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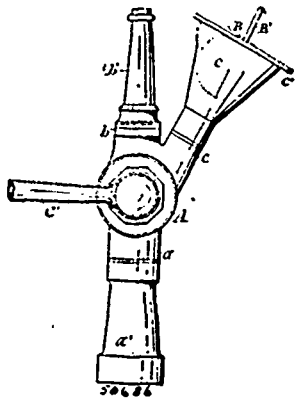
No. 50,686. Hose Nozzle. (*Lance de boyau.*)

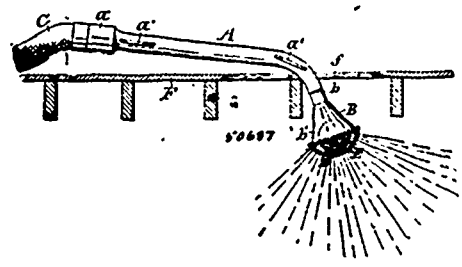


Charles Ver Treese Pollock, Greenwich, Connecticut, and Benjamin Frederick Merrett, Newark, New Jersey, both in the U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. In a combined hose and spraying nozzle, the combination with a hose nozzle adapted to deliver a straight stream, a spraying nozzle at an angle to and communicating with the said hose nozzle and provided with a flaring outlet, a spherical body within the flaring outlet, and means at the junction of the said nozzles whereby either (or both) may be closed as desired. 2nd. In a combined hose and spraying nozzle, the combination with the central part having an inlet, two outlets, and two parallel openings on a plane transverse to said inlet and outlets, of a cylindrical cut-off valve having a recess in the same transversely of its length seated in said parallel openings, means for rotating said valve, a flaring part on one of the said outlets, a ball loosely held within said part, and a guard over the mouth of said flaring part, as and for the purpose described. 3rd. In a combined hose and spraying nozzle, the combination with the central part having an inlet, two outlets, and two parallel openings on a plane transverse to said inlet and outlets, of a cylindrical cut-off valve having a recess in the same transversely of its length seated in said parallel openings, means for rotating said valve, a plurality of recesses in the casting around one of the said parallel openings, and a spring carried by the cut-off valve and adapted to enter the recesses, substantially as and for the purpose set forth. 4th. The combination with the central part of a combination nozzle having an inlet and two outlets, two parallel openings on a plane transverse to said inlet, of a cylindrical cut-off valve having a recess in the side of the same transversely of its length seated in said parallel openings, a handle for rotating said valve, recesses in the part surrounding one of the parallel openings, a spring mounted on one end of and carried by the cut-off valve to enter the recesses, a flaring part on one of the outlets, and a ball held within said flaring part, as and for the purpose described.

No. 50,687. Combined Pipe and Nozzle.

(*Lance et tuyau combinés.*)



Charles Ver Treese Pollock, Greenwich, Connecticut, U. S. A., 2nd December, 1895; 6 years.

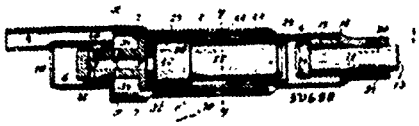
Claim.—1st. In a combined pipe and nozzle, the combination of a pipe bent intermediate of its length, and adapted to be connected to a line of hose, a nozzle with a flaring outlet on the end of said pipe, and a ball or other suitable spherical body within the flaring outlet, as set forth. 2nd. In a combined pipe and nozzle, the combination of a pipe bent intermediate of its length, and adapted to be connected to a line of hose, a nozzle with a flaring outlet on the end of said pipe, a ball within the flaring outlet and a guard extending across said outlet, substantially as set forth. 3rd. In a combined pipe and nozzle, the combination of a pipe having one end adapted to be connected to a line of hose and having a curved portion near its opposite end, a nozzle with a flaring outlet on the end of said pipe, a spherical body within the flaring outlet, and a guard extending across said outlet, substantially as described and shown. 4th. In a combined pipe and nozzle, the combination of a pipe having one end adapted to be connected to a line of hose and contracted in size toward the opposite end and provided with a curved portion near the latter end, a nozzle with a flaring outlet on the end of said pipe, a ball within the flaring outlet, a rim on the edge of the outlet, and a curved guard-piece secured at its ends to the said rim on diametrically opposite sides of the outlet, substantially as described and shown.

No. 50,688. Pneumatic Tool. (*Outil pneumatique.*)

James Wolstencroft, assignee of John G. Carlinet, both of Frankford, Philadelphia, Pennsylvania, U.S.A., 2nd December, 1895; 6 years.

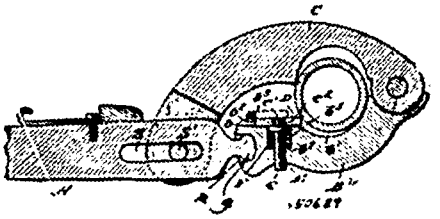
Claim.—1st. In a pneumatic tool, the combination with a suitable casing, of a reciprocating striker, and a reciprocating valve movably fitted at one end in the casing and at the other end movably fitted to said striker by a cup and plunger arrangement, substantially as described. 2nd. In a pneumatic tool, the combination with a suit-

able casing, of a reciprocating striker, and a reciprocating valve cup-shaped at one end surrounding the striker and having a reduced



portion at the other end provided with induction and eduction ports, substantially as described. 3rd. In a pneumatic tool, the combination with a suitable casing, of a reciprocating striker, and a reciprocating cup-shaped valve enclosing one end of the striker, said valve controlling the induction and eduction of pressure, and itself forming the actuating pressure chamber for the striker to be operated in, substantially as described. 4th. In a pneumatic tool, the combination with a cylinder having a tool support at one end and a valve casing at the other, of a striker fitted to and guided by said cylinder, and a longitudinally movable distributing valve independent of the cylinder, fitted to and guided by said striker at one end, and by said casing at the other end. 5th. In a pneumatic tool, the combination with a cylinder having a tool support at one end and a valve casing at the other, of a striker fitted to and guided for a portion of its length by said cylinder, a distributing valve independent of the cylinder having a cylindrical portion at one end surrounding and guided upon a remaining portion of the length of the striker, and valve guided at its other end by said casing. 6th. In a pneumatic tool, the combination of a casing, a movable striker within the casing, means for producing the striking movements of the striker, means for admitting fluid pressure between the striking end of the striker and the tool end of the casing, and means for exhausting pressure at said striking end, consisting in an independent exhaust port controlled by the movements of said striker. 7th. In a pneumatic tool, the combination of a casing, a movable striker therein, a distributing valve for controlling the induction and eduction of fluid pressure above the striker, a duct extending through the striker, also controlled by said valve for admitting fluid pressure below the striker, and means for exhausting said fluid below the striker.

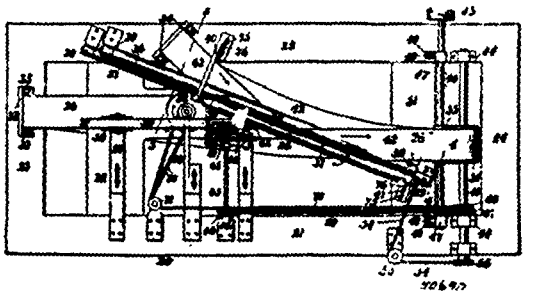
No. 50,689. Pipe Wrench, etc. (*Clé à tuyau, etc.*)



Charles Lenard Dunham and Cochran Craig Stover, both of Centerview, Ohio, U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. A pipe tongs of the class described, having the jaw provided with inwardly-projecting flanges or ears at the sides of the die-seat, said ears carrying lugs or arms projecting over the die-seat, the removable block-die or plate arranged under said lugs or arms, and the retaining-pin seated in the jaw and engaging an opening in the die, substantially as and for the purpose set forth. 2nd. A pipe tongs of the class described, having the jaw provided with the block-die or plate secured in position by a spring-actuated retaining-pin seated in the jaw and engaging the die, substantially as and for the purpose set forth. 3rd. A pipe tongs of the class described, having the jaw provided with projecting lugs or arms overhanging the die-seat, the removable block-die or plate set in said seat under the projecting lugs or arms and provided with the opening or perforation, and a spring-actuated retaining-pin seated in an opening in the jaw and projecting upwardly therefrom, and having its top end engaging the opening in the die, substantially as and for the purpose set forth. 4th. A pipe tongs of the class described, having the jaw provided with the die-seat having the transverse shoulder b^2, at its end and the overhanging lugs or arms, in combination with the block-die or plate set in said seat against said shoulder, and a retaining-pin seated in the jaw and projecting upwardly therefrom and engaging the die, substantially as and for the purpose set forth. 5th. A pipe tongs of the class described, having the jaw provided with the inwardly-projecting flanges or ears at the sides of the die-seat, said flanges or ears having the lugs or arms projecting over the die-seat, the block die or plate set in its seat between the projecting side flanges or ears and under the arms or lugs thereon, and having the opening or perforation, the retaining pin seated in the opening or perforation in the jaw and projecting therefrom into engagement with the opening in the die, and the actuating spring housed in the opening in the jaw, substantially as and for the purpose set forth. 6th. A pipe tongs of the class described, having the jaw provided with the die-seat, and with the projecting lugs or arms overhanging the die-seat, the jaw being provided at the die-seat with an opening or perforation having an interior annular shoulder, the block-die or plate adapted to be set in the die-seat under the overhanging lugs or arms, and provided with the opening or perforation, the retaining-pin seated in the opening in the jaw and having its top end projecting therefrom and engaging the opening in the die, said pin being provided with a circumferential flange or shoulder, and a coiled spring mounted upon said retaining-pin, substantially as and for the purpose set forth. 7th. A pipe tongs of the class described, having the jaw provided with projecting lugs or arms overhanging the die-seat, and with an opening or perforation at the die-seat, the block-die or plate seated under said overhanging lugs or arms, and provided with an opening or perforation, and an adjustable retaining-pin seated in the opening in the jaw, and having its top end projecting into engagement with the opening in the die, substantially as and for the purpose set forth. 8th. An improved pipe tongs of the class described, embodying the operating lever or handle, the jaw C pivotally connected with said lever, and the jaw B pivotally connected to the outer end of the jaw C, and having an engagement or bearing with the inner end of the operating lever, the operating lever or handle having the elongated bearing opening or slot *s*, at the pivotal point of connection with the jaw C, substantially as and for the purpose set forth. 9th. An improved pipe tongs of the class described, comprising the lever, the main jaw pivotally carried by the lever, the supplementary jaw pivotally connected at its outer end to the main jaw, and having at its rear end a pivotal joint with the end of the lever, the jaws being provided in their inner faces with the curved or segmental recesses and the supplementary jaw being provided with projecting lugs or arms overhanging the die-seat, the block-die or plate set within its seat under said lugs or arms, and with relation to the curved or segmental recess, and a retaining-pin seated in the jaw and projecting therefrom into engagement with the die, substantially as and for the purpose set forth.

No. 50,690. Cigarette Machine. (*Machine à cigarette.*)

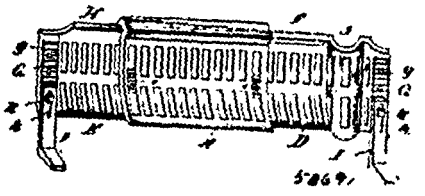


William Maxfield and Edmond Congar Brown, both of Brooklyn, New York, U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. In cigarette machines, the combination with a travelling apron suitably supported, a still bar, fixedly mounted on proper supports, a belt wound on part of its surface, a roller, all in operative relation with one another and means for conducting the tobacco into the space between the roller and said apron and belt, substantially as set forth. 2nd. In cigarette machines, the combination with two still bars, fixedly mounted on proper supports each having a belt wound on part of its surface, a roller, all in operative relation with one another and means for conducting tobacco into the space between said belts at their point of contact with said still bars and the roller, substantially as set forth. 3rd. In cigarette machines, the combination with a travelling belt suitably supported, a still bar, a second belt wound on part of its surface, a roller provided with a conical forward end portion all in operative relation with one another and means for introducing tobacco into the space between said conical end portion and said belts were so supported, substantially as set forth. 4th. In cigarette machines, the combination with a travelling belt suitably supported, a still bar, a second belt wound on part of its surface, a roller provided with a conical forward end portion, all in operative relation with one another and an inclined disc adjusted to conduct tobacco towards said conical end portion, substantially as set forth. 5th. In cigarette machines, the combination with a travelling belt suitably supported, a still bar, a second belt wound on part of its surface, and a roller, all in operative relation with one another, of means for holding said belts in said frictional contact with each other and mechanism for propelling said belts, substantially as set forth. 6th. In cigarette machines, the combination with a travelling belt suitably supported, a still bar, a second belt wound on part of its surface, a roller, all in operative relation with one another, means for conducting tobacco into the space between said roller and the operative portions of said belts, and appliances for varying the relative position between said roller and said operative portions of the belts, substantially as set forth. 7th. In cigarette machines, the combination with a roller and two still bars, each provided with a suitable belt, all in operative relation with one another, of mechanism or conducting tobacco into the space between roller and belts, and means for guiding the wrapping material towards the roller obliquely, substantially as set forth. 8th. In cigarette machines, the combination with a

travelling apron suitably supported, a still bar, a belt wound spirally around part of its surface, and a roller, all in operative relation with one another, the roller being placed obliquely with reference to the direction in which the apron travels, of means for conducting the tobacco into the space between the roller and said apron and belt, substantially as set forth.

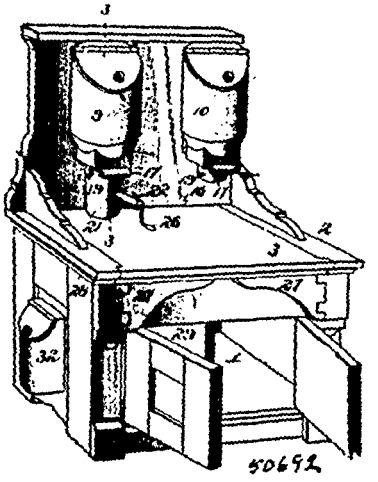
No. 50,691. Front Grate for Cook Stoves.
(Grille de poêle de cuisine.)



Fay O. Farwell and The Adams Company, both of Dubuque, Iowa, U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. A front grate for cook stoves, consisting of a main plate, air holes through said main plate, supporting legs for sustaining the grate at the required height in the stove and means for adjustably attaching said legs to the said grate, as and for the purposes shown. 2nd. In a cook stove, a front grate consisting of a main plate having a dovetail running longitudinally along its upper edge, air openings through said plate, one or more wings provided with tenons adapted to engage the dovetail of the main plate, supporting legs for sustaining the grate at the required height in the stove, and means for adjustably attaching said legs to said grate, for the purposes shown. 3rd. A front grate for cook stoves, consisting of a main plate extending wings, one of which wings is supplied with a vertical semi-circular portion, and means for adjustably attaching said wings to the main plate, substantially as described and shown. 4th. An adjustable front grate for cooking stoves, consisting of a main plate with a longitudinal dovetail along the upper inner edge of said plate, two wings with their upper edges formed into tenons, for engaging with said dovetail in said plate, and having their outer ends corrugated or roughened, one of said wings having a vertical semi-circular portion and supporting legs adjustably secured to the outer ends of said wings, all combined substantially as described and shown.

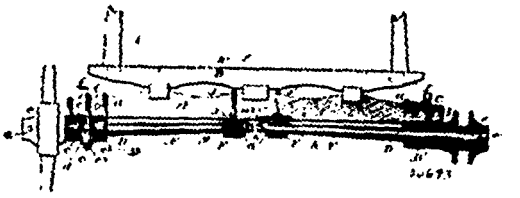
No. 50,692. Kitchen Cabinet. *(Buffet de cuisine.)*



John Fisher, George W. Jones, Theodore Parker and Millard Perry, all of Springdale, Arkansas, U.S.A., 2nd December, 1895; 6 years.

Claim.—A kitchen cabinet having a body portion provided below the plane of its top with a depressed receptacle forming a sink, said top having a removable section fitted to slide forwardly and rearwardly and constituting a cover for the sink, swinging brackets on the front of the cabinet for supporting the sliding section when extended to form a table or biscuit board, bins supported by a bracket rising from the top of the cabinet in rear of the sink, said bins having their lower outlet ends arranged adjacent to the plane of the top of the cabinet, whereby a receptacle to receive flour or meal must be arranged in the sink and the movable section of the top extended to expose the same, substantially as specified.

No. 50,693. Vehicle. *(Voiture.)*



John Henry Curl and Clay Faulkner, assignees of Gailbreath Cummins, all of MacMinnville, Tennessee, U.S.A., 2nd December, 1895; 6 years.

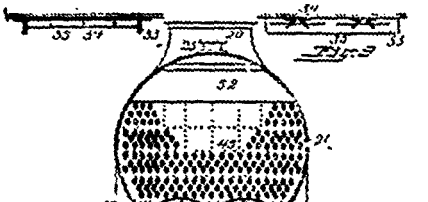
Claim.—1st. The combination with a revoluble axle, of an outer bearing therefor and an inner pivotally adjustable bearing, substantially as set forth. 2nd. The combination with a revoluble axle, of an outer bearing therefor, an inner pivotally adjustable bearing, and devices for securing the latter in a fixed position after it has been adjusted, substantially as set forth. 3rd. The combination with a revoluble axle, of an outer bearing, and an inner bearing constructed and adapted to be adjusted horizontally and pivotally and prevented from displacement laterally and longitudinally, substantially as set forth. 4th. The combination with a revoluble axle, of an outer bearing, an inner bearing, a fixed plate having a perforation and a projection on the inner bearing adapted to enter said perforation and means for securing said bearing in a fixed position, substantially as set forth. 5th. The combination with a fixed axle and a revoluble axle, of outer bearings for the revoluble axle secured to the fixed axle, a perforated plate secured to the fixed axle, a bearing block for the inner end of the revoluble axle, a projection on said bearing block entering said perforated plate, and a strap or clip for securing said bearing block to the fixed axle, substantially as set forth. 6th. The combination with an outer and an inner bearing and a revoluble axle mounted therein, of a collar mounted therein, of a collar mounted on the end of the axle and having a notched cam-shaped end and a pin passing through the axle and adapted to enter one of said notches, substantially as set forth. 7th. The combination with a fixed axle, of an outer bearing secured thereto, an inner pivotally adjustable bearing, an axle mounted in said bearings, ears projecting from the inner bearing, and a strap or clip passing through said ears and over the fixed axle, substantially as set forth. 8th. The combination with a fixed axle, of a sleeve on the end thereof, a block or plate made integral with said sleeve and forming the upper portion of a bearing for a revoluble axle, a block forming the lower portion of said bearing, ears projecting from one portion of said bearing, and a strap or clip passing through said ears and over the said sleeve, substantially as set forth.

No. 50,694. Composition of Artificial Stone, etc.
(Composition de pierre artificielle, etc.)

Frederick Brown and John King, both of Fort William, Ontario, Canada, 2nd December, 1895; 6 years.

Claim.—1st. A composition for artificial stone composed of cement, sand and lime combined with saccharine matter, carbonate of soda, silicate of soda alum and cloride of calcium, substantially in the proportions and for the purpose set forth. 2nd. The process herein described for manufacturing artificial stones or brick for building purposes, tiles or paving, and all other purposes to which the same can be applied using a composition of cement, sand and lime combined with saccharine matter, carbonate of soda, silicate of soda, alum and cloride of calcium, substantially mixed and combined in the proportions and manner herein specified and set forth and forming the composition into desired forms, substantially as described and for the purposes set forth.

No. 50,695. Steam Boiler. *(Chaudière à vapeur.)*



John MacCormack, Bayonne, New Jersey, U.S.A., 2nd December, 1895; 6 years.

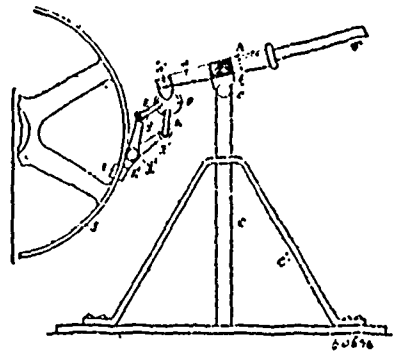
Claim.—1st. In a water-tube boiler, the combination with the cylindrical water-heads, water-tubes extending from the fire-sheet

of one of said heads to that of the other, a mantle or shield enclosing said tubes, and choking angle-plates connected to said shield and fitted to said heads, suitable doors being provided in said shield and plates if desired. 2nd. In a water-tube boiler, the combination with water-heads and the connecting tubes, of a grate arranged between said heads, and a shield enclosing the space between said heads and consisting of a sheet metal exterior, provided interiorly with reinforcing angles, and suitable means for retaining in place a layer of non-combustible non-heat-conducting material. 3rd. The combination with the water-heads and connecting tubes, of the mantle or shield extending from one head to the other over said tubes, of a pan in which said heads and mantle rest and are confined in their proper relative positions, substantially as set forth. 4th. The combination with the water-heads, the connecting tubes and the mantle, of the grate, the angle-bars extending across from one side of the mantle to the other at the rear of the grate, and the bridge-wall built in between and held in place by said angle-bars, substantially as set forth. 5th. The combination with the water-heads, the water-tubes extending from one head to the other and the mantle located as described, of baffle-plates composed of fire-bricks placed upon said tubes at different elevations and extending from one side of the mantle to the other, and means for preventing longitudinal movement of the fire bricks, as shown and described. 6th. The combination with the water-tubes and the mantle, of baffle-plates consisting of fire bricks placed upon said tubes, and bars secured at their ends in the mantle and lying in grooves in said bricks to hold them in place. 7th. In an internally-fired water-tube boiler, the combination with water-heads, of a steam shell extending from one head to the other, water-tubes located between said shell and the grate, and larger water-tubes connecting the water-heads together near their bottoms to provide a perfect circulation of water in the boiler. 8th. In an internally-fired water-tube boiler, the combination with water-heads, of several horizontal series of tubes extending from one head to the other, a steam-shell also extending from one head to the other and partially surrounded by said tubes, and several horizontal baffle-plates extending alternately from the opposite water-heads between said tubes, the uppermost of said plates being divided by said shell forcing the products of combustion along the sides thereof. 9th. In a water-tube boiler, the combination with a water-head at each end thereof, of tubes connecting said heads together, and a series of removable, hooked braces, substantially as described, connecting the outer end of a water-head to the flue-sheet thereof, either by perforated strong-back angles as described or otherwise, as and for the purpose set forth. 10th. In a wate-tube boiler, the combination with a water-head at each end thereof, of tubes connecting the water-heads and located in horizontal groups spaced apart, strong-back angles secured horizontally to the outer ends of the heads, strong-back angles riveted to the flue-sheet in a line with the spaces between groups of tubes, and braces connecting said end to the flue-sheet by attachment thereof to opposite strong-back angles, substantially as set forth. 11th. In a water-tube boiler, the combination with a water-head at each end thereof, of water-tubes connected at their ends in the flue-sheets of said heads, a steam-shell also connected to the flue-sheets of said heads, and toggle-braces connecting the outer end of each head to the flue-sheet and to the steam-shell and supplemented or not as desired by a through brace, substantially as set forth. 12th. In a water-tube boiler, the combination with water-heads of which the outer end is separated from the flue-sheet sufficiently to admit a man, of a steam-shell connected at the ends in the flue-sheets of said heads and provided with a man-hole, and removable braces connecting the outer end of each water-head to its respective flue-sheet and to the steam-shell if desired, substantially as set forth. 13th. In a water-tube boiler, substantially as described, the combination with a water-head, of a perforated strong-back angles secured to the outer end and flue-sheet respectively of said head, and toggle-hook braces each having a hook and shoulder at both ends, the former for insertion into said perforations and the latter to bear against the edge of said angles for the purpose set forth. 14th. In a water-tube boiler provided with water-heads, the combination with a tube opening at each end into said heads, of a plug at each end of said tube provided with means extending to the exterior of the boiler either through hand-hole plates or otherwise, whereby the plug may be forced into the tube without interfering with the operation of the boiler. 15th. In a water-tube boiler, the combination with water-heads substantially as described, of water-tubes rigidly connected at their ends in the flue-sheets of said heads and thereby bracing said sheets one against the other and having their ends belled, hand-holes in the outer ends of said heads opposite each tube, and a plug for each of said belled ends provided with a screw stem hinged or not as desired, which turns through a socket in its respective hand-hole plate of any desired form or consisting of a hollow bolt used for holding the said plate in place, substantially as set forth.

No. 50,696. Lever for Turning Steam Engines off their Dead Centres. (*Lévier pour détourner les machines à vapeur de leur centre.*)

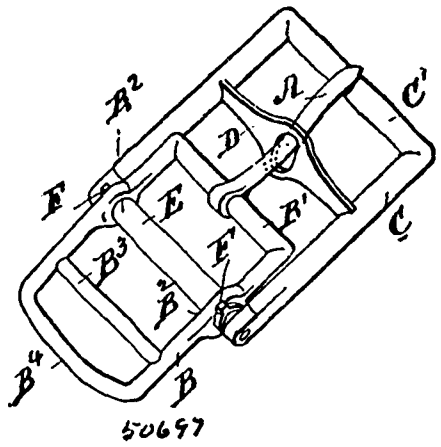
John Donnelly, St. Henri, Quebec, Quebec, Canada, 2nd December, 1895; 6 years.

Claim.—On a lever for turning steam engines off their dead centres, the combination of a lever A, having cross pieces b and a^1, two pieces a^2 and a^3, provided with the rings D and D^1, holding the ones E, to which is secured the levers g and g^1, of the grapples G,



with a suitable stand C^1, and socket bar a^4, substantially as described and for the purposes set forth.

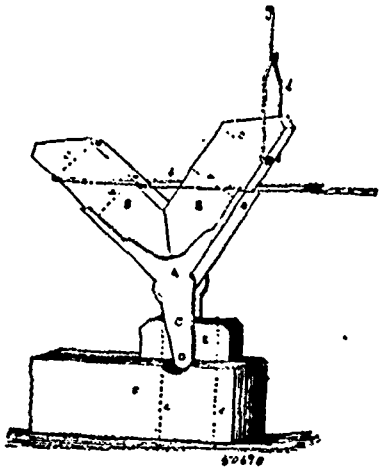
No. 50,697. Buckle. (*Boucle.*)



Frank B. Conobise, New York, State of New York, U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. A buckle consisting of a swinging-frame having engaging means pivoted thereon, and of a main frame upon which the swinging-frame is mounted, substantially as described. 2nd. A buckle consisting of a swinging-frame having a pivoted engaging means, and of a main frame upon which the swinging-frame is mounted, in combination with means to guide the pivoted engaging means when the swinging-frame is rocked, substantially as described. 3rd. A buckle consisting of a swinging-frame having a pivoted engaging means, and of a main-frame upon which the swinging frame is mounted, said main-frame provided with a cross-bar for guiding the pivoted engaging means when the swinging-frame is rocked, substantially as described. 4th. A buckle consisting of a swinging-frame having a pivoted tongue, and of a main-frame upon which the swinging-frame is mounted, said main-frame provided with a cross-bar having an opening therethrough, and said pivoted tongue passing through the opening of the cross-bar, substantially as described. 5th. A buckle consisting of a swinging-frame having a pivoted engaging means, a main-frame upon which the swinging-frame is mounted, means to guide the pivoted engaging means when the swinging-frame is rocked, and means to limit the movement of the swinging-frame, substantially as described. 6th. A buckle consisting of a swinging-frame having a pivoted engaging means upon one end of said frame and an opening in the other end of said frame, in combination with a main-frame upon which the swinging-frame is mounted between the engaging means and the opening, substantially as described. 7th. A buckle consisting of a swinging-frame having openings in the side-bars thereof and a pivoted tongue mounted upon its front bar, and of a main-frame having a rear bar upon which the swinging-frame is mounted by means of the aforesaid openings, such main-frame having a front bar and a perforated guiding-bar whereby the pivoted tongue is guided, substantially as described.

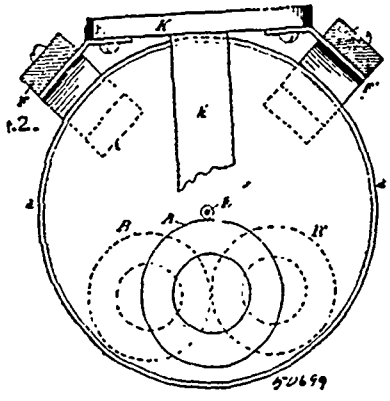
No. 50,698. Triangle for Operating Oil and Water Wells. (*Triangle pour actionner les puits à l'huile ou à eau.*)



Peter Babcock, Petrolia, Ontario, Canada, 2nd December, 1895; 6 years.

Claim.—1st. The construction of the casting A, and the mode of attachment of the same to the sill F, substantially as and for the purpose set forth. 2nd. The combination of the casting A, with extension blocks B, B, and clevises *a*, *b*, substantially as and for the purpose hereinbefore set forth.

No. 50,699. Method of and Means for Measuring the Energy of Alternating Electric Currents. (*Méthode et moyen de mesurer l'energie de courant électrique alternatif.*)



Oliver B. Shallenberger, Rochester, Pennsylvania, U.S.A., 2nd December, 1895; 6 years.

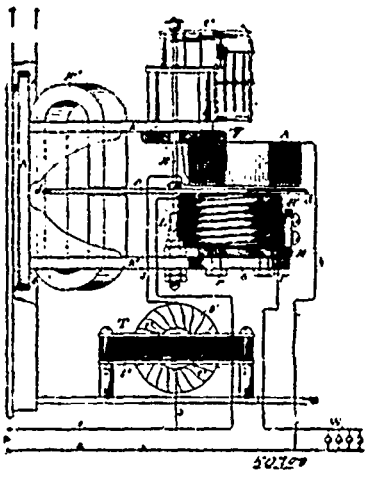
Claim.—1st. The method of measuring the energy of multiphase alternating currents, which consists in the creation to two magnetic fields, one of which is proportional to and in phase with the current in one of the circuits, and the other proportional to and in phase with an electromotive force in quadrature with that of the said circuit, establishing thereby a resultant inductive influence, and producing thereby mechanical effects of definite value. 2nd. The method of measuring the energy transmitted by alternating currents which consists in establishing two alternating magnetic fields which are respectively proportional in strength to the current and to the electromotive force, and which differ in phase by the complement of the angle of current lag in the work-circuit, producing thereby a resultant inductive influence, subjecting a movable conductor to said inductive influence, and indicating the resulting motion against a definite opposing force. 3rd. The method of measuring the energy transmitted by alternating currents, which consists in subjecting a movable conductor to two opposing forces, one approximately proportional to the product of current, electromotive force and the sine of the phase angle between them, and the other proportional to the resulting motion, and indicating the amount of such motion. 4th. The method of measuring the energy transmitted by alternating currents, which consists in subjecting a movable conductor to two opposing forces, one force approximately proportional to the product of the work-current, an electromotive force in quadrature with that of the work-circuit and proportional thereto, and the sine of the phase angle between said electromotive force and said current, and the other force proportional to the resulting movement or speed, and indicating, registering or recording the total movement. 5th. The method of measuring the energy transmitted by alternating currents which consists in producing an alternating magnetic field proportional to the strength of the current in the work-circuit, producing a second alternating magnetic field proportional to an electromotive force of known value with reference to that of the work-circuit and differing in phase from the first-named field by the complement of the angle of current lag in the work-circuit, establishing by said two fields a resultant inductive influence, subjecting a movable conductor thereto and indicating the resulting motion against a definite opposing force. 6th. The method of measuring the energy transmitted by multiphase alternating currents over three or more conductors, which consists in establishing a magnet field proportional in strength to the current delivered over one conductor to the work-circuit, deriving a current from two other conductors between which the electromotive force is in quadrature with that impressed upon the first-named conductor, and establishing by such current a second field, producing a resultant shifting field by these two component fields, and by inductive influence of the shifting field producing mechanical motion against a retarding force directly proportional to the rate of motion, and registering the amount of such motion. 7th. The method of obtaining an electromotive force in quadrature with that impressed upon a given conductor in a multiphase system of distribution, which consists in combining in series the electromotive forces of two circuits in which the phases af electromotive force differ by equal angles of opposite sine from the electromotive force impressed upon the first-named conductor. 8th. The method of measuring the energy transmitted by alternating currents which consists in creating a magnetic field by the resultant of two component currents differing in phase and creating a second field by currents due to the algebraic sum of the electromotive forces producing said component currents, producing a resultant shifting field by said two fields, and by said shifting field producing motion proportional to the energy transmitted. 9th. The method of impressing upon the shunt circuit of an electric meter for multiphase currents, an electromotive force in quadrature with that impressed upon the series circuit, which consists in combining in series the electromotive forces of two circuits in which the phases of electromotive force differ by equal and opposite angles from that impressed upon said series circuit, and applying the resultant electromotive force to said shunt circuit. 10th. The method of measuring energy transmitted over a multiphase alternating current system, which consists in producing an alternating magnetic field proportional to the resultant of two component currents of the system, producing a second magnetic field proportional to and in phase with the electromotive force obtained by the addition of the electromotive forces to which the component currents are due, establishing thereby a resultant shifting magnetic field, subjecting a rotary armature to the inductive action thereof and recording, registering or indicating the movement of such armature against an opposing force. 11th. The method of measuring the energy of multiphase alternating currents, which consists in inducing in a movable closed conductor currents caused by the combined inductive effect of a work-current and a shunted current which, when no lag exists in said work-current, is in quadrature therewith, and indicating the resulting motion against a known opposing force. 12th. In an electric meter for alternating currents, the combination of a rotating disc, two coils or sets of coils having their axes directed toward said disc and located in different circumferential positions, one of said coils being wound with relatively small wire adapted for shunt circuit connection, and the other coil or set of coils being wound with thick wire adapted for series connection, a non-inductive resistance included in series with the shunt-connected coil, and a retarding device consisting of a magnet whose poles embrace said disc and are directed toward opposite sides of said disc. 13th. An electric meter consisting of the combination of a disc of conducting material, a shaft carrying the same, a counting train driven by said shaft, means for producing two magnetic fields differing in phase and the axes of which traverse said disc at points so located that the two fields combine to form a resultant shifting field, and a retarding device opposing to the rotation of the shaft, a force proportional to the speed. 14th. In an electric meter for alternating currents, the combination of a disc of conducting material, a shaft carrying the same, a solenoid having its axis approximately perpendicular to the plane of the disc, a second solenoid or set of solenoids having their axes directed toward said disc at another point or points, than the first, and means for adjusting the relative positions of said solenoids, substantially as described. 15th. In a meter for measuring alternating electric currents, the combination with the frame having horizontal arms k^1, k^2, of the coils A, B, and B^1, supported from said arms, and the clamping devices for securing them to said arms, substantially as described. 16th. In an electric meter for alternating currents, the combination of a supporting frame, having a horizontal arm k^2, and the coils B, and B^1, carried thereby and the adjustable support for said coils carried upon said arm, substantially as described. 17th. In a meter for alternating currents, the combination of actuating coils and an armature subjected to the influence of said coils consisting of a disc of conducting material, the dimensions of which, parallel to its axis, are greater than the thickness of the metal from which it is formed, whereby vibration in a direction

normal to its surface is prevented. 18th. In a meter for alternating electric currents, an actuating device consisting of a thin rotating disc of conducting material, having a flange or bead formed upon its periphery, a shunt-connected coil upon one side of said disc, and a series-connected coil upon the opposite side of said disc, said coils having their windings approximately parallel to said disc. 19th. In a meter for multiphase alternating electric currents, the combination with a fixed coil adapted to be connected in series with one of the circuits, of a fixed coil having a relatively large number of turns and adapted to be connected across a second circuit, a movable armature having an independent closed circuit in inductive relation to both of said coils, and an adjustable non-inductive resistance connected in series with the shunt-connected coil. 20th. A meter for multiphase alternating electric currents, comprising the combination of a coil receiving currents proportional to the electromotive force upon one of the circuits, a second coil receiving currents proportional to the currents flowing in a second circuit, the phase of the currents in the first coil being practically in quadrature with the currents in the second coil when no lag exists in the current flowing to the work-circuit, an armature comprising a closed conducting circuit, and an indicating or registering device operated oy the movements of the armature. 21st. A meter for multiphase alternating electric currents, comprising a series coil traversed by the currents flowing in one of the circuits, and a shunt circuit comprising a coil and a non-inductive resistance therewith, and connected across a second circuit whose impressed electromotive force is in quadrature with that impressed upon the series circuit. 22nd. In a meter for measuring multiphase alternating electric currents, the combination of a coil connected across one of the work-circuits, a second coil connected in series with the second work-circuit, an armature consisting of a rotary disc toward different points of which said coils are directed, and a registering or indicating device operated by the movements of said armature. 23rd. The combination with the circuits of a multiphase system of distribution by alternating currents, of a meter containing two actuating coils of which one is traversed by currents due to the resultant of two component currents differing in phase, and the other is traversed by currents due to the algebraic sum of the electromotive forces producing the component currents. 24th. In combination with a system of alternating current distribution for multiphase currents in which one conductor is common to two circuits, a meter having an actuating device consisting of an armature, an actuating coil connected in the common conductor, and a second actuating coil connected in shunt between two other conductors. 25th. In a system of multiphase electrical distribution, a meter in which the actuating device comprises a coil connected in series with a circuit carrying the resultant of two currents differing in phase, and a second coil connected in shunt between two conductors carrying the components forming that resultant current. 26th. The combination with the circuits of a multiphase system of alternating current distribution, of a meter having one coil or a set of coils connected in series with one of the conductors carrying a current supplied by two windings of the source, each winding having one terminal connected to said conductor, and a shunt circuit including another coil or set of coils of the meter connected to the remaining terminals of said windings. 27th. In an electric meter for alternating currents, an armature having a closed conducting circuit, means for producing a shifting field to which the armature is subjected, and means for inducing eddy currents therein directly proportional to the rate of movement of the armature. 28th. An actuating device for use upon multiphase systems of alternating current distribution consisting of an armature, and two actuating circuits for driving said armature, one of said actuating circuits having a relatively high non-inductive resistance and adapted to be connected in shunt and the other of said circuits being of relatively low resistance and adapted to be connected in series, said circuits acting conjointly when traversed by alternating currents differing in phase to produce rotation of said armature. 29th. In combination with the circuits of a multiphase system of alternating current distribution, an actuating device consisting of an armature having a closed conducting circuit, an actuating coil of relatively high non inductive resistance connected between the conductors of one branch of the system, a second actuating coil of relatively low resistance connected in a branch of the system other than that across which the first named coil is connected, the impressed electromotive forces upon the two coils being in quadrature.

No. 50,700. Method of and Means for Measuring Alternating Electric Currents. (*Méthode et moyen de mesurer le courant électrique alternatif.*)

Oliver B. Shallenberger, Rochester, Pennsylvania, U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. The method of measuring the energy transmitted by single phase alternating electric currents, which consists in establishing two alternating magnetic fields, one proportional to, and in phase with the current transmitted to the work circuit, the other derived from, and proportional to the impressed electromotive force of the work circuit and lagging approximately ninety degrees behind that electromotive force, producing by such two magnetic fields a resultant shifting magnetic field, producing by such resultant field mechanical motion against a force which is proportional to the speed, and registering such motion. 2nd. The method of measuring the energy transmitted by single phase alternating electric currents, which consists in developing two alternating magnetic fields, one proportional



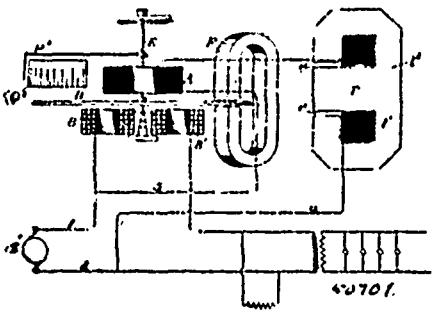
to and having a definite phase relation to the current transmitted to the work circuit, the other derived from, and proportional to the impressed electromotive force of the work circuit and under varying conditions of lag in the work circuit differing from the first field by approximately the complement of the angle of such lag, producing by such two magnetic fields a resultant shifting magnetic field, producing by such resultant field mechanical motion against a force which is approximately proportional to the speed, and registering such motion. 3rd. In an electric meter for alternating currents, operated by inductive effects of currents in a shunt-connected and a series connected coil, the method of compensating for changes of periodicity which consists in inductively varying the shunt current in an inverse ratio to the periodicity. 4th. In an electric meter, the combination of an actuating coil and its circuit, and an inductance coil comprising a winding of insulated wire and an inclosing subdivided iron core having an interruption in the magnetic circuit, the reluctance across said interruption being greatly in excess of that of the remaining portion of the magnetic circuit, the total reluctance being sufficiently low to render the coefficient of self-induction high relatively to that of the winding alone, the counter electromotive force of said inductance coil constituting the principal element of impedance in said circuit. 5th. In an electric meter for alternating currents, the combination of a movable element having a closed conducting circuit of non-inductive form, a derived circuit, an actuating coil included thereinand operating proportionally to the current therein, and a coil connected in said derived circuit having a practically constant coefficient of self induction and the inductance of which constitutes the greater part of the total impedance of said derived circuit. 6th The combination with an electric motor operated by alternating currents, of a coil of high inductance and relatively low resistance, connected in that portion of the meter circuits wherein the current varies with the difference of potential of the work circuit, said coil producing the greater part of the total impedance of said meter circuit, and having a practically constant coefficient of self-induction within the maximum limit of working. 7th. In an electric meter for measuring the energy transmitted by an alternating current, the combination with a movable armature and energizing coils for producing a resultant shifting field acting to impel the same of an inductance coil connected in series with one of the coils comprising an exciting coil and a core of laminated soft iron having an air gap interposed, the amount of iron of said core being sufficient to produce a large lag without approaching magnetic saturation, and the air gap being sufficient to require a magnetizing current large relatively to that required for magnetizing the iron. 8th. In an alternating current electric meter having a shunt circuit, an inductance coil in the shunt circuit consisting of a magnetizing coil, an interrupted laminated soft iron core, the cross-section of iron in which is sufficient to remain well below magnetic saturation, while the interruption or air gap in the core is sufficient to require a magnetizing current which is large relatively to that required for magnetizing the iron, but the iron portion of the core occupying a sufficient length of the magnetic circuit to secure a high coefficient of self-induction with relatively very small loss due to the resistance of the winding. 9th. In an electric meter for measuring alternating electric currents, an inductance coil for controlling the current through the shunt circuit comprising a coil of conducting wire and a laminated soft iron core having an air gap which is small in proportion to the total length of the core. 10th. In an electric meter for alternating electric currents, an inductance coil comprising a conducting coil and a nearly closed laminated soft iron core having an interposed air gap of sufficient length relatively to the length of the iron core to render the form of the waves of magnetizing current

practically free from distortions due to the magnetization of the iron. 11th. In an electric meter for alternating currents, an inductance coil consisting of a conducting coil and a nearly closed laminated soft iron core having an air gap sufficient to require for any given magnetization a magnetizing force largely in excess of that required to equally magnetize the iron. 12th. In an alternating current electric meter an inductance coil having a nearly closed soft iron core, in which the air gap is sufficient to render the apparent energy of the circuit in which said coil is included large relatively to the energy consumed in the winding and in the iron and at the same time maintaining a low magnetization of the iron. 13th. In an electric meter for alternating currents an inductance coil having an approximately closed soft iron core in which the air gap is sufficiently large relatively to the length of the iron portion to cause the magnetization to be proportional to the magnetizing current through a wide range. 14th. An inductance coil consisting of a magnetizing coil, an interrupted soft iron core, the cross-section of iron in which is sufficient to remain well below magnetic saturation, while the interruption of air gap in the core is sufficient to require a magnetizing current which is large relatively to that required for magnetizing the iron, but the iron portion of the core occupying a sufficient length of the magnetic circuit to secure a high coefficient of self-induction with relatively very small loss due to the resistance of the winding. 15th. An inductance coil comprising a winding and a nearly closed laminated soft iron core having an interposed air gap of sufficient length relatively to the length of the iron core to render the form of the waves of magnetizing current practically independent of the distortions due to the magnetization of the iron. 16th. In an electric meter, the combination of an inductance coil in which the magnetizing current is approximately proportional to the induction, an armature and means for subjecting it to an inductive influence proportional to the magnetizing current. 17th. In an electric meter, the combination of an inductance coil in which the magnetizing current is approximately proportional to the induction, an armature of conducting material having a small coefficient of self-induction, and means for subjecting said armature to an inductive influence proportional to the magnetizing current. 18th. In an alternating current electric meter having a resultant shifting field produced by two magnetic fields or groups of fields, differing in phase, an inductance coil of constant permeability throughout the working limits of the meter controlling one of said magnetic fields and rendering its wave form approximately the same as that of the impressed electromotive force, and an armature, the permeability of whose magnetic circuit is approximately constant, subjected to the action of the two fields, the induction of each field having a wave form similar to the current producing it. 19th. In an electric meter for alternating electric currents, the combination of inducing coils, a movable element in which for given currents in said inducing coils, a torque is produced directly proportional to the periodicity and an inductance coil in which the current is inversely proportional to the periodicity. 20th. An inductance coil comprising a winding of insulated wire and an inclosing subdivided iron core having an interruption in the magnetic circuit, the reluctance across said interruption being greater than that of the remaining portion of the magnetic circuit, the total reluctance being sufficiently low to render the coefficient of self-induction high relatively to that of the winding alone. 21st. The method of maintaining in an actuating circuit of an inductively operated electric meter, an inductive effect proportional to the electromotive force impressed upon said circuit independently of the periodicity, which consists in creating by means of the current in said circuit a controlling magnetic field, and by means of the counter electromotive force induced by said field, automatically varying the current in said circuit in inverse ratio to the periodicity. 22nd. The combination of a circuit conveying an alternating current, an actuating device in said circuit tending to vary its effects proportionally to the periodicity of said current, and means for inductively varying the current in said circuit in inverse proportion to the periodicity. 23rd. In an alternating current meter, an actuating coil in shunt circuit, and a compensating inductance coil connected in said circuit made to automatically vary the current in said circuit in inverse ratio to the periodicity. 24th. In an alternating current controlling device made to automatically vary the current in one of the actuating circuits in inverse proportion to the periodicity. 25th. In a meter for alternating electric currents, the combination of an armature and actuating coils therefor, one of said coils being of large wire, adapted for series connection, and the other being of fine wire adapted to be connected in shunt, and an adjustable soft iron core within one of said coils.

