connected with an inclined end of the bore of the said pipe stem, substantially as shown and described. 7th. A tobacco pipe, comprising a bowl, a stem formed with a chamber and adapted to receive the said bowl, a convolitional spiral passage arranged in the said chamber and having its wall disposed vertically, the said passage having a cover at its top, the centre of the passage being connected with the outlet of the bowl, and the outer end of the passage being connected with an inclined end of the bore of the said pipe stem, and an absorbent material in the bottom of the said chamber and forming the bottom for the said passage, substantially as shown and described. 8th. A tobacco pipe, comprising a bowl, a stem formed with a chamber and adapted to receive the said bowl, a convolitional passage arranged in the said chamber and having its wall disposed vertically, the centre of the passage being connected with the outlet of the bowl and the outer end of the passage being connected with an inclined end of the bore of the said pipe stem, a cover placed on the open top of the said passage, a draft plug having a central aperture leading to the centre of the spiral passage, to conduct the smoke from the bowl to the centre of the passage, and an absorbent material forming the bottom for the spiral passage, substantially as shown and described. 9th. A tobacco pipe, comprising a stem formed with a chamber, a bowl removably connected with the said stem at the said chamber, a draft plug formed with a passage leading to the inside of the bowl, a cover over the said chamber, a convolitional spiral passage arranged in the said chamber directly under the said cover, and connected at its middle with the plug passage and at its outer end with the bore of the pipe stem, and an absorbent material held in the bottom of the chamber and forming the bottom for the spiral passage, substantially as shown and described.

No. 60,598. Pencil Sharpener. (Taille-crayon.)



James O. Graves, Prides Crossing, Massachusetts, U.S.A., 13th July, 1898; 6 years. (Filed 15th June, 1898.)

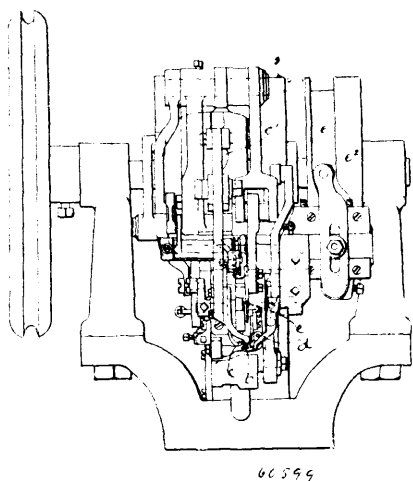
Claim.—A combined pencil-sharpener, point-guard and eraser all in a single device, consisting of a body portion with tapered bore at one end with a knife arranged in a slit therein, a bore at the opposite end with cone-shaped inner end, and a cylindrical portion of less diameter between the tapered bore and cone-shaped portion whereby the tapered portion of the pencil is held by said cone shaped portion and the point prevented from contact with the walls of the cylindrical portion of less diameter, and an eraser seated in an annular groove at one end of the body portion.

No. 60,599. Sewing Machine. (Machine à coudre.)

Francis Joseph Freese, Montreal, Quebec, Canada, 13th July, 1898; 6 years. (Filed 7th October, 1896.)

Claim.—1st. In a sewing machine of the class described, a needle and a looper disposed and operated in order that the looper will, after having completed its operation of making the loop, place the thread in engagement with the barb of the needle and a cam c^1 having a depression c^2 for operating said looper, for the purpose set forth. 2nd. In a sewing machine of the class described, stitch-forming instrumentalities comprising a looper c , and a looper operating cam c^1 having a depression c^2 in the periphery thereof. 3rd. In

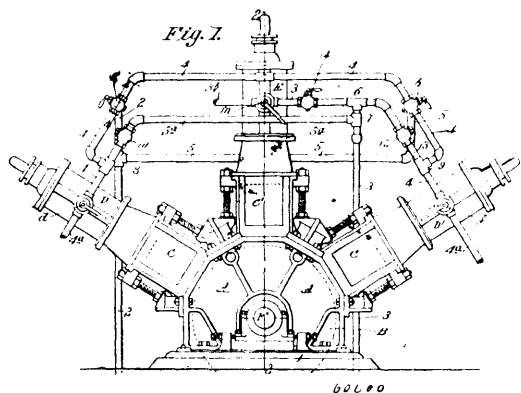
a sewing machine of the class described, stitch-forming instrumentalities comprising a channel guide *d*, channel guide operating cam



*d*1, a needle *b*, and a needle operating cam *b*1, all disposed and arranged as shown and described, and for the purpose set forth.

No. 60,600. Wood Pulp Grinding Machine.

(Machine à broyer le bois de pulpe.)

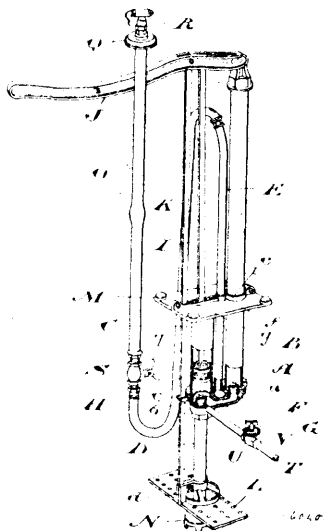


Andrew Tromblee, Port Henry, New York, U.S.A., 13th July, 1898; 6 years (Filed 6th June, 1898.)

Claim. 1st. In a wood-pulp-grinding machine, the combination with an operating-cylinder, and an auxiliary cylinder, and suitable valve-controlled waste-pipes therefor, of a main high-pressure water-pipe, a water-pipe between said operating and auxiliary cylinders for conveying water to the upper side of the pistons thereof for moving them in one direction, a connection from said main pipe to said pipe between the said cylinders, a valve in the said last-named pipe controlling the water from said main pipe, and by means of which said water is diverted to said auxiliary cylinder simultaneously with the shutting off of the same from said operating cylinder, and vice versa, and means for moving said pistons in a direction opposite to that imparted by said high-pressure pipe connections, substantially as set forth. 2nd. In a wood-pulp-grinding machine, in combination, two operating cylinders and a non-operating auxiliary cylinder, and suitable valve-controlled waste-pipes therefor, a main high-pressure water-pipe, a pipe connecting together all the said cylinders for operating their pistons in one direction, suitable valve connections between said main pipe and said cylinder-connecting pipe, whereby, when one of said valves is operated to shut the water off from an operating cylinder it simultaneously diverts it to said auxiliary cylinder, and a low-pressure waste-pipe having valve-controlled connections with said cylinders for moving the pistons thereof in a direction opposite to that imparted by said high-pressure water, substantially as described. 3rd. In a wood-pulp-grinding machine in combination with the operating-cylinders thereof and a non-operating auxiliary cylinders, all having suitable valve-controlled waste-pipes, of high-pressure water-pipe connections between said cylinders for moving the pistons thereof toward the grindstone of said machine, low-pressure water-pipe connections between said cylinders for moving the pistons thereof in a direction opposite to that which said high-pressure water imparts, a valve in said high-

pressure pipe whereby, when water is shut off from one of said operating-cylinders, it is diverted simultaneously to said auxiliary cylinder, valves on said cylinders for providing free exit for water contained in either end thereof simultaneously with free entrance of water under pressure to the opposite end thereof, and check-valves in said low-pressure pipes, all as and for the purpose described.

No. 60,601. Spray Pump. (Pompe.)

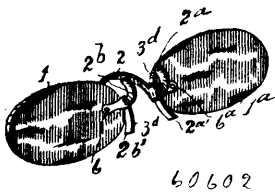


William Henry Heard, Lo: don, Ontario, Canada, 15th July, 1898; 6 years. (Filed 12th April, 1898.)

Claim. 1st. In a pump, a base casting having two passages formed therein, in combination with a plunger tube and suction tube connecting with one passage, an air chamber and a discharge pipe connecting with the other passage, a valve between the two passages, and a valve between the first-mentioned passage and the opening of the suction pipe, substantially as and for the purpose specified. 2nd. In a pump, a base casting having two passages formed therein, in combination with a plunger tube and suction tube connecting with one passage, an air chamber and a discharge pipe connecting with the other passage, a valve between the two passages, a valve between the first-mentioned passage and the opening of the suction pipe, and a small pipe communicating with the said passage, substantially as and for the purpose specified. 3rd. In a pump, a base casting having two passages formed therein, in combination with a plunger tube and suction tube connecting with one passage, an air chamber and a discharge pipe connecting with the other passage, a valve between the two passages, a valve between the first-mentioned passage and the opening of the suction pipe, a small pipe communicating with the said passage, and a regulating valve in the said pipe, substantially as and for the purpose specified. 4th. A pump provided with a suction tube and a valve closing the upper end thereof, in combination with a small tube opening into the pump just above the said valve, and a regulating valve in the said tube, substantially as and for the purpose specified. 5th. In a pump, a base casting, two lugs formed thereon, a suction tube and an air chamber connected thereto, in combination with a pump-handle, pivoted upon the air chamber, an agit rod sleeved upon the said suction pipe, and a rod connected to the said agitator, pivoted to the said handle and passing between the aforesaid lugs, substantially as and for the purpose specified. 6th. In a pump, a valve cage externally screw-threaded and having an opening in its lower portion closed by a ball, in combination with a screw plug closing an opening in the top of the cage, substantially as and for the purpose specified. 7th. In a pump, a base casting having two passages formed therein, in combination with a plunger tube and suction tube connecting with one passage, an air chamber and a discharge pipe connecting with the other passage, a valve between the two passages, and a valve between the first-mentioned passage and the opening of the suction pipe, each valve comprising a cage screwed into a suitable opening and having an opening in its lower portion closed by a ball or other valve and a screw plug closing an opening in the top of the cage, substantially as and for the purpose specified. 8th. In a pump, the suction tube *D*, in combination with the strainer *N*, provided with the ribs *k*, wire gauze *h*, lugs *j*, and bent wire *k*, substantially as and for the purpose specified. 9th. In a pump, the suction tube *D*, in combination with the strainer *N*, provided with wire gauze *h*, lugs *j* and bent wire *k*, substantially as and for the purpose specified. 10th. In a pump, an agitator sleeved upon the suction tube and partly split, in combination with an agitator rod having its end inserted between the parts, and a clamping bolt adapted to clamp the parts together, substantially as and for the purpose specified. 11th. In a pump, and in combina-

tion with the air chamber and discharge pipe thereof, a plate centrally divided and adapted to embrace the said parts, and means for clamping the two portions of the plate together, substantially as and for the purpose specified. 12th. In a pump, and in combination with the discharge pipe thereof, a valve normally held closed by spring pressure in combination with a cam pivoted to the end of the spindle and bearing against the valve mounting, and one or more lever handles connected to the said cam, substantially as and for the purpose specified. 13th. In a pump, and in combination with the discharge pipe thereof, a valve comprising a casing, a valve seat surrounding the passage-way in the casing, a valve disc adapted to fit the said seat, a valve spindle connected to the said disc, the valve mounting screwed into the casing and provided with an opening through which the spindle passes, a cam provided with one or more lever handles and pivoted on the end of the valve spindle, a washer loose on the spindle and provided with a bevelled recess, and a coil spring on the spindle between the valve disc and washer, substantially as and for the purpose specified. 14th. In a pump, a drip cap having a sleeve thereon, in combination with a metal tube secured within the sleeve and a bamboo tube surrounding the metal tube and having its end inserted in a recess in the drip cap, substantially as and for the purpose specified. 15th. In a pump, a spray nozzle, comprising a casing internally threaded and provided with a water inlet in one side thereof and a water outlet in one end in combination with a spindle passing through a suitable packing in the other end of the casing, and provided with a square portion and a needle on its end, a nut threaded to screw loosely within the casing and having a recess formed therein to fit the square part on the plunger, and a coil spring bearing against the head of the spindle and the casing, substantially as and for the purpose specified. 16th. In a pump, a spray nozzle, comprising a casing internally threaded and provided with a water inlet in one side thereof and a water outlet in one end, in combination with a spindle provided with a square portion and a needle on its end, a nut threaded to screw loosely within the casing and having a recess formed therein to fit the square part on the plunger, a washer on the spindle with a bevelled recess, a coil spring between the washer and the nut, and a coil spring bearing against the head of the spindle and the casing, substantially as and for the purpose specified.

No. 60,602. Eye Glass. (Lorgnon.)

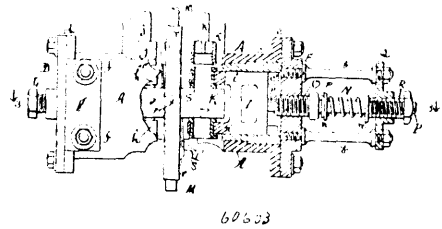


Thomas Marsden Heard, Cleveland, Ohio, U.S.A., 15th July, 1898; 6 years. (Filed 23rd April, 1898.)

Claim. 1st. In eye-glasses, the combination of a bow-spring, nose-guards having upper and lower branches, the latter being offset on a line with the centre of the lenses and curving backwardly and upwardly and having a torsional twist, and the lower arms being in approximately the same vertical plane as the lenses, substantially as described. 2nd. In eye-glasses, the combination of a bow-spring and nose-guards, the bow-spring entering from the front of the lenses and set at an angle thereto, and the upper arms of the nose-guards curving backwardly and upwardly and set at an angle opposite to the angle of the bow-spring, substantially as set forth. 3rd. In eye-glasses, the combination of a bow-spring and nose-guards, said guards being provided with downwardly extending arms, and arms curving backwardly, upwardly and forwardly, and means for attaching said bow-spring and nose-guards to said lenses, substantially as set forth. 4th. In eye-glasses, the combination of a bow-spring and nose-guards, the latter having upwardly extending arms formed with a torsional twist therein, and downwardly extending arms and clips for attaching said bow-spring and nose-guards to lenses, substantially as described. 5th. In eye-glasses, the combination of a bow-spring and nose guards, said bow-spring set at an angle to the plane of the lenses, and said nose-guards having upwardly extending arms curving backwardly, upwardly and forwardly and having a torsional twist, and downwardly extending arms, and clips adapted to embrace the nose-guards, bow-spring and the lenses, substantially as described. 6th. In eye-glasses, the combination with bow-spring, nose-guard and lenses of clips, formed from a single piece of metal, having six horizontal arms and two vertical arms and adapted to embrace the bow-spring, nose-guards and lenses, substantially as set forth. 7th. In eye-glasses, the combination with lenses, of a bow-spring set at an angle to the plane of the lenses, nose-guards formed integrally with the bow-spring and set at an opposite angle to the bow-spring, said nose-guards having upwardly extending arms curved backwardly, upwardly and forwardly, and having a torsional twist, and clips adapted to embrace the nose-guards, bow-spring and lenses, substantially as described.

No. 60,603. Metal Tubes Making Apparatus.

(Appareil pour faire les tubes métalliques.)



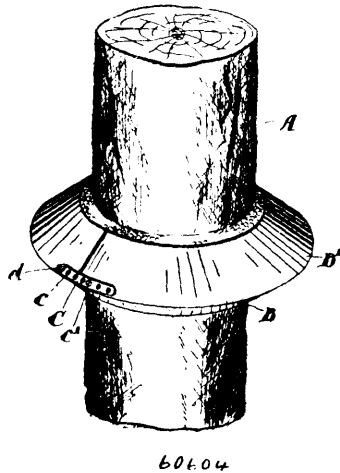
Ralph Charles Stiefel, Ellwood City, Pennsylvania, U.S.A., 15th July, 1898; 6 years. (Filed 14th March, 1898.)

Claim.—1st. The process for making seamless metal tubes, which consists in drawing and stretching the previously pierced metal lengthwise through a die in a cool or cold state upon a movable mandrel which travels with the metal, thereby elongating the tube, producing circumferential tension around the said mandrel and causing the tube to cling to the mandrel by friction, and thereafter stretching the metal laterally or circumferentially and loosening and enlarging it upon the said mandrel by subjecting it to transverse rolling pressure against the said mandrel. 2nd. In the process set forth, the reduction of the outer diameter of the metal upon the mandrel to a uniform degree, causing the metal to grip the mandrel by the circumferential tension and the subsequent increase of the internal diameter of the metal by cross rolling pressure that stretches the tube circumferentially and releases its grip upon the mandrel without destroying or injuring the mandrel, substantially as described. 3rd. The continuation of the drawing process by the removal of the mandrel and the further reduction of the external diameter of the tube by cold drawing without the mandrel, whereby the pierced metal, after being first reduced in diameter and thickness and expanded internally upon the mandrel is hereafter reduced without the mandrel. 4th. The process of making seamless metal tubes of any desired external diameter, thickness, and internal diameter at different points in its length, which consists in drawing the metal in a cold state through dies and upon a mandrel which moves with the metal, and which, at each point of its length, is of a diameter which will leave a thickness of metal produced by the die approximately that desired; thereafter enlarging the tube upon the mandrel by transverse cold rolling upon the said mandrel, so as to enlarge the internal diameter sufficiently to release the grip upon the mandrel and permit the withdrawal of the mandrel from the enlarged tube; and thereafter cold-drawing the tube through an external die after the withdrawal of the mandrel, and producing the desired external diameter, internal diameter, and thickness, will be produced at each point of the tube, and any desired variation from point to point be obtained, substantially as set forth. 5th. The apparatus for transverse rolling characterized by pressure rolls at the sides of the pass, being mounted with their axes and the working faces all substantially parallel with the line of the pass, and a loose mandrel free to travel lengthwise and to turn with the metal being treated, and mechanism which gives a positive rotation to the pressure rolls and thereby turns the mandrel and the metal. 6th. In apparatus of the type described, means for angularly adjusting the axes of the pressure rolls in planes parallel with the pass to produce lengthwise progression of the work at will. 7th. In the cross rolling apparatus, the pressure rolls mounted with their axes and working faces, substantially parallel with the line of the pass, in combination with means for adjusting the rolls to and from each other under a yielding pressure. 8th. In the cross rolling apparatus, the pressure rolls mounted with their axes and working faces all substantially parallel with the line of the pass, in combination with means for adjusting the rolls to and from each other under a yielding pressure, and means for adjusting the axes of the rolls angularly to produce progressive movement of the work, and a guide roller which also is angularly adjustable. 9th. In the cross rolling apparatus, the combination of the pressure rolls with axes lying in planes parallel with the line of the pass, the pressure rolls being angularly adjustable to produce more or less progressive movement of the work and being provided with flexible mechanical driving connections for giving positive rotation to the rolls without interfering with their adjustment, substantially as set forth. 10th. In the cross rolling apparatus, the combination of the pressure rolls located at opposite sides of the pass, and carried by supporting frames which are adjustable in the guideways at right angles to the pass, the said guideways being formed in structures mounted to turn on axes which are transverse to the pass, whereby the rolls may be given independent angular and lateral adjustments relative to the pass, substantially as set forth. 11th. The combination of the main frame, the cylindrical structures mounted in bearings therein on a common axis axial line and provided with longitudinal guideways, frames which reciprocate in said guideways, compressing rolls carried by said frames and located on opposite sides of a pass the axis of which is at right angles to and intersects the axial

line of the cylindrical structures, with means for adjusting the rolls and their supporting frames towards or away from each other, substantially as set forth. 12th. The combination of the cylindrical main frame, with bearings in the same axial line, cylindrical structures mounted and free to rotate in said bearings but held against endwise movement therein, guideways in said structures, frames mounted in said guideways, and carrying rolls located at each side of a pass the axis of which is at right angles to the axis of the cylindrical main frame, cross bars or caps on the outer ends of the main frame with screws projecting through them to adjust the rolls and their frames towards or away from each other, substantially as set forth. 13th. The combination of the cylindrical main frame, and the cylindrical structures mounted within it, the guide in said structures, the frame mounted in said guides, and carrying rolls located at opposite sides of a pass, a screw in one end of the main frame bearing against the end of the adjacent roll frame, and a rod or plunger at the other end of the main frame bearing against the other roll frame with a yielding pressure, substantially as set forth. 14th. The combination of the main frame, the rolls therein located at opposite sides of a pass, the frames which carry the rolls mounted in guides so as to move towards or away from the pass, one of said roll frames being adjustable but held in rigid operative position, the other being also adjustable but yieldingly pressed towards the pass, with means to limit this movement, substantially as set forth. 15th. The combination of the main frame, the roll frames mounted in a suitable guide therein, means for adjusting and rigidly holding one of said frames in its operative position, the plunger spring pressed against the other frame and the adjusting screw through which it passes with a rigid collar on the plunger to contact with the screw and limit its movement, substantially as set forth. 16th. The combination of the main frame, the roll frame mounted in suitable guides therein, one of said frames being rigidly held in operative position while the other is urged towards it by a spring pressed plunger, the collar on the plunger, and the spring bearing at one end against the collar, with the hollow screw through which the outer end of the plunger passes pressing upon and adjusting the tension of the spring, substantially as set forth. 17th. The combination of the main frame, the compressing rolls carried thereby and forming a pass between them, the roller-guide located below the said pass and mounted in bearings upon the head of a shaft or spindle, the axis of which intersects the axis of the pass at its mid-length, substantially as set forth. 18th. The combination of the main frame, the compressing rolls carried thereby and forming a pass between them, the roller guide located below the pass and mounted in bearings upon the head of the shaft or spindle, the axis of which intersects the axis of the pass at its mid-length a screw bearing against the lower end of the spindle to adjust and hold it at any desired elevation and a set screw in the bearing of the spindle to hold it against rotation, substantially as set forth.

No. 60,604. Insect Ring Shield for Trees.

(*Anneau pour protéger les arbres contre les insectes.*)



Archibald Henderson, Toronto, Ontario, Canada, 15th July, 1898; 6 years. (Filed 20th January, 1898.)

Claim.—1st. A tree protector comprising a ring designed to surround the trunk of the tree and provided with an outwardly downwardly-slanting flaring flange extending from the top and forming a hood, and having the interior diameter of the ring greater than the trunk of the tree, a suitable filling located in the annular space formed between the inside of the ring and the tree and an inwardly extending flange formed at the bottom of the ring, and designed to hold the filling in place, as and for the purpose specified. 2nd. A tree protector comprising a ring designed to surround the trunk of the tree and provided with an outwardly downwardly-slanting flaring flange extending from the top and forming a hood and

having the interior diameter of the ring greater than that of the trunk of the tree and a filling designed to be inserted in the annular space between the ring and the tree and comprising a lower layer of oakum, a central layer of red cedar and a top layer of gravel, as and for the purpose specified. 3rd. A tree protector comprising a ring having an outwardly downwardly-slanting flaring flange, an inwardly extending tapered portion narrower at the bottom than at the top provided with a bottom inwardly extending flange and means for connecting the opposing ends of the divided ring together, so as to closely overlap each other, as and for the purpose specified. 4th. A tree protector comprising a divided ring designed to surround the trunk of the tree and provided with an outwardly downwardly-slanting flaring flange and a link pivotally connected to one end of the divided ring and provided with a series of holes and a pin on the opposing end designed to fit into one of the holes in the link, so as to hold the overlapping ends together, as and for the purpose specified.

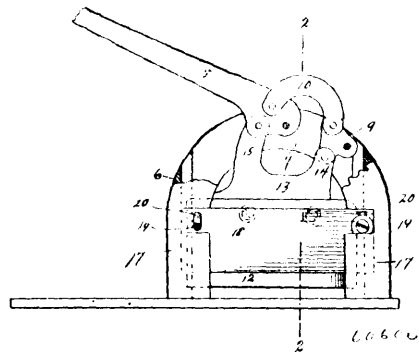
No. 60,605. Fishing Game. (*Jeu de pêche.*)



William Chancellor Haigh, Chorlton-cum-Hardy, Manchester, England, 15th July, 1898; 6 years. (Filed 15th March, 1897.)

Claim.—1st. A receptacle containing opaque liquid and fitted with a table carrying imitation toy fishes and said table moving in one or more directions beneath the level of said liquid, as and for the purposes set forth. 2nd. In a fishing game, an artificial pond, imitation or toy fishes with links L and fishing rod tackle with hooks D magnets or equivalent devices, as set forth. 3rd. A tank A, disc or table B, suspended by tube I from the plate J, carried on driving spindle F, as set forth. 4th. A tank, dish, trough or reservoir filled with opaque liquid containing imitation or toy fishes of the kind described and moving in one or more directions, as and for the purposes set forth.

No. 60,606. Tobacco Cutter. (*Coupe tabac.*)

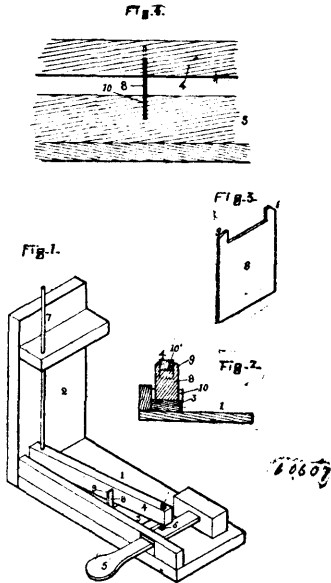


Samuel H. Arrell, Guthrie, Oklahoma, U.S.A., 15th July, 1898; 6 years. (Filed 3rd May, 1898.)

Claim.—1st. The herein described tobacco-cutter comprising a base 5, frame 6 having a slot 7, a lever 8, links 9 and 10, a cutting-blade 12, cross head 13 provided with grooves 14 and 15, the sides of said frame being provided with grooves 16, and scraping-blades 18 held in place by screws 19, all combined substantially as shown and described and for the purpose set forth. 2nd. As an improved article of manufacture, a tobacco-cutter, the same being provided with scraping-blades 18 mounted in grooves 17, and held in place by screws 19 said blades being provided with slots 20 whereby the same may be adjusted, substantially as and for the purpose set forth. 3rd. The herein described tobacco-cutter comprising a base 5, frame 6, having a slot 7, a lever 8, links 9 and 10, a cutting-blade 12, cross-head 13 provided with arms 14 and 15, the sides of said frame being provided with grooves 16, in which said cutting-blade is mounted and grooves 17 in which said scraping-blades are mounted, said

scraping-blades being provided with slots 20, and set-screws passed through said slots whereby the said scraping-blades may be adjusted, substantially as shown and described.

No. 60,607. Pedal Action. (Action de pédale.)

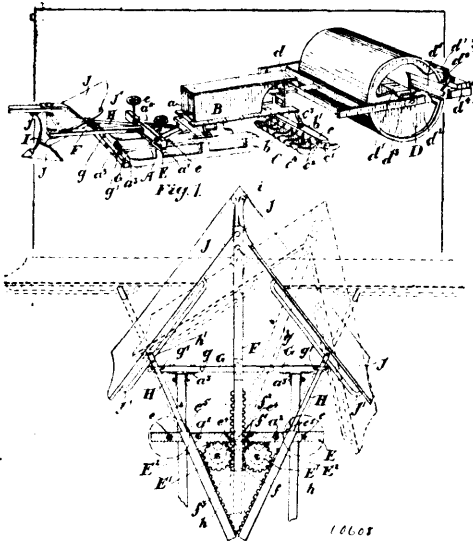


William Henry Ivers, Dedham, Massachusetts, U.S.A., 15th July, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—A spring for pedal actions composed of a flat plate, opposite ends of which enter the substance of the bed piece and pedal bar, respectively, and be thereby secured to such bed piece and pedal bar, substantially as explained.

No. 60,608. Snow Clearing Machine.

(Machine pour enlever la neige.)

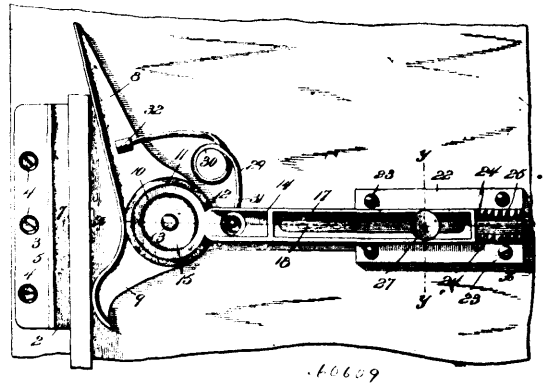


Samuel Freeman McCusker, St. Louis de Gonzague, Quebec, Canada, 15th July, 1898; 6 years. (Filed 29th April, 1898.)

Claim.—1st. A winter road machine, comprising a suitable sled or sleigh provided with a draught tongue, a plough centrally and pivotally secured to the tongue directly in front of the sled and provided with shares adjustably held to the sled at the rear of the same, as and for the purpose specified. 2nd. A winter road machine, comprising a suitable sled or sleigh provided with a draught tongue, a plough centrally and pivotally secured to the tongue directly in front of the sled and provided with shares adjustably held to the sled at the rear of the same, a box seat supported at one end at the rear of the sled, and a cross bar flexibly connected to the rear end of the box seat and provided with a series of

runners extending from end to end of the same and arranged so that each of the series is pivotally held to the bar independently, as and for the purpose specified. 3rd. In a machine of the class described, the combination with the plough, plough sled and runners, of the roller provided with a suitable frame and a rear platform and a scraper suitably supported on such platform and normally spring-held away from the roller, as and for the purpose specified. 4th. In a winter road machine, the combination with the sleigh or sled and draught-tongue, of the plough-share having the stem secured underneath the draught-tongue, the wings pivotally connected to the point of the plough-share on each side of the stem, the horizontal rods connected to the back of the wings, the adjusting rods provided with ring shaped ends, the cross bar on the front of the sled, and means for throwing the rods forwardly or rearwardly to adjust the angle of the wings of the plough, as and for the purpose specified. 5th. In a winter road machine, the combination with the sleigh or sled and draught-tongue, of the plough-share having the stem secured underneath the draught-tongue, the wings pivotally connected to the point of the plough-share on each side of the stem, the horizontal rods connected to the back of the wings, the adjusting rods provided with ring-shaped ends, the cross bar on the front of the sled, the cross bar supported on the sled and having a central aperture, the tongue or draught-bar F extending through such aperture, the racks formed on each side thereof at the rear end of the tongue, the pinions meshing therewith suitably journaled on the cross bar, and the co-acting racks formed on the adjacent rods meshing with the pinions, as and for the purpose specified. 6th. In a machine of the class described, the combination with the tongue or draught-rod and plough having the stem thereof pivotally connected to the tongue, and suitable wings or moulding boards connected with the centre of the plough, and means for adjustably connecting the plough to the sled, of the front cross bar connected to the front of the sled by suitable clevises and provided with stop pins, one on each side of the tongue to limit its lateral movement, as and for the purpose specified. 7th. The combination with the tongue and plough, having the stem centrally connected to the tongue and the laterally extending wings or mould boards, of the fixed posts secured in one of the cross bars of the sled and extending upwardly therefrom, the adjustable cross bar, the screw spindles extending therethrough and rotatably held in the cross bar of the frame, the said adjustable cross bar having a central aperture through which the tongue extends, as and for the purpose specified.

No. 60,609. Bench Vice. (Etau d'établi.)



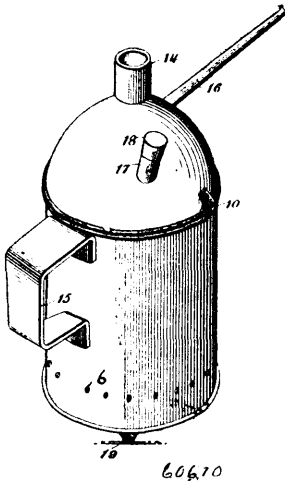
Henning Mathias Knudsen, Anaconda, Montana, U.S.A., 15th May, 1898; 6 years. (Filed 16th July, 1898.)

Claim.—1st. In a bench vice, the combination with a fence, of a movable jaw supported on the bench and having an annular recess the flange of which is partly cut away, and a bar clamped to the bench and having a flat circular head to seat in said annular recess with the bar extending through the opening in the flange, whereby the jaw can turn on said head and be held against vertical movement, substantially as described. 2nd. In a bench vice, the combination with a fence, of a movable jaw supported on the bench and having an annular recess, the flange of which is partly cut away, and a central pin, a bar clamped to the bench and having a flat centrally-perforated circular head to seat in said annular recess and fit over the pin, with the bar extending through the opening in the flange, whereby the jaw can turn on said head and be held against vertical movement, and a spring connected at one end to said bar and at its other end to the jaw to one side of its axis of rotation, substantially as described. 3rd. In a bench vice, the combination with the fixed jaw, having a straight bearing face, of a movable jaw supported on the bench, said jaw comprising a long actuating-arm and a short clamping-arm, the inner faces of which are at an angle to each other, and a lateral extension on the outer face of the jaws at their junction, said extension having an annular recess, the flange of which is partly cut away, and a central pin, a bar clamped to the bench and having a circular perforated head to fit over said pin in the

recess with the bar extending through the opening in the flange, and a spring secured at one end to the bar and detachably connected to the long arm of the jaw, to normally force the long arm toward the fixed jaw, substantially as described. 4th. In a bench vise, the combination with a fixed jaw having a straight bearing face, of a movable jaw supported on the bench, said jaw comprising a long actuating-arm and a short clamping-arm, the inner faces of which are at an angle to each other, a plate firmly secured to the bench and having spaced parallel ribs provided with teeth on their upper faces, a slotted bar pivotally connected at one end to the movable jaw at the junction of its arms and having spaced flanges on its lower face to fit between the ribs on the plate, and having also teeth to interlock with the teeth on the plate, a thumb-screw extending through the slot in the bar into said plate to lock the teeth together, and a spring secured at one end to the bar and detachably connected to the long arm of the jaw, substantially as and for the purpose specified. 5th. In a bench vise, the combination with a fence, of a movable jaw supported on the bench and having an annular recess, the flange of which is partly cut away, a plate firmly secured to the bench and having teeth on its upper face, a longitudinally slotted bar having teeth on its lower face to interlock with the teeth on the said plate, said bar having also a flat circular head on one end to seat in the annular recess in the jaw with the bar extending through the opening in the flange, and a set screw extending through the slot into the said plate, to adjustably clamp the bar and plate together and hold the jaw against vertical movement, substantially as described.

No. 60,610. Insect Destroyer.

(Appareil pour détruire les insectes.)



Eli Thompson Priest, Rising Star, Texas, U. S. A., 15th July, 1898; 6 years. (Filed 16th May, 1898.)

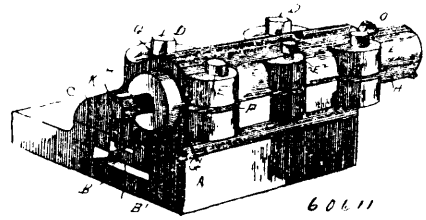
Claim.—1st. An insect destroyer, comprising a fire-pot, and a boiler or generator composed of inner and outer spherical shells, the conical bottom piece connecting the inner and outer shells at the base, and the chimney-tube connecting them at the top, said boiler or generator being provided with a discharge-spout, substantially as described. 2nd. An insect-destroyer, comprising a fire-pot, a boiler or generator mounted at the top of the fire-pot, a concave pan centrally fixed to the bottom of the fire-pot and designed to receive ashes or similar material, saturated with oil, to provide an oil-burner, said pan being of less diameter than the fire-pot forming an intervening annular space between its periphery and the walls of the fire-pot, and a removable grate located above the pan and provided at its periphery with a depending annular supporting-flange located in the space between the pan and the walls of the fire-pot, substantially as and for the purposes described.

No. 60,611. Tool Holder. (Porte-outil.)

John K. Severson, Madison, Wisconsin, U. S. A., 15th July, 1898; 6 years. (Filed 11th June, 1898.)

Claims.—1st. The combination in a holder for cutting or boring tools, of a base-block, a sliding block secured thereon, a clamping-recess in said sliding-block, screw-bolts for contracting and another bolt for expanding said clamping recess, a tool-holder adapted to be secured within said recess, a plunger secured centrally of said holder, an inclined recess in said holder adapted to receive tool-shank, a spring for outwardly impelling said plunger, a screw-plug for impelling the plunger inwardly, the contact of the inner plunger and adapted to clamp the tool-shank within the holder, the whole constructed, arranged and adapted for operation, substantially as and for the purpose herein set forth and shown. 2nd. In a tool-holder, the combination with a supporting-base, of a sliding block, a clamping-recess in said sliding block, a screw-threaded bolt for expanding

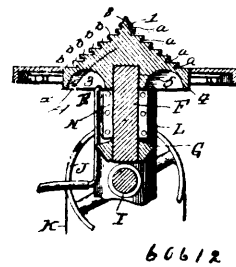
and contracting said recess, a resilient bushing within said recess, a tool holder or clamp having a longitudinal recess opening into an



inclined transverse recess, a rearwardly-spring-impelled plunger in the first-mentioned recess, a screw-plug adapted by rotation to force said plunger inwardly, a cutting or boring tool having a shank adapted to enter said inclined recess and to be secured therein by the pressure of the plunger and against said shank, all substantially as herein shown and set forth. 3rd. The combination with a turning or boring lathe of a tool-holder therefor, consisting of a supporting-block, a sliding block mounted thereon, clamping bolts projected through said sliding and base portions, a clamping-recess in said sliding block, bolts for contracting and expanding said clamping portion, a tool-holder adapted for insertion into said clamping recess, an outwardly-spring-impelled plunger in said holder, a screw-threaded plug for projecting said plunger inwardly, a tool-bearing shank with an inclined aperture therefor adjacent to the end of said holder, said shank adapted to be clamped by the projected end of said plunger, all substantially as herein shown and described.

No. 60,612. Cuff and Collar Ironing Machine.

(Machine à repasser les cols et poignets.)

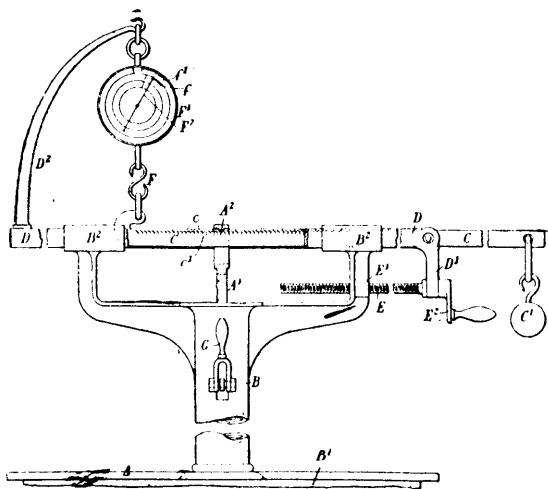


Fred E. Fay, Los Angeles, California, U.S.A., 15th July, 1898. Re-issue of No. 56,129; 6 years. (Filed 25th June, 1898.)

Claim.—1st. An ironing machine comprising a rotatable head formed with a peripheral groove, one wall of the groove being extended beyond the other wall to provide a ledge whereby an article is guided into the groove, substantially as described. 2nd. An ironing machine having a rotatable head, a circular groove in the head and a guide on the same plane as a side of the groove, forming a projecting wall to the latter, substantially as set forth. 3rd. An ironing machine having a circular rotatable head with circular faces of different circumference, a groove in the circular face of smallest circumference, the surface of the head which extends on a line with the lower wall of the groove forming a guide leading to the groove, substantially as set forth. 4th. In a machine of substantially the character described, a rotating portion formed with a groove in which to smooth the edges of articles, the periphery of one wall of which groove is of greater diameter than that of the other wall, whereby a ledge is provided upon which to rest the article and by which to direct it into the groove, substantially as set forth. 5th. An ironing machine having a circular rotatable head with circular faces of different circumference, a groove in the circular face of smallest circumference, a table having a central circular opening, the wall of said opening fitting the face of greatest circumference and in line with the groove therein and means for heating and rotating the head, substantially as described. 6th. In an ironing machine, the combination of a rotating circular head formed with a peripheral groove having a guiding ledge projecting beyond and leading to the groove, said head terminating in and upwardly presented working end or button with unobstructed working space above it, and means for supporting and operating the head located wholly beneath it, substantially as set forth. 7th. The ironing machine consisting of the table provided with a circular hole, the shaft journaled co-axially with such hole, a circular head fixed on the upper end of the shaft and fitted in the hole and provided with a peripheral groove, on wall of which is in line with the face of the table, and terminating in a knob at the top with a groove around the neck of the knob, means underneath the table and head for heating the head, and means for rotating the shaft, substantially as set forth. 8th. The combination of a vertical rotating shaft, means

for rotating the shaft, a circular head on such shaft stepping on its upper face and having around the steps respectively a peripheral groove, substantially as set forth. 9th. The combination of a vertical rotating shaft, means for rotating the shaft, a circular head fixed on the top of such shaft and being solid and stepped on its upper face and having around the steps respectively a peripheral groove, and the heating appliance arranged beneath the head to heat it. 10th. In an ironing machine for smoothing the edges of cuffs and collars, a conical revolving head having its surface stepped to form vertical circular walls and horizontal annular ledges, and provided with peripheral grooves formed respectively in the vertical walls, each of which grooves has one of its walls in line with and adjacent to an annular ledge, substantially as shown and for the purposes set forth. 11th. In a machine for ironing the edges of collars, a circular rotary head having its upper face stepped and provided with peripheral grooves and terminating at the top in a button or knob having a small neck to approximately fit into the internal angles of the collar, substantially as and for the purpose set forth. 12th. The machine for smoothing the edges of cuffs and collars provided with a vertical rotating shaft and a gas-burner arranged near such shaft, and a solid circular head having its upper face stepped and provided with peripheral grooves and in its underside a central socket to fit the upper end of the shaft, and an annular groove to receive the flame from the gas-burner.

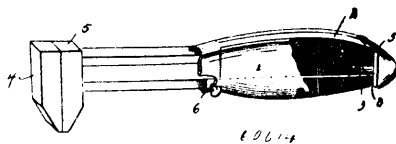
No. 60,613. Weighing and Price Indicating Apparatus. (Appareil à peser et indiquer le prix.)



Francis Williams, Pentre Clawdd, Rwabon, Wales, Great Britain, 15th July, 1898; 6 years. (Filed 24th March, 1897.)

Claim.—1st. In a weighing apparatus the combination of a spring balance and a steel yard or pivoted beam in operative connection with each other, substantially as and for the purpose described. 2nd. In weighing and value indicating apparatus the combination with a spring balance and a steel yard or pivoted beam in operative connection with each other, of a frame, and means for adjusting the frame so as to move the spring balance and the steel yard in relation to the rod or device by which they are operated through the weight of the load, or for adjusting the said rod or device in relation to the balance and steel yard substantially as described. 3rd. In weighing and value indicating apparatus the combination with a spring balance and a pivoted beam in operative connection with each other of a device such as a scale pan for containing the goods to be weighed and valued an adjustable weight for balancing the scale pan and means for simultaneously adjusting the scale pan and the balance weight along the pivoted beam without disturbing their mutual balance, substantially as described. 4th. In weighing and value indicating apparatus a spring balance having a finger or pointer and a scale, one stationary and the other movable with respect to it, to indicate the tare (or weight of the container for the goods) and the gross weight (or weight of the container plus the weight of the goods), a scale adjustable in relation to the first scale to indicate the net weight of the goods and a scale, interchangeable or not, adjustable in relation to the first two scales to indicate the total value of the goods at a fixed price per unit of value, all arranged so that at the termination of each weighing operation the finger or pointer indicates the tare and gross weights and the total value of the goods on the respective scales and the zero point of the net weight scale indicates the tare on the first mentioned scale, substantially as described. 5th. In weighing and value indicating apparatus the combination with a spring balance having a dial face with weight or weight and value scales of scale rings or discs indicating value readily attached to or detached from the dial face, substantially as and for the purpose described.

No. 60,614. Wrench. (Clé à terou.)

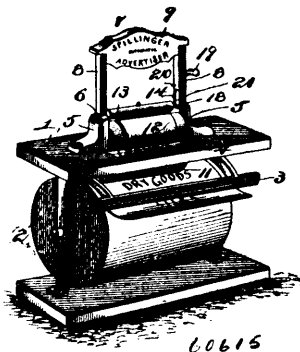


Louis N. Leonard, Butte, Montana, U.S.A., 15th July, 1898; 6 years. (Filed 11th June, 1898.)

Claim.—1st. A wrench, comprising a handle provided with a groove having teeth or serrations thereon, and a head to form the stationary jaw a block having a serrated opening and extension and projections at each side thereof, a movable jaw arranged upon a shank, adapted to slide within said groove, the end of the shank being provided with teeth or serrations, and a cam-block rotatively secured to said handle by movement of which the teeth are brought into or out of engagement with each other, substantially as described. 2nd. A wrench, comprising a handle provided with a groove having teeth or serrations thereon, and a head to form the stationary jaw, a block having a serrated opening and extension and projections at each side thereof, a movable jaw arranged upon a shank, adapted to slide within said groove, the end of the shank being provided with teeth or serrations, and lateral projections or pins adapted to move in grooves in the sides of the handle, and a cam-block rotatively secured to said handle by movement of which the teeth are brought into or out of engagement with each other, substantially as described. 3rd. A pipe-wrench attachment, comprising a block having a serrated opening therein to engage the pipe, an extension formed thereon to engage one edge of the shank and projections arranged at each side of the block adapted to engage the stationary and movable jaws, substantially as described.

No. 60,615. Paper Roll Holder.

(Porte rouleau de papier.)



Joseph Spillinger, Philadelphia, Pennsylvania, U.S.A., 15th July, 1898; 6 years. (Filed 16th June, 1898.)

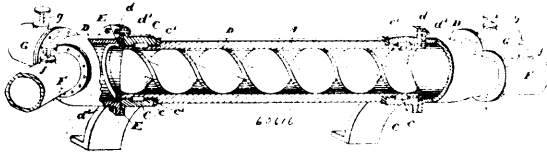
Claim.—1st. In a device of the class described, the combination of a supporting-frame adapted to receive a roll of paper, and provided with arms, a blade mounted on the arms, a transverse support mounted on the arms and located between the blade and the roll of paper, and a clamping-plate mounted between the arms at a point intermediate of the blade and the support and extending rearward over the latter, said clamping-plate being provided with means for securing it at any desired adjustment, substantially as described. 2nd. In a device of the class described, the combination of a supporting-frame adapted to receive a roll of paper and provided with arms, a vertically-disposed knife-blade connecting the ends of the arms and having a substantially horizontal extension at the top thereof, a support extending across the space between the arms and adapted to receive the paper, a clamping-plate journaled between the arms, provided with an extended threaded journal and arranged to engage the paper at the said support, and a nut arranged on the threaded journal and bearing against the adjacent arm to secure the clamping-plate in its adjustment, substantially as described.

No. 60,616. Rotary Engine. (Machine rotatoire.)

Alexander Hastings Canning, Toronto, Ontario, Canada, 16th July, 1898; 6 years. (Filed 5th May, 1898.)

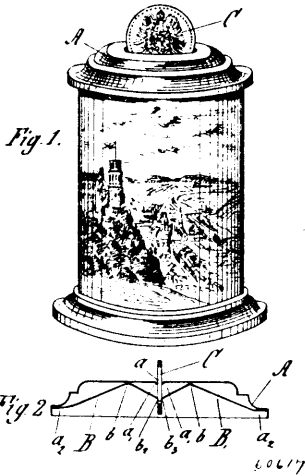
Claim.—1st. A rotary engine comprising a tube having a convolute spiral centre extending from end to end of the same, suitable bearings for supporting the outside of the tube, a suitable casing at each end and inlet and exhaust ports arranged as specified. 2nd. A rotary engine comprising a tube having a convolute spiral centre extending from end to end of the same, suitable bearings for supporting the outside of the tube, a suitable casing at each end pro-

vided with an annular chamber and an inlet pipe leading into the same, and a suitable valve at the ends of the tube for controlling the



exhaust as and for the purpose specified. 3rd. A rotary engine comprising a tube having a convolute spiral centre extending from end to end of the same, suitable bearings for supporting the outside of the tube, a suitable casing at each end, steam tight packing rings fitting at both sides of the bearings and between the tube and casing and inlet and exhaust ports arranged as specified.

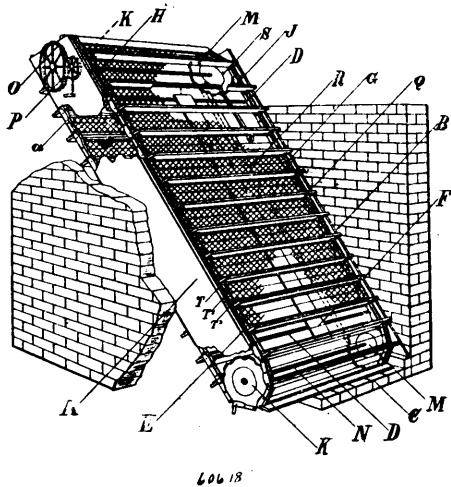
No. 60,617. Money Box. (Boîte à monnaie.)



Caspar Fliegelskamp, Mannheim, Baden, Germany, 16th July, 1898; 6 years. (Filed 18th April, 1898.)

Claim.—A money box of the kind described having a coin-receiving slit and two spring plates whose ends normally meet near the receiving slit, which plates are adapted to yield to admit a coin and to close to prevent the withdrawal of a coin, substantially as and for the purpose described.

No. 60,618. Water Rack. (Ratelier pour l'eau.)



Thomas Blarman, Owen Sound, Ontario, Canada, 16th July, 1898; 6 years. (Filed 28th January, 1898.)

Claim.—1st. In a revolving screen for flumes, penstocks and intake waterpipes, the frame composed of the sides A and B the base C, the cross beams D D, the parallel uprights E F and G, the endless chains H and J, the sprocket wheels K and M, and the pins S, as and for the purpose hereinbefore set forth. 2nd. In a revolving screen for flumes, penstocks and intake waterpipes the driving shafts N

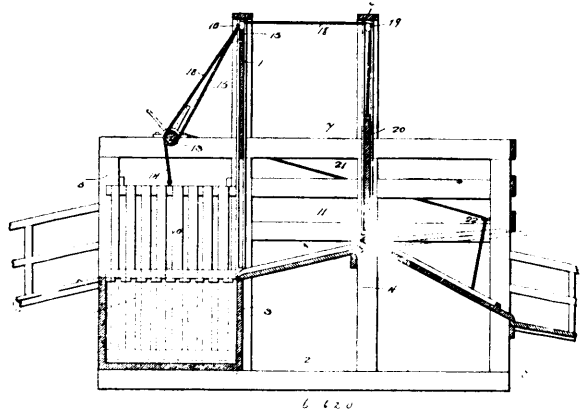
working within the sliding boxes and journaled within the sides A and B, and having the rods T, T¹ and T² secured within the chains H and J, with the alternate racks Q, as and for the purpose hereinbefore set forth. 3rd. In a revolving screen for flumes, penstocks and intake waterpipes the netted guard R made in sections and secured to the links a passing over the front of the rods T, T¹ and T², as and for the purpose hereinbefore set forth. 4th. In a revolving screen for flumes, penstocks and intake waterpipes the combinations of the driving shafts N, with sliding boxes journaled within the sides A and B, the driving gear with the pinion P, and spur-wheel O, as and for the purpose hereinbefore set forth. 5th. In revolving screens for flumes, penstocks and intake waterpipes, the chain with the link a with the two horizontally parallel and opposite sides b and c the opening d a jaw e, the hook shaped base f, the oval rod j, as and for the purpose hereinbefore set forth. 6th. In revolving screens for flumes, penstocks and intake waterpipes, the knocker having the opening g, the opening h for the reception of the cross-bar i as and for the purpose hereinbefore set forth.

No. 60,619. Hog-Cholera Medicine. (Médecine pour porcs.)

Carl Kuklinski, Kowahlen, German Empire, 16th July, 1898; 6 years. (Filed 10th January, 1898.)

Claim.—A remedy against hog-cholera and other diseases of the intestinal tract, composed of an extract of drugs acting as a laxative and stimulating secretion such as senna, centaury, peppermint and the like, with a mixture of alcohol and acetic acid and with the addition of ethereal oils in the proportion, and for the purpose set forth.

No. 60,620. Animal Dipping Tank. (Réservoir pour immerger les animaux.)



Edward Albert Steen, Findlay, Ohio, U.S.A., 16th July, 1898; 6 years. (Filed 8th July, 1898.)

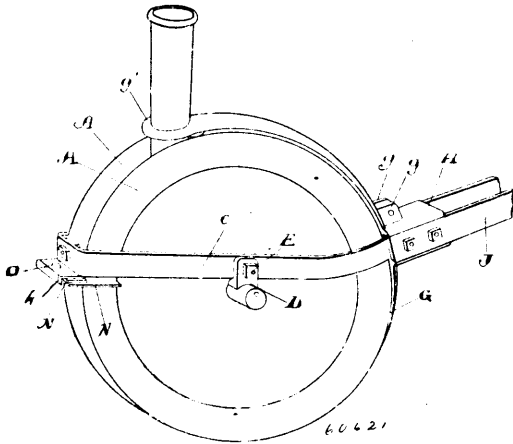
Claim.—In a device of the character described, the combination with the dipping tank, the cage having a vertical movement therein, a draining-pen, doors at the entrance and exit of said pen, a tilting platform entirely enclosed by a framework when in its elevated position, a windlass, and ropes leading from the cage, doors and pivoted platform, to the windlass, whereby when the platform is lowered one of the doors or guards will be raised and the other lowered and at the same time, the tilting platform will be actuated.

No. 60,621. Drill. (Foret.)

Richard Sylvester, Lindsay, Ontario, Canada, 16th July, 1898; 6 years. (Filed 8th July, 1898.)

Claim.—1st. A disc shoe drill embracing in its construction two converging discs, each having a central bore, an axle for each disc, consisting of a spindle projecting outwardly through the bore, a cup-shaped enlargement on the inner end of the spindle secured to the inner side of the disc, and an anti-friction ball contained within the cups of the enlargement, substantially as specified. 2nd. A disc shoe drill embracing in its construction two converging discs, each having a central bore, an axle for each disc, consisting of a spindle projecting outwardly through the bore, a cup-shaped enlargement on the inner side of the spindle secured to the inner side of the disc, an anti-friction ball contained within the cups of the enlargements, a disc frame and bearings connected to the frame for the axles of the discs, consisting of a hanger, a bore for the hanger, and a hollow wooden bushing for the bore to receive the ends of the spindles, substantially as specified. 3rd. A disc shoe drill embracing in its construction two converging discs, each having a central bore, an axle for each disc, consisting of a spindle projecting outwardly through the bore, a cup-shaped enlargement on the inner end of the spindle secured to the inner side of the disc, an anti-friction ball contained within the cups of the enlargements, a

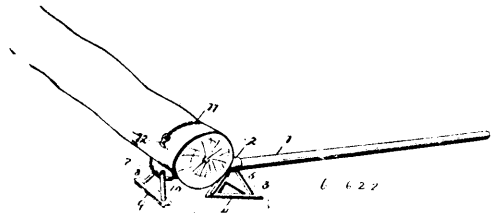
disc frame and bearings connected to the frame for the axles of the discs, consisting of a hanger, a bore for the hanger, and a hollow



wooden bushing for the bore to receive the ends of the spindles, an oil passage through the hanger and bushing to the journal of the spindles, and a cap to close the passage to prevent the admission of foreign particles, substantially as specified. 4th. In a disc shoe drill, the combination of a frame embracing in its construction a bail-shaped metallic strap, having a back and two opposite converging sides, with a curved guard corresponding to the discs, a forwardly projecting channelled enlargement at the middle of the guard to receive the ends of the frame, sides and ends of the drag bars of the main frame, substantially as specified. 5th. In a disc shoe drill, the combination of a frame embracing in its construction a bail-shaped metallic strap, having a back and two opposite converging sides, with a curved guard corresponding to the discs, a forwardly projecting channelled enlargement at the middle of the guard to receive the ends of the frame, sides and ends of the drag bars of the main frame, two lugs connected to the front of the guard and top of the enlargement to receive the ends of the spring pressure rods, substantially as specified. 6th. In a disc shoe drill, the combination of a frame embracing in its construction a bail-shaped metallic strap, having a back and two opposite converging sides, with a curved guard corresponding to the discs, a forwardly projecting channelled enlargement at the middle of the guard to receive the ends of the frame, sides and ends of the drag bars of the main frame, two lugs connected to the front of the guard and top of the enlargement to receive the ends of the spring pressure rods, a loop at the upper end of the guard, a plate projecting forwardly from the back of the disc frame between the discs, a boot or grain spout having a lug bolted to the plate, and its upper end held by the loop of the guard or shield, substantially as specified. 7th. In a disc shoe drill, the combination of a frame embracing in its construction a bail-shaped metallic strap, having a back and two opposite converging sides, with a curved guard corresponding to the discs, a forwardly projecting channelled enlargement at the middle of the guard to receive the ends of the frame, sides and ends of the drag bars of the main frame, two lugs connected to the front of the guard and top of the enlargement to receive the ends of the spring pressure rods, a loop at the upper end of the guard, a plate projecting forwardly from the back of the disc frame between the discs, a boot or grain spout having a lug bolted to the plate, and its upper end held by the loop of the guard or shield, and a forwardly curved toe for the boot or grain spout, substantially as specified. 8th. In a disc shoe drill the combination of a frame embracing in its construction a bail-shaped metallic strap, having a back and two oppositely converging sides, with a curved guard corresponding to the discs, a forwardly projecting channelled enlargement at the middle of the guard to receive the ends of the frame, sides and ends of the drag bars of the main frame, two lugs connected to the front of the guard and top of the enlargement to receive the ends of the spring pressure rods, a loop at the upper end of the guard, a plate projecting forwardly from the back of the disc frame between the discs, a boot or grain spout having a lug bolted to the plate, and its upper end held by the loop of the guard or shield, a rearward projection of the plate, and laterally adjustable scraper knives connected to the rearward projection substantially as specified. 9th. In a disc shoe drill the combination of a frame embracing in its construction a bail-shaped metallic strap, having a back and two oppositely converging sides, with a curved guard corresponding to the discs, a forwardly projecting channelled enlargement at the middle of the guard to receive the ends of the frame, sides and ends of the drag bars of the main frame, two lugs connected to the front of the guard and top of the enlargement to receive the ends of the spring pressure rods, a loop at the upper end of the guard, a plate projecting forwardly from the back of the disc frame between the discs, a boot or grain spout having a lug bolted to the plate, and its upper

end held by the loop of the guard or shield, a forwardly curved toe for the boot or grain spout a rearward projection of the plate, laterally adjustable scraper knives connected to the rearward projection, and two discs shoes each having a central bore, an axle consisting of a spindle projecting outwardly through the bore, a cup-shaped enlargement at the inner end of the spindle, secured to the inner side face of its respective disc, an anti-friction ball contained between the cups of the enlargements, and hangers connected to the discs frame, each having a central bore, a hollow wooden bushing, contained within the bore to receive the spindle of the axle, an oil passage through the bearing to the bore of the bushing, and a cap to close the oil passage substantially as specified. 10th. In a disc shoe drill, two scraper knives each consisting of a longitudinally slotted body portion and two forwardly projecting blades, each arranged to scrape their respective sides of the discs, substantially as specified. 11th. In a disc shoe drill, two scraper knives, each consisting of a longitudinally slotted body portion and two forwardly projecting blades, each arranged to scrape their respective sides of the discs, a disc frame, a bed-plate connected to the disc frame for the scraper knives, and a belt passing through the slot of the body portion and bed plate, substantially as specified.

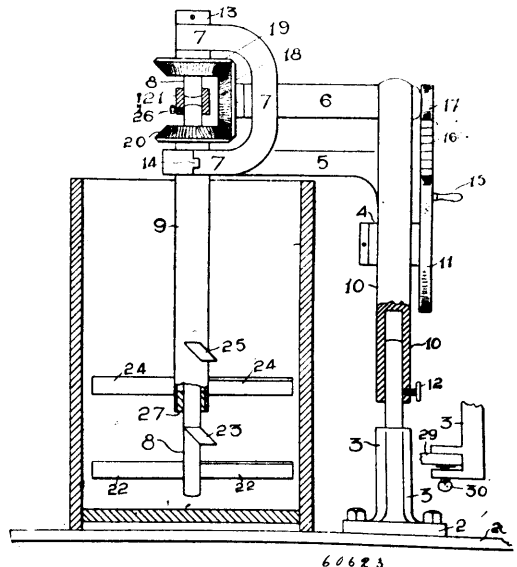
No. 60,622. Cant Hook. (Renard.)



Henry John Greyell, Enderby, British Columbia, Canada, 16th July, 1898; 6 years. (Filed 6th July, 1898.)

Claim. - 1st. A cant hook, comprising a handle, a collar secured thereon, a support connected to said collar, a tip secured to the front end of said handle, and a support pivotally connected to said tip, substantially as described. 2nd. A cant hook, comprising a handle, a collar secured thereon intermediate its end, a support connected to said collar, a tip secured to the front end of said handle, and means connected to said tip, for supporting said tip in position when raised, substantially as described. 3rd. A cant hook, comprising a handle, a collar secured thereon intermediate its ends, said collar being provided with a hook, a triangular support connected to said collar, a tip secured at the front end of said handle, said tip having a segmental upper surface, swinging support pivotally connected to said tip, and a chain removably connected to said hook, said chain having its free end provided with a log engaging hook, substantially as described.

No. 60,623. Churn. (Barratte)

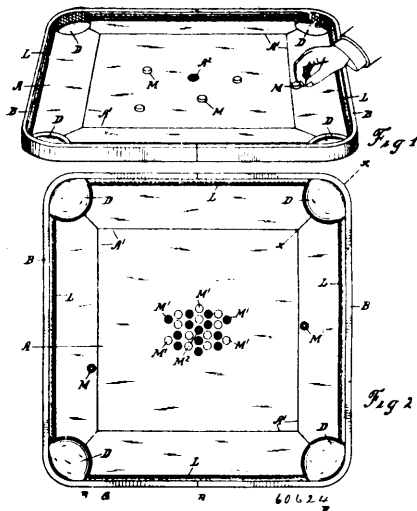


Robert William Hillyard, Ottawa, Ontario, Canada, 16th July, 1898; 6 years. (Filed 5th July, 1898.)

Claim. - 1st. In a churn combination of the fly wheel sprocket with a chain and sprocket as and for the purpose specified. 2nd. In a

churn the combination of the fly wheel sprocket 11, with the chain 16, and the sprocket 17 as and for the purpose specified. 3rd. In a churn the combination of the fly wheel sprocket 11, the chain 16, the sprocket 17, the main shaft carrying at its exterior end the said sprocket 17 and at its interior end the bevel gear 18, meshing with bevel gear 19 mounted on shaft 8, and with bevel gear 20 mounted on shaft 9 as and for the purpose specified. 4th. In a churn the combination of the fly wheel sprocket 11, chain 16, sprocket 17, the main shaft carrying at its exterior end the said sprocket 17 and at its interior end the bevel gear 18, meshing with the bevel gear 19 mounted on shaft 8 and with the bevel gear 20 mounted on shaft 9, said shaft 8 being in two pieces, joined by coupling 21 as and for the purpose specified. 5th. In a churn the combination of the fly wheel sprocket 11, the chain 16, the sprocket 17 at the exterior end of the main shaft, the bevel gear 18 at the interior end of said main shaft the bevel gear 19 and 20 meshing with said bevel gear 18, and said bevel gear 19 and 20 being mounted on shafts 8 and 9 respectively, and the said shafts 8 and 9 carrying near their lower extremities the floats 22, 23 and 24, 25 respectively, as and for the purpose specified. 6th. In a churn comprising a churn body 1, the fly wheel sprocket 11, the chain 16, the sprocket, 17, the main shaft, the bevel gears 18, 19, and 20, the shafts 8 and 9, and the floats 22, 23 and 24, 25 the frame 10, the base 2 and standard 3, the said frame 10 being adjustable vertically on the said standard 3, substantially as described and for the purpose specified. 7th. In a churn comprising a churn body 1, the fly wheel sprocket 11, the chain 16, the sprocket 17, the main shaft, the bevel gears 18, 19 and 20, the shafts 8, and 9 the floats 22, 23 and 24, 25 the frame 10 mounted on the standard 3, the said frame 10 having a hinge joint 14, or equivalent device, as and for the purpose specified. In a churn the combination of the shaft, 8, the shaft 9, dashers located at suitable intervals on said shaft suitable means for rotating the said shafts 8 and 9 in opposite directions and the plug 27 fitted into said shaft 9 as and for the purpose specified. 9. In a churn comprising a churn body 1, a fly wheel sprocket 11, the chain 16, the sprocket 17, the main shaft, the bevel gears 19 and 20, the shafts 8 and 9, suitable means for rotating said shafts 8 and 9 in opposite directions, and floats located at suitable intervals on said shafts 8 and 9, the combination of the coupling 21, the shafts 8 and 9, and hinge joint 14, or equivalent device, as and for the purpose specified.

No. 60,624. Game Board. (Jeu.)

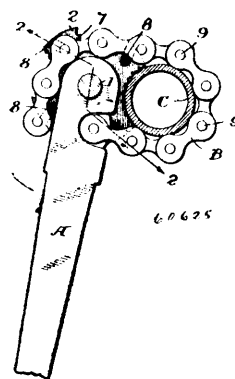


Henry Lincoln Haskell, Ludington, Michigan, U.S.A., 16th July, 1898; 6 years. (Filed 15th April, 1898.)

Claim.—1st. In game board, the combination of a face, a rim projecting above the face, and pockets, with sets of discs adapted to be grouped about the centre of the face, and a disc adapted to be snapped to impel the other discs into the pockets, substantially as described. 2nd. In a game board, the combination of a face, a rim projecting above the face, a cushion on the rim, and pockets, with sets of discs adapted to be grouped about the centre of the face, and a disc adapted to impel the other discs into the pockets, either directly or by the deflecting action of the cushion, substantially as described. 3rd. In a game board, the combination of face, a rim projecting above the face, a base line on said face, and pockets, with sets of discs adapted to be grouped about the centre of the face, and a disc adapted to be snapped to impel the other discs on said face into said pockets, either directly or by the deflecting action of the cushion, substantially as described. 4th. In a game board, a face, a rim, a cushion on the rim, a series of pockets, and a corner opposite each pocket recessed in the plane of the cushion, substantially as described. 5th. The combination of a

game board, having a face, a rim projecting above the face, a cushion on the rim, a base line adjacent to the rim, and pockets outside the base line, with sets of discs adapted to be grouped about the centre of the face, and a disc adapted to be snapped from the base line to impel the other discs into the pockets, either directly or by the deflecting action of the cushion, substantially as described. 6th. In a game board, the combination of a face, a series of pockets, a rim forming the outer boundary of each pocket and having a central recess for each pocket extending above and below the plane of the face of the board, and adapted to receive the impact of the playing disc and deflect the same into the bottom of the pocket, substantially as described. 7th. In a game board, the combination of a face, a rim, a series of pockets, a central recess in the rim for each pocket curved in all directions and extending above and below the plane of the face of the board, and a pocket of felt or similar material hung loosely in front of the said recess, whereby the impact of the playing disc may carry the loose material before it into the recess, and the disc be deflected into the bottom of the pocket, substantially as described. 8th. In a game board, the combination of a face, a rim projecting above and below the face, openings in the face for pockets, pockets each secured to the rim, and to an adjustable wire held in the rim and securing each pocket below the face, substantially as described. 9th. In a game board, the combination of a face, a rim, openings in the face for pockets, a groove in the rim for each pocket below the face, a wire secured by each groove and encircling the openings, and pockets held about the openings by the wires, substantially as described.

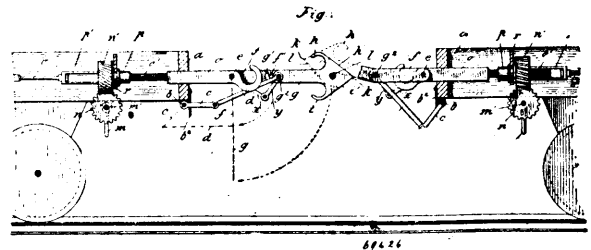
No. 60,625. Pipe Wrench. (Cle à tuyau.)



Thomas M. Righter and George Jeffries, both of Mount Carmel, Pennsylvania, U.S.A., 16th July, 1898; 6 years. (Filed 14th April, 1898.)

Claim. 1st. In a pipe wrench, the combination of a lever, a pivot bolt passing through the lever, a pair of jaws fixed upon and adapted to rotate with said bolt, toothed recesses in the periphery of said jaws, slots in the inner faces of the jaws between the recesses, and a chain connected with the lever and provided with pins adapted to engage the slots in the jaws, substantially as described. 2nd. A pipe wrench comprising a lever or handle, a pivot bolt free to turn in an opening in said handle, a pair of circular jaws arranged upon the bolt on opposite sides of the handle, inclined slots in the inner faces of said jaws, said slots extending inward from the periphery and being inclined to the radii, a chain connected with the handle near the pivot bolt, said chain having pins projecting from the sides thereof adapted to be seated in the inclined slots of the jaws, substantially as described.

No. 60,626. Car-Coupler. (Attelage de chars.)

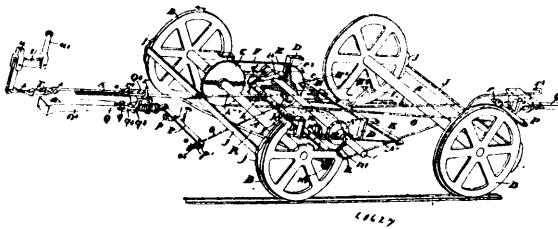


Louis Mathias Grosz, Erzsébetfalva, near Budapest, and Moritz Hay, Budapest, both of Hungary, 18th July, 1898; 6 years. (Filed 25th June, 1898.)

Claim.—1st. An automatic side operated coupling for railway vehicles, comprising a transverse crank-shaft carried by the vehicle,

an arm fast thereon and a double hook connected by links to the arm and provided with a double inclined end adapted to slide over, and engage one of the hooks, with a bolt adjacent to the said hooks of the counterpart coupling of the adjoining vehicle, all arranged operating and constructed, substantially as hereinbefore described. 2nd. A form of construction of the coupling claimed on claim 1, so arranged, that the drawing up of the parts thereof is effected by worm-wheels operated by an independent shaft terminating in a lever or crank *m*, in the manner and for the purpose above set forth, constructed and arranged substantially as hereinbefore described. 3rd. A form of construction of the coupling claimed on claim 1, characterised by the facts that the double hooks are, on the one hand arranged pivotally on the draw-bar *o*, and on the other hand, connected by means of an intermediate link *d* with a rigid arm of the shaft *b*, with the object, by altering the position of the draw-rods by means of the hand-crank *m*, of enabling the double hooks so be brought exactly into the vertical position required constructed and arranged, substantially as hereinbefore described. 4th. In the coupling above described, connecting the arm *g* with the draw-bar *o* by the pivoted link rods *x* and *y*, for the purpose of maintaining the coupling secure in case of breakage constructed and arranged, substantially as described.

No. 60,627. Car Brake. (Frein de chars.)



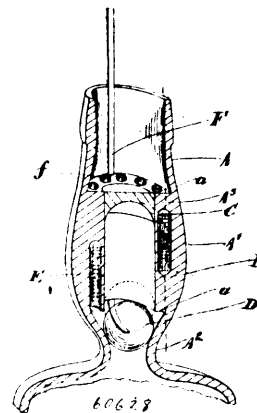
James Harry Keighly McCollum Remigius Elmsley and William Henry Brouse, all of Toronto, Ontario, Canada, 18th July, 1898; 6 years. (Filed 23rd June, 1898.)

Claim.—1st. In a car brake, the combination with the brake levers and shoes and rods connecting the same, of the cross shaft connected by chain to the brake lever and supported in bearings attached to the bottom of the car, a sprocket wheel provided with a frictional face supported loosely on said shaft, a sprocket wheel on the car axle and sprocket chain connecting both sprocket wheels, a friction disc operatively connected to the main shaft, so as to rotate with it in one direction and revolve loosely on the shaft in the opposite direction and means for throwing the sprocket wheel friction disc against the friction disc operatively connected to the cross shaft, as and for the purpose specified. 2nd. In a car brake, the combination with the brake levers and shoes and rods connecting the same, of the cross shaft connected by chain to the brake lever and supported in bearings attached to the bottom of the car, a sprocket wheel provided with a frictional face supported loosely on said shaft, a sprocket wheel on the car axle and sprocket chain connecting both sprocket wheels, a friction disc operatively connected to the main shaft, so as to rotate with it in one direction and revolve loosely on the shaft in the opposite direction and the bell-crank lever suitably pivoted on the supporting bearings connected to the bottom of the car and having a forked end extending in proximity to the hub of the frictional sprocket wheel and means for operating said lever, so as to throw the frictional sprocket wheel in contact with the friction disc on the cross shaft, as and for the purpose specified. 3rd. In a car brake, the combination with the brake levers and shoes and rods connecting the same, of the cross shaft connected by chain to the brake lever and supported in bearings attached to the bottom of the car, a sprocket wheel provided with a frictional face supported loosely on the said shaft, a sprocket wheel on the car axle and sprocket chain connecting both sprocket wheels, a friction disc operatively connected to the main shaft, so as to rotate with it in one direction and revolve loosely on the shaft in the opposite direction, and the bell-crank lever suitably pivoted on the supporting bearings connected to the bottom of the car and having a forked end extending in proximity to the hub of the frictional sprocket wheel, the recedable draw bar, the lever connected to the rear end thereof and suitably pivoted in a bracket connected to the bottom of the car and the spring-held rod connecting the opposite end of the lever to the bell crank lever, as and for the purpose specified. 4th. In a car brake, the combination with the brake levers and shoes and rods connecting the same, of the cross shaft connected by the chain to the brake lever and supported in bearings attached to the bottom of the car, a sprocket wheel provided with a frictional face supported loosely on said shaft, a sprocket wheel on the car axle and sprocket chain connecting both sprocket wheels, a friction disc having a ratchet wheel connected to same, an arm on the main shaft provided with a spring-held dog designed to engage with the ratchet wheel and means for throwing the sprocket wheel friction disc against the friction disc operatively connected to the cross-shaft as and for the purpose specified. 5th. In a car brake, the combination with the brake levers and shoes and rods connecting the same, of the cross shaft connected by chain to the brake lever and supported in bearings

attached to the bottom of the car, a sprocket wheel provided with a frictional face supported loosely on said shaft, a sprocket wheel on the car axle and sprocket chain connecting both sprocket wheels, a friction disc having a ratchet wheel connected to same, an arm on the main shaft provided with a spring-held dog designed to engage with the ratchet wheel, means for throwing the sprocket wheel friction disc against the friction disc operatively connected to the cross-shaft a supplemental ratchet wheel on the main shaft reversely set to the ratchet wheel on the friction disc, a spring-held dog designed to engage therewith and means for releasing such dog, as and for the purpose specified. 6th. In a car brake, the combination with the brake levers and shoes and rods connecting the same, of the cross shaft connected by chain to the brake lever and supported in bearings attached to the bottom of the car, a sprocket wheel provided with a frictional face supported loosely on said shaft, a sprocket wheel on the car axle and sprocket chain connecting both sprocket wheels, a friction disc having a ratchet wheel connected to same, an arm on the main shaft provided with a spring-held dog designed to engage with the ratchet wheel, means for throwing the sprocket wheel friction disc against the friction disc operatively connected to the cross-shaft a supplemental ratchet wheel on the main shaft reversely set to the ratchet wheel on the friction disc, a spring-held dog designed to engage therewith, an arm connected to such dog, a rod extending from such arm to a point above the centre of the pivotal connection of the draw-bar to the draw bar rod and an operative connection from such rod to the motor car, as and for the purpose specified. 7. In a car brake, the combination with the brake levers and shoes and rods connecting the same, of the cross-shaft connected by chain to the brake lever and supported in bearings attached to the bottom of the car, a sprocket wheel provided with a frictional face supported loosely on said shaft, a sprocket wheel on the car axle and sprocket chain connecting both sprocket wheels, a friction disc having a ratchet wheel connected to same, an arm on the main shaft provided with a spring-held dog designed to engage with the ratchet wheel, means for throwing the sprocket wheel friction disc against the friction disc operatively connected to the cross-shaft, a supplemental ratchet wheel on the main shaft reversely set to the ratchet wheel on the friction disc, a spring-held dog designed to engage therewith, an arm connected to such dog, a rod extending from such arm to a point above the centre of the pivotal connection of the draw-bar to the draw bar rod, a rod having an eye-shaped end secured on the hooked end of the aforesaid rod, snap hooks connecting the end of the eye-rod, an eye-rod above the opposite draw-bar and a connecting rod from such rod to the front of the car, a bell-crank pivoted to a suitable bracket connected to the bottom of the car and connected at the bottom to the connecting rod and a depression plunger pivotally connected to the upper end of the bell-crank as and for the purpose specified.

No. 60,628. Non-refillable Bottle.

(Bouteille non réemplissable.)

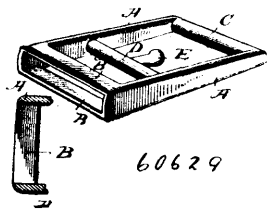


Archibald Grant Snowdon, Albert Edward Morris and John Michaels, all of Montreal, Quebec, Canada, 18th July, 1898; 6 years. (Filed 21st June, 1898.)

Claim.—1st. In a non-refillable bottle, the neck portion provided with a swell and a contraction below the swell and inner wall with top and bottom shoulders forming a central aperture, closing means at the top for such aperture and a ball designed to normally rest upon the seat formed by the lower contraction and have movement between such seat and the aperture and a series of passage-ways circumferentially around the central aperture, as and for the purpose specified. 2nd. In a non-refillable bottle, the neck portion provided with a swell and a contraction below the swell and inner wall with top and bottom shoulders forming a central aperture, closing means at the top for such aperture and a ball designed to normally rest upon the seat formed by the lower contraction and have movement between such seat and the aperture, a series of passage-ways circumferentially around the central aperture and a wire designed to be

inserted through a passage way in the wall and having a lower bent and designed to normally hold the ball up from its seat until the bottle is filled in the first place and to be withdrawn after such filling, as and for the purpose specified.

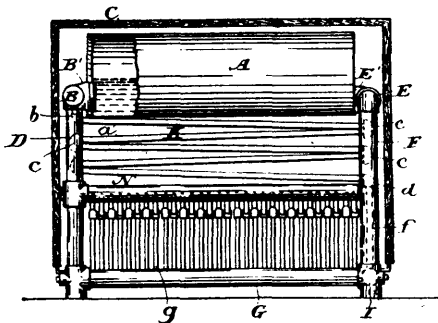
No. 60,629. Buckle. (Boucle.)



Silas C. Purdy, Thomas A. Philips and John J. Stilson, all of Atkinson, Nebraska, U. S. A., 18th July, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—1st. A buckle having wedge-shaped side bars, cross-bars at the top and bottom of the side bars leaving a slot or opening between them, a cross-bar and the headed stud or tongue extending in the direction of the length of the side bars, substantially as set forth.

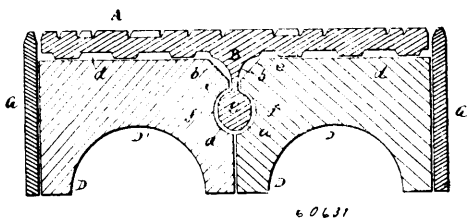
No. 60,630. Steam Generator. (Générateur de vapeur.)



The Roberts Safety Water Tube Boiler Company, Red Bank, New Jersey, U.S.A., 18th July, 1898; 6 years. (Filed 13th May, 1898.)

Claim.—1st. In a steam-generator, the combination of the elevated drum A, communicating cross-box B, cross-pipe I and one or more tiers of longitudinal return-tubes communicating directly with said cross-pipes, and forming a connection with the front and rear of the generator, as set forth. 2nd. In a steam-generator, the combination of the drum A, cross-box B, cross-pipe I and an intermediate group of longitudinal tubes a connected to headers L, L', as set forth. 3rd. In a steam-generator, the combination of the drum A, the lower longitudinal pipes G and N, the intermediate side pipes D connected with said drum, and a series of cross-tubes M, alternately connected with the opposite lower and intermediate pipes G and N, as set forth. 4th. In a steam-generator, the combination of the drum, the cross boxes or pipes B and I, one or more tiers of longitudinal tubes K communicating therewith, longitudinal lower and intermediate side pipes G and N also communicating with the drum, and a series of cross-tubes M, alternately connected with the opposite lower and intermediate side pipes, as set forth.

No. 60,631. Printing Plate. (Plaque à imprimer.)

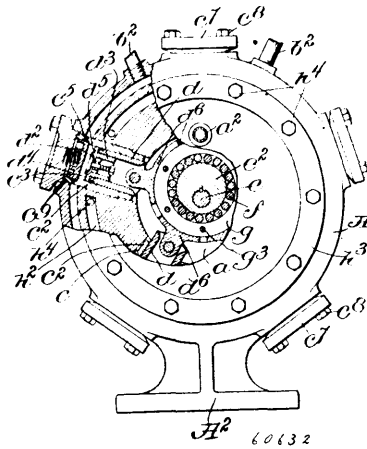


Benjamin Franklin Curtis and Ferdinand Wesel, both of Brooklyn, New York, U.S.A., 18th July, 1898; 6 years. (Filed 11th May, 1898.)

Claim.—1st. A printing plate, provided on its underside with a longitudinal rib having a beveled bottom edge and a longitudinal

groove in the side above said head, substantially as herein shown and described. 2nd. The combination with a printing plate provided on its underside with a longitudinal rib, having a beveled bottom edge and a longitudinal groove in each side above said head, of two base sections having their upper inner corner edges beveled downward and outward and provided with a longitudinal groove below said bevel, substantially as herein shown and described. 3rd. The combination with a chase of one or more printing plates, each provided on its underside with a longitudinal rib, having its underside beveled and provided with a longitudinal groove, above said bevel, twice as many base sections as there are printing plates, of which base sections at least one for each printing plate has its upper corner, adjacent to the rib, beveled downward and outward and which section has a longitudinal groove below said bevel and of wedges introduced between the sides of the chase and the outer sides of the base sections, substantially as herein shown and described.

No. 69,632. Rotary Pump. (Pompe rotatoire.)



The Hygienic Refrigeration Company, New York City, assignee of Jeanie Belle Wood, St. Louis, Missouri, U.S.A., 18th July, 1898; 6 years. (Filed 22nd April, 1898.)

Claim.—1st. A rotary pump comprising a casing having a closed gas chamber in the interior thereof and a separate closed gas chamber also formed in the casing and surrounding the interior chamber, a series of plunger chambers each one of which extends from one of said closed gas chambers to the other, a plunger adapted to reciprocate in each plunger chamber and having a valve adapted to be opened during the movement of said plunger in one direction but not in the other, a valve controlling the communication of each plunger chamber with one of said gas chambers, said valve being adapted to be closed when the plunger valve is open, means for reciprocating the said plungers, and a gas inlet to one of said chambers and a gas outlet from the other, substantially as described. 2nd. The combination with a casing having an interior closed gas chamber, provided with an inlet for the gas to be compressed, of an annular gas chamber in said casing surrounding said closed chamber and adapted to receive and deliver gas after the compression thereof, a series of plunger chambers extending from said annular gas chamber to said interior gas chamber, a plunger adapted to reciprocate in each plunger chamber, a shaft extending through the interior gas chamber and having an eccentric mounted thereon, a ring or float surrounding said eccentric, anti-friction devices or rollers between said eccentric and said ring, a shoe connected with each plunger and having a portion adapted to be retained in an under-cut groove along the outer periphery of said float, a valve in each plunger adapted to be open during the movement of said plunger towards said interior gas chamber and to be closed during the movement of said plunger in the opposite direction, and a valve interposed between each plunger chamber and the annular gas chamber adapted to be opened during the movement of the plunger towards the same and to be closed during the movement of the plunger in the opposite direction, substantially as described. 3rd. In a rotary pump, the combination with a casing provided with a series of radial plunger chambers, of a gas chamber in the interior of said casing, a second gas chamber formed in the casing, and surrounding the gas chamber first named, all of the plunger chambers extending from one gas chamber to the other and communicating with both, a plunger in each plunger chamber, and means for reciprocating the same, a gas inlet to one of said gas chambers and a gas outlet from the other, a valve in each plunger adapted to be closed during the movement thereof towards the chamber with the outlet, a valve controlling the communication of each plunger chamber with the gas chamber having the outlet, and a water jacket for the plunger chambers comprising an annular groove extending along each wall of the casing, transverse passages through the said casing between the plunger chambers to afford communication between said annular grooves, and a cover or closure for each groove adapted to be secured to the

side of the casing over the said groove, substantially as described.

4th. In a rotary pump, the combination with a substantially cylindrical casing provided with an interior gas inlet chamber, of a series of radial openings extending from the outer periphery of said casing to said chamber, a lining or bushing adapted to be inserted into each of said openings and itself constituting a plunger chamber, an annular valve seat formed in said bushing, a valve seated thereon, an opening in said bushing above said valve seat, an annular gas outlet chamber formed in said casing and having communication with all the plunger chambers through said openings in the several bushings, an annular channel in the interior of each bushing surrounding the valve, a plunger longitudinally movable in each of said bushings and itself provided with a valve, means for reciprocating said plungers whereby the gas is caused to pass through the same from the interior gas inlet chamber and to be compressed and forced into the annular gas outlet chamber aforesaid, and a bonnet adapted to be secured to the outside of the casing at each opening, to close the said openings and maintain the bushing in position, substantially as described.

5th. In a rotary pump, the combination with a cylindrical shell having an internal closed gas chamber and an annular closed gas chamber surrounding the internal chamber, of radial bores or openings extending from the outside periphery of the casing through the annular chamber in the internal chamber, a bushing for each bore provided with a shoulder, an enlarged mouth for each bore extending from a point adjacent to said shoulder to the outside periphery of the shell, whereby a shoulder is formed in the bore adjacent to that on the bushing, an annular ring of packing material supported upon the said shoulders, a bonnet provided with a tongue adapted to engage said packing material, a plunger longitudinally movable in and fitting the bushing in each bore, said plungers being adapted to be operated by an eccentric mounted on a shaft extending transversely through the said shell, and valves to control the passage of gas through the plunger from one of the gas chambers to the other, substantially as described.

6th. In a rotary pump, the combination with a stationary cylindrical casing provided with a series of radial plunger chambers, of a closed gas chamber within said casing and communicating with all of said plunger chambers, an annular gas chamber also formed in the casing and surrounding the gas chamber first named, and also communicating with all of said plunger chambers, a plunger in each of said plunger chambers, an eccentric rotatably mounted within said casing, a ring surrounding the said eccentric, the periphery of which ring is adapted to co-act directly with the said plungers to produce a reciprocatory movement thereof, anti-friction devices interposed between said eccentric and said ring, and valves to control the passage of gas through the said plungers from one of the said chambers to the other, substantially as described.

7th. The combination with a casing having an interior closed gas chamber, of an annular gas chamber formed in said casing and surrounding the said interior chamber, a series of plunger chambers extending from one of said gas chambers to the other, a plunger adapted to reciprocate in each plunger chamber, a shaft extending through the interior gas chamber and having an eccentric mounted thereon, a ring or float surrounding the said eccentric and adapted to co-operate with the plungers aforesaid to produce the reciprocatory movement thereof, anti-friction devices for said ring, a valve in each plunger adapted to be open during the movement of said plunger in one direction and to be closed during the movement thereof in the opposite direction, and a valve interposed between each plunger chamber and one of the said gas chambers adapted to be open during the movement of the plunger towards the same and to be closed during the movement of the plunger in the opposite direction, substantially as described.

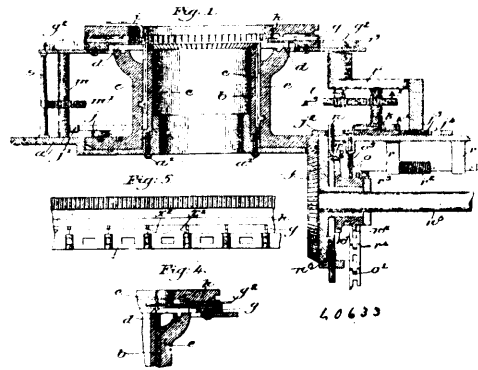
8th. In a rotary pump having a series of plungers adapted to be operated by an eccentric, a main shaft, shaft bearings, a chamber inclosing one end of said shaft, said inclosing chamber communicating with one of the gas chambers, and an anti-friction thrust bearing to sustain the end thrust away from said inclosing chamber.

No. 60,633. Knitting-Machine. (*Machine à tricoter.*)

Charles James Appleton, Long Island City, and Edwin H. Brown, New York City, both in the State of New York, U.S.A., 18th July, 1898; 6 years. (Filed 18th April, 1898.)

Claim.—1st. In a circular knitting-machine, the combination of the vertical needle-cylinder, a vertical cam-ring, cylinder-needles supported by said needle-cylinder with their hooks turned outward, horizontal needles with their hooks turned upward, a horizontal needle-plate lying outside of and above said needle-cylinder for supporting said horizontal needles with their hook ends projecting inward and in position to pass between the vertical needles, a cam-plate supported above said horizontal needle-plate for operating said horizontal needles, cam-chains supported by said needle-plate on edge and around the periphery of the needle supporting portion of the said plate, and provided with cams to raise the horizontal needles successively into action, and means for driving the respective parts of the machine, substantially as described. 2nd. In a circular-knitting-machine, the combination of the cam-cylinder having at its lower projecting flange a roller, a slide situated in the bed-plate so that the motion outward is given by the roller and returned inward by a spring at each revolution of the cam-cylinder, a pawl located on the upper side of the slide arranged to come in contact with the teeth of a ratchet-wheel at each outward movement of the slide, a vertical shaft, a ratchet-wheel fixed at the lower end

thereof driven by the downward movement of the aforesaid pawl, a needle-plate, needles carried thereby, sprocket-wheels also carried



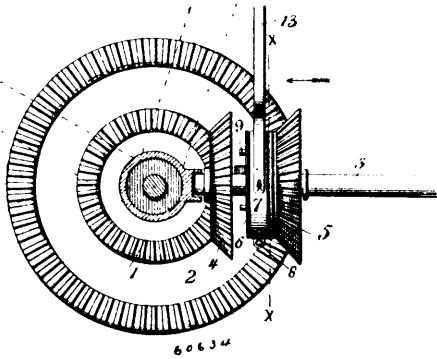
by the said plate, chains carried and driven by said sprocket-wheels, intermediate pinions for conveying motion from the ratchet-wheel to the sprocket-wheels, said chains throwing the needles into and out of action, substantially as described. 3rd. In a circular knitting-machine, the combination of the vertical slide, a pin attached to the upper end thereof, means for depressing and raising the slide, a pawl carried by the slide, a ratchet-wheel operated by the pawl attached to the slide at each downward motion thereof, a sprocket-wheel attached to the said ratchet-wheel and rotating with it, a pin carried by the bed-plate, a chain carried and moved by the sprocket-wheel, provided with cams on its face that at stated times will engage with the lower end of the pin and raise it up through the bed-plate, this bed-plate having a suitable bearing to carry pin and slide, a pawl-carrying slide situated in the bed-plate and a ratchet-wheel actuated thereby, the said slide having on its under side a catch to engage with the pin which will arrest its motion, and means for driving the said pawl-carrying slide, substantially as described. 4th. The combination of the needle-plate provided with needle-grooves, the needles carried by said plate, sprocket-chains provided with cams supported around the periphery of said plate and adapted to throw the needles into and out of operation and means for supporting parts, substantially as described. 5th. A knitting machine for knitting a circular fabric of varying diameter, embodying in its construction a vertical needle-cylinder and reciprocatory needles therein, a horizontal needle-support and reciprocatory needles therein, both sets of needles having their hooks arranged to draw loops in the fabric in the same direction, and the two sets of needles being constructed to co-operate in the production of a knit fabric, means for actuating the needles to perform knitting, and means substantially as hereinbefore set forth, co-operatively connected with the machine-operating means for acting upon the horizontal needles to automatically bring them into and allow them to be withdrawn from operation in a predetermined order or time to add new wales or lines of stitches to the fabric. 6th. A knitting-machine for knitting a circular fabric of varying diameter, embodying in its construction a vertical needle-cylinder and reciprocatory needles therein, a horizontal needle-support and reciprocatory needles therein, both sets of needles having their hooks arranged to draw loops in the fabric in the same direction, and the two sets of needles being constructed and arranged to co-operate in the production of a knit fabric, means for actuating the needles to perform knitting, and sprocket pattern-chains provided with cams N^2 , co-operatively connected with the machine-operating means for acting upon the horizontal needles to automatically bring them into and allow them to be withdrawn from operation in predetermined order or time to add new wales or lines of stitches to the fabric. 7th. A knitting-machine for knitting a circular fabric of varying diameter, embodying in its construction a vertical needle-cylinder and reciprocatory needles therein, both sets of needles having their hooks arranged to draw loops in the fabric in the same direction, and the two sets of needles being constructed and arranged to co-operate in the production of a knit fabric, means for actuating the needles to perform knitting, means, substantially as hereinbefore set forth, co-operatively connected with the machine-operating means for acting upon the horizontal needles to automatically bring them into and allow them to be withdrawn from operation in predetermined order or time, and hold-downs co-operating with both sets of needles, as described and for the purpose explained.

No. 60,634. Bicycle Gear. (*Engrenage de bicyclette.*)

William Lane and Alfred Doney, both of Pen Argyl, and Leonidas W. Morss, Scranton, all in Pennsylvania, U.S.A., 18th July, 1898; 6 years. (Filed 15th April, 1898.)

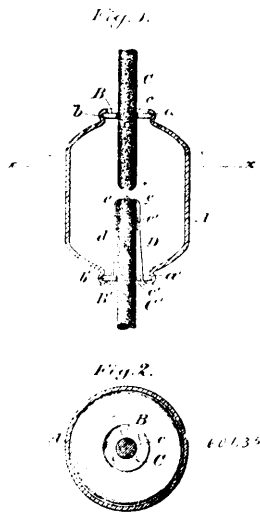
Claim.—In changeable gearing for bicycles, and the like, the combination of differential gearing, a shaft disposed at right angles to the axis of the differential gearing, companion gear wheels mounted loosely upon the said shaft and in mesh at all times with

the differential gearing and formed in their inner faces with a series of openings, a collar or sleeve mounted upon the shaft between the



companion gear wheels and having a feather and spline connection therewith, pins fitted into transverse openings of the collar and having their end portions projecting beyond the sides thereof and entering the openings formed in the inner faces of the aforesaid companion gear, a sectional ring fitted into an angular groove or seat formed in the periphery of the collar and having grooves or races in its opposing sides, means for securing the sections of the ring together, and balls fitted into the races of the said sectional ring and adapted to engage with the inner walls or sides forming the annular groove or seat of the aforesaid collar or sleeve, substantially as described and for the purpose set forth.

No. 60,635. Electric Arc Lamp. (Lampe électrique à arc.)



Albert Cooper Seibold, Mount Vernon, and Alfred Blackburn, New York City, both in the State of New York, U.S.A., 18th July, 1898; 6 years. (Filed 12th April, 1898.)

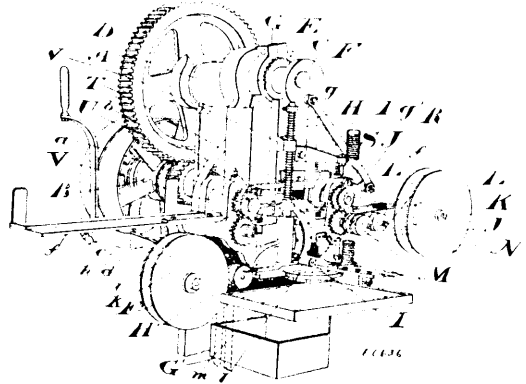
Claim.—1st. An arc-lamp having the electrodes around the arc enclosed in a small transparent or translucent normally air-tight casing, said casing being provided at one or both of its ends with closures engaging the electrodes, one or both of which constitute valves operating substantially as and for the purposes set forth. 2nd. In an arc-lamp, the combination of a transparent globe, flexible perforated discs closing the globe at top and bottom and encircling the carbons to form substantially air-tight closures permitting a movement of the globe relative to the carbons, and means for adjusting the globe with the consumption of the carbons, substantially as described.

No. 60,636. Bottle Seal. (Sceau pour bouteilles.)

August Peterson, assignee of Robert Scott Anderson, both of Toronto, Ontario, Canada, 18th July, 1898; 6 years. (Filed 18th March, 1898.)

Claim.—1st. In a machine for the purpose described, the combination of the following mechanism:—a set of dies and operating mechanism for stamping the metal cap, a suitably rotated holding and feed-wheel, a guide for conveying the caps to the said holding and feed-wheel, mechanism for removing the caps from the stamping dies and pushing them into the guide, a suitably operated die and plunger for cutting out paper discs and placing them in the caps, a reservoir for cork discs, means for removing cork discs one

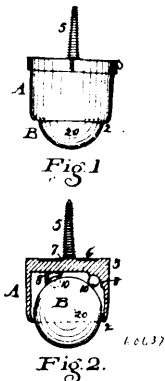
at a time, from the reservoir, and a plunger for inserting the discs within the caps brought to it by the holding and feeding device



after the insertion of the paper discs, substantially as and for the purpose specified. 2nd. In a machine for the purpose described, the combination of the following mechanisms:—a set of dies and operating mechanism for stamping the metal cap, a suitably rotated holding and feed-wheel, a guide for conveying the caps to the said holding and feed-wheel, mechanism for removing the caps from the stamping dies and pushing them into the guide, a suitably operated die and plunger for cutting out paper discs and placing them in the caps, a reservoir for cork discs, means for conveying cork discs, one at a time, from the reservoir, a plunger for inserting the discs within the caps brought to it by the holding and feeding device after the insertion of the paper discs, and a suitably operated finger below the holding and feed-wheel for expelling the completed caps, substantially as and for the purpose specified. 3rd. In a machine for the purpose described, the combination of the following mechanisms:—a set of dies and operating mechanism for stamping the metal cap, a suitably rotated holding and feed-wheel, a guide for conveying the caps to the said holding and feed-wheel, mechanism for removing the caps from the stamping dies and pushing them into the guide, and a suitably operated die and plunger for cutting out paper discs and placing them in the caps, substantially as and for the purpose specified. 4th. In a machine for the purpose described, a set of dies and operating mechanism, in combination with a rotating holding and feeding wheel, a guide adapted to convey metal caps from the dies to the rotating wheel, and mechanism for pushing the caps from between the dies into the said guide, substantially as and for the purpose specified. 5th. In a machine for the purpose described, a set of dies and operating mechanism in combination with a discharge slide adapted to push the caps from between the dies, a pivoted arm on which the discharge slide is pivotally supported, mechanism for intermittently rocking the said arm between the operations of the dies, a rotary feed wheel suitably shaped and supported, a curved guide adapted to receive caps from the discharge slide and convey them to the feed wheel, and mechanism for intermittently rotating the feed wheel, substantially as and for the purpose specified. 6th. In a machine for the purpose described, an upper annular die movably supported, mechanism for reciprocating the same, and a spring operated plunger located within the said die, in combination with inner and outer lower stationary dies, and a spring pressed ring located between the dies and adapted to raise the formed caps clear of the same, substantially as and for the purpose specified. 7th. In a machine for the purpose described, an upper annular die movably supported, mechanism for reciprocating the same, and a spring operated plunger located within the said die, in combination with inner and outer lower stationary dies, a spring pressed ring located between the dies, and adapted to raise the formed caps clear of the same, and a spring supported guide for the metal strip adapted to lift it clear of the formed cap when the upper die is raised, substantially as and for the purpose specified. 8th. In a machine for the purpose described, an upper annular die movably supported, mechanism for reciprocating the same, and a spring operated plunger located within the said die, in combination with inner and outer lower stationary dies, a spring pressed ring located between the dies and adapted to raise the formed caps clear of the same, a spring supported guide for the metal strip adapted to lift it clear of the formed cap when the upper die is raised, and intermittently simultaneously operated feed rollers located at each side of the dies, substantially as and for the purpose specified. 9th. In a machine for the purpose described, a suitably rotated shaft, a crank disc thereon a pair of feed rollers suitably journaled and geared together, a second pair of suitably journaled feed rollers also geared together, a ratchet wheel fast on the spindle of one roller of each pair, arms journaled on the said spindles, pawls journaled on the said arms and engaging the ratchet wheels, a connecting rod pivotally connecting the said arms, and a pitman pivoted upon one of them and on the aforesaid crank disc, substantially as and for the purpose specified. 10th. In a machine for the purpose described, a suitably rotated shaft, a crank disc thereon, a pair of feed rollers suitably journaled and geared together, a second pair

of suitably journaled feed rollers also geared together, a ratchet wheel fast on the spindle of one roller of each pair, arms journaled on the said spindles, pawls journaled on the said arms and engaging the ratchet wheels, a connecting rod pivotally connecting the said arms, and a pitman pivoted upon one of them and on the afore-said crank disc, and an adjustable spring friction brake bearing on one of the rollers, substantially as and for the purpose specified. 11th. In a machine for the purpose described, an automatically moved cap holding and feeding device, in combination with a sleeve carrying an annular die movably supported above the said device, means for limiting the up and down movement of the sleeve, a plunger and plunger head movable within the said sleeve and arranged to lift it, an arm adapted to move the plunger and connected with a suitable reciprocating part, a spring arranged between the sleeve and plunger to permit the latter to continue its downward motion after the sleeve has stopped, and a die plate with a suitable hole below the annular die on the sleeve, substantially as and for the purpose specified. 12th. In a machine for the purpose described, an intermittently moved cap-holding and feeding device, in combination with a feed tube for cork discs suitably supported above it, a slide suitably supported in a guide below the said tube and adapted when reciprocated to push out one disc at a time from the feed tube, and a plunger connected with a suitable reciprocating part and adapted to force the cork disc when pushed out into caps in the holding and feeding device, substantially as and for the purpose specified. 13th. In a machine for the purpose described, an intermittently moved cap-holding and feeding device, in combination with a feed tube for cork discs suitably supported above it, a guide-way suitably supported between the bottom of the feed tube and the said device, a slide supported in the said guide, means for reciprocating the slide, and a plunger connected with a suitable reciprocating part and adapted to force the cork discs as pushed out through a hole in the slide and into the caps, substantially as and for the purpose specified. 14th. In a machine for the purpose described, a rotary feed wheel provided with holes to receive caps and a series of projections on its under side between the holes, in combination with a spring finger connected to the frame, shaped to enter said holes, and provided with an inclined portion adapted to ride over the said projections, substantially as and for the purpose specified. 15th. In a machine for the purpose described, a rotary feed wheel provided with holes to receive caps, and a series of projections on its under side between the holes, in combination with a spring finger connected to the frame, shaped to enter the said holes and provided with an inclined portion adapted to ride over the said projections, and a curved hood suitably supported above the feed wheel and finger, substantially as and for the purpose specified. 16th. In a machine for the purpose described, the combination of a rotary feed wheel provided with holes, to receive caps, a suitably journaled spindle to which the said wheel is secured, a ratchet wheel fast on the spindle, a lever pivoted on the frame of the machine, a spring actuated pawl pivoted on the said lever and engaging the ratchet wheel, and mechanism for intermittently rocking the said lever, substantially as and for the purpose specified. 17th. In a machine for the purpose described, the combination of a rotary feed wheel provided with holes to receive caps, a spindle journaled within a bearing formed upon the frame, a collar surrounding the lower end of the spindle, a soft washer between the collar and the bearing, a pin passing through a hole in the collar and a slot in the spindle, a set screw in the end of the spindle bearing against the pin, and mechanism for intermittently rotating the said wheel, substantially as and for the purpose specified. 18th. In a machine for the purpose described, the combination of a paper reel, rollers suitably journaled to guide the paper below the paper cutting and placing mechanism; a roller fast to the spindle of a feed roller, a paper reel driven by a cord from the said roller, and an intermediate tightener roller, substantially as and for the purpose specified.