No. 50,701. Indicating Watt Meter for Alternating Electric Currents. (*Mètre pour courant électrique alternatif.*)

Oliver B. Shallenberger, Rochester, Pennsylvania, U.S.A., 2nd December, 1895; 6 years.

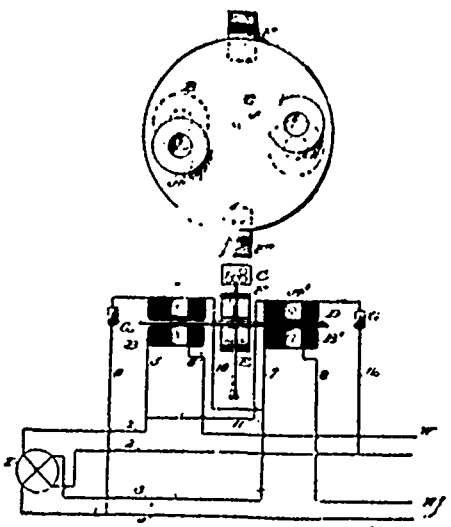
Claim. 1st. The combination of a disc of conducting material, a shaft carrying the same, a spring opposing the rotation of the disc, means for producing two magnetic fields differing in phase, the axes of which fields traverse said disc at points so located that the two fields combine to form a resulting shifting field for rotating said disc, an index for noting the degree of rotation produced, and a damping device applied to said disc. 2nd. In an electric indicating device for alternating currents, the combination of a disc of conducting material, a shaft carrying the same, a solenoid having its



axis approximately perpendicular to the plane of the disc, a second solenoid or set of solenoids having their axes directed toward said disc at another point or points than the first, a spring for opposing the motion produced in said disc by the action of said solenoids and an indicating device for noting the position of said disc. 3rd. In a meter for alternating currents, an actuating device consisting of a rotary disc of conducting material, a shunt connected coil upon one side of said disc, a series connected coil upon the opposite side of said disc, said coils having their axes perpendicular to said disc and occupying different circumferential positions, and a scale carried by said disc for indicating the degree of deflection. 4th. In a meter for alternating electric currents, the combination of a rotating disc, a spring or equivalent device opposing the rotation of the disc, a shunt connected coil and a series connected coil having their axes directed toward said disc at different points for producing rotation of the disc by means of currents differing in phase, a scale for noting the deflections of the disc, and a damping device for opposing the oscillations of the disc. 5th. In a meter for alternating electric currents, the combination of a series connected coil, a shunt connected coil of relatively large number of turns, a device in series with the shunt connected coil compensating for variations in periodicity, an armature moved by the inductive effects of said coils, means for opposing the movement of the armature increasing in its effect in proportion to its deflection, and a scale for noting the amount of its deflection. 6th. In a meter for alternating electric currents, the combination of a series connected coil, a shunt connected coil having a relatively large number of turns, and an adjustable resistance connected in series with the last named coil for adjusting for periodicity and temperature, an armature moved by the resultant effect produced thereon by said coils and an indicating device for noting the amount of the movement of such armature. 7th. In a deflecting indicating meter, the combination of a movable scale responding to variations in the energy to be indicated, and a damping device for suppressing the oscillations thereof, comprising one or more magnets and a closed conductor passing between the poles thereof and moving with the scale. 8th. In a meter for indicating multiphase alternating electric currents, the combination of a coil connected across one of the circuits, a second coil connected in series with a second circuit, an armature consisting of a rotary disc toward different points of which said coils are directed, a scale and pointer for indicating the amount of deflection of said armature, and a damping device for suppressing oscillations of said armature. 9th. The combination, with the circuits of a multiphase system of distribution by alternating currents, of a meter containing two actuating coils of which one is traversed by currents to the resultant of two component currents differing in phase, and the other is traversed by currents due to the algebraic sum of the electromotive forces producing those component currents, an armature actuated by the resultant effects of said coils, a spring opposing the motion of the armature, and an indicating device for noting the position of the armature. 10th. In an indicating meter, the combination of an armature, actuating coils for producing rotation thereof, a scale moving with said armature, and a damping device for suppressing oscillations of the moving parts. 11th. In an indicating meter, the combination of a disc of conducting material, actuating coils for producing rotation thereof, a damping device for suppressing oscillations of said disc and a graduated cylindrical band carried by the disc. 12th. In an indicating meter, the combination of a disc of conducting material, actuating coils for producing rotation thereof, a damping device for suppressing oscillations of said disc, a graduated cylindrical band carried by the disc, and an index extending over said band. 13th. An indicating meter for alternating electric currents comprising an armature, a shunt connected coil, and a series connected coil for actuating the same, the shunt-connected coil being traversed by currents differing in phase approximately ninety degrees from the current traversing the series-connected coil when no lag exists in the current traversing the work circuit, a spring or equivalent device for opposing the motion of the armature, and an indicating device for noting the deflection of the armature. 14th. In an electric indicating meter, the combination of a moving scale for indicating the degree of deflection, a support therefor of conducting material carrying the scale, and damping magnets acting upon said conducting support. 15th. In an electric indicating meter, the combination of a moving scale, a damping con-

ductor mechanically connected therewith, and magnets between the poles of which said damping conductor moves. 10th. In an electric indicating meter, the combination of a moving scale and a damping device mechanically connected therewith to oppose the oscillation of the scale.

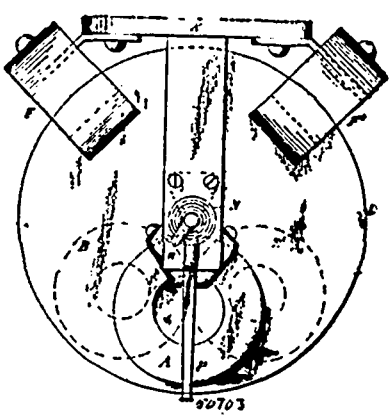
No. 50,702. Watt Meter for Multiphase Alternating Electric Currents. (*Mètre pour courant électric alternatif à multiphase.*)



Oliver B. Shallenberger, Rochester, Pennsylvania, U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. In an electric meter, an actuating device responding to the currents transmitted over two or more circuits, consisting of an armature and two independently operating sets of actuating coils, each set comprising a series coil connected in one circuit, and a shunt coil connected across another circuit. 2nd. The combination with the circuits of a multiphase system of distribution, of an electric meter, the actuating portion of which includes an armature and separate sets of independently operating actuating coils, each set comprising a coil depending for its actuating effects upon the current transmitted over one branch of the circuit independently of that transmitted over the other branches. 3rd. In an alternating current electric meter for measuring energy transmitted over two or more circuits, the combination of a counting or registering device, and an actuating device therefor consisting of an armature and two or more independent sets of actuating coils, each set dependent for its operation upon currents differing in phase, and comprising a coil connected in shunt upon one circuit and a coil connected in series with another circuit. 4th. The combination with circuits upon which the impressed electromotive forces are in quadrature of a meter, the actuating device of which consists of an armature, its shaft, and two sets of actuating coils each comprising a shunt-connected and a series-connected coil, the shunt-connected coils being upon opposite sides of the shaft, and the series-connected coils being likewise upon opposite sides of the shaft but having their axes in different radial lines from the shunt-connected coils. 5th. The combination with a three-wire multiphase system of alternating current distribution, of a meter having two sets of actuating coils, each set comprising a shunt-connected and a series-connected coil, the two series-connected coils being connected respectively in two of the three wires and the shunt-connected coils being connected respectively between the third wire and the wire with which the corresponding series-connected coil is not connected. 6th. The combination with a three-wire multiphase system, of alternating current distribution, of a meter comprising an armature, a series-connected coil in one wire, a shunt-connected coil connected between the second and third wires, said coils being so related as to produce a shifting field when traversed by alternating currents differing in phase to the effects of which said armature is subjected, a series-connected coil connected in the said second wire, a shunt-connected coil connected between the first-named wire and said third wire, the last-named shunt-and series-connected coils being related to each other and to said armature in the same manner as the first named coils, and the two sets of coils so located with reference to each other as to independently affect said armature, a retarding device, and a counting, registering or indicating device operated by said movements of said armature. 7th. The combination of a multiphase system of alternating current distribution, and a meter for measuring the energy transmitted over the system consisting of an armature and two sets of actuating coils therefor, each set comprising a shunt and a series coil, the shunt coils being respectively connected across different branches of the system, and each series coil being connected in a branch other than that between which its corresponding shunt coil is connected, said sets of coils acting independently to impel the armature, a retarding device for modifying the movement of the armature, and a counting, registering or indicating device operated by the movements of the armature. 8th. The combination with a multiphase system of alternating current distribution, of an armature and two sets of actuating coils therefor, each set comprising a shunt coil and a series coil, connections across different branches of the system including the respective shunt coils, each series coil being included in a branch of the system other than that between which its corresponding shunt coil is connected. 9th. In an electric meter, an armature and two sets of actuating coils, each set comprising a shunt-connected coil and a series-connected coil, the two shunt-connected coils so related to each other and to the armature as to produce no resultant torque upon the armature by reason of currents differing in phase traversing those coils alone, and the two series-connected coils likewise so related to each other and to the armature as to produce no resultant torque upon the armature by reason of currents differing in phase traversing those coils alone, each set of coils depending for its action upon currents differing in phase traversing the respective coils of that set. 10th. In an electric meter for alternating currents, an armature having a closed conducting circuit, and a retarding device having a closed conducting circuit in which currents are induced by its own motion, the temperature coefficients of the two conducting circuits with reference to electrical resistance being approximately the same.

No. 50,703. Alternating Current Measuring Instrument. (*Instrument à mesurer le courant alternatif.*)



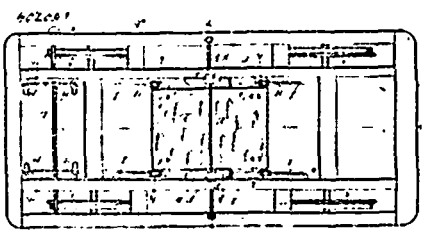
Oliver B. Shallenberger, Rochester, Pennsylvania, U.S.A., 2nd December, 1895; 6 years.

Claim.—1st. In an electric meter the combination of an armature comprising a closed conducting circuit, an actuating coil in inductive relation thereto, an inductance coil connected in series with said actuating coil, a second actuating coil, a non-inductive resistance in series therewith, and means for determining the mechanical effect produced by the passage of alternating currents through said actuating coils. 2nd. In an electric meter the combination of an armature comprising a closed conducting circuit, an actuating coil in inductive relation thereto, an inductance coil comprising a winding connected in series with said actuating coil and a subdivided core containing an air gap, a second actuating coil, a non-inductive resistance in series therewith, and means for determining the mechanical effect produced by the passage of alternating currents through said actuating coils. 3rd. In an electric meter the combination of an armature comprising a closed conducting circuit, an actuating circuit including an actuating coil and an inductance coil, a second actuating circuit including an actuating coil and a non-inductive resistance, said actuating circuits being connected in parallel. 4th. In an electric meter the combination of an armature comprising a closed conducting circuit, an actuating circuit including an actuating coil and an inductance coil, a second actuating circuit including an actuating coil and a non-inductive resistance, said actuating circuits being connected in parallel, and means for indicating the resulting movement against an opposing force of definitely varying effect. 5th. The combination of an armature comprising a closed conducting circuit, an actuating circuit including an actuating coil and an inductance coil, a second actuating circuit including an actuating coil and a non-inductive resistance, said actuating circuits being connected in parallel, a damping device applied to reduce the oscillations of the armature, and means for indicating the deflection against an opposing force which increases with the deflection. 6th. The combination of a conducting disc mounted on a shaft capable of rotation, a graduated scale carried thereby, an actuating circuit of high self induction inductively related to said disc, a second actuating circuit of

low self induction, also inductively related to said disc, a spring attached to said shaft tending to oppose its rotation, and a damping magnet applied to reduce the oscillations. 7th. In an alternating current meter, the combination of a movable element and suitable indicating devices, with two actuating circuits and their respective actuating coils, one of said circuits receiving currents proportional to the electromotive force impressed upon it independently of the periodicity, the other of said circuits receiving currents directly proportional to the impressed electromotive force and inversely proportional to the periodicity. 8th. In an alternating current meter, the combination of a movable element operated inductively, actuating circuits connected in parallel, a non-inductive resistance included in one of said circuits, and an inductance coil included in the other circuit, said inductance coil comprising a winding of relatively low resistance having a nearly closed subdivided iron core with an interruption or air gap, which air gap constitutes the principal element of reluctance in the magnetic circuit of said inductance coil. 9th. In an alternating current meter, operated by the inductive effects of two currents differing in phase, the method of compensating for changes of periodicity which consists in maintaining one of said currents proportional to the difference of potential independently of the periodicity, and causing the other to vary by its self-inductive action, inversely as the periodicity, and to vary also in direct proportion to the difference of potential. 10th. The combination of an armature comprising a closed conducting circuit, an actuating circuit including an actuating coil and a coil of relatively high self induction in series therewith, a second actuating circuit including an actuating coil and a relatively high non-inductive resistance in series therewith, the temperature coefficient of the non-inductive resistance being approximately the same as that of the closed conducting circuit of the armature, said actuating circuits being connected in parallel. 11th. The combination of an armature comprising a closed conducting circuit, an actuating circuit including an actuating coil and a coil of relatively high self-induction in series therewith, a second actuating circuit including an actuating coil and a relatively high non-inductive resistance in series therewith, the temperature coefficient of the non-inductive resistance being so related to that of the armature as to vary the actuating current inversely as the current induced in the closed conducting circuit of the armature is varied by changes of temperature. 12th. In a meter for alternating current circuits, the combination of a closed conductor capable of rotation, actuating circuits therefor connected in parallel, one of said circuits including an inductive resistance, and the other including a non-inductive resistance having a temperature coefficient approximately equal to that of the said closed conductor.

No. 50,704. Coal Dumping Cars.

(*Char à bascule pour le charbon.*)



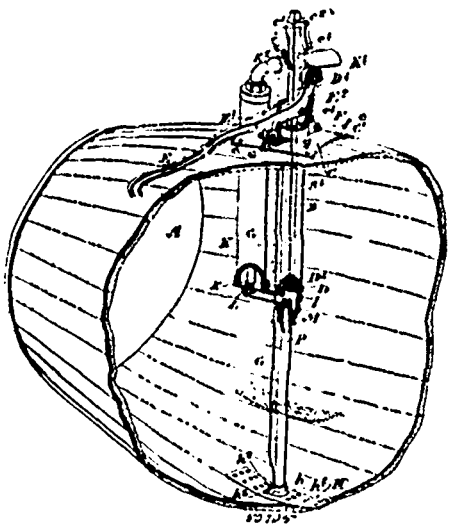
William George Lane, Pictou, Nova Scotia, Canada, 3rd December, 1895; 6 years.

Claim.—1st. A dumping car having a hopper open at its lower end, and a pair of doors pivoted to jointed side pieces or wings, gravitating locking latches adapted to secure said doors in closed positions, and rollers on said doors adapted to roll on guides or ways secured to the car frame, substantially as and for the purpose set forth. 2nd. A dumping car having a hopper at its lower end, and a pair of doors pivoted to jointed side pieces or wings, and gravitating latches adapted to secure said doors in closed positions, and rollers on said doors adapted to roll on guides or ways secured to the car frame combined with a rock-shaft having a releasing lever and arms connected to the respective side wings and means for releasing the latches during the opening of the doors, substantially as and for the purpose set forth.

No. 50,705. Pump. (*Pompe.*)

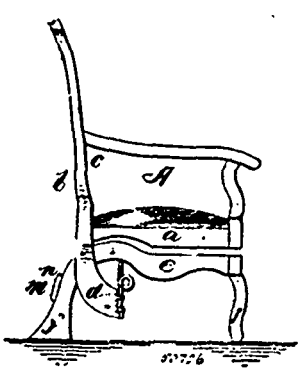
William Henry Heard, London, Ontario, Canada, 3rd December, 1895; 6 years.

Claim.—1st. In a pump for barrels, the combination with the main cylinder and plunger, and air cylinder and tube of the ball valves located beneath the plunger and tube, and held in a cage comprising the guide-ways and teeth extending laterally over each ball, as and for the purpose specified. 2nd. In a pump, the combination with the base casting having a recess internally threaded at one end of the passage-way formed in the casing, of the valve L having the ring portion externally threaded and provided with circular holes l^3 in the upper face of the ring, as and for the purpose specified. 3rd. In a pump, the combination with the base casting a recess internally threaded at the lower side of the passage way above the suction tube, of the



valve M, formed as specified, and having the ring portion externally threaded and recesses m^3, formed in the lower face of the ring, as and for the purpose specified. 4th. The combination with a cylinder, of a plunger provided with a rod d^1, and having a central annular groove for the reception of packing of the plunger and open annular grooves to each side of such central groove, all arranged as and for purpose specified. 5th. The combination with the main cylinder and air cylinder and tube extending downwardly from the lower end of the main cylinder, of the plunger and plunger rod, lever for operating the same, perforated dasher through with the suction tube extends and a rod connecting the dasher with the lever, as and for the purpose specified. 6th. The combination with the main cylinder and air cylinder and tube and passage-ways connecting both cylinders and a suction tube extending downwardly from the lower end of the main cylinder, of the plunger and plunger rod, lever for operating the same, perforated dasher through which the suction tube extends, and a rod pivotally connected at the top end to the lever and having the lower end extending into a lug, forming part of the collar *h*, in which it is held by a set screw, as and for the purpose specified. 7th. The combination with the pump and pump cylinder supported from a central boss on the arched plate on the outside of the barrel and extending into the barrel as specified, the standards extending upwardly from the boss and connected together at the top by a suitable head piece, the plunger and plunger rod and the lever pivotally connected to the plunger and to a swing link pivotally connected to the lugs on the boss, as and for the purpose specified.

No. 50,706. Rocking Chair. (*Fauteuil à bascule.*)



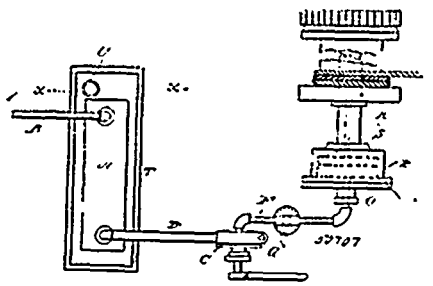
Thomas Walter Wigg, Jamestown, New York, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. A rocking chair consisting of a base, a seat, a back connected to the seat and having its sides projecting below the top of the base, a transverse bar connecting the lower ends of the sides, of the back, and a coiled spring attached at one end to said bar and having its other end connected with the chair base, substantially as described. 2nd. A rocking chair, consisting of a base, a cross bar connecting opposite sides of the base, a seat, a back connected with the seat and having its sides projecting below the top of the base, a cross bar connecting the lower ends of said sides, springs connecting

said cross bar with the cross bar on the base, and an elastic buffer attached to the base in rear of the back of the chair, substantially as shown and described. 3rd. In a rocking chair, the combination with a stationary base, and a combined seat and back having its side bars projecting below the top of the base, of parallel cross bars connecting the lower ends of said side bars and opposite sides of the frame, plates attached to said parallel bars by eye-bolts and a coiled spring arranged between said bars and having its ends fitted in grooves in the plates thereon extending through said eye-bolts, substantially as shown and described.

No. 50,707. Hydraulic or Steam Ram.

(*Bélier hydraulique ou à vapeur.*)



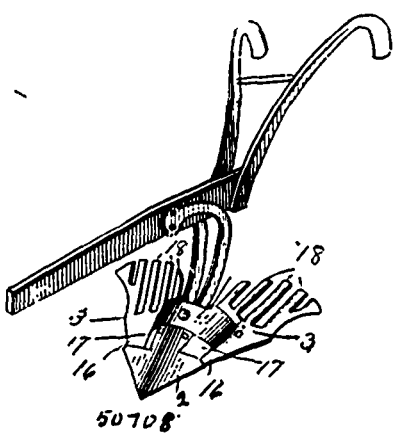
John P. Randerson and John Milton Seward, New York, State o New York, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. A condenser for steam or other rams, used in connection with a boat, consisting of a steam box or receptacle, through which the steam is passed, a tank in which said steam box or receptacle is placed, and a stand pipe in said tank, which extends through the bottom of the boat, and is open at both ends, whereby water is admitted to said tank and discharged therefrom, by the movement of the boat, substantially as shown and described. 2nd. In a hydraulic or steam ram, or similar apparatus, the combination of a steam or water supply pipe, a three-way valve connected therewith, a pipe communicating with the centre of said valve and with the ram, and a discharge pipe also communicating with said valve, and said valve being provided with means for the operation thereof, the construction and arrangement being such that the water or steam enters the valve, passes into and from the centre thereof to the ram, and is returned to the centre of the valve from which it is discharged, substantially as shown and described. 3rd. In a hydraulic or steam ram, or similar apparatus, the combination with a supply pipe, of a three-way valve connected therewith, a pipe communicating with the centre of said valve and with the ram, and an air cushion chamber connected with and communicating with said last named pipe, substantially as shown and described. 4th. In a hydraulic or steam ram, or similar apparatus, the combination of a supply pipe, a condenser in communication therewith, a pipe leading therefrom, a three-way valve in communication therewith, a pipe in communication with the centre of the three-way valve, and with the ram, and an air cushion chamber connected with and communicating with said last named pipe, said three-way valve being also provided with a discharge pipe adapted to communicate with the centre of said valve, substantially as shown and described. 5th. In a hydraulic or steam ram, or similar apparatus, the combination of a supply pipe, a three-way valve connected therewith, a pipe connected with the three-way valve, with the ram, and air cushion chamber connected and communicating with said last named pipe, a discharge pipe also communicating with said valve, and a lever or other device for opening the valve, substantially as substantially as shown and described. 6th. In a hydraulic or steam ram, or similar apparatus, the combination of a supply pipe communicating with said ram, a ram rigidly mounted on a shaft and revolving therewith, a stuffing box through which the steam or water passes and means for applying the power, substantially as shown and described. 7th. In a hydraulic or steam ram, or similar apparatus, the combination of a supply pipe communicating with said ram, a ram rigidly mounted on a shaft and revolving therewith, a stuffing box through which the steam or water passes and means for applying the power consisting of a piston within the ram provided with a pin or rod, substantially as shown and described. 8th. In a hydraulic or steam ram, or similar apparatus, the combination of a supply pipe, a three-way valve connected therewith, a pipe communicating with the centre of said valve and with the ram, an air cushion chamber connected with and communicating with said last named pipe, a ram rigidly mounted on a shaft and adapted to revolve therewith, and means connected therewith for applying the power, a discharge pipe connected with said valve, and means for operating the valve, substantially as shown and described.

No. 50,708. Potato Digger. (*Arrache-patates.*)

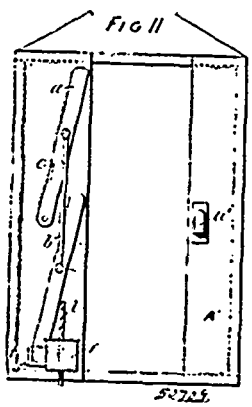
Daniel Daniel, Lonoke, Arkansas, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. In a plough, constructed substantially as shown and described, the combination with the plough stock and standards, of the body 1, provided with a central countersunk bolt hole 5, flared bolt holes 5^1, recesses 7, flanges 8, grooves 11 and perforated flanges



6, plough point 2, and wing attachments 3, provided with fingers 18, and downward extensions 16, substantially as shown and described, and for the purposes set forth. 2nd. In combination with a plough stock, the body, having a central countersunk bolt hole, flared bolt holes, one on each side of the downward extension 9, recesses 7, flanges 8, and grooves 11, said body adapted to carry a perforated plough point and perforated wings, substantially as shown and described, and for the purposes set forth.

No. 50,709. Hoist, etc. (*Monte-charges, etc.*)



James Wilson Martin, Manchester, England, 3rd December, 1895; 6 years.

Claim.—1st. The combination in hoist cages, of a rope clip or grip pmg device connected to a hand rail, whereby the hoist hand rope is held securely by the clip on lifting the hand rail, for the purpose specified and all substantially as set forth. 2nd. In hoist cages, for the purposes mentioned, the combination of a rope gripper *u*, *v*, attached by lever *s*, to connecting rod *q*, and the hand rail *a*, all substantially as described and shown in the drawings. 3rd. The combination in hoist cages, of the rope protector *h*, attached to links *k*, *k*, and slotted quadrant *f*, on the hand rail *a*, all substantially as shown, for the purposes specified. 4th. In hoist cages the combination with the subject matter of the preceding claims and the india-rubber buffers *x*, *x*, for the purposes set forth and substantially as described. 5th. The arrangement and combination in hoists, of the parts hereinbefore described and shown in figures 1 to 14 inclusive herewith, for the purposes specified, and all substantially as set forth.

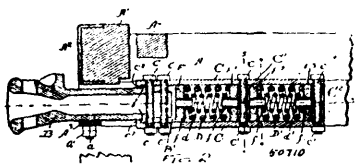
No. 50,710. Draft Rigging for Cars.

(*Agrès de tirage pour chars.*)

William H. Miner, Chicago, Illinois, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. In a double or tandem spring draft rigging, the combination with the draft timbers A A, end sill A^1, and carry iron A^3, of two draw-bar stop castings or plates G G, secured thereto and furnished each with three stop projections on their inner faces, and having an upper integral guide flange G^1, a removable guide plate G^2, secured at the lower edge of each of said plates or castings

G, a draw-bar B, two separate and independently removable pocket or extension plates C C secured to said draw-bar by removable



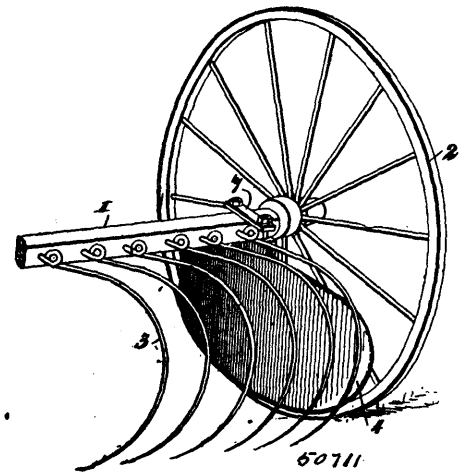
bolts, spacing or abutment blocks C^1, C^2, extending between said pocket or extension plates C C, removable bolts c c extending through said blocks C^1, C^2, four follower plates or blocks F, F^1, F^2, F^3, each furnished with a central hole and a pin or thimble secured therein for supporting the springs, one between each pair of followers, to permit the draw-bar and the pocket or extension plates secured thereto to be removed while leaving the springs and followers in place, substantially as specified. 2nd. In a tandem spring draft rigging, the combination with the draft timbers of two tandem arranged springs, a pair of followers for each of said springs, plates G secured to the inner faces of the draft timbers, and having guides G^1, G^2, at their upper and lower edges to support and guide the followers, and provided each with three stops for the followers to abut against, a draw-bar and two separate and removable pocket plates secured to the draw-bar and provided with removable abutments to bear against the followers, all four of said followers extending transversely between said plates G, G, and abutting at their ends against said plates and fitting between said guides G^1, G^2, and said removable pocket plates fitting and reciprocating one above and one below said followers, substantially as specified. 3rd. In a tandem spring draft rigging, the combination with the draft timbers of two tandem arranged springs, a pair of followers for each of said springs, plates, plates G secured to the inner faces of the draft timbers and having guides G^1, G^2, at their upper and lower edges to support and guide the followers, and provided each with three stops for the followers to abut against, a draw-bar and two separate and removable pocket plates secured to the draw-bar and provided with removable abutments to bear against the followers, said followers having pins or projections to support the springs when the draw-bar and pocket plates are removed, all four of said followers extending transversely between said plates G, G, and abutting at their ends against said plates and fitting between said guides G^1, G^2, and said removable pocket plates fitting and reciprocating one above and one below said followers, substantially as specified. 4th. In a tandem spring draft rigging, the combination with the draft timbers of two tandem arranged springs, a pair of followers for each of said springs, plates G secured to the draft timbers and having guides G^1, G^2, to support and guide the followers, stops for the followers to abut against, a draw-bar and two separate and removable pocket plates secured to the draw-bar and provided with removable abutments to bear against the followers, said guides H^2, at the lower edges of said plates G, G, being removably secured thereto, substantially as specified. 5th. In a tandem spring draft rigging, the combination with the draft timbers of two tandem arranged springs, a pair of followers for each of said springs, plates G secured to the inner faces of the draft timbers, and having guides G^1, G^2, at their upper and lower edges to support and guide the followers, and provided each with three stops for the followers to abut against, a draw-bar and two separate and removable pocket plates secured to the draw-bar, and provided with removable abutments to bear against the followers, said followers being provided with central holes and having separate hollow pins or thimbles secured therein to support the springs at each end of the springs, all four of said followers extending transversely between said plates G, G, and abutting at their ends against said plates, and fitting between said guides G^1, G^2, and said removable pocket plates fitting and reciprocating one above and one below said followers, substantially as specified. 6th. The combination with the draft timbers A, A, end sill A^1 and carry iron A^3 of draw-bar B, two separate removable pocket plates C, C, secured thereto, spacing or abutment blocks C^1, C^2, between said pockets C, C, to bear against said followers, removable bolts for securing said blocks C^1, C^2 in position and clamping said pocket plates together, tandem springs D, D^1, followers F, F^1, F^2, F^3, having central pins *f*, draw bar stop castings or plates G, G, having each a guide flange G^1 and a removable guide plate G^2, stops *g*, g^1, g^2, the rear end of said draw-bar serving as the abutment to bear against the front follower, substantially as specified.

No. 50,711. Horse Hay Rake Fender.

(*Defense pour rateaux à foin.*)

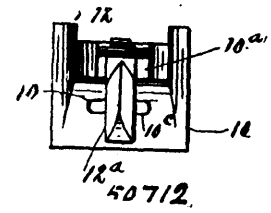
Daniel Vohress Mott, Nanton, Alberta, North-west Territories, Canada, 3rd December, 1895; 6 years.

Claim.—1st. The combination with a hay rake, of two fender plates hung from the axle of said rake, one near each wheel thereof, substantially as described. 2nd. The combination with a hay rake, of a fender plate, the same having a threaded rod projecting upwardly therefrom at sides of the axle, and clip plates secured above and below the axle and through which the threaded rod passes, substantially as described. 3rd. The combination with a hay rake, of a fender plate having tubulated edges, a rod held in said tubulated edges, and having its extremities parallel with each other and pro-



jecting upwardly from the plate, and clip plates above and below the axle and through which the projected extremities of the rod are passed and which secure said clip plates, substantially as described.

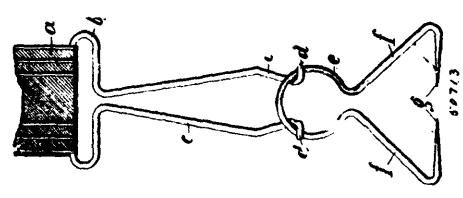
No. 50,712. Car Coupler. (*Attelage de chars.*)



George Hector Pacaud, Fall River, Massachusetts, U.S.A., and Ernest Fortunat Edgar Barthe, Montreal, Quebec, Canada, 3rd December, 1895; 6 years.

Claim.—1st. The combination with a drawhead having an open recess at the front and a transverse wall in front of said recess, of an elongated latch hook pivoted in the recess and extending forwardly thereof and resting upon said wall, and a spring pressing on the said hook, substantially as described. 2nd. The combination with a drawhead having an open recess at the front, and a transverse wall in front of the recess and lower than the side walls of the drawhead, of an elongated coupling hook pivoted in the the recess at its rear end and extending forwardly of the drawhead, the said coupling hook being adapted to swing laterally and upwardly, and a device for lifting the coupling hook at either side of the car, substantially as described. 3rd. The combination with a drawhead having an open recess at the front, producing two side walls and an undercut transverse front wall, the said front wall being lower than the side walls of the drawhead, of an elongated coupling hook pivoted at its rear end between the walls of the drawhead recess, the said coupling hook having a latching nose sloped rearwardly on its front and rear edges, a finger spring on the drawhead pressing the coupling hook upon the transverse front wall, and a hook detaching device, operative from either side of roof of the car whereon the coupling is placed, substantially as described. 4th. A releasing mechanism for the coupling hooks of car coupling, comprising a transverse rock shaft supported to receive longitudinal movement handle arms on the ends of said shaft, a latching device on each side of the car body, adapted to be alternately engaged with one of the handle arms, a double crank on the rock shaft and loosely connected with the coupling hook, a second double crank on the rock shaft between said first named crank and one end of the said shaft, an upright lifting rod having a joint in its body adapted for lateral flexure, an offset in the shaft above the said joint, a a loose connection between the car body and the lifting rod above the laterally flexing joint, and a projecting hook on the car body adapted to support the lifting rod at its offset, substantially as described.

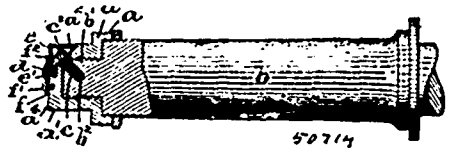
No. 50,713. Suspender Buckle. (*Boucle de bretelles.*)



Burkhard Frey, Zizers, Switzerland, 3rd December, 1895; 6 years.

Claim.—An improved means for attaching braces, knapsacks, etc., consisting of an eye with ring *c*, diverging parts *f*, and the opposite pointed ends *g*, and of a clip *b*, to grip into the eye *c*, fitted with spring arms *e*, having hook formed ends *d*, substantially as described and shown in the drawing.

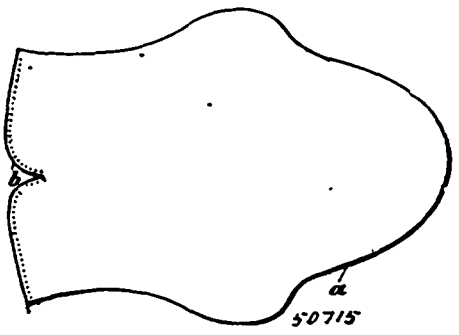
No. 50,714. Nut Lock. (*Arrête-écrou.*)



William Adolph Bode, Orange, New Jersey, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. The combination, with the threaded end of an axle, journal, or the like, having a screw-threaded bore, and a nut on said screw-threaded end, of a check bolt in said bore, and a cap adapted to be closed down upon the head of said bolt to entirely surround the same, said cap being pivotally secured to the face of the nut, substantially as and for the purposes set forth. 2nd. The combination, with the threaded end of an axle, journal, or the like, having a screw-threaded bore b^2, at an angle to the longitudinal axis of the axle, of a nut *a*, on said screw-threaded end, having a chamfered surface a^2, and a hole a^3, corresponding with the open end of said bore b^2, and a check bolt in said bore, substantially as and for the purposes set forth. 3rd. The combination, with the threaded end of an axle, journal, or the like, having a screw-threaded bore b^2, at an angle to the longitudinal axis of the axle, of a nut *a*, on said screw-threaded end, having a chamfered surface a^2, and a hole a^3, corresponding with the open end of said bore b^2, a check bolt in said bore, and an angular cap on said nut, adapted to be closed down upon the head of said bolt, substantially as and for the purposes set forth. 4th. The combination, with the threaded end of an axle, journal, or the like, having a screw-threaded bore b^2, at an angle to the longitudinal axis of the axle, of a nut *a*, on said screw-threaded end, having a chamfered surface a^2, and a hole a^3, corresponding with the open end of said bore b^2, a check bolt in said bore, a cap adapted to be closed down upon the head of said bolt to surround the same, said cap being pivotally secured to the face of the nut, and a spring *f*, in engagement with the face of said cap, substantially as and for the purposes set forth.

No. 50,715. Boot. (*Chaussure.*)



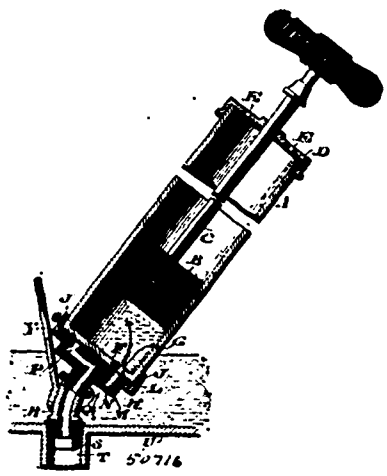
Bruno Wesselmann, Gottingen, Prussia, Germany, 3rd December, 1895; 6 years.

Claim.—1st. A shoe characterized by the fact that welt, side, toe and heel pieces, are constructed out of one piece, whereby the heel, sole and other essential parts can be sewn on to the rolled form of the shoe, for the purpose of producing an elastic, durable and light article and at the same time protecting the feet from the penetration of water, snow, &c. 2nd. The application to the shoe represented in 1, of supporting contrivance between the heel and sole, for the purpose of effecting a better union of the shoe with the hollow of the foot.

No. 50,716. Pump. (*Pompe.*)

Emil Noppel, Philadelphia, Pennsylvania, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. In a lift and force pump having a rotary barrel, a base with ports out of alignment with each other, and a valve freely located on said base, having ports adapted to register alternately with the ports of said base, one of the ports of the valve having a branch for connection with the place of service of the pump, substantially as described. 2nd. In a lift and force pump having the barrel A, the base F, in its lower extremity, the ports G and H, the valve M, adjacent said base, having the flange L, and the ports P and N therein, the pipe R, and the bushing S, said parts being combined substantially as described. 3rd. In a lift and force pump, a barrel with a coupling ring secured to its discharged end, a valve with ports between said coupling ring and barrel, and a plate secured to said



coupling ring and having shoulders adapted to be engaged by the walls of said ports, said parts being combined substantially as described. 4th. In a lift and force pump, a barrel, a cap secured on its head having an angular opening therein, a piston with a stem in said opening, a coupling ring on the discharge end of the barrel, and a valve between said ring and the end of the barrel, said parts being combined substantially as described. 5th. In a lift and force pump, a barrel, a piston therein, the base of said barrel having a plurality of ports therein, a movable valve held against said base having a plurality of ports adapted to register with the ports of said base, a pipe attached to one of said ports provided with a bushing, a handle attached to said pipe, means for holding said valve in position, and means for limiting the movement of said valve and barrel relative to each other, substantially as described. 6th. A lift or force pump, consisting of a barrel with a cap on its head with openings therein, and a plurality of ports in its base, a piston with a stem angular in cross section passing through said cap, a coupling ring secured to its base, and a valve having ports therein between said coupling ring and base, said parts being combined substantially as described.

No. 50,717. Non-Fillable Bottle.

(*Bouteille ne pouvant être remplie*)

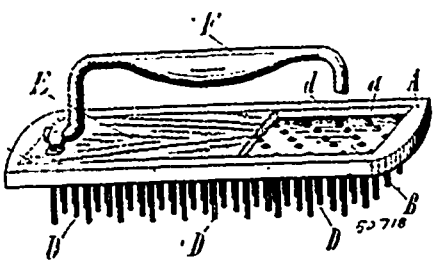
William A. Hubener, Hoboken, New Jersey, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. A bottle provided with a neck, at the base of which is formed a perforated partition, said neck being adapted to be closed by a plug or stopper, having a central bore formed therein, and a ball suspended below the perforated partition, by means of a cord or wire, which is carried upwardly through said central bore, substantially as shown and described. 2nd. A bottle provided with a neck, at the base of which is formed perforated partition, said neck being adapted to be closed by a plug or stopper, having a central bore formed therein, and a ball suspended below the perforated partition, by means of a cord or wire, which is carried upwardly through said central bore, said bore being adapted to be closed by

means of cement or other material, substantially as shown and described. 3rd. A bottle provided with a neck, at the base of which is formed a perforated partition, said neck being adapted to be closed by a plug or stopper, having a central bore formed therein, and a ball suspended below the perforated partition, by means of a cord or wire, which is carried upwardly through said central bore, said bore being adapted to be closed by means of cement or other material, and said partition being provided in its upper surface with a conical depression, and the lower end of the plug or stopper, being also conical in form, and the apex thereof, directed downwardly into said conical depression, substantially as shown and described. 4th. The combination with a bottle, provided with a plurality of partitions, in the body thereof, which are irregular in form and provided with downwardly directed extensions at opposite sides, in each of which is formed an opening or passage, and a perforated partition at the bottom of the neck of the bottle, of a plug or stopper adapted to close said neck and provided with a central bore or passage therethrough, and a ball or spherical body in the bottle with which is connected a cord or wire which passes through said perforated partition, and through said central bore in the plug or stopper, substantially as shown and described. 5th. The combination with a bottle, provided with a plurality of partitions, in the body thereof, which are irregular in form, and provided with downwardly directed extensions at opposite sides, in each of which is formed an opening or passage, and a perforated partition at the bottom of the neck of the bottle, of a plug or stopper adapted to close said neck and provided with a central bore or passage therethrough, and a ball or spherical body in the bottle with which is connected a cord or wire which passes through said perforated partition, and through said central bore in the plug or stopper, said central bore being adapted to be filled with cement or other material, and the bottom of the bottle being provided with an upwardly directed extension, substantially as shown and described. 6th. A bottle provided with a neck, at the base of which is formed a perforated partition, said neck being adapted to be closed by a plug or stopper having a central bore formed therein, and a ball composed of separate parts, and suspended by a cord or wire, which is passed therethrough, and through said perforated partition, and through the central bore of the plug or stopper, substantially as shown and described.

No. 50,718. Device for Cleaning Brushes.

(*Appareil pour nettoyer les brosses.*)



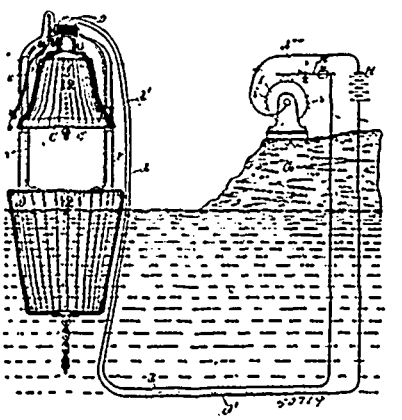
Hermann Runge, Griefswald, Prussia, Germany, 3rd December, 1895; 6 years.

Claim.—1st. A brush cleaner consisting of a perforated plate, through which perforations pass a correspondent number of pins having heads housed in recesses of a covering plate screwed upon the lower plate, substantially as described. 2nd. A brush cleaner consisting of a perforated plate A, through which perforations C pass a correspondent number of straight pins D loosely put into said holes, having heads *d* housed in recesses of a covering plate E screwed upon the lower plate by screws *c*, substantially as set forth. 3rd. A brush cleaner consisting of a perforated plate A, through which perforations C pass a correspondent number of screwed pins D^1 D^1 loosely put into said holes, having heads *d* housed in recesses of a covering plate E screwed upon the lower plate by screws *c*, substantially as set forth.

No. 50,719. Bell Buoy. (*Bouée à cloche.*)

John Albert Fairbanks, Cambridge, Massachusetts, U.S.A., 3rd December, 1895; 6 years.

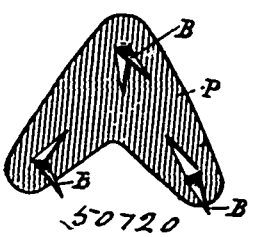
Claim.—1st. A bell buoy anchored at sea and having a bell or other sounding instrument arranged thereon, in combination with an electrically operating striking or sounding device arranged on said buoy, wires leading from said sounding device to a battery or electric current generator located at a distance from such buoy, and an automatic circuit closer and breaker adapted to close and break the circuit to produce sounds corresponding with the chart number of the buoy, substantially as described. 2nd. A bell buoy anchored at sea and having a bell or other sounding instrument arranged thereon provided with a hammer or sounding device adapted to be sounded by the motion of the sea, combined with a positive electric device located at a station in the vicinity of or away from the bell buoy and electrically connected to a striking mechanism on said bell buoy, for the purpose of causing the bell on the buoy to be positively sounded at any and all times when the sea is so calm as to prevent the rocking of the buoy to sound the bell thereon as herein specified. 3rd. A bell buoy anchored at sea and having a bell or



other sounding instrument arranged thereon, and having a number corresponding to its chart location combined with an electrically operated striking or sounding device arranged on said bell buoy and electrically connected to a battery or electric current generator and a circuit closer located at a station in the vicinity of or away from said bell buoy, said circuit closer being arranged to intermittently close and open the circuit and produce sounds on the bell buoy sounding device corresponding to the chart number of the buoy, substantially as and for the purpose set forth.

No. 50,720. Protecting Plate for the Soles of Shoe.

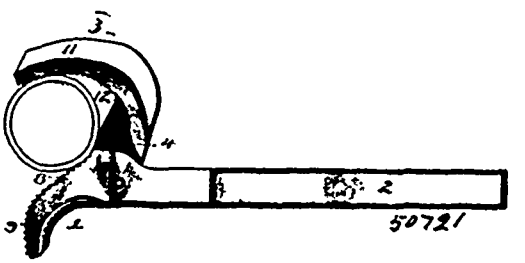
(*Plaque de protection pour semelles de chaussures.*)



Herbert G. H. Glass, Detroit, Michigan, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. A protecting plate P, formed of spring steel, and with the barbs B, punched or pressed up from the material of which the plate is formed, leaving one side or end of said barb integral with said plate, substantially as and for the purpose set forth. 2nd. As a new article of manufacture, a protecting plate, formed with the inclined edges A A, and with the barbs B substantially as and for the purpose set forth. 3rd. The combination with a shoe or other foot-wear, of a protecting plate P, formed of spring steel, and with the barbs B, punched or pressed up from the material of which the plate is formed leaving one side or end of said barb integral with said plate, substantially as and for the purpose set forth. 4th. A protecting plate P, formed of spring steel, and with the inclined edges A A, and barbs B B, in combination with a shoe or other foot-wear, substantially as and for the purpose set forth.

No. 50,721. Pipe Wrench. (*Clé à tuyau.*)

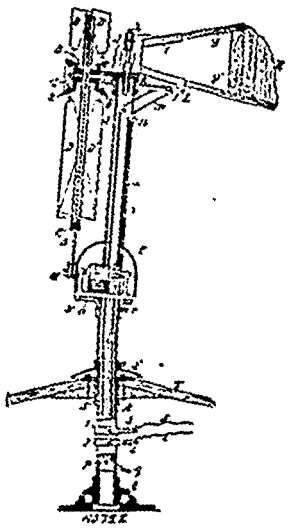


Frank L. Felger and Robert D. Shafer, both of Fayette, Ohio, U.S.A., 3rd December, 1895; 6 years.

Claim.—A wrench having a fixed jaw integral with a handle and provided with a compoundly-curved serrated face, said fixed jaw and handle being longitudinally slotted and the slot extending in

the jaw from the rear end to a point approximately at the centre thereof, a swinging jaw having a concave serrated face and a reduced shank pivoted within said slot, the pivotal point of the shank being in advance of the rear end of the serrated face of the fixed jaw and said shank being extended beyond its pivotal point to form a tongue 6, of which one side provides an abrupt shoulder located within the slot of the handle in all positions of the swinging jaw and arranged approximately in the plane of the axis of movement of the jaw, the extremity of the swinging jaw being abrupt and being adapted to project beyond the end of the fixed jaw when the swinging jaw is in its normal position, and the front edge of the shank being adapted to form a stop to limit the insertion of an object between the jaws and determine the points of engagement of the serrated faces of the jaws with the object, and a spring located within the slot in the handle and permanently engaging said shoulder on the extension of the shank, said spring being concealed within the slot and the pressure thereof against the shoulder being approximately perpendicular to the plane of the shoulder in all positions of the swinging jaw, substantially as specified.

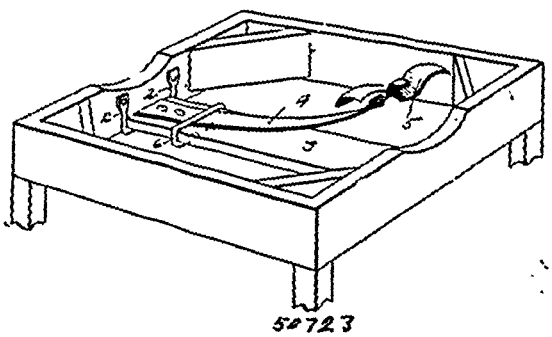
No. 50,722. Wind-Wheel. (*Roue à vent.*)



William C. Bramwell, Hyde Park, Massachusetts, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. A wind-wheel having a hub, a rim, and wind-blades or sails subjected to a tensional strain between said hub and rim. 2nd. A wind-wheel having a rim subjected to a compressive stress by wind-blades having a tensional strain imparted to them between said rim and the hub of said wheel. 3rd. A wind-wheel having its hub suspended by wind-blades under a state of tension from the rim of said wheel. 4th. A wind-wheel having a hub, a rim, wind-blades directly connecting said hub and rim, and means for imparting a tensional strain to said blades. 5th. A tensional wind-wheel having means whereby a machine or shaft may be driven directly from or near the rim of said wheel. 6th. A wind-wheel, an electric generator or a shaft or a machine mounted upon a rotative standard, and means for transmitting the power of said wheel direct from or near its periphery to the said machine or shaft to be driven. 7th. A hollow rotative standard, a wind-wheel mounted thereon, a rudder and gear for operating or turning said rudder through the said standard at a convenient point near the surface of the ground or within a building surrounding said standard. 8th. A rotative standard having a bearing in the roof or upper platform and resting upon a step within a tower or other building, and having an electric generator fixed or otherwise caused to turn with said standard, a rope or other means of driving said generator in direct connection with the rim or periphery of a wind-wheel mounted on said standard or caused to turn with it, a rudder also carried or caused to turn with said standard, and rings or brushes or other means whereby the electric current generated may be transmitted from said generator to a desired locality. 9th. A dynamo or other electric machine suspended by a flexible joint to the standard of a wind wheel, direct connection between said wheel and the pulley of said machine, so that the weight of a portion of said weight of said machine is caused to act as a tightener or adjuster of said direct connection. 10th. A roof bearing of a wind-wheel standard, guide pulleys or other means fixed to said standard, a belt or flexible connection between said wheel outside the building, and a shaft or machine located within said building, and means whereby said connection may pass through said roof bearing. 11th. A holder for wind-blades having projecting arms or other means for holding said blades, a hub or other device for attaching said holders to the rim or periphery of a wind-wheel, and means for carrying a rope or other connection by said holders, substantially as set forth. 12th. A hollow standard carrying a rudder and a wind-wheel, a shaft or rod or other means for operating said rudder by a worm gear, a sprocket-chain or a link, said rod passing through said standard connecting at or near its top with said rudder, and having means for turning it at a convenient point lower down, substantially as set forth.

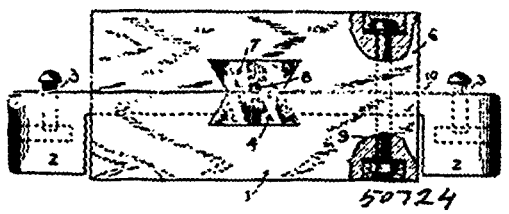
No. 50,723. Barrel Support. (*Support de baril.*)



Robert Walker, Oakland, California, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. In a barrel support, the combination with a stand of a spring arm secured thereto and cabable of tilting the barrel as its contents are withdrawn, substantially as described. 2nd. In a barrel support, the combination with a stand, of a bar secured thereto below the barrel, and a spring arm connected to the bar and capable of raising the barrel as its contents are withdrawn, substantially as described. 3rd. In a barrel support, the combination of a stand, a bar secured thereto, and a spring arm carried by the bar and having at its free end a curved plate, substantially as described. 4th. In a barrel support, the combination with a stand, of a spring arm secured thereto and having at its free end a curved or segmental plate, the arm being capable of tilting the barrel as its contents are withdrawn, substantially as described. 5th. In a barrel support, the combination of a stand, a frame rockable thereon, rods fixed to the frame, and spiral springs embracing the rods and engaging the stand, substantially as described. 6th. In a barrel support, the combination with a stand, of brackets secured to the inner sides thereof, a bar supported by said brackets, a spring arm secured to the bar and having one end free, and a curved or segemental plate secured to the free end of the arm, substantially as described. 7th. In a barrel support, the combination with a stand, of a bar secured thereto, a spring arm fixed to the bar and having one end free, and a ring embracing the bar arm and slidable on both, substantially as described.

No. 50,724. Lightning Arrester. (*Paratonnerre.*)

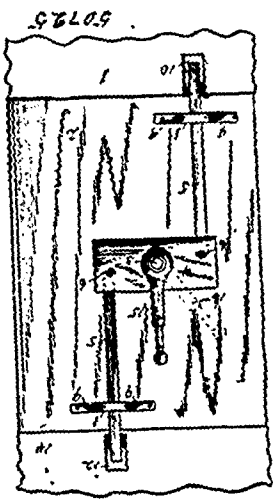


Alexander Jay Wurts, Pittsburg, Pennsylvania, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. In a lightning arrester, a pair of sparking terminals and an interposed discharge wedge formed in a body of fibrous material the fibres of which extend in a direction transverse to the static discharge, substantially as described. 2nd. In a lightning arrester, a pair of sparking terminals, a non-conducting support therefor, and an interposed discharge wedge formed in a body of fibrous material, the fibres of which extend in a direction transverse to the static discharge, substantially as described. 3rd. In a lightning arrester, a non-conducting plate or block having sparking terminals embedded therein and an interposed discharge wedge formed in a block of fine-grained hardwood, the fibres of which extend in a direction transverse to the static discharge, substantially as described. 4th. In a lightning arrester, a non-conducting plate or block having sparking terminals embedded therein and an interposed discharge wedge formed in a block of lignum vitæ, the grain of which extends in a direction transverse to its exposed surface, substantially as described. 5th. In a lightning arrester, a plate or block formed of dry, porous wood having sparking terminals embedded therein and having an interposed discharge wedge formed in a block of fine-grained hardwood the grain of which extends in a direction transverse to its exposed surface, substantially as described. 6th. In a lightning arrester, a plate or block formed of dry, porous wood the grain of which extends in a direction transverse to its thickness,

and having sparking terminals embeded therein and having an interposed discharge web formed in a body of lignum vitæ the grain of which extends in a direction transverse to its exposed surface, substantially as described. 7th. A lightning arrester comprising two rigidly connected non-conducting plates or blocks one of which is provided with sparking terminals and with an interposed discharge wedge formed in a body of fine-grained hardwood the grain of which extends in a direction transverse to the meeting surfaces of the two plates or blocks, substantially as described. 8th. A lightning arrester comprising two connected plates or blocks of non-conducting material one of which is provided with sparking terminals and an interposed discharge web formed in a body of lignum vitæ and the other of which has an opposing lignum vitæ block provided with an opening or openings adjacent to said discharge wedge, substantially as described. 9th. A lightning arrester comprising two plates or blocks of insulating material, the inner face of one being provided with sparking terminals and an interposed discharge wedge formed in a block of fine-grained hardwood the grain of which extends in a direction transverse to the face of the plate, and the other having an opposing block or slab of similar material the grain of which extends in the same direction, said plates being glued together and clamped by means of screws or equivalent means, substantially as described. 10th. A lightning arrester comprising two rigidly connected plates or blocks of insulating material, the inner face of one being provided with sparking terminals and an interposed discharge wedge formed in a body of lignum vitæ the grain of which extends in a direction transverse to its exposed surface and the other being provided with a grooved strip or block of like material similarly arranged, each of said blocks having a dovetail connection with its supporting plate, substantially as described. 11th. A lightning arrester, comprising a plate or block carrying sparking terminals and an interposed discharge wedge formed in a body of hard fibrous material, the fibres of which extend in a direction transverse to its exposed surface, and a cover plate or block having an opening or openings adjacent to said discharge wedge, substantially as described. 12th. A lightning arrester, comprising a pair of sparking terminals, a non-conducting support therefor, an interposed discharge wedge and a cover therefor, having an opening extending to the surface thereof, substantially as described. 13th. A lightning arrester, comprising a pair of sparking terminals, a non-conducting support therefor, a discharge wedge between said sparking terminals and a cover therefor having a groove adjacent thereto, substantially as described.

No. 50,725. Bolt. (*Boulon.*)



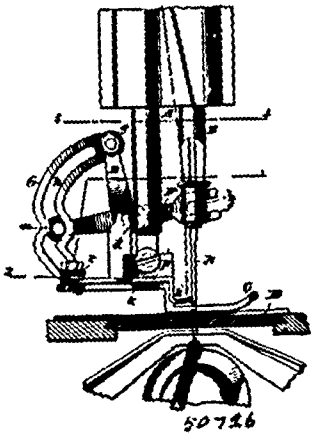
John Wesley Sammis, Mary B. Evers and Cornelia B. Lee, all of Dover, New Jersey, U.S.A., 4th December, 1895; 6 years.

Claim.—In a refrigerator or other receptacle or object, the combination with the door casing having a wedge secured to the lower sill and flush with the upper side thereof, and a wedge secured to the upper sill a short distance above its lower side, of the vertically operating bolts, having their free ends bevelled to form wedges adapted to engage with the wedges secured to said sills, substantially in the manner shown and described.

No. 50,726. Sewing Machine. (*Machine à coudre.*)

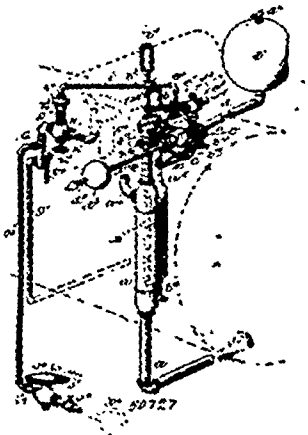
The Self-Threading Sewing Machine Company, New York, State of New York, assignee of Albert Legg, Allendale, New Jersey, and Frank Henry Treacy, Brooklyn, New York, all of the U.S.A., 4th December, 1895; 6 years.

Claim. 1st. In a sewing machine, the combination of a needle having a recess or open eye for engaging the thread, with means of



operating said needle, means for feeding thread to the same, which consists of a guide and finger and means to cause said guide and finger to move simultaneously from in front of the path of said needle first so as to distend the thread and then so as to carry the same into the open eye of said needle as it descends, and with complemental stitch forming mechanism below the cloth-plate, substantially as described. 2nd. In a sewing machine a presser-foot and a needle with a recess or open eye for engaging the thread, the thread feeding mechanism for said needle which consists of arms journalled on a vertical axis movable horizontally on the presser-foot, means of swinging said arms on said axis as the same is reciprocated, and means of reciprocating said axis as the needle-bar reciprocates, substantially as described. 3rd. The combination of a plate having a slot therein, with two arms journalled on a common axis said axis being operatively connected with said slot, two links each journalled at one end on one of said arms, and at the other end on a common fixed journal, and with means of reciprocating said first named axis in said slot, whereby said arms are swung upon said axis as the same is reciprocated, substantially as described. 4th. In a sewing machine having a presser-foot, and a needle with a recess or an open eye for engaging the thread, the thread feeding mechanism for said needle which consists of arms journalled on a vertical axis movable horizontally on the presser-foot, means of swinging said arms on said axis as the same is reciprocated, which consists of two links, each journalled at one end on one of said arms and at the other end on a journal fixed on said presser-foot, and means of reciprocating said movable axis, substantially as described. 5th. In a sewing machine having a needle with a recess or open eye for engaging the thread, the thread feeding mechanism for said needle, which consists of two connected arms bearing respectively, a guide and finger and concurrently and interdependently movable, and so as to carry said guide and finger from a point in front of the path of said needle towards and to opposite sides of said path, means of moving said arms connected only with said finger-bearing arm, substantially as and for the purposes described.

No. 50,727. Boiler Feeder. (*Alimentateur de chaudières.*)



Robert Gordon McAuley and Louis Brown Fulton, both of Pittsburg, Pennsylvania, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. A boiler feeder connected to a boiler, primary and auxiliary valves located between the boiler and the feeder and both

normally closed by the boiler pressure, and a hollow lever for operating directly on said auxiliary valve and having a hollow enlarged end, said lever communicating with the interior of said boiler and operated by the water therein, said primary valve being unseated when said auxiliary valve is acted upon by said lever, substantially as set forth. 2nd. A boiler feeder connected to a boiler, primary and auxiliary valves located between the boiler and the feeder both normally closed by the boiler pressure, a hollow lever for operating said auxiliary valve and having a hollow enlarged end provided with a vent-valve, a steam pipe opening into said hollow end, said lever and steam pipe communicating with the interior of the boiler, substantially as set forth. 3rd. A boiler feeder connected with a boiler, primary and auxiliary valves located between the boiler and the feeder and both normally closed by the boiler pressure, a water-column opening into the boiler and having a water-pipe extending downwardly therein, a lever for operating said auxiliary valve, said lever being hollow and communicating with said water-pipe to which it is pivotally connected, a ball or sphere at one end of said lever provided with a vent-valve, and a steam-pipe having its inner end opening into said water-column and extending through said ball or sphere, substantially as set forth. 4th. A boiler feeder connected with a boiler, a primary valve between said feeder and the boiler normally held to its seat by the boiler pressure, a diaphragm to which said valve is connected, a pressure-pipe communicating with the interior of the boiler and opening into the casing of said primary valve above said diaphragm, an auxiliary valve in said pressure-pipe, and a hollow lever having a spherical end and communicating with the interior of said boiler, said lever being designed to operate said auxiliary valve, substantially as set forth. 5th. A boiler feeder connected with a boiler, a valve between said feeder and the boiler, normally held to its seat by the pressure in the latter, a pressure-pipe communicating with the interior of the boiler connected to the casing of said valve, an auxiliary valve located in said pressure-pipe, and a hollow operating lever having a spherical end and communicating with the interior of said boiler and designed to operate said auxiliary valve, whereby said primary valve will be operated, as set forth. 6th. A boiler feeder connected with a boiler, a valve between said feeder and the boiler, normally held to its seat by the boiler pressure, a diaphragm to which said valve is connected, a pressure-pipe communicating with the interior of the boiler and opening into the casing of said valve above said diaphragm, an auxiliary valve in said pipe having a projecting rod, and a hollow lever having a spherical end and communicating with the interior of said boiler, said lever being located beneath said auxiliary valve and designed to engage said rod, substantially as set forth. 7th. The combination with a boiler, of a feeder, a pipe connecting said feeder to the boiler, a water-column opening into said boiler, a hollow operating lever having an enlarged end, said lever communicating with the interior of, and pivotally connected to said water column, the steam pipe leading from said water column to said enlarged end of said lever, a primary valve located in said connecting pipe and normally closed by the boiler pressure, the pressure-pipe leading from said water column to the casing of said valve, and an auxiliary valve located in said pressure pipe and designed to be unseated by said lever, whereby said former valve will be unseated, substantially as set forth. 8th. The combination with a boiler, of a feeder, a pipe connecting said feeder to the boiler, a water column opening into said boiler, a hollow operating lever having an enlarged end, said lever communicating with the interior of and pivotally connected to said water column, the steam pipe leading from said water column to said enlarged end of said lever, a primary valve located in said connecting pipe and normally closed by the boiler pressure, the pressure pipe leading from said water column to the casing of said valve, the relief valve located in said pressure pipe, an auxiliary valve being designed to be operated by said lever, substantially as set forth. 9th. The combination with a boiler, of a feeder, a pipe connecting said feeder to the boiler, a water column opening into said boiler, a hollow operating lever having an enlarged end, said lever communicating with the interior of, and pivotally connected to said water column, the steam pipe leading to said enlarged end of said lever, a valve located in said connecting pipe normally closed by the boiler pressure, the pressure pipe leading from said water column, the casing of said valve extending substantially parallel with and above said lever, a relief valve normally held to its seat and located in said pressure-pipe, and an auxiliary valve also located in said pressure pipe, said relief and auxiliary valves having downwardly extending rods designed to be alternately engaged by said lever, substantially as set forth. 10th. A boiler feeder connected with a boiler, a primary valve between said feeder and the boiler, and normally held towards its seat by the boiler pressure, a pressure pipe communicating with the interior of said boiler and connected to the casing of said valve, an auxiliary valve located in said pressure pipe, a hollow operating lever having a spherical end and communicating with the interior of said boiler and designed to operate said auxiliary valve, and means for adjusting said primary valve, whereby the reseating thereof will be prevented, as and for the purpose set forth. 11th. A boiler feeder connected with a boiler, a primary valve between said feeder and the boiler normally held towards its seat by the boiler-pressure, a diaphragm to which said valve is connected, a spring acting on said diaphragm, said valve having a lower hollow extension, and an adjustable rod having one end fitted in said hollow extension, a pressure pipe communicating with the interior of the boiler and connected to the casing of said valve, an auxiliary valve located in said pressure pipe, and a hollow operating lever having a spherical end and communicating with the interior of said boiler, and designed to operate said auxiliary valve, substantially as set forth. 12th. A boiler feeder connected with a boiler, means for supplying steam thereto, a suction or water-supply-pipe opening into said feeder and connected to the water-supply, and a graduated valve located in said pipe and held firmly to its seat by said water-supply when said feeder is not in operation, said valve being unseated when a vacuum is created in said suction pipe when steam is admitted to said feeder and the latter is operated, the extent to which said valve is unseated being controlled by the suction in the water-supply-pipe, as set forth. 13th. A boiler feeder connected with a boiler, means for supplying steam thereto, a suction or water-supply-pipe opening into said feeder and connected to the water-supply, and a graduated valve located in said pipe and held firmly to its seat by said water-supply when said feeder is not in operation a valve-casing having an opening therein, and a diaphragm to which said valve is connected, said valve being unseated when a vacuum is created in said suction pipe when steam is admitted to said feeder and the latter is operated, the extent to which said valve is unseated being controlled by the suction in the water-supply-pipe, as set forth. 14th. A boiler feeder connected with a boiler, means for supplying steam thereto, a suction or water-supply-pipe opening into said feeder and connected to the water-supply, and a valve located in said pipe having a series of ports of different lengths, and normally held firmly to its seat by said water-supply when said feeder is not in operation, said valve being unseated when a vacuum is created in said suction pipe when steam is admitted to said feeder and the latter is operated, the extent to which said valve is unseated being controlled by the suction in the water-supply-pipe, as set forth. 15th. A boiler feeder connected with a boiler, means for supplying steam thereto, a suction or water-supply-pipe opening into said feeder and connected to the water-supply, and a valve located in said pipe having a series of ports and curved portions of different lengths, and normally held firmly to its seat by said water-supply when said feeder is not in operation, said valve being unseated when a vacuum is created in said suction pipe when steam is admitted to said feeder and the latter is operated, the extent to which said valve is unseated being controlled by the suction in the water-supply-pipe, as set forth. 16th. A boiler feeder connected with a boiler, means for supplying steam thereto, a suction pipe opening into said feeder and connected to the water-supply, a valve designed to be automatically unseated when a vacuum is created in the suction-pipe, and a valve in said pipe between the feeder and said former valve to permit the escape of any water remaining in said pipe after the feeder ceases to operate, substantially as set forth. 17th. In a boiler feeder, the combination with a water column and primary and auxiliary-valves, of a hollow operating lever for operating said auxiliary-valve communicating with said water-column, a yoke attached to said column and supporting said lever, and a stop for said lever extended in line therewith and with the ends of which stop said lever is designed to contact, as set forth. 18th. In a boiler feeder, the combination with a water-column, of a hollow operating lever communicating with said water-column, a primary-valve, a pressure-pipe leading from said water column, to the casing of said primary-valve, a yoke on said water-column pivotally supporting said lever, said yoke having an upper tubular portion above said lever forming part of said pressure-pipe, relief and auxiliary-valves located in said tubular portion and having depending rods designed to be engaged by said lever, and a stop for said lever extended in line therewith and with which said lever is designed to engage, substantially as set forth. 19th. In a boiler feeder, the combination with a water-column, an operating lever, and a primary-valve, of a pressure pipe leading from said water-column to said primary-valve, the auxiliary and relief valves located in said pressure-pipe and designed to be forced to their seats by the pressure therein, and the cylinders enclosing said latter valves having holes or perforations therein above the valves, substantially as and for the purpose set forth. 20th. The combination with a boiler, of a water-column opening therein, a hollow lever pivotally connected thereto and communicating therewith, and having an enlarged end, a weight on the other end of said lever, a steam-pipe located in said water-column and having its inner end beneath the inner end of said steam pipe, a whistle, or the like, with which said second pipe communicates, a thermostat connecting said water-column to said whistle, a feeder-pipe connecting the latter to the boiler, a primary-valve located therein normally held to its seat by the boiler pressure, a diaphragm to which said valve is connected, a pressure-pipe leading from said water-column to the casing of said primary-valve above said diaphragm, auxiliary and relief-valves located in said pressure-pipe above said lever and having downwardly projecting rods designed to be engaged by said lever, a suction-pipe leading from the water-supply to said feeder, and a valve located in said latter pipe and designed to be unseated by the creation of a vacuum in said suction pipe, substantially as set forth.

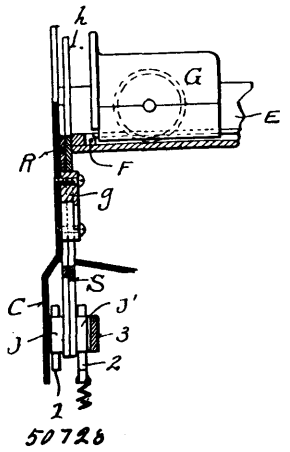
No. 50,728. Coin-delivery Apparatus.

(*Appareil à délivrer la monnaie.*)

Edward Julius Brandt, Watertown, Wisconsin, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. A coin-delivery apparatus embodying a suitable casing, a series of inclined coin-channels in the casing, an apertured

plate facing the lower ends of the channels, racks arranged in said channels, hollow coin-followers in sliding engagement with the racks,



rack-engaging pinions fast on arbors mounted in the followers, volute springs connecting the arbors and housings, and reciprocative pushers operative to lift coin from the aforesaid channels into register with the plate apertures, the latter being of such contour and dimensions as will permit escape of coin brought into register therewith. 2nd. A coin-delivery apparatus embodying a suitable casing, a pair of inclined coin-channels in the casing, a suitably apertured plate facing the lower ends of the channels, a pair of parallel single coin-pushers operative in one channel adjacent to said plate, levers connected to both pushers, a lug on one of the levers arranged to lift the other, another pusher operative in the remaining channel, and having a working face approximately equal in width to the thickness of two coins, a lever connected to the latter pusher and provided with a lug arranged to lift the outermost of the former levers, and still another lever provided with a lug arranged to lift all the aforesaid levers. 3rd. A coin-delivery apparatus that embodies a suitable casing, a series of inclined coin-channels in the casing, an apertured stop-plate at the lower ends of the channels, coin-pushers loose in the plate, and a reciprocative mechanism for the pushers comprising a series of rockers, together with a series of vertically reciprocative edgewise plates having depending feet opposing the rockers. 4th. A coin-delivery apparatus embodying a suitable casing, a series of inclined coin-channels in the casing, a plate that faces the lower ends of the channels and has a series of coin-apertures, as well as vertical slots communicating with these apertures, coin-pushers loosely engaging the slots, ears on the pushers abutting said plate, tilt-rods in pivotal connection with the lower ends of said pushers, springs in the rods exertive against the aforesaid pushers, and suitable mechanism for actuating said rods. 5th. A coin-delivery apparatus embodying a suitable casing, a series of inclined coin-channels in the casing, a plate that faces the lower ends of the channels and has a series of coin-apertures above the bottoms of the same, as well as vertical slots communicating with these apertures, coin-pushers maintained in loose engagement with the slots, tilt-rods in pivotal connection with the pushers, bell-cranks exertive against the rods, rockers operative against the bell-cranks, a series of loose edgewise plates having depending feet opposing the rockers, and push-rods joined to the plates. 6th. A coin-delivery apparatus embodying a suitable casing, a series of inclined coin-channels in the casing, a plate that faces the lower ends of the channels and has a series of coin-apertures above the bottoms of the same, as well as vertical slots communicating with these apertures, coin-pushers maintained in loose engagement with the slots, tilt-rods in pivotal connection with the pushers, bell-cranks exertive against the rods, springs connecting the rods and bell-cranks, rockers operative against said bell-cranks, a series of loose edgewise plates having depending feet opposing the rockers, and push-rods joined to the plates. 7th. A coin-delivery apparatus embodying a suitable casing, a series of inclined coin-channels in the casing, an apertured stop-plate at the lower ends of the channels, coin-pushers loose in the plate, a reciprocative mechanism for the pushers, coin followers in the aforesaid channels, loose pins in the paths of the coin-followers, and an alarm-mechanism arranged to be actuated by movement of the pins under impulse of said followers.

No. 50,729. Machine for Untwisting and Picking Ropes of Curled Fibre. (*Machine pour détordre et écharpiller les cordages.*)

Samuel A. Flower, Newark, New Jersey, U.S.A., 4th December, 1895; 6 years.

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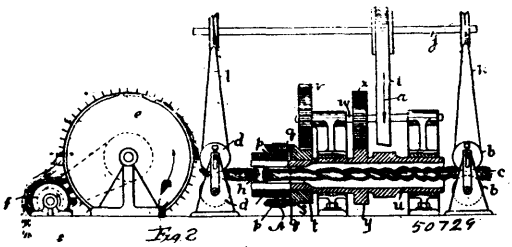
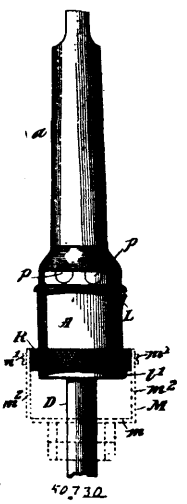
Claim.—1st. The combination of untwisting apparatus for roped fibres consisting of one or more drawing and twisting-heads, feed



rolls for delivering the roped fibres thereto and holding them for untwisting, and feed rolls for receiving and discharging the untwisted ropes from the drawing and twisting heads, substantially as described. 2nd. The combination of untwisting apparatus for roped fibers consisting of one or more drawing and twisting heads having rolls *h* for holding the ropes for untwisting, and being geared for feeding them along, feed rolls *b* for delivering the roped fibres thereto, and holding them for untwisting, feed rolls *d*, for receiving the untwisted ropes from the drawing and twisting heads and a picker for picking the fibres apart, substantially as described.

No. 50,730. Tool Chuck. (*Mandrin pour outils.*)

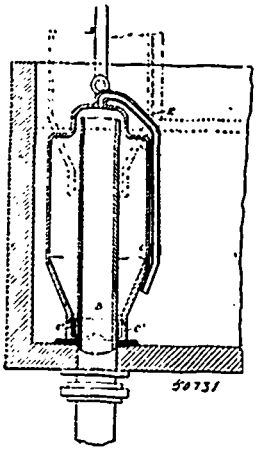


James Texter Fink, Washington, and Albert Stephan, Mount Pleasant, both in Columbia, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. A chuck having a cylindrical bore provided with a bearing at its inner end to hold a tool against rotation without interfering with its endwise motion, and a ring sliding freely on the head of the chuck, in combination with a lever of greater length than the width of the ring pivoted in said head and adapted to lock a tool against endwise motion, said lever provided with a lip at its outer end adapted to limit the movement of the ring in one direction, and with a tail adapted to project into the plane of motion of said ring when the forward end of said lever is depressed by such ring, for the purpose set forth. 2nd. A tool chuck provided in its head with a cylindrical bore, and with a bearing formed by two spaced pins near the inner end of said bore and adapted to receive between them the flattened end of the shank of a tool and hold the latter against rotation without interfering with its endwise movement, a thrust or wear plate or plates at the inner end of the bore held against displacement by the aforesaid pins, and the lever L pivoted in the head of the chuck and provided with a pin adapted to engage the shank of the tool and hold the latter against endwise motion, in combination with the ring R of the same interior diameter as the exterior diameter of the head of the chuck, said ring adapted to slide on said head and move the lever into and out of its operative position, substantially as and for the purpose set forth. 3rd. A tool chuck provided in its head with a cylindrical bore and with a bearing formed by two removable pins having provimate flat faces within the bore and adapted to receive between them the flat end of the shank of a tool and hold the same against rotation without interfering with its endwise motion, a thrust or wear plate or plates at the inner end of the bore, held against displacement by the aforesaid pins, and the lever L pivoted in the head of the chuck and provided with a removable pin adapted to engage the shank of the tool and hold the same against endwise movement, in combination with the ring R of the

ame interior diameter as the exterior diameter of the head of the chuck, said ring adapted to slide on said head and move the lever into and out of its operative position, substantially as and for the purpose set forth. 4th. The combination with a tool chuck provided in its head with a seat for the cylindrical shank of a tool, of a lever pivoted in said head, and a pin detachably connected with said lever and adapted to engage the tool shank, and means, as the ring R, adapted to move the lever into and out of its operative position, substantially as and for the purpose set forth. 5th. A chuck adapted to receive and hold a tool against rotary movement, a locking device to hold said tool against endwise movement, and a sliding element adapted to control said locking device, in combination with an attachment, such as described, connected with the sliding element, and adapted to move the same so as to release the locking device from the tool, substantially as and for the purpose set forth. 6th. The combination with a chuck provided with a cylindrical bore and a bearing near its inner end, a tap having a cylindrical shank provided with a flattened end, said shank and flattened end respectively fitting the aforesaid bore and the bearing therein, and a lever adapted to engage the tap and hold it against endwise movement in the bore, of a ring sliding freely on the head of the chuck and adapted to move the lever into and out of engagement with the tap, an actuating device connected with the ring and projecting beyond the face of the chuck, said actuating device adapted to come in contact with the uppermost nut on the tap when said tap is full, for the purpose set forth.

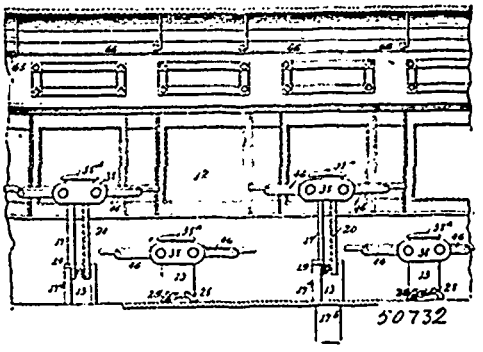
No. 50,731. Siphon Valve. (*Soupape de siphon.*)



Frederick Booth, Concord, New Hampshire, U.S.A., 4th December, 1895; 6 years.

Claim.—The combination with the outlet pipe, of the hollow valve body closed at its upper end and having a downwardly tapering lower end fitting the said pipe as shown at C^1, and there provided with lateral inlet openings C^2, and the pipe E leading from the top of the said valve body down along the outer side thereof, and terminating a suitable distance above the openings C^2, substantially as described.

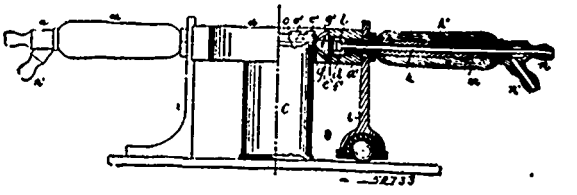
No. 50,732. Car Seat. (*Siège de chars.*)



James Madison Osgood, Boston, Massachusetts, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. A car provided with upper and lower berths partly overlapping each other, the projecting end portions of said berths being capable of being swung down to afford each occupant a dressing room extending to the top of the car, substantially as described. 2nd. A car chair mounted on rollers and provided with downwardly extending projections adapted to engage slots of tracks on which the rollers are adapted to run, substantially as described. 3rd. A car chair comprising a bottom portion, backs hinged to opposite edges thereof, a motion transmitting device whereby both backs are caused to move simultaneously but in opposite directions, and a movable connecting device whereby one of the backs may be coupled to, or uncoupled from the said motion-transmitting device, to permit of independent movement of the said back, substantially as described. 4th. A car chair comprising a bottom portion, two reversible backs located one at each end of the bottom portion to form a back for one portion thereof, and mounted to swing in different planes adjacent to each other so that the two backs can be swung side by side so as to practically form a single back, and a movable part secured to one of the backs and constructed to engage the other back, to compel it to move in unison with the first named back, said movable part when withdrawn from engagement with one of the backs permitting the said back to be reversed independently of the other back, whereby the chair may be converted into a tete-a-tete, substantially as described. 5th. The combination, with the sliding chair, of the spring pressed retaining dogs thereon and constructed to engage a relatively stationary part of the car to hold the chair against sliding movement, and means for simultaneously operating the dogs, substantially as described. 6th. A chair provided with a bottom portion, two reversible backs, and a rod slidably mounted on one of the backs and constructed to engage the other back, substantially as described. 7th. A car provided with chairs convertible into berths, alternate chairs being vertically movable to form upper berths, and the other chairs being slidable toward and from the said vertically-movable chairs, the lower berths when in position for use, extending partly under the upper berths, and projecting beyond the same at one end, so as to afford a free space above the said end of the lower berth to the top of the car, substantially as described.

No. 50,733. Method of and Means for Hermetically Sealing Metal Boxes, etc. (*Méthode et moyen de sceller hermétiquement les boîtes métalliques, etc.*)

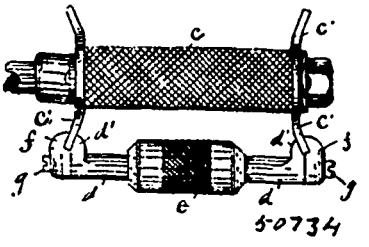


Jules Gersant, Deal, and Archibald George Buttifant, Benet Place, London, both in England, 4th December, 1895; 6 years.

Claim.—1st. The process of hermetically sealing metal boxes, tins, or cans, destined for preserving alimentary products and other articles consisting of fusing a portion of the coating of fusible metal at the junction of the top and bottom of the box, substantially as specified. 2nd. In means for hermetically sealing metal boxes, tins, or cans, the framing consisting of the two portions a, a^1, made to open and close and divided concentrically into two compartments d, e, with gas inlet or inlets to the outer compartment d, air orifices e^1, in top of compartment e, and communicating apertures in the dividing wall f, and a slot or opening g, in the innermost enclosing wall through which the flame is directed upon the portion of the box, tin, or can, to be hermetically sealed, all constructed, arranged and operated substantially as hereinbefore described and shown in the drawings for the purpose of hermetically sealing metal boxes, tins, or cans by means of a direct flame acting upon and fusing a portion of the fusible coating of such metal boxes, tins, or cans without the addition of solder or any soldering composition, all as set forth. 3rd. In means for hermetically sealing metal boxes, tins, or cans, the combination and arrangement of framing a, a^1, constructed as hereinbefore set forth and shown with gas and air inlet tubes k, l, arms m, and nozzle o, all as and for the purposes hereinbefore described.

No. 50,734. Balance Attachment for Bicycle-Pedals.

(*Attache pour pédales de bicycle.*)

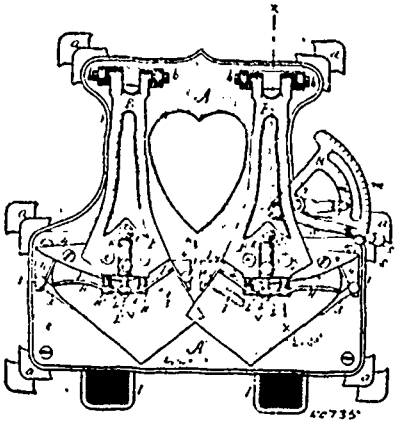


John R. Bliven, Daytona, Florida, U.S.A., 4th December, 1895 6 years.

Claim.—In combination with an axially supported pedal, having radial lips c^1, as set forth, right and left hand threaded rods whose outer ends are formed as clamps to engage said lips, and a threaded weight, adjustably mounted upon said threaded rods, all substantially as and for the purpose specified.

No. 50,735. Machine for Marking Leather.

(*Machine à marquer le cuire.*)



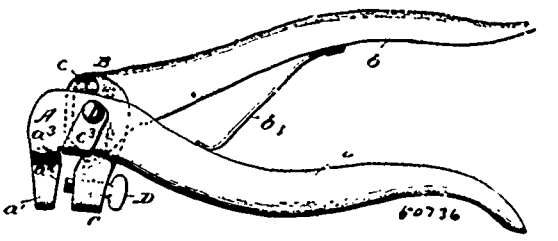
Winfield Scott Soule, Brockton, Massachusetts, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. In a machine of the character described, the bed or table A, *the vertically swinging arm B supported by said bed and* provided with the rearwardly extending horizontal bores B^1, the pins J secured adjustably horizontally in said bores, the markers H formed to produce a continuous curved line indicating the location and shape of the line of stitching, said markers being secured adjustably vertically to said pins, and the actuating rod D connected with the arm whereby the marker is forced down upon the quarter, substantially as set forth. 2nd. In a machine of the character described, in combination, a bed or table, the arm B swinging vertically with relation thereto, the marker H formed to produce a continuous curved line indicating the proposed location of the stitching, said marker being secured adjustably vertically and horizontally to the said arm, the actuating rod D adjustably connected with the arm and provided with an adjustable stop for limiting the upward movement of the arm, a spring adapted to hold the arm slightly raised from the bed, and the gages 4 adjustably secured to the bed, substantially as described. 3rd. In a machine of the character described, a bed or table, the vertically swinging arm B supported by said bed and provided with the rearwardly extending horizontal bores B^1, said bores containing the adjustable pins J which extend *forward therefrom, the marker H hung on said pins, the horizontal* pin L secured to the arm between and above the pins J, and adjustable horizontally with relation to said arm, and the gage-button L^1 swivelled on the outer end of said pin L and adapted to swing down in front of the marker, substantially as set forth. 4th. In a machine of the character described, a bed or table provided with the slots 3, the arm B swinging vertically with relation to said bed, the marker H adjustably secured to said arm, the gage 4 lying on said bed, the horizontally sliding frame U^1, U^{11} provided with the slideways or slots U, the screws or pins extending through the slots U and 3 and the gage, the guide rods W for directing the movement of said frame, the rack R^1 rigid with said frame, the vertical shaft P supported by the bed and provided with a segment, gear R engaging with said rack, a gage or dial N swinging from said shaft and marked to indicate sizes and widths, a size-indicating pointer S fast on said shaft, and a width-indicating pointer T pivotally connected with the gage or dial, substantially as described. 5th. In a machine of the character described, a bed or table provided with the pairs of slots 3, the slots in each pair extending toward each other at forward angles, as described, the gages 4 lying on the bed, the frame U^1, U^{11} *sliding horizontally forward and back with relation to the* machine and provided with the slideways or slots U, converging at a forward angle, as described, the screws or pins 1 each extending through and playing in the slots U and 3, and the links 7, elbow-lever 5 pivoted to the frame and link 8, said links pivotally connecting the opposite ends of said elbow-lever with the pins 1 which slide in the two slots 3 constituting a pair, substantially as set forth.

No. 50,736. Saw Setting Tool. (*Outil à contourner.*)

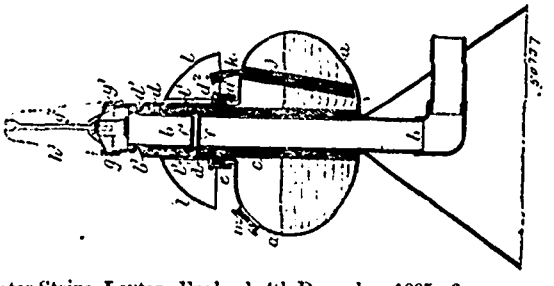
John A. Minger, Bern, Kansas, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. In a saw setting tool, the combination, with an anvil jaw, of a clamping jaw pivoted thereon, and a setting jaw or hammer pivotally connected with the clamping jaw, substantially as shown and described. 2nd. In a saw setting tool, the combination, with an anvil jaw, having an opening therein, of a clamping jaw pivoted within said opening, and a setting jaw or hammer pivoted to the clamping jaw above its pivotal point, substantially as shown



and described. 3rd. In a saw setting tool, the combination, with the anvil jaw, of the clamping jaw having a regulating screw and the setting jaw or hammer pivoted to the opposite end of the clamping jaw, substantially as shown and described. 4th. In a saw setting tool, the combination, with an anvil jaw having an inclined face, of the setting jaw or hammer having an inclined nose and the clamping jaw pivotally connected with the setting jaw and provided with a regulating screw, substantially as shown and described. 5th. In a saw setting tool, the combination, with an anvil jaw, of a clamping jaw pivoted thereto, said clamping jaw being slotted and a setting jaw or hammer pivoted within the slot of the clamping jaw, and the regulating screw, all arranged substantially as shown and described.