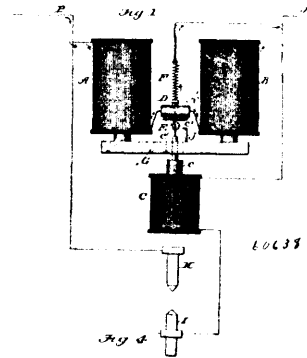
No. 60,637. Caster. (Roulette de meubles.)



William Irving Stilwell and George B. Solders, both of Cleveland, Ohio, U. S. A., 18th July, 1898; 6 years. (Filed 28th February, 1898.)

Claim.—In a ball bearing castor, the casing circular inside and outside and tapered downward in vertical section and having shoulders at regular intervals about its side and top, a threaded supporting stem and an annular depression in the top about said stem, and said casing having on its inside in the angle of its top and side three several substantially semi-spherical cavities so disposed that lines radiating at an angle of 45° from the vertical axis of the castor ball pass through the centres of said cavities, semi-friction balls in said cavities and a single castor ball having its bearing against said anti-friction balls and closely surrounded beneath its horizontal centre by the skirting of the casing, substantially as described.

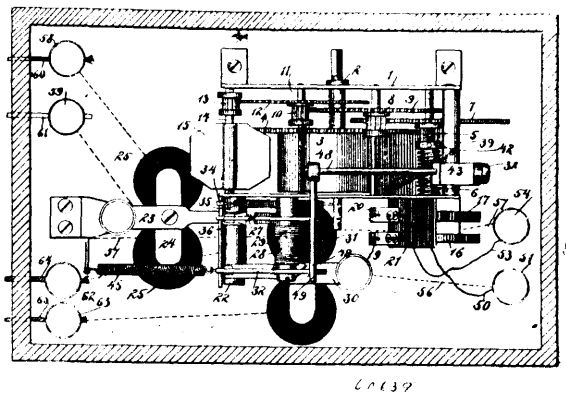
No. 60,638. Electric Arc Lamp. (Lampe électrique à arc.)



George Munroe Lane and Elisha Stout, both of Ashbury Park, New Jersey, U.S.A., 18th July, 1898; 6 years. (Filed 18th February, 1898.)

Claim.—1st. In an arc-lamp, the shunt magnets, one of which is low and the other of high resistance, and so arranged that the current is adapted to first pass through the low resistance magnet, substantially as shown and described. 2nd. In an arc-lamp, the low and high resistance shunt magnets, automatic mechanism for short circuiting the high resistance magnet when the arc is not established, substantially as shown and described. 3rd. In an arc-lamp, the combination with the high and low resistance shunt magnets, and the auxiliary magnet, of automatic mechanism for short circuiting the high resistance magnet when the arc is not established, and cutting in said magnet when the arc is established, substantially as shown and described. 4th. In an arc-lamp, the combination with the high and low resistance magnets, the auxiliary magnet, the carbons and feeding mechanism, of contacts D and E, operated as described, the armature G, carrying the pin J, and the armature of the auxiliary magnet connected with the contact-plate E, all arranged substantially as shown and described.

No. 60,639. Electro-Mechanical Circuit Controllers. (Contrôleur électro-mécanique de circuit.)



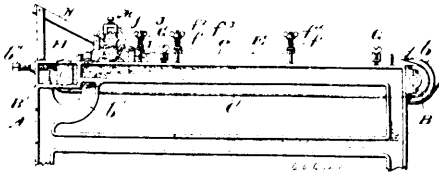
Charles Wesley Price, Newark, Essex County, New Jersey, and John Dunklee Gould, Brooklyn, New York, U.S.A., 18th July, 1898; 6 years. (Filed 26th November, 1897.)

Claim.—1st. An electro-mechanical controller for an electric circuit, comprising a spring-driven motor, holding devices for said motor, an electro-magnet in a normally closed local circuit for operating one of said holding devices, another electro-magnet in a normally open local circuit for operating the other of said holding devices, a main circuit, and two circuit-controlling discs for said

main circuit and operated by the motor, substantially as specified. 2nd. An electro-mechanical controller for an electric circuit, comprising a spring-driven motor, a screw shaft operated by said motor, a pair of main circuit making and breaking discs on said screw shaft, a pivoted lever having a pin engaging between the threads of said screw shaft, a pin extending laterally from said lever, a pin extended from the screw shaft at its end opposite that upon which the discs are mounted, and adapted to engage with the pin on the lever, means for shifting the lever to its normal position, an electro-magnet in a normally closed local circuit operating to release the motor, and an electro-magnet in a normally open local circuit also operating to release the motor, substantially as specified. 3. An electro-mechanical controller for an electric circuit, comprising a spring-driven motor, a pair of circuit-making and breaking discs operated by the motor, a fan shaft comprised in the motor, a stop lever pivoted to the frame of the motor and adapted to be engaged by said pin, an electro-magnet in a normally closed local circuit, an electro-magnet in a normally open local circuit, armature levers operated by said magnets and each adapted to engage with a finger extended from the stop lever, a contact post normally engaged by the armature lever of the closed circuit electro-magnet, a connection between said post and a main line wire, and a connection between the armature lever of the open circuit electro-magnet and a main line wire, substantially as specified. 4th. An electro-mechanical controller for an electric circuit comprising a spring-driven motor, a screw shaft operated by said motor, main circuit making and breaking discs on the screw shaft, a pivoted lever having a pin engaging between the threads of said screw shaft and provided with means for stopping the movement of the shaft and motor, a rock shaft on which the lever is mounted, a rod extended from said rock shaft, trip levers pivoted on a projection from the frame of the device, an arm extended from the rod and adapted to engage with the rear ends of said trips, armature levers engaged by said trips, a stop lever operated by said armature levers, and a pair of local circuit electro-magnets for controlling the armature levers, substantially as specified.

No. 60,640. Machine for Working Dough.

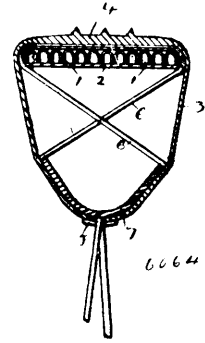
(Machine à pétrir la pâte.)



William Stephen Corby, Charles Israel Corby and Theodore Jacob Mayer, all of Washington, District of Columbia, U.S.A., 18th July, 1898; 6 years. (Filed 27th September, 1897.)

Claim.—1st. The combination of a travelling belt, an opposing pressure board provided with depending side flanges which are arranged adjacent to the belt, and supports for said board, substantially as set forth. 2nd. The combination of a travelling belt, a pressure board or device provided with depending flanges at its sides, and a sustaining table over which the belt moves substantially as set forth. 3rd. The combination of a travelling belt, an opposing pressure board, and springs which hold the pressure board toward the belt with a yielding force, substantially as set forth. 4th. The combination of a travelling belt, and an opposing yielding pressure board, the pressure being less at the delivery, than at the feed end of the board, substantially as set forth. 5th. The combination of a travelling belt, an opposing pressure board, adjusting devices by which the pressure board may be positively adjusted toward or away from the belt, and spring pressing devices which hold the board toward the belt with a yielding force, substantially as set forth. 6th. The combination of a travelling belt, an opposing pressure board, and a curler at the forward end of the latter, substantially as set forth. 7th. The combination of a travelling belt, an opposing pressure board, a curler at the forward end of the latter, and an adjustable spring pressure device for the curler, substantially as set forth. 8th. The combination of a travelling belt, an opposing pressure board, a curler at the forward end of the pressure board, and shaping rollers in front of the curler, substantially as set forth. 9th. The combination of a travelling belt, an opposing pressure board, a curler at the forward end of the pressure board, and the strips O at the sides of the pressure board near the curler, substantially as set forth. 10th. The combination of a travelling belt, devices for turning up the edges of the belt and maintaining such edges at substantially right angles to the main central portion of the belt, and an opposing pressure board which is arranged opposite to the said central portion of the belt, substantially as set forth.

No. 60,641. Tyre. (Bandage.)



Charles George Robertson, Lanark, Scotland, James Jackson Robertson, Leeds, York, England, and George E. Robertson, Montreal, Quebec, Canada, 18th July, 1898; 6 years. (Filed 16th June, 1898.)

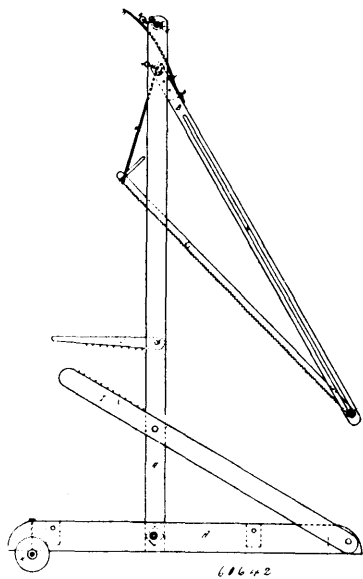
Claim. 1st. In combination with a wheel, a resilient tyre of greater diameter than the wheel body, flexible means intermediate of the tyre and wheel body for connecting said tyre flexibly to the wheel body and tension devices adapted to act upon said intermediate connecting means, substantially as and for the purpose set forth. 2nd. In combination with a wheel, a resilient tyre of greater diameter than the rim of the wheel body, two or more rings intermediate of said tyre and wheel body and closely encircling said rim and flexible means for connecting said tyre to said rings, substantially as and for the purpose set forth. 3rd. In combination with the rim of a wheel, a resilient metallic tyre of sufficiently greater diameter than the rim of the wheel body to provide a free space between said tyre and rim, two or more rings intermediate of said tyre and rim and closely encircling said rim and flexible textile means for connecting said resilient metallic tyre to said rims substantially as and for the purpose set forth. 4th. In combination with the rim of a wheel, a resilient metallic wheel tyre of sufficiently greater diameter than the rim of the wheel body, to provide a free, complete circumferential, space between said tyre and rim, two or more rings intermediate of said tyre and rim and closely encircling said rim, guy strips formed of single strips of canvas, or the like, extending transversely of said tyre and connecting same to said rings, substantially as and for the purpose set forth. 5th. In combination with the rim of a wheel, a resilient metallic wheel tyre of sufficiently greater diameter than the rim of the wheel body, to provide a free complete circumferential space between said tyre and rim, two or more rings intermediate of said tyre and rim and closely encircling said rim, guy strips formed of single strips of canvas or the like slitted to allow portions thereof to extend in different directions, an outer cover for the whole, and a tread of rubber or the like secured to such outer cover, substantially as and for the purpose set forth. 6th. A wheel tyre composed of a number of resilient rings arranged side by side and concentric with the wheel hub, a flexible binding or cover for the rings, guy strips extending from the tyre to the rim of the wheel and formed of single strips of canvas or the like slitted to allow portions thereof to extend in different directions, an outer cover for the whole, and a tread of rubber or the like secured to such outer cover, substantially as and for the purpose set forth. 7th. A wheel tyre composed of a number of resilient rings of semi-tubular cross section arranged side by side and concentric with the wheel hub, a flexible binding or cover for the rings, guy strips extending from the tyre to the rim of the wheel, and formed of single strips of canvas or the like, slitted to allow portions thereof to extend in different directions, an outer cover for the whole, and a tread of rubber or the like secured to such outer cover, substantially as and for the purpose set forth. 8th. A wheel tyre comprising a series of rings connected together at their adjacent edges, said rings and connections being formed integral with one another, and connected to the rim of the wheel by means of a series of tubular sections, a staple having its legs screw-threaded and taking through perforations in each of said tubular sections, a pair of interiorly screw-threaded nipples taking through the rim of the wheel and adapted to receive the ends of the screw-threaded legs, substantially as and for the purpose set forth. 9th. In combination with the rim and spokes of a wheel, a tyre comprising a series of rings, a nipple and washer mounted adjustably upon each of said spokes, a strap taking over and connected to said rings and connected to said washer, substantially as and for the purpose set forth.

No. 60,642. Hand Sawing Machine.

(Machine à scier à la main.)

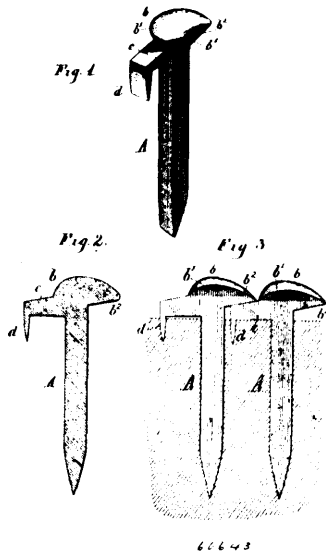
William Henry Hoskin, Mitchell, Ontario, Canada, 19th July, 1898; 6 years. (Filed 30th April, 1898.)

Claim.—1st. The combination of the spring D, shaft B, having slots *c* and *d*, and saw C, substantially as and for the purpose here-



inbefore set forth. 2nd. In a sawing machine, brace I, and arm J, each furnished with spikes, in combination with the frame A, substantially as and for the purpose hereinbefore set forth.

No. 60,643. Spike. (Cheville.)



Van Renssellar Paige, Hopkinton, New Hampshire, U.S.A., 19th July, 1898; 6 years. (Filed 11th May, 1898.)

Claim. A railway rail spike having a head provided with said flanges and a forwardly extending lip the underside of which is inclined upwardly, a bridge integral with the spike, and a thin solid blade depending transversely from the extreme end of the bridge, the upper outer side of the blade being approximately at right angles to the bridge and the upper side of the latter being inclined on the line of inclination of the underside of the lip, whereby the outer sides of the bridge and blade are in conformity with the under side of the lip, substantially as and for the purpose described.

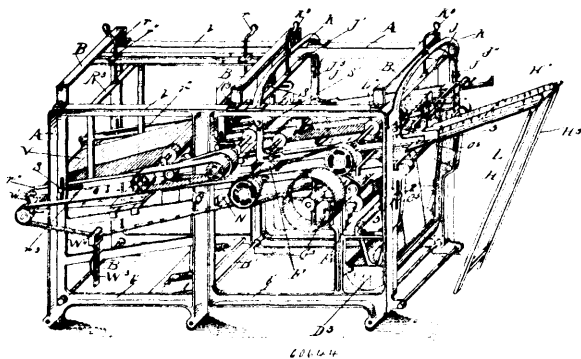
No. 60,644. Can Labelling Machine.

(Machine à étiquetter les boîtes en fer blanc.)

John L. Barkey, Toronto, Ontario, Canada, 19th July, 1898; 6 years. (Filed 22nd February, 1897.)

Claim.—1st. In a can-labelling machine, an endless travelling paste belt having a longitudinal run to apply the paste to the cans,

and a vertically-disposed run at the head end, of a vertically-disposed travelling paste supply belt adjacent to the vertical run of the

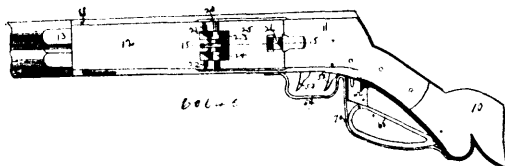


said paste belt to supply paste thereto, and a paste receptacle into which the lower end of the said supply belt extends. 2nd. The combination in a can-labelling machine with the main frame and a supplemental frame mounted in the head end thereof and means for raising and lowering the head end of the supplemental frame, of three triangularly-arranged rolls mounted in said supplemental frame, an endless paste belt passed around said rolls with its longitudinal run in the path of the cans, a vertically-disposed travelling paste and supply belt alongside of the vertical run of the paste belt and also having rolls mounted in the supplemental frame, a paste receptacle into which the lower end of the supply belt extends, and means for adjusting the adjacent runs of the two belts toward and from each other. 3rd. The combination with the main frame, of a pivoted frame mounted therein and vertically adjustable at its head end to vary its inclination, a paste belt having its rolls mounted in said pivoted frame, and a paste supply for said belt carried by said pivoted frame, of vertically-adjustable hangers suspended from the main frame over the ends of the paste belt, rolls journaled in said hanger, an endless can-feeding belt passed around said rollers and guide rails mounted on the main frame and extending longitudinally over the paste belt, and means for adjusting the rails for different sizes of cans. 4th. In a can-labelling machine, a pasting apparatus consisting of a supplemental frame pivotally connected at one end to the main frame, means for adjusting the opposite end of the supplemental frame, to increase or diminish its inclination, a set of drums journaled in the supplemental frame a paste-belt passing around the drums, a paste-dish carried by the supplemental frame, a second set of drums, one of the said drums journaled in the said dish and the other in the supplemental frame, a supply-belt passing around the second set of drums, adapted to convey the paste from the paste-dish to the paste-belt, an idler engaging the outer surface of the supply belt, an idler engaging the paste-belt, and a platform carried by the supplemental frame to receive the cans from the hopper and deliver them to the paste-belt, substantially as specified. 5th. In a labelling machine, a label holder consisting of an open bottom, laterally-adjustable sides composed of telescopic sections connected to the said bottom, and a head for the said sides, substantially as specified. 6th. In a can-labelling machine a label-holder, consisting of an open bottom, laterally adjustable sides composed of telescopic sections connected to the said bottom, a head for the said sides, a door formed in one of the said sides, and an adjusting screw for moving the said sides toward or away from each other, substantially as specified. 7th. In a can-labelling machine a label-holder consisting of an open bottom, laterally adjustable sides composed of telescopic sections connected to the said bottom, a head for the said sides, and a door formed in one of the said sides, substantially as specified. 8th. In a can-labelling machine, a label-holder consisting of an open bottom, laterally adjustable sides composed of telescopic sections connected to the said bottom, a head for the said sides, a door formed in one of the said sides, an adjusting screw for moving the said sides toward or away from each other, a sleeve depending from the under side of the false bottom, a column entering the said sleeve, a laterally movable base for the said column, spring-actuated rollers connected to the base, idlers connected to the under side of the open bottom, and cords connected to the spring-actuated rollers, passing around the idlers connected to the sleeve, to cause the elevation of the false bottom, substantially as specified. 9th. In a can-labelling machine the combination of the pasting apparatus, a label-holder, a supplemental pasting apparatus to gum the lap of the label, consisting of a paste-brush journaled above the label-holder, a paste-receptacle adapted to feed the paste-brush, a reciprocating brush within the paste receptacle, and a traveller on the end of the shank of the reciprocating brush, engaging a can on the spindle of the supplemental paste-brush, substantially as specified. 10th. In a can-labelling machine, the combination of the pasting apparatus, a label-holder, a supplemental pasting apparatus to gum the lap of the label, consisting of a paste-brush journaled above the label-holder, a paste-receptacle adapted to feed the paste-brush, a reciprocating

brush within the paste-receptacle, a traveller on the end of the shank of the reciprocating brush, engaging a cam on the spindle of the supplemental paste-brush, a conveyor to roll the cans from the primary pasting apparatus to the labels, and a pressure-belt to press the label on the can, substantially as specified. 11th. In a can-labelling machine the combination of the primary pasting apparatus, a label-holding receptacle, a platform interposed between the primary pasting apparatus and the label holder, and longitudinally and laterally adjustable tracks R', R' connected to the platform to receive the cans from the primary pasting apparatus, and deliver them at the edge of the labels, substantially as specified. 12th. In a can-labelling machine the combination of the race-way, a presser apparatus located above the race-way, consisting of two vertically and longitudinally adjustable hangers, drums supported in the hangers, a belt passing around the drums and a spring-supported hinged leaf at the delivery end of the race-way, substantially as specified. 13th. In a can-labelling machine, a feed-regulator for the cans, consisting of a rock-shaft 8, a lever 9 connected to the rock-shaft 8, a gate 10 carried by the lever 9, a rock-shaft 17 connected with and operated by the action of the rock-shaft 8, and a gate 20 carried by the rock shaft 17, substantially as specified. 14th. In a can-labelling machine a feed-regulator for the cans, consisting of a rock-shaft 8, a lever 9 carried by the rock-shaft 8 and operated by the action of the can-conveyor, a gate 10 connected to the lever 9, a rock-shaft 17 having a rod 18 operated by the action of the rock-shaft 8, and a gate 20 carried by the rock-shaft 17, substantially as specified. 15th. In a can-labelling machine a feed-regulator for the cans consisting of a rock-shaft 7, a lever 9 carried by the rock-shaft 8 and operated by the action of the can-conveyor, a vertically adjustable gate 10 connected to the forward end of the lever 9, a rock shaft 17, longitudinally adjustable side rods 18 connected to the rock shaft 17 and to the lever 9, an arm 19 connected to the rock-shaft 17, and a vertically adjustable gate 20 carried by the forward end of the arm 19, substantially as specified. 16th. In a can-labelling machine a feed-regulator for the cans consisting of a rock-shaft 8, a lever 9 carried by the rock-shaft 8 and operated by the action of the can conveyor, a vertically adjustable gate 10 connected to the forward end of the lever 9, a rock shaft 17, longitudinally adjustable side rods 18 connected to the rock-shaft 17, and to the lever 9, an arm 19 connected to the rock-shaft 17, a vertically adjustable gate 20 carried by the forward end of the arm 19, and springs to return the lever and co-relative parts to their normal position after being actuated, substantially as specified. 17th. The combination with the chute, the paste-belt and the can conveying belt mounted thereabove and provided with transverse arms to engage the cans and move them over the paste-belt, of oppositely-operating gates located one in advance of the other for controlling the feed of the cans and provided with an operating device located in the path of the belt-arms and to be operated thereby. 18th. A can-labelling machine comprising a frame, a can-chute at the head thereof, a gate mechanism over the chute in the path of the cans, a pasting mechanism to which the chute delivers, a can conveyor belt over the paste-mechanism and provided with means for actuating the said gate mechanism, a label-holder at the rear end of the paste mechanism, a supplemental pasting mechanism at the rear end of the label-holder and a pressing device in rear of said supplemental pasting mechanism. 19th. The combination with the can-chute, and the pasting mechanism, of a vertically adjustable frame above the pasting mechanism, a can-conveying belt and gate mechanism mounted in said frame and adjustable as a whole toward and from the pasting mechanism and chute, the said can-conveying belt having means for actuating the gate mechanism to release one can at a time. 20th. A can-labelling machine comprising, the frame having adjustable sides, the longitudinally-extending paste-belt at the lower end of the chute, a can-conveying belt over the paste-belt, a label-holder beyond the lower ends of the said two belts and having adjustable sides, a table between the said holder and the lower end of the paste-belt, adjustable tracks mounted on said table, a leaf at the rear of the label-holder, laterally-adjustable guide rails extending from the lower ends of the sides of the can-chute over the paste-belt, label-holder and leaf, an endless belt over the label-holder, a supplemental pasting mechanism at the rear end of said belt and over rear end of the label-holder, and a presser belt over said leaf and in rear of said supplemental pasting mechanism.

No. 60,645. Breech Loading Double Barrelled Gun.

(Fusil à deux coups chargeant par la culasse.)



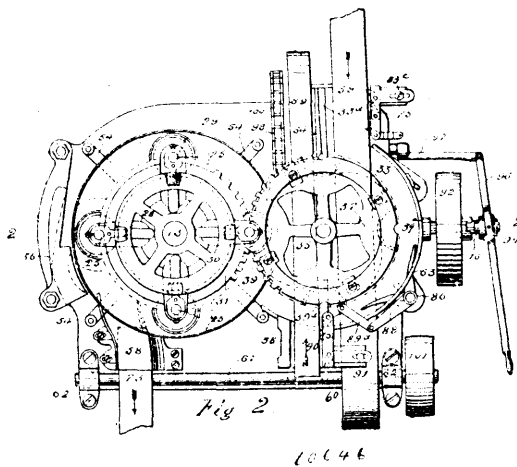
John D. Coon, Nathrop, Colorado, U.S.A., 19th July, 1898; 6 years. (Filed 15th June, 1898.)

Claim—1st. The combination of a frame having a front extension and stock, which front extension is bored to receive a pair of barrels

and is provided with a cavity opening to one side thereof and shaped and arranged to receive a breech-block, a breech-block pivoted on the front extension and arranged to swing in and out relative to the cavity aforesaid and about the rear ends of the barrels, an extractor pivotally connected with the breech-block and arranged to be engaged thereby at the limit of outward movement of the block, an ejector fixed to the extractor, a spring fixed to the front extension and arranged for temporary engagement with the ejector, and guide-springs fixed to the front extension and within the cavity therein and arranged to receive cartridges from the ejector and guide the same out of the cavity. 2nd. The combination of a frame having a front extension bored to receive barrels and formed with a cavity at the rear of the barrels, a breech-block hinged to the front extension and arranged to enter the cavity therein, impact-pins mounted for reciprocation in said breech-block in alignment with the barrels and spring-pressed in one direction, extractor and ejector mechanism fixed to the breech block and firing mechanism located in the frame at the rear of the breech-block and arranged for contact with the impact-pins, together with leaf-springs 32, 33 located in the cavity at the rear of the breech-block and so shaped and arranged as to direct the cartridges from said cavity. 3rd. The combination of a frame having a front extension with a laterally-opening cavity, a breech-block shaped for insertion in said cavity and hinged to the front extension, impact-pins mounted for reciprocation in said breech-block, an extractor 19 located in front of the breech-block, and pivoted conjunctively therewith, which extractor is actuated by contact with the breech-block upon opening the same, an ejector mounted on the extractor, a spring 30 seated in the left-hand wall of the extension and frally restraining the ejector pending the operation thereof, and leaf-springs mounted in the cavity of the extension and shaped and arranged to guide and direct cartridges from said cavity subsequent to the operation of the extractor and ejector. 4th. In a gun, a pair of firing-pins one above the other, springs for establishing the firing function of said pins, ratchet-arms on said firing-pins, a sear engaging one of said ratchet-arms, a trigger for tripping said sear, a sear-nose engaging the other of said ratchet-arms and integral with a trigger for tripping the same, pins traversing the rear ends of the firing-pins and ratchet-arms a vertically-sliding block in the frame, pivoted cams on said block arranged for engagement with the traversing pins in the upward movement of the block to move the firing-pins rearwardly and permit the engagement of the sear and sear-nose with the ratchet-arms, a handle pivoted to the stock and pivotal connections between the handle and the vertically-sliding block. 5th. In a gun, a firing-pin, a sear arranged for connection with said firing-pin at times, a trigger for tripping said sear, a guide rod on said firing-pin, a safety locking-rod on said firing-pin and a safety locking-pin arranged for manual operation to engage the locking rod and restrain the firing function of the firing-pin. 6th. In a gun, a yoke apertured in its end portions and split from said apertures to the ends thereof, whereby a pair of cartridges may be connected and conjunctively inserted and ejected relative to a pair of gun-barrels. 7th. In a gun, a safety locking-pin mounted for travel in a slotted seat, a grooved head on said pin, a locking rod arranged for reciprocation in said grooved head, a hook on said rod, a firing-pin connected with said rod, and a nut swivelled on said pin whereby said pin may be locked in a given position to engage the grooved head with said hook and restrain the firing-pin against premature operation.

No. 60,646. Can Capping Machine.

(Machine à poser les couvercles de boîtes en fer blanc.)



James Moore K. Letson and Frank Watts Burpee, both of Vancouver, British Columbia, Canada, 19th July, 1898; 6 years. (Filed 7th June, 1898.)

Claim—1st. In combination with a frame 10, having a spindle rigidly fixed thereon, a frame 11 arranged to turn upon and rest on

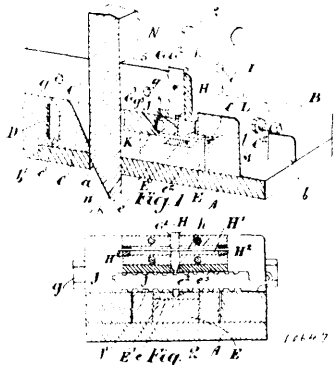
the hub of the said spindle, radial arms on the said frame designed to carry can supports and means for imparting movement to the frame 14, by a bevelled, toothed wheel secured to a shaft, engaging teeth on the bevelled periphery of the said frame as set forth. 2nd. In combination with a frame with an upwardly disposed spindle and a frame to turn thereon, of a table 20 secured to such frame, can guards 40 secured to the support of the table such guards being arranged around and above can support, openings arranged in the table vertically above the can supports, a cam track 46 in the path of depending spindles from the can supports, whereby cans on such supports will be driven into the openings in the table as set forth 3rd. In combination with a machine for applying the caps to cans, a rotatable table having openings for the cans and means for applying cans thereto, of a frame 24 having radial arms with spindles arranged therein, depending discs on the ends of such spindles, a rigidly fixed frame 27 secured to the top of the spindle 13 on which the table and the frames 14 and 24 rotate, said frame having a track 28 for rollers, around the upper and lower sides of its rim, rollers 30 arranged to turn on the shanks of collars which are secured to the top of the spindles 25, and such rollers to take around the track 28, such track taking on the under side of the rim of the frame 27, for a distance vertically above the fixed can 46 on the bed, whereby the discs will be depressed and the can supports will be elevated simultaneously, as set forth. 4th. A rotatable table having openings therein, in combination with reciprocating discs above and below such openings, of jaws forming the annular rim of the said openings, a ring supporting said jaws, having grooves in the upper side thereof, beneath each respective jaw member, tongues depending from the under sides of said jaws and engaging in the grooves, such grooves and tongues being placed at differential axis to the openings, for the purposes set forth. 5th. In combination with a rotatable table having openings therein, with reciprocating disc vertically above and below such openings, of jaw members around said openings, rings connected with tongue and groove mechanism with such jaws, said tongues and grooves arranged on arcs with differential axis to the openings, of support members 53 secured beneath the table and supporting the said rings, arms 54 passing through slots in the upper sides of the members 53, and engaging fixed pins 52, depending from the said rings, antifriction devices on the projecting ends of said arms, and a cam 56 arranged on one side of the table, which will engage and push the said arms inward and draw them forward whereby the rings 52 will be turned for a distance back and forth, and thereby the openings will be expanded and contracted, as set forth. 6th. In combination with a rotatable table having openings therein, with reciprocating can and cap discs beneath and above such openings, of jaw members arranged trihedrically around the said openings, said jaws being bell-mouthed from below, and slightly flared from above, the contracted annular centre having rim for the seats of the can caps, and upwardly projecting lips around such seats, of rigidly fixed pins depending from the table 20 to within slots 51 in said jaw members, said slots being arranged triangular to each other, and with their slideways at right angles to the axis of the openings in the table, as specified. 7th. In combination with a rotatable table having openings therein with reciprocating can and cap discs below and above such openings, of members for contracting and expanding the openings as specified, brackets 41 secured to the table at the rear sides of the openings, plates 48 arranged to reciprocate in slots on opposite sides of the openings, triggers 49 pivotally secured to oppositely fixed ears on the brackets 41, and the horizontally disposed arms of the triggers engaging with projections on the spindles which support the discs above the openings, as set forth. 8th. In a machine of the class described, having a rotatable table with openings therein for the contact of cans and caps, the combination of spindles having discs 26 arranged above such openings, and means for raising and depressing the same, oppositely disposed projections secured on the rear sides of the said spindles 26, brackets 41 secured to the rear sides of the said openings, the inner sides of these brackets being of arc form on the same contour to the openings, slideable plates 48 arranged on opposite sides of the said openings, triggers 49 pivotally connected to upwardly and oppositely disposed ears on the brackets 41, and connecting with the projections on the spindles 26 and the slideable plates 48, whereby when the spindles rise and fall the said plates will be reciprocated over the opposite sides of the openings. 9th. In a machine of the class described, having a rotatable table with openings therein, spindles arranged in a carrier 24 secured to said table, said spindles having discs on their depending end, collars 29 rigidly fixed to the upper ends of the said spindles, shanks on said collars which project inwardly, rollers on the ends of the shanks engaging with a track on the fixed frame 27, vertical apertures through the said shanks of the collars and guides 50 rigidly fixed in the arms of the frame 24 and passing upwardly through the apertures in said shanks of the collars, whereby the spindles 25 will be prevented from turning, as set forth. 10th. In combination with a rotatable table having openings therein, with reciprocating can and cap discs below and above such openings, slideable stems 42 arranged within the spindles 25 above the table, cap-holding discs 26 on the depending ends of the stems 42, coil springs 44 for normally pressing these holders downwards, slots 25* in the sides of the spindles, and screws 43 inserted through such slots and secured in the spindles 25, whereby their movement will be controlled. 11th. In combination with a rotatable table having openings for cans, can supporting discs arranged beneath in a frame integral with the table, a fixed

table or can guideway 33 supported and secured by brackets 32 on a level plane with the can supports below the table, of an inwardly projecting horizontally disposed bracket 34 secured to one end of said table, a shaft 35 vertically journaled in such bracket, a wheel 36 having can recesses 36a therein, said recesses being placed in alignment with the openings in the table, of a cap feeding wheel 37 secured on the upper end of the shaft 35 and having recesses therein directly above the recesses in the wheel 36, and a toothed wheel 39, secured to upwardly projecting brackets on the cap feeding wheel, which toothed wheel meshes with a like wheel 31 secured to the frame 24 above the rotatable table, as set forth. 12th. In combination with a rotatable table having openings therein, can-supporting discs below such openings, cap-engaging discs above such openings, of a can feeding wheel having its recesses engaged in alignment below the recesses or openings in the table, can guards 40 arranged to prevent the cans from being pushed beyond such alignment, a table or bracket 38 secured upon the table 33 having a slide-way for caps, a cap feeding wheel 37 having recesses vertically arranged above the recesses or seats in a wheel 36, and means for communicating movements to these wheels simultaneously with the movement of the table 20, whereby a can will be placed on the support below the opening therein and a cap will be placed over such opening, as set forth. 13th. In combination with a rotatable table having openings therein, and can supports below such openings on a plane with a fixed table 33, a groove in such table for the passage of a belt 59, and an arc guide 63 fixed at even radii with the diameter of a can feeding wheel 36, and means for changing the radius of such guide, as set forth. 14th. In a machine of the class described, in combination with a rotatable table having openings for the contact of cans with their caps, a groove for the passage of a belt 59 arranged to pass over a fixed table, an adjustable bracket 75 having reciprocating fingers 79 arranged in mechanism therein, such mechanism connecting with a cam wheel by an oscillatory lever, whereby the fingers will be thrust back and forth over the said belt 59, as and for the purposes set forth. 15th. A fixed table 33 having a belt passing over a groove or recess in the same, means for imparting movement to such belt, a cam spacing mechanism on one side thereof and means for pushing cans at intervals round a common centre from the belt on one side and to pass over to the other side without contacting with such belt, by a plate intervening. 16th. In a device for feeding caps to cans, in a machine as described, the combination of a table 33 and a recess therein for a belt travelling thereover, a can feeding wheel having seats for cans which push the cans forward over the table, a guide 63 arranged to control the cans, a bracket 86 pivotally fixed without the track of the cans, oppositely disposed arms on said bracket projecting into the path of the cans, of a cap feeding belt 69 arranged over a bracket or slide-way 38, an adjustable bracket 90 secured to a lug on such bracket 38, and a finger cap releasing mechanism arranged on the bracket 90, the same being connected to the arm 88 as shown and described, whereby each can engaging the arms of the bracket, 86 will release its own cap. 17th. In combination with a rotatable table having openings therein for the passage of caps, can supports arranged below said openings, and seats for the caps in such openings, a fixed table 33, and means for passing cans thereover on a plane with the can supports beneath the rotatable table, a bracket 38 arranged above the table 33, a groove for a cap-feed belt 69 which takes thereover and around a pulley 70 on shaft 71, and means for imparting movement to such pulley by a sprocket belt 98 taking over a wheel 99 secured on the shaft 16th, said belt 69 arranged on a plane with the table 20, and means for simultaneously depositing a can and a cap respectively below and above one of the said openings, as set forth. 18th. In a machine of the class described having a rotatable table with contractable openings therein, and can supports below such openings and cap seats within the same, means for simultaneously depositing a can on one of the seats below the openings and a cap in its seat above the same, and of the pressing the cap downwards while the can is being pushed upwards, and for releasing and delivering the same to a belt 73, as set forth. 19th. In combination with a rotatable table having openings therein, each opening being formed by trihedrically arranged members, having tongues on the under sides resting in grooves in a movable ring, which are placed at a differential axis to the opening, and the whole being supported by brackets or plates 53, an arm passing through such plate diametrically in line with the table, a rigid pin secured to said ring and engaging in a slot in the deflected end of such arm and means for forcing the arm in and out, whereby the jaw members will contract and expand the opening, as set forth. 20th. In combination with a rotatable table, having contractable openings therein and reciprocating disc above and below such openings, and reciprocating plates on each side thereof, means for placing a cap on said plates over one of the openings while the opening is contracted, and for placing a can on one of the reciprocating supports, discs beneath such opening, and forthwith drawing the plates from beneath the cap, and for pressing such cap downwards, while the can is being driven upwards into the same, and means for expanding said opening and delivering the can to a delivery belt 73, as and for the purpose set forth.

No. 60,647. Matrix Letter Locating and Stamping Machine. (*Machine pour placer et estamper les caractères.*)

Edward Vander Wee, Montreal, Quebec, Canada, 19th July, 1898; 6 years. (Filed 31st May, 1898.)

Claim.—1st. A locating and stamping tool for matrix bars comprising a suitable base block, a guiding rib to receive the correspond-



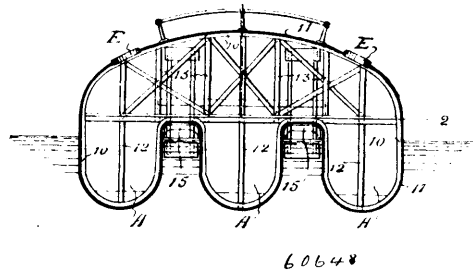
ing notch of the matrix bar to the letter required in the alignment, means for holding the sides of the bar in position and a single stamping punch located in an aperture in a suitable guiding block above the guiding rib and matrix bar and normally projecting a slight distance above such guiding block, as and for the purpose specified. 2nd. A locating and stamping tool for matrix bars comprising a suitable base block, a guiding rib to receive the corresponding notch of the matrix bar to the letter required in the alignment, means for holding the sides of the bar in position and a single stamping punch located in an aperture in a suitable guiding block above the guiding rib and matrix bar and normally projecting a slight distance above such guiding block and a suitable stripping means to raise the punch after being struck, as and for the purpose specified. 3rd. A locating and stamping tool for matrix bars comprising a suitable base block, a guiding rib to receive the corresponding notch of the matrix bar to the letter required in the alignment, means for holding the sides of the bar in position, and a single stamping punch located in an aperture in a suitable guiding block above the guiding rib and matrix bar and normally projecting a slight distance above such guiding block and a spring rod extending through the punch and a cross opening in the guiding block and the screw nuts supporting the ends of the same, as and for the purpose specified. 4th. In a locating and stamping tool for matrix bars, the combination with the bed-plate and rectangular frame secured thereto, having a central aperture, the longitudinal block provided with a central opening and means within the opening for supporting the matrix bars, a guiding rib located on such means for holding the matrix bar in position, the upper guiding block and punch and means for holding the matrix bar and notch therein directly underneath the centre of the punch, as and for the purpose specified. 5th. In a locating and stamping tool for matrix bars, the combination with the bed-plate and rectangular frame secured thereto, having a central aperture, the longitudinal block provided with a central opening and means within the opening for supporting the matrix bar, a guiding rib located on such means for holding the matrix bar in position, the upper guiding block and punch, an inclined inner side at the end of the opening of the block, a plunger having an inclined bevelled side and a spring designed to normally force the block containing the matrix bar forward, as and for the purpose specified. 6th. In a locating and stamping tool for matrix bars, the combination with the bed-plate and rectangular frame secured thereto, having a central aperture, the longitudinal block provided with a central opening and means within the opening for supporting the matrix bar, a guiding rib located on such means for holding the matrix bar in position, the upper guiding blocks and punch, an inclined inner side at the end of the opening of the block, a plunger having an inclined bevelled side, a cross recess at the rear end of the adjustable block, a corresponding recess in the rear portion of the frame and a flat curvular spring located in such recess and designed to exert a normal pressure forwardly as and for the purpose specified. 7th. The combination with the block C having a central opening C¹, and the raised front over-hanging portion C², of the upper guiding block G G¹, the stock block G², the holding blocks K & L, the set screws M and punch H located in an aperture in the upper guiding block and normally projecting slightly above the top surface of same, as and for the purpose specified. 8th. In a stamping tool, a guiding rib or part for the purpose described located, at the same relative lateral position from the symbol, which it is designed to produce in the line when cast, as occupied by the corresponding guiding rib or part in the line casting machine, as and for the purpose specified.

No. 60,648. Hull for Marine Vessels.
(*Coque de vaisseau marin.*)

John William Grahon, Nanaimo, British Columbia, Canada, 19th July, 1898; 6 years. (Filed 30th May, 1898.)

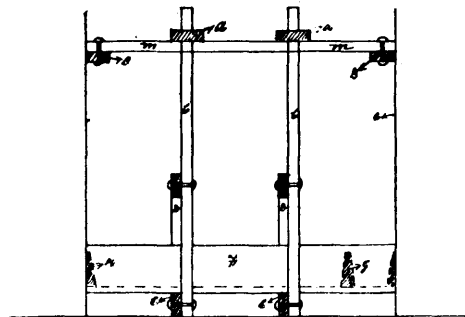
Claim.—1st. In a hull for marine vessels, the form as herein set forth, having three displacing bodies depending downwards in ves-

sel form, from a main horizontal deck, and such depending bodies converging into one bow, as set forth. 2nd. A hull of the class de-



scribed, being composed of three displacing bodies, having three stems, and such displacing bodies being secured together by a main deck, and converging into one bow, as and for the purposes specified. 3rd. A vessel of the class described having continuous ribs passing over a main deck and beneath a trinal hull, and the said hull converging into one bow, substantially as set forth. 4th. A vessel hull having three displacements, such displacements being divided by sufficient space for the accommodation of paddle-wheels there between, and such displacements or hulls converging into one bow, as and for the purposes set forth.

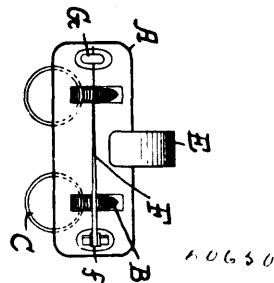
No. 60,649. Pig Stall. (*Etable à cochons.*)



Timothy R. Hilborn, Township of King, York, Ontario, Canada, 19th July, 1898; 6 years. (Filed 20th June, 1898.)

Claim. A feeding trough and adjustable partitions, comprising the trough F, division pieces G, fall board P, division partition pieces C, J and D, supported in frame pieces A, M and E, all arranged and combined, as and for the purpose hereinbefore set forth.

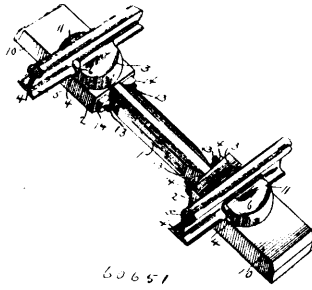
No. 60,650. Belt Pin. (*Epingle de ceinturons.*)



Margaret J. Freel, Toronto, Ontario, Canada, 19th July, 1898; 6 years. (Filed 8th July, 1898.)

Claim.—1st. In a belt pin, the combination with the plate A, of one or more loops B, and one or more rings C, for attachment to the skirt the belt hook E, the catch G, and safety pin F, hinged to the back of the plate, substantially as specified. 2nd. In a belt pin, the combination with the plate A, of loops B, the rings C, for attachment to the skirt, the belt hook E, the catch G, and safety pin F, hinged at f to the back of the plate, substantially as specified.

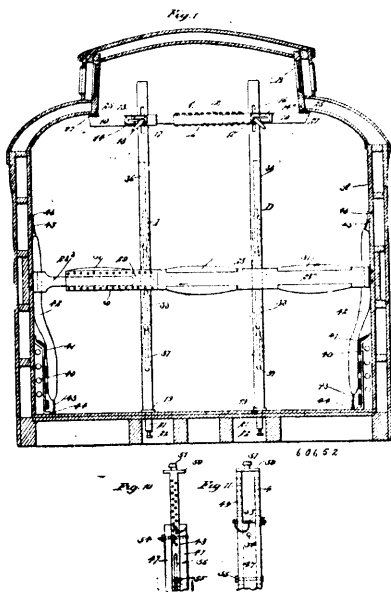
No. 60,651. Railway Tie. (Traverse de chemin de fer.)



John Kline, Nescopeck, Pennsylvania, U.S.A., 19th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. A metallic tie comprising a central section adapted to extend between and engage the inner faces of a pair of rails and provided with lateral extensions having openings, the end sections engaging the outer faces of the rails and provided with threaded pins extending through the openings of the lateral extensions, and nuts engaging the threaded pins and arranged at the inner edges of the lateral extensions, substantially as described. 2nd. A metallic cross-tie comprising a central section provided with lateral extensions having openings, the end sections provided with threaded pins extending through the openings of the lateral extensions, nuts engaging the threaded pins and arranged at the inner edges of the lateral extensions, and the vertical projections 3 mounted on the sections and engaging the inner and outer faces of the rails, each projection being provided with vertical faces and recessed at 7 and undercut at 4 to provide recesses to receive the bottom flanges of the rails, substantially as described. 3rd. A metallic tie formed of three sections, the middle sections being adapted to extend between and partly below the track-rails and having its ends widened laterally and provided with vertical projections to engage the web of the respective rails on their inner sides and having also a recess in each end from which openings extend out to opposite sides of the middle portion of the section, and the end sections being adapted to abut against the ends of the middle section below the rails and having vertical projections to engage the web of the respective rails of their outer sides, each end section having a tongue on its inner end to fit in the recess in the ends of the middle section, threaded pins extending from the tongue through the said openings, and nuts on the threaded pins, substantially as described.

No. 60,652. Portable Horse Stalls for Railway Cars. (Stalle de chevaux portative pour chars de chemin de fer.)

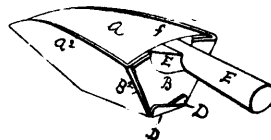


John Patterson Young, New Haven, Connecticut, U.S.A., 19th July, 1898; 6 years. (Filed 8th July, 1898.)

Claim.—1st. In a stall fixture for cars, stall partition, device for sustaining the partitions, and means whereby the stall fixtures may be secured to the car structure in a detachable manner and so that when the fixtures are removed the car body will be in normal con-

dition, substantially as specified. 2nd. A stall fixture for cars, consisting of cross-bars arranged for locking connection with the car, stanchions, means for attaching the stanchions to the cross-bars, and partitions held to slide in the said stanchions, for the purpose set forth. 3rd. In stall fixtures for cars, adjustable cross-bars, stanchions adjustably connected with the cross-bars, means for locking the cross-bars to the cars, and partitions adapted to be removably mounted in the said stanchions, as and for the purpose specified. 4th. In a stall fixture for cars, upper and lower adjustable cross-bars provided with means for locking engagement with the car, stanchions adjustably connected with the said cross-bars, spring-controlled sockets arranged to receive the lower ends of the stanchion, the said stanchions being provided with slide-ways, and partitions mounted in the slide-ways of the stanchions, substantially as shown and described. 5th. The combination, with a car provided with spring-controlled sockets in the flooring thereof, and pads removably attached to the sides of the car, of stall fixtures consisting of adjustable cross-bars arranged for locking engagement with the upper portion of the car, stanchions entering the said sockets and adjustably connected with the upper cross-bars, adjustable intermediate cross-bars engaging with the stanchions and having locking engagement with the sides of the car, and partitions removably carried by the said stanchions, for the purposes specified. 6th. The combination, with a car having side plates covering recesses, the said side plates being provided with one or more key-hole slots, and pads removably located at the sides of the car, being secured to the floor and provided at their upper ends with studs adapted to enter sundry of the said key-hole slots in the sides of the car, of adjustable cross-bars provided with studs at their ends, plates provided with key-hole slots located at the upper portion of the car, receiving the said studs, stanchions adjustably connected with the said cross-bars, intermediate cross-bars having bearing against the stanchions, the said intermediate cross-bars being adjustable and provided with studs adapted to enter sundry of the key-hole slots in the side plates of the car, and partitions adjustably mounted in the said stanchions, for the purpose set forth.

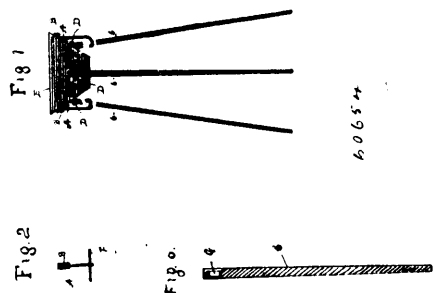
No. 60,653. Scoop. (Escope.)



Marwin R. Davenport and Elmer E. Davenport, both of Baraboo, Wisconsin, U.S.A., 19th July, 1898; 6 years. (Filed 8th July, 1898.)