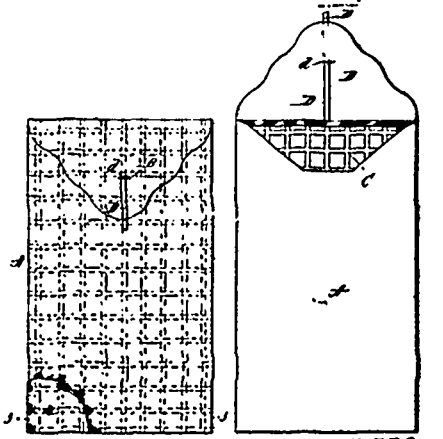
No. 50,737. Incandescent Lamp. (*Lampe incandescente.*)



Peter Steins, Leyton, England, 4th December, 1895; 6 years.

Claim.—1st. The combination of a closed reservoir, an air tube through it, a wick around the air tube, an opening into it and a mantle or refractory body at the top of it, substantially as described. 2nd. Incandescent lamps, substantially as described and shown in the drawing.

No. 50,738. Envelope. (*Enveloppe.*)



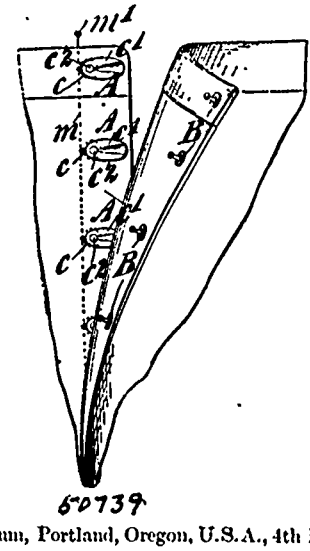
David Ambrose, New York, State of New York, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. An envelope, the inner surface of the sides of which are provided with a lining of flexible metal, substantially as shown and described. 2nd. An envelope, the inner surface of the sides of which are provided with a lining, consisting of a net work or mesh of flexible metal, substantially as shown and described. 3rd. An envelope, provided with a flap in the usual manner and the inner

surface of the sides of which are provided with a lining consisting of a net work or mesh of flexible metal, which is secured thereto, substantially as shown and described. 4th. An envelope, provided with a flap in the usual manner and the inner surface of the sides of which are provided with a lining, consisting of a net work or mesh of flexible metal which is secured thereto, and one of said side linings being also provided with a strip or tongue which is adapted to be extended through the flap of the envelope and to hold the same closed when folded, substantially as shown and described.

No. 50,739. Garment Securing Device.

(*Agrafe de vêtement.*)

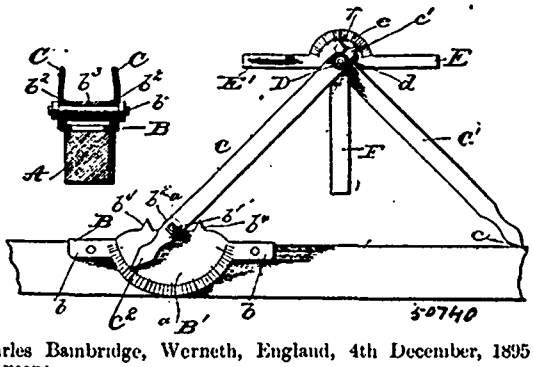


Otte Van Oostrum, Portland, Oregon, U.S.A., 4th December, 1895; 6 years.

Claim.—1st. The herein described fastener comprising separable members, one of which consists of a stud and the other of a clutch piece, the clutch piece comprising a base piece, having a flange projected perpendicular thereto at a distance from the edge of the base piece, so as to leave a marginal flange exteriorly of the said perpendicular flange, and produce a central recess or chamber interiory of the perpendicular flange, both flanges being adapted for engagement with the material to which the clutch piece is attached, a spring-pressed latch located in the said central chamber interiorly of the perpendicular flange of the base piece, and a perforated cap plate held on the said perpendicular flange of the base piece and adapted to engage the material on the opposite side from the base piece, substantially as described. 2nd. The herein described garment fastening device, comprising a series of separable members adapted to be secured to a garment, of which one member consists of a stud and the other of a clutch piece, the latter comprising a base piece, having a flange projected perpendicular thereto, a perforated cap plate which rests on the said flange and is adapted to form, with the base piece, a clamp for the garment, a pintle held between the base piece and the cap plate interiorly of the flange of the base piece on which the cap plate rests, a spring pressed latch pivoted on the said pintle and provided with a lateral limb that projects to the outside of the said flange, and a releasing device connecting the limbs of the several latches of the series, substantially as described.

No. 50,740. Carpenter's Roof Holder and Gauge.

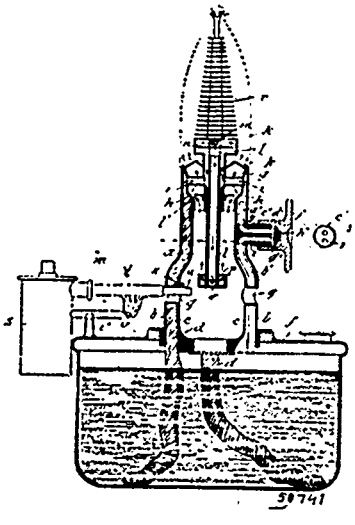
(*Appareil pour mesurer et scier le bois de construction.*)



Charles Bainbridge, Werneth, England, 4th December, 1895; 6 years.

Claim.—1st. A carpenter's work holder and roof gauge comprising among its members, a base plate adapted to be placed on a work trestle or bench, a pattern arm pivoted to said base plate and adapted to be moved to any angle on either side of its point of pivoting, and a second pattern arm pivoted to the end of said first named arm adapted to engage the trestle or bench at its other end, to form with said first named arm a roof pattern, substantially as described. 2nd. A carpenter's work holder and roofing gauge, comprising among its members, a base plate adapted to be placed on a work trestle or bench and provided with a protractor, a pattern arm pivoted to said base plate in operative relation to said protractor and having a portion adapted to travel over said protractor and a second pattern arm pivoted to the outer end of said first named arm, and having its free end provided with a point for engaging the trestle or bench, said second arm being of the same length as the length of the first named arm from its point of pivoting to its pivotal connection with said second arm, whereby said arms may be placed at any desired angle to form a roof pattern on either side of their pivotal connection with the base plate, substantially as described. 3rd. A carpenter's work holder and roofing gauge, comprising among its members a base plate adapted to be placed on a trestle or work bench and provided with a protractor, a pattern arm pivoted to said plate in operative relation with said protractor, a second pattern arm pivoted to the outer end of said first named arm, a roof pattern, at either side of pivotal connection with said base plate, a protractor adjacent to the pivotal connection of said arms, and a plumb indicating arm pivoted to said pattern arms at their pivotal point of union, said plumb-indicating arm having a part for engaging said protractor, substantially as described. 4th. A carpenter's work holder and roofing gauge, comprising among its members a base adapted to be placed on a work trestle or bench, a jointed arm pivoted thereto, a levelling arm pivoted to the joint of the arm, and a plumb indicating arm, substantially as described. 5th. A carpenter's work holder and roofing gauge, comprising among its members a base adapted to be placed on a work trestle or bench, a jointed arm pivoted to said base, a levelling arm provided with a protractor, and a plumb indicating arm having a pointer to traverse the said protractor, the levelling arm and the plumb indicating arm being pivoted upon the pivot of the jointed arm, substantially as described. 6th. A carpenter's work holder and roofing gauge, comprising among its members, a base plate adapted to be placed upon a trestle or work bench, a pattern arm pivoted to said base plate, said plate being provided with spurs at either side of said pivotal connection, a second pattern arm pivoted to plate, said plate being provided with spurs at either side of said pivotal connection, a second pattern arm pivoted to the outer end of first named arm, and provided with a point for engaging the trestle or bench whereby said pattern arm may be set at different angles to form a roof pattern, and also to support work and a saw guiding arm detachably secured to said pattern arm and adjustable to different angles, substantially as described.

No. 50,741. Lamp for the Production of Spirit-gas Incandescent Light, with Lighting and Extinguishing Contrivance. (*Lampe pour la production de gaz spiritueux à lumière incandescente, avec appareil à allumer et éteindre.*)

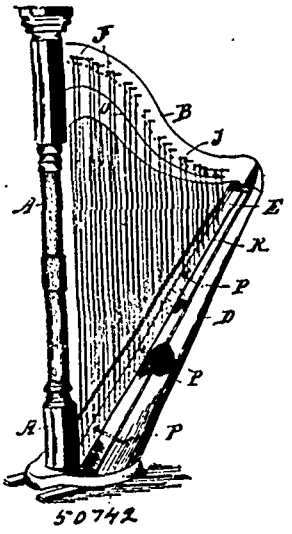


Albin Perlich, Dresden Striesen, Germany, 4th December, 1895; 6 years.

Claim.—1st. In a lamp for the production of spirit-gas incandescent light, the arrangement of the double walled, cylindrical hollow body *a*, forming the burner, by which the gas, developed in the

wicks *d*, by the flame at the burner head, attains through tubes *i*, *i*, and circulating round plate *n*, into the hollow burner disc *k*, in order to be again heated, and then passing through the openings *m*, goes downward into the tube *l*, streaming out of a distributing chamber *o*, into the interior of the cylinder, from where, mixed with the air entering by the channels *g* circulating round tubes *i*, *i*, and conducted through the perforated surface k^1, to the flame, as described 2nd. In a lamp for the production of spirit-gas incandescent light, the arrangement of a conical widening *h*, in such way, that by a plate moving upwards and downwards on the tube *l*, the intermediate space between the two is diminished or enlarged, and accordingly varying the influx of gas, as described. 3rd. In a spirit-gas incandescent lamp, the arrangement on the burner disc *k*, of a ribbed body *r*, which holds the incandescent body, for the purpose of accumulating and distributing heat, as described. 4th. In the warming arrangement the combination of a special spirit receptacle *s*, a tube *t*, filled with a wick and provided with small opening *u*, and catch *x*, with burner tube *v* beneath, by which the spirit in tube *t*, is gasified, as set forth. 5th. The extinguishing arrangement consisting of two tubes a^1 and b^1, placed between the walls of the cylinder *a*, into which the parallel channels *y* and *z*, of a short piece i^1 run, upon which a closed socket *d*, is moved backwards and forwards by a handwheel f^1 in order, by means of the cone shaped stopper plate g^1 lying in it, to open or shut the channels *y* and *z*, for the purpose of diverting the gas into the receptacle *f*, as set forth.

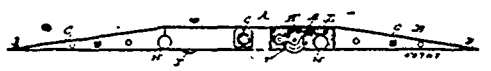
No. 50,742. Harp. (*Harpe.*)



Leopold Lehman, Joliet, Illinois, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. In a harp the combination of a hollow neck B, a set of tuning pegs projecting from each side of said neck, a double set of strings arranged so that the strings of one set cross those of the other set and an integral rest *o* on each side of said neck, said rests having notches *n* therein, substantially as specified. 2nd. In a harp, a body D, consisting of a curved metal back, a sounding board having its edges secured to the edges of said back, interior corner strips V, V, a longitudinal interior central strip running the entire length of said sounding board, a similar exterior strip E, sounding posts P, located centrally within the body and connecting the back and the sounding board, and an exterior head on each end of each of said sounding posts whereby said sounding board is prevented from being bowed upwardly, substantially as specified.

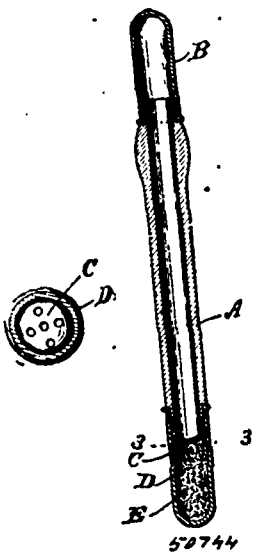
No. 50,743. Hose Bridge. (*Pont pour boyaux.*)



William H. Baker and George McFarlane, both of Detroit, Michigan, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. In a hose bridge, the combination of a central wheeled section, and two end sections hinged to the end of said central section and adapted to fold over upon the same and being tapered downward toward their outer ends, the adjacent ends of the sections being recessed to embrace the lines of hose, substantially as and for the purpose described.. 2nd. In a hose bridge, the combination of a central section, wheels supporting said section, and adapted to travel on the car track, means carried by the truck for movably supporting said wheels, means for raising the truck for transportation and for lowering it to anchor it, and tapering end sections carried by the central sections, substantially as and for the purpose described 3rd. A hose bridge consisting essentially of a wheeled truck, wings or end sections, and intermediate connections hinging the wings to the truck and adapted to lower the truck onto the track when the wings are swung outward and downward. 4th. In a hose bridge, the combination of the central section, oscillatory bars pivoted to the sides of the same and carrying a wheel axle, end sections, and levers fulcrumed on the sides of the central section and having their inner ends bearing on the free ends of the oscillatory bars and their outer ends pivoted to the inner ends of the end sections.

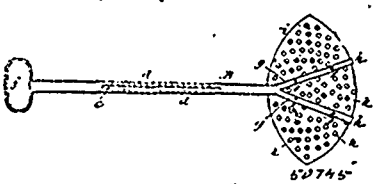
No. 50,744. Thermometer Case. (*Etui de thermomètre.*)



Alfred A. Smith and Frederick S. Smith, assignees of Philip Jaisohn, all of Washington, Columbia, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. In a physician's thermometer case, the combination with the case proper, of an auxiliary receptacle on the case, and a fixed partition located between the receptacle and interior of the case, having an opening therein, whereby a communicating passage is formed between the interior of the case and receptacle, and the instrument is prevented from moving into the receptacle, substantially as described. 2nd. In a physician's thermometer case, the combination with the thermometer-holding case and means for opening and closing the same, an auxiliary receptacle on the case, and a fixed perforated partition between the interior of the receptacle and interior of the case, substantially as described. 3rd. In a physician's thermometer case, the combination with the case having a fixed perforated end, of a cap for the perforated end, fashioned to constitute a receptacle, and means for removably securing the cap on the case, substantially as described. 4th. In a physician's thermometer, the combination with a case for the thermometer, having a fixed perforated section, a closure for the case, and a closed receptacle secured to the case over the perforations, and communicating with the interior of the case through the perforations, substantially as described.

No. 50,745. Pot Holder and Strainer.
(*Porte-pot et couloir.*)



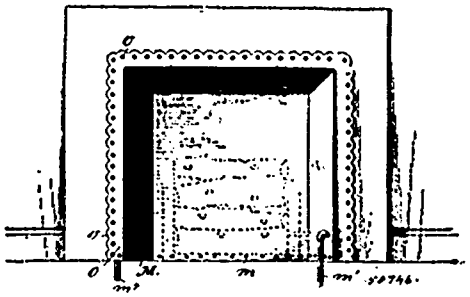
Sarah Jane Cushman, assignee of William Grove Bohns, both of Rochester, New York, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. A combined pot holder and strainer, consisting of a forked handle lever having attached thereto a strainer, catches on the end of the forks, a slot in its centre, ratchet teeth along the margin of the slot, a groove under the slot, and a hand grip at one end, a perforated strainer plate attached to the forks of the lever, a pawl lever handle made to slide in the slot of the forked lever handle and engage with the ratchet teeth on the same, and a hook to hold the bail of a pot, the whole arranged and constructed for

holding and tilting a pot, while straining water therefrom, all substantially as described. 2nd. The forked lever B, constructed with slot *c*, ratchet teeth *d*, forks *g*, *g*, with end catches *h*, *h*, strainer plate *i*, hand grip *f*, groove *c* on the under side, all substantially as described. 3rd. The pawl handle lever C, constructed with a hand grip *l*, a hook *m*, pawl *n*, and pin *o*, projecting through the thin end for sliding in the groove *c*, of the forked handle lever B, all substantially as specified. 4th. The combination of the forked lever handle B, and the pawl lever handle C, formed with a hook *m*, pin *o*, and ratchet pawl *n*, *n*, all substantially as described.

No. 50,746. Art of Steam Heating.

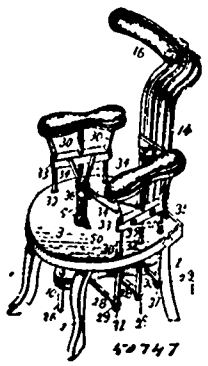
(*Art de chauffer à la vapeur.*)



Frederick Ellsworth Backus, Williamsport, Pennsylvania, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. A radiator composed of a narrow chambered structure adapted to be placed within a fire place niche and having the appearance of a metallic lining for the same, said radiator having an inlet and an outlet for a heat circulating medium, substantially as described. 2nd. A radiator composed of a narrow chambered structure adapted to be placed in a fireplace niche with a space intervening between the radiator and the walls of the niche, said radiator having an inlet and an outlet for the heat circulating medium and provision for the passage of air to and from the space between the radiator and the walls of the niche, substantially as described. 3rd. A radiator simulating a lining for a fire place with a space between the walls of the niche and the radiator, the said radiator having an inlet circulating medium, and provided with the openings *a* and perforations *c*, forming a communication between the air of the room and the space between the radiator and the walls of the fireplace niche, substantially as described.

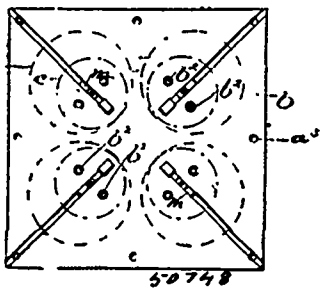
No. 50,747. Chair. (*Chaise.*)



Edmund Walter Briggs, jr., Lyons, Iowa, U.S.A., 5th December 1895; 6 years.

Claim.—1st. In a chair, the combination of a frame, a threaded shaft arranged vertically therein, a seat connected to the upper end of the shaft, a back movable vertically on the frame, a bar connecting the back and shaft, a rod arising vertically from the bar, and an adjustable connection between the rod and back, whereby the back is braced and its resiliency regulated, substantially as described. 2nd. In a chair, the combination of a frame, a threaded shaft movable vertically therein, a seat mounted on the shaft, a rod rigidly secured to the frame and projecting downwardly therefrom, a bar connected to the shaft and movable longitudinally on the said rod, a back movable vertically on the frame and connected to the bar, whereby the back and seat are moved in unison, and a rod rigidly secured to and arising vertically from the bar and an adjustable connection between the rod and back, whereby the back is braced and its resiliency regulated, substantially as described. 3rd. In a chair, the combination of a stationary shaft supported on legs, a threaded shaft movable vertically therein, a seat proper fixed to the upper end of the threaded shaft, a bar loosely mounted on the lower end of the threaded shaft and below the stationary seat and projected beyond the rear side thereof, a back slidably mounted on the rear side of the stationary seat and rigidly connected to the rear end of the bar, a series of rigid rods rigidly secured to the bar and projecting transversely from each side thereof, a vertically extending rod for each of the several transverse rods and rigidly connected thereto, and two arms rigidly secured to the upper ends of the vertical rods and one at each side of the chair, and slidably connected to the stationary seat at opposite sides thereof, substantially as described. 4th. In a chair, the combination of a stationary seat supported on legs, a threaded shaft movable vertically therein, a seat proper fixed to the upper end of the shaft, a bar loosely mounted on the lower end of the shaft and below the stationary seat and projecting to the rear side thereof, a back slidably connected to the rear side of the stationary seat and rigidly connected to the corresponding end of the bar, a series of rods rigidly connected to the bar and projecting transversely beyond either side thereof, a series of arm-supporting rods respectively connected to the rods of the bar and projecting vertically therefrom and slidably connected to the sides of the stationary seat, a collar fitting loosely on the threaded shaft and at the upper end thereof directly below the seat proper, brace rods connected to the collar and to the arm-supporting rod, and arms mounted upon said arm-supporting rods, substantially as described.

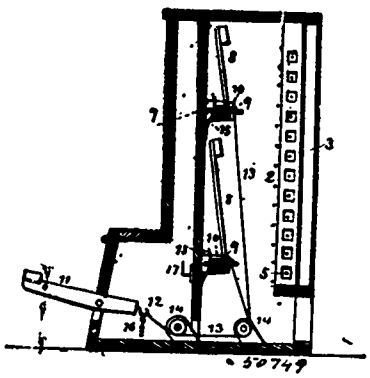
No. 50,748. Match Board. (*Moule pour couvercle de poêle.*)



John Wright and James A. Wright, both of Cleveland, Ohio U.S.A., and James Cooper, Montreal, Quebec, Canada, 5th December, 1895; 6 years.

Claim.—1st. A pattern or match board provided with a face plate common to a number of interchangeable patterns, for the purpose set forth. 2nd. A pattern or match board provided with a permanent face plate and removable patterns, for the purpose set forth. 3rd. A pattern or match board provided with a face plate common to a number of interchangeable patterns and coincident means of attachment for the patterns and face plate, for the purpose set forth. 4th. A pattern or match board provided with a permanent face plate common to a number of interchangeable patterns, the said face plate having a number of pit forming depressions and attachment bosses, and a number of patterns having pit forming bosses and apertures respectively coincident with the pit forming depressions and attachment bosses on the face plate, with connections such as screws between the apertures and the attachment bosses, for the purpose set forth. 5th. In combination, the sprue having an angular base or lower end and the match board formed with a correspondingly shaped socket or opening to receive such base, for the purpose set forth. 6th. In a pattern or match board, reciprocal lip-forming punches having diminished body portion and friction rollers carried by same, for the purpose set forth.

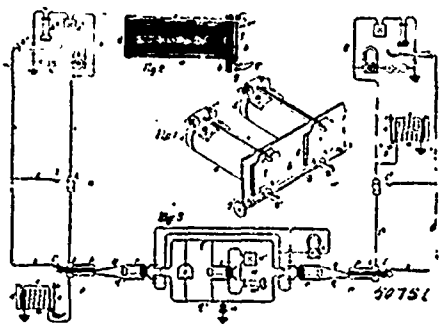
No. 50,749. Dulcimer. (*Tympanon.*)



amuel Blacketer and Anders Larson Walline, both of Gowrie Iowa, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. The combination with a case, of a musical instrument secured therein, boards adjacent to the instrument, one side of which boards is provided with beaters pivotally secured thereto, and the other side is provided with a series of hooks, there being a hook for each beater, pedals secured in the case, and cords secured to the beaters, and adapted to be secured to the pedals or to the hooks upon the boards, substantially as set forth. 2nd The combination with a case, of a musical instrument secured therein and provided with springs, rock bars which are pivoted in suitable bearings beaters mounted on said rock bars, two or more of said beaters having arms of different lengths, being mounted on the same rock bar so as to strike different strings, and mechanism for actuating said beaters, substantially as and for the purpose described.

No. 50,750. Multiple Switch Board for Telephone Exchanges. (*Tableau à aiguilles multiple pour échange de téléphone.*)

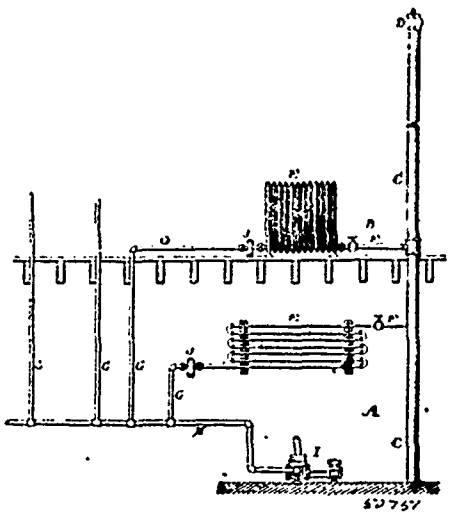


The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. The combination with an annunciator having an electro-magnet, a pivoted armature therefor, an indicator and mechanism in connection with said armature and indicator adapted to actuate the indicator when the armature is vibrated between its extreme positions, of a circuit containing a source of pulsating currents, a source of continuous current and means for connecting said source of continuous current with the circuit, whereby the actuation of the indicator by pulsating currents may be prevented by connecting the source of continuous current with the said circuit, substantially as specified. 2nd. The combination with an annunciator having an electro-magnet, an indicator, and mechanism adapted to actuate said indicator, when said electro-magnet is intermittently energized by a pulsating current, but adapted to retain said indicator in operative when the electro-magnet is continuously energized or de-energized, of a circuit containing said electro-magnet and a source of pulsating current, a source of continuous current and means for connecting the same in said circuit, substantially as specified. 3rd. The combination with an annunciator having an electro-magnet, a pivoted armature therefor, an indicator and a catch-arm carried by said armature having alternate teeth adapted to engage with said indicator when said armature is in either of its extreme positions, but to release the same when the armature is vibrated, of a conducting circuit including said electro-magnet and a source of pulsating current, a source of continuous current and means for connecting said source of continuous current in circuit with said electro-magnet, substantially as described. 4th. The combination with a telephone line circuit, of spring jacks connected therewith in multiple, an annunciator having an electro-magnet, a pivoted armature therefor, an indicator, and a catch-arm carried by said armature having alternate teeth adapted to engage with and to retain said indicator when the armature is in either of its extreme positions, but to release the indicator when the armature is vibrated, a connecting plug adapted for insertion into a spring jack and having a conducting surface arranged to make contact with the corresponding contact-piece of the spring jack, a cord circuit terminating in said plug, and a source of continuous current connected with said cord circuit, whereby the indicator of the annunciator may be operated by pulsating currents sent over the line when disconnected, but such operation is prevented when connection is made with the line, substantially as described. 5th. The combination with a telephone line circuit, of a grounded source of pulsating current connected therewith, spring jacks each having two contact-pieces connected with the different sides respectively, of the line circuit, an annunciator in a ground branch from one side thereof having an electro-magnet, a pivoted armature therefor, an indicator, and a catch-arm provided with alternate teeth adapted to engage with and retain the said indicator when the armature is in either of its extreme positions, but to release the same when said armature is vibrated, a connecting plug for insertion into any spring jack having contact pieces arranged to register with the corresponding contact-pieces of a spring jack, and a source of continuous current in a ground branch from that contact-piece of said plug which is arranged to connect with the side of the line circuit connected with said annunciator, substantially as described. 6th. The combination with an annunciator having an electro-magnet, a pivoted armature therefor, an indicator and a catch-arm provided with alternate teeth adapted to engage with and retain said indicator, when the armature is in either of its extreme positions, but to release the indicator when the armature is vibrated, of a circuit including said electro-magnet and a source of pulsating current, a source of continuous current, means for connecting said source of continuous current in said circuit and means for periodically resetting said indicator, substantially as specified. 7th. The combination with a telephone line circuit, of a grounded source of pulsating current connected with one side thereof, spring jacks each having two contact-pieces connected with the different sides respectively of the line circuit, an annunciator in a ground branch having an electro-magnet, a pivoted armature therefor, an indicator, and a catch-arm carried by said armature having alternate teeth adapted to engage with and retain said indicator when the armature is in either of its extreme positions, but to release the same when the armature is vibrated, a connecting plug for insertion into any spring jack, having contact-pieces arranged to register with the corresponding contact-pieces of a spring jack, a conducting circuit joining the different contact-pieces of a plug, including a clearing-out annunciator, a source of current adapted to actuate said clearing-out annunciator, included in said line circuit, and a grounded source of continuous current connected with that contact-piece of the connecting plug which connects with the side of the circuit containing the annunciator, substantially as specified.

No. 50,751. Steam Heating Apparatus.

(*Appareil de chauffage à vapeur.*)



Warren Webster & Co., Camden, New Jersey, assignee of William D. Pickels, Chicago, Illinois, both in the U.S.A., 5th December, 1895; 6 years.

Claim.—In a steam heating system for buildings, the combination of an exhaust pipe, a series of supply lines leading therefrom to supply steam to different portions of the building, heaters connected with the supply lines, a main return, a series of return lines from the heaters leading thereto, a vacuum creating device connected with the main return to create and maintain a partial vacuum therein, and automatic thermostatic regulating valves between the outlet of the heaters and the returns to permit the air and water to be drawn from the heaters by the partial vacuum maintained in the return, but to close the passage of steam, whereby the radiators are kept free from air and water.

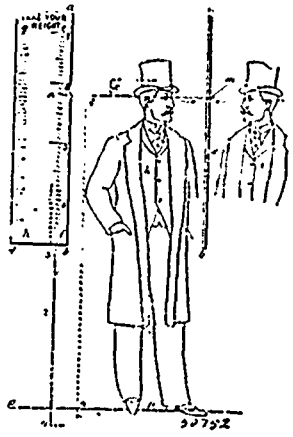
No. 50,752. Means for Ascertaining Stature.

(*Moyen de mesurer la hauteur des personnes.*)

William Elborne, Peterborough, England, 5th December, 1895; 6 years.

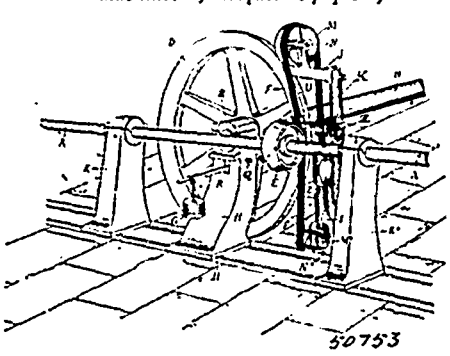
Claim.—1st. The combination with any platform and support, of a vertical mirror carried by said support and a vertical scale or scales adapted to be visible to and to intersect and give a relative measurement of the height of the horizontal plane of vision of a person standing upon said platform and observing his reflected image in said mirror whence the stature of such observer may be ascertained within a small fraction of an inch or centimeter. 2nd. The combination with any platform and support, of a vertical mirror carried by said support and a vertical scale or scales adapted to be visible

to and to intersect the horizontal plane of vision of a person standing on said platform and observing his reflected image in said



mirror, the zero point of said scale or scales being below the platform for such distance that the measurement of said intersection shall be the height of the observer.

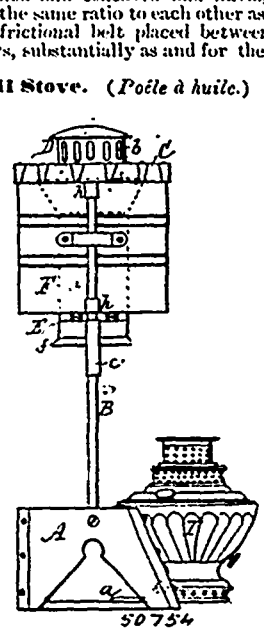
No. 50,753. Friction Wheel for Paper Manufacturing Machinery. (*Roue de friction pour machines à fabriquer le papier.*)



Christian Seybold, Machinenbauzesellschaft, Zweibuecken, Rheinpfalz, Germany, 5th December, 1895; 6 years.

Claim.—1st. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical co-operating faces of which are respectively convex and concave, a belt placed between said co-operating convex and concave faces, and means for forcing one pulley toward the other, substantially as described. 2nd. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical co-operating faces of which are respectively convex and concave, an adjustable belt placed between said co-operating convex and concave faces, and operative means for forcing one pulley toward the other, substantially as described. 3rd. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical co-operating faces of which are respectively convex and concave, one or more guide pulleys, a belt passing over the same and between said co-operating convex and concave faces of the driving and driven pulleys, and means for forcing the driving and driven pulleys together, substantially as described. 4th. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical, co-operating faces of which are respectively convex and concave, one or more guide pulleys, a belt passing over the same and between said co-operating convex and concave faces of the driving and driven pulleys, an adjustable guide and means for forcing the driving and driven pulleys together, substantially as described. 5th. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical, co-operating faces of which are respectively convex and concave, one or more guide pulleys, a belt passing over the same and between said co-operating convex and concave faces of the driving and driven pulleys, a guide for the belt, operative means for moving the guide pulleys and the guide in the direction of the faces of the driving and driven pulleys, and means for forcing the driving and driven pulleys together, substantially as described. 6th. A variable speed friction gear for shafts placed at an angle, consisting of a concave faced pulley on one of the shafts, a convex faced pulley on the other shaft, guide pulley adjustable in the direction of the faces of the driving and driven pulleys, a belt passing over the same and between the driving and driven pulleys, a thrust bearing for one of the pulley shafts, a weighted shaft and an operative connection between the latter and the bearings, substantially as described. 7th. A variable speed friction gear for shafts placed at an angle, consisting of a concave faced pulley on one of the shafts, a convex faced pulley on the other shaft, guide pulleys adjustable in the direction of the faces of the driving and driven pulleys, a belt passing over the same and between the driving and driven pulleys, a thrust bearing for one of the pulley shafts longitudinally guided, a rack on said bearing, a weighted shaft, and a pinion on said shaft engaging the rack on the thrust bearing, substantially as described. 8th. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical co-operating faces of which are respectively convex and concave, a friction belt placed between said co-operating faces and caused to embrace the driving pulley sufficiently to maintain the said belt in motion by its contact with said driving pulley when the driving and driven pulleys are disengaged, and means for forcing the pulleys together, substantially as set forth. 9th. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical co-operating faces of which are respectively convex and concave, means for forcing the the pulleys together, a friction belt placed between said co-operating faces, and guide rolls for said belt for conducting the same around a sufficient portion of the periphery of the driving pulley to maintain the said belt in motion by its contact with said driving pulley when the driving and driven pulleys are disengaged, substantially as set forth. 10th. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the one being a conical male pulley, and the other a conical female pulley, the respective faces of which are convex and concave, means for forcing the pulleys together, a friction belt placed between said co-operating faces, and guide rolls for said belt for conducting the same around a sufficient portion of the periphery to maintain the said belt in motion by its contact with said driving pulley when the driving and driven pulleys are disengaged, substantially as set forth. 11th. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, the conical co-operating faces of which are respectively convex and concave, and having their diameters in a ratio of not less than 1 to 3, to counterbalance the tendency of the belt to shift towards the larger diameter of the driving pulley, a frictional belt placed between the co-operating faces of the pulleys, and means for forcing the pulleys together, substantially as set forth. 12th. A variable speed friction gear for shafts placed at an angle, consisting of two pulleys, a friction placed between said pulleys, a lower guide roll for the belt, and an upper guide roll mounted to turn laterally, substantially as and for the purpose set forth. 13th. In a variable speed friction gear of the character set forth, a lower guide roll for the friction belt mounted to move in the longitudinal direction of the belt and laterally, combined with means for producing a tension in the belt, substantially as described. 14th. In a variable speed friction gear of the character set forth, the combination with the pulleys and the co-operating friction belt, of guide rolls for the latter adapted to permit lateral adjustment of the belt, substantially as described. 15th. In a variable speed friction gear of the character set forth, the combination of a driving and driven pulley having co-operating conical faces respectively convexed and concaved and having their larger end diameters bearing the same ratio to each other as their smaller end diameters, and a frictional belt placed between the co-operating faces of said pulleys, substantially as and for the purpose set forth.

No. 50,754. Oil Stove. (*Poêle à huile.*)

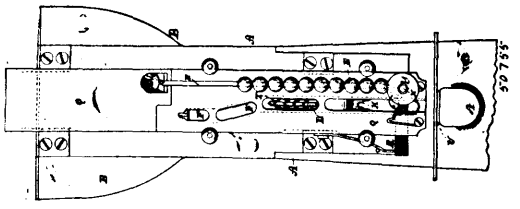


Leonard Henkle, Rochester, and Charles Stanford Upton, New York, both in the State of New York, U.S.A., 5th December, 1895; 6 years.

Claim.—1st. In an oil stove, the combination of a base A, lamp I, standards B B rising from the base, and a chimney E, sliding on the standards and resting over the lamp as described. 2nd. In an oil stove, the combination of a base A, standards B B rising therefrom, a lamp I, a chimney E, and cylinder F, the chimney and cylinder sliding on the standards and operating independently, as and for the purpose specified. 3rd. In an oil stove, the combination of a supporting base A, standards B B, a band C, attached to the standards, a chimney E, and a cylinder F, the chimney and cylinder sliding on the standards and so arranged that the cylinder when raised in contact with the band forms an oven at the top of the stove, as herein shown and described. 4th. In an oil stove, the combination with the supporting standards B B, of the chimney E, and cylinder F, arranged to slide independently on the standards and assume different positions relatively to each other, as herein shown and described.

No. 50,755. Automatic Button Fastening Machine.

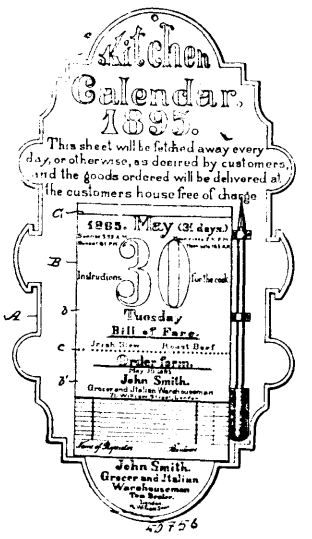
(*Appareil automatique à assujétir les boutons.*)



Ira James Saunders, New York, State of New York, and Aaron Frederick Smith, Lynn, Massachusetts, both in the U.S.A., 5th December, 1895; 6 years.

Claim.—1st. The combination with attaching mechanism and means of operating the same, of the hopper having two compartments, for the buttons and fasteners respectively, a reciprocating channel-bar arranged in ways on the front of the hopper, and provided with two channels, respectively adapted to receive buttons and fasteners, and direct them to each other and to the attaching mechanism, vibrating levers for supplying said channel-bar with buttons and fasteners from the hopper, and means of reciprocating the channel-bar, substantially as and for the purpose set forth. 2nd. The combination with attaching mechanism comprising a hammer and anvil, of the two take-levers C, D, arranged adjacent to each other, the drive-lever G, connecting means between lever G, and the take-levers, and a treadle bed or pitman attached to the drive-lever whereby all the said parts are actuated in unison, substantially as and for the purpose set forth. 3rd. The combination with the two take-levers arranged adjacent to each other, of the drive-lever having an extension piece passing up between the take-levers, and connecting therewith by means of studs g^1, g^{11}, each entering slots formed to receive them in the respective take-levers, substantially as and for the purpose set forth. 4th. The combination with the treadle rod or pitman of the drive-lever G, pivoted thereto, and the two take-levers operatively connected with the drive-lever, substantially as and for the purpose set forth. 5th. The combination with the channel-bar, and the fastener channel therein, of the vibrating feed-lever L, slotted at its midlength to receive a fulcrum pin *r*, and the channel-bar provided with a bracket *s*, carrying an operative pin or stud entering said feed-lever, whereby the lever is vibrated by the motion of the channel-bar, substantially as and for the purpose set forth. 6th. In combination, the vertical reciprocating channel-bar and means of operating the same, such bar provided with separate channels for both buttons and fasteners, and forming a junction at their lower ends, means for delivering buttons one by one, by gravity and presenting them in position for receiving the fasteners in the eye thereof, and a feeder in the fastener channel serving to feed the fasteners one by one to the buttons as presented, the feeding and delivering devices being operated by the motion of the channel-bar, substantially as and for the purpose set forth. 7th. The combination with the reciprocating channel-bar having button and fastener channels therein, and adapted to direct them to each other, of a cam M, at the junction of the two channels co-operating with a hold-bar R, to control the button while receiving the fasteners, and a check spring as O to check the fall of the button when released by said cam and hold-bar, and retain the united button and fastener until struck by the hammer K, substantially as and for the purpose set forth. 8th. The combination, with the movable channel bar, and means of operating the same, an arbour *x* journalled in the lower end of the channel-bar, which arbour carries at the front or outer end, a crescent shaped cam M and at the inner end a hub having a slit in one side which is engaged by a stationary pin *u*, whereby the cam M is oscillated by the motion of the channel-bar, substantially as and for the purpose set forth. 9th. The combination, with the channel-bar, and the hammer K, of the cam M, and holder-bar R for holding the button momentarily while receiving the fastener, and a check-spring O, which detains the united button and fastener until struck by the hammer K, substantially as and for the purpose set forth.

No. 50,756. Kitchen Calendar. (*Calendrier de cuisine.*)

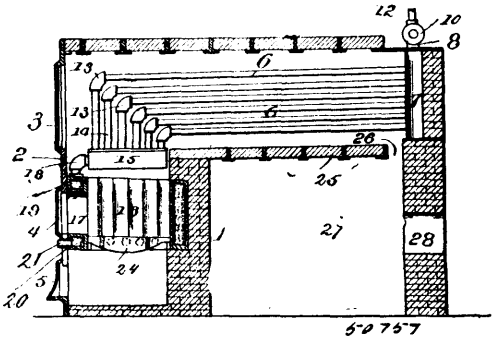


Ludwig Peter Nicolai Hansen, Flensburg, Prussia, Germany, 5th December, 1895; 6 years.

Claim.—A kitchen or office calendar provided with separable sheets, the upper portion of each sheet having inscribed upon it daily information from the almanac, and the lower portion of each sheet being partially separated from the said upper portion so as to be readily removable and containing an order form, substantially as set forth.

No. 50,757. Sectional Steam Boiler.

(*Chaudière à section.*)



Joseph Alexander Irenoe Claudon, Glenwood Springs, Colorado, U.S.A., 6th December, 1895; 6 years.

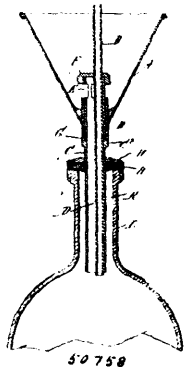
Claim.—1st. In a sectional steam generator or water-heater, the combination, with the inclined horizontal water tubes, the rear vertical manifolds connected therewith, the vertical water-tubes connected with the front ends of said inclined tubes and the inclined manifolds with which said vertical tube are connected, of the water jacket forming the sides of the fire-box, having openings in its sides at the lower end, the return tubes connected therewith, the removable screw-plugs, and the nipples connecting the front manifolds with the water jacket, substantially as described. 2nd. In a sectional steam boiler or water-heater, the combination, with the water-tubes, the upper and lower manifolds, and the water-jacket connected with said lower manifolds, having corrugated inner walls, of the casing, the fire-box, the horizontal wall extending from the fire-box to near the rear end of the casing forming a flue at said end, the chamber below said wall and the exit flue at the rear end of the casing below said horizontal wall, substantially as described.

No. 50,758. Automatic Funnel. (*Entonnoir automatique.*)

Harvey Isaiah Keiner, Wilkesbarre, Pennsylvania, U.S.A., 6th December, 1895; 6 years.

Claim.—1st. A stopper for automatic funnels, comprising an annular body portion adapted to seal the mouth of a bottle or similar vessel and provided with an interior body of flexible material. 2nd. A stopper for automatic funnels, consisting of a substantially rigid body portion, and a hollow and elastic portion on the under side thereof, said hollow portion being filled with or provided with a body or flexible material. 3rd. A stopper for automatic funnels, adapted to be used in connection therewith to close the mouth of a

bottle or vessel, comprising a substantially rigid portion, and a flexible or elastic portion having a body of flexible ma-

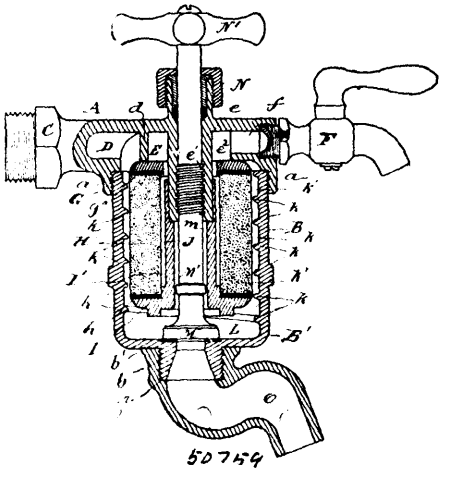


50758

terial, substantially as shown and described. 4th. A stopper for automatic funnels, adapted to be used in connection therewith for closing the mouth of a bottle or other vessel consisting of an annular hollow body of elastic and flexible material, and filled in with flexible material and a substantially rigid portion above the same, which serves as a support therefor each of said parts having a central opening through which the tube connected with the funnel passes, substantially as shown and described. 5th. A stopper for automatic funnels, adapted to be used for filling bottles or other vessels, comprising a flat annular body of thin flexible rubber, having upon the exterior thereof, an upwardly projecting rim with an inwardly directed flange upon the upper edge thereof, said stopper being centrally apertured, and provided with an upwardly directed extension having an annular flange upon the upper edge, and a filling of flexible material inserted within said stopper and beneath the exterior flange and the central flange, and the centrally apertured disc of substantially rigid material secured to both of said flanges, substantially as shown and described. 6th. A stopper for automatic funnels, adapted to be used in filling bottles or other vessels, consisting of an annular body of elastic and flexible material, having an aperture in the centre thereof with an upwardly projecting extension, and an annular flange upon the top of said extension, and a disc or body of substantially rigid material secured at the upper surface of said body and also provided with a central opening, and secured to the said flange, substantially as shown and described. 7th. The combination with a funnel, of a tubular valve, having a collar thereon, adapted to limit the movement and a stopper beneath the same adapted to make an air tight connection between the funnel and a bottle or similar vessel, said stopper comprising an annular body adapted to seal the mouth of a bottle or other vessel and provided with an interior body of flexible material, substantially as shown and described. 8th. A funnel consisting of a body having a sleeve, a tubular valve loosely fitted to the sleeve and provided with openings for the passage of the liquid, a collar upon the valve tube and adapted to limit its movement within the sleeve, an air tube within the valve tube extending therethrough, and an elastic stopper adjustably and frictionally fitted upon the tube, comprising a portion of flexible material, and a substantially rigid portion above the same, substantially as shown and described.

No. 50,759. Combined Faucet and Filter.

(*Robinet et filtre combinés.*)



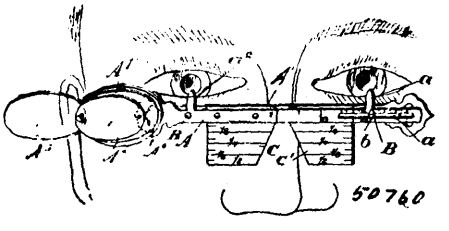
50759

Rudolph Conrader, Erie, Pennsylvania, U.S.A., 6th December 1895; 6 years.

Claim.—1st. The combination in a combined faucet and filter, of a shell or body, a hollow porous filtering cylinder secured in said shell or body, an outer annular chamber in the upper section of the shell or body communicating with the water supply, spiral ribs projecting from the inner surface of the lower section of the shell or body so as to form a series of spiral passages between said spirals and the outer surface of the porous filtering cylinder and opening at their upper ends into the lower part of said outer annular chamber, a cock in the lower section of the shell or body for discharging unfiltered water passing down said spiral passages around the outside of the porous filtering cylinder, an annular chamber communicating with the central opening in said porous filtering cylinder, and a cock in the shell or body communicating with said inner chamber for discharging filtered water therefrom, substantially as and for the purpose set forth. 2nd. In a combined faucet and filter, a shell or body, a hollow filtering cylinder therein, an annular space surrounding the filtering cylinder, and a water inlet communicating therewith, a hollow sleeve extending down through the central opening in the filtering cylinder, and a collar or washer on the lower end of said hollow sleeve fitting up against the lower end of the filtering cylinder and retaining it in place, an inner annular chamber surrounding said hollow sleeve, an outlet for discharging water from said inner chamber, a discharge cock in the lower end of the shell or body for discharging water passing down around the outside of the filtering cylinder, and a valve stem for operating said cock extending up through and engaging a screw thread within said hollow sleeve, substantially as and for the purpose set forth. 3rd. In a combined faucet and filter, a shell or body, a hollow filtering cylinder therein, an outer annular chamber in the upper part of the shell or body communicating with the water supply and with a narrow annular space surrounding the filtering cylinder, a hollow sleeve extending down through the central opening in the filtering cylinder, and a collar or washer on the lower end of said hollow sleeve fitting against the lower end of the filtering cylinder and securing it in place, an inner annular chamber surrounding said hollow sleeve, an outlet cock for discharging water from said inner chamber, a discharge cock in the central part of the lower end of the shell or body for discharging water passing down around the outside of said porous filtering cylinder, and a valve stem for operating said cock extending up through and engaging a screw thread within said hollow sleeve, substantially as and for the purpose set forth. 4th. In a combined faucet and filter, a shell or body, an inner opening in the upper part of said shell or body, and an annular chamber D communicating therewith, an inner annular chamber E separated from the outer chamber by an annular wall *d*, an outlet cock F communicating with said chamber E, a washer G fitting up against the lower end of the wall *d*, a hollow porous cylinder H fitting up against packing *g* on said washer, a hollow sleeve *e* forming the inner wall of the chamber E, and extending down into the central opening in said porous cylinder, a hollow sleeve I^1 extending up into the central opening in said porous cylinder, and engaging the lower end of the hollow sleeve *e* by means of screw threads thereon, a flange I on said sleeve I^1 adapted to cover and engage the lower end of said porous cylinder, and packing *h* between said flange and the lower end of said cylinder, substantially as and for the purpose set forth.

No. 50,760. Pupilometer and Bridge Measure.

(*Pupilomètre et mesure de pont.*)



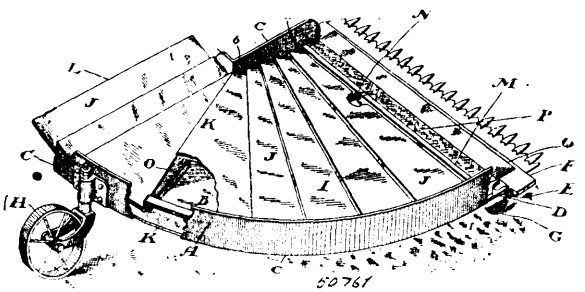
50760

Loran Lester Palmer, Toronto, Ontario, Canada, 6th December, 1895; 6 years.

Claim.—1st. In a pupilometer and bridge measure, the combination of sliding bars, a pupil index pointer for each bar, connecting means for the bars whereby they may be adjusted lengthwise, a suitably divided scale on the edge of the bar and an index pointer for such scale attached to one bar and sliding over the other, as and for the purpose specified. 2nd. The combination with the sliding bars suitably connected together and provided with pupil index pointers edge scales and index pointers for same and end gripping plates, as and for the purpose specified. 3rd. The combination with the sliding bars suitably connected together, of heels one for each bar extending downwardly from same, as and for the purpose specified. 4th. The combination with the sliding bars suitably connected together, of heels one for each bar extending downwardly from same and an index pointer attached to one bar and sliding over the other. 5th. The combination with the sliding bars each provided with a pupil index pointer and having scale marked thereon, of slots in each bar and index clip pointers extending through the slots holding the bars together and projecting over the scales, as and for the purpose specified. 6th. The combination

with the sliding bars suitably connected together and adjustable lengthwise, of heels one for each bar provided with scales on their outer edges, as and for the purpose specified. 7th. In a pupilometer and bridge measure, the combination with the sliding bar, of a lense sized plate attached to or forming part of one end of the bar and having supplemental lense sized plates pivotally connected to the outer ends of the plate, as and for the purpose specified.

No. 50,761. Clover Seed Table Attachment for Mowers. *(Attache pour tables à graine de trèfle pour faucheuses.)*

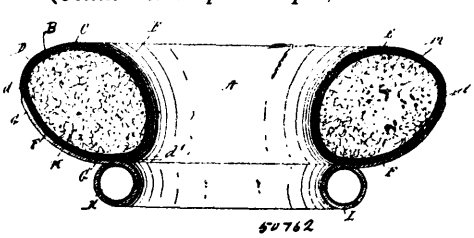


Donald McArthur, Manilla, Ontario, Canada, 6th December, 1895; 6 years.

Claim.—1st. A clover seed table for attachment to the cutter bar of a mower having a false bottom composed of pieces having their surfaces inclined to the general plane of the table, substantially as and for the purpose specified. 2nd. A clover seed table for attachment to the cutter bar of a mower, having an inclined false bottom composed of triangular or trapezoidal pieces having their surfaces inclined to the general plane of the table, substantially as and for the purpose specified. 3rd. A clover seed table for attachment to a mower, comprising the bottom B, side walls C, caster wheel H, false bottom I, formed of the inclined pieces J, secured to the ribs K, and the inclined stationary front piece M, substantially as and for the purpose specified. 4th. A clover seed table for attachment to a mower, comprising the bottom B, side walls C, caster wheel H, false bottom I, formed of the inclined pieces J, secured to the ribs K, and hinged to the inclined stationary front piece M, substantially as and for the purpose specified. 5th. A clover seed table for attachment to a mower, comprising the bottom B, side walls C, caster wheel H, false bottom I, formed of the inclined pieces J, secured to the ribs K, hinged to the inclined stationary front piece M, and the pivoted arm O, substantially as and for the purpose specified. 6th. A clover seed table for attachment to the cutter bar of a mower, having a false bottom composed of inclined pieces, the inclination of each succeeding piece being greater than that immediately preceding it, substantially as and for the purpose specified. 7th. A clover seed table for attachment to the cutter bar of a mower, having an inclined false bottom composed of inclined pieces, the inclination of easch succeeding piece being greater than that immediately preceding it, substantially as and for the purpose specified. 8th. A clover seed table for attachment to a mower, comprising the bottom B, side walls C, caster wheel H, false bottom I, formed of the inclined pieces J, secured to the ribs K, hinged to the inclined stationary front piece M, and the apron P connected to the cutter bar and bridging the gap between the cutter bar and the table, substantially as and for the purpose specified.

No. 50,762. Pneumatic Horse Collar.

(Collier à cheval pneumatique.)

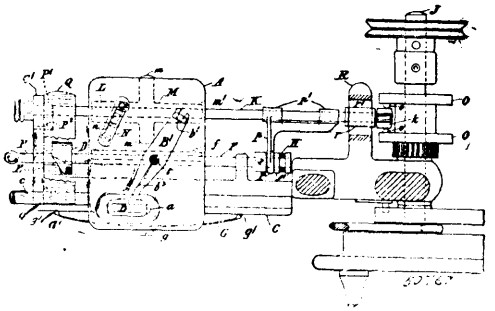


Harry Clarke, New York, State of New York, U.S.A., 6th December, 1895; 6 years.

Claim.—1st. A collar for horses, comprising the usual body portion A, which is composed of an inner tube of rubber, a tubular covering or casing of canvas, said canvas covering or casing being provided on the inner side, or bearing surface with a covering of wire mesh, over which is placed a covering or casing of thin leather, and said canvas tube or covering being also provided on the outer side with a steel or other metal plate or covering over which is placed a covering of leather, substantially as shown and described. 2nd. A collar for horses, comprising the usual body portion A, which is composed of an inner tube of rubber, a tubular covering or casing of canvas, said canvas covering or casing being provided on the inner side, or bearing surface with a covering of wire mesh, over which is placed a covering or casing of thin leather, and said canvas tube or covering being also provided on the outer side with a steel or other metal plate or covering over which is placed a covering of leather, which is also formed into a tubular attachment as E, which is provided with a metal tube or lining, substantially as shown and described. 3rd. A collar for horses, or other animals, which is filled in or provided with a packing of asbestus fibre and which is also adapted to be inflated with air, substantially as shown and described. 4th. A collar for horses or other animals, the body portion of which is filled in or provided with a packing of asbestus fibre and adapted to be inflated with air, said body portion being also provided with a tubular attachment as K, substantially as shown and described. 5th. A collar for horses or other animals, the body portion of which is filled in or provided with a packing of asbestus fibre and adapted to be inflated with air, said body portion being also provided with a tubular attachment as K, provided with an inner tube or lining, substantially as shown and described.

No. 50,763. Button-Hole Sewing Machine.

(Machine à coudre les boutonnières.)

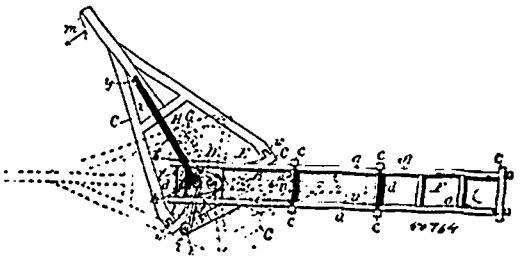


Richard Mathew Melhuish, London, England, 6th December, 1895; 6 years.

Claim.—1st. In a button-hole sewing machine of the kind described, the combination, with the shuttle race cover slide, of a spring guard plate fixed thereto, adapted to cover the work plate vibrating cam and feed screw brake and to cause the cover slide to jam in its groove so as to prevent it sliding out during the working of the machine, as specified. 2nd. In a button-hole sewing machine of the kind described, the combination, with the work plate vibrating cam, of an abutment consisting of a roller with flats formed on it so as to be self-adapting to the inclination and movements of the cam and afford an extended and renewable wearing surface, as specified. 3rd. In a button-hole sewing machine of the kind described, constructing the feed screw nut partly of metal tapped in the ordinary way and partly of an inserted and renewable piece of soft material such as gutta-percha, leather, or wood clamped tightly against the screw shaft so as to be thereby impressed with the screw thread, substantially as and for the purpose specified. 4th. In a button-hole sewing machine of the kind described, the combination, with the nut constructed as described, of a split sleeve adapted to lightly embrace and slide upon the plain portion of the feed screw shaft, substantially as and for the purpose specified. 5th. In a button-hole sewing machine of the kind described, the feed screw having its threaded portion cylindrical at the middle and slightly tapered down at each end in combination with a nut of such relative length as to overlap the tapered portions of the screw in making its minimum traverse, as and for the purpose specified. 6th. In a button-hole sewing machine of the kind described, the combination, with the nut constructed as described, of horizontal steady arms projecting from both sides of the nut and bearing against the under side of the vibrating work plate for supporting the plate and preventing the nut turning with the feed screw, as specified. 7th. In a button-hole sewing machine of the kind described, the combination, with the stud on the feed screw nut and with the slot link on the vibrating work plate, of a die-block receiving the stud and fitting such link, as and for the purpose specified. 8th. In a button-hole sewing machine of the kind described, the bearing block in which the shifting end of the feed screw shaft is mounted, constructed with an air cushion chamber at the upper side, and split at the lower side and fitted to move between the top and bottom guides of a horizontally slotted standard, substantially as and for the purpose specified. 9th. In a button-hole sewing mrchine of the kind described, the acting faces of the teeth of the feed screw operating crown wheels made of the combined hooked and convex form described for the purpose specified. 10th. In a button-hole sewing machine of the kind described, splitting the jaw-carrying arm of the work clamp longitudinally as described to enable the jaw to yield and adapt itself to unequal thickness of fabric beneath the two ends of the jaw, as specified. 11th. In a button-hole sewing machine of the kind described, shaping the surfaces of the cam rod vibrating lever which engages with the collars on the cam rod, by means of milling cutters mounted on a shaft which is temporarily substituted for the cam rod, and caused to rotate whilst receiving

an angular motion similar to that of the cam rod, the lever at same time receiving its proper angular motion so that the cutters acting on the opposite faces of the lever will bring said faces to such form as to allow flat collars on the cam rod to maintain a constant bearing against said faces when the machine is at work, as specified. 12th. In a button-hole sewing machine of the kind described, the sleeves of the eccentric rod which embrace the feed screw shaft split longitudinally so as to enable a tight fit to be constantly maintained, as described. 13th. In a sewing machine, the locking device for the thread tension adjustment screw, consisting of a half nut carried by a spring and pressed by it into engagement with the tension adjustment screw, substantially as described.

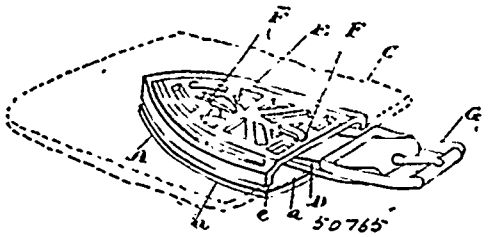
No. 50,764. Baling Press. (*Presse d'empaquetage.*)



Frank L. Robinson, Albion, New York, U.S.A., 6th December, 1895; 6 years.

Claim.—1st. A baling press having a frame provided at one end with a rigid hanger, in combination with a sweep lever held by the hanger, a plunger, crank arms held one above and one below the hanger, a pitman connecting the crank arms and the plunger, a vertical shaft passing through the crank arms and the hanger, and a yielding suspender for the sweep lever, connecting the latter with said shaft, substantially as shown and described. 2nd. A baling press consisting of a frame provided with a hanger, a plunger, crank arms held by the hanger, a pitman connecting the crank arms and the plunger, and a sweep lever, in combination with a suspender for the sweep lever, a shaft held by the hanger to support the suspender, and a movable collar on the shaft to regulate the elevation of the suspender, substantially as shown and described. 3rd. A baling press having a frame provided at one end with a rigid hanger divided horizontally, in combination with a sweep lever held between the divided parts of the hanger, a plunger, crank arms held one above and one below the hanger, a pitman connecting the crank arms and the plunger, a vertical shaft passing through the crank arms and the hanger, and a suspender for the sweep lever connecting the latter with said shaft, substantially as shown and described.

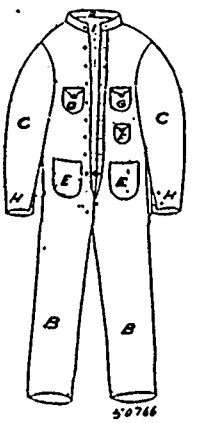
No. 50,765. Fastening Attachment.
(*Attache pour assujtéir.*)



John Hobbs, Toronto, Ontario, Canada, 6th December, 1895; 6 years.

Claim.—1st. A fastening attachment consisting of two plates, one of the plates provided with a series of prongs adapted to pass through the material, the other plate provided with slots to receive the prongs, substantially as specified. 2nd. A fastening attachment consisting of two plates, the inner faces of both of the plates concaved, prongs projecting from the middle of the inner face of one of the plates and extending through the other plate, and bent over to securely lock the plates together, substantially as specified. 3rd. A fastening attachment consisting of two plates, the inner faces of both of the plates concaved, prongs projecting from the middle of the inner face of one of the plates and extending through the other plate, and bent over to securely lock the plates together, the inner face of the outer sides of the other plate serrated to securely grip the material between the plates, substantially as specified.

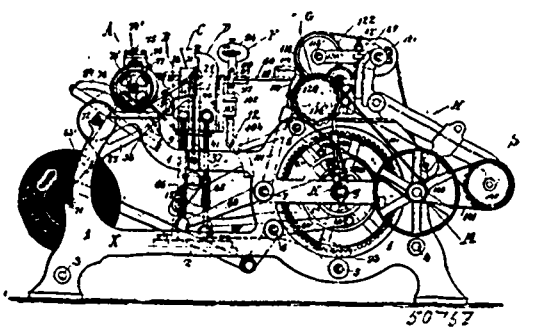
No. 50,766. Overall. (*Pantalon d'ouvrier.*)



Honoré Charlebois, Ottawa, Ontario, Canada, 6th December, 1895; 6 years.

Claim.—An overall consisting of trousers and jacket, the right and left halves of trousers and jacket in one piece seamed together from the crutch to the collar as shown and described.

No. 50,767. Method of and Machine for Manufacturing Pencils, etc., (*Méthode et machine pour fabriquer des crayons.*)



Frederick Elijah Blaisdell, Philadelphia, Pennsylvania, U.S.A. 6th December, 1895; 6 years.

Claim.—1st. The herembefore described method of making pencils, &c., which consists in providing a sheet of flexible material such as paper, &c., with a series of weakened lines, forming a curl in one end of the sheet diagonal to the weakened lines, setting the curl so as to make the same permanent, rolling the rest of the sheet around the curl so that the roll formed will remain in form, and inserting a suitable core or crayon in the curl at any stage of the process. 2nd. The herembefore described method of making pencils, &c., which consists in providing a sheet of flexible material such as paper, &c., with a series of weakened lines, forming a curl in one end of the sheet diagonal to the weakened lines, setting the curl by heat so as to make the same permanent, rolling the rest of the sheet around the curl so that the roll formed will remain in form, and inserting a suitable core or crayon in the curl at any stage of the process. 3rd. The herembefore described method of making pencils, &c., which consists in providing a sheet of flexible material such as paper, &c., with a series of weakened lines, forming a curl in one end of the sheet diagonal to the weakened lines, setting the curl so as to make the same permanent, rolling the rest of the sheet around the curl, securing the outer end of the sheet to the roll thus formed, and inserting a suitable core or crayon in the curl at any stage of the process. 4th. The herembefore described method of making pencils, &c., which consists in providing a sheet of flexible material such as paper, &c., with a series of weakened lines, forming a curl in one end of the sheet diagonal to the weakened lines, setting the curl by heat so as to make the same permanent, rolling the rest of the sheet around the curl, securing the outer end of the sheet to the roll thus formed, and inserting a suitable core or crayon in the curl at any stage of the process. 5th. The herembefore described process of making pencils, &c., which consists in providing a sheet of flexible material such as paper, &c., with a series of weakened lines, forming a curl in one end of the sheet diagonal to the weakened lines, setting the curl by heat so as to make the same permanent, inserting a suitable marking lead or crayon in the curl, rolling the rest of the sheet around the curl and crayon, and securing the outer edge of the sheet to the roll thus formed. 6th. The herembefore

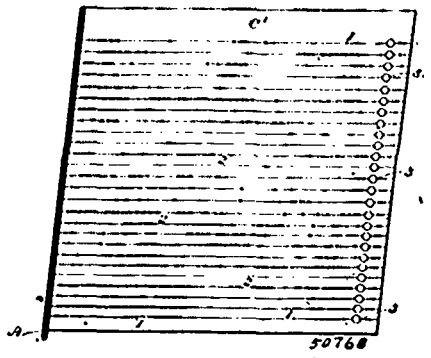
described method of making pencils, &c., which consists in forming a curl in the end of a sheet of flexible material such as paper, &c., setting the curl so as to make the same permanent, rolling the rest of the sheet around the curl so that the roll formed will remain in form, and inserting a suitable core or crayon in the curl at any stage of the process. 7th. The hereinbefore described method of making pencils, &c., which consists in forming a curl in the end of a sheet of flexible material such as paper, &c., setting the curl by heat so as to make the same permanent, rolling the rest of the sheet around the curl, securing the outer end of the sheet to the roll thus formed, and inserting a suitable core or crayon in the curl at any stage of the process. 8th. The hereinbefore described method of making pencils, etc., which consists in forming a curl in the end of a sheet of flexible material such as paper, etc., setting the curl by heat so as to make the same permanent, inserting a suitable core or crayon in the curl, rolling the rest of the sheet around the curl and crayon, and securing the outer end of the sheet to the roll thus formed. 9th. In a machine of the class described, the combination with a paper-feeding mechanism, of a curl-forming mechanism, crayon-supplying mechanism, pasting mechanism and rolling mechanism, substantially as shown and described. 10th. In a machine of the class described, the combination with a paper-feeding mechanism, of a curl-forming mechanism, crayon-supplying mechanism, cutting mechanism, pasting mechanism, and rolling mechanism, substantially as shown and described. 11th. In a machine of the class described, the combination with a paper-feeding mechanism, of a curl-forming mechanism, crayon-supplying mechanism, cutting mechanism, perforating mechanism, pasting mechanism and rolling mechanism, substantially as shown and described. 12th. In a machine of the class described, the combination with a curl-forming mechanism, of mechanism for supplying a suitable core or crayon to the coil after the same is formed, and a rolling mechanism for rolling the sheet in which is the curl, inclosing the crayon around such curl and crayon, substantially as shown and described. 13th. In a machine of the class described, the combination with a paper-feeding mechanism, of a curl-forming mechanism, mechanism for supplying a suitable core or crayon to the curl after the same is formed, mechanism for supplying paste, etc., to the sheet after the insertion of the crayon or core, and a rolling mechanism for rolling the sheet around the curl and crayon, substantially as shown and described. 14th. In a machine of the class described, the combination with a paper feeding mechanism, of a curl-forming mechanism, mechanism for supplying a suitable core or crayon on the curl after the same is formed, cutting mechanism for cutting the sheet after the insertion of the crayon or core, mechanism for supplying paste, etc., after the insertion of the crayon or core, and a rolling mechanism for rolling the sheet around the curl and crayon after the same is supplied with paste, substantially as shown and described. 15th. In a machine of the class described, the combination with a paper-feeding mechanism, of a curl-forming mechanism, crayon-feeding mechanism, pasting mechanism, rolling mechanism and drying mechanism, substantially as shown and described. 16th. In a machine of the class described, the combination with a paper-feeding mechanism, of a curl-forming mechanism, crayon-feeding mechanism, paper-cutting mechanism, pasting mechanism, rolling mechanism and drying mechanism, substantially as shown and described. 17th. In a machine of the class described, the combination with a paper-roll holder, of an intermittently actuated paper-feeding mechanism, a curl-forming mechanism, crayon-feeding mechanism, paper-cutting mechanism, pasting mechanism, rolling mechanism and drying mechanism, substantially as shown and described. 18th. In a machine of the class described, the combination with a paper-roll holder, of an intermittently actuated paper-feeding mechanism, a curl-forming mechanism, crayon-feeding mechanism, paper-cutting mechanism, paper-perforating mechanism, pasting mechanism, rolling mechanism and drying mechanism, substantially as shown and described. 19th. In a machine of the class described, the combination of a paper-feeding mechanism A, curl-forming mechanism B, crayon-supplying mechanism C, paper-perforating mechanism E, pasting mechanism F, and rolling mechanism G, substantially as shown and described. 20th. In a machine of the class described, the combination of a paper-feeding mechanism A, curl-forming mechanism B, crayon-supplying mechanism C, paper-cutting mechanism D, paper-perforating mechanism E, pasting mechanism F, rolling mechanism G, and drying mechanism H, substantially as shown and described. 21st. In a machine of the class described, the combination of a paper-feeding mechanism A, curl-forming mechanism B, crayon-supplying mechanism C, paper-cutting mechanism D, paper-perforating mechanism E, pasaing mechanism F, rolling mechanism G, and drying-mechanism H, substantially as shown. 22nd. In a machine of the class described, the combination with a curl-forming mechanism B, of a crayon-supplying mechanism C, substantially as shown and described. 23rd. In a machine of the class described, the combination with a curl-forming mechanism B, of a crayon-supplying mechanism C, a pasting mechanism F, and a rolling mechanism G, substantially as shown and described. 24th. In a machine of the class described, the combination with a curl-forming mechanism B, of a crayon-supplying mechanism C, pasting mechanism F, rolling mechanism G, and an automatic carrier or feeding-device for passing the material from the pasting to the rolling mechanism, substantially as shown and described. 25th. In a machine of the class described, the combination with a curl-forming mechanism B, of an intermittently actuated paper-feeding mechanism A, substantially as shown and described. 26th. In a machine of the class described, the combination with an intermittently actuated paper-feeding mechanism A, of a curl-forming mechanism B, crayon-supplying mechanism C, paper-cutting mechanism D, pasting mechanism F, and rolling mechanism G. 27th. In a machine of the class described, the combination with an intermittently actuated paper-feeding mechanism A, of a curl-forming mechanism B, a crayon-supplying mechanism C, a paper-cutting mechanism D, a paper-perforating mechanism F, and a rolling-mechanism G, substantially as shown and described. 28th. In a machine of the class described, the combination with the paper-roll holder of a paper-feeding mechanism A, a curl-forming mechanism B, and a paper-cutting mechanism D, the mechanism B and D extending diagonally across the path of the paper as the same is fed to them by the feeding mechanism, substantially as shown and described. 29th. In a machine of the class described, the combination with the paper-feeding mechanism A, of the curl-forming mechanism B, the mechanism E extending diagonally across the path of the paper-feed, substantially as shown and described 30th. In a machine of the class described, the combination with a paper-feeding mechanism A, of a curl-forming mechanism B, crayon-supplying mechanism C, pasting-mechanism F, and rolling mechanism G, the mechanisms B, C, and F, and G, being located diagonal to the path of the paper as the same is fed along by the paper-feeding mechanism A, substantially as shown and described. 31st. In a machine of the class described, the combination with a paper-feeding mechanism A, of a curl-forming mechanism B, a cutting-mechanism D, and a rolling mechanism G, the mechanisms D and E extending diagonally across the path of the paper fed to them by the feeding mechanism A, substantially as shown and described. 32nd. In a machine of the class described, the combination with the curl-forming rod or die 19, having the groove 20, of a curl-forming mandrel 40 adapted to enter the groove 20, and means for partially and reciprocally rotating the rod or die 19, substantially as shown and described. 33rd. In a machine of the class described, the combination with the curl-forming rod or die 19, having the groove 20, of the curl-forming mandrel 40, a crayon-box or receptacle 21 in communication with one end of the rod or die 19, a crayon-feeding rod 31, means for reciprocating the crayon-feeding rod and the mandrel, means for forcing the mandrel down into the groove 20 of the rod 19, and means for partially and reciprocally rotating the rod or die 19, substantially as shown and described. 34th. In a machine of the class described, the combination with the curl-forming rod or die 19, having the groove 20, of the curl-forming mandrel 40, adapted to enter the groove 20, means for partially and reciprocally rotating the rod or die 19, and means for heating the mandrel, substantially as shown and described. 35th. In a machine of the class described, the combination with the curl-forming rod or die 19, having the groove 20, of the curl-forming mandrel 40, a crayon-box or receptacle 21, in communication with one end of the rod or die 19, a crayon-feeding rod 31, means for reciprocating the crayon-feeding rod and the mandrel, means for forcing the mandrel down into the groove 20, of the rod 19, and means for partially and reciprocally rotating the rod or die 19, substantially as shown and described. 36th. In a machine of the class described, the combination with a paper-roll holder, of an intermittently actuated paper-feeding mechanism, a curl-forming rod or die 19, having the groove 20, a mandrel 40, means for forcing the mandrel down into the groove 20, means for heating the mandrel a, tension roller 51, a paper-cutting mechanism D, and a lifting plate 52, substantially as shown and described. 37th. In a machine of the class described, the combination with a paper-roll holder, of an intermittently actuated paper-feeding mechanism, a curl-forming rod or die 19, having the groove 20, a mandrel 40, means for heating the mandrel, a tension-roller 51, a paper-cutting mechanism D, paper-perforating mechanism B, and a lifting-plate 52, substantially as shown and described. 38th. In a machine of the class described, the combination with a paper-roll holder, of an intermittently actuated paper-feeding mechanism, a curl-forming rod or die 19 having the groove 20, a mandrel 40, means for heating the mandrel, reciprocating slide-bars 44, a tension-roller 51 carried by such slide-bars 44, and fingers 51 for forcing the mandrel 40 down into the groove 20, also carried by the slide bars 44, substantially as shown and described. 39th. In a machine of the class described, the combination with a paper-roll holder, of an intermittently actuated paper-feeding mechanism, a curl-forming rod or die 19, having the groove 20, a mandrel 40, means for heating the mandrel, reciprocating slide bars 44, a tensional roller 51 carried by such slide bars 44, fingers 51 for forcing the mandrel 40 down into the groove 20, also carried by the slide-bars 44, reciprocating slide-bars 43, and a paper-cutting knife carried by the slide-bars 44, substantially as described. 40th. In a machine of the class described, a rolling mechanism having three positively rotated rolls, the centre roll of which is smaller than the other two, and one of the larger rolls of which is moved away from the other large roll as the roll of paper or other material formed by their joint action grows in size, substantially as shown and described. 41st. In a machine of the class described, the combination one with another in the rolling mechanism thereof, of a roll 118, a roll 116, and a middle or back roll 117 of smaller diameter than either of the other rolls, all of said rolls being positively rotated in the same direction, substantially as described and for the purposes set forth. 42nd. In a machine of the class described, the combination one with another in the rolling mechanism thereof, of a roll 118, a roll 116,

a middle or back roll 117 of smaller diameter than either of the other rolls, and mechanism for positively rotating all of said rolls in the same direction at substantially the same peripheral speed, substantially as described and for the purposes set forth. 43rd. In a machine of the class described, the combination one with another in the rolling mechanism thereof, of the roll 116, roll 118, middle or back roll 117, of smaller diameter than and located between the roll 116 and 118, means for varying the distance between the rolls 116 and 118, and means for lifting or moving the roll 117, substantially as described and for the purpose set forth. 44th. In a machine of the class described, the combination one with another in the rolling mechanism thereof, of a roll 118, a roll 116, a middle or back roll 117 of smaller diameter than either of the other rolls, gearing connecting the three rolls together so that they will all be rotated in the same direction at substantially the same peripheral speed, means for varying the distance between the rolls 118 and 116, and means for actuating the roll 117 so as to allow the escape from between the rolls of the roll of paper, etc., formed by their joint action, substantially as shown and described. 45th. In a machine of the class described, the combination with the roll 116, of the roll 118, means for positively rotating each of said rolls, a middle or back roll 117 located between the rolls 116 and 118 revolubly mounted in journals 86, carried by the back-plate 119^1, pivot-shafts 126, secured to the back-plate 119^1, and mounted in journals 127, means for partially rotating the shaft 126, so as to move the back-plate 119^1, and means for rotating the roll 117, substantially as shown and described. 46th. In a machine of the class described, the combination with the roll 116, of the roll 118, means for positively rotating each of said rolls, a middle or back-roll 117, located between the rolls 116 and 118, and revolubly mounted in journals 86, carried by the back-plate 119^1, pivot-shafts 126 secured to the back plate 119^1, movably mounted in journals 127, means for partially rotating the shaft 128, so as to move the back-plate 119^1, a sleeeve 132, revolubly mounted upon one of the pivot-shafts 126, a gear-wheel 134, secured to the sleeve 132, meshing with the gear-wheel 125, secured to the roll 117, a gear-wheel 133, also secured to the sleeve 132, meshing with the gear wheel 135, rigidly mounted upon the shaft 116^1, of the roll 116, substantially as shown and described. 47th. In a machine of the class described, and in the rolling mechanism thereof, the combination with the roll 116, of the roll 118, means for positively rotating each of said rolls, a shaft 121 movably mounted in suitable journals, levers 120, rigidly secured at one end to the shaft 121 and having journals revolubly supporting the roll 118 at the other end thereof, a lever 120^1, rigidly secured at one end to the shaft 121 and a cam A^2, for actuating the lever 120 so as to raise and lower the roll 118 by the partial rotation of the shaft 121, substantially as shown and described. 48th. In a machine of the class described, the combination with the roll 116 revolubly supported in suitable bearings, of the roll 118, revolubly supported by the ends of suitable levers 120, means for positively rotating the rolls 116 and 118, a shaft 121 upon which the levers 120, are rigidly secured, journals in which the shaft 121 is mounted so as to be partially rotatable therein, a lever 120^1, secured to the shaft 121, a cam for actuating the lever 120^1, so as to partially rotate the shaft 121, a middle or back-roll 117 located between the rolls 116 and 118 revolubly mounted in journals 86, carried by the back-plate 119^1, pivot-shafts 126, secured to the back-plate 119^1, and mounted in journals 127, means for partially rotating the shaft 126, so as to move the back-plate 119^1, and gearing by which the roll 117, is rotated, substantially as shown and described. 49th. In a machine of the class described, the drying mechanism having the endless travelling belt or apron 138, the stationary belt or apron 147, located above the belt or apron 138, rollers 148, located above the belt or apron 147, and means for forcing the rollers 148, down upon the belt or apron 147, so as to press the same toward the belt or apron 138, substantially as shown and described. 50th. In a machine of the class described, a drying mechanism having the endless travelling belt or apron 138, the stationary belt or apron 147, a table located beneath the upper run of the travelling belt or apron and forming a support therefor, a series of rollers 148, journalled in rods 149, located above the stationary belt or apron 147, and springs 149, for forcing the rollers down upon the table over which the upper run of the travelling belt 138 travels, substantially as shown and described.

No. 50,768. Pencil. (*Crayon.*)

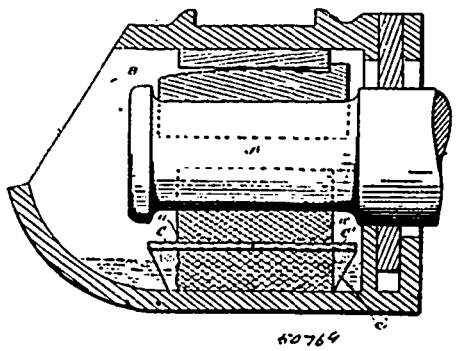
Frederick Elijah Blaisdell, Philadelphia, Pennsylvania, U.S.A., 6th December, 1895; 6 years.

Claim.—1st. A pencil having its marking-lead or crayon provided with a covering-film B of less lubricity than the crayon and inclosed in a roll composed of a sheet of flexible material C^1 weakened at intervals, the film B being unattached to the sheet C^1 throughout the working length of the crayon, substantially as described and for the purpose set forth. 2nd. A pencil having its marking-lead or crayon provided with a covering-film B of less lubricity than the crayon and inclosed in a covering from which sections in the form of a conical helix may be removed one by one so as to uncover the marking-lead or crayon section by section, the film B being unattached to the sheet C^1 throughout the working length of the crayon, substantially as described and for the purpose set forth. 3rd. A pencil having its marking-lead or crayon provided with a covering-film B of less lubricity than the crayon and inclosed in a roll composed of a sheet of flexible material C^1 bearing weakened lines *arranged diagonal to the axis of the roll along which the sheet may* be separated, the film B being unattached to the sheet, substantially



as described and for the purposes set forth. 4th. A pencil having its marking-lead or crayon provided with a covering film B of less lubricity than the crayon and inclosed in a roll composed of a sheet of flexible material bearing weakened lines arranged diagonal to the axis of the roll, along which the sheet may be separated, the outer edge of *the sheet being secured to the roll, and the film B being unattached* to the sheet, substantially as described and for the purpose set forth. 5th. A pencil having its marking-lead or crayon provided with a covering film B of less lubricity than the crayon and inclosed in a roll composed of a sheet of flexible material bearing weakened lines arranged diagonally to the axis of the roll, the film B being unattached to the sheet throughout the working length thereof, the outer edge of the sheet being secured to the roll and being provided with perforations 3 adjacent to such edge, substantially as described and for the purpose set forth. 6th. A pencil having its marking-lead or crayon provided with a covering-film B of less lubricity than the crayon and inclosed in a covering which may be removed section by section from the crayon without the use of a cutting instrument, the covering-film being unattached to the covering, substantially as described and for the purposes set forth.

No. 50,769. Car-Axle Lubricator. (*Boîte à graisse.*)



Julia Elizabeth Wright, Anna F. Wright and Eric Emma Wright, all of Windsor, Ontario, Canada, assignees of Arthur W. Wright, Detroit, Michigan, U.S.A., 9th December, 1895; 6 years.

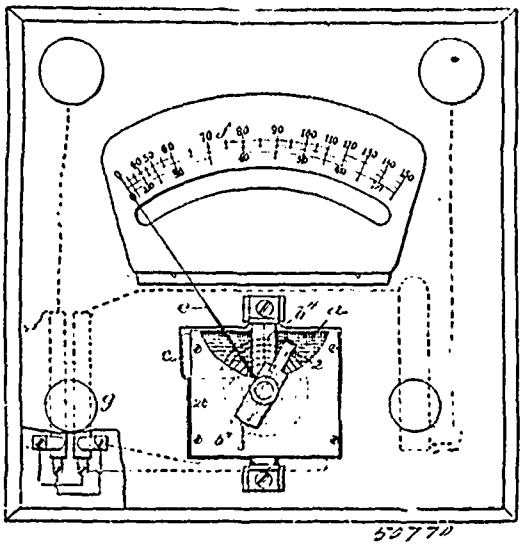
Claim.—1st. The combination of a car-axle box, a transverse partition below the journal thereof made in sections and having the division line between the sections across the axis of the axle, and means for linking the several sections of the partition together, substantially as described. 2nd. In combination on with a car-axle box, a transverse partition adapted to be placed below the journal thereof, and made in sections provided with longitudinal apertures for the passage of lubricating wicks and with longitudinal apertures for the passage of a wick supporting spring, and engaging catches adapted to engage the sections of the partition and hold the same together, substantially as described.

No. 50,770. Galvanometer. (*Galvanomètre.*)

The Whitney Electrical Instrument Company, Saco, Maine, assignee of Adrian H. Hoyt, Penacook, New Hampshire, both in the U.S.A., 9th December, 1895; 6 years.

Claim.—1st. The combination with a solenoid of a needle within said solenoid, said needle being pivoted on an axis parallel to its own plane and perpendicular to the axis of the solenoid, and a core or pole piece also under the inductive influence of said solenoid, and extending into inductive proximity to said needle, as set forth. 2nd. The combination with a solenoid, of a needle or armature within said solenoid, and movable on an axis parallel to its own plane, and

perpendicular to the axis of said solenoid, and a core or pole piece having its polar extremity at one side of the plane through the axis



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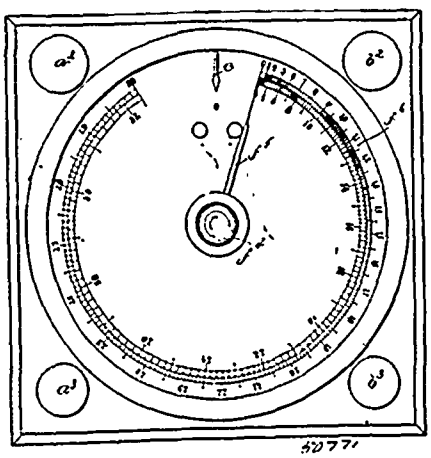
of the solenoid and the needle, and terminating near one polar extremity of the needle, as and for the purpose set forth. 3rd. An electrical indicating device comprising a solenoid, a normally neutral or non-polarized armature or needle pivoted midway between its polar extremities on an axis parallel to its own plane and perpendicular to the axis of the solenoid and within the said solenoid, a constantly increasing force opposing the movement of the needle, a pointer carried by said needle and co-operating with a suitable graduated scale, and a normally neutral magnetic core or pole piece adapted to be polarized by a current flowing through said solenoid and having one of its polar extremities in inductive proximity to said needle or armature, substantially as and for the purpose set forth. 4th. In an electrical indicating device, the combination with the solenoid, of a movable armature or needle comprising a thin plate of soft iron pivotally supported in said solenoid on an axis parallel to its own plane and perpendicular to the axis of said solenoid, substantially as described. 5th. In an electrical indicating device, the combination with a solenoid, of an armature or needle in inductive proximity thereto, the said armature or needle consisting of a thin plate of soft iron pivoted on an axis parallel to its own plane, substantially as described. 6th. In an electrical indicating device, the combination with a solenoid, of a movable armature or needle comprising a thin disc of soft iron curved or bent at its polar extremities and a stationary pole piece in inductive proximity to both said solenoid and said armature, substantially as described.

No. 50,771. Galvanometer. (*Galvanometere.*)



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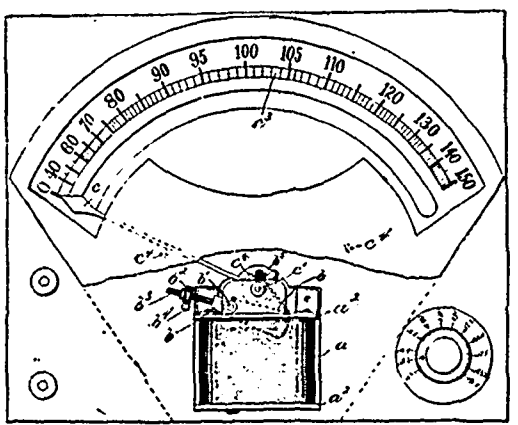
The Whitney Electrical Instrument Company, Saco, Maine, assignee of Adrain H. Hoyt, Penacook, New Hampshire, both in the U.S.A., 9th December, 1895; 6 years.

Claim.—1st. An electrical indicating device comprising a coil or solenoid, an armature or needle pivotally supported across the mouth of said solenoid on an axis perpendicular to the axis thereof, means for holding said armature normally in such position that one of its extremities extends into the mouth of the said coil but at an angle to the axis thereof, a variable force opposed to the movement of said armature upon its axis, and means for determining the amount of such force required to balance the inductive force tending to move the said armature from the said natural position, as described. 2nd. An electrical indicating device comprising a coil, an armature or needle consisting of a disc of soft iron pivotally supported on an axis parallel to its own plane and perpendicular to that of the coil, the said armature extending across the mouth of the coil and having one of its extremities projecting into the mouth of the coil, a force *opposed to the movement of* said armature, means for adjusting the effect of said force to balance the force exerted by the current upon the armature at a predetermined position, and an indicator co-operating with the said adjusting means, substantially as described. 3rd. An electrical indicating device comprising two solenoids, a common armature pivoted at right angles to the axis of said solenoids, the polar extremities thereof extending into the mouths of said coils respectively, and means for indicating the amount of current in either solenoid by the inductive effect thereof on said armature, as set forth. 4th. An electrical indicating apparatus comprising two solenoids placed end to end, an armature between the two, movable on an axis perpendicular to their common axis and having its polar extremities extending into the mouths of said coils respectively, means for indicating the amount of current in either solenoid by the inductive effect thereof upon said armature, and separate circuit connections for said coils, respectively, as set forth.

No. 50,772. Galvanometer. (*Galvanomètre.*)



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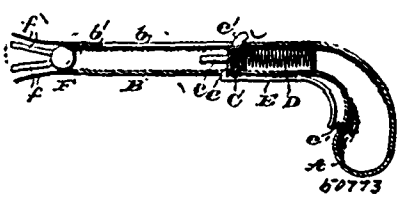
The Whitney Electrical Instrument Company, Saco, Maine assignee of Adrian H. Hoyt, Penacook, New Hampshire, both in the U.S.A., 9th December, 1895; 6 years.