Claim.—1st. A scoop having its body constructed out of a single piece of sheet metal, cut and bent and pressed to have its spout V-shaped and inclined, its bottom rectangular, and its back of two superposed thicknesses, substantially as described. 2nd. A scoop having its body, consisting of a single piece of sheet material, cut and bent to have its spout V-shaped, its bottom triangular of two superposed thicknesses, and its back of two superposed thicknesses, substantially as described. 3rd. A scoop having its body, consisting of a single piece of sheet material, cut and bent to have spout V-shaped, its back of two superposed thicknesses, and to its bottom of two superposed thicknesses, having tongues overlapping the bottom of the backparts, substantially as described. 4th. A scoop having its body, consisting of a single piece of sheet metal, cut and bent to have its spout V-shaped, its bottom triangular, and its back of two superposed thicknesses, in combination with a handle having a tongue bent down and straddling the upper edges of said back parts, substantially as described.

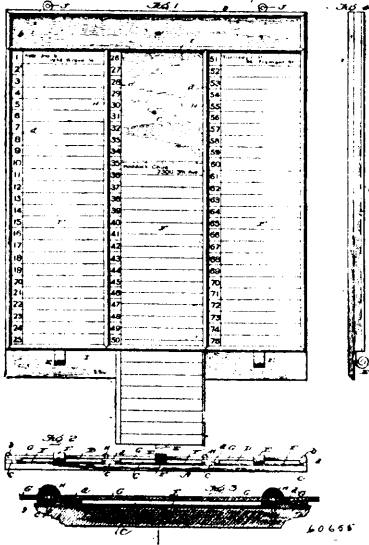
No. 60,654. Bag Holding Machine, (Accroche-sac.)



Major Creedy, Brantford, Ontario, Canada, 19th July, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. The combination of the hopper E and the legs or supports C, C, C, substantially as and for the purpose specified. 2nd. The combination of the hopper E, and the legs or supports C, C, C, and the arms or holders A, A, substantially as and for the purpose hereinbefore set forth.

No. 60,655. Bulletin Board. (Planche à bulletin.)



William Edgar Benson, Kansas City, Missouri, U.S.A., 19th July, 1898; 6 years. (Filed 24th June, 1898.)

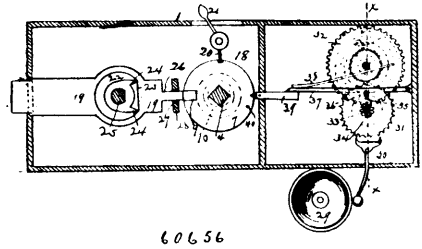
Claim.—1st. The bulletin board herein shown and described comprising the stationary frame having a closed back, parallel guide strips *c*, fixed to said back and within the frame, number plates attached to the guide strips and inscribed with columns of figures in consecutive order, glass front or fronts fastened to said stationary frame and the guide strips by suitable devices, a series of vertically slidable cases confined edgewise between the strips and laterally between the back and number plates, and name slips removably fitted in said cases, a series of such name slips being provided for each case and each slip arranged in alignment with one figure in a column on one number plate, all arranged and combined for service as set forth. 2nd. A bulletin board comprising a back, a series of guide strips attached thereat, a series of number plates of greater width than the guide strips and fastened to the latter to project beyond the edges thereof and serving, in connection with the back, to confine the sliding cases against lateral displacement, and the glass front panes fastened to the number plates, combined with a series of slidable cases fitted edgewise between the guide strips and laterally between the back and the projecting edges of the number plates, and name slips or cards fitted in the slidable cases substantially as described. 3rd. A bulletin board comprising a back, a series of guide strips attached thereto, a series of number plates of greater width than the guide strips and projecting, at their edges, beyond the same to serve in connection with the back as guides to confine suitable cases against lateral displacement, the glass front panes arranged over the number plates, the moulding strips applied over the edges of the glass front panes, and the fasteners passed between the edges of the glass front panes, and holding the mouldings, the glass panes, and the number plates on the back, combined with a series of slidable cases fitted edgewise between the guide strips and laterally between the back and the projecting edges of the number plates, means for locking said cases in detachable vertical position, and removable cards or slips carried by the slidable cases, substantially as described.

No. 60,656. Lock. (Serrure.)

James D. Ross, Olive, Kentucky, U.S.A., 19th July, 1898; 6 years. (Filed 9th July, 1898.)

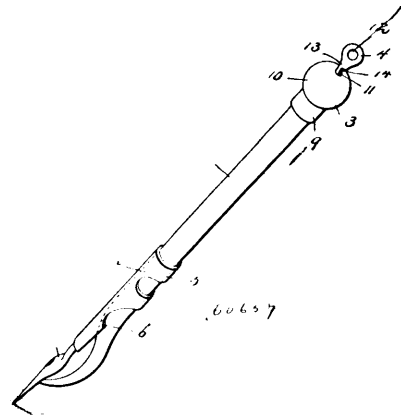
Claim.—1st. The combination with a locking-bolt having an extension on the rear end thereof and means for shifting said bolt, of a series of tumbler-discs rotatably mounted in the rear of said bolt and having peripheral notches or recesses therein, a shaft to which one of said tumbler-discs is secured, having a dial-plate thereon, a sleeve on said shaft upon which the other of said discs are loosely mounted and pins upon each of said tumbler-discs engaging pins upon the next adjacent disc, a stop-pin in the lock-casing adapted to engage peripheral slits in said discs and a handle for operating said pin projecting through the upper edge of the lock-casing, as and for the purpose set forth. 2nd. The combination with a locking-bolt, a series of tumbler-discs one of said discs having a pin thereon and means for turning said discs to permit the operation

of said bolt, of alarm mechanism, consisting of a gong and hammer therefor, an escapement-wheel, through which said hammer is



operated, a drive-wheel engaging a pinion and secured to said escapement-wheel, a stop disc also secured thereto and having a notch or recess in one edge thereof, a stop-lever having a lug or projection thereon normally engaging said stop-disc and a trip-lever for throwing said stop-lever out of engagement with said disc, the said trip-lever being actuated by the pin on one of said tumbler-discs, substantially as and for the purpose described.

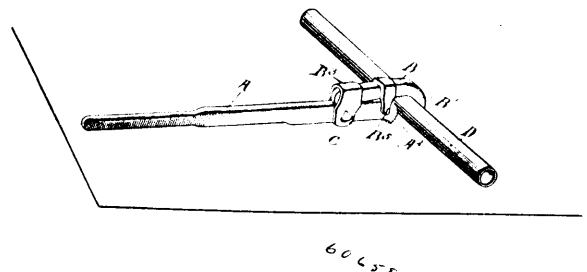
No. 60,657. Pen. (Plume.)



Olof Winkler, Helsingborg, Sweden, 19th July, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—1st. In a reservoir pen, the combination with a hollow body portion, of a flexible cap or bulb upon one end of said body portion, and an adjustable air inlet valve projecting through an opening in said cap, the said valve provided with an inclined recess, substantially as and for the purpose set forth. 2nd. In a reservoir pen, the combination with a hollow body portion, of a flexible closing cap upon the upper end of said body portion provided with an opening, and a plug valve adapted to fit within said opening provided with an inclined recess in one of its sides, whereby by a change of position of said plug valve in said cap said opening may be completely closed or the size thereof regulated, as and for the purpose set forth.

No. 60,658. Pipe Wrench. (Clé à tuyau.)

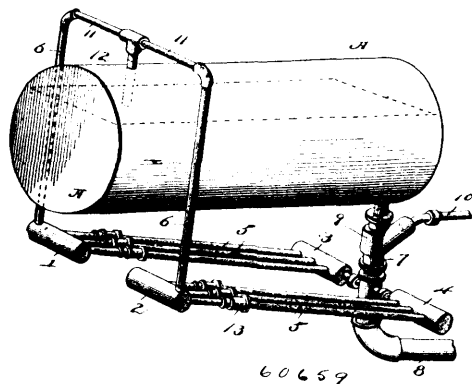


Thomas Jefferson Fowler, Topaz, California, U.S.A., 20th July, 1898; 6 years. (Filed 14th June, 1898.)

Claim. 1st. In a pipe wrench, the combination of a handle jaw having a series of perforations and a curved or cam-shaped outer end provided with teeth, a movable jaw having its outer end curved or bent to one side, the inside of said jaw being V-shaped and provided with teeth on both sides of the V, two parallel arms projecting from the movable jaw on the same side as its curved end, embracing the handle jaw and having perforations to register with those of the handle jaw, perforations of one arm being of less diameter than the

other and screw-threaded, a pivot-screw passing through the perforation of one arm of the movable jaw and one of the perforations of the handle jaw and threaded into the perforation of the other arm of the movable jaw, and a second pair of parallel guide arms projecting from the movable jaw on the same side as the curved between the curved end of and the pivot arms, all substantially as and for the purpose set forth.

No. 60,659. Steam Boiler. (Chaudiere à vapeur.)



Horace Lizzelle Freeman, Lexington, North Carolina, U.S.A., 20th July, 1898; 6 years. (Filed 5th May, 1898.)

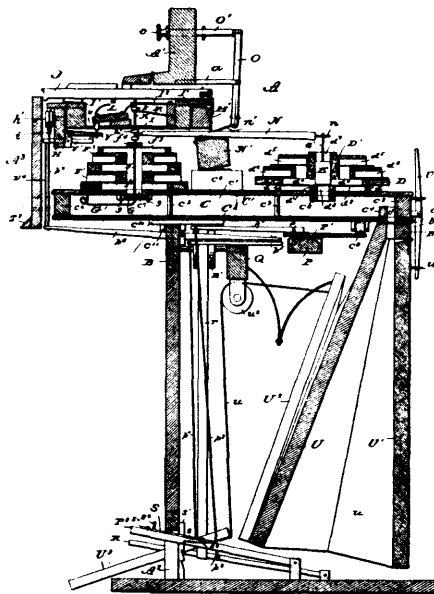
Claim.—1st. The combination with a boiler or steam-generator, of a pair of manifolds located at or near the front end of the boiler, a second pair of manifolds located at the rear end of the boiler and in a lower plane than the first pair of manifolds, upright pipes connecting the front manifolds with the boiler and terminating at a point corresponding with the water-line, longitudinal pipes connecting corresponding front and rear manifolds, a T-coupling having lateral branches in communication with the rear manifolds, a coupling or connection between the rear end of the boiler and the T-coupling, and having a branch, a blow-off in communication with the lower end of the T-coupling and of larger cross-sectional area than the connection between the boiler and T-coupling, and a feed-pipe passing through the branch of the connection between the boiler and T-coupling and terminating about centrally thereof to assist in the circulation of the water and serving to precipitate any impurity therein, substantially as and for the purpose set forth. 2nd. The combination with a steam generator, of an expansion joint, comprising a sleeve interiorly threaded at one end and exteriorly threaded at the other end, and a thimble connected at its inner end to the exterior threaded portion of the sleeve and having an inner annular flange at the outer end thereof, adapted to receive the end of the movable pipe, and forming with the inner end of the sleeve, an annular packing chamber, substantially as shown and described. 3rd. The combination with a steam generator, of an expansion joint, comprising a stationary sleeve, a thimble connected therewith, having an inner annular flange at the mouth thereof adapted to receive the end of the movable pipe, a packing chamber formed by the annular flange and the inner end of the stationary sleeve, the thimble being adjustably connected with the stationary sleeve to vary the size of the packing chamber, substantially as and for the purpose set forth.

No. 60,660. Organ. (Orgue.)

William Shephard Moses, Tracy, Minnesota, U.S.A., 20th July, 1898; 6 years. (Filed 17th May, 1898.)

Claim.—1st. In a musical instrument of the character described, the combination with the exhaust mechanism, of a sounding-chamber movable sidewise and communicating with said exhaust mechanism by way of a slot and openings registering with each other, a transverse series of reeds mounted on the sounding-chamber and communicating therewith by valve openings and headed operating rods for operating the valves, together with a key-board having tracker-pins adapted to engage the headed operating rods immediately below, substantially as shown and described. 2nd. The combination in a reed-organ, of the sounding-chamber having openings in the upper sounding-board thereof, a diaphragm supported a suitable distance above the sounding-board and having a series of openings which communicate with the openings in said sounding-board, a pipe-board having a corresponding series of pipes, and a reed-board having reed-chambers which communicate with the pipes and a series of vertical openings on a line with the corresponding openings in the diaphragm, together with pistons located within said vertical openings, and means for operating the pistons from a key-board, substantially as shown and for the purpose set forth. 3rd. In a reed-organ, the combination, of the tone-mechanism movable sidewise, a tilting key-board adapted to operate the reeds of the tone-mechanism, together with a single foot-lever or pedal connected to the tone-mechanism and key-board for tilting them in opposite directions, and supplemental means for shifting the tone-

mechanism, substantially as shown and described. 4th. In a reed-organ, the combination, of the tone mechanism movable sidewise, a



tilting key-board adapted to operate the reeds of the tone-mechanism, a foot-lever or pedal connected to the key-board and to interposed means for tilting the rear part of the tone-mechanism, and independent pedals connected to the ends of the tone-mechanism by belts which pass over suitable guide-pulleys, substantially as shown and described. 5th. In a reed-organ, the combination with the movable tone-mechanism carrying friction rollers, a tilting-board forming a bearing for the friction rollers, and an arm secured to said tilting-board and connected to a pedal, together with a tilting key-board connected to said pedal by interposed levers and connections, substantially as shown and for the purpose set forth. 6th. In a reed-organ, the combination with the movable tone-mechanism carrying friction-rollers, a tilting-board forming a bearing for the friction-rollers, an arm secured to said tilting board and connected to a depending rod, the lower end of which is passed through an opening in a foot-pedal, an adjustable stop attached to the lower end of the rod, together with a tilting key-board connected to said pedal, and supplemental means for shifting the tone-mechanism, substantially as shown and for the purpose set forth. 7th. In a reed-organ, the combination with a foot-lever or pedal, of a sliding-plate mounted thereon and provided with lateral extensions and at its forward end with a toe-portion, stationary rack-bars with which the lateral extensions of the plate engage, and a spring for causing such engagement, substantially as shown and described. 8th. In a reed-organ, a device for holding the foot-levers or pedals depressed, consisting of a sliding-plate mounted on the pedal and provided at its forward end with an upturned portion and at its sides with extensions, rack-bars with which said extensions engage, and a spring for causing such arrangement, together with a cam located on the pedal to engage the end of the sliding-plate, substantially as shown and for the purpose set forth. 9th. In a reed-organ, the combination with the coupler-boards, of a hinged board, screws adjustable upon said hinged-board and in engagement with said coupler-boards, a centrally fulcrumed lever one end of which is in contact with said hinged-board, and interposed levers and rods connecting the first-mentioned lever to a foot-lever or pedal, substantially as shown and described. 10th. In a reed-organ, the combination with the two sets of reeds and key-board having tracker-pins with rigid collars, of levers operating one set of reeds by engaging said collars, a rock-bar upon which the levers are fulcrumed, a lever connected at one end to the rock-bar, and an operating-rod connected to the other end of the lever, substantially as shown and for the purpose set forth. 11th. In a reed-organ, the combination with the two sets of reeds mounted upon a movable sounding-chamber, of a key-board having tracker-pins with rigid collars, levers operating one set of reeds by engaging said collars, a rock-bar upon which the levers are fulcrumed, said rock-bar having a looped wire attached thereto, together with a pivoted lever in sliding engagement with the rock-bar, and an operating rod connected to the opposite end of said lever, substantially as shown and for the purpose set forth. 12th. In a reed-organ, the combination with a movable sounding-chamber or wind chest and fixed bellows or exhaust mechanism, of connections between the parts and means for disengaging the sounding-chamber from the bellows and means for moving laterally the sounding-chamber, substantially as shown and for the purpose set forth. 13th. In a reed-organ, the combination with a movable sounding-chamber or wind chest and a fixed bellows or pumping

device, of separable connections between the sounding-chamber and bellows and means for detaching or separating the connections so that the sounding-chamber may be moved laterally, substantially as shown and for the purposes set forth. 14th. In a reed-organ, the combination with the exhaust mechanism or bellows, of a key-board both mounted immovably upon the frame of the instrument, of a wind chest or sounding-chamber movable longitudinally with respect to the frame, means for operating the valves or pistons of the sounding-chamber carried thereby so as to engage with the keys of the key-board, substantially as shown and for the purpose set forth. 15th. In a reed-organ, the combination with the exhaust mechanism or bellows, of a wind chest or sounding-chamber movable relative to the exhaust mechanism or bellows, of reeds and valve or piston operating means carried by the sounding-chamber, together with a key-board fixedly mounted upon the frame, substantially as shown and for the purpose set forth. 16th. In a reed-organ, the combination with the exhaust mechanism or bellows, of a wind chest or sounding-chamber movable laterally relative to said exhaust mechanism, openings connecting the bellows and sounding-chamber the openings registering, substantially as shown and for the purpose set forth. 17th. In a reed-organ, the combination of a sounding-board having the tone-mechanism mounted thereon and means for moving the same sidewise, a key-board carried by the frame of the instrument so as to occupy a fixed position, of exhaust mechanism also occupying a fixed position with respect to the frame, together with mechanism for shifting the tone-mechanism with respect to the key-board and the bellows or exhaust mechanism, substantially as shown and for the purpose set forth. 18th. In a reed-organ, the combination of the tone-mechanism movable sidewise, a key board occupying a relatively fixed position with respect to the tone-mechanism, together with exhaust mechanism and means for changing the position of the tone-mechanism with respect to the keys and exhaust mechanism, substantially as shown and for the purpose set forth. 19th. In a reed-organ, a wind chest movable laterally with respect to the fixed key-board and bellows, said wind chest having openings in its enclosing boards, valves or pistons operating in conjunction with said openings and connections between the valves or pistons and the key-board, together with air passages for establishing communication between the bellows and wind chest, substantially as shown. 20th. In a reed-organ, the combination with a key-board and bellows, of a wind chest or sounding chamber movable laterally with respect thereto, said wind chest or sounding-chamber having openings in the enclosing boards, valves or pistons therefor, connections with the valves or pistons and key-board and means for connecting the bellows and wind chest or sounding-chamber, substantially as shown and for the purpose set forth. 21st. In a reed-organ or similar instrument, the combination with a wind chest movable laterally with respect to the key-board and bellows, of tone-mechanism connected with the wind chest so as to be moved in conjunction with the same, substantially as shown. 22nd. In a reed-organ or similar instrument, the combination with the key-board and bellows of ordinary construction, of a wind chest or sounding-chamber supported so as to be movable laterally with respect to the key-board and bellows, substantially as shown and for the purpose set forth. 23rd. In a reed-organ, the combination with a movable sounding-chamber and fixed bellows, of connections between said parts and means for tilting the sounding-chamber to effect a dis-engagement of the connections and means substantially as shown for moving the sounding-chamber when tilted, for the purpose set forth. 24th. In a reed-organ, the combination with a key-board, sounding-chamber and bellows, of connecting means, the sounding-chamber being supported so that it may be raised or tilted and when so moved will disengage the connections carried thereby from the key-board and bellows, substantially as shown and for the purpose set forth.

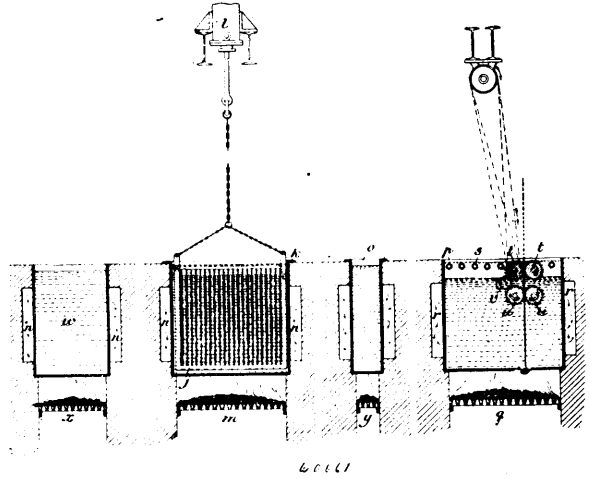
No. 60,661. Art of Manufacturing Tin Plate.

(Art de fabriquer des plaques en fer blaqué.)

William Rogers, Leechburg, Pennsylvania, U.S.A., 20th July, 1898; 6 years. (Filed 26th April, 1898.)

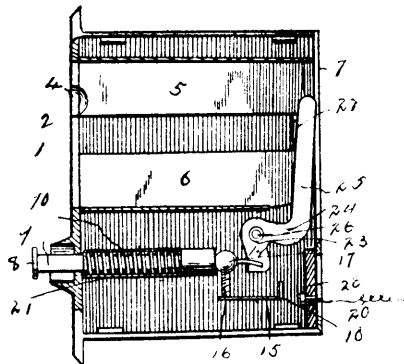
Claim.—1st. As a step in the process of coating sheets of iron or steel with tin or other coating metal or alloy, preparing the sheets by subjecting them, after rolling and without previous pickling for removing the scale, to heat in a suitable furnace while enclosed in a pack in a suitable vessel or box and protected from the access of atmospheric air by surrounding them with pulverized sand, lime, iron ore, or other suitable material, whereby is effected a mutual reaction between the external oxide scale and the internal carbon of the sheets, substantially as and for the purpose described. 2nd. In the process of preparing sheet iron for coating with tin or other metal or alloy, deoxidizing and decarburizing the sheets without removal of the iron scale, by enclosing them in a pack within a suitable receptacle, and preventing the access of atmospheric air by surrounding them with sand or pulverized material, such as dolomite or iron ore, placed within the receptacle, the sheets being protected from actual contact with such pulverized material by an envelope or enclosure composed preferably of sheet iron, and subjecting the sheets thus surrounded to heat in a suitable furnace, and thereby effecting a mutual reaction between the external oxide scale and the internal carbon on the sheets, substantially as described. 3rd. The process of reducing the oxide and largely eliminating the carbon from sheets of rolled wrought iron, at one

operation, by subjecting them, without previous removal of the oxidized coating, to furnace heat, when enclosed in a substantially air-



tight receptacle, and protected from access of external air, effecting thereby a mutual reaction between the oxide of the external scale and the internal carbon of the sheets, substantially as described. 4th. As a finishing step in the process of manufacturing tin plate, or other metal coated sheets, subjecting the sheets to the compressive and polishing action of burnished steel rolls coated wholly or partially with grease, said sheets having been first treated without removal of the surface oxides or simultaneous deoxidizing and decarburizing operation of heating in a substantially air-tight receptacle, and then coated by dipping in molten metal, substantially as described. 5th. The process of making tin plate or other metal-coated sheet iron, by subjecting the metal sheets to a process of simultaneous deoxidation and decarburization, by exposure to heat in a suitable vessel protected from access of external atmosphere for the purpose of effecting a mutual reaction between the external oxide scale and the internal carbon of the sheets then coating the wrought iron sheets by dipping in tin or other coating metal in a molten condition, and finally subjecting the sheets to the compressive action of polished sheet rolls, to compact the pores of the metal sheet, and effect a firmer adherence of the coating metal, substantially as described. 6th. The process of coating sheet iron with tin or other metal or alloy, consisting in the following steps, viz: deoxidizing, decarburizing and softening the sheets in the manner hereinbefore described without previous removal of the surface oxide by subjecting them to heat in a furnace where enclosed in a substantially air tight receptacle, protected from access of external atmosphere, then coating such sheets with melted grease, then dipping the sheets repeatedly in a tank of melted metal at a lower temperature, and finally subjecting sheets so prepared and coated to rolling pressure while immersed in metal grease, substantially as described.

No. 60,662. Bell-Push Button, Card Receiver and Card Ejector. (Bouton de timbres, receptacle de cartes et ejecteur.)



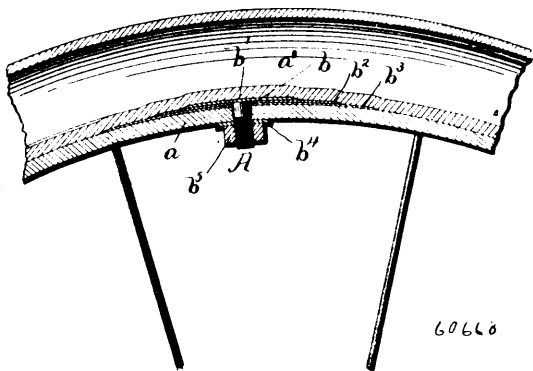
Obadiah M. Bossert, Oakmont, Pennsylvania, U.S.A., 20th July, 1898; 6 years. (Filed 25th June, 1898.)

Claim. 1st. The combination with the bell-actuating mechanism, of the card-receptacle, mechanism for ejecting the cards therefrom, a casing inclosing said bell-actuating mechanism and card-ejecting mechanism, said receptacle being open at one end for permitting

the insertion and removal of cards, and an operative connection between the bell-actuating mechanism and the card-ejecting mechanism whereby they are operated simultaneously, substantially as described. 2nd. The combination with the bell-actuating mechanism, of the divided card-receptacle, mechanism for partially ejecting the cards therefrom, a casing inclosing said bell-actuating mechanism, card-receptacle and card-ejecting mechanism, said receptacle being open at its forward end for permitting the insertion and removal of cards, and an operating connection between the bell-actuating mechanism and the card-ejecting mechanism, whereby they are operated simultaneously, substantially as described.

No. 60,663. Bicycle Tire Fastening Device.

(Appareil d'attache pour bandages de bicyclet.)



Frederick Leslie Row, Hemmingford, Quebec, Canada, 20th July, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—1st. The combination with a bicycle tire, of a bolt, having an elongated head, and means for securing said head in a fixed position on said tire, substantially as described. 2nd. The combination with a bicycle tire, of a bolt, having an elongated head, and means, mounted on said bolt, for securing said head in a fixed position on said tire, substantially as described. 3rd. The combination with a bicycle tire, of a bolt, having an elongated head, a strip mounted on said bolt below said head and adapted to be secured to said tire, and means for preventing said bolt moving in said strip, substantially as described. 4th. The combination with a bicycle tire, of a bolt, having an elongated head, a strip mounted on said bolt and adapted to be secured to said tire, and a strip of material interposed between said head and said strip, whereby said bolt will be prevented from moving in said securing strip, substantially as described. 5th. In a bicycle wheel, the combination of a tire, a bolt fixedly secured thereto, a rim, having an opening for the passage of said bolt, a nut secured to said bolt below said rim, and a washer interposed between said rim and said nut, substantially as described.

No. 60,664. Art of Producing Plated Metal.

(Art de production de métal plaqué.)

William John Wilder, West Chicago, Illinois, U.S.A., 20th July, 1898; 6 years. (Filed 20th May, 1898.)

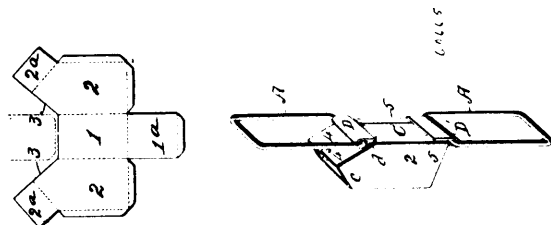
Claim.—1st. As a new manufacture, iron or steel having a coating of a flexible tenacious alloy, containing aluminum, tin and zinc. 2nd. As a new manufacture, iron or steel having a coating of an alloy containing aluminum, lead, tin and zinc, substantially as described. 3rd. The process of preparing the herein described new manufacture consisting in preparing a molten bath of an alloy containing aluminum, tin and zinc, cleansing iron or steel and applying a suitable flux and after applying the flux introducing the iron or steel into, and withdrawing it from the bath, substantially as described. 4th. The process of preparing the herein described manufacture, consisting in preparing a molten bath of an alloy containing aluminum, lead, tin and zinc, cleansing iron or steel and applying a suitable flux, and after applying the flux introducing said iron or steel into and withdrawing it from the bath, substantially as described.

No. 60,665. Pump Bucket. (Golet de pompe.)

Charles Alford Bartliff, St. Louis, Missouri, U.S.A., 20th July, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—1st. As a new article of manufacture, the herein described blank for the body portions of pump-buckets, said blank having the central front-forming portion 1 and the bottom-forming end extension 1', and the lateral or wing portions 2, having at one end the oblique and lateral extensions 2' which form the pouring or lip portion of the finished buckets, substantially as specified. 2nd. As a new article of manufacture, the herein described pump bucket having its front, side, and bottom portions, together with its pouring lip, shaped up from sheet metal, and its back formed entirely by a flat link of the carrying-chain, said link having the forwardly offset

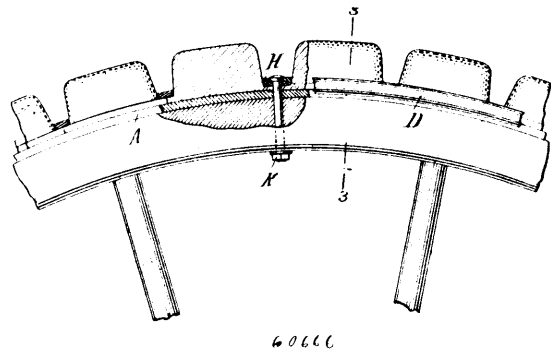
and rearwardly turned end hooks adapted to detachably engage the wire links of the chain and to form the bearings therefor, substan-



tially as specified. 3rd. The combination with the buckets open at the back, of the chain having the wire links and the intermediate flat links secured to and forming the backs of the buckets, the end portions of said flat links being forwardly offset and bent to form rearwardly turned hooks in the plane of the chain, substantially as specified. 4th. The combination with the bucket having its front, bottom, and lateral portions, and its pouring lip, formed from a single piece of metal, and without a back portion, of a flat link secured to said bucket and forming the back thereof, said link having its end portions extended beyond the ends of the bucket, such extensions being offset forwardly and bent to form hooks which open from the rear and whose rear portions are secured to the bottom and pour lip of the bucket, substantially as specified.

No. 60,666. Elastic Tire for vehicles.

(Bandage élastique pour voitures.)



Frank Elmer Hall, Quincy, Mass., U. S. A., 2th July, 1898; 6 years. (Filed May 13th, 1898.)

Claim.—1st. In a tire for vehicle wheels, the combination with blocks or sections of India rubber having flat bases with flanges at the sides and ends and adapted to rest upon the periphery of a wheel, of a band B, composed of side bars with flanges that embrace the side edges of the wheel, and cross bars E, the said band being applied over the said rubber blocks with the side bars bearing on the flanges at the sides and the cross-bar over the flanges at the ends of said blocks, and means for drawing together the ends of the band and holding it to the wheel, as set forth. 2nd. A tire for vehicle wheels, the combination with blocks or sections of India rubber having flat bases with flanges at the sides and ends and adapted to rest upon the periphery of a wheel, of a band B composed of side bars with flanges that embrace the side edges of the wheel and having channels or grooves G in their under surfaces, and cross-bars E, the said band being applied over the said rubber blocks with the side bars bearing on the flanges at the sides and the cross-bars over the flanges at the ends of said blocks and means for binding the said band firmly to the wheel whereby the flanges of the blocks will be forced up into the channels or grooves G, as set forth. 3rd. The combination in a wheel tire with blocks or sections of India rubber having flat bases with flanges at the sides and ends and adapted to rest upon the periphery of a wheel, and reinforcing plates or strips L secured to the said bases, of a band B composed of side bars with flanges that embrace the side edges of the wheel, and cross-bars E, the said band being applied over the rubber blocks with the side bars bearing on the flanges at the sides and the cross-bars over the flanges at the ends of said blocks, and means for drawing the band tight about the wheel and thereby clamping the rubber blocks in position, as set forth.

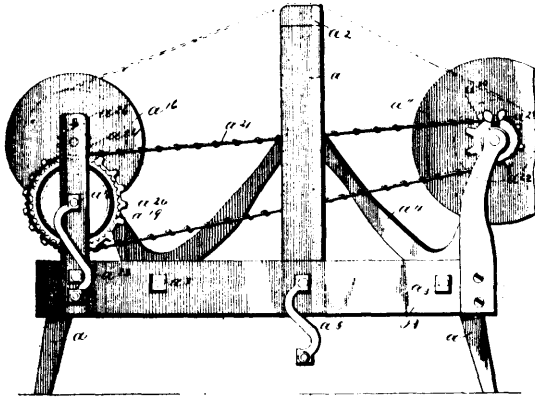
No. 60,667 Ribbon Measuring Machine.

(Machine à mesurer le ruban.)

Janvier Létourneau, St. Hyacinthe, Quebec, Canada, 20th July, 1898; 6 years. (Filed 18th May, 1898.)

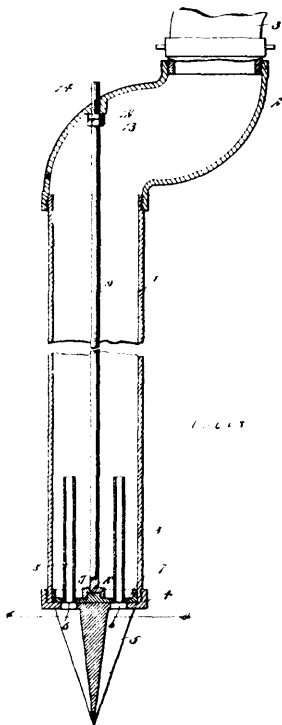
Claim.—1st. A ribbon measuring machine comprising a frame, a support for the measuring device, an adjustable spool or drum carrier, a shaft, a drum mounted on said shaft having one of its sides adjustable, and means for imparting movement to said drums, sub-

stantially as described. 2nd. A ribbon measuring machine comprising a frame, a measuring support device affixed thereto, a ribbon



spool or drum holder secured at one end of said frame, a shaft mounted at the opposite end of said frame, a receiving drum mounted on said shaft, a carrier frame slidably mounted in said frame, said carrier frame being connected to the inner side of said receiving drum and said ribbon spool or drum holder, means for adjusting said carrier frame, and means for imparting movement to said drums, substantially as described. 3rd. The combination with a frame having a gear mounted therein, of a shaft pivotally mounted in said frame, a pinion slidably mounted on said shaft, a spring mounted on said shaft and interposed between said frame and said pinion, a yoke slidably mounted on said shaft and adapted to embrace said pinion, and an adjustable pawl pivotally connected to said yoke, whereby said pinion will be brought into and out of engagement with said gear, substantially as described.

No. 60,668. Nozzles for Thawing Apparatus.
(*Lance pour appareil à dégeler la terre.*)

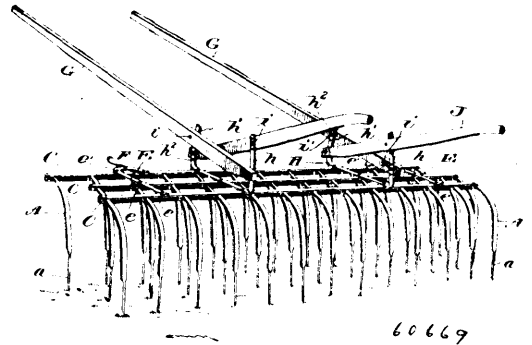


David Phillips, Pony, Madison Co., Montana, U.S.A., 20th July, 1898; 6 years. (Filed 11th July, 1898.)

Claim.—1st. A nozzle for thawing apparatus, comprising a tubular body portion, a coupling on one end thereof, a point carrier on the other end thereof and having ports, a point extended from the carrier, a valve for controlling the ports of the carrier, and a rod extended upward from the valve and through the wall of the coupling, substantially as specified. 2nd. A nozzle for a thawing apparatus, comprising a tubular body portion, a coupling on one end of the body portion, a point carrier on the other end of the body portion and having ports, a coniform point on the carrier, a

valve mounted to rotate on the inner side of the carrier, pipes extending upward from holes in the valve, and a rod removably engaging an annular lug on the valve and extending upward through a hole in the wall of the coupling, substantially as specified.

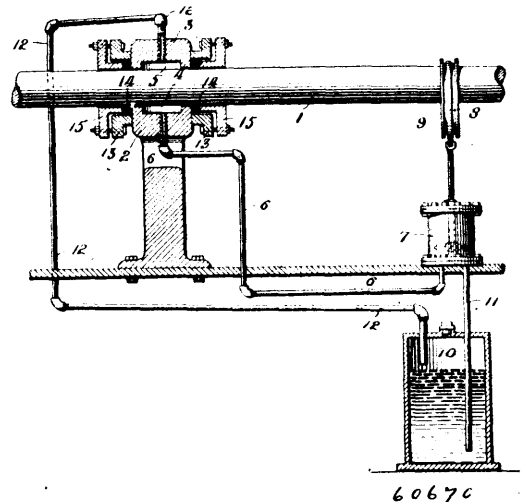
No. 60,669. Weeder. (*Sarcleur.*)



Daniel Youngs Hollock, Southold, New York, and Daniel Ernest Hollock, York, Pennsylvania, both in the U.S.A., 20th July, 1898; 6 years. (Filed 9th July, 1898.)

Claim. 1st. A flexible tooth for a weeder having a substantially straight, trailing lower end portion, substantially round in cross section and small in size, adapted to engage with the soil, and a flat spring yielding upper portion adapted to be secured to the frame of the machine, substantially as and for the purposes hereinbefore set forth. 2nd. In a weeder, the combination of the flexible teeth having trailing lower ends, substantially round in cross section and small in size, arranged to engage with the soil, and flat spring-yielding portions by which the teeth are secured to the frame of the machine, and reinforcing members adapted to bear upon the flat portions of the teeth, substantially as and for the purposes hereinbefore set forth. 3rd. The combination of the frame, of the teeth supported thereby, each tooth being adapted to rest upon the ground and thereby support the frame, and constructed to have a small round substantially straight and rearwardly inclined lower portion *a*, and a flat spring-yielding upper portion *a'*, which is secured to the frame, substantially as set forth. 4th. The combination of the frame consisting of the supporting bars, and the horizontally arranged J-shaped connecting pieces *E*, and the teeth carried by the bars, substantially as set forth. 5th. The combination of the frame, the thills or shafts, the brackets *H* which connect the frame and the thills having upward tending arms *b*, *b'*, and adjustable connections between the bracket arms and thills, whereby the inclination of the frame and thills relative to each other may be varied, substantially as set forth. 6th. The combination of the frame bars *C*, the teeth supported by the bars, and each formed with a small round lower portion *a*, and a flat upper portion *a'*, the horizontally arranged J-shaped connecting pieces *E* uniting and bracing the frame bars, the thills, the brackets *H* connecting the frame and the thills, and the adjustable connections between the thills and the said brackets, substantially as set forth.

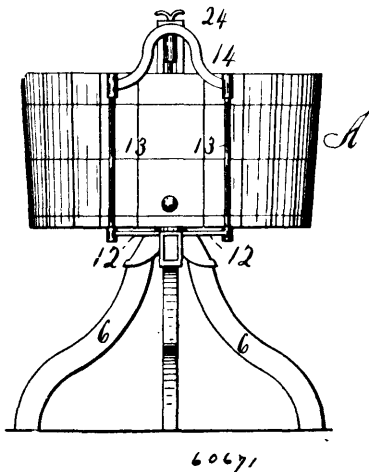
No. 60,670. Shaft Bearing. (*Coussinet d'arbre de couche.*)



Oren Fritzel Cook, San José, California, U. S. A., 20th July, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—The combination with a horizontal shaft, of a bearing box provided at its ends with stuffing boxes and having formed respectively in the upper and lower sides of its bore and in the same vertical plane oil chambers or pockets disposed longitudinally of the shaft and of a materially less width than the diameter of the latter, whereby the shaft will form a loose closure for the open sides of said chambers or pockets, an oil inlet pipe arranged to deliver oil under pressure to the lower of said chambers or pockets, and an oil outlet pipe communicating with the upper of said chambers or pockets and of a greater diameter than said inlet pipe, substantially as set forth.

No. 60,671. Washing Machine. (*Machine à laver.*)



Alonzo Abram Casler, Lestershire, New York, U. S. A., 21st July, 1898; 6 years. (Filed 5th July, 1898.)

Claim.—1st. In a washing machine, the combination with a tub, provided with a central pivot, of a support for said tub, a ball bearing between said tub and support, a concentric with said pivot to carry the weight, and a second ball bearing in said support, bearing laterally against said pivot, whereby said tub is prevented from oscillating vertically. 2nd. In a washing machine, the combination with a tub mounted upon a central pivot, a support therefor, and a rubber within the tub, of an arm upon said support, an upright upon said arm, an upper arm upon said upright, and means to connect said rubber to said upper arm to be supported thereby. 3rd. In a washing machine, the combination with a tub, and a rubber within it, of parallel uprights secured to said rubber, ways upon said uprights, a sleeve grooved to engaged with said ways, and means to support said sleeve over the centre of said tub and rubber. 4th. In a washing machine, the combination with a tub mounted to be rotated upon a suitable support, of an arm upon said support, and a spring connecting it to the edge of said tub, whereby the momentum of the tub rotating in one direction is stopped by tension thereby produced upon the spring, and the tub is started to rotate in the opposite direction. 5th. In a washing machine, the combination with a rotating tub, of a stationary arm provided with a slotted head, and a spring connected to said tub and to said slot in said head whereby said spring is traversed in said slot and a tension produced thereon by the partial rotation of said tub. 6th. In a joint, the combination with a disc, and a cylindrical stud or pin thereon, of two separate ball-bearings one engaging with said disc in its plane, and the other engaging with said pin in a plane at a right angle to the plane of said disc.

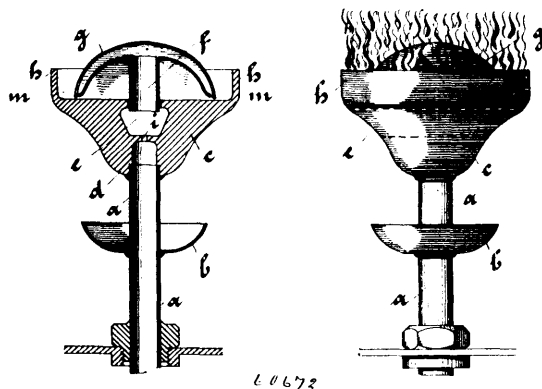
No. 60,672. Hydro-carbon Burner.

(*Foyer à hydro-carbures.*)

Gustav Barthel, Dresden, Germany, 20th July, 1898; 6 years. (Filed 22nd June, 1898.)

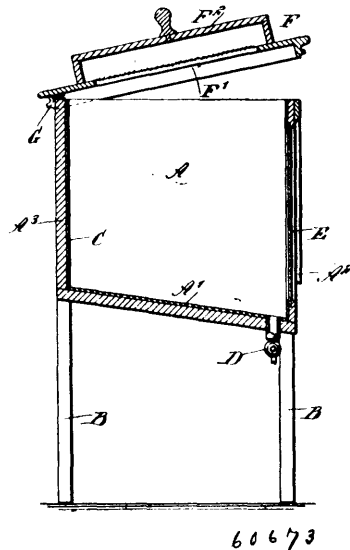
Claim.—1st. A burner for petroleum and other hydro-carbons comprising a solid body containing a gasifying chamber *d* below the burner, said metallic body being provided with passages *e* in communication with the gasifying chamber, for admission of air and gas and a flange *h* opposite the outlet holes on the burner cap, substantially as described. 2nd. A burner for petroleum and other hydro-carbons comprising a solid metallic body containing a gasifying chamber and air inlet passages, a central communicating passage between the gasifying chamber and air inlet passages, and an air integral or detachable flange *h* a burner cap *f* with gas outlet perforations *m* substantially as described. 3rd. A burner for petroleum and other hydro-carbons comprising a solid metallic body containing a gasifying chamber and an air inlet passages, and a detachable flange and projections *k* in front of the gas outlet perforations

in the burner cap, substantially as described. 4th. In a burner for petroleum and other hydro-carbons, the combination of a solid



metallic body containing a gasifying chamber, a hollow burner cap provided with peripheral openings and communicating with the said gasifying chamber, and a flange formed on or connected to the said solid metallic body in front of the openings in the burner cap, air inlets being provided in the said body to convey air to the gas vaporizer in the gasifying chamber, substantially as described.

No. 60,673. Cream Separator. (*Séparateur pour la crème.*)



Arthur Clare Webber, Knowlesville, New York, U.S.A., 21st July, 1898; 6 years. (Filed 13th July, 1898.)

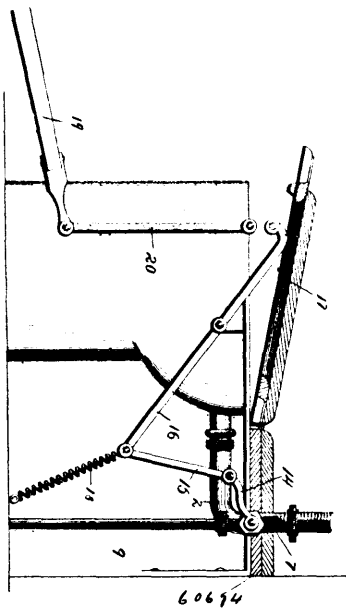
Claim.—1st. A cream separator, provided with a box having a hopper-shaped bottom inclined in a longitudinal direction, substantially as shown and described. 2nd. A cream separator, provided with a box having a hopper-shaped bottom inclined in a longitudinal direction, and a screen cover for the said box, and having a hood over the screen, the hood being open at the sides, substantially as shown and described.

No. 60,674. Closet System. (*Système de latrines.*)

Joseph Roy, Montreal, Quebec, Canada, 21st July, 1898; 6 years. (Filed 14th July, 1898.)

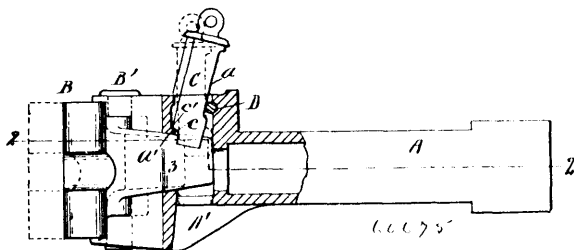
Claim.—1st. A closet system comprising a bowl, a tank, a flushing pipe connected to said tank and said bowl, and means for supplying water to said tank, the inlet and outlet of the water to said tank being through said flushing pipe, substantially as described. 2nd. A closet system comprising a bowl, a tank, a flushing pipe connected to said bowl and said tank, a water supply for said tank, said supply being connected to said flushing pipe, and means located in said flushing pipe for intermittently varying the direction of the flow of water through said flushing pipe to and from said tank, substantially as described. 3rd. A closet system comprising a bowl, a tank, a flushing pipe connected to said bowl and said tank, a water supply for said tank, said supply being connected to said flushing pipe, and automatic means located in said flushing pipe for intermittently varying the direction of the flow of water through said flushing pipe to and from said tank, substantially as described. 4th. A closet

system comprising a bowl, a tank, a flushing pipe connected to said bowl and said tank, a water supply for said tank, said supply being



connected to said flushing pipe, a valve located in the path of movement of said supply pipe and said flushing pipe, said valve being adapted to alternately open said pipes, and means for moving said valve to either of its positions, substantially as described. 5th. A closet system comprising a bowl, a tank, a flushing pipe connected to said bowl and said tank, a water supply for said tank, said supply being connected to said flushing pipe, a valve located in the path of movement of said supply pipe and said flushing pipe, said valve being adapted to alternately open said pipes, and means for automatically moving said valve to either of its positions, substantially as described. 6th. A tank for closet systems comprising a chamber, a combined inlet and outlet tube thereto, and means, located therein and operated by the movement of the water passed therein for automatically regulating the amount of water passed into said tank, substantially as described. 7th. A tank for closet systems comprising a chamber, a combined inlet and outlet tube located therein, and a float valve located in said chamber, said float valve being adapted to be moved to contact with a valved seat formed in said chamber, by the action of the water passing into said chamber, whereby the amount of water passed therein may be regulated, substantially as described. 8th. A tank for closet system comprising a chamber, an inlet and outlet tube located therein, said tube having the formation and action of a syphon, and means located within said chamber for regulating the amount of water passed into and out of said chamber, substantially as described.

No. 60,675. Car Coupler. (*Attelage de chars*.)



Philip T. Handiges, Detroit, Michigan, U.S.A., 21st July, 1898; 6 years. (Filed 13th July, 1898.)

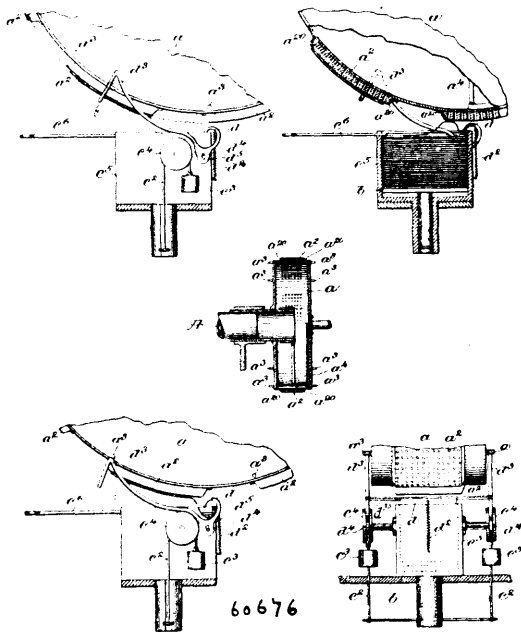
Claim.—1st. The combination with a coupler head provided with a chamber and with an orifice extending through the head for the reception of a locking pin, of a swinging knuckle, and a movable locking device mounted in said head projecting through the upper end of said orifice and formed with a supporting shoulder toward its lower end, said head formed with a fixed support within said orifice to engage said shoulder and support the locking device in unlocked position said pin in raised position being lifted up so that the projecting shoulder thereon engages on said fixed support above the chamber of the draw head, substantially as set forth. 2nd. The combination with a coupler head provided with a chamber to receive the knuckle, and with an orifice therethrough to receive a locking pin having a fixed support therewithin above said chamber, of a swinging knuckle,

a vertically movable locking pin passing through said orifice in the head provided with a supporting shoulder toward its lower end, a lifting device connected with the upper end of said pin, and a fulcrum at one side the locking pin above said chamber to tilt the locking device when in raised position and seat the supporting shoulder of the pin upon said fixed support, whereby the pin may be automatically held in an uncoupled position, said pin in raised position being lifted up so that the projecting shoulder thereon, engages on said fixed support above the chamber of the draw head, substantially as set forth. 3rd. The combination with a coupler head formed with a chamber and with an opening through the head, of a swinging knuckle, and a vertically movable locking pin mounted in said orifice and projecting through the upper end thereof, said head constructed with a fixed support projecting inward within said opening, and said locking pin constructed with a supporting shoulder toward its lower end to engage said ledge, said pin in raised position being lifted up so that the projecting shoulder thereon engages on said fixed support above the chamber of the draw head, substantially as set forth. 4th. The combination of a coupler head provided with an orifice therethrough for the reception of a locking pin and having a fixed support within said orifice, of a swinging knuckle, and a locking pin provided with a supporting shoulder toward its lower end to engage the support within said orifice to support the pin in raised position upon the fixed support within said orifice in position for uncoupling the inner end of said knuckle by its opening movement tripping the locking device from off said support and throwing said supporting shoulder upon the upper surface of the knuckle into position to drop into locked position at the closing movement of the knuckle, substantially as set forth. 5th. The combination with a chamber coupler head, formed with an orifice extending therethrough to receive a locking device, of a swinging knuckle, a vertically movable locking pin passing through said orifice and provided with a supporting shoulder toward its lower end, and a fulcrum at the rear of the locking pin above the chamber in said head, said head formed with a fixed support projecting inward on the front wall of said orifice intermediate the ends of said opening to engage said shoulder and support said pin, said pin in raised position being lifted up so that the projecting shoulder thereon engages on said fixed support above the chamber of the draw-head, substantially as set forth. 6th. The combination with a coupler head provided with a chamber and with an opening through the head to receive a locking pin, of a swinging knuckle, a vertically movable locking pin provided with a supporting shoulder on one side thereof toward its lower end, and with an additional shoulder on the opposite side thereof, a fulcrum at one side the locking device above the chamber in the head, and a fixed support on the opposite side the locking device within said opening above the chamber in the head to engage the corresponding shoulder of the locking device and support the pin in unlocked position, said pin in raised position being lifted up so that the projecting shoulder thereon engages on said fixed support above the chamber of the draw-head, substantially as set forth. 7th. The combination with a coupler head provided with an orifice therethrough for the reception of a locking pin and having a fixed support within said orifice, of a swinging knuckle provided with a shoulder at its inner end, and a locking device provided with a supporting shoulder toward its lower end to engage said fixed support in position for uncoupling, said locking device projecting below said supporting shoulder, the inner end of said knuckle by its opening movement tripping the locking device and throwing the supporting shoulder off said fixed support and upon the shoulder of the knuckle into position to permit the locking device to drop into locked position at the closing movement of the knuckle, substantially as set forth. 8th. The combination with a chambered coupler head provided with an orifice therethrough for the reception of a locking pin and having a fixed support within said orifice above the chamber of the head, of a swinging knuckle provided with a shoulder projecting inward and outward at its inner end, and a locking device provided with a supporting shoulder toward its lower end to engage said fixed support in position for uncoupling, and having its lower end projecting below said supporting shoulder, the inner end of said knuckle by its opening movement contacting with the lower end of the locking device and tripping the locking device throwing the supporting shoulder off from said fixed support and upon the upper face of the shoulder of the knuckle into position to permit said latter shoulder riding out from in under said supporting shoulder in the closing movement of the knuckle, whereby the locking device may drop into locked position in front of the shoulder of the knuckle, substantially as set forth. 9th. The combination with a coupler head provided with a chamber and with an opening through the head to receive a locking device, and with a fixed support within said opening, of a swinging knuckle, a vertically movable locking device in said opening provided with a supporting shoulder toward its lower end to seat upon said fixed support in uncoupled position, a fulcrum at one side the locking device serving as a stop to limit the upward movement of the locking pin, and also serving to seat the supporting shoulder of the locking device upon said fixed support in uncoupled position, said pin in raised position being lifted up so that the projecting shoulder thereon engages on said fixed support above the chamber of the draw head, substantially as set forth. 10th. The combination with a coupler head provided with an orifice extending therethrough for the reception of a locking pin, and constructed with a fixed support within said orifice, of a swinging knuckle, and a movable locking pin mounted in said head pro-

jecting through the upper end of said orifice, said locking pin formed with a supporting shoulder c^1 , to seat upon said fixed support, and with a portion C^1 , at the lower end of the pin projecting downward below said supporting shoulder, said knuckle formed with a shoulder B^2 , said latter shoulder by the opening movement of the knuckle contacting with the portion C^1 , of said pin to trip the pin from off the fixed support and throw the supporting shoulder of the pin upon the upper surface of the shoulder of the knuckle into position to drop into locked position at the closing movement of the knuckle, substantially as set forth. 11th. The combination with a coupler head provided with an orifice extending there-through for the reception of a locking pin, and formed with a fixed support within said orifice, of a swinging knuckle, and a movable locking pin mounted in said head projecting through the upper end of said orifice, said locking pin formed with a supporting shoulder c^1 , with a portion C^1 , projecting below said supporting shoulder, and with a cut away portion c^2 , said knuckle formed with a shoulder B^2 , and with a cut away portion b , to contact with the cut away portion c^2 , of the pin in the opening movement of the knuckle to strip the locking device from off the fixed support and throw the supporting shoulder of the pin upon the upper surface of the shoulder of the knuckle into position to drop into locked position at the closing movement of the knuckle, substantially as set forth.

No. 60,676. Paper Feeding Machine.

(Appareil alimentateur de papier.)



James Madison Blaisdell, Winthrop, Massachusetts, U.S.A., 21st July, 1898; 6 years. (Filed 25th April, 1898.)

Claim.—1st. An apparatus for feeding sheets of paper from a pile of such sheets, comprising a sheet picker into contact with which the top sheet is adapted to be forced by atmospheric pressure, and means for producing a change of position of said sheet picker relative to the part of said top sheet which is acted upon by such pressure, while such action is going on, to thereby progressively pick up said sheet and separate it from the sheet below, substantially as described. 2nd. The combination with a sheet picker into contact with which a sheet is adapted to be forced by atmospheric pressure, of a support for a pile of sheets, a retaining device to hold a portion of the top sheet stationary with relation to the support, means for producing a change of position of said sheet picked relative to said support and to that part of the top sheet which is being acted upon by such pressure whereby said sheet picker and said top sheet are caused to travel one past the other to progressively subject the sheet to atmospheric pressure, and means for subsequently releasing the portion acted upon by the said retaining device, substantially as described. 3rd. In a sheet feeding device, the combination with an exhausted chamber having an inlet in a wall thereof, of a support for the sheets, means for producing a relative movement of said chamber and said support whereby the sheets are brought to a position to be acted upon by atmospheric pressure at the chamber inlet, a retaining device for the sheets adapted to engage and hold one portion of the sheet while another portion thereof is drawn into contact with the wall of the chamber, means for pressing said support towards said retaining device, and means for releasing the sheet from said retaining device after that portion of the sheet which is not held by said device has been drawn into contact with the wall of the chamber, and for simultaneously preventing the movement of the support towards the retaining device, substantially as

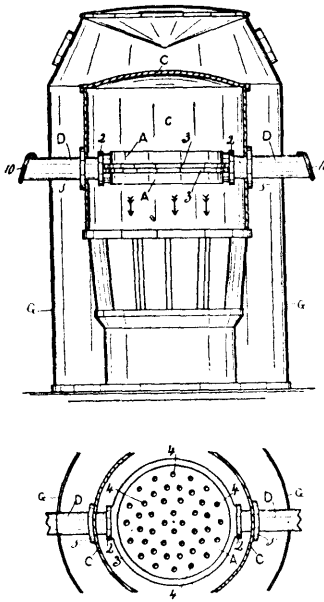
described. 4th. In a sheet feeding device, the combination with an exhausted chamber having an inlet in a wall thereof, of a support or a pile of sheets arranged to support the pile so that the top sheets thereof is adjacent to but wholly out of contact with the wall of said chamber where the said inlet is situated, a retaining device to hold a portion only of the top sheet stationary with relation to the said support, the remainder of the sheet being free to move into contact with the wall of the chamber at the inlet aforesaid, and means for producing a movement of one of said parts past the other, whereby the exhaust chamber and that part of the sheet drawn into contact therewith have a movement one past the other, so that the sheet is progressively acted upon by pressure at the inlet and that portion of the sheet not held by the retaining device progressively picked up into contact with the chamber over the inlet thereto, substantially as described. 5th. In a sheet feeding device, the combination with a traveling carrier comprising a rotatable drum from which the air is partially exhausted, said drum being provided with one or more inlets, of a sheet support adjacent to said drum, means for rotating said drum to cause the inlets to travel past said support, means for moving said support towards the wall of the drum, a retaining device for the sheets on said support to retain a portion of the top sheet while another portion thereof is being drawn into contact with the wall of the drum, a stop or projection connected with said drum and adapted in the movement thereof to engage the said retaining device and cause it to release the top sheet, and means whereby the movement of said retaining device to release the top sheet prevents the movement of the support towards the wall of the carrier, substantially as described. 6th. In a sheet feeding device the combination with the traveling carrier comprising a rotatable drum from which the air is exhausted, said drum being provided with one or more inlets, of a sheet support adjacent to said drum, a stationary shutter for the inlet, said shutter terminating at a point adjacent to the sheet support, a retaining device for holding a portion only of the sheet stationary with relation to the said support, the remainder of the sheet being free to move into contact with the drum at the inlet, means for rotating said drum to cause the inlets to travel past the surface of the sheet which is drawn into contact therewith, but prevented by said retaining device from being carried along thereby and means for subsequently operating the retaining device to release the sheet, substantially as described. 7th. In a sheet feeding device, the combination with an exhausted chamber having an inlet in the wall thereof, of a support for a pile of sheets arranged to support the pile so that the top sheet thereof is adjacent to the wall of said chamber where the said inlet is situated, a retaining device to hold a portion only of the top sheet stationary with relation to said support, the remainder of said sheet being free to move into contact with the wall of said chamber at the inlet, means for producing a movement of one of said parts past the other whereby the exhaust chamber and that part of the sheet which is drawn into contact therewith have a movement one past the other so that the sheet is progressively picked up by atmospheric pressure at the inlet; and means for closing the said inlet up to the time the said inlet is in position to cause the pressure thereat to act upon the sheet, substantially as described. 8th. In a sheet feeding device, the combination with an exhausted chamber provided with an inlet in the wall thereof, of a support for the sheets adapted to be moved towards the wall of said chamber by means of a weight and pulley, a presser-foot provided with a spring whereby it is normally pressed down upon the surface of a sheet on the support, said presser-foot having a loose pivotal connection with said support, an arm or projection from said presser-foot adjacent to said pulley, means for producing a relative movement of the chamber and the sheet support, and a tripping projection adapted to engage said arm and move the same into engagement with the pulley, whereby said arm is rocked on the pulley as a fulcrum, to lift the presser-foot and at the same time to prevent rotation of the pulley and check the movement of the support which would otherwise result, substantially as described. 9th. In a sheet feeding device, the support e , weight c^1 and pulley c^2 , and the presser-foot d having an elongated slot d^1 adapted to engage projections or pins to support said presser-foot, the spring d^2 whereby said presser-foot is normally pressed towards said support, and the arm d^3 overlying said pulley, substantially as described.

No. 60,677. Hot Air Furnace. (Fornaise à air chaud.)

John Booker, Hamilton, Ontario, Canada, 21st July, 1898; 6 years. (Filed 13th July, 1898.)

Claim.—1st. In a hot air furnace of the character described, an air chamber centrally located in the hot air heating dome above the coal and fire pot thereof, side pipes connected to said air chamber and extending through the dome and through the hot air casing to convey atmospheric air to the chamber, apertures through the lower surface to allow the air from said chamber to unite and to ignite with the smoke and gaseous elements from the fuel and fire, as described. 2nd. A hot air furnace capable of receiving atmospheric air in the central heating dome immediately above the fire pot of the furnace by means of side pipes passing through the walls of the furnace casing and the hot air area and through the walls of said dome and connecting to the central air chamber, having a number of air outlets through the central base, as described. 3rd. A heating device, consisting of a circular air chamber centrally located imme-

diately above the fire pot, side pipes connected thereto and extending through the walls of the dome and outer casing of furnace and



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beyond with end dampers, said pipes to convey air to said chamber's air outlets through the lower wall thereof to allow the air to ignite with the elements from the fuel pot to create more heat to the dome, hence to the hot air encircling same, as described. 4th. A hot air furnace of the character described, comprising an air chamber centrally located in the heating dome immediately above the fire pot, said pipes connected to said chamber and extending through the dome and the hot air casing to convey atmospheric air into said chamber, apertures through the base of the lower half to allow said air to unite with and to ignite with the elements of the fire, a downward draft to said elements to heat the base of the furnace produced by the dependent open damper 8, operated beyond the hot air casing of the furnace to produce downward draft through the fire pot of the furnace and upward draft in the inside vertical flue H, as described. 5th. A hot air furnace of the character described, comprising an air chamber centrally located in the heating dome immediately above the fire pot, side pipes connected to said chamber and extending through the dome and the hot air casing to convey atmospheric air into said chamber, apertures through the base of the lower half to allow said air to unite with and to ignite with the elements of the fire, in conjunction with the dependent and co-operating dampers, comprising the open damper 6, the closed damper 12, and the closed damper 8, operated to produce direct draft to the furnace. 6th. In a hot air furnace, dampers in flue E, connected together by means of a rod pivoted to lugs on the upper part thereof, a lower damper in flue F, pivotally connected to said damper by means of a rod having pivotal arms, a operating rod connected to the arm of the lower damper and extending to the front of the furnace, in order to close the damper 6, and open the dampers 12 and 8, to cause downward draft through the fire pot and heat the base, as described. 7th. In a hot air furnace dependently connected upper dampers in flue E, a lower damper in flue F, pivotally connected to said upper dampers by a rod having pivotal arms, an operating rod connected to the arm of said lower damper and extending to the front of the furnace in order to open the damper 6, and close the dampers 12 and 8, to cause direct draft to the furnace, as described. 8th. A hot air furnace capable of receiving atmospheric air in the central heating dome, immediately above the fire pot of the furnace by means of an air chamber receiving atmospheric air from the outside of the hot air casing of the furnace, through side pipes connected to the side sockets 2, of said chamber, and to the heating dome by means of the flange 5, air apertures in lower face of said air chamber, as described. 9th. In a hot air furnace, a circular air chamber comprising upper and lower halves, each half having a circular flange to fit snugly together, a socket at one or both sides of said chamber air conveying pipe fitting in said socket, or sockets, and extending to the outer part of the furnace, a flange on said pipe to secure the same to the wall of the furnace dome to support the said air chamber in position immediately above the fire pot of the furnace, and apertures in the lower face of the air chamber, to assist combustion in the furnace, as described.

No. 60,678. Elastic Covered Cord for Suspenders.
(Cordon elastique pour bretelles.)

Alfred May Ziegler, Boston, Massachusetts, U.S.A., 21st July, 1898: 6 years. (Filed 13th July, 1898.)

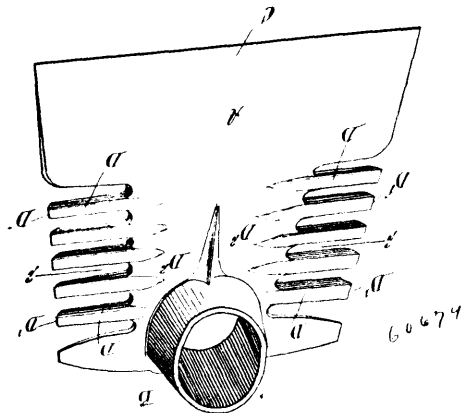
Claim.—1st. An elastic cord composed of an elastic core, portions of which are wound at intervals and covered with a tubular covering,



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substantially as described. 2nd. The herein described elastic cord having portions tightly wound thereon at intervals to limit the elasticity of the cord, substantially as described.

No. 60,679. Sugar Planter's Hoe. (Houe.)



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Frank Herbert Foster, Wahiawa, Koloa Kanai, Hawaiian Islands, 21st July, 1898: 6 years. (Filed 14th July, 1898.)

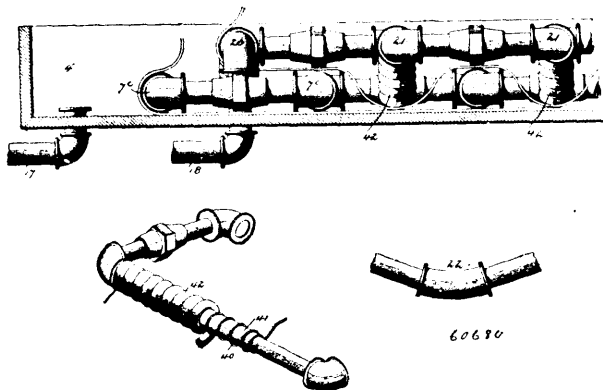
Claim.—1st. A hoe provided with a blade having a cutting edge at its lower end, and a series of transverse teeth on each side and extending approximately parallel to the said cutting edge, the cutting edges of the teeth extending in the direction of the blade, substantially as shown and described. 2nd. A hoe provided with a blade having a cutting edge at its lower end, and a series of transverse teeth on each side and extending approximately parallel to the cutting edge, the cutting edges of the teeth extending in the direction of the blade, the teeth being increased in thickness over that of the blade, the top and bottom parts of the teeth extending over the front and rear surfaces of the blade, to form parallel integral ribs thereon, substantially as shown and described.

No. 60,680. Hygiene Apparatus. (Appareil hygiénique.)

Nils August Renstrom, Omaha, Nebraska, U.S.A., 21st July, 1898: 6 years. (Filed 22nd June, 1898.)

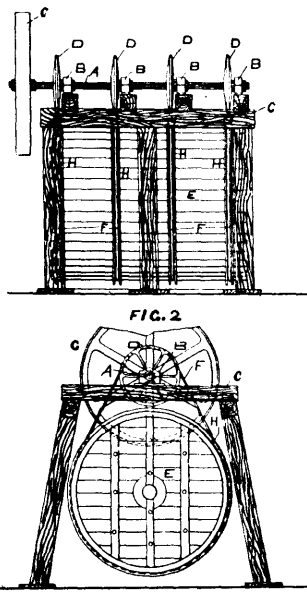
Claim.—1st. In a hygiene apparatus of the character described, the combination with the cabinet and the hollow lounge or support located therein, the water pipe extending into said lounge and crossing the same from side to side and then extending upwardly, and the rotatable spraying device connected therewith, of the air bell located above said spraying device and connected with an air pipe, the rotatable shaft, the spiral wings and fan blades, substantially as described. 2nd. In a hygiene device of the character described, the combination with the cabinet and the hollow lounge or body support located therein, of the water pipe passing through said lounge and then extended upwardly and provided with a spraying

and shower device, the connected air pipes, one of which passes into and communicates with the lounge, while the other extends



therethrough, the vertical pipe connected with said air pipes, the horizontal pipe connected therewith, the bell located above the spraying and shower device, the rotatable shaft provided with spiral wings and the fan blades, substantially as specified. 3rd. In a hygiene device of the character described, the combination with the cabinet, the lounge or body support connected therewith and the rotatable spraying device located in the upper part of the cabinet, of the air bell located above the said spraying device and connected with an air pipe, the rotatable shaft, the spiral wings and the fan blades, substantially as specified. 4th. In a hygiene apparatus of the character described, the combination with the cabinet, the hollow lounge or body support connected therewith, the water pipe passing through said lounge and then extended upwardly and provided with a spraying and shower device and the connected with air pipes, one of which passes into and communicates with the lounge, while the other extends therethrough, of the mattress, the fecal receptacle communicating with the lounge and mattress, the draw-off pipe, the glass receptacle connected therewith, the pipe connected with said receptacle, and the suction pipes connected with said fecal receptacle, substantially as described.

No. 60,681. Means of Supporting and Rotating Barrels, Cylinders and the Like. (Moyen de support et rotation pour barils, cylindres, etc.)



The Ore Atomic Reduction and Gold Extraction Company, 83 Cannon Street, London, assignee of John Frederick Webb, 83 Bridge Road, Battersea, Surrey, England, 22nd July, 1898; 6 years. (Filed 24th November, 1897.)

Claim.—1st. Improved means for supporting and rotating barrels, cylinders and the like, consisting of a shaft adapted to be rotated, two or more flexible slings carried by the said shaft or by pulleys on the said shaft, in which slings, the barrel or like device is hung so as to be revolved by the movement of the slings around the said shaft, substantially as described. 2nd. In combination, a barrel, cylinder or the like, having grooved bonding hoops or circumferential

bands, two or more flexible slings and a shaft with or without pulleys adapted to rotate and carry the said barrel or the like by means of the said slings, substantially as described.

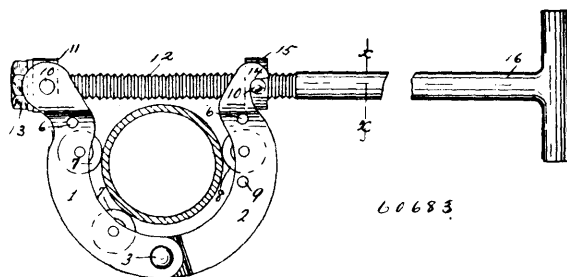
No. 60,682. Explosive. (Explosif.)

The British and Colonial Colliery Supply Association, Limited, 20 Abchurch Lane, London, England, assignee of Max Bielefeldt, Wittenberg, Saxony, German Empire, 22nd July, 1898; 6 years. (Filed 30th October, 1897.)

Claim.—1st. The herein described manufacture of an explosive by intimately mixing pulverized ammonium nitrate, nitrate of potassium, sodium, barium, calcium, or strontium and resin, substantially in the proportions specified, and heating the mixture till the resin begins to melt. 2nd. An explosive consisting of ammonium nitrate, and another or others of the nitrates mentioned and resin, the latter in quantity much smaller than that of the ammonium nitrate, manufactured as above set forth.

No. 60,683. Pipe Cutting Tool.

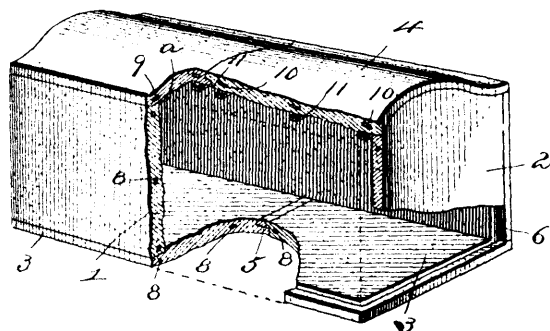
(Outil pour couper les tuyaux.)



August Rodefeld and Gilbert Vore, both of Richmond, Indiana, U.S.A., 22nd July, 1898; 6 years. (Filed 21st April, 1898.)

Claim.—1st. A pipe-cutter comprising a screw-threaded operating-handle, a fixed and movable nut on said handle with trunnions projecting from opposite sides thereof, two hinged jaws, one of which has a pivotal connection with the trunnions on said fixed nut, and the other of said jaws having its engaging end terminating in hooks to engage the trunnions on said movable nut, and rotating cutters mounted in said jaws, substantially as shown and described. 2nd. In a pipe-cutter, the combination with an operating-handle, of the cutter-jaws 1 and 2 having a hinged connection, and the latter of said jaws having hooks on the end opposite the hinged end thereof, a fixed and movable nut on said operating-handle with the former of which the said jaw 1 has a connection, and with the latter of which the hook end of jaw 2 is detachably connected, and rotating cutters mounted in said jaws, substantially as and for the purposes specified.

No. 60,684. Burial Vault. (Voute.)

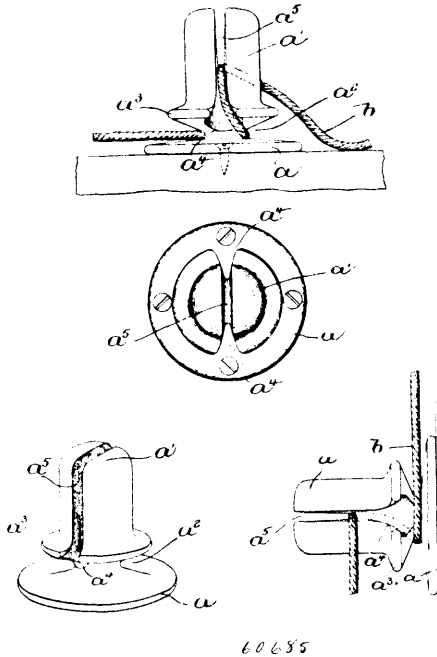


Benjamin F. Van Camp, William W. Worley and Elisha R. Worley, all of Claypool, Indiana, U.S.A., 22nd July, 1898; 6 years. (Filed 13th April, 1898.)

Claim.—1st. In a sarcophagus, a slab or arched form, a rectangular frame composed of longitudinal bars and transverse bars overlapping the longitudinal bars at their ends and rigidly secured thereto, and having the longitudinal bars embedded in the edge portions of the slab, and an arched frame comprising transverse arched bars having their terminals rigidly secured to the end portions of the aforesaid transverse bars and abutting against the inner edges of the longitudinal bars, and a bar connecting the arched bars and parallel with the side bars, the arched frame being wholly embedded in the slab, substantially as and for the purpose specified. 2nd. A sarcophagus, comprising slabs of cement or like plastic material, a metal frame composed of crossing rods welded at

the points of crossing, embedded in the body slabs, the top slabs being of arched form and having a metal frame applied thereto and composed of longitudinal and transverse arched bars connected together and embedded in the top slabs, and truss-bars connecting the side bars and having their middle portions exposed, the terminals of the arched bars abutting against the inner sides of the outer longitudinal bars, the bottom slabs having a space between the overlapping parts of their meeting ends to receive a bonding material, and having corresponding grooves in the edges of the end slabs and in the inner faces of the side slabs to receive cement, the body-slabs being rabbeted to sustain them against external lateral pressure, substantially as specified.

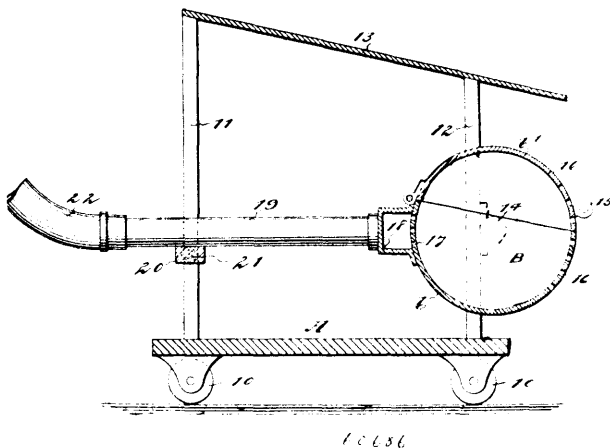
No. 60,685. Rope Grip. (Grippe pour cordages)



Warren Emerson Sargent, Haverhill, Allan Melbourne Wilson and Nathaniel Ward Colby, both of Manchester, all of New Hampshire, U.S.A., 22nd July, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. As a means for securing a rope or cord, a grip having communicating recesses situated in different planes and forming a continuous cord-confining channel, and a cleft in addition to said recesses, for binding the cord. 2nd. As a means for securing a rope or cord, a grip comprising a base and a body portion, a peripheral cord-receiving recess between said base and body, one or more cord-receiving recesses communicating with said peripheral recess and in a different plane therefrom, and a cleft in said body adapted to receive and bind the cord, the said recesses and cleft together forming a continuous cord-confining channel.

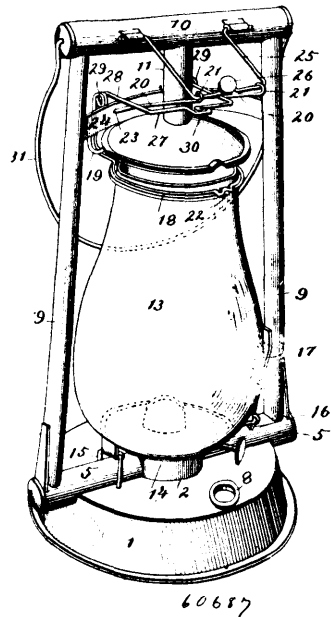
No. 60,686. Thawing Device. (Appareil à dégeler.)



Cary Wright, Salmon City, Idaho, U.S.A., and George S. Terry, New York City, 22nd July, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—1st. In a mining device, a portable support, a heater having a perforated surface and adjustably mounted upon the said support, and a tube for supplying air, connected with the said heater, for the purpose specified. 2nd. In a mining device, the combination, with a truck, forward and rear standards attached to the track, and a cross bar adjustable upon the rear standards, of a cylindrical heater pivotally supported by the forward standards, the said heater being provided with a perforated forward surface and with perforations at the rear, a box enclosing the rear perforations, an air supply-tube connected with the said box, resting upon the adjustable cross bar, and a roof attached to the said uprights and carried over the forward portion of the said heater, for the purpose set forth. 3rd. In a mining device, the combination, with a truck, forward and rear standards attached to said truck, and a cross bar adjustable upon the rear standards, of a cylindrical heater mounted upon the forward standards, the said heater comprising a body and a cover section, the forward portion of the body and cover sections of the heater being perforated, the body section of the heater being also provided with perforations at its rear, a box enclosing the rear perforations of the heater, a pipe adapted to convey air, connected with the said box and supported upon the adjustable cross bar, and a roof attached to the said standards, the forward portion of the roof extending over the forward portion of the heater, for the purpose specified.

No. 60,687. Lantern. (Lanterne.)

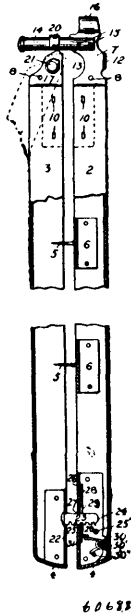


Robert Hermance, Fort Anne, Harve G. Ellis and Daniel V. Brown, both of Glen Falls, all in New York, U.S.A., 22nd July, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. In a tubular lantern, an oil reservoir having a wick tube extended therein toward the bottom of the reservoir and a filling tube extended beneath the reservoir top and having a bottom inclined toward the wick tube and communicating therewith at the lower end of said inclined bottom, the other end of the filling tube being provided with a stoppered filling orifice above the higher part of the inclined tube-bottom, substantially as and for the purpose described. 2nd. In a tubular lantern, the combination with the tubular frame, the globe, the globe support, and the dome supported by a vertical tube depending rigidly from the upper horizontal tube of said frame, of a brace secured transversely to the upper portions of the side tubes and provided with guide openings, a spring clamp engaging the upper end of the globe and provided with a finger piece and with spring arms passed through said guide openings, a stirrup hinged to the upper horizontal tube of the lantern frame and having a cross-bar engaged by eyes on the ends of said spring clamp arms, a thumb piece on said stirrup, the said stirrup and connected clamp arms being adapted to exert a tilting action on the upper portion of the globe to raise one side of its lower edge from the globe support, and spring arms connected by a cross-bar adapted to engage said stirrup and hold the globe in its tilted position, substantially as described. 3rd. In a tubular lantern, the combination with a lantern frame, the globe and the globe support, of a spring clamp adapted to be engaged around the upper portion of the globe and provided with spring arms, a stirrup hinged to the top of the frame and engaged with said spring clamp arms to tilt the upper portion of the globe and raise one side of its lower edge from the globe support, and a cross-bar carried by said spring arms and adapted to be engaged with said stirrup to hold the globe in its tilted position, substantially as described. 4th. In a tubular

lantern, the combination with the frame and its vertical side tubes, the globe and the hinged globe support having an eye or loop on the side opposite the hinge, of the depending spring catch attached to one of the side tubes or the frame and adapted to engage said loop or eye and thereby fasten the said globe support, substantially as shown and described.

No. 60,688. Newspaper File. (File pour journaux.)

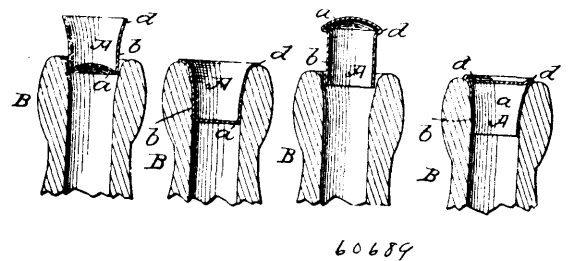


Daniel Lamont McLean, assignee William Leonard Lambkin, both of Ottawa, Ontario, Canada, 22nd July, 1898; 6 years. (Filed 21st March, 1898.)

Claim.—1st. In a newspaper file, the combination of two sheet metal bars formed U-shaped in cross section and placed together with their edges facing each other, extensions secured to them at one end forming part of a hinge joint, said extensions consisting of matched halves having their inner ends cranked outwardly to meet the inner sides of the bars and their projecting ends in contact and rigidly connected, a hinge pin secured upon one of said extensions, a shackle adapted to turn and slide upon said pin and pivotally connected with the other extension, said last named extension formed with a nose adapted to impinge on said pin and lock itself into position thereon, feet formed on the extension of the lower bar to retain the bars lying on edge, a loop formed on the extremity of one of the extensions adapted as a hanger, pins secured on channel shaped insertions secured in the open space of one bar so that said pins project into the space of the other bar and are adapted to hold the papers, a lock secured to the non-hinge ends of the bars consisting of a rigidly secured stud having rectangular notches to form rectangular teeth and of a channel shaped lock case secured in the other bar, said case being provided with a perforation registering with and receiving said stud and a spring and key actuated catch plate held longitudinally sliding in said case and provided with a registering perforation one end of which is adapted to enter the rectangular notches in said stud, substantially as set forth. 2nd. In a newspaper file, the combination of two sheet metal bars formed U-shaped in cross section and placed together with their edges facing each other, a pair of matched plates having their central portion in contact and rigidly connected to form a plate of double thickness, their inner ends cranked outwardly to meet the inner sides of the lower bar and be rigidly connected thereto as an extension thereof, their outer ends looped to form a ring and their lower edges provided with laterally bent lugs to form feet, a hinge pin straddled upon the outer end of the central portion and rigidly secured in position, another pair of matched plates having their outer portion in contact and rigidly connected to form a plate of double thickness and formed into the shape of a nose and their inner ends cranked outwardly to meet the inner sides of the upper bar and be rigidly connected thereto as an extension thereof and a shackle adapted to turn and slide upon said hinge pin and pivotally connected to the nose extension at such a point that the nose will move eccentrically and impinge upon said pin when the bar is parallel or nearly so as to the other bar, substantially as set forth. 3rd. In a newspaper file, the combination of two sheet metal bars formed U-shaped in cross-section and placed with their edges facing each other, a channel shaped bracket inserted and rigidly secured within one of said bars, a stud rigidly secured to the transverse portion of said bracket so as to project into the space of the other bar, rectangular notches in said stud forming rectangular teeth and the end of said stud rounded or beveled towards said teeth, a channel-

shaped lock case rigidly secured within the other bar, a perforation in the face plate registering with and admitting said serrated stud, a sliding catch plate within said case bearing on the inner face of the face plate and guided in slots in the sides of said case and provided with a perforation registering with and admitting said serrated stud, a spring coiled upon a pin and pushing said catch so that one end of its perforation will bear against the serrated edge of the stud and cause it to engage one of the notches, a keyhole in one side of said lock case and a key adapted to be inserted in said keyhole and to retract the catch plate against the pressure of the spring, substantially as set forth. 4th. In a newspaper file, the combination with two bars of a stud attached to one bar having one edge serrated by rectangular notches to form rectangular teeth and its point rounded or beveled toward the teeth, a lock case attached to the other bar consisting of a face plate or transverse portion and sides, a perforation in said face plate registering with and admitting said serrated stud, a catch plate held longitudinally sliding on the inner face of said face plate and provided with a perforation registering with the perforation in the face plate and provided with a projection adapted to engage the bit of a key, a spring suitably held within said case and pushing said catch plate in such direction that one edge of the perforation will bear against the serrated edge of said stud and engage one of its notches, a keyhole in one side of the case and corresponding bar in proximity to the projection on the catch plate and a key adapted to retract the catch against the pressure of the spring and release the serrated stud, substantially as set forth. 5th. In a newspaper file, the combination with a bar of a projection thereon, a hinge pin rigidly secured upon said projection, a shackle having an eye adapted to turn and slide upon said pin, a projection on another bar desired to be connected with the bar first above recited, said last named projection formed into a nose adapted to impinge on said hinge pin and said shackle pivotally connected to said nose eccentrically so that when the projection is in a certain desired position, said nose will impinge upon said pin, but will swing free thereof in other positions, substantially as set forth. 6th. In a newspaper file, the combination of two bars provided with means for holding papers between them, such as pins, a self-adjusting locking hinge connecting said bars at one end and consisting of a projection on one bar holding a hinge pin and a projection on the other bar terminating in a nose impinging on said hinge pin and pivoted eccentrically to said nose, and a locking device at the other ends of the bars consisting of a stud on one of them having rectangular notches forming rectangular teeth and a case inserted in the other bar containing suitable mechanism to engage and hold said stud or to be released by means of a key, substantially as set forth. 7th. In a newspaper file, the combination of two bars provided with means for holding papers between them, such as pins, a hinge connecting said bars at one end allowing one bar to be lifted and turned aside and consisting of an extension on one bar having a hinge pin rigidly secured thereto and an extension on the other bar having a shackle pivoted thereto which has an eye adapted to slide and turn on said hinge pin, and a locking device at the other ends of said bars consisting of a stud provided with rectangular notches forming rectangular teeth said stud adapted to project into a casing secured to the other bar provided with a registering perforation to admit said stud and containing mechanism to engage any one of said notches and retain the same until released by a key, substantially as set forth.

No. 60,689. Bottle Stopper. (Bouchon de bouteille.)



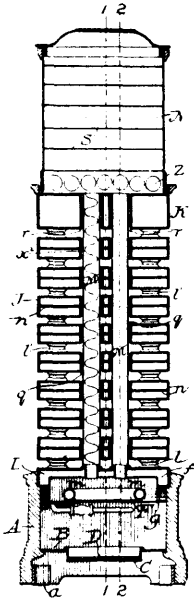
Harry Clay Blye, assignee of Gustave Koch, both of New York City, U.S.A., 22nd July, 1898; 6 years. (Filed 7th July, 1898.)

Claim.—1st. The hollow ductile plug stopper having the upwardly diverging sides and closed end and so proportioned with respect to the opening it is to close and seal that when driven into said opening said plug will have its sides contracted and conformed to the walls of said opening and brought into sealing contact therewith, substantially as and for the purpose set forth. 2nd. The hollow ductile plug stopper having the sides and dish end and so proportioned with respect to the opening it is to close and seal as to, upon direct insertion, tightly engage the walls of said opening and be locked into fixed sealing contact therewith by flattening said dish end, substantially as and for the purposes set forth. 3rd. The hollow ductile plug stopper having the sides and upwardly dish end and so proportioned with respect to the opening it is to close and seal as to upon direct insertion tightly engage the walls of said opening and be locked into fixed sealing contact therewith by flatten-

ing said dished lower end, substantially as and for the purposes set forth. 4th. The hollow ductile plug stopper having the sides, upwardly dished lower end and annular flange depending exterior to the bottle neck, said plug stopper being so proportioned with respect to the opening in said neck as to, upon direct insertion, tightly engage the walls of same and be locked into fixed sealing contact therewith by flattening said dished end, substantially as and for the purposes set forth. 5th. In combination with the bottle or receptacle, the stopper consisting of the hollow ductile cylindrical plug of greater initial diameter than the diameter of the neck of the bottle or receptacle to receive it, whereby said stopper requires the application of force for its insertion and is by said force contracted and brought into sealing contact with said neck, substantially as and for the purposes set forth.

No. 60,690. Heating and Ventilating System.

(*Système de chauffage et ventilation*)



60690

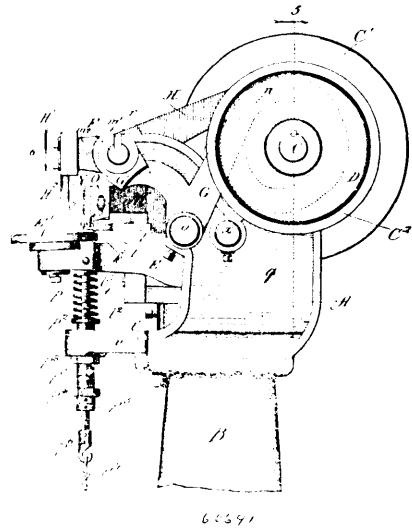
The American Incandescent Gas Company, Kansas City, assignee of Thomas Hennessy, Excelsior Springs, Missouri, U.S.A., 22nd July, 1898; 6 years. (Filed 30th June, 1898.)

Claim. 1st. As a new article of manufacture, a radiator section having openings near one end on opposite faces, a diaphragm extending from that end from side to side approximately to the opposite end, and a series of passages extending directly through the sides and the diaphragm. 2nd. A radiator comprising a series of sections communicating with each other at one end and having its outer sections directly connected at its opposite end, diaphragms in said sections substantially as described, and a series of pipes extending through the sections and forming air passages, substantially as described. 3rd. A radiator comprising a series of sections directly connected at one end by a series of short nipples, and having the upper and lower section connected directly at the opposite end by a pipe screwed into the upper section and extending into the lower section, the lower end of said pipe being provided with a long thread, and a collar mounted thereon, as and for the purposes set forth. 4th. In combination with the base and its burner, a hot water radiator mounted thereon comprising a series of connected sections, passages extending through said sections one above another, a series of pipes of an external diameter smaller than said openings and mounted therein, said pipes communicating with the base, and a chamber mounted upon the top of the radiator in direct communication with the upper ends of the pipes, whereby the products of combustion are confined and act around the entire exterior of the pipes. 5th. In combination with the base and its burner, a hot water radiator mounted thereon comprising a series of connected sections, passages extending through said sections one above another, a series of pipes of an external diameter smaller than said openings and mounted therein, said pipes communicating with the base, and a chamber mounted upon the top of the radiator in direct communication with the upper ends of the pipes, whereby the products of combustion are confined and air is permitted to pass up and around the entire exterior of the pipes. 6th. A hot water radiator comprising a series of sections directly connected at one end, a pipe *L* connecting the outer sections at the opposite end, a collar *i* formed integral with the lower section and extending towards the bottom thereof, whereby a trap is formed for the lower end of the connecting pipe. 7th. In a radiator, the combination of the base provided with air passages extending therethrough, a series of sections mounted upon said base, and also provided with openings in line

with the passages in the base, and a series of tubes passing down through the openings in the sections and resting upon the base. 8th. In a radiator, the combination of the base provided with air passages extending therethrough, rings or collars formed around said air passages, a series of sections mounted upon said base, and also provided with openings in line with the passages in the base, and a series of tubes passing down through said openings in the sections and resting upon the base around the rings or collars. 9th. In combination with the base and its burner, a radiator section mounted thereon having depending sides *f* inclining down from one end to the other, and a down prop *g* at the lower end of said depending sides, a series of sections mounted on said bottom section and connected thereto, and a top section connected to said intermediate sections and also directly connected with the down prop.

No. 60,691. Insole Reinforcing Machine.

(*Renfort pour semelles.*)



The Gem Flexible Insole Company, Boston, assignee of John B. Hadaway, Brockton, both in Massachusetts, U.S.A., 22nd July, 1898; 6 years. (Filed 29th June, 1898.)

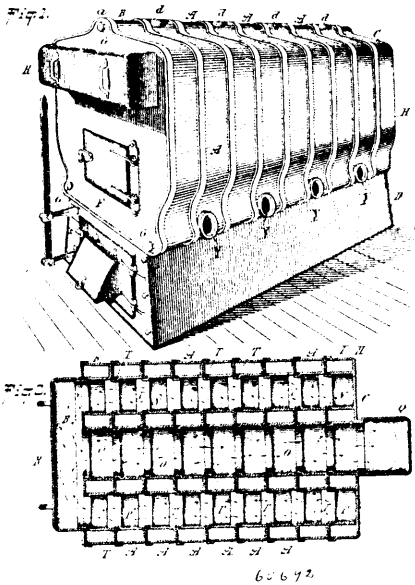
Claim. 1st. In a machine for applying reinforcing material to insoles, the combination with a work support, of a former or anvil to sustain the free edge portion of the reinforcing material on the insole, a beader or crimper co-operating with said former or anvil to bead or crimp the said reinforcing material, and means for actuating said beader or crimper, substantially as described. 2nd. In a machine for applying reinforcing material to insoles, the combination with a movable work support, of a former or anvil to sustain the free edge portion of the reinforcing material on the insole, a beader or crimper co-operating with said former or anvil to bead or crimp the reinforcing material, and means for actuating said beader or crimper, substantially as described. 3rd. In a machine for applying reinforcing material to insoles, the combination with a work support, of a reciprocating beader or crimper having a yoke shaped head for beading or crimping the reinforcing material upon the insole, and means for actuating said beader or crimper, substantially as described. 4th. In a machine for applying reinforcing material to insoles, the combination with a work support, of a former or anvil to sustain the free edge portion of the reinforcing material on the insole, an oscillatory presser tool co-operating with said former or anvil, a reciprocating beader or crimper co-operating with said former or anvil to bead or crimp the reinforcing material, and means for actuating the presser tool and beader or crimper, substantially as described. 5th. In a machine for applying reinforcing material to insoles, the combination with a work support, of a vibratory former or anvil to sustain the free edge portion of the reinforcing material on the insole and feed the work, a reciprocating beader or crimper co-operating with said former or anvil to bead or crimp the said reinforcing material, and means for actuating said beader or crimper and former or anvil, substantially as described. 6th. In a machine for applying reinforcing material to insoles, the combination with a work support, of a vibratory former or anvil to sustain the free edge portion of the reinforcing material on the insole, an oscillatory vibrating presser tool co-operating with said former or anvil to hold and feed the work, a reciprocating beader or crimper co-operating with said former or anvil to bead or crimp the said reinforcing material, and means for actuating the presser tool and beader or crimper, substantially as described. 7th. In a machine for applying reinforcing material to insoles, the combination with a yielding work support, of a vibratory work engaging former or

anvil to sustain the free edge portion of the reinforcing material on the insole, an oscillatory vibrating presser tool co-operating with said former or anvil to hold and feed the work, a reciprocating beader or crimper co-operating with said former or anvil to bead or crimp the said reinforcing material, and means for actuating the presser tool and former or anvil alternately with the beader or crimper, substantially as described. 8th. In a machine for applying reinforcing material to insoles, the combination with a yielding work support, of a vibratory former or anvil to sustain the free edge portion of the reinforcing material on the insole, a gauge on said former or anvil in position to bear against the edge of the insole, an oscillatory vibrating presser tool co-operating with said former or anvil to hold and feed the work, a reciprocating beader or crimper co-operating with said former or anvil to bead or crimp the said reinforcing material, and means for actuating the presser tool and former or anvil alternately with the beader or crimper, substantially as described. 9th. In a machine for applying reinforcing material to insoles, the combination with a yielding work support, of a vibratory former or anvil to sustain the free edge portion of the reinforcing material on the insole, a gauge for guiding the work on its support with relation to the head formation on the work, an oscillatory vibrating presser tool co-operating with said former or anvil to hold and feed the work, a reciprocating beader or crimper co-operating with said former or anvil to bead or crimp the said reinforcing material, and means for actuating the presser tool and former or anvil alternately with the beader or crimper, substantially as described. 10th. In a machine for applying reinforcing material to insoles, the combination with a work support, of a reciprocating beader or crimper having a yoke shaped head for heading or crimping the reinforcing material upon the insole, a cutter for trimming off the surplus from the edge of said material, and means for actuating said beader or crimper and cutter, substantially as described. 11th. In a machine for applying reinforcing material to insoles, the combination with a work support, of a vibratory former or anvil to sustain the free edge portion of the reinforcing material on the insole, a gauge for guiding the work on its support with relation to the bead formation of the work, a lower cutter adjacent to said former or anvil, an oscillatory vibrating presser tool, co-operating with said former or anvil to hold and feed the work, a reciprocating beader or crimper co-operating with said former or anvil to bead or crimp the said reinforcing material, an upper cutter, and means for actuating the presser tool and former or anvil alternately with the beader or crimper and upper cutter, substantially as described. 12th. In a machine for applying reinforcing material to insoles, the combination with a frame, of a work support, a rotary drive shaft carrying cams, a lever I fulcrumed to oscillate horizontally, and engaging at one end of said cams, a former or anvil P¹ supported on the opposite end of said lever to extend over said work support, a lever H fulcrumed to oscillate vertically and engaging at one end another of said cams, a presser tool H² supported over said work support and connected with the lever H to oscillate therewith, a lever M² fulcrumed to oscillate vertically and engaging at one end another of said cams, and a beader or crimper N on the opposite end of said lever H adjacent to said former or anvil P¹, substantially as described. 13th. In a machine for applying reinforcing material to insoles, the combination with the frame of a work support, a rotary drive shaft, carrying cams, a lever I fulcrumed to oscillate horizontally and engaging at one end of said cams, a former or anvil P¹ supported on the opposite end of said lever to extend over said work support and having a head A³, a lever H fulcrumed to oscillate vertically and engaging at one end another of said cams, a presser tool H² supported over said work support and connected with said lever to oscillate therewith, a lever M fulcrumed to oscillate vertically and engaging at one end another of said cams, and a beader or crimper N having a yoke shaped head B¹ and supported on the opposite end of said lever M adjacent to said former or anvil P¹, substantially as described. 14th. In a machine for applying reinforcing material to insoles, the combination with the frame, of a work support, a rotary drive shaft carrying cams, a lever I fulcrumed to vibrate horizontally and engaging at one end of said cams, a former or anvil P¹ supported on the opposite end of said lever to extend over said work support, a cutter L adjacent to said former or anvil, a lever H fulcrumed to oscillate vertically and engaging at one end another of said cams, a presser tool H² supported over said work support and connected with the lever H to oscillate therewith, a lever M fulcrumed to oscillate vertically and engaging at one end another of said cams, a beader or crimper N on the opposite end of said lever M adjacent to said former or anvil P¹, and a cutter O in the lever M, substantially as described. 15th. In a machine for applying reinforcing material to insoles, the combination with a frame A, of a work support B¹ on a spring controlled frame E, a drive shaft C carrying a pulley C² having formed on one face a cam groove D, and a cam drum having formed on its outer faces respectively the cam grooves D¹ and D² and a cam groove D³, a longitudinally reciprocating shaft F, a lever G fulcrumed to engage at one end the cam D, and carrying at its opposite end a cam G² in engagement with a roll e¹ on the shaft F, a lever I fulcrumed to vibrate horizontally and engaging at one end the cam D³, a former or anvil L¹ supported on the opposite end of the lever I, a cutter L adjacent to said former or anvil, a lever H fulcrumed to engage at one end the cam D¹ and carrying at its opposite end a sleeve m surrounding the shaft F, a collar m¹ surrounding said sleeve, and carrying a head H¹ supporting the presser

tool H², a lever H fulcrumed to engage at one end the cam D², and a cutter G on said lever M, the whole being constructed and arranged to operate, substantially as described. 16th. In a machine for applying reinforcing material to insoles, the combination with a work support, of bead forming tools and mechanism to actuate said tools to cause them to form a bead or crimp in said reinforcing material, substantially as described. 17th. In a machine for applying reinforcing material to insoles, the combination with a work support, of work feeding and bead forming tools, and actuating mechanism therefor, adapted to feed the work and form a bead or crimp in the reinforcing material, substantially as described. 18th. In a machine for applying reinforcing material to insoles, the combination with bead forming mechanism for forming the bead or crimp in the reinforcing material, edge trimming mechanism for trimming the edge of said reinforcing material, substantially as described. 19th. In a machine for applying reinforcing material to insoles, the combination with a work support, of bead forming mechanism acting to form a bead or crimp in the reinforcing material and to secure said reinforcing material to an insole, substantially as described. 20th. In a machine for applying reinforcing material to insoles, the combination with a work support, of bead forming mechanism operating automatically to form a bead or crimp in the insole reinforcing material, substantially as described. 21st. In a machine for applying reinforcing material to insoles, mechanism operating automatically to form a bead or crimp in said reinforcing material and to secure said reinforcing material to an insole, substantially as described. 22nd. In a machine for applying reinforcing material to insoles, the combination with a vibrating anvil or former arranged to project under the edge of the reinforcing material, of a presser tool and means to impart a simultaneous lateral movement to the anvil or former and the presser tool, substantially as described. 23rd. In a machine for applying reinforcing material to insoles, the combination with an anvil or former and a heading or crimping tool, of a presser tool, means to move said tool towards and from the work, and means to laterally reciprocate said tool in the direction of the feed of the work, substantially as described. 24th. In a machine for applying reinforcing material to insoles, the combination with a heading or crimping tool, of an anvil or former arranged to project beneath the reinforcing material, and to engage and feed the work, and means to actuate said anvil or former, substantially as described. 25th. In a machine for applying reinforcing material to insoles, the combination with a heading or crimping tool, of an anvil or former having a bead moulding head and shoulder to bear against the lip of the insole, substantially as described. 26th. In a machine for applying reinforcing material to insoles, the combination with a heading or crimping tool, of an anvil or former having a bead moulding head projecting therefrom, substantially as described. 27th. In a machine for applying reinforcing material to insoles, the combination with a heading or crimping tool, of an anvil or former having a bead moulding head and a finger projecting laterally from said head, substantially as described. 28th. In a machine for applying reinforcing material to insoles, the combination with a work support, of an anvil or former, an oscillatory presser tool, and a spring controlled auxiliary pressing and smoothing tool, co-operating with said anvil or former, a reciprocating heading or crimping tool, also co-operating with said anvil or former to bead or crimp the said reinforcing material, and means for actuating the presser tool and heading and crimping tools, substantially as described. 29th. In a machine for applying reinforcing material to insoles, the combination with a work support, of an anvil or former, an oscillatory presser tool having a bent finger, and a spring controlled auxiliary pressing and smoothing tool pivotally supported on said presser tool, said presser tool co-operating with said anvil or former, a reciprocating heading or crimping tool also co-operating with said anvil or former to bead or crimp the said reinforcing material, and means for actuating the presser tool and heading or crimping tool, substantially as described. 30th. In a machine for applying reinforcing material to insoles, the combination with a work support, of a vibratory former or anvil, an oscillatory presser tool comprising a bend figure d, adjustably secured upon its oscillatory support and carrying a set screw d⁷, an auxiliary pressing and securing tool d⁵, pivotally supported on a head d³, carried by a set screw d⁴, in a slot in said presser tool and a spring d⁶, carried by a set screw d⁷, said presser tool co-operating with said anvil or former, a reciprocating heading or crimping tool co-operating with said anvil or former to bead or crimp the said reinforcing material, and means for actuating the presser tool, and heading or crimping tools, substantially as described. 31st. In a machine for applying reinforcing material to insoles, the combination with bead forming mechanism arranged to form a bead or crimp in the reinforcing material of a presser tool, and an auxiliary pressing and smoothing tool to press and smooth the reinforcing material to cause it to lie smoothly upon the insole, substantially as described. 32nd. In a machine for applying reinforcing material to insoles, the combinations with an anvil or former and the bead forming tool, of a presser tool and an auxiliary pressing and smoothing tool, substantially as described. 33rd. In a machine for applying reinforcing material to insoles, the combination with an anvil or former and the bead forming tool, of a presser tool and a yielding auxiliary pressing and smoothing tool, substantially as described. 34th. In a machine for applying reinforcing material to insoles, the combination with a presser tool and an anvil or former, of a heading and crimping tool and an auxiliary pressing and smoothing tool car-

ried by the presser tool, substantially as described. 35th. In a machine for applying reinforcing material to insoles, the combination with a bead forming tool, of a presser tool, and a pressing and smoothing tool arranged to have a movement towards the work with the presser tool and a movement across the work independent of said tool, substantially as described.