Claim.—1st. In an electrical indicating device, the combination with a solenoid and an armature pivoted at one side of the end of said coil and extending outward from its pivot over the mouth of said coil and within the magnetic field thereof, of an indicator or pointer by said armature and a compensating connection between the free end of said armature and the said pointer, as set forth. 2nd. The combination of the electrically moved armature or needle of an electrical indicating device, and a pivotally supported pointer or indicator, with a link connected at one end to said electrically moved armature and at the other end to an arm connected to said pointer, as set forth. 3rd. In an electrical indicating device, the combination with a solenoid and movable armature in inductive proximity thereto, of a rheostat in circuit with said solenoid, and a pointer connected with said rheostat movable over a scale calibrated in terms of current periodicity, as and for the purpose set forth.

No. 50,773. Toy Marble Shooter.
(*Jouet projectile.*)



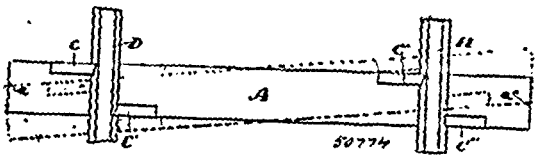
50773

Henry D. Gardy and Taylor C. Burke, both of Chester City, Pennsylvania, U.S.A., 9th December, 1895; 6 years.

Claim.—In a toy pistol, the barrel provided with a slot, a buffer b^1 secured in the forward end of said slot, the striking point c, a cylindrical body integral with and extending rearwardly from said point, a projection c^1, extending upwardly from the cylindrical body and adapted to work in the slot of the barrel, a coiled spring

seated in said cylindrical body, flat spring ribs flared outwardly, and secured to the extreme end of the barrel, the free ends of said ribs being turned back, all combined and operating as described.

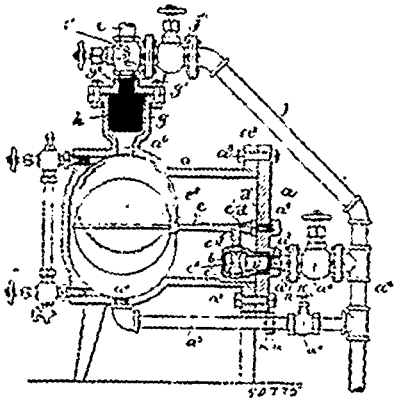
No. 50,774. Railroad Tie. (*Traverse de chemin de fer.*)



Harmon Gilmore and Harry Clayton Marlatt, both of Simcoe Ontario, Canada, 9th December, 1895; 6 years.

Claim.—1st. A railroad tie consisting of a sleeper, lugs on the top of the sleeper adapted to securely hold the rails in their proper relative position to each other, and a flange depending from the underside of the sleeper to maintain the tie in its set position, substantially as specified. 2nd. A railroad tie consisting of a sleeper, a series of lugs arranged on the top of the sleeper to securely hold the rails in their proper relative position to each other, each of the lugs provided with an overlapping rabet tapering in width from the outside of the lug to the inside, a flange depending from the underside of the sleeper to maintain the tie in its set position in the road-bed, substantially as specified. 3rd. A railroad tie consisting of a sleeper, lugs on the top of the sleeper adapted to securely hold the rails in their proper relative position to each other, and a flange depending from each side of the sleeper to maintain the tie in its set position in the road-bed, substantially as specified. 4th. A railroad tie consisting of a sleeper, a series of lugs arranged on the top of the sleeper to securely hold the rails in their proper relative position to each other, each of the lugs provided with an overlapping rabet tapering in width from the outside of the lug to the inside, and a flange depending from each side of the sleeper to maintain the tie in its set position in the road bed, substantially as specified.

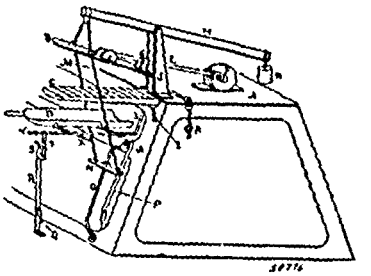
No. 50,775. Steam Trap. (*Purge à vapeur.*)



George Segur Brainerd, Boston, Massachusetts, U.S.A., 9th December, 1895; 6 years.

Claim.—1st. The improved steam trap, comprising the chamber having the inlet a^6, and the outlet a^7, the valve-casing within the chamber, the valve in said casing, the pivoted float-lever connected with the valve, the strainer-holder communicating with the inlet and composed of separable sections, the detachable strainer in said holder, the supply-pipe connected with said holder, the by-pass connecting said supply pipe with the outlet and provided with a valve whereby it may be opened and closed, the supply-pipe being also provided with a valve between the by-pass and the chamber, whereby said pipe may be closed to discontinue the operation of the trap, the by-pass providing an outlet for the steam and water of condensation when the trap is not in operation. 2nd. The improved steam trap, comprising a steam conduit having a valve, the trap casing detachably connected with the steam conduit and having a water outlet, a float-valve for said outlet within the casing and a shut-off valve in the outlet, exterior to the casing, a waste-pipe detachably connected with the outlet, and a by-pass connecting the steam conduit with the outlet, and provided with a valve. 3rd. The improved steam trap, comprising a steam conduit having a valve, the trap casing detachably connected with the steam conduit and having an internal float-valve, a water outlet and a sediment outlet, each provided with a shut-off valve, the waste-pipe detachably connected with said outlets, and the by-pass connecting the steam conduit with the waste-pipe and provided with a valve.

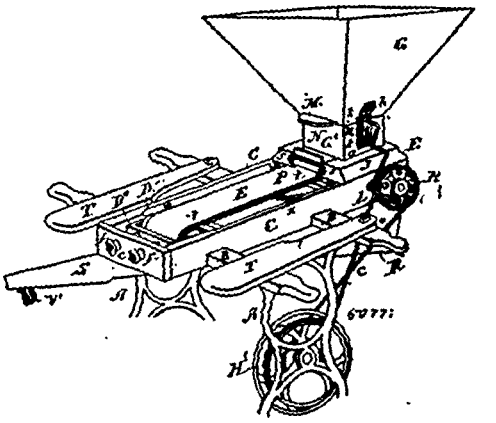
No. 50,776. Device for Hardening and Forming Felt Boots, etc. (*Appareil pour durcir et former les chaussures de feutre, etc.*)



James Stewart, Grand Rapids, Michigan, U.S.A., 9th December, 1895; 6 years.

Claim.—1st. The combination with a steam-box adapted to receive and support the bat from which the blank is to be made, of a reciprocating jigger adapted to operate upon one surface of such bat, an adjustable pan or shell adapted to clamp and hold the bat upon the steam-box while being operated upon, means for holding said pan or shell fixed and stationary in its operative position upon the bat, and means for moving said pan or shell towards and away from said steam-box, substantially as described. 2nd. The combination with a steam-box adapted to receive and support the bat from which the blank is to be made, of a reciprocating jigger adapted to operate upon one surface of said bat, an adjustable pan or shell adapted to clamp and hold the bat upon the steam-box while being operated upon, means for moving said pan or shell towards and away from the steam-box, and means for holding said pan fixed and stationary, locking said pan or shell in its clamping position, substantially as described. 3rd. The combination with the stationary steam-box C, of a movable pan or shell D, rods X, Y, pivotally connected to said pan or shell, a pivoted lever V pivotally connected to said rods, and a reciprocating jigger adapted to operate upon a bat supported upon the steam-box, substantially as described. 4th. The combination with the stationary steam-box C, of the movable pan or shell D, the pivoted lever V, pivotal connections between said pan or shell and said lever, and a lever latch S, fulcrumed to a fixed support and pivoted at one end to the lever V, for locking the pan or shell in against the steam-box, substantially as described. 5th. The combination with the stationary steam-box C, of the jigger B, the pitman E pivoted thereto intermediate the ends of the jigger, a loop G secured to the jigger near one end of the latter and straddling the pitman, a weighted lever H, pivotally connected at one end to said jigger, and a movable pan or shell D for clamping the bat on the steam-box, and rods M and lever P for drawing the jigger into operative position upon the bat, substantially as described.

No. 50,777. Bean Picker. (*Moissonneuse de fèves.*)

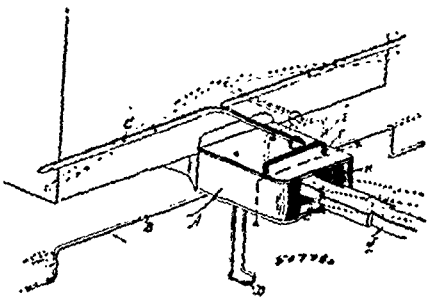


Merritt M. Nye, Rochester, Michigan, U.S.A., 9th December, 1895; 6 years.

Claim.—1st. In a bean picker, the combination of the rectangular frame, the rollers journaled within the frame at each end thereof, the endless apron passing over said rollers, the movable rectangular yoke supporting the journals of the forward roller, said yoke being provided with a bolt at each end that passes through the frame and receives a thumb nut thereon, whereby tension may be applied to said apron and the ends of said roller adjusted horizontally. 2nd. The combination with the frame, of the cap having the feed opening therein, the hopper having the rectangular throat supported on said cap over said opening, the agitator consisting of a rectangular bail depending within said throat and adapted to reciprocate over said feed opening, the journals of said agitator being supported in a ver

tically adjustable plate. 3rd. The combination with the frame, the endless apron mounted therein, the cap over a portion of said apron, said cap having a feed opening there through, the plate crossing the front of said opening and depending close to the surface of said apron, said plate being secured to the face of said cap by screws passing through vertical slots therein, whereby it is made vertically adjustable. 4th. The combination of the frame, the rollers journalled therein carrying the endless apron, the hopper having the vertical slots in the sides thereof, the agitator in said hopper having horizontal bearings that pass through said slots and are journalled in vertically adjustable plates secured to the hopper, the crank of said agitator, the pulley on the shaft of one of said rollers, and the pitman coupling said crank to said pulley. 5th. The combination with the frame, the horizontally movable apron mounted therein, the V-shaped guard mounted above but adjacent to the upper face of the lower portion of said apron. 6th. The combination of the frame, the inclined spout attached to the forward end thereof, said spout having a wire screen bottom, and a tight supplementary bottom below said screen provided with an open end.

No. 50,778. Car Coupler. (*Attelage de chars.*)

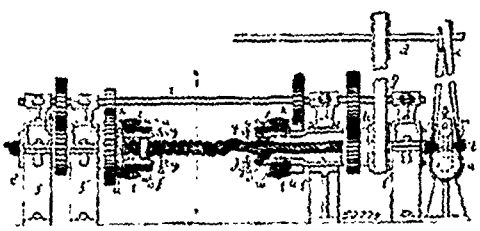


Frank E. Hutchings, Ypsilanti, Michigan, U.S.A., 9th December 1895; 6 years.

Claim.—1st. In a car-coupling, the combination with the draw-head A, of the clamping jaws G pivoted therein and adapted to engage the coupling-pin J, the springs L inserted in the rear end of the draw-head, and adapted to force the front ends of the clamping jaws open, and the locking plate E mounted in the front end of the draw-head, and adapted to hold the clamping jaws G in engagement with the coupling-pin, substantially as set forth. 2nd. In a car-coupling, the combination with the draw-head A of the clamping jaws G pivoted therein, and adapted to engage the coupling-pin J, the springs L inserted in the rear end of the draw-head, and adapted to force the front ends of the clamping jaws open, the locking plate E mounted in the front end of the draw-head and adapted to hold the clamping jaws G in engagement with the coupling-pin of the oscillating lever C, attached to the car and bent at its centre to connect and operate with the locking plate E, substantially as described. 3rd. In a car-coupling, the combination with the draw-head of the clamping jaws pivoted therein and adapted to engage the coupling-pin, the springs L inserted in the rear end of the draw-head and adapted to force the front ends of the clamping jaws open, the locking plate in the front ends of the clamping jaw, the oscillating lever C attached to said locking plate, adapted to operate said locking plate, and the lifting bar B secured to the lower side of the draw-head and adapted to force the coupling-pin, substantially as described.

No. 50,779. Fibre Curling Apparatus.

(*Appareil à friser les fibres.*)

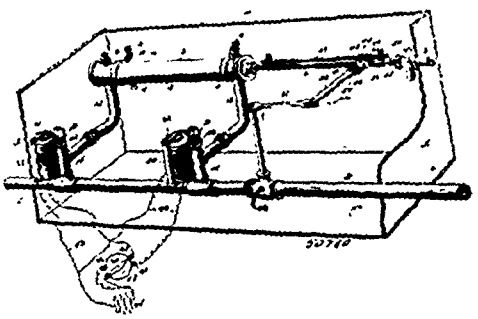


Samuel Albert Flower, Newark, New Jersey, U.S.A., 9th December, 1895; 6 years.

Claim.—1st. In a fibre curling machine, the combination of two drawing and twisting heads placed in line and fronting each other, means for rotating both in the same direction, rolls carried by said heads, means for driving the rolls receiving the fibre at a greater speed than the rolls of the other head, and feed rolls for delivering the fibres to the drawing and twisting heads and holding them for twisting, substantially as described. 2nd. In a fibre-curling machine, the combination of two drawing and twisting heads provided with rolls, said heads being placed in line and fronting each other, means for gearing them together for uniform speed in the same direction, and means for causing the rolls of the head receiving the fibres to revolve at a higher speed than the rolls of the other head, substantially as described. 3rd. A drawing and twisting head provided with rolls mounted and adjustable in arcs of circles, driving wheels for said rolls located in the axis of which the rolls are adjustable, and geared with the respective rolls at their opposite ends respectively, said driving wheels having suitable means of actuating them, substantially as described. 4th. A drawing and twisting head provided with rolls mounted and adjustable in arcs of circles, and an adjusting screw and push-rods at each end of the rolls adapted for adjusting both rolls in one direction by said screw, with opposing adjusting screws for each roll, substantially as described.

No. 50,780. Automatic Cut-off Mechanism.

(*Mécanisme de détente automatique.*)

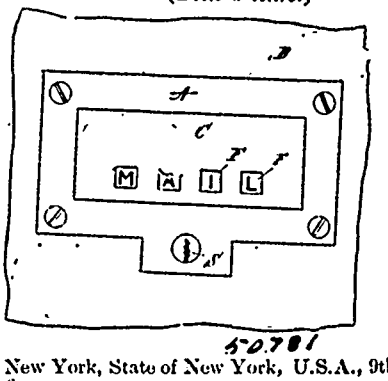


William M. Williams, Opelika, Alabama, U.S.A., 9th December, 1895; 6 years.

Claim.—1st. The combination with a supply-pipe, of communicating valve casings, having spaced seats, double valves to fit said seats, a cylinder arranged above the plane of the valve casings and connected at opposite ends thereto by interposed pipes, said double valves being adapted to control the passages from the supply-pipe to the cylinder and from the cylinder to vent openings in the valve casings, the said pipes tapping the casings between the valve seats, a piston operating in the cylinder and connected to a cut-off valve in the supply pipe, air-inlet valves in the cylinder and means actuated by thermal variations for controlling the valves, substantially as described. 2nd. The combination of a supply-pipe, a cylinder in communication at opposite ends with the supply-pipe, a piston operating in the cylinder, a cut-off valve for the supply-pipe operatively connected with the piston-rod, a drain valve stem arranged in the path of and adapted to be actuated by the piston-rod, valves for controlling the admission of fluid into the cylinder upon opposite sides of the plane of the piston-head, and means controlled by thermal variations for actuating said controlling valves, substantially as specified. 3rd. The combination of a supply-pipe, a cylinder in communication at opposite ends with the supply-pipe, a piston operating in the cylinder, a drain valve stem arranged in the path of the piston-rod, a tip adjustably mounted upon the piston-rod to engage and operate the drain valve stem, a cut-off valve for the supply-pipe operatively connected with the piston-rod, valves for controlling the admission of fluid to the cylinder upon opposite sides of the plane of the piston-head, and means actuated by thermal variations for operating the controlling valves, substantially as specified. 4th. The combination of a supply-pipe, a cylinder connected at its extremities with the supply-pipe, a piston operating in the cylinder, a cut-off valve for the supply-pipe, a guide rod arranged parallel with the path of the piston-rod, a clamp adjustably secured to the piston-rod and provided with a guide engaging and adapted to slide upon the guide-rod, connections between said clamp and the cut-off valve, valves for controlling the admission of fluid to the cylinder upon opposite sides of the plane of the piston-head, and means controlled by thermal variations for actuating the controlling valves, substantially as specified. 5th. The combination with a supply-pipe, a cut-off valve for the supply-pipe, a cylinder communicating at its extremities with the supply-pipe, and a piston operating in the cylinder and operatively connected with the cut-off valve, of valves for controlling the admission of fluid to the cylinder upon opposite sides of the plane of the piston-head, said valves also controlling vents for draining the cylinder, return springs for actuating the valves to open the vents, valve-controlled air inlets for the cylinder, and means controlled by thermal variations for actuating the valves to admit fluid to the cylinder, substantially as specified. 6th. The combination with a supply-pipe, a cut-off valve for the supply-pipe, a cylinder communicating at its extremities with the supply-pipe, and a piston operating in the cylinder and operatively connected with the cut-off valve, of double valves adapted to fit opposite valve-seats respectively controlling the admission of fluid to the cylinder upon opposite sides of the plane of the piston-head and vents for draining the same, springs for normally holding the valves in position to cut-off the admission of fluid to the cylinder and open the draining vents, electro-magnets arranged in different circuits and having their armatures provided with arms for engaging the

stems of the double valves, respectively, and a circuit closer controlled by the thermal variations for closing either circuit, substantially as specified.

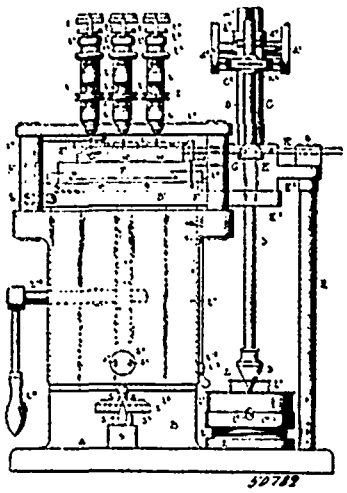
No. 50,781. Letter Box. (*Boîte à lettre.*)



Wallace Peck, New York, State of New York, U.S.A., 9th December, 1895; 6 years.

Claim.—1st. A mail delivering and receiving device, comprising a spring operated pivotally supported plate, which is placed in an oblong opening in the door, a plate as E, secured in the said opening, and extending inwardly, and a locking device below the opening in which the said plate is pivoted by means of which said plate may be locked in the closed position, substantially as shown and described. 2nd. A mail delivering and receiving device, comprising a spring operated, pivotally supported plate which is placed in an oblong opening in the door, a plate as E secured in the said opening, and extending inwardly, a locking device below the opening in which the said plate is pivoted by means of which said plate may be locked in the closed position, said plate E being provided on its lower side with a gong which is adapted to be sounded by the spring operated plate when released from the lock, substantially as shown and described. 3rd. The combination, with a door provided with an opening formed therein, of a plate as A, provided with side wings as *a*, a spring operated plate mounted in a central opening formed in the plate A, said spring operated plate being provided with a plurality of holes, a sliding plate mounted back of said holes, on which is printed or formed designating letters, which are adapted to show through said holes, a lock for securing the pivoted plate in the closed position, and an inwardly directed plate secured in said opening, substantially as shown and described. 4th. The combination, with a door provided with an opening formed therein, of a plate as A, provided with side wings as *a*, a spring operated plate mounted in the central opening formed in the plate A, said spring operated plate being provided with a plurality of holes, a sliding plate mounted back of said holes, on which is printed or formed designating letters, which are adapted to show through said holes, a lock for securing the pivoted plate in a closed position, and an inwardly directed plate secured in said opening, the said inwardly directed plate being provided with a gong adapted to be operated by the spring operated pivoted plate, substantially as shown and described. 5th. The combination, with a door provided with an opening formed therein, of a plate as A, provided with side wings as *a*, a spring operated plate mounted in the central opening formed in the plate A, said spring operated plate being provided with a plurality of holes, sliding plate mounted back of said holes, on which is printed or formed designating letters, which are adapted to show through said holes, a lock for securing the pivoted plate in a closed position, and an inwardly directed plate secured in said opening, the said inwardly directed plate being provided with a gong adapted to be operated by the spring operated pivoted plate, and means for operating the sliding plate, substantially as shown and described. 6th. The combination with a door provided with an opening formed therein, of a plate as A, provided with side wings as *a*, a spring operated plate mounted in the central opening formed in the plate A, said spring operated plate being provided with a plurality of holes *a*, sliding plate mounted back of said holes, on which is printed or formed designating letters, which are adapted to show through said holes, a lock for securing the pivoted plate, in a closed position, and an inwardly directed plate provided with a gong adapted to be operated by the spring operated pivoted plate, and means for operating the sliding plate, consisting of pins secured thereto, which extend inwardly at each end thereof, and a pivotally supported lever on one end for moving said plate in one direction, and the lug or shoulder at the other end for moving said plate in the opposite direction when the spring operated plate is thrown open, substantially as shown and described. 7th. A mail delivering and receiving device, which is adapted to be connected with a door, and to be secured in an opening formed therein, comprising a spring operated pivotally supported plate, as E, also adapted to be secured in said opening, and extending inwardly, means for retaining the spring operated plate in a closed position, said plate E being also adapted on its lower side with a gong which is adapted to be sounded by the spring operated plate, when the latter is released from the closed position, substantially as shown and described.

No. 50,782. Engraving Machine. (*Machine à graver.*)



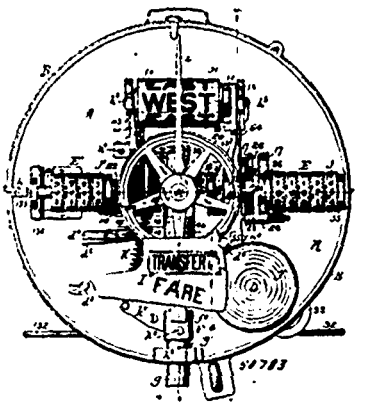
George F. Ballon, New York, State of New York, U.S.A., 9th December, 1895; 6 years.

Claim.—1st. In an engraving machine, the combination with a tool-carrier or work-holder, of reciprocating links operatively connected therewith, and an operating device for moving said links separately in two directions or simultaneously in all other directions in the same plane, substantially as set forth. 2nd. In an engraving machine, the combination with a tool-carrier or work-holder, of pivoted levers for moving the same, and reciprocating links connected to said levers, said links being movable separately or simultaneously, substantially as set forth. 3rd. In an engraving machine, the combination with a tool-carrier or work-holder, of pivoted levers connected therewith, reciprocating links for operating said levers, and guides for said links limiting them to movements in straight lines at an angle to each other, substantially as set forth. 4th. In an engraving machine, the combination of a tool-carrier or work-holder, and means for moving the same relative to a pattern, said means consisting of two pivoted levers connected directly or indirectly with said tool or work-holder, and two reciprocating links connected to the pivoted levers and movable in straight lines at an angle to each other, substantially as set forth. 5th. In an engraving machine, the combination with a tool-carrier or work-holder, of reciprocating, slotted and intersecting links, a device at the intersection of the slots for moving either or both links, and means operated by said links and operatively connected to said tool-carrier or work-holder, substantially as set forth. 6th. In an engraving machine, the combination with a tool-carrier or work-holder, of reciprocating links movable separately and together, means operated by said links and operatively connected with said tool-carrier or work-holder, and a pivoted tracer-rod, substantially as set forth. 7th. In an engraving machine, the combination with a tool-carrier or work-holder, of reciprocating links movable separately and together, means operated by said links and operatively connected with said tool-carrier or work-holder, and a pivoted tracer-rod movable laterally in all directions and capable of lengthwise movement, substantially as set forth. 8th. In an engraving machine, the combination with a tool or work-holder, of a tracer, a spended rod carrying said tracer, reciprocating links having slots through which said rod passes, and levers connected to said links for communicating the movements of said links to the mechanism carrying said tool or work-holder, whereby the movements of said tracer are followed by the tool or work-holder, substantially as set forth. 9th. In an engraving machine, the combination of reciprocating blocks, a tool or work-holder mounted upon said blocks, levers connected with said blocks, reciprocating links connected to said levers, and a tracer engaging with said links to reciprocate the same, substantially as set forth. 10th In an engraving machine, the combination of two mechanically connected reciprocating blocks, a tool or work-holder carried by one said blocks, levers for operating each of said blocks, and a tracer and intermediate mechanism for working said levers, substantially as set forth. 11th. In an engraving machine, the combination of a support having a slot, a block sliding in said slot and having a transverse slot, another block sliding in said transverse slot, a tool or work-holder mounted upon the latter block, levers for operating each of said blocks, and a tracer and intermediate mechanism for working said levers, substantially as set forth. 12th. In an engraving machine, the combination of a support having a slot, a block sliding in said slot and having a transverse slot, another block sliding in said transverse slot, a tool or work-holder mounted upon the latter block, levers for operating each of said blocks, a reciprocaing-link connected to each of said levers, and a tracer engaging with both of said links to reciprocate the same, substantially as set forth. 13th. In an engraving machine, the combination with two blocks

adapted to work in transverse directions and carrying a tool or work holder, levers for operating each of said blocks, a reciprocating link connected to each of said levers, said links having transverse slots, and a tracer rod passing through said slots to reciprocate the links, substantially as set forth. 14th. In an engraving machine, the combination of a block movable back and forth in one direction, a tool-carrier or work-holder movable therewith and capable of independent movement in a transverse direction, and a series of connected levers and links for moving said block and carrier, said levers being pivoted and said links being movable in straight lines at an angle to each other, substantially as set forth. 15th. In an engraving machine, the combination of two blocks or carriers, one adapted to reciprocate on a stationary support and the second reciprocating upon the first block, a tracer, and independent mechanical connections from said tracer to said blocks for moving the blocks directly and giving the second one of such blocks a compound movement corresponding to the movements of the tracer, substantially as set forth. 16th. In an engraving machine, the combination of two blocks or carriers, one adapted to reciprocate on a stationary support, and the second reciprocating upon the first block, a tool or work-holder carried by said last named block, a tracer, and independent mechanical connections from said tracer to said blocks for moving the blocks directly, and giving the second one of such blocks a compound movement, whereby the tool or work-holder will receive movements corresponding to the movements of the tracer, substantially as set forh. 17th. In an engraving machine, the combination with a tool or work-holder, of a tracer, mechanism for imparting the movements of the tracer to said tool or work holder, and means for varying the movement of said tool or work holder relative to the tracer in one direction without varying the relative movements of the tracer and said tool or work holder in any other direction, substantially as set forth. 18th. In an engraving machine, the combination with a tool or work holder, of a tracer, mechanism for imparting the movements of the tracer to said tool or work-holder, and means for adjusting said mechanism, whereby the movements of the tool or work holder are caused to vary relative to those of the tracer, and produc ng an engraving whose lines are different from the lines of the pattern followed by the tracer, substantially as set forth. 19th In an engraving machine, the combination of reciprocating blocks, a tracer, mechanism for imparting the movements of said tracer to said blocks, and means for altering the length of movement of one block relative to the movement of the tracer, independent of the length of movement of the other block relative to the tracer, substantially as set forth. 20th. In an engraving machine, the combination of two blocks adapted to reciprocate in transverse directions, a tracer, mechanism for imparting the movements of said tracer to said blocks, and means for altering the length of movement of one block relative to the movement of the tracer independent of the length of movement of the other block relative to the tracer, substantially as set forth. 21st. In an engraving machine, the combination of reciprocating blocks, a tool or work-holder carried thereby, a tracer and intermediate mechanism for reciprocating said blocks whereby the movements of the tracer are communicated to the tool or work-holder, and means for adjusting said mechanism relative to the reciprocating blocks whereby the length of movement of one of said blocks relative to a given pattern may be altered without altering the length of movement of the other block, substantially as and for the purpose set forth. 22nd. In an engraving machine, the combination of two blocks or carriers, one adapted to reciprocate on a stationary support, and the second reciprocating upon the first block, a tracer, independent mechanical connections from said tracer to said blocks for moving the blocks directly and giving the second one of such blocks a compound movement corresponding to the movements of the tracer, and means for altering said mechanical connections to vary the proportion of movement given the blocks, substantially as set forth. 23rd. In an engraving machine, the combination of reciprocating blocks, a tool or work holder carried by said blocks, two levers adjustably connected with said blocks, and a tracer and intermediate mechanism for working said levers, substantially as set forth. 24th. In an engraving machine, the combination of reciprocating blocks carrying a tool or work-holder, levers for moving said blocks, slots in said levers, adjustable blocks in said slots and clamped to the levers and adapted to be connected with the reciprocating blocks, substantially as set forth. 25th. In an engraving machine, the combination of reciprocating blocks carrying a tool or work-holder, levers for moving said blocks, slots in said levers, adjustable blocks in said slots, said blocks being in two parts having flanges and adapted to be secured together to clamp a lever between the flanges, and a hole in each of said adjustable blocks into which a projection from one of said reciprocating blocks enters, substantially as set forth. 26th. In an engraving machine having reciprocating blocks upon which a tool or work-holder is mounted, the combination of guides mounted upon said blocks, blocks P working between said guides, levers having adjustable blocks clamped clamped thereon, and a connection between said adjustable blocks and blocks P, substantially as and for the purpose set forth. 27th. In an engraving machine, the combination with a tool mounted in a chuck, a frame carrying said chuck, a spindle upon which said frame is journalled, a spring for forcing said tool toward the work, and means for removing said tool from the work, substantially as set forth. 28th. In an engraving machine, the combination of a tool-carrier, a plurality of tools carried thereby, a work-holder carried by reciprocating blocks, a tracer, reciprocating links through which the movements of said tracer are imparted to said blocks, and means for independently and simultaneously adjusting said tools relative to the work, substantially as set forth. 29th. In an engraving machine, the combination with a tool-carrier, of a plurality of tools carried thereby, a work-holder carried by reciprocating blocks, a tracer, reciprocating links through which the movements of said tracer are imparted to said blocks, and means for independently regulating the depth of cut of each tool, substantially as set forth. 30th. In an engraving machine, the combination with a tool-carrier, of a plurality of tools carried thereby, a work-holder carried by reciprocating blocks, a tracer, reciprocating links through which the movements of said tracer are imparted to said blocks, and means for simultaneously regulating the depth of cut of all the tools, substantially as set forth. 31st. In an engraving machine, the combination with a tool-carrier, of a plurality of tools carried thereby, a work-holder carried by reciprocating blocks, a tracer, reciprocating links through which the movements of said tracer are imparted to said blocks, and means for independently and simultaneously regulating the depth of cut of all the tools, substantially as set forth. 32nd. In an engraving machine, the combination with a sliding block, of a head mounted thereon and having a chuck adapted to carry a tool, means for adjusting said head independently of said sliding block, a work-holder, and mechanism operated by a tracer for moving said work-holder relative to the tool, substantially as set forth. 33rd. In an engraving machine, the combination with a tool-carrier, a spindle on which said carrier is adapted to move vertically, a scale t, and a nut t^2, carried by said tool-carrier and co-operating with the spindle to respectively adjust the tool toward the work and regulate its depth of cut, substantially as set forth. 34th. In an engraving machine, the combination of a tool-carrier, a plurality of heads mounted thereon and each having a chuck adapted to carry a tool, spindles on which said heads are adapted to move vertically a scale t and nut t^2 carried by each head and co-operating with the spindles to independently adjust the tools toward the work and regulate their depth of cut, means for moving the tool-carrier upward, and an adjustable stop for limiting the downward movement of the carrier to simultaneously regulate the depth of cut of all the tools, substantially as set forth. 35th. In an engraving machine, the combination, of a vertically sliding block, a tool mounted on said block, a screw beneath said block, and a screw in the lower end of said block adapted to strike the first named screw to limit the downward movement of said block, substantially as set forth. 36th. In an engraving machine, the combination of a vertically sliding block, a tool mounted thereon, a rack-bar on said block, a pinion meshing with said rack-bar through which said block is moved, an adjustable stop for limiting the downward movement of said block to regulate the depth of cut of said tool, a horizontally sliding work-holder, and mechanism operated by a tracer for moving said work-holder, substantially as set forth. 37th. In an engraving machine, the combination with two blocks adapted to move in transverse directions, a work-holder carried thereby, two levers for imparting motion to said blocks and both connected to one of said blocks, a common pivot or fulcrum for said levers, and a tracer-rod for actuating said levers to move the work-holder, through the reciprocating blocks relative to a tool, substantially as set forth. 38th. In an engraving machine, the combination with the relatively movable work holder and tool, of a tracer-rod, mechanism for communicating the movement of said rod to the actually movable one of said elements, and means for varying the leverage of said rod relative to said mechanism whereby the range of movement of said movable element may be varied relative to a pattern, substantially as and for the purpose set forth. 39th. In an engraving machine, the combination with the reciprocating blocks, of a tracer-rod, mechanism for communicating the movements of said rod to said blocks, and means for varying the leverage of said rod relative to said mechanism, whereby the range of movement of said blocks may be varied relative to a pattern, substantially as and for the purpose set forth. 40th. In an engraving machine, the combination with the reciprocating blocks, of a tracer-rod, mechanism for communicating the movements of said rod to said blocks, and an adjustable pivot for said rod, substantially as set forth. 41st. In an engraving machine, the combination with the reciprocating blocks, of a tracer-rod, mechanism for communicating the movements of said rod to said blocks, a universal joint through which said rod passes, and means for adjusting said joint vertically, substantially as set forth. 42nd. In an engraving machine, the combination with the reciprocating blocks, of a tracer-rod, mechanism for communicating the movements of said rod to said blocks, a standard, a bracket on said standard carrying a universal joint through which said rod passes, and means for vertically adjusting said bracket on said standard, substantially as set forth. 43rd. In an engraving machine, he combination with the reciprocating blocks, of a tracer-rod, mechanism for communicating the movements of said rod to said blocks, a standard, a bracket on said standard carrying a universal joint through which the rod passes, a rack-bar on said standard, a pinion carried by said bracket meshing with said rack-bar, and means for rotating said pinion to adjust said bracket vertically on said standard, substantially as and for the purpose set forth. 44th. In an engraving machine, the combination with the reciprocating blocks, of a tracer-rod, mechanism for communicating the movements of said rod to said blocks, a standard, a bracket on said standard carrying a universal joint through which

the rod passes, a rack-bar on said standard, a pinion carried by said bracket meshing with said rack-bar, a scale for rotating said pinion to adjust said bracket vertically on said standard, and means for locking said scale when the bracket is adjusted, substantially as and for the purpose set forth. 45th. In an engraving machine, the combination with the reciprocating blocks, of a tracer-rod, mechanism for communicating the movements of said rod to said blocks, a standard, a bracket on said standard carrying a universal joint through which the rod passes, a rack-bar on said standard, a pinion carried by said bracket meshing with said rack-bar, a scale for rotating said pinion to adjust said bracket vertically on said standard, means for locking said scale when the bracket is adjusted, and means for clamping said bracket to said standard to prevent lateral movement, substantially as set forth. 46th. In an engraving machine, the combination with the relatively movable work-holder and graver, of reciprocating links, mechanism for communicating the movements of said links to the actually movable one of said elements, a pivoted tracer-rod for moving said links, and means for varying the pivot point of said rod to vary its leverage, substantially as set forth. 47th. In an engraving machine, the combination with a tool and work-holder movable relative to each other, of a tracer, mechanism for communicating the movements of the tracer to the tool or work-holder, and means for adjusting the tracer to regulate the length of the movements imparted to said mechanism, substantially as set forth: 48th. In an engraving machine, the combination with a movable work-holder, of a tracer, reciprocating links actuated by said tracer and operatively connected with the work-holder whereby the movements of the tracer are imparted to the work-holder, and means for regulating the length of movement imparted to said reciprocating links by the tracer, substantially as set forth. 49th. In an engraving machine, the combination with a tool and work-holder movable relative to each other, of a tracer-rod, mechanism for communicating the movements of the tracer to the movable member, and means for regulating the degree of all inclinations of the tracer-rod relative to a given pattern to alter the length of movement given the movable member, substantially as set forth. 50th. In an engraving machine, the combination with a movable work-holder, of a tracer-rod, reciprocating links actuated by said tracer-rod and operatively connected with the work-holder whereby the movements of the tracer are imparted to the work-holder, and means for regulating the degree af all inclinations of the tracer-rod relative to a given pattern to alter the length of movement given the reciprocating links by the tracer-rod, substantially as set forth. 51st. In an engraving machine, the combination with the tracer-rod, of the reciprocating links operatively connected with the work-holder for communicating the movements of said rod to said work-holder, said links crossing each other and having transverse slots at the point of intersection, shoes in said slots, and a sleeve or roller through which the tracer-rod passes held within said slots by said shoes, substantially as set forth. 52nd. In an engraving machine, the combination with the tracer-rod, of the reciprocating links operatively connected with the work-holder for communicating the movements of said rod to said work-holder, said links crossing each other and having transverse slots at the point of intersection, concave shoes in said slots and a sleeve or roller through which the tracer-rod passes having a spherical outer surface and held within said slots by said concave shoes, substantially as set forth. 53rd. In an engraving machine, the combination with an open pattern, of a tracer for imparting motion to a tool or work-holder, said tracer passing through or past said pattern and said pattern and tracer being vertically movable with relation to each other, and means for moving either or both, whereby the length of the movements imparted to said tool or work-holder by the tracer may be varied, substantially as and for the purpose set forth. 54th. In an engraving machine, the combination with an open pattern, of a tracer for imparting motion to a tool or work-holder, said tracer having a tapering or cone-shaped surface passing through or past said pattern, and said pattern and tracer being vertically movable with relation to each other, and means for moving either or both, whereby the length of the movements imparted to said tool or work-holder by the tracer may be varied, substantially as and for the purpose set forth. 55th. In an engraving machine, the combination with an open pattern, of a pivoted tracer-rod for imparting motion to a tool or work-holder, the end of said rod passing through or past said pattern and said pattern and tracer being vertically movable with relation to each other, and means for moving either or both, whereby all inclinations of the tracer-rod relative to a given pattern are altered and whereby the length of the movements imparted to the tool or work-holder by the tracer are varied, substantially as and for the purpose set forth. 56th. In an engraving machine, the combination with an open pattern, of a pivoted tracer-rod for imparting motion to a tool or work-holder, the end of said rod being provided with a tapering or cone-shaped tracer which passes through or past said pattern, and said pattern and tracer being vertically movable with relation to each other, and means for moving either or both, whereby all inclinations of the tracer-rod relative to a given pattern are altered and whereby the length of the movements imparted to the tool or work-holder by the tracer-rod are varied, substantially as and for the purpose set forth. 57th. In an engraving machine, the combination with an open pattern, of a pivoted tracer-rod for imparting motion to a tool or work-holder, the end of said rod being provided with a tapering or cone-shaped tracer which passes through or past said pattern, and a vertically movable plate upon which said tracer rests and by which it is moved vertically, whereby all inclinations of the tracer-rod relative to given pattern are altered and whereby the length of the movements imparted to the tool or work-holder by the tracer-rod are varied, substantially as and for the purpose set forth. 58th. In an engraving machine, the combination with a tool or work-holder, of reciprocating links operatively connected therewith for imparting motion thereto, a tracer-rod for moving said links, and an open pattern through or past which said tracer-rod passes, said rod and pattern being vertically movable with relation to each other, whereby all inclinations of said rod relative to a given pattern are altered and whereby the length of the movements imparted to the reciprocating links are varied, substantially as and for the purpose set forth. 59th. A pattern for engraving machines, consisting of an open figure or character, a supporting plate, and pins extending between said pattern and plate, ubstantially as set forth. 60th. A pattern for engraving machines, consisting of an open figure or character mounted on pins extending from a base or plate, in combination with a base l, having a rib l^1, on which said plate is adapted to rest, and means for clamping said plate in position, substantially as set forth. 61st. In an engraving machine, the combination with a tracer, of an open pattern through which said tracer projects, and a vertically movable plate beneath said pattern on which said tracer rests, substantially as set forth. 62nd. In an engraving machine, the combination with a tracer, of an open pattern through which said tracer projects, a base for supporting said pattern, said base being circular and having an external screw-thread, an internally screw-threaded collar on said base, and a plate on which said tracer rests resting on said collar and adapted to be moved vertically by screwing said collar up or down on said base to move said tracer vertically, substantially as set forth. 63rd. In an engraving machine, the combination with a tracer, of a pattern, and a guide in proximity to said pattern for guiding the movements of the tracer while using a roughing cutter, substantially as set forth. 64th. In an engraving machine, the combination with a tracer, of an open pattern through which said tracer projects, a base for supporting said pattern, a vertically moving plate beneath said pattern on which said tracer rests, a groove or flange on said plate for guiding the movements of the tracer while using a roughing cutter, and means for moving said plate to move said tracer through the pattern, substantially as set forth.

No. 50,783. Fare Register. (*Registre à billets.*)



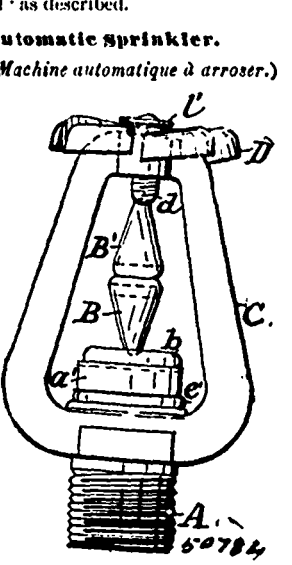
The St. Louis Register Company, assignee of Ephron Catlin and Gustavus Rein, all of St. Louis, Missouri, U.S.A., 9th December, 1895; 6 years.

Claim.– 1st. The combination with the trip-register, the permanent register and means for releasing the trip-register, and for locking the permanent register against movement while the trip register is released, of a motor for returning the trip-register to zero, substantially as described. 2nd. The combination with the trip-register and the permanent register, and means for actuating said registers step by step, of a disengaging device for releasing the trip-register, so that it may be moved backward, means for locking the permanent register against movement while the trip register is released, and a motor moving said trip-register to zero, substantially as described. 3rd. The combination with the trip register, a permanent register mounted in a rocking frame, and means for actuating said registers step by step, of means for disengaging the trip register from the permanent register, and for locking the permanent register against movement while the trip-register is disengaged, and a motor for returning said trip-register to zero, substantially as described. 4th. The combination of the trip-register, a pinion movable in unison therewith, a segment in gear with the pinion, a motor spring connected to the segment, means for actuating the registers step by step and placing the spring under tension, and means for releasing the trip-register, so that the motor spring may act, substantially as described. 5th. The combination with the trip-register, a permanent register, gearing connecting the two registers, and means for actuating the registers step by step, of a sliding frame for disconnecting

said gearing and for locking the permanent register against movement while disconnected, and a motor spring for returning the trip-register to zero, substantially as described. 6th. The combination with the trip register and the permanent register, and means for actuating the registers step by step, of a disengaging device for disconnecting said two registers, a spring constantly tending to hold the disengaging device in its inactive position, a lock for holding said device in disconnecting position against the tension of said spring, and a motor for returning the trip-register to zero, substantially as described. 7th. The combination with the trip-register and the permanent register, of a disengaging device for disconnecting said two registers, a spring constantly tending to hold the disengaging device in its inactive position, a lock one portion of which is carried by the device and the other co-acting portion by the trip-register, for holding said device in disconnecting position against the tension of its spring, and a motor for returning the trip-register to zero, substantially as described. 8th. The combination of a step by step revoluble index, a motor placed under tension as the index is revolved, means for step by step moving the index, a holdback or stop-pawl, normally preventing the backward rotation of the index and means for releasing the stop-pawl from its control of the index whereby the motor is free to return to the index, substantially as described. 9th. The combination with the trip-register and the permanent register, and means for moving the registers step by step, of a disengaging device for releasing one register from the other and a single spring for returning the trip-register to zero, and for returning the disengaging device to its inactive position, substantially as described. 10th. The combination with the trip-register and permanent register, and the actuated wheel of the trip-register having a projection, of means for returning the trip-register to zero, and a zero stop for contact with said projection fixed in one direction and yielding in the other, substantially as described. 11th. The combination of an index and its carrying wheel, the permanent register geared with said wheel, a disengaging device for disconnecting said register from said wheel, a spring constantly tending to hold said device in its inactive position, a circular flange on the wheel and a non-rotating engaging latch carried by the device, substantially as described. 12th. The combination of a step by step rotatable index and its carrying wheel, a stop-pawl normally preventing backward rotation of said wheel, a disengaging device for releasing said stop-pawl, a spring constantly tending to hold said device in its inactive position, a flange on the carrying wheel and a non-rotating engaging latch on the device for holding the stop-pawl in its released position against the tension of said spring, and means for turning the index and carrying wheel backward, substantially as described. 13th. In a fare register the combination of the wheel 20 having a circular flange with a recess, a slide having a non-rotating latch for engaging said flange, means for rotating said wheel until the recess in the flange coincides with the latch, and a spring free to move the latch from the recess, substantially as described. 14th. The combination with the wheel 20, having the broken circular flange, of a latch for engaging the flange and a brake pawl carried by said wheel and adapted to meet the latch, substantially as described. 15th. The combination with a pawl-carrier 26, having two projections, of an engaging stop as 18, and means for moving the pawl-carrier to place the projections in line with the stop, substantially as described. 16th. The combination with a pawl-carrier 26, having two projections, of an engaging stop 18, fixed in one direction and yielding in the other, and means for moving the pawl-carrier to place the projections in line with the stop, substantially as described. 17th. The combination with the normally exposed trip-register and the permanent register, of an auxiliary permanent register, and means for actuating the said first two registers continuously step by step, and another means for actuating all three registers step by step, and means for returning the trip-register to zero without disturbing the record of the permanent registers, substantially as described. 18th. The combination with the trip-register, the permanent register and gearing connecting the two registers, of an auxiliary permanent register having a gear adapted to be geared with and ungeared from said two registers, substantially as described. 19th. The combination with the trip-register and permanent register, of an auxiliary permanent register operative with the trip-register, substantially as described. 20th. The combination with the trip-register, of two permanent registers both common to said trip-register, substantially as described. 21st. The combination with the trip-register and permanent register, of an auxiliary permanent register and an indicating signal for indicating the operation of said auxiliary register, substantially as described. 22nd. The combination with the trip-register and permanent register, of an auxiliary permanent register, an actuating slide for said first two registers and another actuating slide for said auxiliary register, and adapted to operate the first-named slide, whereby the three registers are operated, and means for returning the trip register to zero without disturbing the condition of the permanent register, substantially as described. 23rd. The combination with the registers of two actuating slides therefor, both adapted to be directly moved and one slide having a projection so that the other slide shall be operated when it is moved, substantially as described. 24th. The combination with the registers of two actuating slides therefor, a projection on one slide to bear against the other and a single spring and connections with the slides for returning one slide or both slides when moved, substantially as described. 25th. The combination with the registers of two actuating slides therefor, and a locking pawl for preventing the operation of one slide while the other is being moved, and permitting both slides to be moved simultaneously, substantially as described. 26th. The combination with the registers and the fare indicating signal I, of an arm for moving it in one position, a yielding pin for holding it in such position, and means connected with one of the registers for moving the pin to release the signal, substantially as described. 27th. The combination with the registers and the fare indicating signal I, of an arm for moving it in one direction, a longitudinally yielding pin for holding it in such position, and an oscillating pawl for depressing the pin to release the signal, substantially as described.