No. 60,692. Water Heater. (Calorifère.)

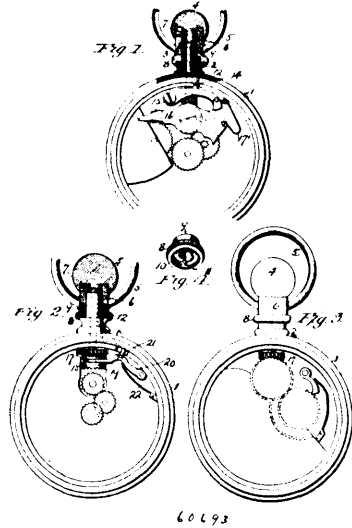


Josephus Plenty, Jersey City, New Jersey, assignee of David Eversden Howatt, Roslyn, New York, both in the U. S. A., 22nd July, 1898; 6 years. (Filed 20th June, 1898.)

Claim.—1st. In a sectional water heater of the character described, the combination of the several hollow sections arranged side by side and having at their upper portions the side and central communicating exit flues, said sections being of a construction to direct the products of combustion over their surfaces and to the said side flues and prevent their direct entrance to the said central flue, which leads to the exit pipe, substantially as set forth. 2nd. In a sectional water heater of the character described, the combination of the several hollow sections arranged side by side and having at their upper portion the longitudinal flue leading to the exit or smoke pipe, the central portions of said sections over the fire box being set inward or depressed to form the heat flues, and the upper portions of said sections above said longitudinal flue being dome-shaped or raised and correspondingly apertured in their contacting side faces to establish substantially a head communicating with all of said hollow sections and provided with means for receiving the ends of the outlet pipes for the hot water, substantially as set forth. 3rd. In a sectional water heater of the character described, the combination of the several hollow sections arranged side by side and forming between them the heat flues from the fire box to the escape flue, the upper portions and the lower outer side portions or legs of said sections having their contacting faces apertured to establish communication for water from one section to another adjacent to the outlets for the hot water and adjacent to the inlets for the water, substantially as set forth. 4th. In a sectional water heater of the character described, the combination of the several hollow sections forming between them the heat flues from the fire-box to the exit flue, said sections extending downward at their outer sides to form the sides of the box and just above the lower ends of said sides bulging outward both within and without the heater to form increased water and heating capacity in said sections and increased fire-box or combustion capacity between those portions of said sections which form the fire-box, substantially as set forth. 5th. In a sectional water heater, the combination of the several transverse hollow sections arranged side by side and having at their upper portion one or more of the longitudinal flues, said sections being each composed of the parts H, I, flanged and brought together and forming the complete hollow section, substantially as set forth. 6th. In a sectional water heater of the character described, the combination of the several hollow sections arranged side by side and having at their upper portion a longitudinal flue leading to the smoke pipe, said sections forming heat flues between them and being formed of the parts H, I, flanged and brought together and having on their inner surface the inwardly extending heat conducting portions, substantially as set forth. 7th. In a sectional water heater, the combination of the several hollow transverse water sections bound together and forming between them the heat flues which extend upward to a longitudinal exit flue, said sections being

composed of the vertical transverse parts H, I, brought together and whose flanges form said longitudinal exit flue and the outer walls of the heater, substantially as set forth.

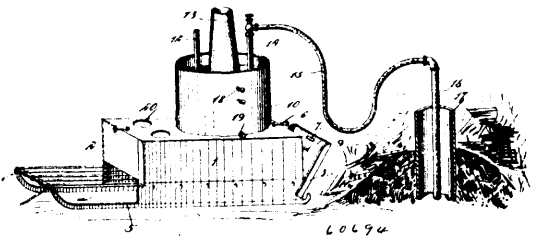
No. 60,693. Watch. (Montre.)



Samuel Lesnick, New York City, and Max Cherwinsky, Cambridgeport, Massachusetts, U.S.A., 22nd July, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. In a stem winding and setting watch, the combination with a winding and setting stem, of a rotatable ring or annulus formed with a cam rotatable therewith, a lever for shifting the parts necessary to throw the setting mechanism into operative relation and the winding mechanism out of operative relation, and a pin or arm projecting through the watch case, one end of said pin or arm lying in the path of rotation of said arm and the other operating on said lever, substantially as and for the purpose described. 2nd. In a stem winding and setting watch, the combination with the winding and setting stem, of a rotatable annulus or ring formed on its inside with a cam rotatable therewith, a lever for shifting the parts necessary to throw the setting mechanism into operative relation and the winding mechanism out of operative relation, and a movable pin or arm having its lower portion in connection with said lever and its upper end in proximity to the cam of the rotatable ring or annulus so as to be depressed by the movement of said cam, substantially as and for the purposes described. 3rd. In a stem winding and setting watch, the combination with a winding and setting stem, of a rotatable annulus or ring provided with a cam rotatable therewith, a yoke carrying wheels adapted to be thrown into engagement respectively with the winding and setting train, a lever fulcrumed inside of the watch case and having one end bearing directly upon said yoke, and a movable or sliding pin having its lower end arranged to bear upon said lever and its upper end lying in the path of rotation of said cam, substantially as and for the purposes described. 4th. In a stem winding and setting watch, the combination with the winding and setting stem, and the watch pendant, of a rotatable ring encircling the pendant and provided with a cam rotatable with the ring, and an upwardly extending pin or arm having its upper end lying in the path of said cam to be moved as the cam rotates and its lower end arranged to operate a part of the winding and hand-setting mechanism, substantially as and for the purposes described.

No. 60,694. Thawing Apparatus. (Appareil à dégeler.)



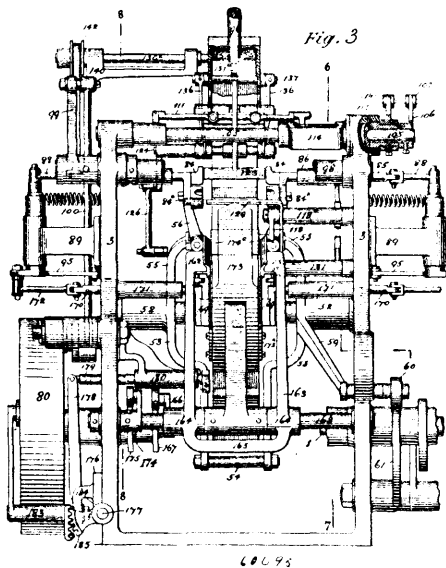
Raymond Anton Lackman, and Frederick Scheel, both of Earlring, Iowa, U.S.A., 22nd July, 1898; 6 years. (Filed 4th May, 1898.)

Claim.—1st. A thawing apparatus, comprising a heater, a boiler thereon and having a partition a distance below its top, a flue

extended from the heater through the partition, and a steam pipe leading through the partition, substantially as specified. 2nd. The combination with a sled, of a heater removably mounted thereon, a grate for the heater and forming a top for the sled, a door for the heater, hinged to the sled and adapted to turn down thereon, and a boiler on the heater, substantially as specified. 3rd. A thawing apparatus, comprising a heater mounted on runners, a door for the rear end of the heater, the lower portion of said door being held in position by upwardly turned portions of the runners, means for holding the upper portion of the door in position, a hinged door front, a grate for the heater, a boiler on the heater and having a partition extended across it a short distance below its top, a flue extended from the heater through said partition, and a steam pipe extended through said partition, substantially as specified. 4th. A heater, having a hinged door at its front end, runners upon which the heater is mounted and having upwardly turned portions at the rear end, a rear door adapted to engage with its lower edge upon the runners and against the up-turned portions, and a securing rod extended from the top of the heater and designed to pass through either one of two openings made in said rear door, substantially as specified.

No. 60,695. Machine for Making Up Tobacco.

(Machine à préparer le tabac.)



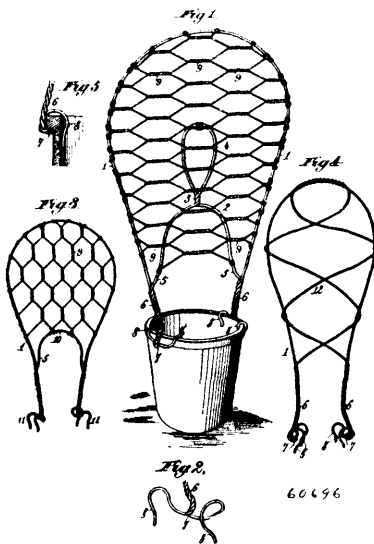
Richard H. Wright, New York City, assignee of William Rose, Market Street, Gainsborough, Lincoln, England, 22nd July, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.—1st. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed, of an endless belt for feeding wrappers in an unfolded condition, a deflecting-plate, as 19, arranged above the delivery end of the feed-belt, and downwardly-inclined arms, as 26, arranged above the mould-boxes when at rest, for guiding the wrappers into position, substantially as shown and described. 2nd. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed and means for feeding wrappers in an unfolded condition, of a two-part platform, each part pivoted to swing downwardly along the opposite ends of the mould-boxes for holding the wrappers in position over the mould-boxes, substantially as shown and described. 3rd. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed, means for feeding wrappers in an unfolded condition and devices for guiding the wrappers downwardly, of a two-part platform for holding the wrappers in position over the mould-boxes, each part being pivoted to swing downwardly at the opposite ends of the mould-boxes, substantially as shown and described. 4th. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed, of wrapper-feeding and receiving mechanism, a wrapper-presser plate provided with fingers conforming to one side of the mould-box and over-reaching the top thereof, and means for operating said presser-plate to descend upon and press and fit the wrapper into a mould-box and bend its forward edge down upon the top thereof, substantially as shown and described. 5th. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed and wrapper-receiving mechanism, of a wrapper-receiving platform arranged to swing downwardly on the

outside of the mould-box as its opposite ends, and a wrapper-presser plate, whereby a wrapper fed upon the platform is grasped between the platform and the presser-plate and deposited in the mould-box, substantially as shown and described. 6th. In a machine for forming rectangular packets of tobacco or similar material, the combination with movable mould-boxes or recesses in which the packets are formed and devices for pressing and fitting wrappers in the mould-boxes, of retaining devices for engaging and holding the wrappers in position while the mould-boxes are moving and means for moving the retaining devices into engagement with the wrappers and then moving them forward with the forward movement of the mould-boxes and then moving them out of engagement with the wrappers and then backward to their engaging position. 7th. In a machine for forming rectangular packets of tobacco or similar material, the combination with a series of movable mould-boxes or recesses in which the packets are formed and devices for pressing and fitting the wrappers into the mould-boxes, of devices for engaging the ends of the wrappers projecting from the boxes and retaining them in position while the boxes are moving from the wrapper-receiving to the tobacco-receiving positions, substantially as shown and described. 8th. In a machine for forming rectangular packets of tobacco or similar material, the combination of a series of movable mould-boxes or recesses in which the packets are formed and devices for pressing and fitting the wrappers into the mould-boxes, of devices for engaging the wrappers of two adjacent moulds to retain them in position while the rear mould is moving from the wrapper-receiving to the tobacco-receiving position and the forward mould is moving away from the tobacco-receiving position, substantially as shown and described. 9th. In a machine for forming rectangular packets of tobacco or similar material, the combination of an intermittently-rotating mould-wheel, carrying a series of mould-boxes or recesses in which the packets are formed, and devices for pressing and fitting the wrappers in mould-boxes, of retaining devices for engaging and holding wrappers in position in the mould-boxes and mechanism for moving the same with the rotation of the mould-wheel and restoring them to their original position, substantially as shown and described. 10th. In a machine for forming rectangular packets of tobacco or similar material, the combination of a mould-wheel provided with mould-boxes or recesses in which the packets are formed and in which wrappers have been fitted, of tobacco delivering and compressing mechanism and blocks, as 84, and means for moving the blocks into and out of engagement with the ends of the mould-boxes, to form end walls for the boxes at the time the tobacco is delivered and compressed therein, substantially as shown and described. 11th. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed and in which wrappers have been fitted, of tobacco delivering and compressing mechanism, blocks, as 84, devices for folding the edges of the wrappers around the tobacco, blocks, as 84, and means for simultaneously moving the blocks into and out of engagement with the ends of the mould-boxes, whereby blocks 84 will be in engagement with one mould-box while the tobacco is delivered and compressed therein and blocks 84 will be in engagement with the next advanced box while the folding devices are operating, substantially as shown and described. 12th. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed and wrapper-feeding and tobacco-feeding devices, of a compound wrapper-folding mechanism consisting of a presser-foot, as 112, fixed to a rock-shaft and a toggle mechanism for operating the presser-foot after it has folded down the wrapper edge to further depress the top of the said fold without depressing the heel thereof, substantially as shown and described. 13. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed, wrapper-feeding mechanism, tobacco-feeding mechanism and devices for folding the wrappers around the tobacco, of a folding device for making the last end fold provided with an inclined portion whose inner face presses and creases the end tab, and a flat portion for wiping the several folds in position, substantially as shown and described. 14th. In a machine for forming rectangular packets of tobacco or similar material, the combination with mould-boxes or recesses in which the packets are formed, wrapper-feeding mechanism, tobacco-feeding mechanism and devices for folding the wrappers around the tobacco, of a device, as 162, for making the last end fold, and means for giving a short upward movement to said device to crease the end fold against the edges of the side folders, as 153, and means for giving a further upward sliding or wiping movement to said device to press the several folds against each other and smooth out the end of the packet. 15th. In a machine for forming rectangular packets of tobacco or similar material, the combination with wrapper-feeding and tobacco-feeding devices and devices for forming the tobacco into rectangular masses and folding the wrappers about the same, of dies for counter-sinking the folded ends of the packets, means for operating said dies consisting of slide-rods 170, links 172 adjustably connected in arc slots 172, arms 95 connected to rods 94 attached to arms 92 operated by cam 90, substantially as shown and described. 16th. In a machine for forming rectangular packets of tobacco or similar material, the combination with an intermittently-rotating mould-wheel provided with mould-boxes or recesses in which the packets are formed, and end folding

and countersinking devices, of a holding-plate adapted to press upon and hold the packets in position in two or more of the mould-boxes at the same time, while the wheel is stationary and the end folding and countersinking devices are operating, and means to withdraw the plate while the mould rotates, substantially as shown and described. 17th. In a machine for forming rectangular packets of tobacco or similar material, the combination with a mould-wheel provided with mould-boxes or recesses in which the packets are formed, of a curved holding-plate provided with flat plates adapted to press upon the packets contained in the mould-boxes and covered by the said holding-plate, substantially as shown and described. 18th. In a machine for forming rectangular packets of tobacco or similar material, the combination with a mould-wheel provided with mould-boxes or recesses in which the packets are formed, and end folding and countersinking devices, of a holding-plate adapted to press upon and hold the packets in position in the mould-boxes while the end folding and counter-sinking devices are operating, and adapted to be withdrawn while the mould-wheel rotates, said holding-plate being provided with laterally-projecting plates for locking the folds of the packets and protecting the same during the revolution of the mould-wheels. 19th. In a machine for forming rectangular packets of tobacco or similar material, the combination with packet-forming devices, of an ejector operating to move into and out of the mould-boxes in which the packets are formed to thrust the same out, and means for operating the same, comprising cam-operated arm 182, sectors 185, arm 178 and slide-rod 179 carrying the ejector 181, substantially as shown and described. 20th. In a machine for forming packets of tobacco or similar material, the combination with a tobacco-packing plunger, of a cleaning-brush mounted on a horizontal rotating shaft journaled in one arm of an elbow-lever and arranged to move in a circular path across the face of the plunger by the oscillation of the elbow-lever, and means for rotating the brush-shaft and oscillating the elbow-lever, substantially as and for the purpose set forth.

No. 60,696. Trellis. (Trellis.)



Fred De Golia Clark, assignee of George William Warren, both of Prattsburg, New York, U.S.A., 22nd July, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—1st. A trellis having at one end a clutch composed of curved elastic members to engage the inside of a flower pot or receptacle, and a projecting contact-point to extend under and engage the bead, rib or flange on the pot, or receptacle, whereby the trellis serves as a handle to carry the latter, substantially as described. 2nd. A trellis, consisting of a ball-shaped frame having a pair of clutches constructed with projecting contact-points to engage under the bead, rib or flange of flower-pot, or other receptacle, whereby the trellis is interlocked with the receptacle and constitutes a handle for carrying the latter, substantially as described. 3rd. A trellis, consisting of a wire frame having its lower end portion twisted and formed into a clutch comprising a sharp inward curve to provide a contact-point and arms or terminals extending in opposite directions from said contact-point and bent into elastic clutch-hooks, the contact-point constructed to engage under the bead or rib on a flower-pot and the elastic clutch-hooks constructed to bear against the inside of the pot, substantially as described. 4th. A trellis, consisting of a wire frame having its lower end portion twisted and formed into two opposite clutches, each comprising an inward curve to provide a contact-point and two arms of terminals extending from said contact-point and bent into

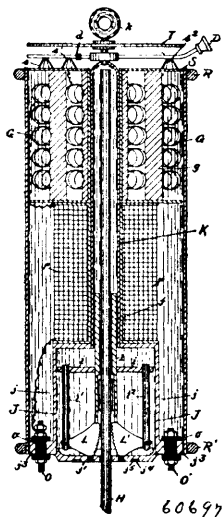
clutch-hooks, substantially as and for the purpose described. 5th. A trellis, consisting of a frame having hooked terminals bent outwardly and provided with a sharp inward curve to form contact-points for engaging the outer face of a flower-pot under the rib or shoulder at the top thereof, the hooks being arranged in pairs at the contact-point of each side of the trellis, and composed of upper curved portions to extend over the upper edge of the flower-pot and depending portions forming contact-points for engaging the interior of the pot, said hooked terminals forming spring-catches, substantially as described. 6th. A trellis, comprising a body-frame, a brace-frame connected thereto and adapted to strengthen the same, and means for attaching the trellis to a flower-pot or similar receptacle, substantially as described. 7th. A trellis, comprising a body-frame, and a brace-frame connected to said body-frame and adapted to strengthen the same, the ends of said brace-frame being connected to the ends of the body-frame and forming clutches adapted to hold the trellis upon a flower-pot or similar receptacle, substantially as set forth. 8th. A trellis, comprising a body-frame, and a brace-frame, connected to said body-frame, the ends of said brace-frame and the body-frame being twisted and forming clutches adapted to secure the trellis detachably to a flower-pot or similar receptacle, substantially as set forth. 9th. A trellis, comprising a body-frame, and a brace-frame connected to said body-frame, formed of a single piece and having its sides twisted to provide a loop arranged at approximately the centre of the body-frame, said sides being extended from said loop and together with the sides of the body-frame twisted and forming clutches adapted to secure the trellis to a flower-pot or similar receptacle, substantially as set forth. 10th. A trellis, comprising a body-frame, and a brace-frame connected to said body-frame and adapted to strengthen the same, said brace-frame being formed of a single piece and having its sides twisted to form a loop, said sides diverging from said loop and having their lower terminals twisted with the lower terminals of the sides of the body-frame, the terminals of each side of the body-frame and the brace-frame at each side of the trellis extending in opposite directions and forming attaching-hooks adapted to secure the trellis to a flower-pot or similar receptacle, and a filling secured to the body-frame and extending thereover, substantially as set forth. 11th. A trellis, comprising a body-frame, and a brace-frame connected to said body-frame and adapted to strengthen the same, said brace-frame being formed of a single piece and having its sides twisted to provide a loop arranged at approximately the centre of the body-frame, said sides diverging from said loop and each having its lower terminal twisted with the lower terminal of one side of the body-frame, said twisted terminals of the body-frame and the brace-frame being bent outwardly and provided with a sharp inward curve to form a contact-point, the terminals of each side of the body-frame and the brace-frame at each side of the trellis extending in opposite directions from said contact-point and being bent to form attaching-hooks, the contact point and attaching-hooks at each side of the trellis constituting a clutch, said clutches being adapted to secure the trellis to a flower-pot or similar receptacle, substantially as set forth. 12th. A trellis, comprising a body-frame and a brace-frame having hooked terminals bent outwardly and provided with a sharp inward curve to form contact points for engaging the outer face of a flower-pot under the rib or shoulder at the top thereof, the hooks being arranged in pairs at the contact-point of each side of the trellis, and consisting of upper curved portions to extend over the upper edge of a flower-pot and depending portions forming contact-points for engaging the interior of a flower-pot, said hooked terminals forming spring-catches, substantially as described. 13th. A trellis, comprising a body-frame having a hook or clutch at each of its sides, and a brace-frame having a hook or clutch at each of its sides, said brace-frame having a portion of its length above the hooks or clutches twisted together with the body-frame, substantially as set forth. 14th. A trellis, comprising a body-frame having a hook or clutch at each of its sides, a brace-frame having a hook or clutch at each of its side, said brace-frame having a portion of its length above the hooks or clutches twisted together with the body-frame, and a filling secured to the body-frame, said brace-frame extending across the space bounded by the body-frame and connected to said filling, substantially as set forth.

No. 60,697. Electric Arc Lamp. (Lampe électrique à arc.)

Sidney Irwin Crain, Stewart Shillito, and Charles A. Irwin, all of Cincinnati, Ohio, U. S. A., 22nd July, 1898; 6 years. (Filed 9th March, 1898.)

Claim.—1st. The combination, in an arc lamp, of the magnet, F, the casing, J, the tube, K, the armature, L, adapted to work in the tube, K, the piston, I, carried by the armature and adapted to work in the casing, J, the arms, r, depending from the piston and rigidly attached thereto, and the clutch jaws, L, pivoted to the arms, substantially as and for the purpose set forth. 2nd. The combination, in an arc lamp, or a pair of pivoted arms carrying rollers adapted to engage with the upper carbon at or near its point of support, and electrical connection between the rollers and the main, substantially as and for the purpose set forth. 3rd. The combination, in an arc lamp, of a carbon, a pair or pivoted arms, carrying rollers adapted to contact with opposite sides of the carbon during its downward travel and a pair of clutch jaws carried by the arms and adapted to engage the carbon when it passes through the rollers, substantially as and for the purpose set forth. 4th. The combination, in an arc

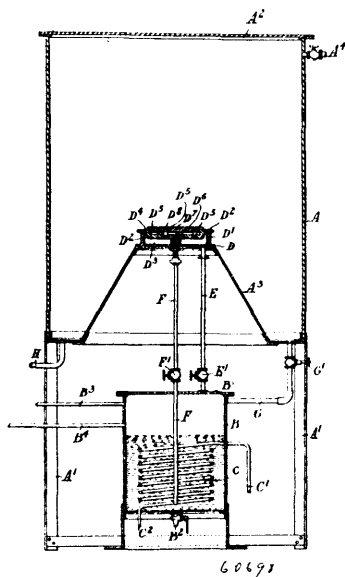
lamp, of the casing, J, the tube, K, the bottom plate, j¹ having groove j⁴, adapted to receive the top of the inner globe, C, a pack-



ing j⁵, in the groove adapted to make an air tight connection between the casing and the globe, ports j⁶, adapted to permit passage of air between the casing and the globe, the supporting rods, O and O¹, the globe support, P, and the eccentric, Q, adapted to raise or lower the globe, substantially as and for the purpose set forth. 5th. The combination, in an arc lamp, of the casing, A, having lugs, a, the ring, R, having grooves adapted to pass over the lugs, a, the ring, R¹, adapted to support the outer globe, and the connecting rods, r, substantially as and for the purpose set forth. 6th. The combination, in an arc lamp, of the casing, A, having lugs, a, the ring, R¹, having grooves adapted to pass over the lugs, the ring R¹, adapted to support the outer globe, the connecting rods, r, the supporting rods, O and O¹, the globe support, P, and the eccentric, Q, adapted to raise or lower the globe, substantially as and for the purpose set forth. 7th. The combination, in an arc lamp, of an outer casing, an inner casing enclosing the carbon-operating mechanism, and having a removable bottom plate, a tube extending upwardly from the inner casing, and a magnet frame and a resistance frame, both having bores adapted to take over the upwardly extending tube and held in position by gravity, substantially as and for the purpose set forth.

No. 60,698. Apparatus for Oxidizing Oil.

(Appareil pour oxyder l'huile.)



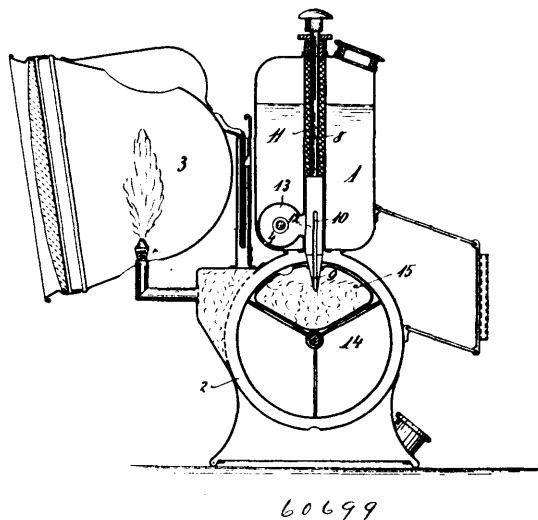
The Commercial Ozone Syndicate, Limited, assignee of Sigmund Rosenblum, and Samuel Rideal, all of London, England, 22nd July, 1898; 6 years. (Filed 29th December, 1897.)

Claim.—1st. The process of oxidizing oils by the intermingling of a jet of ozone with the oil in a sprayed or atomized condition, sub-

stantially as specified. 2nd. In the oxidization of drying oil, the use in conjunction with ozone, of certain soluble driers such as the resinates of linoleates of lead or manganese, or a combination of the salts of the two metals, substantially as described. 3rd. Subjecting mixtures of drying oils to oxidation by intermingling the oils in a sprayed or atomized condition with ozone and certain soluble driers, such as the resinates and linoleates of lead or manganese, or a combination of the salts of the two metals, substantially as described. 4th. In apparatus for oxidizing oils, the combination of a vessel B¹, provided with suitable inlet and outlet pipes, with a device for intermingling oils in the form of a spray with ozone, substantially as specified. 5th. In apparatus for oxidizing oils, the combination with a vessel B provided with suitable inlet and outlet pipes, of the casing A, the flanged dish D, the flanged dish D² with perforations D³, the dishes being suitably supported within the casing A, to form a space D³ below the dish D², the cover D², provided with holes D⁴, the tubular spindles D⁵ screwed through the dish D² and passing into the holes D⁴ so as to form a passage way through the cover D², the pipe F, provided with valve F¹, communicating between the closed vessel B, and the space D³ below the cover D², substantially as specified. 6th. In apparatus for oxidizing oils, the combination with a closed vessel B, provided with pipes B³, B⁴, draw-off cock B², the circulation coil C and pipes C¹, C², of the chamber or casing A, provided with top cover A² and valve A⁴, the conical mounting A³, the flanged dish D carried on the mounting, the flanged dish D² with perforations D³ and inclosing a space D³ between the dishes, the cover D² provided with holes D⁴, the tubular spindles D⁵ screwed through the dish D² and passing into the holes D⁴, so as to form a passage way through the cover D², the pipe F, provided with valve F¹, communicating between the closed vessel B and the space D³ below the cover D², the pipe E, provided with valve E¹, communicating between the space D³ and the upper interior portion of the vessel B, the pipe G, provided with valve G¹, communicating between the chamber A and the vessel B, and the drain pipe H, substantially as specified.

No. 60,699. Acetylene Gas Producing Machine.

(Machine pour la production de gaz acetylene.)



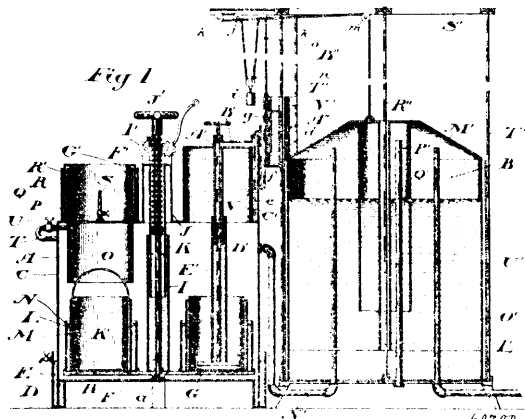
Dr. Julius Hofmeier, assignee of Max Strakosch, both of Vienna, Austria, 22nd July, 1898; 6 years. (Filed 2nd May, 1898.)

Claim.—1st. In apparatus for producing acetylene gas the combination of a closable vessel for receiving unopened cartridges of calcium carbide and having an opening for the passage of a perforating device with a device comprising a pressure rod 8 with cutting edge or point 9 and grooves 10, this rod being adapted to be operated from outside the vessel in order to let water enter into the cartridge or to let the carbide of calcium leave the same. The combination with a closable chamber 2 of a drum 14 in the interior of the same to receive the carbide cartridges 15 means for turning drum from outside the vessel and a perforator adapted to be thrust outside into the vessel through suitable entrance, for the purposes of perforating the cartridges. 3rd. The combination with a closable vessel and cartridge receiving drum therein of a perforating device wherein the pressure rod 8 is connected with a hand lever 16, which in its turn is in connection with a double rod 19 influenced by a spring 22 and carrying a dog 23 adapted on movement of the hand lever to turn a ratchet wheel 35 on the shaft 34 of the said drum 14 and to operate the perforator, substantially as set forth. 4th. A device for regulating the stopping the water admission, comprising a valve 5 and a compressible, capillary fabric 6 arranged on the back of the

valve seat thereof. 5th. The combination with the water admission valve and valve seat, of a capillary fabric closing the water delivery outlet said valve seat, and means for giving adjustable compression to said fabric for the purpose set forth.

No. 69,700. Acetylene Gas Producing Machine.

(Machine pour la production de gaz acétylène.)



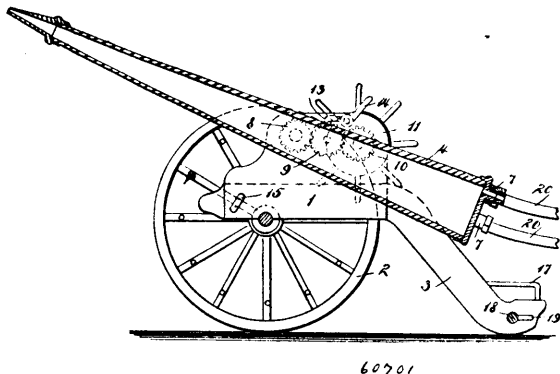
James Grant Kerr and Christopher Fry, both of Niagara Falls, Ontario, Canada, 22nd July, 1898; 6 years. (Filed 11th March, 1897.)

Claim.—1st. In an acetylene gas machine, a generator having two or more carbide receptacles therein, in combination with mechanism for isolating at will any one of the receptacles from the gas space of the generator, whereby gas may be generated from one receptacle while the other is isolated, substantially as and for the purpose specified. 2nd. In an acetylene gas machine, a generator provided with a gas space having a carbide receptacle therein, in combination with a water chamber surrounding the carbide receptacle, and a cylinder connected to the generator and adapted to enter the water chamber so as to isolate the said receptacle from the gas space of the generator, substantially as and for the purpose specified. 3rd. In an acetylene gas machine, a generator provided with a gas space having a carbide receptacle therein, in combination with concentric walls enclosing an annular water chamber about the said receptacle, a cylinder extending through the top of the generator and adapted to enter the said water chamber and isolate the said carbide receptacle from the gas space, and a removable cover for said cylinder, substantially as and for the purpose specified. 4th. In an acetylene gas machine, a generator provided with a gas space having a plurality of carbide receptacles arranged therein equi-distant from its centre, and a water chamber surrounding each of said carbide receptacles in combination with a cylinder extending through the top of the generator and arranged and adapted to enter, one at a time, each of water spaces surrounding the carbide receptacles, and a cover for said cylinder, substantially as described. 5th. In an acetylene gas machine, a generator comprising a chamber having an open ended cylinder extending downwardly through its top, a removable cover for the said cylinder, a base plate, mechanism for raising and lowering the said base plate, and concentric walls carried by the base plate so as to form an annular water chamber surrounding a carbide space, the said cylinder being of such a size and so located as to be adapted to enter the said annular water space when the base plate is raised, substantially as and for the purpose specified. 6th. In an acetylene gas machine, a generator comprising a chamber having an open ended cylinder extending downwardly through its top, a removable cover for said cylinder, a base plate, mechanism for raising, lowering and turning the said base plate, two sets of concentric walls carried by the base plate so as to form two annular water chambers surrounding two carbide spaces, and a water supply pipe so located as to be above one carbide space when the other is below the aforesaid cylinder, substantially as and for the purpose specified. 7th. In an acetylene gas machine, a generator comprising a chamber having an open ended cylinder extending downwardly through its top, a removable cover for said cylinder provided with U-shaped double walls, concentric walls connected to the top of the generator to form an annular water chamber within which the outer wall of the cover may lie, a base plate, mechanism for raising, lowering and turning the said base plate, two sets of concentric walls carried by the base plate so as to form two annular water chambers surrounding two carbide spaces, and a water supply pipe so located as to be above one carbide space when the other is below the aforesaid cylinder, substantially as and for the purpose specified. 8th. In an acetylene gas machine, a generator comprising a chamber having an open ended cylinder extending downwardly through its top, a removable cover for said cylinder provided with U-shaped double walls, concentric walls connected to the top of the generator to form an annular water chamber within which the outer wall of the cover may lie, a gas jet or cock connected with an opening through the cover, a base plate, mechanism for raising, lowering and turning the

said base plate, two sets of concentric walls carried by the base plate so as to form two annular water chambers surrounding two carbide spaces, and a water supply pipe so located as to be above one carbide space when the other is below the aforesaid cylinder, substantially as and for the purpose specified. 9th. In an acetylene gas machine, a generator comprising a chamber having an open-ended cylinder extending downwardly through its top, a removable cover for said cylinder, provided with U-shaped double walls, concentric walls connected to the top of the generator to form an annular water chamber within which the outer wall of the cover may lie, a gas jet or cock with an opening through the cover, and a pipe provided with a stop cock and connecting the interior of the cylinder with the gas space of the generator, substantially as and for the purpose specified. 10th. In an acetylene gas machine, a generator comprising a chamber having an open-ended cylinder extending downwardly through its top, a removable cover for said cylinder provided with U-shaped double walls, concentric walls connected to the top of the generator to form an annular water chamber within which the outer wall of the cover may lie, a gas jet or cock connected with an opening through the cover, a pipe provided with a stop cock and connecting the interior of the cylinder with the gas space of the generator, a base plate, mechanism for raising and lowering the said base plate, and concentric walls carried by the base plate so as to form an annular water chamber surrounding a carbide space, the aforesaid cylinder being of such a size and so located as to be adapted to enter the said annular water space when the base plate is raised, substantially as and for the purpose specified. 11th. In an acetylene gas machine, a generator comprising a chamber, a base plate contained therein, and adapted to carry carbide receptacles, a sleeve or rod connected to the said base plate and extending upwardly through the top of the generator, a tube extending downwardly from the top of the generator and surrounding the said rod or sleeve, and a tube extending upwardly from the base plate around the said tube to form with it a water seal, and means for raising and lowering said base plate and its sleeve or rod, substantially as and for the purpose specified. 12th. In an acetylene gas machine, a generator comprising a chamber, a base plate contained therein and adapted to carry carbide receptacles, a sleeve connected to the said base plate and extending upwardly through the top of the generator, a rod connected to the bottom of said chamber and extending upwardly through the said sleeve, a tube extending downwardly from the base plate around the said tube to form with it a water seal, and mechanism for raising and lowering said base plate and its sleeve or rod, substantially as and for the purpose specified. 13th. In an acetylene gas machine, a generator comprising a chamber, a base plate contained therein and adapted to carry carbide receptacles, a sleeve connected to the said base plate and extending upwardly therefrom to the cut-side of the generator, a rod connected to the bottom of the said chamber and extending upwardly through the said sleeve, a large tube with a closed top extending upwardly from the top of the generator, a tube extending downwardly from the opening in the top of the tube through which the said sleeve passes and a tube extending upwardly from the base plate around the said tube to form with it a water seal, substantially as and for the purpose specified. 14th. In an acetylene gas machine, a generator comprising a chamber, a base plate contained therein and adapted to carry carbide receptacles, a cogged or toothed sleeve connected to the said base plate and extending upwardly therefrom to the outside of the generator, mechanism for raising, lowering and holding said toothed sleeve, a rod connected to the bottom of the said chamber and extending upwardly through the said sleeve, a large tube with a closed top extending upwardly from the top of the generator, a tube extending downwardly from the opening in the top of the tube through which the said sleeve passes, and a tube extending upwardly from the base plate around the said tube to form with it a water seal, substantially as and for the purpose specified. 15th. In an acetylene gas machine, a generator comprising a chamber having an open-ended cylinder extending downwardly through its top, a removable cover for said cylinder, a base plate, mechanism for raising, lowering and turning the said base plate, two sets of concentric walls carried by the base plate so to form two annular water chambers surrounding two carbide spaces, and a water supply pipe so located as to be above one carbide space when the other is below the aforesaid cylinder, and a cylinder with a closed top extending upwardly from an opening in the top of the generator of such a size as to permit of a carbide receptacle rising through it when the base plate is raised, substantially as and for the purpose specified. 16th. In an acetylene gas machine, a generator comprising a chamber, and a carbide receptacle contained therein, in combination with a water supply pipe extending through the top of the chamber, a tube with closed bottom into which the said supply pipe dips to form a water seal, an agitator connected to the bottom of said tube, and an agitator rod connected to the agitator and extending through the water supply pipe to the outside of the generator, substantially as and for the purpose specified. 17th. In an acetylene gas machine, a generator comprising a chamber, and a carbide receptacle contained therein, in combination with a water supply pipe extending through the top of the chamber, and a suitably supported tube with closed bottom into which the said supply pipe dips to form a water seal, a down pipe outside the generator with closed lower end and a cross-tube connecting the upper ends of the water supply pipe and down pipe, substantially as and for the purpose specified. 18th. In an acetylene gas machine, a generator, a suitably supported water tank,

and a gas holder, in combination with a siphon dipping into the water in the tank, and provided with an extra upwardly turned leg to form a water seal, a tube or spout adapted to convey the water from the upper end of the water seal to the water inlet of the generator, and mechanism for raising and lowering the siphon by the rise and fall of the gas dome of the holder so as to automatically control the water supply, substantially as and for the purpose specified. 19th. In an acetylene gas machine, a generator, a suitably-supported water tank and a gas holder, the combination with a siphon dipping into the water in tank, provided with an upwardly-turned leg to form a water seal and a downwardly-extending tube connected to the upper end of the said leg, an opening being formed above their junction, a down pipe communicating with the interior of the generator and adapted to receive the downwardly extending tube of the siphon, and mechanism for raising and lowering the siphon by the rise and fall of the gas dome of the holder so as to automatically control the water supply, substantially as and for the purpose specified. 20th. In an acetylene gas machine, a generating chamber provided with a water inlet, and a water tank as V, in combination with a siphon having a leg d, entering said water tank, a leg as c, entering the said water inlet, and the legs f and g, connecting the said legs d and c, substantially as and for the purpose specified. 21st. In an acetylene gas machine, a generator and a base plate journaled thereon so as to be capable of rotary and vertical movements, in combination with one or more ribs formed on the bottom of the generator, one or more grooves being formed in the under side of the said base plate to engage with the said ribs, substantially as and for the purpose specified. 22nd. An agitating mechanism for an air tight chamber comprising a pipe extending through top of the chamber, a tube with closed bottom into which the said pipe dips to form a water seal, an agitator connected to the bottom of the said tube, and an agitator rod connected to the agitator and extending through the pipe to the outside of the chamber, substantially as and for the purpose specified. 23rd. In an acetylene gas machine, a gas dome, in combination with a siphon adapted to control the water supply, a cord attached at one end to the gas holder and at its other end to the said siphon, a frame, suitable guide pulleys arranged thereon, a weighted pulley hung in a bight of the cord between two of the guide pulleys, a knot formed in the cord between the siphon and the guide pulley through which the cord next passes, and a knot formed in the cord between the said pulley and the weighted pulley, substantially as and for the purpose specified. 24th. In an acetylene gas machine, a gas dome, in combination with a frame supported above it, a rod connected to the top of the gas dome and adapted to move through the said frame, a binding post electrically connected with the frame a binding post connected to said frame, but insulated therefrom, a spring supported by the binding post and adjustable nuts upon the said rod adapted to press the spring in contact with the frame when the gas holder falls too low, substantially as and for the purpose specified.

No. 60,701. Fire Extinguisher. (Extincteur d'incendie.)

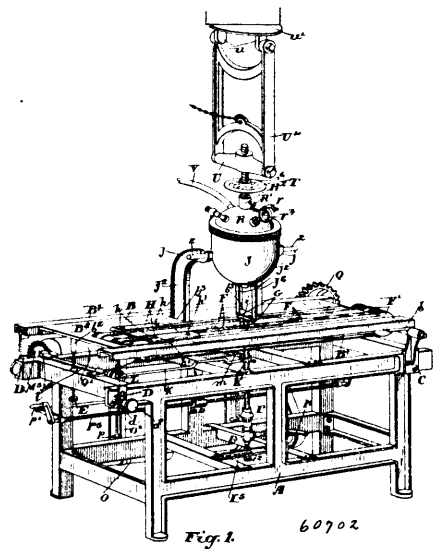


Thomas A. Ready, New York U.S.A., 25th July, 1898; 6 years. (Filed 21st January, 1898.)

Claim.—1st. A fire battery, comprising a carriage having trail stocks, loops on the lower ends of said trail stocks, wheels on which the carriage is mounted, bars extended outward from the spokes of said wheels, blocking devices carried by the carriage and movable into engagement with spokes of the wheels, a nozzle having trunnion bearings in said carriage, and means for adjusting the nozzle, substantially as specified. 2nd. A fire battery, comprising a carriage having trail stocks, loops on the lower ends of said trail stocks, wheels on which the carriage is mounted and bars extended outward from the spokes of said wheels, blocking devices carried by the carriage and movable into engagement with spokes of the wheel, a nozzle having trunnion bearings in said carriage, a pinion on an extended end of one of the trunnions, a hand wheel mounted to rotate on the stud extended from the carriage, a pinion attached to said hand wheel, an intermediate pinion connecting the first two mentioned pinions, and a locking dog for engaging with one of the pinions, substantially as specified.

No. 60,702. Confectionery Ornamenting Machine.

(Machine pour l'ornamentation des confiseries.)



Thomas Robertson, Toronto, Ontario, Canada, 25th July, 1898; 6 years. (Filed 2nd February, 1898.)

Claim.—1st. A confectionery ornamenting machine comprising a reservoir for the mixture, a flexible tube depending therefrom having a suitable lower orifice and means for imparting to the tube any desired swing or motion, as and for the purpose specified. 2nd. A confectionery ornamenting machine comprising a nipple, a reservoir for the mixture, a flexible tube connecting the reservoir to the nipple and means for imparting to the nipple any desired swing or motion and means for feeding the confections under the nipple as and for the purpose specified. 3rd. A confectionery ornamenting machine comprising a nipple, a reservoir for the mixture, a flexible tube connecting the reservoir to the nipple, means for imparting to the nipple any desired swing or motion and bands to receive the confections suitably supported and driven to bring the confections in regular rotation under the nipples as and for the purpose specified. 4th. A confectionery ornamenting machine comprising a nipple, a reservoir for the mixture, a flexible tube connecting the reservoir to the nipple, means for imparting to the nipple any desired swing or motion, bands to receive the confections suitably supported and driven to bring the confections in regular rotation under the nipples and placing guiding bars placed in proximity to the bands, as and for the purpose specified. 5th. In a confectionery ornamenting machine, in combination a nipple, a reservoir for the mixture, a flexible tube connecting the reservoir to the nipple, means for imparting to the nipple any desired swing or motion, means for feeding the connections lengthwise under the nipple and a device for conveying heat to the nipple, as and for the purpose specified. 6th. In a confectionery ornamenting machine, in combination a nipple, a reservoir for the mixture, a flexible tube connecting the reservoir to the nipple, means for imparting to the nipple any desired swing or motion, means for feeding the confections lengthwise under the nipple, a hollow conveying tubular support open at the top end and suitably connected to the nipple and a suitable burner in the support, as and for the purpose specified. 7th. In a confectionery ornamenting machine, in combination a nipple, a reservoir for the mixture, a flexible tube connecting the reservoir to the nipple, means for feeding the confections lengthwise under the nipple, a supporting standard for the nipple, a suitable cross shaft and crank-wheel thereon, a suitable longitudinal shaft and crank-wheel thereon and rods connecting such crank-wheels to a coupling on the pivotally supported nipple standard, as and for the purpose specified. 8th. In a confectionery ornamenting machine, in combination the nipple, the reservoir, the flexible tubes connecting the reservoir to the nipple, and means for imparting any desired swing or movement to the nipple, a table pivotally supported at one end, endless bands passing over the table and supported at the ends on suitable pulleys and suitably driven and means for supporting the free end of the table at any desired height above the frame, as and for the purpose specified. 9th. In a confectionery ornamenting machine, in combination the nipple, the reservoir, the flexible tubes connecting the reservoir to the nipple and means for imparting an endwise and lateral movement to the nipple, a table pivotally supported at one end, endless bands passing over the table and supported at the ends on suitable pulleys and suitably driven, the slotted end hangers secured to one end of the side bars of the table and clamping screws therefor and the set screws extending through the frame and abutting a suitable projection on, or portion of the free end of the table, as and for the

purpose specified. 10th. In combination the reservoir, the flexible tubes connected to a tube leading therefrom, the nipples to which the lower ends of the flexible tubes are connected, the supporting tube suitably connected to the nipples, the socket at the bottom end of the tube, and the cross-bar and set screw extending through the cross-bar into the socket and means for imparting a requisite movement to the tube, as and for the purpose specified. 11th. In combination the reservoir, the flexible tubes connected to a tube leading therefrom, the nipples to which the lower ends of the flexible tubes are connected, the supporting tube suitably connected to the nipples, the bracket at the bottom end of the tube, the cross-bar and set screw extending through the cross-bar into the socket, means for imparting a requisite movement to the tube, the open cage in the tube, the gas burner and tube leading thereto, as and for the purpose specified. 12th. The combination with the nipples, and movable support for the same, of the cross shaft having a bevelled pinion at one end, the shaft at right angles to the cross shaft and having a bevelled pinion at one end meshing with the bevelled pinion on the end of the cross shaft, the crank-wheels on the end of the cross shaft at right angles to same and the rods connecting the crank-wheels to a coupling on the movable support of the nipples, as and for the purpose specified. 13th. The combination with the nipples, and movable supports for same, of the cross shaft having a bevelled pinion at one end, the shaft at right angles to the cross shaft and having a bevelled pinion at one end meshing with the bevelled pinion on the end of the cross shaft, the crank wheel on the ends of the cross shaft at right angles to same, and the rods connecting the crank wheels to a coupling on the movable support of the nipples, the cone pulleys on the shaft at right angles to the cross shaft and the cone pulleys on the main shaft, the belt for connecting the same, and means for shifting the belt on the cone pulleys, as and for the purpose specified. 14th. In a machine of the class described, the combination with the nipples and suitable support therefor, of the rods and crank wheels, the groove extending across the centre of the crank wheels, the block located and longitudinally adjustable in same and having the end of the rods connected thereto, and the set screws for adjusting the block, as and for the purpose specified. 15th. The combination with the bands, the band pulleys and table supporting the same pivoted at one end on the shaft of the band pulley, of the worm wheel on the end of such shaft, the worm on the side shaft, the cone pulley on such shaft, the cone pulley on the main shaft and a belt connecting the pulleys, and means for shifting such belt, as and for the purpose specified. 16th. In a machine of the class described, the combination with the reservoir and trunnions extending therefrom, and the arms provided with jaws for supporting the trunnions, of the cap, and means at right angles to the trunnions whereby the cap may be raised and swung from over the top of the reservoir, as and for the purpose specified. 17th. In a machine of the class described, the combination with the reservoir and trunnions extending therefrom, and the arms provided with jaws for supporting the trunnions of the cap, the boss at the top of the cap, the frame above it having a lower cross bar and situated at right angles to the trunnions, the screw spindle having a lower end extending into the boss at the top of the cap and grooved and held therein by suitable set screws extending into the groove, the upper threaded end of the spindle extending through the cross bar and the hand wheel for manipulating the spindle, as and for the purpose specified.

No. 60,703. Creosote Compound. (Composé de créosote.)

Jules Brissonnet, 1 Rue Debrausse, Paris, France, 25th July, 1898; 6 years. (Filed 19th November, 1897.)

Claim.—1st. The process for producing a phosphorus compound of creosote, consisting essentially in treating pure or alkalinized creosote in toluene with a phosphorus compound in the proportion of three molecules of alkalinized creosote to one molecule of oxychloride of phosphorus, substantially as specified. 2nd. A new chemical compound known as phosphate of creosote of phosphorus produced by treating three molecules of alkalinized creosote with one molecule of oxychloride of phosphorus, substantially as specified. 3rd. The process for producing a phosphorus compound of creosote consisting essentially in treating pure or alkalinized creosote in aqueous solution with a phosphorus compound in the proportion of three molecules of alkalinized creosote to one molecule of oxychloride of phosphorus or an equivalent proportion of phosphorus pentachloride or of phosphoric anhydride, substantially as described.

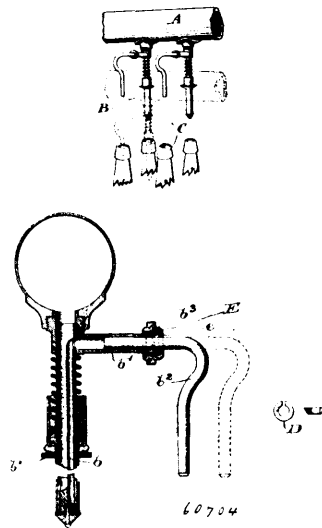
No. 60,704. Bottle Filling Machine.

(Machine pour le remplissage des bouteilles.)

William Miles Fowler, Stamford, Connecticut, U.S.A., 25th July, 1898; 6 years. (Filed 31st December, 1897.)

Claim.—1st. The combination with a filler, of an air escape conduit leading from the filler into position to enter the mouth of a receptacle at the same time the filler enters the mouth of another receptacle, the said air escape conduit being formed in sections, and means for adjusting one of the sections relative to the other, substantially as set forth. 2nd. The combination with the filler, of the air escape conduit leading therefrom, the said air escape conduit consisting of a section fitted to telescope within another section, a

wedge-shaped ring fitted to enter between the movable section and the inner wall of the other section, and a nut for forcing the ring



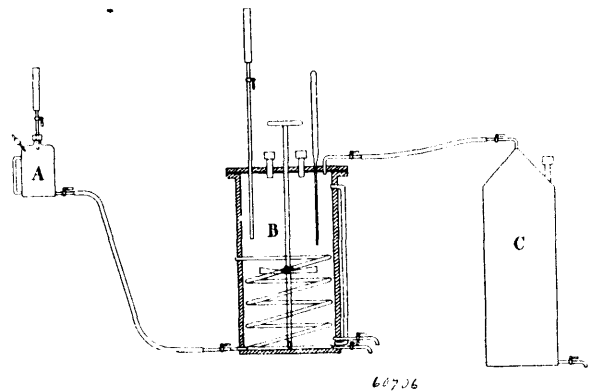
into position to lock the movable section in the desired adjustment, substantially as set forth.

No. 60,705. Artificial Silk. (Soie artificielle.)

Dr. Max Fremery and Johann Urban, both of Oberbruch, Germany, 25th July, 1898; 6 years. (Filed 3rd January, 1898.)

Claim.—A process for the manufacture of artificial silks, in which a solution of cellulose, preferable in an ammoniacal solution of cupric oxide, is made of suitable consistency and in such a manner as to avoid the decomposition thereof by maintaining a sufficiently low temperature and preferably by filtering perfect homogeneity, and this solution is conducted through fine jets or apertures into a precipitating liquid, for example acetic acid, which brings the cellulose out of solution from the substances dissolving it in such manner that the cellulose while forming into threads or fibres is separated from its solution, and the dissolving substances can be recovered.

No. 60,706. Yeast and Bacteria Developing Apparatus. (Appareil pour exciter la fermentation de la levure.)



Niels Bendixen, Copenhagen, Denmark, 25th July, 1898; 6 years. (Filed 10th January, 1898.)

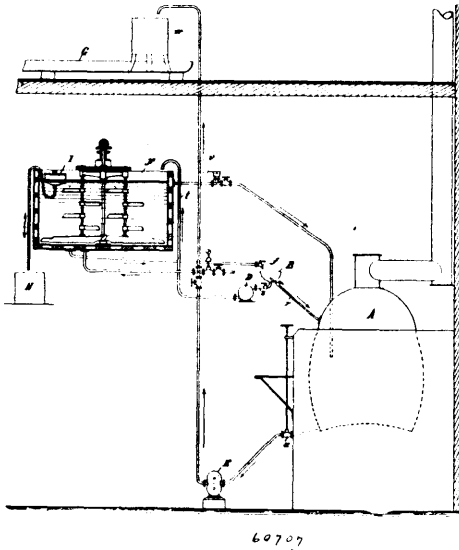
Claim.—Propagating apparatus for the development of pure cultures of yeast and bacteria consisting of a fermenting cylinder B, and a reserve cylinder A, being mutually connected by a rubber tube or other movable means of connection so that fluid may run from the reserve cylinder to the fermenting cylinder or vice versa owing to the different levels of the fluid by the raising or lowering of the reserve cylinder.

No. 60,707. Brewing Apparatus. (Appareil de brassage.)

Cornelius Schmitz, Boppard, Rhineland, Germany, 25th July, 1898; 6 years. (Filed 24th February, 1898.)

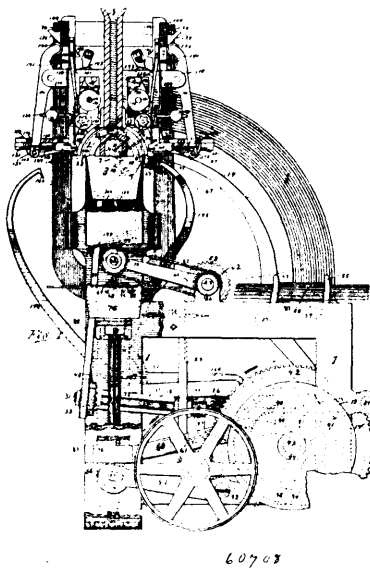
Claim.—1st. The production of beer-wort by using malt-flour in such a manner, that after having drawn off a diastase-solution, the

whole mash is, after successively increasing the temperature, boiled and washed boiling, then cooled and the wort thus produced sweet-



ened with the diastase-solution. 2nd. The apparatus for producing beer-wort from malt-flour, comprising the brewing-pan A shown in figure 1, the cooling trough B, the pumps D¹ and E, the mash-tun F, the cooling-receiver G, the float I and the deposit vessel H together with the corresponding pipes, taps, and valves connecting the single devices, substantially as illustrated and described. 3rd. The mash-tun having the double walls a and b of the jacket, and c and d of the bottom, so that the whole vat is surrounded exteriorly by a special chamber, with means for guiding water or steam around it. 4th. The float I having the circular walls m, m¹ and the cap p on the bottom k, and the hanging circular walls n and n¹, on the cover K, whereby m, m¹ and p are perforated on the top, and n, n¹, on the under part. 5th. The special cooling trough B having the corrugated double walls g and h with inserted partitions i between the opposite lying points of the corrugations, in such a manner, that the water introduced in B on the one end of the trough into the upper space formed between two corrugations passes in a zig-zag manner successively through all the longitudinal chambers formed between the single corrugations i and leaves at the end of the last chamber through the pipe Q.

No. 60,708. Basket Making Machine.
(Machine à faire des paniers.)

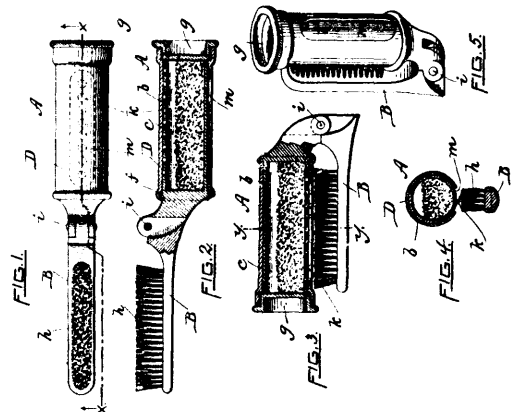


Emmet Horton, Elmira, New York, U.S.A., 25th July, 1898; 6 years. (Filed 14th March, 1898.)

Claim.—1st. In a basket making machine, the combination with a form and mechanism for placing about the form the blanks com-

posing the bottom and sides of the basket, of a band feeding and adjusting mechanism, and a nailing mechanism arranged to be automatically advanced toward and away from the form, whereby the assembled parts are united and the nailing mechanism moved out of the way of the assembling mechanism, as and for the purpose set forth. 2nd. In a basket making machine, the combination with a form, and mechanism for automatically assembling the bottom, sides and bands about the form, of a nailing mechanism arranged to be moved toward and away from the form. 3rd. In a basket making machine, the combination with a form, and mechanism for placing the body portion of the basket about the form, of a band feeding and adjusting mechanism, and a nailing mechanism adapted to apply nails and unite the bands and sides upon two or more sides of the form at one operation. 4th. In a basket making machine, the combination with a form, and assembling and uniting mechanism, of a band feed hopper or chute centrally disposed above the form, and mechanism for separately removing and transferring the bands from the chute to the sides of the form. 5th. In a basket making machine, the combination with a form, and mechanism for assembling the body portion about its bottom and sides, band rollers travelling in opposite directions about the form, a clamping mechanism for holding the bands in lapped position, and uniting mechanism. 6th. In a basket making machine, the combination with a form and mechanism for pressing or folding the body portion of the basket over the form, of a band feeding mechanism arranged and adapted to advance a pair of bands to the form in position to be united to the inner and outer edges of the basket sides, and uniting mechanism, substantially as described. 7th. In a basket making machine, the combination with a form and mechanism for pressing or folding the body portion of the basket over the form, of wrapping devices arranged to wrap the bands about the form, and uniting mechanism. 8th. In a basket making machine, the combination with a form and mechanism for pressing or folding the body portion of the basket over the form, of a band feeding mechanism, consisting of a hopper or holder for the bands and devices for cutting out a pair of bands and feeding them to the form in position to be united to the inner and outer edges of the sides, substantially as described. 9th. In a basket machine, the combination with a form, of a device for folding or pressing over the form the blanks constituting the bottom and sides of the basket, and a band feeding mechanism arranged and adapted to feed bands to the form in position to be united to the inner and outer edges of the sides, substantially as described. 10th. In a basket making machine, the combination with the form, of a gravity band feeding device, an oscillating, transferring head adapted to remove and transfer single bands from the hopper to the form, means for folding the body portion over the form, and means for uniting the same and the bands, substantially as described. 11th. In a basket making machine, the combination with a form, of band wrapping devices, a nailing mechanism, a mechanism for pressing or folding the body portion of the basket to the form, and automatic presser feet adapted to press and hold the lapped ends of the band to the action of the nailing mechanism, substantially as described. 12th. In a basket making machine, the combination of a suspended form, and mechanism for automatically pressing or folding the body portions over a form, a band feeding mechanism and a nailing mechanism arranged to apply nails to all sides of the form simultaneously. 13th. In a basket making machine and in combination with a form, a clamp for pressing the blanks for the body portion of the basket over the form, a holder for the stacked blanks, and a needle arm arranged and adapted to separately pick up and transfer the blanks from the holder to the clamp and in position to be pressed over the form, as and for the purpose set forth. 14th. In a basket making machine, a form, in combination with mechanism for pressing or folding the bottom and side portions of the basket over the form, and band wrapping rollers arranged to travel around the form, substantially as described.

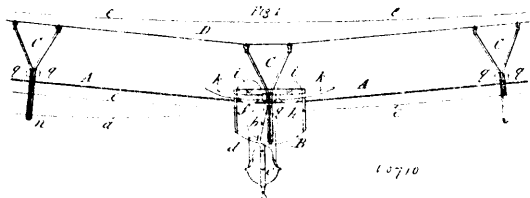
No. 60,709. Tooth Brush. (Brosse à dents.)



Isaac N. Lincoln, Providence, Rhode Island, U.S.A., 25th July, 1898; 6 years. (Filed 21st March, 1898.)

Claim. In a folding tooth brush, the combination consisting of the jointed handle, and part provided with bristles, and the other part consisting of a receptacle, a series of perforations extending longitudinally from each end of the receptacle, the rotatable sleeve mounted on the handle and extending beyond the front end thereof, a longitudinal slot in said sleeve, with a cap engageable on the front end of the sleeve adapted to operate in opening and closing the perforation, as shown and for the purpose specified.

No. 60,710. Hoisting and Conveying Apparatus.
(Appareil ascenseur et de transport.)

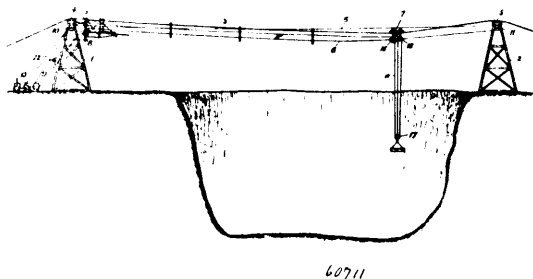


Estelle Austin De Camp and Clarence A. De Camp, both of Boonton, New Jersey, U.S.A., executors of the will of Alfred H. De Camp, 25th July, 1898; 6 years. (Filed 21st January, 1898.)

Claim.—1st. In a hoisting and conveying apparatus, a way, a fall rope, a fall rope support suspended from a point above said way, said fall rope support consisting of a frame composed two members straddling said way and extended below the same on each side thereof and adapted to be deflected outwardly from each other, and means for sustaining said fall rope support, in combination with a carriage mounted on said way and passing in its movements between and deflecting outwardly the members of the fall rope support, and means for closing together said members of the fall rope support and retaining them normally in a closed position, substantially as shown and described. 2nd. In a hoisting and conveying apparatus, a tram cable, and a carriage adapted to travel thereon, said carriage having a frame fixed longitudinally upon it, said frame having pointed ends and flaring sides, a fall rope passing over a sheave on said carriage, and means for operating said carriage and means for operating said fall rope, in combination with an independent supporting cable hung above the said tram cable, and one or more fall rope supports suspended from said supporting cable in the path of said carriage, said fall rope supports consisting of duplicate frames adapted to contact with the sides of said frame of said carriage and to be separated thereby during the passage of the carriage between them, and means for closing said frames together when said carriage has passed them, substantially as shown and described. 3rd. In a hoisting and conveying apparatus, a tram cable and a carriage adapted to travel thereon, said carriage having a frame fixed longitudinally thereon, said frame having pointed and elevated ends and flaring sides, a fall rope passing over a sheave on said carriage, and means for operating said carriage and fall rope, in combination with an independent supporting cable hung above said tram cable, and one or more fall rope supports suspended from said supporting cable in the path of said carriage, said fall rope supports consisting of duplicate frames hinged together at their upper ends, and each of the said frames having upon its inner side a bearing for the frame of said carriage, said bearings being hollowed on their opposing faces so as to contact with each other only at their upper and lower ends, and said duplicate frames being also provided with outwardly flaring guides adapted to contact with the sides of said frame of said carriage, and a spring actuated connection between said duplicate frames of the fall rope support adapted to close said frames together at their lower ends, and a sheave mounted upon one of said duplicate frames on its side facing the other of said frames and near its lower end, substantially as shown and described. 4th. In a hoisting and conveying apparatus, a fall rope support adapted to be suspended from a point above the tram cable of the apparatus and comprising two frames provided with inwardly projecting parts enclosing between them said tram cable and serving as bearings for the frame of the carriage of the apparatus when passing said frames, one of said frames having a sheave at its lower end for supporting the fall rope, said frames being deflectible outwardly from each other by the carriage of the apparatus sufficiently to permit the passage between them of said carriage, and means for enforcing and maintaining a closure of the lower ends of said frames when said carriage is passed, substantially as shown and described. 5th. In a hoisting and conveying apparatus, a way, a carriage movable upon said way, said carriage having a flexible deflecting frame with elevated pointed ends and a fall rope passing over a sheave on said carriage, in combination with a cable sustained above said way practically parallel in a vertical plane therewith, a fall rope support depending from said cable and embracing said way, said fall rope support depending from said cable and embracing said way, said fall rope support comprising duplicate frames, and guides mounted on the inner faces of said frames to bear upon the deflecting frame of said carriage as it passes, substantially as described. 6th. In a hoisting and conveying apparatus, a tram cable, a carriage adapted to travel thereon, said carriage having a flexible deflecting frame with pointed elevated

ends, guide sheaves on said frame to embrace the tram cable and a fall rope passing over a sheave on said carriage, in combination with a cable supported above said tram cable and practically parallel therewith in a vertical plane, a weight attached at one end of said cable for producing tension thereon, a fall rope support connected with said cable and embracing the said tram cable, said fall rope support comprising duplicate frames, and guide pieces on the inner faces of said duplicate frames for embracing the tram cable and bearing upon the deflecting frame of said carriage when it passes and means for closing and holding said frames together at their lower ends when in normal position, substantially as shown and described. 7th. In a hoisting and conveying apparatus, a way, a carriage adapted to traverse said way means for moving said carriage on said way, a flexible deflecting frame fixed on said carriage, said frame having pointed ends and flaring sides, sheaves on said frame for guiding said frame on said way, and a fall rope passing over a sheave on said carriage, in combination with a cable sustained above said way practically parallel thereto in a vertical plane therewith, a fall rope support connected with said cable, said fall rope support comprising duplicate frames embracing said way, and vertically curved supporting guides attached to the inner faces of said duplicate frames for supporting said frames on said way and contacting with the deflecting frame of said carriage, substantially as shown and described. 8th. In a hoisting and conveying apparatus, a fall rope support comprising duplicate frames, each of said frames having at its lower end a sheave for sustaining the fall rope of the apparatus, and a guide for directing the fall rope past said sheaves when it is raised, substantially as shown and described. 9th. In a hoisting and conveying apparatus comprising a fall rope support, a carriage adapted to travel on the way of said apparatus, said carriage having a flexible deflecting frame, said frame having pointed elevated ends and flaring sides and means on said frame for retaining the pointed ends thereof in a fixed relation to said way, substantially as shown and described.

No. 60,711. Hoisting and Conveying Apparatus.
(Appareil ascenseur et de transport.)



Estelle Austin De Camp and Clarence A. De Camp, Boonton, New Jersey, U.S.A., executors of the will of Alfred H. De Camp, 25th July, 1898; 6 years. (Filed 21st January, 1898.)

Claim.—1st. In a hoisting and conveying apparatus, a way, a rope support movably mounted upon said way, and a running line, in combination with mechanism stationarily located relatively to the supports of the apparatus for automatically discharging said rope supports into connection with said running line, substantially as shown and described. 2nd. In a hoisting and conveying apparatus, a way, a rope support movably mounted on said way, and a running line, in combination with mechanism stationarily located relatively to the supports of the apparatus for automatically discharging said rope support into connection with the running line, and means on said rope support whereby it may fixedly engage said running line, substantially as shown and described. 3rd. In a hoisting and conveying apparatus, a way, a rope support movably mounted on said way, and a running line, in combination with mechanism stationarily located relatively to the supports of the apparatus for automatically discharging said rope support into connection with the running line, and means whereby the said mechanism may be operated by the running line, substantially as shown and described. 4th. In a hoisting and conveying apparatus, a way, a series of fall rope supports having rollers whereby they are movably mounted upon said way, a fall rope, and a running line, in combination with mechanism stationarily located relatively to the supports of the apparatus for automatically discharging said fall rope supports into connection with the running line, and means on said fall rope supports whereby they may fixedly engage said running line, and sheaves mounted on said fall rope supports for sustaining the fall rope thereon, substantially as shown and described. 5th. In a hoisting and conveying apparatus, a way, a series of fall rope supports movably mounted on said way, said fall rope supports having sustaining sheaves for the fall rope, and having adjustable frames embracing the running line of the apparatus, in combination with mechanism stationarily located relatively to the supports of the apparatus for automatically receiving said fall rope supports and releasing them from the running line and for discharging them at intervals upon said running line in gripping contact therewith, the fall rope, and the running line, substantially as shown and described. 6th. In a hoisting and conveying apparatus, a mechanism stationarily connected to a sup-

port of the apparatus for operating the fall rope supports, said mechanism comprising a threaded operating shaft, gearing connected with the said shaft, a sheave, and a running line, the latter in its movement over the sheave effecting the operation of the various parts, substantially as shown and described.

7th. In a hoisting and conveying apparatus, a mechanism stationarily connected with a support of the apparatus, said mechanism comprising a sheave rigidly connected with its axle, a sliding threaded shaft connected by gears with the axle of said sheave, said shaft having a finger piece adapted to contact with pivoted operating pieces, said operating pieces having wedge-shaped projections adapted when in their normal position to contact with and expand the frame of the fall rope supports of the apparatus, and the fall rope supports, said supports having adjustable frames, springs adapted to close said frames toward each other, and sheaves for sustaining the fall rope of the apparatus, in combination with said fall rope and the running line, the latter in its movement over the sheave effecting the operation of the various parts, substantially as shown and described.

8th. In a hoisting and conveying apparatus, a way, a rope support movably mounted on said way, and a running line, in combination with a mechanism stationarily supported by said way for automatically receiving and discharging said rope support into connection with the running line, substantially as shown and described.

9th. In a hoisting and conveying apparatus, an elevated way, a running line, a fall rope, a fall rope support movably sustained on said way and means on said fall rope support for automatically gripping said running line, in combination with a mechanism stationarily located relatively to the apparatus, said mechanism comprising a revoluble threaded shaft, a device adapted to traverse said shaft as it revolves and throw the said means on the fall rope carrier into gripping contact with said running line, and means for releasing such grip, substantially as shown and described.

10th. In a hoisting and conveying apparatus, an elevated way, a running line, a fall rope, a fall rope support movably sustained on said way, and means on said fall rope carrier for automatically gripping and releasing said running line, in combination with a mechanism stationarily located relatively to said apparatus, said mechanism comprising a revoluble sheave operated by said running line, a revoluble shaft having a broken thread formed upon it, said shaft being connected with said sheave to revolve with it, a nut adapted to traverse said shaft in a normally upright position when said shaft revolves, means on said nut adapted to take into the break in the thread on said shaft and cause the nut to turn with the shaft, means on said nut for throwing the gripping device on said fall rope carrier into operative contact with the running line, and means for restoring said nut to its normal upright position on said shaft, substantially as shown and described.

11th. In a hoisting and conveying apparatus, the combination of an elevated way, a running line, a fall rope, and a fall rope support movably sustained upon said way, means on said fall rope support for gripping said running line, and a mechanism stationarily located relatively to said apparatus, said mechanism comprising a sheave operated by said running line, a shaft so connected with said sheave as to revolve simultaneously with it, said shaft having a broken thread formed upon it, a nut on said shaft, said nut having a threaded portion adapted to take on to the thread upon said shaft and to cause said nut to move lengthwise of said shaft when the same is revolved, said nut having also a lock pin adapted to travel upon the thread on said shaft and catch in the break in said thread, an operating piece swung between the lines of travel of the said nut and the said fall rope carrier and adapted to contact with and operate the gripping device on said fall rope carrier, a tripping device on said nut for contacting with said operating piece, and a tripping device fixed at a point opposite the break in the thread of said shaft for contacting with said lock pin and raising it from the thread of said shaft, substantially as shown and described.

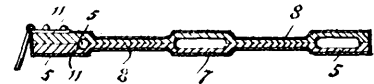
12th. In a hoisting and conveying apparatus, the combination of an elevated way, a carriage adapted to travel on said way in a vertical plane therewith and passing over sheaves upon the supports of the said apparatus, a fall rope passing over a sheave on said carriage and a series of fall rope supports sustained upon said way, means on said fall rope supports for gripping said running line, and a mechanism stationarily located relatively to said apparatus, said mechanism comprising a sheave operated by said running line, a shaft so connected with said sheave as to revolve simultaneously with it, said shaft having a thread formed upon it and said thread being broken at intervals, a nut on said shaft, said nut having a threaded portion adapted to take on to the thread upon said shaft and to cause said nut to move lengthwise of said shaft when the same is revolved, said nut having also a lock pin adapted to travel upon the thread on said shaft and catch in the breaks in said thread, a series of operating pieces pivotally swung between the lines of travel of the said nut and the said fall rope carriers and adapted to contact with and operate the gripping devices on said fall rope carriers, a tripping device on said nut for contacting with said operating pieces, and a series of tripping devices, one of each of which tripping devices is fixed at a point opposite a break in the thread of said shaft for contacting with said lock pin and raising it from the thread of said shaft, substantially as shown and described.

13th. In a hoisting and conveying apparatus, the combination of a tram cable, a carriage adapted to travel on said tram cable, a running line connected with said carriage, means for operating said running line, a fall rope passing over a sheave on said carriage,

and a series of fall rope supports sustained upon said tram cable, means on said fall rope supports for gripping said running line, and a mechanism stationarily located relatively to said apparatus, said mechanism comprising a sheave operated by said running line, a shaft connected with said sheave to turn with it, said shaft having a thread formed upon it, said thread being broken at intervals, a nut on said shaft, said nut having a threaded portion adapted to take on to the thread upon said shaft and to cause said nut to move lengthwise of said shaft when the same is revolved, said nut having also a lock pin adapted to travel upon the thread on said shaft and catch in the breaks in said thread, a series of operating pieces pivotally swung between the lines of travel of the said nut and the said fall rope carriers and adapted to contact with and operate the gripping devices, a tripping device on said nut for contacting with said operating pieces, and a series of tripping devices, one of each of which tripping devices is fixed at a point opposite a break in the thread of said shaft for contacting with said lock pin and raising it from the thread of said shaft, and means on said threaded shaft for timing the movements of the nut to the movements of the fall rope carriers, substantially as shown and described.

14th. A tripping mechanism comprising a revoluble shaft having a broken thread, a nut adapted to traverse said shaft in a normally upright position when said shaft is revolved, a locking device on said nut for taking into the break in the thread of said shaft and causing the nut to revolve with the shaft, a trip on said nut, and means for releasing the locking device from the break in the shaft, substantially as shown and described.

No. 60,712. Fireproof Door. (Porte à l'épreuve du feu.)



David Hislop Ferguson, Richard Wilson Smith and Robert Thomas Hopper, all of Montreal, Quebec, Canada, 25th July, 1898; 6 years. (Filed 21st October, 1897.)

Claim.—1st. A fireproof door, shutter, wainscoting or the like formed of asbestos hardened and rendered non-hygroscopic. 2nd. A fireproof door, shutter, or the like of asbestos formed to imitate the panels, styles, rails and muntins thereof hardened and rendered non-hygroscopic. 3rd. A fireproof door, shutter, wainscoting or the like, consisting of asbestos hardened by silicate of soda and rendered non-hygroscopic by calcium chloride. 4th. A fireproof door, shutter, wainscoting or the like, consisting of asbestos hardened by silicate of soda and rendered non-hygroscopic by calcium chloride and provided with a veneer of wood. 5th. A fireproof door, shutter, wainscoting or the like, consisting of asbestos in two halves hardened and rendered non-hygroscopic, arranged with a space between them and secured together, and a filling of fiberized asbestos or other fireproof material, for said space. 6th. A fireproof door, shutter, wainscoting or the like, consisting of asbestos pulp moulded into shape to imitate the panels, styles, rails, and muntins, hardened by silicate of soda and rendered non-hygroscopic by calcium chloride, for the purpose set forth.

No. 60,713. Process of Treating Blast Furnace Slag. (Procédé pour le traitement de scorie de fournaies à fusion.)

Alexander D. Elbers, Hoboken, New Jersey, U.S.A., 25th July, 1898; 6 years. (Filed 26th March, 1898.)

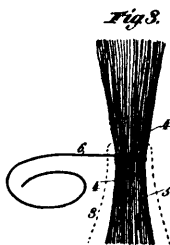
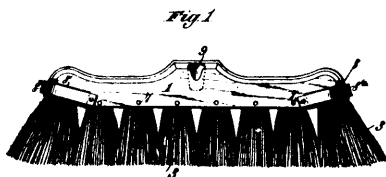
Claim.—1st. The herein described process of treating sulphurous blast furnace slag in its ground or pulverized state which consists in superficially desulphurizing the slag and impregnating it with nitrosyl, substantially in the manner set forth. 2nd. The herein described process of treating sulphurous blast furnace slag in its ground or pulverized state, which consists in superficially desulphurizing the slag, and impregnating it with nitrosyl by the application of a weak solution of nitric acid, substantially as described. 3rd. An improved product consisting of superficially desulphurizing and nitrosylized slag, substantially as herein set forth.

No. 60,714. Brush and Floor Sweeper. (Balayuse de planchers.)

Jacob Frederick Hoke, jr., Sullivan, Indiana, U.S.A., 25th July, 1898; 6 years. (Filed 22nd March, 1898.)

Claim.—A brush composed of a head provided with tuft holes or recesses, and a number of tufts secured in said recesses and each

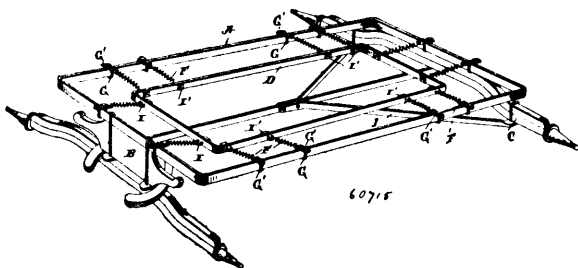
consisting of a rigid core or peg and folded-over fibers surrounding and secured to said peg by a single continuous wire having its inner



60714

end portion wrapped around the inner portions of the fibers and its outer end portion wrapped around the outermost or folded-over portions of the fibers, substantially as described.

No. 60,715. Vehicle Spring Gear.
(Châssis à ressort pour voitures.)

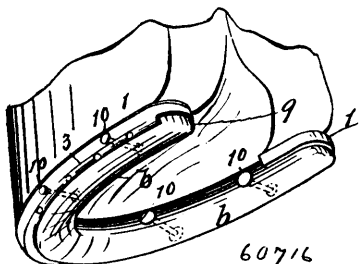


60715

Samuel Q. Saunders, New Bridge, Oregon, U.S.A., 25th July, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. The combination of frame A, frame D within and smaller than frame A, and longitudinally-adjustably spiral springs between and uniting the frame, substantially as described. 2nd. The combination of frame A, frame D within and smaller than frame A, hooked clips on one of the frames, and spiral springs secured at one end to the clip-hooks and at their opposite ends adjustably secured to the other frame, substantially as shown and described. 3rd. An improved spring-gear, comprising an outer frame, clips embracing the same, hooked plates for closing the clips, an inner frame of less size than the outer frame, springs connecting the frames, one end of each spring connecting with hooked plate of a clip on the outer frame, and eyebolts adjustably secured to the inner frame and to which the inner ends of the springs are attached, substantially as shown and described. 4th. The combination of frame A, frame D within and smaller than frame A, screw-eyes adjustable in one of the frames for securing one end of the springs, and means for securing the other ends of the springs to the other frame, substantially as shown and described.

No. 60,716. Horse Shoe. (Fer à cheval.)



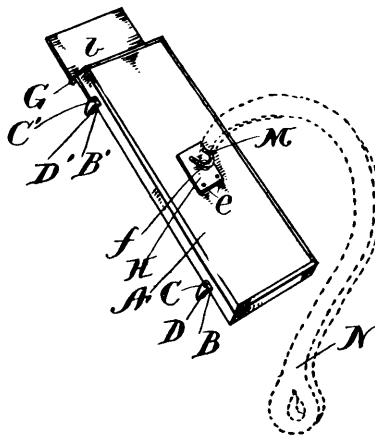
60716

Danial Paar and Henry Paar, both of Canton, Ohio, U.S.A., 25th July, 1898; 6 years. (Filed 13th July, 1898.)

Claim.—The combination of the body 1, provided with the tangs 9 located at the heel ends of the shoe, the tread 6, provided with the

outwardly extending flange 7, and the groove 8, and the horizontal flange of the body 1 located in the groove formed in the tread, and said tread extended above and below the body, substantially as and for the purpose specified.

No. 60,717. Roof Bracket. (Console pour toitures.)

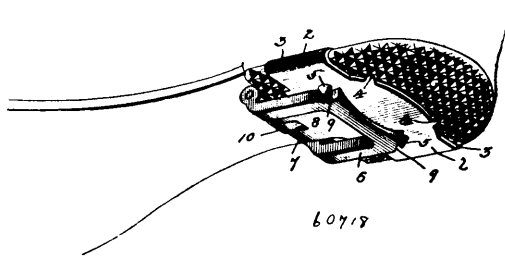


60717

Darius Cleland, Oakland, California, U.S.A., 25th July, 1898; 6 years. (Filed 14th July, 1898.)

Claim.—1st. A cleat for painter's hooks having a foundation or body, a series of spurs secured to said body, a metal member secured to said body and a metal rim projecting outward from said metal member and adapted to engage the extremity of a painter's hook substantially as set forth. 3rd. The combination with body A, of one or more metal plates C C' secured to said body and provided with integral spurs D, D', projecting plate G secured to said body and slightly offset therefrom, a plate secured to said body and formed with a depression, and a metal rim above said depression for the purpose of holding the painter's hook as set forth.

No. 60,718. Ice Creeper. (Grappin.)



60718

Odilon Feher, Montreal, Quebec, Canada, 25th July, 1898; 6 years. (Filed 14th July, 1898.)

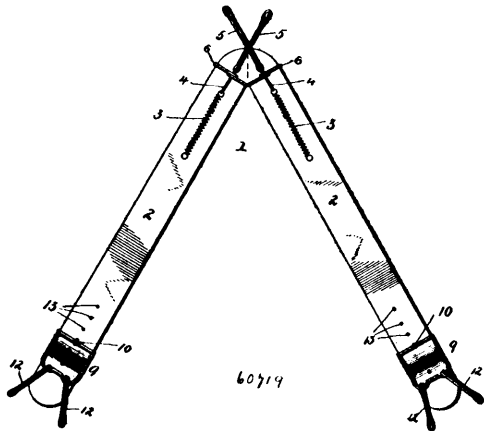
Claim.—1st. An ice creeper, comprising a plate having lateral extensions adapted to engage with the shoe to which the creeper is attached, and also having engaging teeth adapted to engage the under face of the shoe, spurs formed on the outer side of said plate, and means connected to said plate for placing said spurs into operative and inoperative contact with the ice or snow, substantially as described. 2nd. The combination with an ice creeper, having downwardly extending spurs adapted to engage with the ice, etc., of a protector hingedly connected to said ice creeper, said protector being movable into and out of a position contiguous to said spurs, whereby said spurs will be passed into or out of operative contact with the surface being walked upon, substantially as described. 3rd. The combination with an ice creeper having downwardly extending spur, of a protecting plate hingedly connected to said creeper, said plate being adapted to be passed into and out of a position contiguous to said spurs, and a spring adapted to contact with said plate to hold it in its inoperative or operative position, substantially as described.

No. 60,719. Suspender. (Bretelles.)

John Messenger, Denfield, Ontario, Canada, 25th July, 1898; years. (Filed 14th July, 1898.)

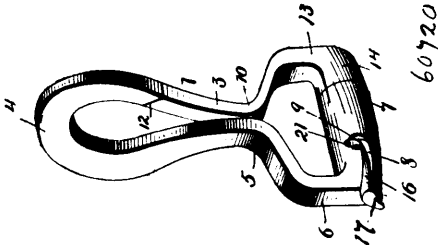
Claim.—1st. A suspender, comprising two leather strips, buckles adjustably mounted on the front ends of said strips, button engaging

strips or loops elastically secured to the rear ends of said strips, and a guide for each of said strips or loops, substantially as described.



2nd. A suspender, comprising two leather strips, buckles adjustably mounted on the front ends of said strips, springs secured to said strips near their rear ends, cords secured to said springs, button engaging strips or loops secured to said cords, and a guide for each of said cords, substantially as described.

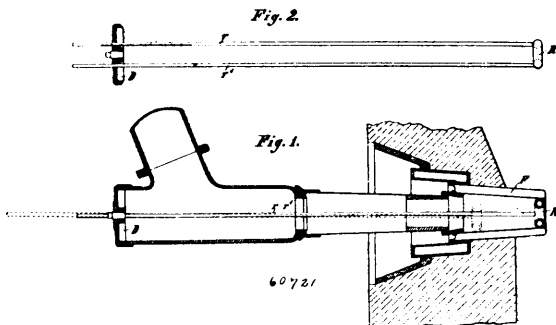
No. 60,720. Snap Hook. (Crochet à ressort.)



Lucien Viel, William's Lake, British Columbia, Canada, 25th July, 1898; 6 years. (Filed 14th July, 1898.)

Claim.—1st. A snap hook formed of two members, one of said members having a hollow casing for the reception of a rod portion secured to the opposite member, said rod portion forming a means for holding said members together, and a spring secured within said hollow casing and having its end portions engaging said members, said spring portion serving to hold said members in operative position, substantially as described. 2nd. A snap hook, comprising a stationary member having its lower end provided with a hollow casing, a movable member having an inwardly projecting portion adapted to fit in and close one end of said hollow casing, said projecting portion having an inwardly extending rod provided with a lug, said rod and lug being adapted to pass through said hollow casing and form means for connecting said members together, and a spring having one of its ends slidably mounted in said movable member, and having its opposite end adapted to be removably secured to said fixed member, said spring being detachably mounted on said rod portion, substantially as described.

No. 60,721. Apparatus for Regulating the Diameter of Air Pipes in Blast Furnaces. (Appareil pour régler le diamètre des tuyaux à air dans les hauts fournaux.)

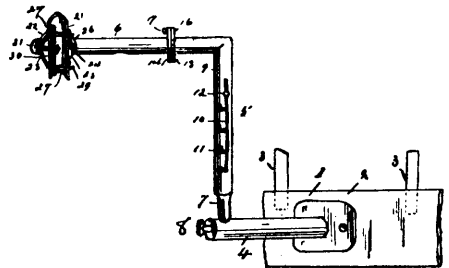


Paul Benni, Ostrowiec, Goiw Rodon, Russia, 25th July, 1898; 6 years. (Filed 14th July, 1898.)

Claim.—1st. The improved apparatus for regulating the area of free inlet in air inlets for blast furnaces, characterized by the

arrangement that by the displacement of a body of any convenient shape, such as a hollow ring filled with water in a conical or pyramidal part of the tube such as tuyere, any required area of inlet can be obtained, constructed and arranged substantially as hereinbefore described. 2nd. A modification of the apparatus set forth in claim 1, devised especially for blast furnaces, and characterized by the arrangement that the insertion piece of suitable shape cooled by constant circulation of water and inserted in the tuyere, can be actuated from the outside without involving any stoppage of the blast furnace, constructed substantially as and for the purpose set forth, and illustrated in the accompanying drawing.

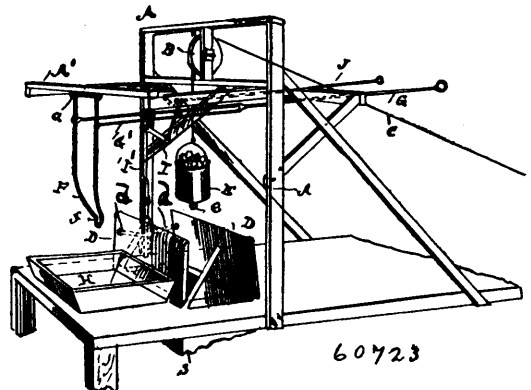
No. 60,722. Umbrella Holder. (Porte-parapluie.)



Louise A. D. Northrup, Shoreham, Vermont, U.S.A., 25th July, 1898; 6 years. (Filed 15th July, 1898.)

Claim.—1st. A holder for umbrellas and the like, involving the combination of the base-plate, for convenient attachment to a body-belt or other like support having a vertical face, a main stem projecting horizontally from said base-plate, an axially adjustable telescopic piece extending vertically from the main stem and axially adjustable horizontal socket-arm, and a socket, whereby the umbrella may be supported away from the body, and may be adjusted at any desired elevation and angle, substantially as described. 2nd. A holder of the class described, comprising a supporting-arm formed of a main stem, a socket-stem, and a sectional elbow connecting said stems, one end of said elbow being corrugated and fitted in the main stem, a screw carried by said main stem and adapted to engage the corrugated end of the elbow, whereby the latter is locked against rotation, means for locking the sections of the elbow together, adjustable connections between the elbow and the socket-stem, whereby said socket stem is adjustable upon the elbow, a socket carried by the socket-stem and adapted to receive an umbrella or the like, said socket being adjustable upon the socket-stem, and locking-arms carried by said socket and adapted to secure an umbrella or the like within said socket, substantially as described.

No. 60,723. Dump for Ore Buckets. (Bascule pour godets à minerais.)

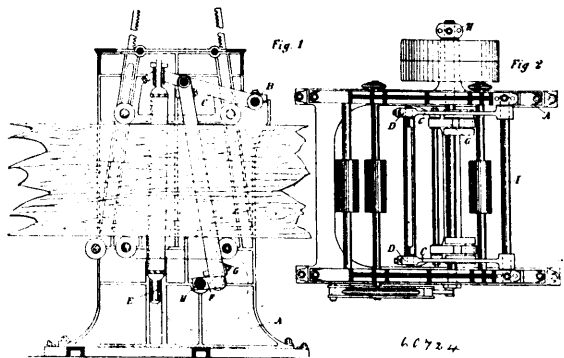


Hector Pepin, Victor, Colorado, U.S.A., 25th July, 1898; 6 years. (Filed 15th July, 1898.)

Claim.—1st. A dumping device for bucket-hoisting apparatus, comprising a ball or knob suspended from the bottom of the bucket by a short chain or similar connector, and a lever pivoted at one side of the bucket and terminating at its outer end in a fork or yoke which narrows at its extremity, said lever being adapted to be swung beneath the bucket when it is raised and to embrace the knob suspended from the bucket, substantially as described. 2nd. A dumping device for bucket-hoisting apparatus, comprising a ball or knob suspended from the bottom of the bucket by a short chain or similar connector, a lever pivoted at one side of the bucket and terminating at its outer end in a fork or yoke which narrows at its extremity, said lever being adapted to be swung beneath the bucket

when it is raised and to embrace the knob suspended therefrom, and a hand lever connected with said swinging lever to control it, substantially as described. 3rd. A dump for bucket-hoisting devices comprising a knob suspended from the bottom of the bucket, a lever pivoted at one side of the bucket, having a fork or yoke which narrows to a point at its outer end, said lever being adapted to swing beneath the bucket when it is raised and to embrace the knob suspended therefrom, and a hopper located beneath said lever to receive the contents of the bucket, substantially as described. 4th. A dump for bucket-hoisting devices, comprising a ball or knob suspended from the bottom of the bucket, a lever pivoted at one side of the bucket, having a fork or yoke which is narrow at its outer extremity, said lever being adapted to swing beneath the bucket when it is raised and to embrace the knob suspended therefrom, trap doors hinged at the upper end of the shaft and at opposite sides thereof, and levers by which said doors may be opened or closed, substantially as described. 5th. A dump for bucket-hoisting devices, comprising a ball or knob suspended from the bottom of the bucket, a lever pivoted at one side of the bucket, having a fork or yoke which is narrow at its outer extremity, said lever being adapted to swing beneath the bucket when it is raised and to embrace the knob suspended therefrom, trap doors hinged to the upper end of the shaft and at opposite sides thereof, levers by which said doors may be opened or closed, and a hopper located beneath said swinging lever to receive the contents of the bucket, substantially as described. 6th. A dump for bucket-hoisting devices, comprising a ball or knob suspended from the bottom of the bucket, a dumping lever pivoted at one side of the bucket and having a fork or yoke which at its outer extremity is narrow, said lever being adapted to swing beneath the bucket when it is raised and to embrace the knob suspended therefrom, trap doors hinged on opposite sides of the shaft and adapted to meet above the shaft to form an A-shaped cover therefor, links pivoted to said doors and to each other to form a toggle-joint, and levers connected to the centre of said toggle-joint to operate the doors, substantially as described. 7th. A dump for bucket-hoisting devices, comprising a ball or knob suspended from the bottom of the bucket, a dumping lever pivoted at one side of the bucket and having a fork or yoke which at its outer extremity is narrow, said lever being adapted to swing beneath the bucket when it is raised and to embrace the knob suspended therefrom, trap doors hinged on opposite sides of the shaft and adapted to meet above the shaft to form an A-shaped cover therefor, links pivoted to said doors and to each other to form a toggle-joint, levers connected to the centre of said toggle-joint to operate the doors, substantially as described. 7th. A dump for bucket-hoisting devices, comprising a ball or knob suspended from the bottom of the bucket, a dumping lever pivoted at one side of the bucket and having a fork or yoke which at its outer extremity is narrow, said lever being adapted to swing beneath the bucket when it is raised and to embrace the knob suspended therefrom, trap doors hinged on opposite sides of the shaft and adapted to meet above the shaft to form an A-shaped cover therefor, links pivoted to said doors and to each other to form a toggle-joint, levers connected to the centre of said toggle-joint to operate the doors, and a hopper located beneath said dumping lever to receive the contents of the bucket, substantially as described.

No. 60,724. Saw Gate. (Cadre de scie.)



Henrich Zarling, 3 Wendenschestrasse, Riga, Russia, 25th July, 1898; 6 years. (Filed 15th July, 1898.)

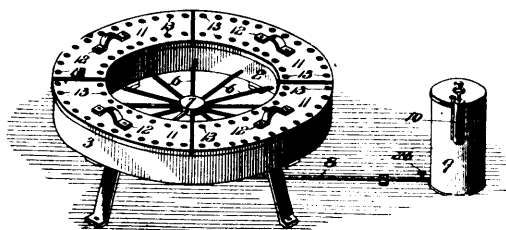
Claim.—A saw gate consisting of a frame E, the lower end of which moves in a guide, and the upper end of which swings, by means of levers C, around a fixed axle B, the movement of the crank and driving axle H being transmitted to the lever I by a connecting rod G in order to decrease friction and to allow of the easy exchange of the frame, constructed and arranged, substantially as hereinbefore described.

No. 60,725. Tire Heater. (Chauffeur de bandages.)

Jacob J. A. Morath, Clayton, Missouri, U.S.A., 25th July, 1898; 6 years. (Filed 15th July, 1898.)

Claim.—1st. A tire-heater having an annular drum or receptacle provided with interior tire-supports, an annular series of vapourizing-burners located within the drum and having mixing-chambers arranged in an approximately horizontal plane, the mixing-chambers of one burner having their outlet ends contiguous to and adapted to discharge toward the adjacent burner and hence parallel with a tire on said supports, and means for supplying fluid-fuel to the burners, substantially as specified. 2nd. A tire-heater having an annular

drum or receptacle provided with interior tire-supports, an annular series of burners located in the drum or receptacle and having

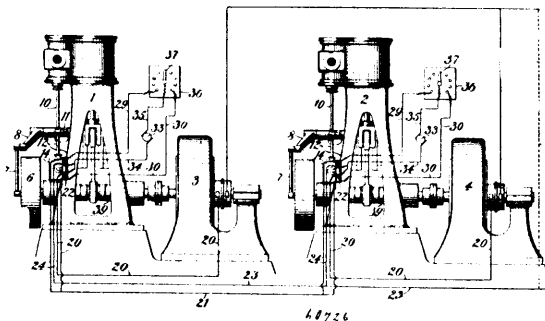


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vapourizing and burner tubes and mixing-chambers which are disposed at an upward inclination from the burner-tube, the outlet ends of the mixing-chambers of one burner being located contiguous to and adapted to discharge toward the vapourizing-tube of the adjacent burner of the series, and means for supplying fluid-fuel to the burners, substantially as specified. 3rd. In a tire-heater, the combination with a receptacle, of a fluid-fuel burner having vapourizing and burner-tubes arranged in a common vertical plane, said burner-tube being provided with jet-tubes, a casting located contiguous to said tubes and provided with mixing-chambers arranged respectively in alignment with the jet-tubes and inclining upwardly therefrom, an initial ignition pan or trough located below the burner-tube and adapted to receive drippings from the lower extremities of the mixing chambers, and a shield spanning the interval between the vapourizing tube and the contiguous side of the casting and extending over the jet-tubes, substantially as specified.

No. 60,726. Fluid Pressure Motor Governor.

(Gouverneur pour moteurs à pression hydraulique.)



Francis Marion Rites, Ithaca, New York, U. S. A., 26th July, 1898; 6 years. (Filed 11th May, 1897.)