No. 50,784. Automatic Sprinkler.

(*Machine automatique à arroser.*)



The Manufacturers Automatic Sprinkler Company, assignee of Charles William Siver, both of Syracuse, New York, U.S.A., 10th December, 1895; 6 years.

Claim.—1st. In an automatic sprinkler, the combination with the valve seat, the valve thereon, the diaphragm and the bearing opposite the diaphragm, of a pair of angular levers having straight end portions extending outward at right angles to the axis of the sprinkler head, one of said levers being provided at its angle with a rib curved in cross-section and lying in a correspondingly curved recess in the opposite lever, and a device composed of two metal pieces soldered together lying in slots in the ends of said levers and securing said ends together, as set forth. 2nd. In an automatic sprinkler, the combination of the nozzle provided with a valve seat, the valve, the yoke, an adjustable screw in the yoke opposite the valve, a strut formed of angular levers having the angles opposite each other and provided with straight arms, concave bearings, for the strut, rounded points on the strut to lie in said bearings, and a soldered releasing device to hold the ends of the straight arms together, as and for the purpose described. 3rd. In an automatic sprinkler, the combination with the nozzle provided with a valve seat, the porcelain valve, the yoke extending above the valve, a diaphragm on the valve having a concavity in the centre of its upper side, and having its edges turned down and lying in contact with the valve, an adjustable screw in the yoke opposite the centre of the diaphragm and having a concavity in its end, a strut formed of a pair of angular levers having the angles opposite each other and to one side of a perpendicular line extending through the centre of the diaphragm and screw, straight arms of the levers extending horizontally, slots in the ends of said arms, and a soldered releasing device in the slots and holding the arms together, as set forth. 4th. In an automatic sprinkler, the combination with the nozzle, the yoke extending from diametrically opposite sides of and above the nozzle, the valve seat, valve, diaphragm with concavity in its centre resting with its edge on the valve, the disc with an indentation in its centre between the diaphragm and valve, a screw in the yoke directly above the concavity in the diaphragm, and having a concavity in its lower end, a strut formed of a pair of angular levers, the angles being opposite each other, and to one side of a perpendicular line extending through the axis of the screw, a rounded rib at the angle of one lever lying in a corresponding groove in the opposite lever, rounded points on the short ends of the levers to lie in the concavities in the diaphragm and screw, and suitable means to hold the free ends of the said levers together. 5th. In an automatic sprinkler, the combination with the valve seat, the valve thereon, the diaphragm and the bearing opposite the diaphragm, of a pair of angular levers having straight end portions extending outward at right angles to the axis of the sprinkler head, one of said levers being provided at its angle with a rib curved in cross-section and lying in a correspondingly curved recess in the opposite lever, an annular groove around the valve seat containing a coil spring, bearing upon the lower side of the valve, and a device composed of two metal pieces soldered together

lying in slots in the ends of said levers and securing said ends together, as set forth. 6th. In an automatic sprinkler, the combination with the nozzle, valve, diaphragm and strut, of the yoke above the diaphragm, the screw passing through the yoke, the annular space surrounding the upper end of the screw, the flanged ring in the said space and extending above the end of the screw, solder securing the ring to the yoke and screw and covering the upper end of the same, and the deflector between the yoke and the rim of the said ring, as set forth. 7th. In an automatic sprinkler, the combination with the nozzle, valve, diaphragm and strut, of the yoke above the diaphragm, the screw passing through the yoke, the annular space surrounding the upper end of the screw, the flanged ring in the said space and extending above the end of the screw, and means to secure the ring and screw to the yoke to hold them rigidly in place, as set forth. 8th. In an automatic sprinkler, the combination with the nozzle, valve, diaphragm and strut as described, of the yoke extending upward from diametrically opposite sides of the nozzle and above the diaphragm, a headless screw passing through the yoke directly above the centre of the diaphragm, the annular space surrounding the upper end of the screw, a flanged ring in said annular space, and extending above the end of the screw, solder securing the ring to the yoke and screw and covering the upper end thereof, and a rotary deflector loosely mounted between the yoke and the rim of the ring and provided with a divided edge, circular apertures through the deflector at the ends of the slots and the teeth between the slots bent, substantially as described and shown. 9th. In an automatic sprinkler, the combination with the nozzle valve, diaphragm and strut as described, of the yoke extending upward from diametrically opposite sides of the nozzle and above the diaphragm, a headless screw passing through the yoke directly above the centre of the diaphragm, the annular space surrounding the upper end of the screw, a flanged ring in the said annular space, and extending above the end of the screw, solder securing the ring to the yoke and screw, and covering the upper end thereof, and a rotary deflector loosely mounted between the yoke and the rim of the ring and provided with a divided edge, circular apertures through the deflector at the ends of the slots and the teeth between the slots bent, the annular recess in the valve seat, and a coil spring lying in the recess and bearing against the porcelain valve, as and for the purpose described.

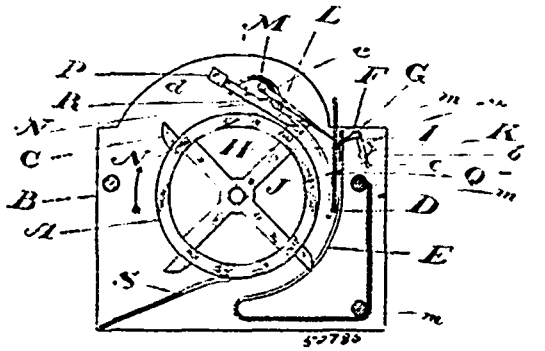
No. 50,785. Manufacture of Transfer Pictures.

(*Fabrication d'images.*)

Hector de Grousilliers, Charlottenburg, Germany, 10th December, 1895; 6 years.

Claim.—1st. A transfer picture, comprising the backing, the coating applied thereto in the known manner and which is soluble in water and the second coating composed of wood pitch or resin and oil mixed with a colouring matter, substantially as described. 2nd. A transfer picture, comprising the backing, the coating applied thereto in the usual manner and which is soluble in water and the second coating composed of wax, turpentine and oil mixed with a colouring matter, substantially as described. 3rd. A transfer picture, comprising the backing coating applied thereto in the usual manner, and which is soluble in water, and the second coating composed of boiled and linseed oil, substantially as described. 4th. A transfer picture, comprising the backing, the coating applied thereto in the usual manner and which is soluble in water, a second coating insoluble in water and composed of a diluted composition of wood-pitch or resin, and oil, or wax, turpentine and oil, or boiled and crude linseed oil, on which second coating the impression is made, substantially as described.

No. 50,786. Fare Box. (*Boîte à billets.*)

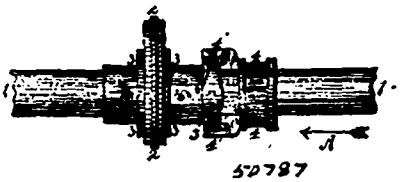


Joseph Henry Coleman, Tottenham, Ontario, Canada, 10th December, 1895; 6 years.

Claim. 1st. In a fare box, one or more needles arranged to permit of the insertion of fares into the box and automatically arranged to resist their withdrawal then from when the box is in a normal position, substantially as and for the purpose specified. 2nd. A fare box having a passage way for fares, in combination with one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares placed in the box, substantially as and for the purpose specified. 3rd. A fare box having a passage-way for fares, in combination with one or more pivoted needles having their points normally out of the path of fares placed in the box, and means for automatically bringing the points of the needles into the path of or against the fare when the same is inserted in the box, substantially as and for the purpose specified. 4th. A fare box having a passage-way for fares, in combination with one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares placed in the box, one or more pivoted needles having their points normally out of the path of such fares, and means for automatically bringing the points of the last mentioned needles into the path of or against the fare when the latter is inserted in the box, substantially as and for the purpose specified. 5th. In a fare box, a concave and a rotatable toothed drum between which the fares pass, in combination with one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares passing between the concave and the drum, substantially as and for the purpose specified. 6th. In a fare box, a concave and a rotatable toothed drum between which the fares pass, in combination with one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares passing between the concave and the drum, one or more pivoted needles having their points normally out of the path of such fares, and means for automatically bringing the points of the last mentioned needles into the path of or against the fare when the latter is inserted in the box, substantially as and for the purpose specified. 7th. In a fare box, a slotted concave and a rotatable toothed drum, the points of the teeth of which enter the slots in the concave, in combination with one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares passing between the concave and the drum, substantially as and for the purpose specified. 8th. In a fare box, a slotted concave and a rotatable toothed drum, the points of the teeth of which enter the slots in the concave, in combination with one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares passing between the concave and the drum, and pivoted locks to retain the needles in their normal position when the box is inverted, substantially as and for the purpose specified. 9th. In a fare box, the combination of the following elements: a concave, a rotatable toothed drum, one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares passing between the concave and the drum, one or more pivoted needles having their points normally out of the path of such fares, and one or more pivoted levers having their ends lying in the path of the fares and adapted to raise the last mentioned needles when a fare presses against the said lever ends, substantially as and for the purpose specified. 10th. In a fare box, the combination of the following elements: a concave, a rotatable toothed drum, one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares passing between the concave and the drum, and pivoted locks adapted to retain the needles in their normal position when the box is inverted, substantially as and for the purpose specified. 11th. In a device of the class described, the combination of a slotted concave, a rotatable toothed drum, the points of the teeth of which enter the slots in the concave, and a slotted stop plate, substantially as and for the purpose specified. 12th. In a fare box, the combination of a concave, a suitably journalled toothed drum, a ratchet-wheel rigidly connected to the spindle of the said drum, a slide suitably supported, a spring actuated dog pivoted on the said slide, a spring pawl rigidly connected to the box and engaging with the teeth of the ratchet-wheel, a grip pivoted at one end to the slide and a spring connection between the said grip and the handle of the box, substantially as and for the purpose specified. 13th. In a fare box, the combination of a concave, a suitably journalled toothed drum, a ratchet-wheel rigidly connected to the spindle of the said drum, a slide suitably supported, a spring dog pivoted on the said slide, a stop on the slide adapted to come into contact with the ratchet-wheel to limit its motion, a spring pawl rigidly connected to the box and engaging with the teeth of the ratchet-wheel, a grip pivoted at one end to the slide and a spring connection between the said grip and the handle of the box, substantially as and for the purpose specified. 14th. In a fare box, a concave and a rotatable toothed drum, between which the fares pass, in combination with one or more pivoted needles projecting through slots in the said concave, one or more pivoted needles having their points normally out of the path of fares placed in the box, and means for automatically bringing the points of the last mentioned needles into the path of or against the fare when the latter is partially inserted in the box, substantially as and for the purpose specified. 15th. In a device of the class described, a concave adapted to yield to pressure and to return to its former position on the removal of the same, in combination with a rotatable toothed drum, substantially as and for the purpose specified. 16th. In a device of the class described, a slotted concave adapted to yield to pressure and to return to its former position on the removal of the same, in combination with a rotatable toothed drum, the points of the teeth of which enter the slots in the concave, substantially as and for the purpose specified. 17th. In a fare box, mechanism for conveying fares into the interior of the box, in combination with a slide adapted to operate the said mechanism and a grip connected to the handle and adapted to operate the said slide, substantially as and for the purpose

specified. 18th. In a fare box, mechanism for conveying fares into the interior of the box, in combination with a slide adapted to operate the said mechanism and a grip connected to the handle and adapted to operate the said slide, and a spring arranged to return the said grip and slide to their normal positions, substantially as and for the purpose specified. 19th. In a fare box, the pivoted needles F, having weighted tails I, in combination with the pivoted lock J, provided with the arms *a*, and *b*, and the weighted tail *c*, substantially as and for the purpose specified. 20th. In a fare box, the pivoted needles I, and the concave E, in combination with the curved cross bar *o*, slotted at *d* and *e*, and the levers N, pivoted on the said cross-bar and provided with curved portions Q, weighted tails P, and projections R, substantially as and for the purpose specified. 21st. In a fare box, a slotted concave and a rotatable toothed drum, the points of the teeth of which enter the slots in the concave, in combination with one or more pivoted needles having weighted tails adapted to normally retain the points of the needles in the path of fares passing between the concave and the drum, and pivoted lugs to retain the needles in their normal position when the box is inverted one or more pivoted needles having their points normally out of the path of such fares, and means for automatically bringing the points of the last mentioned needles into the path of or against the fare when the latter is inserted in the box, substantially as and for the purpose specified.

No. 50,787. Shiftable Eccentric. (*Eccentrique mobile.*)



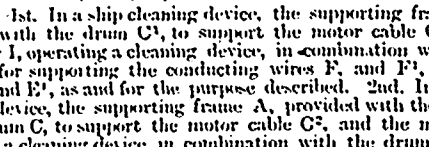
50787

William R. Brown, New Market, Indiana, U.S.A., 10th December, 1895; 6 years.

Claim. In a shiftable eccentric, the combination with the revoluble shaft and sectional boxing rigidly mounted thereon, of the movable circular disc, an oblong opening in said disc, and means for operating said disc transversely on its sectional boxing and revoluble shaft, said means comprising a movable shaft, ring, a pivoted frame, a pair of movable bars, and a pair of links, all as, and for the purposes, set forth, substantially as specified.

No. 50,788. Ship Cleaning Device.

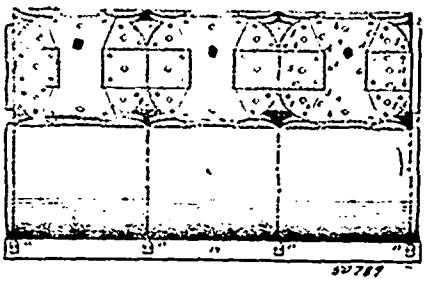
(*Appareil à nettoyer les navires.*)



Eddy Taylor Thomas, New York, State of New York, U.S.A., 10th December, 1895; 6 years.

Claim. 1st. In a ship cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, and the motor I, operating a cleaning device, in combination with the drum D, for supporting the conducting wires F, and F^1, trolley wires E and E^1, as and for the purpose described. 2nd. In a ship cleaning device, the supporting frame A, provided with the wheel A, the drum C, to support the motor cable C^2, and the motor I, operating a cleaning device, in combination with the drum D, for supporting the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 3rd. In a ship cleaning device, the supporting frame A, provided with the wheel A^1, the drum C^1, to support the motor cable C^2, and motor I, operating a cleaning device, supported on the cable B, in combination with the drum B, for supporting the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 4th. In a ship cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, and the motor I, operating a cleaning device, a spring in connection with the drum to re-wind the cable C^2, in combination with the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 5th. In a cleaning device, the supporting frame A, provided with the arbour C, to operate the drums C^1, and D, the motor cable C^2 and the motor, operating a cleaning device in combination with the drum D, for supporting the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 6th. In a cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, and the motor I, operating a cleaning device in combination with the drum D, having grooved flanges D^3 and D^4, the said drum D supporting the conducting wires F and F^1, and trolley wires E and E^1, as and for the purpose described. 7th. In a cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, and the motor I, operating a cleaning device when the said motor I drives the gears J and J^2, in combination with the drum D for supporting the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 8th. In a cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, the motor I, for operating the brush K, in combination with the drum D, for supporting the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 9th. In a cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, the motor I, for driving the gear J^2, which is provided with an eccentric pin J^3, for operating the reciprocating brush K, in combination with the drum D, for supporting the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 10th. In a ship cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, and the motor I for driving the reciprocating brush K, having an adjustable head K^8, supported by the flange K^{11}, in combination with the drum D, for supporting the conducting wires F and F^1, trolley wires E and E^1, as and for the purpose described. 11th. In a cleaning device, the supporting frame A, provided with the drum C^1, to support the motor cable C^2, and the motor I, for operating a cleaning device in combination with the wires F and F^1, as and for the purpose described.

No. 50,789. Method of and Apparatus for Making Wood Dishes. (*Méthode et appareil pour faire des plats en bois.*)



50789

Joseph W. Lambert, Kansas City, Missouri, U.S.A., 10th December, 1895; 6 years.

Claim.—1st. As a new article of manufacture, a wood dish comprising a body portion, end portions projecting upwardly therefrom, and side portions projecting upwardly from said body portion also, and provided with triangular end portions, the apices of which coincide with the under side of the said end portions in the plane of the upper surface of the body portion or bottom. 2nd. The method of forming wood blanks, the same consisting in making the impression of the same in a log or cylinder of wood, and then removing from the log that portion containing the said impression, substantially as set forth. 3rd. The method of forming wood dishes, the same consisting in making the impression desired in a log or cylinder of wood, and then removing from said log that portion of the log containing said impression, and then bending said blank to the proper form and securing the same in such bent form, substantially as set forth. 4th. An apparatus for making impressions upon a rotating log, the same consisting of a roller provided externally with sections or plates, and creasing blades or knives carried by and projecting beyond the face of the said sections or plates, substantially as set forth. 5th. A roller for making impressions in a rotating log or cylinder of wood, comprising a cylinder, a plate or section secured thereto and consisting of a body portion 3, and side portions 4, end portions 5, and triangular portions 6, blades carried at the ends of the body portion, knives carried at the sides of said end portions, and intersecting with the opposite ends of said blades of the body portion, knives extending parallel with the first-named knives, and carried at the outer margins of the side portions 4, and obliquely arranged blades also carried by said side portions, and intersecting with the opposite ends of their marginal knives and with the first mentioned knives a slight distance downward of the blades of the said body portion, and triangular plates fitting between said first mentioned knives and said obliquely arranged blades, and provided at their outer ends with curved knives which intersect the outer ends of the knives of the end portion and the outer ends of the knives or blades of the side portions, substantially as set forth. 6th. In a roller for making impressions in wood, the combination with a number of sections or plates of required formation and arrangement, of knives or creasing blades carried by said sections or plates, and means to adjust said knives or blades so that they shall project more or less beyond the surface of said sections or plates, substantially as set forth. 7th. In a roller for making impressions in wood, the combination with a number of sections or plates of the required formation and arrangement, of a number of slotted knives or blades, screw-bolts engaging the slots of the said knives or blades carried by said sections or plates, rotating plates bearing against the inner edge of said knives or blades, and adjusting screws carried by said sections or plates and engaging said rotatable plates, substantially as and for the purpose set forth. 8th. As a new article of manufacture, a wood blank cut or split longitudinally to form a body

portion, end portions and side portions, between which side portions are located the said end portions, and creased or scored at the junction of said body-portion and said end portion, said creases or scores intersecting at their ends with the inner ends of the cuts or splits separating the ends and side portions, and creased or scored obliquely, said creases or score intersecting at their outer ends with the outer margins of the side portions, and intersecting at their inner ends with the said longitudinal cuts or splits outward of the said transverse creases or scores.

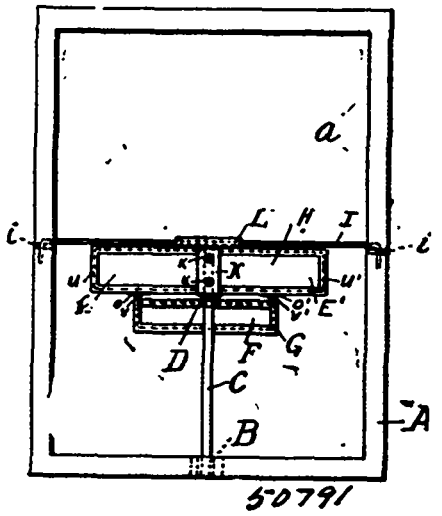
No. 50,790. Rein Holder. *(Porte-rênes.)*

Edwin D. Webb, Ypsilanti, Michigan, U.S.A., 10th December, 1895; 6 years.

Claim.—A rein-holder, comprising a base composed of two sections or plates and provided with a central fulcrum or support, the front plate or section being provided at opposite sides of the fulcrum with longitudinal openings, the longitudinal strips of elastic material detachably secured in the openings of the base by the sections or plates and projecting through the openings, and the springs centrally secured to the fulcrum or support and extending over the elastic strips and forming rein receiving recesses, substantially as described.

No. 50,791. Street Reflecting Mirror.

(Miroir de réflexion pour rues.)

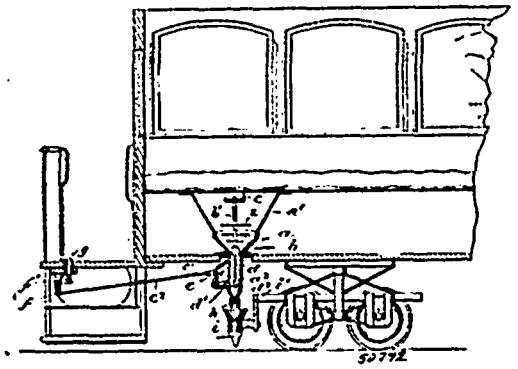


Laurits Waldemar Miller, Montreal, Quebec, Canada, 10th December, 1895; 6 years.

Claim.—A metallic box H, and means for attaching it to a window frame, having two of its faces adapted to receive mirrors E, E¹, and a third mirror F adjusted at an angle to the horizon and suitably attached to said box H, the whole as described and for the purpose set forth.

No. 50,792. Sanding Device for Street Cars.

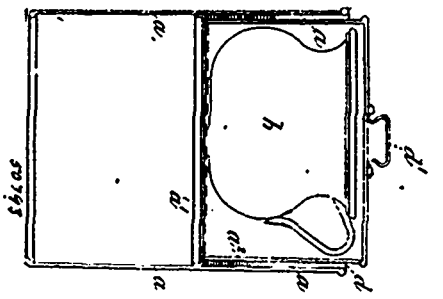
(Appareil à sabler pour chars de rues.)



Frank Oliver Furber and William Augustus Mitchell, both of Saco, Maine, U.S.A., 10th December, 1895; years.

Claim.—1st. The combination of a sand hopper, supported by the car body, a valve controlling the flow of sand therefrom, means for operating said valve, a delivery nozzle, a support therefor independent of the car body which supports said nozzle in front of the wheel, and a conductor for conducting the sand from the sand hopper to said nozzle, substantially as described. 2nd. The combination of a sand hopper supported by the car body, valve therefor, and means for operating it, a delivery cup fixed to the truck, and an intermediate flexible tube for delivering the sand to the delivery cup, substantially as described. 3rd. The combination of a sand hopper, its valve, valve stem, and means for operating said valve, the cylinder *d*, flexible tube *h* attached thereto, and delivering cup *i* fixed to the truck down into which said flexible tube extends, substantially as described. 4th. The combination of a sand hopper, its valve and spring pressed valve stem, guide plate *c*, cylinder *d*, slotted at d^1, and having an ear d^2, and means for operating said valve consisting of the bell-crank lever e^1, bell-crank lever *f*, connecting rod e^2, and the foot piece *g* passing down through a hole in the floor and bearing upon said bell-crank lever *f*, substantially as described. 5th. The combination of a sand hopper, its controlling valve operating mechanism therefor, having as a co-operative part of it a bell-crank lever *f*, one arm of which lies beneath a hole in the floor, and a detachable longitudinally adjustable foot piece placed in said hole and bearing upon said arm, substantially as described. 6th. The combination of sand hopper, its controlling valve, and operating mechanism therefor, having as a co-operative part of it a longitudinally adjustable foot piece, substantially as described. 7th. The combination of a sand hopper, its controlling valve, and operating mechanism therefor, having as a co-operative part of it a detachable foot piece, consisting of the interiorly screw-threaded shank *n*, with a step at its upper end, and the headed screw n^1, substantially as described.

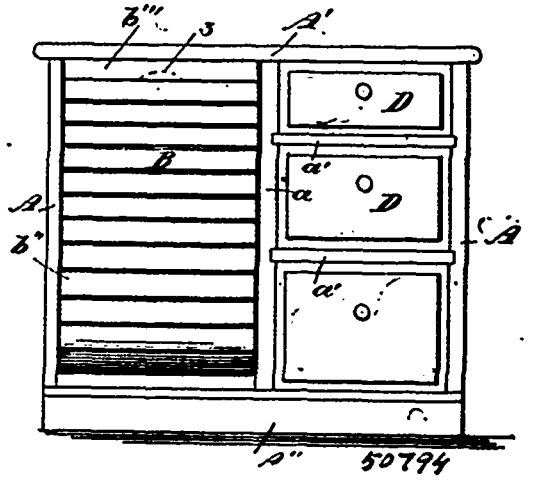
No. 50,793. Night Commode. *(Chaise percée.)*



Obadiah Silcock, Wanganui, New Zealand, 10th December, 1895; 6 years.

Claim.—In a night commode consisting of a pan or pail *a* to receive a chamber or other vessel *b* having a cover enveloping the said chamber or vessel standing in liquid in the said pan or pail thereby making a seal for preventing the escape of noxious vapours, as and for the purposes substantially as described herein.

No. 50,794. Baking Cabinet. *(Cabinet de boulangerie.)*



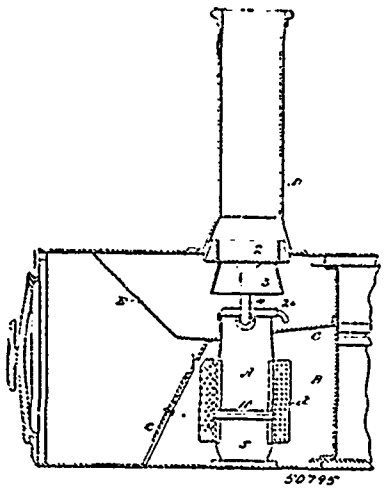
Robert Sword, Kemnay, Manitoba, Canada, 10th December, 1895 6 years.

Claim.—1st. In a baking cabinet, the combination, with a suitable rectangular casing having a top of a partition dividing it in two compartments, cross-rails and drawers in one compartment, and in the other compartment a bin consisting of sides with semi-circular

lower ends and rearwardly bevelled upper ends and curved front edges and a sheet metal back bottom and front in one piece secured to the edges of the sides and the latter provided with trunnions near the centre of the bottom but a little in front thereof and pivoted in the sides of said compartment, substantially as set forth. 2nd. In a baking cabinet, the combination in a flour bin, of sides *b* having semi-circular lower ends and rearwardly bevelled upper ends and curved front, a sheet metal front bottom and back b^1 in one piece secured to the edges of the sides, and trunnions B^1 secured to the sides a little in advance of the centre of the semi-circular bottom, substantially as set forth.

No. 50,795. Exhaust Apparatus for Locomotives.

(*Appareil d'émission de la vapeur pour locomotives.*)

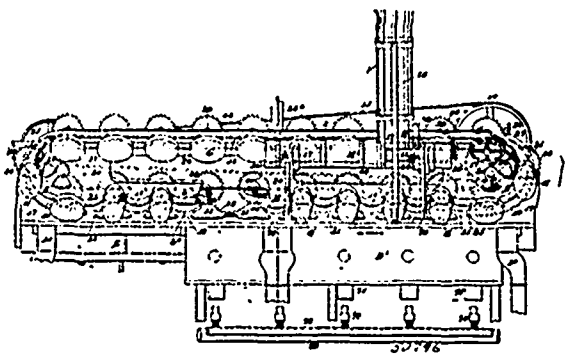


The Smith Exhaust Pipe Company, assignee of John Y. Smith' both of Doylestown, Pennsylvania, U.S.A., 10th December' 1895; 6 years.

Claim.—1st. In an exhaust apparatus, such as described, the combination with the in-take of the exhaust pipe, a netting or perforated plate provided with deflecting plates opposite the openings therein for diverting the solid particles drawn through the flues, said netting or perforated plate with its deflecting plate being located within the smoke-box in proximity to the exhaust pipe so as to direct the solid particles into the forward end of the smoke-box beyond the in-take of the exhaust pipe, substantially as described. 2nd. In an exhaust apparatus, such as described, the combination with the smoke-box and partition separating said smoke-box into two sections or chambers, the one communicating directly with the flues and the other with the smoke-stack, with a passage connecting said chambers, an exhaust pipe discharging into the base of the smoke-stack and having its in-take in the chamber communicating directly with the flues, and an annular nozzle supplied with exhaust steam and discharging into the base of the smoke-stack with an air space or passage between said nozzle and the discharge end of the said exhaust pipe, substantially as described. 3rd. In an exhaust apparatus, such as described, the combination of the partition C with the passage beneath the front end, the exhaust pipe arranged with its in-take beneath said partition and covered by a deflecting perforated plate, and the annular nozzle arranged within the smoke-stack above the discharge end of the exhaust pipe, as and for the purpose set forth. 4th. In an exhaust pipe, such as described, the combination with the middle or second ejector formed by tubes 11 and 12, the vertical partitions separating the steam passage into two sections, substantially as described. 5th. In an exhaust pipe, the combination with the base section and tubes 11, 12 and 13, and casing 14, forming air and steam passages substantially as described, the vertical partitions interposed between the tubes 11 and 12, and tube 13, and the casing dividing said steam passage into two sections, each communicating with the exhaust from one cylinder, substantially as described. 6th. In an exhaust pipe, such as described, comprising the base and upper section, the latter embracing tubes 11, 12 and 13, and casing 14, the said tubes 12 and 13 being united at a point some distance above the base to form a passage for the steam near the nozzle, substantially as described. 7th. In an exhaust pipe, such as described, the combination with the tubes 11, 12, 13 and 14, forming the steam and air passages and steam nozzle, all mounted upon a base provided with a steam chamber, of the blower applied to the ends of tubes 13 and 14 to close the end of the steam space between said tubes at the top of the exhaust pipe, and the annular nozzle supported above the discharge end of the pipe and connected thereto by one or more tubes communicating with the steam space between tubes 13 and 14, as set forth. 8th. The improved exhaust apparatus herein described, the same comprising the base and upper sections containing the divided steam passages and nozzles, and air passages, and the annular nozzle supported above the discharge end of the said upper section in open communication with both sets of steam passages, as and for the purpose specified.

No. 50,796. Can Soldering Machine.

(*Machine pour souder les boîtes en fer blanc.*)

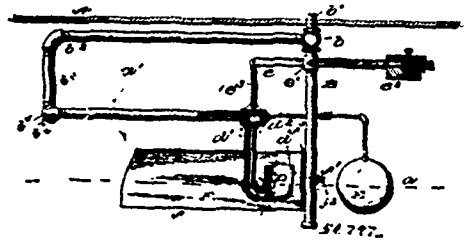


Nelson Troyer and Frederick P. Kendall, both of Astoria, Oregon, U.S.A., 10th December, 1895; 6 years.

Claim.—1st. In a can soldering machine, a solder or flux bath, a rack, a guide channel near the rack, a can holder, the support of which moves in said channel, and a pinion carried by said support, being adapted for engagement with said rack, substantially as shown and described. 2nd. In a can soldering machine, a solder or flux bath, a curved rack, a curved guide channel adjacent to the rack, a shaft, a carrier for the same, the travel of the shaft being regulated by the shape of the said channel, and a pinion secured to the shaft engaging with said rack, substantially as shown and described. 3rd. In a can soldering machine, a frame provided with a curved guide channel, a rack having substantially a corresponding curvature to that of the channel, a shaft held to travel in the guide channel and provided with a can holder, and a pinion carried by the shaft and engaging with said rack, substantially as shown and described. 4th. In a can soldering machine, a can holding shaft, an undulating guide for the same, a corresponding shaped rack, and a pinion secured upon the shaft and engaging with said rack, as and for the purpose specified. 5th. In a can soldering machine, a frame provided with a guide channel, a rack adjacent to said channel, a can holding shaft extending through the said channel and provided with a bearing fitted to engage with opposite walls of the channel, mechanism substantially as described for drawing the shaft through the channel, and a pinion secured upon the shaft and engaging with the rack, substantially as set forth. 6th. In a can soldering machine, an endless carrying belt, and can-holding shafts having bearings pivotally connected with the belt, as and for the purpose set forth. 7th. In a can soldering machine, an endless carrying belt, can holding shafts having link connection with said belt, a stationary rack, pinions secured to the shafts and engaging with the rack, and guides for the said shafts, arranged substantially as herein shown and described. 8th. In a can soldering machine, the combination with a frame having a guide channel therein, a stationary rack, an endless carrying belt and means for driving the same, of guide rails leading to and from the guide channel, can holding shafts having bearings thereon fitted to and adapted to slide in said channel, cams secured to the shafts, adapted to travel in engagement with the guide rails and pinions secured to the shafts and adapted for engagement with the rack, substantially as and for the purpose specified. 9th. In a can soldering machine, the combination with a frame having an undulating channel formed therein, and inclined end channels communicating with the undulating channel, and guide rails independent of the undulating channel but partially surrounding the inclined channels, of can holding shafts having fixed bearings, adapted to travel in said channels, cams secured to the shafts, adapted to engage with the guide rails, an undulating rack located adjacent to the undulating channels, the undulations of both corresponding, a carrier for the shafts, and pinions secured upon the shafts, engaging with said rack, substantially as shown and described. 10th. In a can soldering machine, the combination with a frame having a guide channel therein, guide rails leading to and from said channel, trip devices located one near each guide rail and a rack adjacent to said channel, of an endless carrier, shafts attached to the carrier, extending through and guided by said channel, cams secured upon the shaft, adapted for engagement with the guide rails, pinions carried by the shafts and engaging with said rack, and chucks carried by the shafts, being opened or closed by the said trip devices, substantially as described. 11th. In a can soldering machine, a pivoted frame, an adjusting device whereby the frame is given an inclination, a carrier located in the frame, shafts connected with said carrier and given lateral movement thereby, a rack and pinion mechanism for rotating the shafts, chucks adapted to receive cans, and trip devices attached to the frame and adapted for opening and closing the chucks, substantially as described. 12th. In a can soldering machine, the combination with a frame having a curved guide channel, devices for

adjusting the frame to an inclined position, an endless carrier, shafts connected with the carrier and having their lateral movement directed by the guide channel, and a rack and pinion driving mechanism for said shafts, of a solder or flux bath provided with a track extending over the contents of the bath, chucks secured to said shafts, being adapted to receive cans, and the latter being adapted to travel upon the track of the bath, and a gauge for holding the cans upon the chucks, substantially as described. 13th. In a can soldering machine, a flanged table, a hopper located above the table and adapted to feed cans thereon, a chuck adapted to pass over the table beneath the hopper, a compressing gate located upon the table and acting to press a can toward the chuck, and means, substantially as described, for operating the said door from the carrier of the chuck, as and for the purpose specified. 14th. In a can soldering machine, a chuck, the same consisting of a plate and a cam head having movement on the plate, spring-controlled clamps carried by the said plate, and slides operating said clamps and operated from said cam head, as and for the purpose specified. 15th. In a can soldering machine, a chuck or holder for cans, the same consisting of a plate of substantially the shape of the can, clamps movably mounted on said plate, slides adapted to operate said clamps and connected therewith, springs normally holding the clamps in an inner or outer position, pins projected from the slides, and a cam head provided with a cam race adapted to receive the pins of the slides, said race having recesses therein in number corresponding to the number of slides, as and for the purpose set forth. 16th. In a can soldering machine, a chuck or can holder, the same consisting of a plate of substantially corresponding contour to that of the can it is adapted to carry, clamps located at the margins of the plate, shanks connected with said clamps, slides connected with the said shanks, springs normally holding the slides in an inner or in an outer position, a chuck head mounted to turn on the plate and provided with a cam race having recesses therein, pins projected from the slides and made to enter the said race, and trip arms extending from the exterior of the said cam head, as and for the purpose set forth. 17th. In a can soldering machine, a flanged table contracted at its delivery end and having the flange at said end inclined, a hopper adapted to feed cans to the table, a door hinged at the table below the hopper, a chuck, a carrier for the same, a spring-controlled shaft provided with an arm connected with the door, and a second arm adapted to rock the shaft, and adapted to be acted upon by the chuck carrier, substantially as described.

No. 50,797. Boiler Cleaner. (*Nettoyeur de chaudière.*)



Culberson S. Garrigus, Louisville, Kentucky, and Arthur P. Blattner, Alleghaney, Pennsylvania, U.S.A., 10th December, 1895; 6 years.

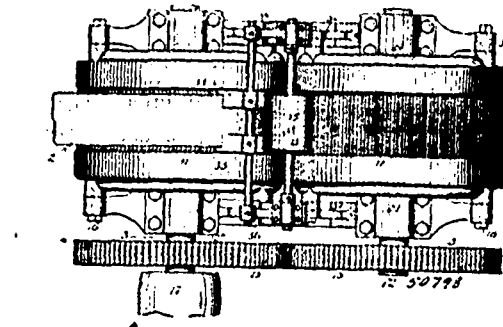
Claim.—1st. The combination with a boiler having a depending standard, of a skimmer-cup having a slot, an outlet-pipe, and a weighted lever, as set forth. 2nd. The combination with a boiler having a depending standard, of an outlet-pipe having a swinging member, a skimmer-cup mounted on end of said member, a weighted lever, and a divergent guide adjustable on said standard, as set forth. 3rd. The combination with a boiler having a depending standard, of an outlet-pipe, a skimmer-cup, a weighted lever, a guide on said standard, and a float in rear of said guide for controlling position of skimmer-cup, as set forth. 4th. The herein described boiler-cleaner, comprising a vertical standard within the boiler, a pipe leading from within the boiler to the outside thereof, a swinging horizontal pipe connected with said pipe, a slotted skimmer-cup supported by and in communication with the free end of said swinging pipe in a position near said vertical standard, a float connected with the free end of said swinging pipe, a lever pivoted upon said standard and having one end connected with said swinging pipe, a weight adjustably secured on the other end of said lever, and converging skimmer-wings having their inner ends supported by said standard exterior to and near said skimmer-cup, substantially as set forth.

No. 50,798. Match Splint Machine.

(*Machine pour éclises d'allumettes.*)

The Continental Match Company, assignee of William F. Hutchinson, both of New York, State of New York, U.S.A., 10th December, 1895; 6 years.

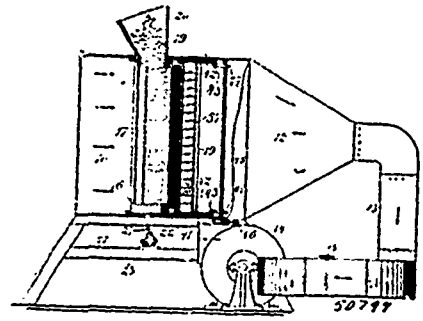
Claim.—1st. A machine of the kind described, comprising oppositely arranged cutting drums having meshing teeth, a series of outwardly moving ejectors held between the teeth of the drums, and a cam and wedge mechanism for actuating the ejectors, substantially as described. 2nd. The combination, with a cutting drum having



peripheral teeth which serve as knives, of the ejectors held between the teeth of the drum, and reciprocating wedges arranged to move behind the ejector, substantially as described. 3rd. The combination, with the revoluble cutting drum having peripheral teeth, which serve as knives, of the ejectors between the teeth the reciprocating wedges movable behind the ejectors, and the stationary cam rings at the ends of the drums and in engagement with the wedges, substantially as described. 4th. The combination, with the cutting drum having peripheral teeth which serve as knives, of the ejectors between the teeth, the wedges reciprocating behind the ejectors, and a double set of cam rings arranged to engage alternate wedges and move them inward at different points during the rotation of the cutting drum, substantially as described. 5th. The combination, with the cutting drum having peripheral teeth which serve as knives, of the ejectors held between the teeth and provided with inclined ends, the wedges inclined to fit against the inclined ends of the ejectors, and the stationary cams for actuating the wedges, substantially as described. 6th. The combination, with the revoluble cutting drum having peripheral teeth which serve as knives, of the ejectors arranged between the teeth, the reciprocating wedges behind the ejectors, the stationary end rings having flanges overlapping the ends of the ejectors, and the cam rings carried by the stationary rings and arranged to engage and actuate the wedges, substantially as described. 7th. The combination, with revoluble cutting drums having peripheral teeth which serve as knives, and the ejectors arranged between the teeth, of the reciprocating wedges behind the ejectors, the alternating wedges being provided respectively with grooves on their outer and inner sides, and a double set of cam rings held stationary at the ends of the drum and adapted to engage the grooves of the wedges, substantially as described.

No. 50,799. Apparatus for Assembling Match Splints.

(*Appareil pour assembler les éclises d'allumettes.*)

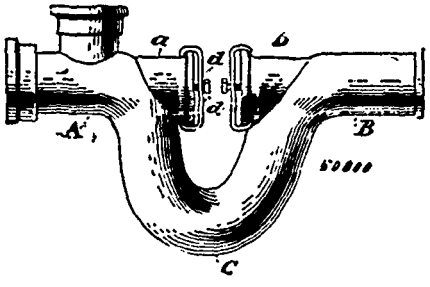


The Continental Match Company, assignee of William F. Hutchinson, both of New York, State of New York, U.S.A., 10th December, 1895; 6 years.

Claim.—1st. An apparatus for assembling match splints, comprising a receptacle adapted to hold the splints in mass and in parallel relation, a gripping device opposite the receptacle and at one end of the match splints to receive the individual splints, and means for forcing an air current through the apparatus to carry the splints endwise into the gripping device, substantially as described. 2nd. An apparatus for assembling match splints, comprising a receptacle adapted to hold the splints in mass and in parallel relation, a gripping device opposite the receptacle and at one end of the match splints to receive the individual splints, means for forcing an air current through the apparatus to carry the splints endwise into the gripping device, and mechanism for vibrating the receptacle or gripping device during the assembling process, substantially as described. 3rd. An apparatus of the kind described, comprising a splint holding receptacle, a gripping device placed opposite the receptacle and provided with perforations or recesses to receive the individual splints, a perforated abutment opposite the gripping device to limit

the protrusion of the splints from the gripping device, and means for forcing an air current through the receptacle and gripping device, the said perforated abutment being in the course of the said air current, substantially as described. 4th. *An apparatus of the kind* described, comprising a splint holding receptacle having one side open and the other side provided with a perforated wall, a gripping device opposite the open side of the splint receptacle, the said gripping device having perforations or recesses to receive the individual splints, a perforated abutment opposite the gripping device, and means for forcing an air current through the splint receptacle and gripping device, the said perforated abutment being in the course of the said air current, substantially as described 5th. An apparatus of the kind described, comprising a splint holding receptacle having one side open and the opposite side perforated, a gripping device having perforations or recesses to receive the individual splints, a perforated abutment opposite the gripping device, means for vibrating the gripping device and splint receptacle, and means for forcing an air current through the splint receptacle and gripping device, the said perforated abutment being in the course of the said air current, substantially as described. 6th. *The combination with the casing* and means for forcing an air current through it, of the splint holding receptacle having one side open and the opposite side perforated, the gripping device having recesses or perforations to receive the individual splints, and mechanism for moving the gripping device in and out in endwise relation to the splints, substantially as described.