Claim.—1st. The combination, with a fluid pressure motor, of a governor, and means independent of the governor, and connected with the valve gear of the motor, which is adapted to automatically adjust the governor, substantially as set forth. 2nd. The combination, with a fluid pressure motor, of a governor, a reciprocating pressure device connected with a reciprocating member of the valve gear of the motor and adapted to modify the effects of the inertia and friction tending to disturb the action of the governor, and means whereby the action of the pressure device may be automatically varied to effect variations in the supply of the motive fluid, substantially as set forth. 3rd. The combination, with a fluid pressure motor, of a governor, an elastic pressure device connected with the valve gear of the motor and tending to modify the effects of the inertia of reciprocating parts and other disturbing forces, and means for automatically adjusting the pressure device, substantially as set forth. 4th. The combination, with a fluid pressure motor, of a governor, an elastic pressure device connected with the valve gear of the motor and adapted to modify the effects of the inertia of reciprocating parts and other disturbing forces, and electrically operated means for automatically adjusting the pressure device, substantially as set forth. 5th. The combination, with a fluid pressure motor, of a governor, an elastic fluid pressure device connected with the valve gear of the motor and adapted to modify the effects of the inertia of reciprocating parts and other disturbing forces, and means for automatically adjusting the pressure device, substantially as set forth. 6th. The combination, with a fluid pressure motor, of a governor, a cylinder filled with air or other elastic fluid, a piston in the cylinder which is connected with the valve gear of the motor, and means for controlling the pressures in the opposite ends of the cylinder, substantially as set forth. 7th. The combination, with a fluid pressure motor, of a governor, a cylinder filled with air or other elastic fluid, a piston in the cylinder which is connected with the valve gear of the motor,

and a valve controlling communication between the spaces on the opposite sides of the piston, substantially as set forth. 8th. The combination, with a fluid pressure motor, of a governor, a cylinder filled with air or other elastic fluid, a piston in the cylinder which is connected with the valve gear of the motor and which is adapted by its movement to compress the fluid in the cylinder, and a valve which is adapted to automatically vary the degree of compression of the fluid, substantially as set forth. 9th. The combination, with a fluid pressure motor, of a governor, an elastic fluid pressure device connected with the valve gear of the motor, and an electrically operated valve controlling the action of the fluid pressure device, substantially as set forth. 10th. The combination, with two or more fluid pressure motors, of a governor for each of the motors, and means whereby the governor of each of the motors may be automatically adjusted in accordance with the relative load on that motor, substantially as set forth. 11th. The combination, with two or more fluid pressure motors, and electrical generators driven thereby, of a governor for each of the motors, and means whereby the governor of each of the motors may be automatically adjusted in accordance with the relative output of the generator driven by that motor, as compared with that of the other generators, substantially as set forth. 12th. The combination, with two or more fluid pressure motors, and electrical generators driven thereby and feeding into the same circuit, of governing devices for each of the motors, and means whereby each unit is controlled and regulated in accordance with variations of its output from that of the other units, or from a standard, substantially as set forth. 13th. The combination, with two or more fluid pressure motors, and electrical generators driven thereby and feeding into the same circuit, of a governor for each of the motors which is adapted to independently control the motor to which it is applied, and means whereby any variation in the load of that motor from that of the other motors, or from a standard, may effect an adjustment of the governor tending to equalize the loads, substantially as set forth. 14th. The combination, with a fluid pressure motor, of a governor, a pressure device for modifying the effects of inertia and other disturbing forces of the valve gear, and means whereby the pressure device may be adjusted by the action of electricity, substantially as set forth. 15th. The combination, with a fluid pressure motor, of a governor, a device for modifying the effects of inertia and other disturbing forces, and means whereby the device may be adjusted by varying the resistance of an electric current, substantially as set forth. 16th. The combination, with a fluid pressure motor, of a governor, a device for modifying the effects of inertia and other distributing forces, and means whereby the device may be automatically adjusted, substantially as set forth. 17th. The combination, with a fluid pressure motor, of a governor, and a device for modifying the effects of inertia and other disturbing forces, which is adjustable automatically and by hand, substantially as set forth. 18th. In a multiple system of motor driven electric generators, the combination with a speed controller, of means for applying thereto the differential effects of electric currents before and after discharge into a common circuit or connected system, substantially as set forth. 19th. In a fluid pressure motor, the combination, of a centrifugally acting weight, a distribution valve, with an adjustable eccentric connected to the weight and forming the means of connection with the distribution valve, a cylinder containing a piston connected to the distribution valve and adapted to alternately compress and expand elastic fluid therein, and means whereby the character of the compression and expansion may be automatically controlled, substantially as set forth. 20th. In a fluid pressure motor, the combination, with a centrifugally acting weight and a distribution valve, of an eccentric adapted to be adjusted by the weight and forming the means of connection between the weight and the distribution valve, and a pressure device connected to the reciprocating parts of the valve gear and adapted by adjustment to modify the governing forces and vary the speeds as desired through the application of electric currents. 21st. In a fluid pressure motor, the combination, of a centrifugally acting weight and distribution valve, with a modifying speeding attachment under control of opposing influences of current from the generator to a common conductor or distributor and from the common conductor to the main feeder, substantially as set forth. 22nd. In a fluid pressure motor, the combination, with a centrifugally acting weight and a distribution valve, of a pressure device subject to the modifying influence of an electric balance for the division of load between two or more units of power and independent adjustable modifying means whereby the speed may be controlled, substantially as set forth.

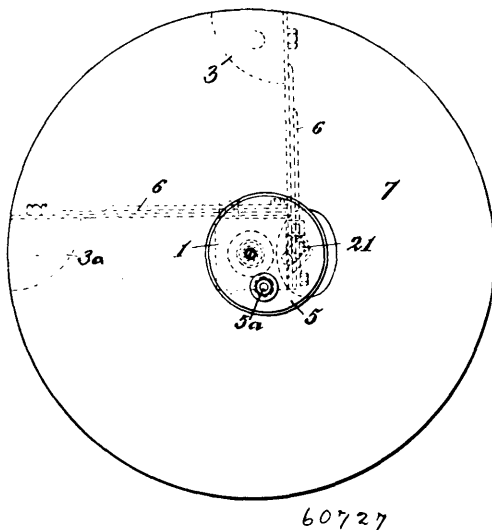
No. 60,727. Governor for Fluid Pressure Engines.

(Gouverneur pour machines à pression hydraulique.)

Francois Marion Rites, Ithaca, New York, U.S.A., 26th July, 1898; 6 years. (Filed 15th July, 1898.)

Claim.—1st. The combination of a rotary carrier, an integral governor-weight structure, comprising a centrifugal weight and an inertia-weight, the inertia-weight having its mass symmetrically disposed on opposite sides of the axis of the carrier, and means by which the governor-weight structure may be connected with, or adapted to actuate or adjust an eccentric, or valve, or other controlling member, substantially as set forth. 2nd. The combination of a rotary carrier, a governor-weight structure subject to con-

trifugal action, and springs set at an angle one to the other and connecting the weight structure to the carrier with the capacity of



movement of the weight structure about an axis on the carrier exterior to the axis of rotation thereof, substantially as set forth. 3rd. The combination of a rotary carrier, a centrifugally-acting weight connected thereto, and a frictional resistance device interposed between the carrier and the weight, substantially as set forth. 4th. The combination of a rotary carrier, a centrifugally-acting weight connected thereto, a frictional resistance device interposed between the carrier and the weight, and mechanism for adjusting the degree of resistance between the weight and the carrier, substantially as set forth. 5th. The combination of a rotary carrier, an integral governor-weight structure, comprising a centrifugal weight and an inertia-weight, the inertia-weight having the particles of its mass symmetrically disposed on opposite sides of the axis of the carrier, an elastic medium interposed between the weight structure and the carrier, and an eccentric, or eccentric-pin, connected to the weight structure, substantially as set forth. 6th. The combination of a rotary carrier, an integral governor-weight structure comprising a centrifugal-weight and an inertia-weight, the inertia-weight having the particles of its mass symmetrically disposed on opposite sides of the axis of the carrier, springs interposed between the weight structure and the carrier and exerting tension in opposite direction to the action of centrifugal force on the weight structure, and an eccentric or eccentric-pin, connected to the weight structure, substantially as set forth. 7th. The combination of a rotary carrier, a governor-weight structure having the particles of its mass disposed on opposite sides of the axis of the carrier, springs set at an angle one to the other and connecting the weight structure to the carrier with the capacity of movement of the weight structure about a single axis on the carrier, and an eccentric or eccentric-pin connected to the weight structure, substantially as set forth. 8th. The combination of a rotary carrier, a governor-weight structure having the particles of its mass disposed on opposite sides of the axis of the carrier and subject to both centrifugal and inertia action, said weight structure being movable about single axis on the carrier, an elastic medium interposed between the weight structure and the carrier, an eccentric or eccentric-pin connected to the weight structure, and a connection between the eccentric or eccentric-pin and the rotary carrier, substantially as set forth. 9th. A governor-weight structure symmetrically disposed about the axis of a carrier and integrally formed with a preponderating mass subject to centrifugal force, and means by which the governor-weight structure may be connected with, or adapted to actuate, or adjust, an eccentric, or valve, or other controlling member, substantially as set forth.

No. 60,728. Method of Tanning. (Méthode de tannage.)

Adolfo Mario, Turin, Italy, 26th July, 1898; 6 years. (Filed 12th July, 1897.)

Claim.—Le procédé de tanner avec des solutions tanniques, où avec de extraits liquides tanniques aussi à quelconque gradation, donnant aux peaux suspendues séparément à un axe ou pivot un mouvement de rotation, ainsi et comme ici décrit et spécifié,

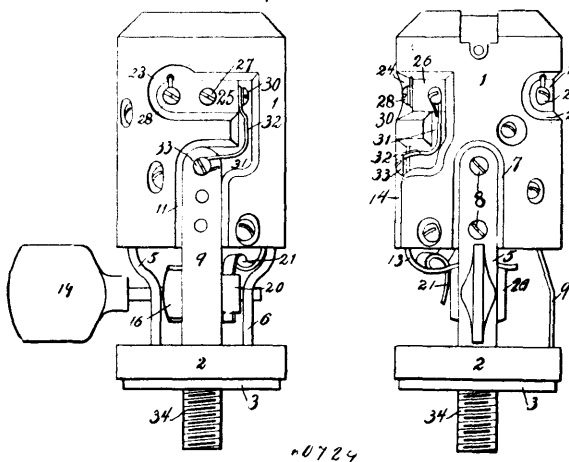
No. 60,729. Electric Lamp Socket.

(Douille de lampe électrique.)

Samuel H. Russell, Watsonville, California, U.S.A., 26th July, 1898; 6 years. (Filed 17th July, 1898.)

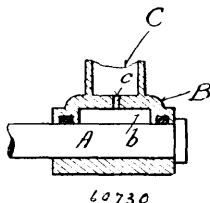
Claim.—1st. An electric lamp socket and switch consisting in an insulating body a base consisting of an insulating disc and a contact

plate, connected with said body by standards in electric union with said plate at their lower ends and with each other at their upper



ends, a switch block and shaft therefor operatively mounted in said standard, an anchoring stem insulated in and passing through said base and in electrical union with the feed wire of the lamp, a switch plate in electrical union with the return wire of the lamp, the free end of said plate lying in the path of the switch block, and a fusible wire mounted in said body and adapted to break the circuit on excess of current, substantially as specified and for the purpose set forth. 2nd. As an improvement in fusible sockets for electric lamps the combination with an insulating body of an insulating disc held away from and attached to said body by the standards 6 and 5 a contact plate connected to the outer face of said disc and in electrical union with said standards, an anchoring stem passing through said disc and plate held insulated from the latter, a fusible link secured in a recess in the body, means for connecting said stem and link with the feed wire of the lamp, a return wire having a fusible link mounted in the body, a contact plate in electrical union with said wire, a switch block having an adjusting head rotatably mounted in said standards, and a securing spring for said head, all operatively combined in the manner and for the purpose set forth. 3rd. The herein described fusible socket for electric lamps consisting of the cylindrical body and the disc-like base, said body being provided with a series of recesses in its peripheral face, standards in electrical union with each other connecting said body and base, poles or angle plates 25 and 26 recessed in the upper part of the body and in electrical union with the lamp, fusible links connected to said poles, means for connecting said links with the source of electric energy and for opening and closing the circuit, substantially as specified and for the purpose set forth. 4th. As an improvement in electric lamp socket, the combination of the cylindrical body having a series of recesses on its peripheral face designed to insulate the parts forming an electric circuit having a fusible link and return wire, a switch block having an oblong body and an adjusting head, means consisting of the depending spring 21 designed to secure said head in an adjusted position, a tubular casing for said body consisting of the sections 35, 36 and 37, means for securing said sections in operative combination, and insulating said casing from contact with said circuit, substantially as specified and for the purpose set forth.

No. 60,730. Method of Applying Compressed Air.
(Méthode d'appliquer l'air comprimée.)

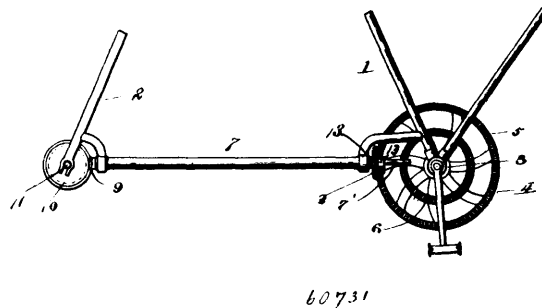


Ferdinand Schumacher, Iron Ridge, Wisconsin, U.S.A., 26th July, 1898; 6 years. (Filed 28th February, 1898.)

Claim.—1st. A rotative carrier, its load, and provision for an automatically regulated volume of compressed-air intermediate of the load and carrier, the latter having a certain proportion of its surface exposed to said air in which it has proportional anti-friction rotation. 2nd. The combination of a rotative carrier, a box or chamber for the carrier having a hollow portion constituting an air-space, a pot having communication with said air-space and also with a source of compressed-air, an air-tight piston in the pot, a load exertive on the piston, and mechanism operative to automati-

cally regulate the volume of compressed-air opposed to the piston in proportion to variable pressure of the load. 3rd. The combination of a rotative carrier, a box or chamber for the carrier having a hollow portion constituting an air-space, a pot having communication with said air-space and also with a source of compressed-air, an air-tight piston in the pot, a load exertive on the piston, mechanism operative to automatically regulate the volume of compressed-air opposed to the piston in proportion to variable gradual pressure of the load, and suitable means for rendering momentary load-combustion non-effective on the air-regulating mechanism. 4th. The combination of a rotative carrier, a box or chamber for the carrier having its upper portion hollowed out to form an air-space, a vertical pot having communication with said air-space, an air-tight piston in the pot, a load exertive on the piston, another vertical pot provided with a relief-valve and containing an air-tight piston also under direct pressure of the load and having its working-face exertive on a confirmed volume of atmospheric-air, a horizontal vessel open at one end and having its closed end in valve-coupling with the pot containing atmospheric-air, an air-tight piston in the vessel provided with a guide-supported rod, a pair of tappets on the piston-rod, and a conveyor connecting the air-space intermediate of the first named piston and carrier with a source of compressed-air, a relief-mechanism for the conveyor operated in one direction by one of said tappets, and a cut-off and supply-mechanism of said conveyor operated in one direction by the other of said tappets.

No. 60,731. Bicycle Gear. (Engrenage de bicyclette.)



William Greiner, Philadelphia, Pennsylvania, U.S.A., 26th July, 1898; 6 years. (Filed 27th April, 1898.)

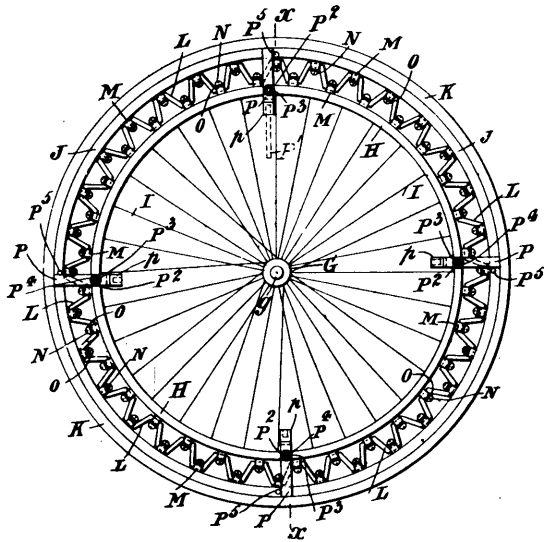
Claim.—1st. The combination with a bicycle, of a drive-sprocket having a plurality of concentric toothed rims, a bevel-gear on the rear wheel, a drive-shaft having a bevel-gear on the rear end engaging the bevel-gear of the rear-wheel, and a single bevel-gear wheel on the front end of the said drive-shaft, adapted to be adjusted to engage different rims of the drive-sprocket, substantially as described. 2nd. The combination with a bicycle, of a duplex drive-sprocket, a drive-shaft running to the rear of the machine for operating the rear wheel, and a single rear wheel adjustably mounted on the front end of the drive-shaft and adapted to mesh with different portions of the said drive-sprocket, substantially as described. 3rd. In a bicycle driving gear in which a longitudinal shaft is employed geared at its ends to the crank axle and rear driving wheel, a bevel-pinion adjustably mounted on the front end of said shaft and provided at one side of its bore with a recess, and a key slidably mounted on the shaft and adapted to fit said recess, the key having provision whereby it may be clamped at the desired point on the shaft, substantially as described.

No. 60,732. Vehicle Wheel and Tire.
(Roue et bandage de voiture.)

Robert Heap Southall, Leeds, York, England, 26th July, 1898; 6 years. (Filed 10th May, 1898.)

Claim.—1st. A wheel consisting of a hub, having a central hole, a central rim connected by spokes to the hub, a tire rim of larger diameter than the central rim and having a rubber tire seated upon its outer periphery and a space between it and the central rim, tension springs constructed as described and interposed between the outer periphery of the central rim and inner periphery of the tire rim for suspending the former rim from the latter rim, substantially as described. 2nd. In a wheel, the combination of a hub, a central rim, spokes for connecting the hub and central rim together, a tire rim of larger diameter than the central rim to provide a space between the said two rims, a tire seated upon the tire rim, with a series of tension springs formed out of a rubber band by fixing the band at equidistant points respectively to the central rim and tire rim for suspending the latter from the former, substantially as described. 3rd. The combination of a rubber tire seated upon a rim, with a second rim of smaller diameter suspended from the larger rim by a rubber band fixed to the smaller rim at equidistant points and attached by loops of the said band forming a series of tension springs, substantially as set forth. 4th. In a wheel, the combination of a rubber tire seated upon a rim, a central rim of smaller diameter than the tire rim, a series of tension springs interposed in the space

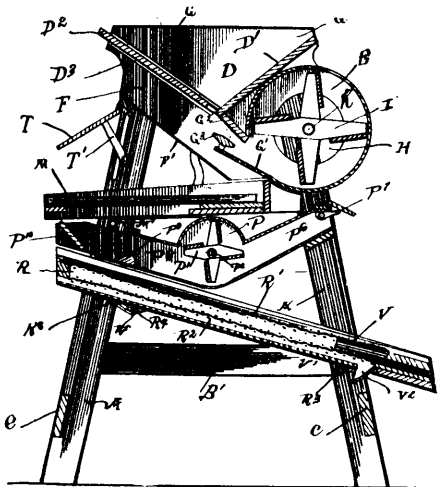
between the said two rims, said tension springs being composed of a rubber band fixed at equidistant points to the central rim and its



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loops fixed to the tire rim for suspension purposes, a hub, spokes for connecting the hub and central rim together, bifurcated levers pivoted to said central rim, and pins fixed on each side of the tire rim with which the ends of the bifurcated levers engage, substantially as described. 5th. In a wheel, the combination of a rubber tire seated upon a rim, a central rim of smaller diameter than the tire rim, and armed with flanges on each side thereof, a series of tension springs interposed in the space between the said two rims, said tension springs being composed of a rubber band fixed at equidistant points to the central rim and its loops fixed to the tire rim for suspension purposes, a hub, spokes for connecting the hub and central rim together, bifurcated levers pivoted to said central rim, and pins fixed on each side of the tire rim with which the ends of the bifurcated levers engage, substantially as described.

No. 60,733. Grain Cleaner and Separator.
(*Nettoyeur et separateur de grain.*)



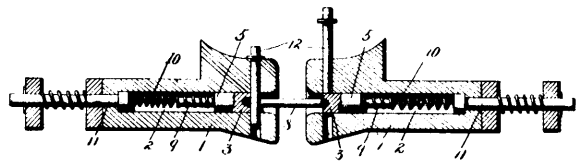
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James C. Benson, Alcony, Ohio, U.S.A., 26th July, 1898; 6 years. (Filed 18th July, 1898.)

Claim.—1st. A grain cleaner and separator comprising a supporting frame, a fan chamber in the upper part thereof, a fan in said chamber, a reciprocating shoe below the fan chamber, secondary fan chamber below the shoe, a fan therein, and a reciprocating screen below the secondary fan chamber, substantially as described. 2nd. In a grain cleaner and separator, the combination with the main frame, the side boards, the fan chamber, a fan therein, hopper and air chamber arranged between the said side boards, the reciprocating shoe, a secondary fan chamber closed at both ends, a fan in said chamber, the lower reciprocating shoe or screen, and means

for operating the fans and reciprocating the shoes, substantially as described. 3rd. In a grain cleaner and separator, the combination with the main frame, the hopper supported therein, the fan chamber, an air chamber arranged directly beneath the hopper, the fan and fan shaft having a pinion at one end and a sprocket at the other end, the eccentric studs carried by the sprocket and pinion, the elbow pivotally attached to the side boards of the hopper and chamber, the reciprocating shoe arranged beneath the said hopper and fan chamber, the lower ends of the elbow levers being pivotally connected to the said shoe, the upper ends of said levers being slotted and adapted to engage the eccentric studs of the pinion and sprocket, substantially as shown and described. 4th. In a grain cleaner and separator, the combination with the main frame, of the hopper, fan and air chambers arranged at the upper end of the main frame, the upper reciprocating shoe, the lower reciprocating shoe, the secondary fan chamber and fan arranged between the upper and lower shoes, the sprocket and pinion mounted upon the ends of the upper fan shaft, the sprocket and disc mounted upon the ends of the lower fan shaft, the eccentric studs arranged upon the said sprocket pinion and disc, the sprocket chain and the elbow levers, all arranged and adapted to operate substantially as described. 5th. In a grain cleaner and separator, the combination with the hopper, fan and air chambers, of the reciprocating shoe arranged beneath the hopper and air chamber, the fan arranged within the fan chamber and having a pinion arranged upon the end of the shaft, said pinion having an eccentric stub or pin, the elbow lever pivoted to the side board of the hopper, slotted at its upper end in order to engage the eccentric stud or pin, the lower end of said lever being pivotally connected to the reciprocating shoe, and the drive gear pivoted to the side of the main frame, and adapter to mesh with the pinion, all arranged and adapted to operate, substantially as shown and described. 6th. In a grain cleaner and separator, the combination with the main frame having the guide rollers, of the reciprocating shoe adapted to slide upon said rollers, the pendent bracket hanger, the supporting rod or shaft arranged in the said pendent bracket hanger, the spring attached to the shoe and adapted to pass beneath the said shaft or rod and hold the same in place in the pendent hanger, and means for reciprocating the said shoe, substantially as shown and described. 7th. In a grain cleaner and separator, the combination with the main frame, of the lever, fan chamber, and air chamber all having common side boards, the fan and fan shaft, said shaft having the pinion at one end and the sprocket at the opposite end, a drive gear meshing with the pinion, the eccentric studs carried by the pinion and sprocket, the elbow levers pivoted to the side boards slotted at their upper ends to engage the eccentric studs, the upper reciprocating shoe supported upon guide rollers of the main frame and pivotally connected to the lower ends of the elbow levers, the secondary fan chamber, the fan and fan shaft, the sprocket arranged upon one end of said shaft, and a disc arranged upon the opposite end, the sprocket chain connecting the two sprocket wheels, the elbow levers pivoted upon the sides of the secondary fan chamber and slotted at their upper ends, the eccentric studs carried by the sprocket and disc, the lower reciprocating shoe, the supporting rod or shaft, the pendent guide hanger, and the spring for holding the supporting rod or shaft in the said hanger, all arranged and adapted to operate, substantially as described.

No. 60,734. Car Coupler. (*Attelage de chars.*)



60734

Leopold Jacob, Waterbury, Connecticut, U.S.A., 26th July, 1898; 6 years. (Filed 16th July, 1898.)

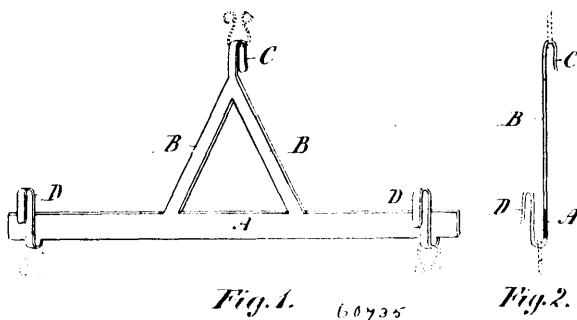
Claim.—1st. A car-coupling, comprising a draw-head having a central longitudinal opening, a pin support mounted in said opening, a coupling-pin normally resting on said support, a link, and a stop to limit the movement of said support, substantially as described. 2nd. A car-coupling, comprising a draw-head having a central longitudinal opening, a pin support mounted in said opening, said pin support having radially extending wings adapted to normally rest in recesses formed in said opening, a coupling-pin normally resting on said pin support, a link, serving normally to move said support rearwardly, a spring to move said support forwardly, and a stop removably located in said draw-head for limiting the forward movement of said support, substantially as described.

No. 60,735. Waistband Connecting Hook.
(*Agrafe pour jupes de robes.*)

Jennet Isabella Gilchrist, Poplar Hill, Nova Scotia, Canada, 26th July, 1898; 6 years. (Filed 18th July, 1898.)

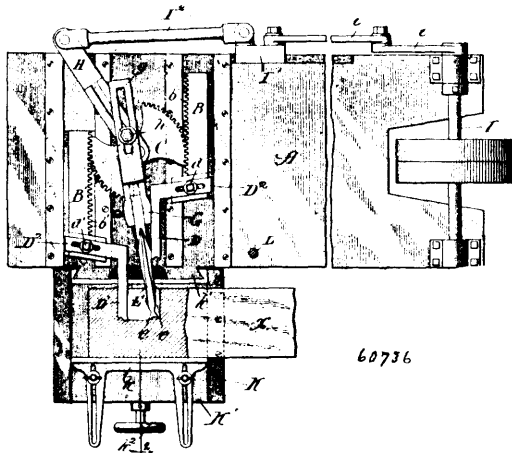
Claim.—1st. A skirt and bodice connecting device, comprising a metallic strip A, having converging struts B, B, extending from

the upper edge and terminating in a hook C, and hooks D, D, extending from the lower edge near the ends and bent upwardly and



downwardly in an opposite direction to the hook C, as and for the purpose set forth. 2nd. A skirt and bodice connecting device stamped integral from a sheet of metal and comprising a strip A, having an upper hook C, extending from the upper edge near the middle, and lower hooks D, D, near the ends extending from the lower edge of said strip, said upper and lower hooks bent in an opposite direction, substantially as set forth.

No. 60,736. Mortising Machine. (Machine à mortaiser.)

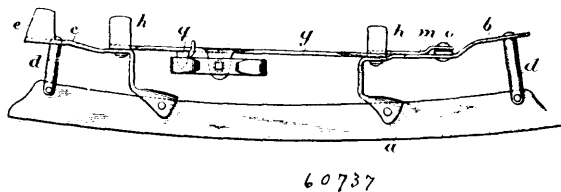


Walter Black, Blue Island, Illinois, U.S.A., 26th July, 1898; 6 years. (Filed 27th May, 1898.)

Claim.—1st. In a machine of the class described, the combination of two reciprocating slides having racks thereon and arranged to hold projecting cutter portions in line with their motion, an oscillating gear portion mounted between the same end engaging with the racks on the slide to impart the desired reciprocating motion, a pivotal tool-holder mounted independently and adjacent to the oscillating gear and provided with an extending arm portion such holder being arranged to vibrate a cutter, and means for securing the vibrating cutter holder portion to the gear portion whereby the desired proportional motions are given such parts, substantially as described. 2nd. In a machine of the class described, the combination of two reciprocating slides having racks thereon and arranged to hold projecting cutter portions in line with their motion, an oscillating gear portion mounted between the same and engaging with the racks on the slide to impart the desired reciprocating motion, a pivotal tool holder mounted independently and adjacent to the oscillating gear and provided with an extending arm portion, such holder being arranged to vibrate a cutter at right angles to the movement of the slides, means for securing the vibrating cutter holder portion to the gear portion whereby the desired proportional movements are given to such parts, means for holding the material, means for adjusting the material to the desired position, and means for feeding the material holder with the material into contact with the cutters, substantially as described. 3rd. In a machine of the class described, the combination of two reciprocating slides having racks thereon, cutter portions adjustably secured to the rack-slides, an oscillating gear portion mounted between the racks and engaging with the same so as to impart the desired reciprocating motion to slides, a pivotal tool holder mounted independently and adjacent to the oscillating gear and provided with an extending arm portion, such holder being arranged to vibrate a cutter, and means for adjustably securing the vibrating cutter holder to the gear portion so as to obtain variable vibratory motions of the vibrating cutter,

substantially as described. 4th. In a machine of the class described the combination of a vibrating or oscillating cutter and two reciprocating cutting chisels operating at substantially right angle thereto and having their shanks arranged substantially parallel with the chords of the semi-arcs through which the oscillating cutter vibrates, substantially as described. 5th. In a machine of the class described, the combination of an oscillating cutter, two reciprocating chisels operating substantially at right angles thereto, provided with a cutting stock *f r* removing the stock transversely of the hole and having such cutting stocks provided with right angular flanges for strengthening the cutters, substantially as described. 6th. In a machine of the class described, the combination of an oscillating cutter provided with a central longitudinal outwardly projecting rib and web portion at right angles thereto extending laterally and below the plane of the rib, such rib being arranged in a plane coincident with the side edge of the cutter, and two reciprocating cutting chisels operating substantially at right angles to the movement of the oscillating cutter provided with right angular extending flanges which lie in a plane substantially with the outer portion of the oscillating cutter, substantially as described. 7th. In combination with a machine of the class described, a reciprocating chisel provided with a cutting stock for removing the material transversely to the opening, a shank portion arranged at an obtuse angle with the cutting stock, a strengthening flange on and arranged at right angles to the cutting stock with its outer surface parallel or coincident with the outer cutting edge of the stock and having its inner side provided with a plurality of rasp-like projections, substantially as described. 8th. In a machine of the class described, a clamping device composed of a primary adjusting screw, an operating handle or lever pivotally connected therewith, and a holding plate or similar element in threaded engagement with such operating handle, substantially as described. 9th. In a machine of the class described, a clamping device composed of a primary adjusting screw provided with a hand wheel at the upper portion thereof, an operating lever handle pivotally connected to the adjusting screw at the lower portion thereof, a holding plate, and a second screw on the holding plate oppositely threaded and in engagement with such operating lever handle, substantially as described. 10th. In a machine of the class described, a clamping device composed of a primary adjusting screw provided with a hand wheel at the upper portion thereof, an operating lever handle pivotally connected to the adjusting screw at the lower portion thereof, a holding plate, a second screw on such holding plate oppositely threaded in engagement with such operating lever handle, and means to prevent the holding plate from rotating, substantially as described. 11th. In a machine of the class described, a clamping device composed of a primary adjusting screw provided with a hand wheel at the upper portion thereof, an operating lever handle pivotally connected with the primary adjusting screw at the lower portion thereof, a holding plate, a second screw on such holding plate oppositely threaded in engagement with a threaded opening in the operating lever handle, a bracketed arm provided with a split nut in which the primary adjusting screw is mounted, means for securing such bracketed arm to the bed of the machine, and a rod secured to the holding plate and passed through the bracketed arm to prevent the rotation of the holding plate, substantially as described.

No. 60,737. Skate. (Patin).

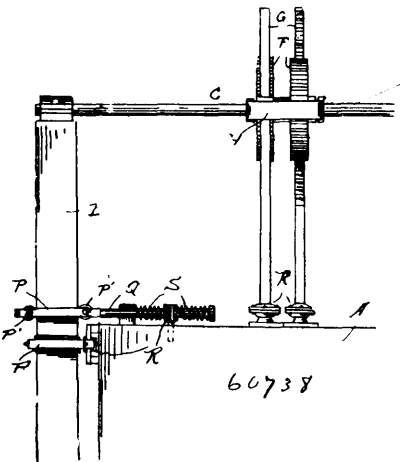


David Way Matthiesen, Stockholm, Sweden, 26th July, 1898; 6 years. (Filed 27th May, 1898.)

Claim.—1st. In fastening mechanism for skates, the combination with two longitudinal bars, one each side of the central line of the skate, movably connected to foot plates and provided with lugs or checkpieces and mechanism for moving them towards or from each other, of one or more pairs of links, one end of each link being connected to one of the said bars and the other ends of each pair of links being connected together and guided by a lengthwise slot in the corresponding footplate, substantially as and for the purpose set forth. 2nd. In a fastening mechanism for skates, the combination with two longitudinal bars, placed one on each side of the centre line of the skate, with their ends movably connected to foot-plates for the heel and toe and provided with check pieces or lugs and screw-mechanism for moving them towards or from each other, of one or more pairs of links, two ends one of each link in the pair being connected together and guided by a lengthwise slot or the like in the foot-plate, the other two ends one of each link in the pair being connected one to each bar, and a check-piece adapted to be placed in or out of engagement with ears, lever arms or the like on the said screw, substantially as and for the purpose set forth. 3rd. In a skate combination with the runner, of foot plates for the heel and toe, one part

of each being on a higher level than the other and resting on post a attached to the runner, the lower part of said foot plates being bent down and the end formed like a claw which grips around and is fastened to the upper edge of the runner, two longitudinal bars provided with check pieces and placed one on each side of the center-line of the skate, the ends of the said bars being movably connected with the said foot plates, means such as a screw-mechanism for moving said bars towards or from each other and one or more pairs of links, two ends (one of each link in the pair) being connected together and guided by a lengthwise slot in the corresponding foot-plate, the other ends of each pair connected one to each of the said longitudinal bars, substantially as and for the purpose set forth.

No. 60,738. Wave Motor. (Moteur à vagues.)

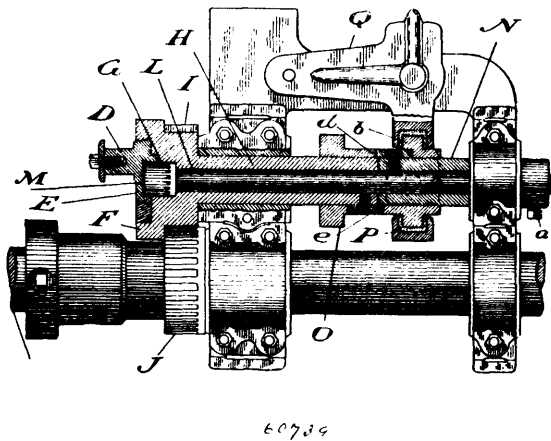


Wallace McDonald, Chicago Park, California, U.S.A., 26th July, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. In an apparatus for transmitting the movement of the waves, a float, guiding posts whereby it is retained in position and its movements made approximately vertical, shafts journaled upon the guide posts above opposite ends of the float, having sprocket wheels connected by a chain, said shafts having oppositely-disposed clutch mechanisms and pawls, gear wheels forming shells which inclose the clutch mechanisms, rack bars yieldingly connected with the float and yokes by which the teeth of the bars are retained in contact with the toothed gear wheel whereby the rise of the float acts through one of the gears to rotate the shaft in one direction and the fall of the float acts through the other gear to rotate it in the same direction. 2nd. In an apparatus for converting the vertical movements of waves to a rotary movement, a float adapted to rise and fall between guiding posts, shafts journaled horizontally upon said posts above opposite ends of the float, and having gear wheels, a chain-and-sprocket connection from one shaft to the other, rack bars with yokes whereby the teeth are maintained in contact and upon opposite sides of gear wheels respectively, said rack bars being flexibly connected with the float, clutch mechanism by which the upward movement of the float is transmitted through one of the gears to rotate the shafts in one direction, and the downward movement is transmitted through the other gear to continue the motion in the same direction. 3rd. In an apparatus for converting the vertical movement of waves to a rotary movement, a float adapted to rise and fall by the action of the waves, guiding posts whereby the float is prevented from considerable end or side movements, rack bars flexibly connected in pairs with the opposite ends of the float extending upwardly therefrom, shafts journaled upon the guiding posts and passing between the pairs of rack bars, gear wheels turnable upon the shaft having interior clutch mechanisms whereby the upward movement transmits power through one rack bar and gear wheel to rotate the shaft in one direction, and the downward movement acts through the other rack bar and gear wheel to continue the movement of the shaft in the same direction, sprocket wheels upon the shafts at each end of the float having corresponding clutch mechanisms whereby the movements of opposite ends of the float are transmitted so as to rotate the driving shafts continually in one direction, guiding rollers fixed to the angles of the float so as to travel against the sides of the guiding posts, said rollers being journaled in yokes and said yokes having swivel-joint connections

with the float whereby the latter is allowed a certain amount of movement within the enclosing posts and with relation thereto. 5th. In an apparatus for converting vertically-reciprocating motion to a circular motion, a rising and falling float adapted to be moved by the action of the waves, and mechanism whereby said movement is converted into a rotary motion, yokes inclosing the corner guide posts having pulleys journaled within them so as to travel upon opposite sides of the posts, said yokes having projecting arms or shanks with swivel connections between them and the float, and springs whereby the float is allowed to move sidewise or endwise with relation to the posts and guide rollers.

No. 60,739. Engine Cut-Off. (Detente de machines à vapeur.)



John Abell, Toronto, Ontario, Canada, 26th July, 1898; 6 years (Filed 9th May, 1898.)

Claim.—1st. In mechanism for the purpose described a slide having a wrist pin thereon on which is journaled the valve connecting rod in combination with a disc having guides thereon in which the said slide may move, a suitably journaled sleeve on which the said disc is fast, means for revolving the said sleeve from some moving part, a shaft within the sleeve, a connection between the shaft and the slide whereby the latter may be moved by the turning of the shaft, and means for turning the said shaft, substantially as and for the purpose specified. 2nd. In mechanism for the purpose described a slide having a wrist pin thereon on which is journaled the valve connecting rod in combination with a disc having guides thereon in which the said slide may move, a suitably journaled sleeve on which the said disc is fast, means for revolving the said sleeve from some moving part, a shaft within the sleeve, a pinion on the shaft, a rack on the slide with which the said pinion engages, and means for turning the shaft, substantially as and for the purpose specified. 3rd. In mechanism for the purpose described a slide having a wrist pin thereon on which is journaled the valve connecting rod in combination with a disc having guides thereon in which the said slide may move, a suitably journaled sleeve on which the said disc is fast, means for revolving the said sleeve from some moving part, a shaft within the sleeve, a connection between the shaft and the slide whereby the latter may be moved by the turning of the shaft, a sleeve secured on the shaft at the end of the first-mentioned sleeve, a longitudinally movable sleeve embracing the said sleeves and provided with oppositely inclined slots engaging the said blocks, substantially as and for the purpose specified. 4th. In mechanism for the purpose described a slide having a wrist pin thereon on which is journaled the valve connecting rod in combination with a disc having guides thereon in which the said slide may move, a suitably journaled sleeve on which the said disc is fast, means for revolving the said sleeve from some moving part, a shaft within the sleeve, a connection between the shaft and the slide whereby the latter may be moved by the turning of the shaft, a sleeve adjustably secured on the shaft at the end of the first-mentioned sleeve, a block projecting from each sleeve, a longitudinally movable sleeve embracing the said sleeves and provided with oppositely inclined slots engaging the said blocks, substantially as and for the purpose specified. 5th. In mechanism for the purpose described a slide having a wrist pin thereon on which is journaled the valve connecting rod in combination with a disc having guides thereon in which the said slide may move, a suitably journaled sleeve on which the said disc is fast, means for revolving the said sleeve from some moving part, a shaft within the sleeve, a connection between the shaft and the slide whereby the latter may be moved by the turning of the shaft, a sleeve secured on the shaft at the end of the first mentioned sleeve, a block projecting from each sleeve, a longitudinally movable sleeve embracing the said sleeves and provided with oppositely inclined slots engaging the said blocks, a collar formed on the said sleeve, a bell crank lever adapted to engage the said collar and means for moving the said lever and holding it as moved, substantially as and for the purpose specified. 6th. In mechanism for the purpose described a slide having a wrist pin thereon on which is journaled

the valve connecting rod in combination with a disc having guides thereon in which the said slide may move, a suitably journalled sleeve on which the said disc is fast, means for revolving the said sleeve from some moving part, a shaft within the sleeve, a pinion on the shaft, a rack on the slide with which the said pinion engages, a sleeve secured on the shaft at the end of the first mentioned sleeve, a block projecting from each sleeve, a longitudinally movable sleeve embracing the said sleeves and provided with oppositely inclined slots engaging the said blocks, substantially as and for the purpose specified. 7th. In mechanism for the purpose described the combination of a slide having a wrist pin thereon on which is journalled

the valve connecting rod, a disc having guides thereon in which the said slide may move, a suitably journalled sleeve on which said disc is fast, gearing between the said sleeve and the main shaft of the engine, a shaft within the sleeve, a connection between the shaft and the slide whereby the latter may be moved by the turning of the shaft a sleeve secured on the shaft at the end of the first mentioned sleeve, a block projecting from each sleeve, a longitudinally movable sleeve embracing the said sleeves and provided with oppositely inclined slots engaging the said blocks, and means for adjusting the said sleeve while the engine is in motion, substantially as and for the purpose specified.

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6535. T. F. FIRTH & SONS, LIMITED, Clifton Mills, Brighouse, Yorkshire, England. Carpets, Rugs, Horse-clothing and Blankets, 4th July, 1898.
6536. FISHER & COMPANY, Sydney, New South Wales, Australia. Medicinal Preparation, 4th July, 1898.
6537. PLYMOUTH ROCK GELATINE COMPANY, Boston, Mass., U.S.A. Gelatine, 7th July, 1898.
6538. THE BOAS MANUFACTURING COMPANY, St. Hyacinthe, Que. Brush Skirt Protector, 7th July, 1898.
6539. EDWARD CALM, New York, N. Y., U.S.A. Compound for use as an Anti-septic, Anti-ferment, Germicide, Bactericide, Preservative and Deodorant, 7th July, 1898.
6540. JAMES TELFER, ROBERT RAEBURN TELFER AND ALEXANDER TELFER, Glasgow, Scotland, trading as TELFER & HUEY. Food Substances, 8th July, 1898.
6541. JAMES TELFER, ROBERT RAEBURN TELFER AND ALEXANDER TELFER, of Glasgow, Scotland, trading as TELFER & HUEY. Food Substances, 8th July, 1898.
6542. VACUUM OIL COMPANY, Rochester, State of New York, U.S.A. Oils, 9th July, 1898.
6543. EMIL PEWNY & COMPANY, Grenoble, France. Kid, Lambskin and other leather or skin Gloves, 9th July, 1898.
6544. THOMAS ARTHUR MORRISON, Montreal, Que. Medicinal Preparations, 11th July, 1898.
6545. MANLIUS BULL, Winnipeg, Man. Polishing Soap, 12th July, 1898.
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6547. FRYE'S REMEDY COMPANY, Boston, Mass., U.S.A. Medicinal Compound, 12th July, 1898.
6548. WILLIAM G. McLAUGHLIN, Athens, Ont. McLaughlin's Asphalt Roof Paint, 14th July, 1898.
6549. T. B. ESCOTT, London, Ont. Tea, 16th July, 1898.
6550. DR. TIBBLES' VI-COCOA, LIMITED, London, England. Preparations of Cocoa, 16th July, 1898.
6551. WALTER CARSON & SONS, Battersea, London, England. Colours, Paints and Varnishes, 16th July, 1898.
6552. EDWARD COOK & COMPANY, London, England. General Trade Mark, 16th July, 1898.
6553. PERCY ALBERT REUSS, Sheffield, England, trading as JOHN CROSSLAND. Cutlery and Edge Tools, 16th July, 1898.
6554. W. D. & H. O. WILLS, LIMITED, Bristol, and Holborn Viaduct, London, England. Manufactured Tobacco, 16th July, 1898.
6555. THE McALLISTER MILLING COMPANY, Peterboro, Ont. Grain Products, 18th July, 1898.
6556. SIEYES, GENIN & COMPANY, Montreal, Que. Tobacco Pipes, 19th July, 1898.
6557. GEORGE BROWN, Toronto, Ont. Stainless Iodine Ointment, 23rd July, 1898.
6558. JOHN BURBIE BELL (partner in the firm of ANDREWS, BELL & COMPANY), Montreal, Que. Medical and Sanitary Compounds, 25th July, 1898.

6559. JOHN LEE JONES, Toronto, Ont. Pharmaceutical Preparations, 26th July, 1898.
6560. FRANCIS TUCKER & COMPANY, LIMITED, Kensington, London, England. Saponaceous Compound, 26th July, 1898.
6561. FRANCIS TUCKER & COMPANY, LIMITED, Kensington, London, England. Preparation or compound for loosening or removing old Paint or Varnish, 26th July, 1898.
6562. BRIDGEPORT BRASS COMPANY, Bridgeport, Conn., U.S.A. Wire, 27th July, 1898.
6563. BENJAMIN WESTWOOD, Toronto, Ont. Patent Medicine, 27th July, 1898.
6564. ROBERT WILLIAM HUDSON, Liverpool and West Bromwich, England, trading as R. S. HUDSON. A certain variety of Soap, 27th July, 1898.
6565. ROBERT WILLIAM HUDSON, Liverpool and West Bromwich, England, trading as R. S. HUDSON. A certain variety of Soap, 27th July, 1898.
6566. FARBENFABRIKEN VORMALS FRIEDRICH BAYER & COMPANY, Elberfeld, Prussia, Germany. Pharmaceutical Preparations, 27th July, 1898.
6567. FARBENFABRIKEN VORMALS FRIEDRICH BAYER & COMPANY, Elberfeld, Prussia, Germany. Pharmaceutical Preparations, 27th July, 1898.
6568. RYLANDS BROTHERS, LIMITED, Warrington, England. General Trade Mark, 28th July, 1898.
6569. RUDGE-WHITWORTH, LIMITED, Coventry, England. General Trade Mark, 28th July, 1898.
6570. JOSEPH TASSÉ, Montreal, Que. Cigars, Cigarettes and Tobaccos, 30th July, 1898.
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10031. ONE PANG OF SORROW. (Song.) Words and Music. By Bianco. Whaley, Royce & Co., Toronto, Ont., 2nd July, 1898.)
10032. RUPERT OF HENTZAU. By Anthony Hope. Henry Holt & Co., New York, N.Y., U.S.A., 2nd July, 1898.
10033. COMBINATION PHOTOGRAPH OF THE EARL AND COUNTESS OF ABERDEEN. Alfred G. Walford, Montreal, Que., 5th July, 1898.
10034. COMBINATION PHOTOGRAPH OF THE LATE HONOURABLE W. E. GLADSTONE. Alfred G. Walford, Montreal, Que., 5th July, 1898.
10035. THE STENOGRAPHER'S COMPANION. (Vol. I. No. 4. July, 1898.) Robert Goltman, Montreal, Que., 5th July, 1898.
10036. McALPINE'S SAINT JOHN CITY DIRECTORY, 1898-99. Thomas H. McAlpine, St. John, N.B., 6th July 1898.
10037. THE CANADIAN MAGAZINE. (July, 1898.) Ontario Publishing Co. (Ltd.), Toronto, Ont., 7th July, 1898.)
10038. ALEX. W. GRANT'S PRIVATE COMBINATION CABLE CODE. Alexander Wink Grant, Montreal, Que., 7th July, 1898.
10039. SILENT FORTUNE TELLER. (Chart.) Alonzo E. Dupell, Brooklyn, New York, N.Y., U.S.A., 8th July 1898.
10040. VICTORIA. (Military Chorus.) Words by Arthur Weir. Music by Louisa Morrison. Miss Louisa Morrison, Montreal, Que., 9th July, 1898.
10041. THE CORONA. (Photo.) William Thomson Freeland, Toronto, Ont., 9th July, 1898.
10042. CANADIAN LIVE STOCK ANNUAL AND GENTLEMAN'S YEAR BOOK. The Canadian Year Book Co., Toronto, Ont., 11th July, 1898.
10043. THE DELINEATOR. (A Journal of Fashion, Culture and Fine Arts, August, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th July, 1898.
10044. THE GLASS OF FASHION UP TO DATE. (August, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th July, 1898.
10045. METROPOLITAN FASHIONS. (August, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th July, 1898.
10046. THE TRADERS' BUSINESS HOUSE DIRECTORY. Archibald H. Brintnell, Toronto, Ont., 14th July, 1898.
10047. ONTARIAN FAMILIES. Genealogies of United Empire Loyalist, and other Pioneer Families of Upper Canada. Vol. II. Edward Marion Chadwick, Barrister, Toronto, Ont., 14th July, 1898.
10048. OFFICIAL TELEPHONE DIRECTORY, DISTRICT OF SOUTHERN QUEBEC, JULY, 1898. The Bell Telephone Company of Canada, (Ltd.), Montreal, Que., 14th July, 1898.
10049. DAU SOCIETY BLUE BOOK FOR MONTREAL, ELITE FAMILY DIRECTORY, CLUB MEMBERSHIP, 1898. Dau Publishing Co., Montreal, Que., 14th July, 1898.
10050. THE NEW BRUNSWICK MAGAZINE. (July, 1898.) William Kilby Reynolds, St. John, N.B., 14th July, 1898.
10051. PHOTOGRAPH OF R. N. JOHNSTON. (Oarsman) A. Edwards Brothers, Vancouver, B.C., 14th July, 1898.
10052. PHOTOGRAPH OF R. N. JOHNSTON (Oarsman.) B. Edwards Brothers, Vancouver, B.C., 14th July, 1898.
10053. PHOTOGRAPH OF J. GAUDAUR. (Oarsman.) Edwards Brothers, Vancouver, B.C., 14th July, 1898.
10054. LA CAISSE GÉNÉRALE. Fonds de Pension, Montréal, 1898. (Circulaire.) Oscar Guyon dit Lemoine, Montréal, Qué., 15 juillet 1898.

10055. OUR LADY OF THE SUNSHINE. Midsummer Annual, 1898. George N. Morang, Toronto, Ont., 15th July, 1898.
10056. THE DUPLEX FLAG, OR ONE AIM, ONE PURPOSE. (Poem.) By Ralph Mayne-Reade. Ralph Mayne-Reade, Quebec, Que., 19th July, 1898.
10057. SOUTH EASTERN PORTION OF EAST AND WEST KOOTENAY (Map.) William Stewart Drewry, Vancouver, B.C., 20th July, 1898.
10058. THE CONFLICT OF LAWS IN THE PROVINCE OF QUEBEC. By F. Laffeur. Camille Theoret, Montreal, Que., 20th July, 1898.
10059. AUTHORIZED BOOK-KEEPING EXERCISES FOR PUBLIC SCHOOL LEAVING AND FORM ONE HIGH SCHOOL EXAMINATIONS. The Copp, Clark Co. (Ltd.), Toronto, Ont., 20th July, 1898.
10060. THE VICTORIAN READERS. FOURTH READER. The W. J. Gage Co. (Ltd.), and The Copp, Clark Co. (Ltd.), Toronto, Ont., 20th July, 1898.
10061. AN ELEMENTARY TREATISE ON ARITHMETIC. For use in the Public and Model Schools of Ontario. By Wilson Taylor, B.A. William Briggs, Toronto, Ont., 21st July, 1898.
10062. MAKERS OF METHODISM. By W. H. Withrow. William Briggs, Toronto, Ont., 21st July, 1898.
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