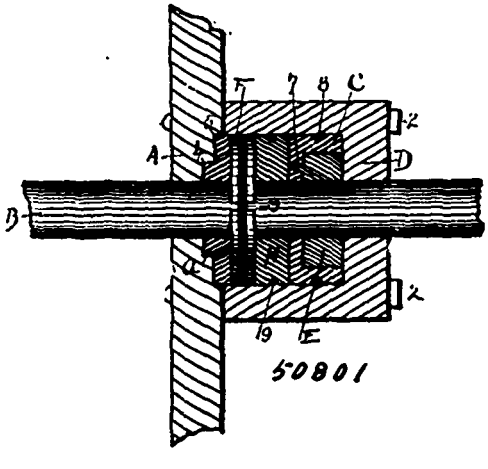
No. 50,800. Pipe Trap. (*Purge de tuyau.*)



Howard F. Pool, Lynn, Massachusetts, U.S.A., 11th December, 1895; 6 years.

Claim.—In a pipe trap, the combination of a receiving and a discharge pipe, the adjacent ends of which are arranged laterally out of alignment, a downwardly and laterally bent trap section, opening in the adjacent ends of the receiving and discharge pipes, and removable covers for said openings, all substantially as described.

No. 50,801. Metallic Packing. (*Garniture métallique.*)

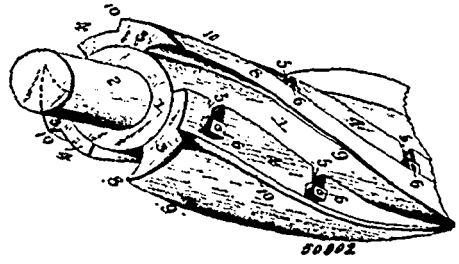


Thomas Crabtree, McCook, Nebraska, U.S.A., 11th December, 1895; 6 years.

Claim.—1st. In a metallic packing, the combination with a suitable housing, of a series of sectional packing rings within said housing, said packing rings being used in pairs and comprising less than half a circle, and springs surrounding said sectional packing rings to normally force them upon the piston rod, all arranged substantially as and for the purpose set forth. 2nd. A metallic packing comprising a series of sectional packing rings, said packing rings being used in sets and pairs, each pair of half rings being less than half a full circle, springs surrounding said sectional packing rings to normally force them together, said sets of sectional rings being united so that their open edges do not register, all substantially as and for the purpose set forth. 3rd. In a metallic packing, the combination with a suitable housing, of a system of packing rings of less than half a circle, said packing rings being used in pairs and comprising a principal and a secondary set of packing rings, said principal packing ring being dished, a second sectional packing ring, one section being immovably held within said principal packing ring, said united packing rings comprising less than a full circle, said secondary packing ring being movably held within said principal packing ring, said secondary packing ring comprising two mutilated half sections working adjoining said principal packing ring, and provided with a spring to normally force them together, all substantially as and for the purpose set forth. 4th. In a metallic packing, the combination with a housing D, of a system of metallic packing rings, comprising the principal dished ring C, having a circumferential groove 3, the interior sectional secondary packing ring E, movably held within said principal ring C, the metallic sectional rings F, F and H, H, in combination with the springs 8, 9 and 10, all arranged substantially as and for the purpose set forth.

No. 50,802. Rotary Cylinder Planer.

(*Machine à raboter à cylindre rotatoire.*)



Myron R. Hubbell and William W. Cate, both of Wolcott, Vermont, U.S.A., 11th December, 1895; 6 years.

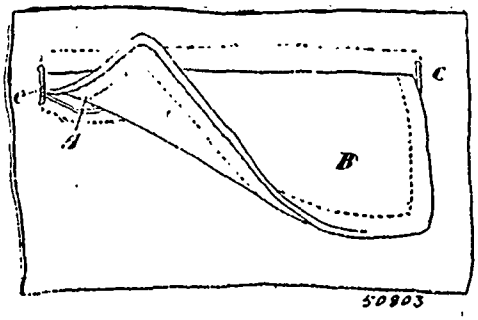
Claim.—1st. The combination of the cylindrical body forming a true cylinder, and the spiral knives of sufficient thickness and so under-ground at their front edges as to provide clearance for the chips, having their inner faces curved to fit the surface of said cylinder, and removably secured thereon, substantially as set forth. 2nd. The combination of the cylindrical body forming a true cylinder, and the spiral adjustable knives of sufficient thickness and so under-ground at their front edges as to provide clearance for the chips, having their inner faces curved to fit the surface of said cylinder, and adjustably secured thereon, substantially as set forth. 3rd. The combination of the cylindrical body forming a true cylinder, and the spiral knives of sufficient thickness and so under-ground at their front edges as to provide clearance for the chips, having their inner faces curved to fit said cylinder, and removably secured thereon, and decreasing in thickness from their front to their rear edges, substantially as and for the purpose set forth. 4th. In a rotary cylinder planer, the spiral blade having its inner face curved to fit a plain cylinder, tapering in thickness from its front to its rear edge, and formed of sufficient thickness and so under-ground at its front cutting edge as to provide clearance for the chips, substantially as set forth. 5th. In a rotary cylinder planer, the combination of a cylindrical cutter-head forming a true cylinder, and a spiral blade curving around the same from end to end, substantially as set forth. 6th. In a rotary cylinder planer, the combination of a cylindrical cutter-head forming a true cylinder, and a single spiral blade curving around the same from end to end and formed with the spiral seat portion having its inner face curved to fit the cylindrical cutter-head and the blade proper springing from the seat-portion at a proper cutting angle and having the curved inner and outer faces and front cutting edge, substantially as set forth. 7th. In a rotary cylinder planer, a blade formed with the inner face extending in an unbroken line to the front cutting edge of the blade, the curved outer face, and the outer edge running at an angle from the main outer face to the front cutting edge, substantially as and for the purpose set forth. 8th. In a rotary cylinder planer, the combination of a cutter-head formed with the integral spiral blade curving around it from end to end, substantially as set forth.

No. 50,803. Manufacture of Pockets.

(*Fabrication de poches de vêtement.*)

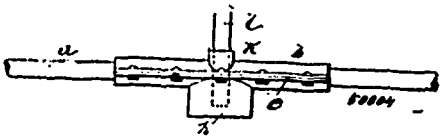
Henry Sintzel, Toronto, Ontario, Canada, 11th December, 1895; 6 years.

Claim.—The combination with the pocket and the ends thereof, of a metal bar comprising a staple the bridge of which is formed



with a knurled outer edge and the prongs of which are thinner than the bridge, and extend through the different thicknesses of the material and are clinched within the lining, the staples being suitably coloured, as and for the purposed specified.

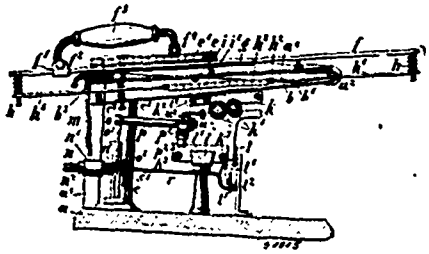
No. 50,804. Coupling for Electrical Connections.
(*Joint pour liaisons électriques.*)



James Michael Faulkner, Philadelphia, Pennsylvania, U.S.A., 11th December, 1895; 6 years.

Claim.—1st. The tubular sectional coupling, arranged to be secured on and embraced the line wire or wires, one section of which has a mercury cup or depression, the other section having an opening through which a side line can be inserted into said mercury, as and for the purpose set forth. 2nd. The electrical coupling, the tube formed of longitudinal sections arranged to tightly grip and hold the conductor or conductors, and provided with a side cup having a body of mercury to engage and electrically connect the conductors, substantially as described. 3rd. A coupling tube formed in longitudinal sections internally formed to rigidly grip the wire, and having fastening means, one of said sections provided with an internal mercury cup or depression, substantially as described. 4th. A coupling tube formed to embrace the conductors and having a mercury cup, substantially as set forth, and an opening opposite the mercury to receive side connections or the like, said tube composed of longitudinal sections internally serrated to grip the wire and provided with means to clamp the sections together on the conductors, substantially as described. 5th. The coupling formed in two longitudinal sections, each section having longitudinal side flanges, the flange of one section being doubled to overlap the straight flange of the other section, *the opposite flanges being bolted together, one* of said sections having an internal depression containing mercury engaging the conductors, substantially as described.

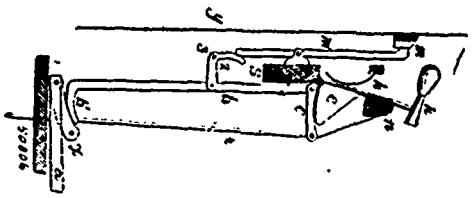
No. 50,805. Type Writing Machine. (*Clavigraphe.*)



Richard Toepper, Naumburg, Prussia, Germany, 11th December, 1895; 6 years.

Claim.—1st. A pressing lever type-writing machine for writing letters, combinations of letters or sign characters of different length of spacing by a single pressure of said lever, comprising a type board with its type arranged in rows according to the number of characters or length of feed required, the single type being in the longitudinal as well as in the oblique direction, inversely arranged relatively to the signs on the indicating board above, so that there will always appear under a fixed pressing stud the type indicated by the said button upon the indicating board, substantially as described. 2nd. A type-writing machine such as described, comprising means for effecting different lengths of spacing movements of the paper carriage and consisting of a plate *m*, provided with a plurality of recesses and operating faces, the bolt *n* actuated by said plate, the angle lever *o*, the pawl p^1 connected therewith, the rack bar p^2, the spring o^1 for actuating the lever *o*, the length of so many teeth moved by the paper carriage being governed by the projecting faces of the said plate, substantially as described. 3rd. A type-writing machine, such as described, comprising the sign indicating board *c*, consisting of a rectangular frame on which an opening c^1 is arranged for each type, sign, or character, a type board having corresponding type, sign, or character arranged beneath said board *c*, and a presser lever f^3, having a button f^4, adapted to penetrate the said openings c^1, substantially as described. 4th. A type-writing machine such as described in combination with a movable paper carriage, a pawl p^1 connected therewith, a rack bar p^2, connected with the frame of the machine, a bar *u* having inclined ends u^3, and u^4, supported in frame *k*, and having a slit u^1, for guidance of the finger u^2, connected with pawl p^1, and for disengaging said pawl from the rack, substantially as described. 5th. A type-writing machine such as described, comprising means for effecting the feed of the paper carriage, consisting of a vertically movable plate, an angle lever *o*, pawl p^1, rack bar p^2, bolt *n*, bar extension *r*, and second rack bar *t* with its pawl t^1, pivot t^2, spring t^4, and loop t^5, all combined and arranged for joint operation, substantially as described. 6th. A type-writing machine of the class described, comprising the base and angular end frame plates, the top and bottom plates hinged to said frame plates, the adjustable columns *c*, the paper rolls k^1, supported upon a movable carriage, and a presser arm frame adapted to move with said carriage and carrying index and type boards all combined to operate, substantially as described.

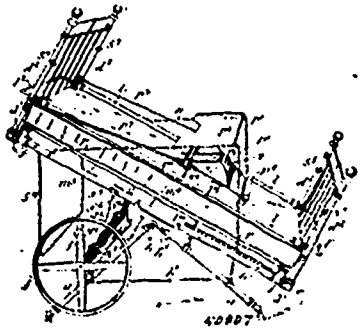
No. 50,806. Piano Action. (*Action de piano.*)



Luther Adelbert Barber, Buffalo, New York, U.S.A., 11th December, 1895; 6 years.

Claim.—1st. The combination with the key of the push-rod, the auxiliary jack-lever and the pedal rail c nnected together, the jack-lever, the jack and the hammer. 2nd. The combination with the key of the push-rod, the auxiliary jack-lever pivotally mounted in the rear to the vertically movable pedal rail, the pedal rail and connections between it and the soft pedal, and the buffer, the jack-lever, the jack, the hammer and the buffer. 3rd. The combination with the key of the push-rod, the auxiliary jack-lever pivotally mounted in the rear upon the vertically movable pedal rail, the pedal rail and connections between it and the soft pedal and the buffer, the cam-faced jack-lever, the jack, the hammer, and buffer. 4th. The combination with the key and the push-rod actuated thereby, of the bell-crank lever having one arm connected to the push-rod, and the other engaging with the damper stem, the *damper upon said stem, the auxiliary jack-lever connected to the* push-rod and to the pedal rail, the cam-faced jack-lever in engagement therewith, the jack, the hammer and the buffer. 5th. The combination with the key and the push-rod actuated thereby, and a cam interposed between them, of the bell-crank lever having one arm connected to the push-rod and the other engaging with the damper stem, the damper upon said stem, the auxiliary jack-lever connected to the push-rod and to the pedal rail, the cam-faced jack-lever, in engagement with the auxiliary lever, the jack, the hammer, and the buffer. 6th. The combination with the jack and the jack-lever, of the push-rod, the key and a cam between and engaging with both of them to actuate the jack-lever.

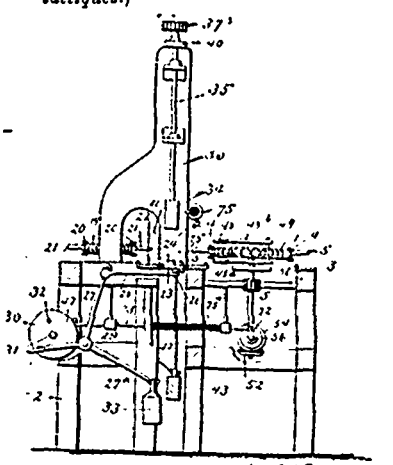
No. 50,807. Invalid Bedstead. (*Lit d'invalide.*)



George Elmer Gorham, Albany, New York, U.S.A., 11th December, 1895; 6 years.

Claim.—1st. An invalid bedstead, mounted to tilt bodily upon a supporting stand, and operating means consisting of a right and left hand screw having travelling nuts and universal joint connections between the bed bottom and said nuts, substantially as described. 2nd. In an invalid bedstead, the combination of a stand, a tiltable bed bottom mounted thereon, a power shaft on the stand having a right and left screw-thread, travelling nuts upon the screw-threaded power shaft, arms jointed at their lower end to the nuts and provided at their opposite ends with globular projections and sockets, connected to the bed bottom, receiving said globular projections, substantially as described. 3rd. In an invalid bedstead, the combination of a stand, a tiltable bed bottom mounted thereon, a power shaft on the stand having a right and left screw-thread, travelling nuts upon the screw-threaded power shaft, arms provided at their lower end with yokes journalled to opposite sides of the nuts, said arms being provided at their opposite ends with globular projections, and sockets connected to the bed bottom, receiving said globular projections, substantially as described. 4th. In an invalid bedstead, the combination of a stand, a tiltable bed bottom mounted thereon, a power shaft on the stand having a right and left screw, travelling nuts upon the screw-threaded power shaft, said nuts having bosses on their opposite sides, arms provided at their lower end with yokes having bosses and connected to the nut bosses by journal pins, and a universal joint connection between the upper end of the arms and the bed bottom, substantially as described. 5th. An invalid bedstead, mounted to tilt bodily upon a supporting stand, and having end boards readily removable, so that the bedstead may be converted into an operating table accessible from every point, substantially as described. 6th. An invalid bedstead, mounted to tilt bodily upon a supporting stand, gearing interposed between the stand and bed bottom at one side of the centre of support, and a supporting rest for relieving the strain on the gearing when the bed bottom is in the horizontal position, substantially as described. 7th. In a bed bottom, a corner union therefor, consisting of separate sections having respectively an interlocking socket and tongue, one of said sections being connected to the end board of the bed bottom and the other section being connected to the side bar of the bed bottom, substantially as described. 8th. In a bed bottom, a corner union therefor consisting of separable sections having respectively an interlocking socket and tongue which taper from above downwardly, and means for releasably holding the socket and tongue in engagement with each other, one of said sections being connected to the end board of the bed bottom, and the other of said sections being connected to the side bar of the bed bottom, substantially as described. 9th. In a bed bottom, a corner union therefor, consisting of separable sections having respectively an interlocking socket and tongue, one of said sections being connected to the end board of the bed bottom and the other section being connected to the side bar of the bed bottom, said latter section being provided with an upwardly extending flange, serving as a means of connection for the support of a woven wire fabric, substantially as described. 10th. In a bedstead, a stand therefor, consisting of legs pivoted together at their upper ends, removable bars spacing and holding the legs at the desired angle apart, and brackets connected to the bed bottom and tiltable with the bed bottom upon the stand, substantially as described. 11th. In an invalid bedstead, the combination with the tiltable bed bottom and the stand upon which the bed bottom is supported, of brackets pivoted to the stand and provided with saddles or yokes within which the side bars of the bed bottom rest, and means for connecting said yokes to the side bars, substantially as described. 12th. In an invalid bedstead, the combination of the side bars, of a table support consisting of jointed arms pivoted to the side bars of the bed bottom, the outer members of said jointed arms being provided with pointed ends, and plates secured to the inner side of the side bars and provided with a series of perforations for the reception of said pointed ends, substantially as described. 13th. In an invalid bedstead, a seat-rest provided with means for sustaining it from the upper part of the bed, substantially as described. 14th. In an invalid bedstead, a seat-rest provided with means for sustaining it from the upper part of the bed, and a foot-rest supported from the seat-rest, substantially as described. 15th. In an invalid bedstead, a seat-rest adapted to rest upon the surface of the bed and means for raising and supporting said seat-rest at its ends above the surface of the bed, substantially as described. 16th. In an invalid bedstead, a seat-rest provided at its ends with socket pieces, and bracket legs pivoted to said socket pieces, and adapted to fold longitudinally of the seat-rest, substantially as described. 17th. In an invalid bedstead, a seat-rest provided at its ends with socket pieces, and bracket legs pivoted to said socket pieces and adapted to fold longitudinally of the seat-rest, and flexible strap connected to the socket pieces and extending to the upper portion of the bedstead, substantially as described. 18th. In an invalid bedstead, a seat-rest provided at its ends with socket pieces, and bracket legs pivoted to said socket pieces and adapted to fold longitudinally of the seat-rest, and flexible straps connected to the socket pieces and extending to the upper portion of the bedstead, in combination with a foot-rest and flexible straps connecting said foot-rest with said socket pieces, substantially as described. 19th. In an invalid bedstead, the combination with the end boards having retaining catches or hooks thereon, of a stretcher frame, and removable sustaining rods for said stretcher frame adapted to rest upon said hooks or catches, substantially as described. 20th. In an invalid bedstead, the combination with a stretcher frame provided with cross strips of canvas connecting the side bars of said stretcher frame, of adjustable connections between the side bars of the stretcher frame and the side bars of the bed bottom, whereby the patient may be held in restraint between the canvas strips and the body of the bed, substantially as described. 21st. In an invalid bedstead, the combination with the bed bottom, of a supplemental frame, means for supporting said frame above the bed, and a flexible bath tub supported at its edges from the frame, substantially as described. 22nd. An invalid bedstead provided at its foot board with a yoke, a sheave mounted upon the yoke, a cord passing over the sheave and attached at its forward end to a leg-extension plate, and provided at its other end with adjustable weights, substantially as described. 23rd. A shoring piece for invalid bedsteads, consisting of inclined legs provided with hooks or catches, substantially as described. 24th. A bed-pan for tilting invalid bedsteads, said bed-pan having that surface which is to rest upon the bed clothes at an angle of about forty-five degrees to its upper rim and devoid or substantially devoid of any forward extension beyond its top opening, substantially as described. 25th. A bed-pan for tilting invalid bedsteads, said bed-pan being substantially triangular in side elevation, devoid or substantially devoid of any forward extension beyond its top opening and having its bottom longer than its top or end, substantially as described.

No. 50,808. Machine for Soldering Caps on Cans.
(*Machine pour souder les couvercles des boîtes métalliques.*)



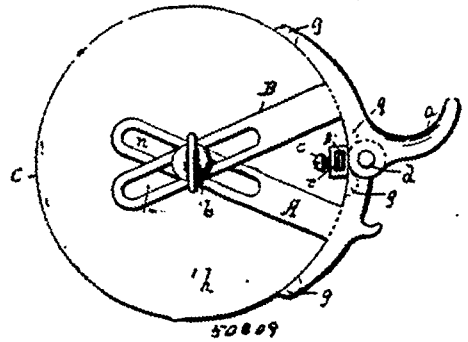
Millard Jay Hawkins, Newport, New York, U.S.A., 11th December, 1895; 6 years.

Claim.—1st. In a soldering machine, two belt carriers lapping by each other, and a stationary soldering table introduced between the overlapping ends, combined substantially as set forth. 2nd. The combination in a soldering machine for soldering cans, of two belt carriers having ends lapping by a stationary soldering table between the carriers, and a shipping device for transferring cans from one of the carriers on to the soldering table, substantially as set forth. 3rd. The combination in a soldering machine for soldering cans, of two overlapping belt carriers adapted to move the cans, a soldering table between the carriers, mechanism for moving the cans out of one carrier on to the table, and mechanism for moving the cans from the soldering table into the other carrier, substantially as set forth. 4th. The combination in a soldering machine for soldering cans, of a carrier, a table along which the carrier moves the cans, a soldering table located adjacent to the carrier table, a can shipping device adapted to engage and ship several cans simultaneously out of the carrier onto the soldering table, and a series of vertically movable soldering irons over the soldering table, substantially as set forth. 5th. In a soldering machine, a soldering table, a feeding carrier operating along one side of the table, a discharging carrier operating along the other side of the table, a shipping bar adapted to move several cans out of the feeding carrier onto the soldering table, a series of hooks operating through slots in the soldering table to transfer the cans from the soldering table into the discharging carrier, a set of rotary soldering irons over the soldering table, and means for heating and operating them, substantially as set forth. 6th. The combination in a soldering machine for soldering cans, of a soldering table, a feeding carrier operating along one side of the table, a discharge carrier operating along the other side of the table, shipping devices for transferring a series of cans out of the feeding carrier onto the soldering table, and off the soldering table into the discharge carrier, an acid supplying pump discharging over the feeding carrier in advance of the soldering table, can engaging finger for operating the pump, a series of soldering irons vertically movable over the soldering table, and means for heating and operating the soldering irons, substantially as set forth. 7th. In a can soldering machine, a carrier table, a carrier operating to move cans

along the table, a soldering table adapted to hold a single row of cans located adjacent to the carrier table, a set of soldering irons, a shipping mechanism for transferring a plurality of cans from the carrier table to the soldering table, combined substantially as set forth. 8th. In a can soldering machine, a plain flat faced carrier table, a carrier operating to slide cans along the table, a stationary soldering table located at the side of the carrier table in the same plane, a set of soldering irons, and a can shipping device for transferring a plurality of cans from the carrier table to the soldering table, combined substantially as set forth. 9th. In a soldering machine, the combination of two parallel carrier tables, a carrier for each table, a soldering table adapted to receive a single row of cans located between the carrier tables, a set of soldering irons and mechanism operating to move the cans onto and off from the soldering table, substantially as set forth. 10th. The combination in a can soldering machine, of a stationary soldering table having can holding divisions, of a continuously moving carrier moving alongside of the table, and a can shipper adapted to move a plurality of cans out of the carrier onto the soldering table, soldering irons and mechanism for operating the same, substantially as set forth. 11th. The combination of a carrier table, a carrier having fingers projecting laterally over the table, a soldering table by the side of and in the plane of the carrier table, a can shipper constructed to ship a plurality of cans out from the carrier fingers onto the soldering table and mechanism for operating the can shipper, substantially as set forth. 12th. The combination in a soldering machine, of a soldering table adapted to hold a single row of cans, carrier tables at each side of the soldering table, a carrier for each carrier table, one feeding and the other discharging, means for shipping a can from the feeding carrier onto the soldering table, and means operating through the soldering table to transfer the cans from the soldering table into the discharging carrier. 13th. The combination in a soldering machine, of a soldering table, a carrier table, and a carrier at side of soldering table, automatic catch adapted to engage the bottom of the can through transverse slots in the soldering table, and mechanism for operating the catches to transfer the cans, substantially as set forth.

No. 50,809. Can Opener.

(Machine à ouvrir les boîtes métalliques.)



James Henry Hollen, Providence, Rhode Island, U.S.A., 11th December, 1895; 6 years.

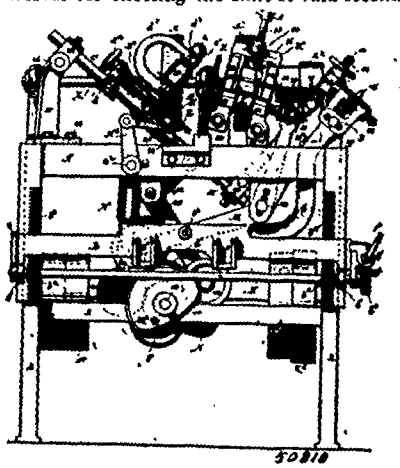
Claim.—In a can opener the combination of two plates having cross arms with spuds on them, and pivoted together by said cross-arms, and having slots made lengthways of said plates, with a thumb screw fitted to slide freely in said slots, and a knife, substantially as described.

No. 50,810. Saw Sharpening Machine.

(Machine à affuter les scies.)

Seymour H. Holley and Samuel V. Rawlings, both of Marquette, Michigan, U.S.A., 11th December, 1895; 6 years.

Claim.—1st. In a saw grinding machine, the combination with suitable mechanism for advancing and holding the saw to be ground, of a throat grinding-wheel and mechanism for operating the same, and an independent wheel for grinding the backs of the saw teeth, and mechanism for operating the same, and suitable mechanism for sustaining said wheels in close proximity, and means whereby said wheels are caused to conjointly act upon the same tooth between the movements of the saw necessary to bring successive teeth in position to be ground. 2nd. In a saw grinding machine, the combination with a throat grinding-wheel and with a reciprocating and vibratory sustaining frame for said wheel, of cam and lever mechanism for imparting movement to said wheel, a second wheel for grinding the backs of the saw teeth and cam and lever mechanism for operating said second wheel, and a shaft whereon said several cams are mounted. 3rd. In a saw grinding machine, the combination with a throat grinding-wheel and with a sustaining frame for said wheel, of pivoted levers for reciprocating and vibrating said sustaining frame, cams for operating said pivoted levers, a second wheel for grinding the backs of the saw tooth and arranged in close proximity to the throat grinding-wheel, mechanism for sustaining said grinding-wheels so placed and whereby they are permitted to act upon the same tooth to be ground between the movements of the saw, a lever for effecting the shift of said second grinding-



wheel, and a cam for operating said lever, and a shaftwhere on said several cams are mounted. 4th. In a saw grinding machine, the combination with a throat grinding-wheel, of a reciprocating frame for sustaining said wheel, said frame extending transversely of the machine, suitable guide mechanism whereon said frame is mounted in manner free to slide, a pivotal support for said guide mechanism and mechanism for vibrating said guide mechanism and for reciprocating said frame. 5th. In a saw grinding machine, the combination with a throat grinding-wheel, of a suitable frame for said wheel extending transversely of the machine, suitable guide mechanism for said sustaining frame, a pivotal support for said guide mechanism, adjustable brackets to which said pivotal support is connected and mechanism connected to said sustaining frame and its guide mechanism and serving to reciprocate and vibrate said frame. 6th. In a saw grinding machine, the combination with a throat grinding-wheel, of a frame for sustaining said wheel, said frame extending transversely of the machine, mechanism for vibrating and reciprocating said frame, and a forwardly projecting extension upon said frame whereby the arbour of the grinding-wheel is sustained. 7th. In a saw grinding machine, the combination with a throat grinding-wheel, of a frame D for sustaining said wheel, suitable guides 26 and 27 whereon said frame is mounted in manner free to slide, pivoted supports 24 and 25 for the outer ends of said guides, and suitable mechanism for reciprocating said frame D, and for vibrating said guides. 8th. In a saw grinding machine, the combination with a throat grinding-wheel E, a sustaining frame D for said wheel, guides 26 and 27 whereon said frame is mounted in manner free to slide, pivoted supports 24 and 25 for said guides and brackets 20 and 21 whereby said supports are carried. 9th. In a saw grinding machine, the combination with a throat grinding-wheel E, and with a reciprocating and vibratory frame for sustaining said wheel and suitable guide mechanism whereon said frame is mounted, of mechanism for operating said frame comprising a pivoted lever connected with said frame for reciprocating the same, a cam for operating said lever, a pivoted lever connected with the guide mechanism of said frame and serving to vibrate the same and a cam for operating said last-mentioned lever. 10th. In a saw grinding machine, the combination with a throat grinding-wheel, and with a reciprocating and vibratory frame for sustaining said frame, and with guide mechanism for said frame, of means for reciprocating said sustaining frame and means for vibrating said guide mechanism comprising a pivoted adjustable lever G, suitably connected with said guide mechanism. 11th. In a saw grinding machine, the combination with a throat grinding-wheel and with a reciprocating and vibratory frame for sustaining said wheel, of suitable means for reciprocating said sustaining frame and means for vibrating said sustaining frame comprising a pivoted lever G, an adjustable rod 43, connected to said lever G at its upper end, and an adjustable rod 39, connecting said rod 43, with said guide mechanism. 12th. In a saw grinding machine, the combination with a grinding-wheel for the backs of the saw teeth, and with means for sustaining said wheel in manner permitting it to be moved in the direction of the length of the teeth, of mechanism for shifting said wheel back and forth, comprising a pivoted lever and a cam for operating said lever. 13th. In a saw grinding machine, the combination with a grinding-wheel for the backs of the saw teeth, and with means for sustaining said wheel in manner permitting it to be moved in the direction of the length of the teeth, of mechanism for shifting said wheel back and forth, comprising a pivoted and adjustable lever, and a cam for operating said lever. 14th. In a saw grinding machine, the combination with a wheel for grinding the backs of the saw teeth and with a vertical and adjustable frame or gate for sustaining said wheel, of mechanism for shifting said wheel back and forth in the direction of the length of the saw teeth comprising a pivoted lever having its upper end loosely connected with the wheel shifting mechanism and a cam for operating said lever.

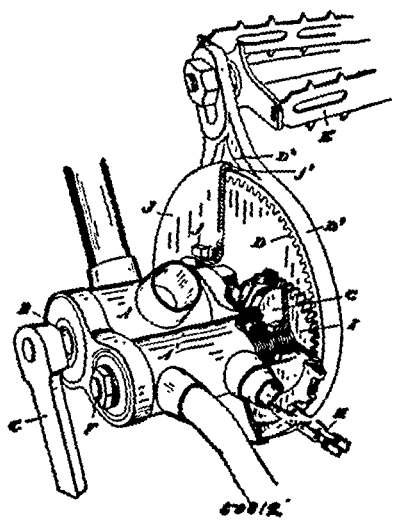
No. 50,811. Food Product. (*Produit alimentaire.*)

Edwin P. Carpenter, New York, State of New York, U.S.A., assignee of Campbell Morfit, London, England, 11th December, 1895; 6 years.

Claim.—The food product herein described, consisting of skim milk condensed by evaporation, sugar and oil of cotton seed, in about the proportions herein specified.

No. 50,812. Drive Gear for Bicycles.

(*Engrenage de bicycles.*)



William Jenkins, Cashel, Ontario, Canada, 13th December, 1895; 6 years.

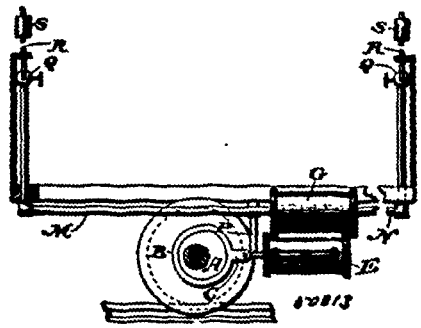
Claim.—1st. The combination, with the double journal box, pedal axle and internal gear secured on one end of the pedal axle, of the driven spindle spur pinion meshing with the internal gear and sprocket pinion adjacent to the spur pinion and the sprocket chain, as and for the purpose specified. 2nd. The combination, with the double journal box, pedal axle and internal gear secured on one end of the pedal axle, and having an outwardly extending arm attached to or forming part thereof, of the driven spindle spur pinion meshing with the internal gear and sprocket pinion adjacent to the spur pinion and the sprocket chain, as and for the purpose specified. 3rd. The combination, with the double journal box, pedal axle and internal gear secured at one end of the pedal axle and provided with an external shroud of the driven spindle spur pinion meshing with the internal gear and sprocket pinion adjacent to the spur pinion and the sprocket chain, as and for the purpose specified. 4th. The combination, with the double journal box, pedal axle and internal gear secured at one end of the pedal axle and provided with an external shroud and a hub recessed in the centre to receive the end nut of the axle, of the driven spindle spur pinion meshing with the internal gear and sprocket pinion adjacent to the spur pinion and the sprocket chain, as and for the purpose specified. 5th. The combination, with the double journal box, pedal axle and internal gear secured at one end of the pedal axle provided with an external shroud, an internal shroud and an inner shroud secured to the journal box, of the driven spindle spur pinion meshing with the internal gear and sprocket pinion adjacent to the spur pinion and the sprocket chain, as and for the purpose specified. 6th. The combination, with the double journal box, pedal axle and internal gear secured at one end of the pedal axle, of the driven spindle, spur pinion meshing with the internal gear and sprocket pinion adjacent to the spur pinion and the sprocket chain leading off from the sprocket pinion at a tangent to the gear, as and for the purpose specified.

No. 50,813. Air Brake for Railway Cars.

(*Frein atmosphérique pour chars.*)

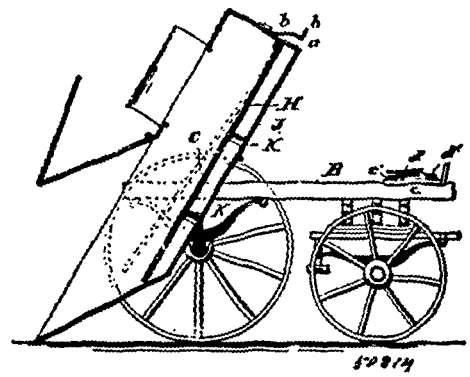
Dennis Dunn Mahoney, and John E. Reyburn, Philadelphia, both of Pennsylvania, U.S.A., 13th December, 1895; 6 years.

Claim.—1st. An air compressor having its piston connected with a rotatable axle, a separate cylinder having at one end an inlet pipe leading from said air compressor, and an air opening in its opposite end, a piston in said cylinder connected with a brake mechanism, a pipe leading from the inlet pipe end of the cylinder to a whistle, and three way cock in said pipe, the casing of said cock having an outlet to the atmosphere, and the parts being combined, substantially as described. 2nd An air compressor having its piston connected with a rotatable axle, a separate cylinder having an inlet pipe communicating with said air compressor at both ends of thelatter, and provided with an air opening, a piston in said cylinder connected



with a brake mechanism, the pipe P, leading from the inlet pipe end of said cylinder and the pipes M and N, communicating with said pipe P, and having cocks therein, substantially as described.

No. 50,814. Dumping Wagon. (*Char à bascule.*)



William Booth and Thomas Henry Barker, both of Gladwyne, Pennsylvania, U.S.A., 13th December, 1895; 6 years.

Claim.—1st. A tipping wagon, having a perforated false bottom and posts rising from the bottom proper, the false bottom being hinged to the body of said wagon, and resting on said posts, substantially as set forth. 2nd. A tipping wagon, consisting of a body having a tail end sloping inwardly from the top to the bottom, a hinged perforated false bottom, posts on the bottom proper, on which the false bottom rests, and a valve on the body below said false bottom, said parts being combined, substantially as described. 3rd. A tipping wagon, having a body provided with journals on the sides thereof, above the sills of the waggon, a perforated false bottom, and posts on the bottom proper, said false bottom being removably supported on said posts, and the parts named combined, substantially as described. 4th. A tipping wagon, having its bottom provided with a perforated false bottom, and posts on the bottom proper, said false bottom being removably supported on said posts, substantially as set forth. 5th. A tipping wagon, having a body provided with journals on the sides thereof, above the sills of the wagon, a sloping tail end, a perforated false bottom, and posts on the bottom proper, said false bottom being removably supported on said posts, and the parts named combined, substantially as described. 6th. A tipping wagon, consisting of a body pivoted to a part rigid with the shafts, an engaging device to hold said body in normal position for carrying a load, and a releasing device, enabling said body to tilt backwards upon its pivot, substantially as set forth. 7th. In a tipping wagon, a body portion pivotally mounted on a stationary framework, a bent tongue secured to said body portion, and an arm pivoted to said frame work, the said arm adapted to be swung into and out of engagement with said tongue, together with a lug upon said frame work to hold said arm against vertical movement, substantially as set forth.

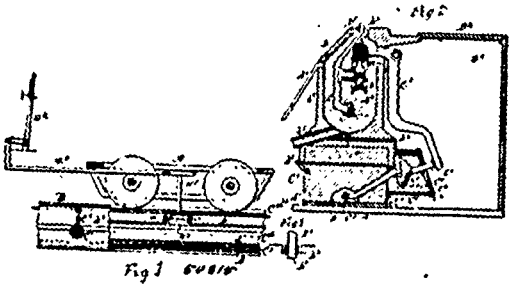
No. 50,815. Electric Railway System.

(*Système de chemin de fer électrique.*)

John La Burt, Brooklyn, New York, U.S.A., 13th December, 1895; 6 years.

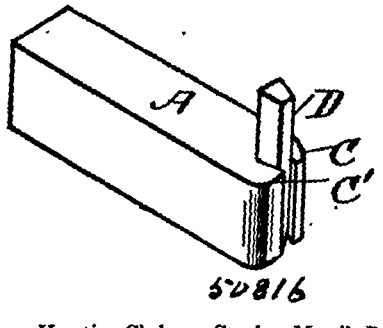
Claim.—1st. In an electric railway system, the combination of a track section and a section at one side thereof forming the walls of a conduit, a contact line in said conduit, rock levers supporting said contact line and having insulated pivotal connection with the track

section, contact plates carried by the lower portion of said rock levers, a main conductor located outside the conduit, and the con-



tact pieces having connection with the conductor. 2nd. In an electric railway system, the combination with a track forming a wall of a conduit and means for supplying an electric current, of a trolley hanger extended into said conduit, arms depending from the trolley hanger and having vertically elongated bearings and a cylindrical rotary bush having trunnion bearings therein. 3rd. In an electric railway system, a track section and a section at one side thereof forming the walls of a conduit for an electric contact line, a string piece to which said conduit sections are secured, a main wire located in said spring piece and connections between said main wire and contact line. 4th. In an electric railway system, the combination with a track and a section adjacent thereto forming a conduit and a main conductor located outside said conduit, of contact pieces having connections with said conductor, a contact line in the conduit, rock levers having pivotal connection with the track and supporting said contact line at their upper ends, plates supported by the lower ends of said levers and adapted to engage with the contact pieces which have connection with the main conductor. 5th. In an electric railway system, the combination with a track and a section adjacent thereto forming a conduit, of a contact line in said conduit, a main conductor isolated from and below the conduit, the rock levers having pivotal connection with the track and supporting the contact line, the contact plates carried by the levers and the contact fingers having connection with the main conductor. 6th. The combination with the track, the contact line and the main conductor, of the rock levers, the contact plates on arms extended from the levers, the boxings, the outer walls thereof of spring or yielding material and the annular series of contact fingers. 7th. In an electric railway system, a contact line consisting of sections and joints for said sections consisting of plugs of insulating material having tapered portions extended into the sections whereby there may be a swinging movement of one section relatively to another. 8th. In an electric railway system, the combination of a contact line consisting of sections, rock levers for supporting said contact line, a main conductor isolated from said contact line, contact pieces extended from the main conductor and consisting each, of an annular row of resilient fingers and contact plates carried by the rock levers for engaging with the first named contact pieces.

No. 50,816. Toe Calk. (*Crampons de fer à cheval.*)



Thomas Baker Huestis, Chelsea, Charles Merril Bunker and Rinaldo Buren Richardson, both of Boston, all in Massachusetts, U.S.A., 12th December, 1895; 6 years.

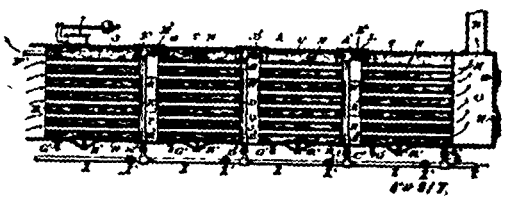
Claim.—The combination of a toe calk, having a vertical groove on one of its faces, extending from top to bottom, and angular in cross-section, and adapted to receive and frictionally hold a nail, with a nail also of angular cross-section and fitting said groove and adapted to be driven into the body of the shoe so as to hold the calk firmly in place until welded, substantially as and for the purpose set forth.

No. 50,817. Feed Water Heater.

(*Réchauffeur de l'eau d'alimentation.*)

Henry Griffith Keasbey, Ambler, Pennsylvania, U.S.A., 13th December, 1895; 6 years.

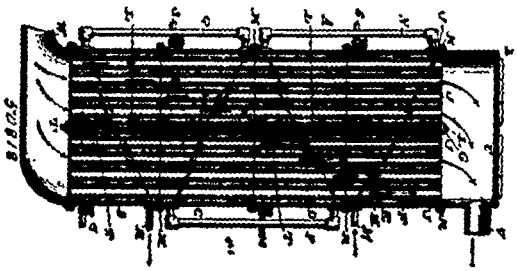
Claim.—1st. A feed water heater, consisting of a series of water-holding chambers having flues therein, said chambers being arranged



in substantially longitudinal alignment, combustion chambers intermediate said water chambers, and connections between each of the latter, communicating with the upper and lower portions of the same, said connections being inclosed within said combustion chambers said parts being combined, substantially as described. 2nd. A feed water heater, consisting of a series of water-holding chambers having flues therein, and combustion chambers therebetween, said chambers being arranged in substantially longitudinal alignment, valved connections between the upper and lower portions of the adjacent water chambers, a feed water inlet communicating with the lower portion of one terminal chamber, and a feed water outlet leading from the upper portion of the other terminal chamber, said parts being combined, substantially as described. 3rd. A feed water heater, consisting of a series of water-holding chambers having flues therein, and combustion chambers therebetween, said chambers being arranged in substantially longitudinal alignment, valved conduits between the upper and lower portions of adjacent water chambers, a valved longitudinally extending pipe arranged adjacent said heater, and having a valved communication directly with one of said chambers, and a valved connection between said longitudinal pipe and each of said conduits, each of the latter having a valve in its lower portion, whereby the flow of fluid to the lower portion of any water chamber may be cut off, said parts being combined substantially as described. 4th. In a feed water heater, a series of water-holding chambers, having combustion chambers therebetween, arranged in substantially longitudinal alignment, flues in said water chambers, an inlet and outlet for the heating medium, the pipes B^1, D^1, E^1, having therein the valves B^2, D^2, E^2, D^4, and E^4, the longitudinally extending pipe X, provided with the valves X^1, and having the valved connections C^1, D^3 and E^3, communicating with said pipes B^1, D^1 and E^1, said parts being combined substantially as described. 5th. A feed water heater, a series of water-holding chambers having flues therein, said chambers being arranged in substantially longitudinal alignment, combustion chambers intermediate said water chambers, valved connections between the upper and lower portions of the adjacent water chambers, and a longitudinally extending valved pipe having a valved communication with each of said connections, said parts parts being combined substantially as described. 6th. The water chambers S, T, U, V, the combustion chambers therebetween, said chambers being arranged in substantially longitudinal alignment, the valved pipes B^1, D^1, and E^1 the pipe X, and the valved connections from the latter, whereby communication is had with said chambers, the above parts being combined substantially as described. 7th. A series of water-holding chambers, having combustion chambers therebetween said chambers being arranged in substantially longitudinal alignment, valved pipes connecting the upper and lower portion of said water chambers, a supply pipe X adjacent to the latter, valved connections from said pipe X to said chambers through the pipes which join said water chambers, said pipe X having valves X^1 thereon between said connections, substantially as described.

No. 50,818. Feed Water Heater.

(*Réchauffeur de l'eau d'alimentation.*)



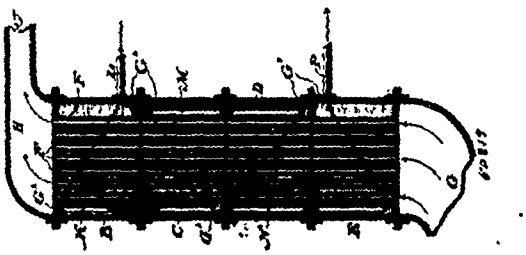
Henry Griffith Keasbey, Ambler, Pennsylvania, U.S.A., 13th December, 1895; 6 years.

Claim.—A feed water heater, consisting of a plurality of separable sections, provided with fire tubes, superimposed upon each other, means for securing said sections in position, connections between said sections extending from the upper portion of one section to the lower portion of the adjacent section, and from the upper portion of

the latter to the lower portion of the next section, the feed water inlet being in the lower portion of the upper chamber, and the hot water outlet leading from the upper portion of the lowest chamber, in combination with a suitable inlet for the products of combustion attached to said lower section, and a hood or casing having an outlet therefrom, attached to the upper section, whereby the water is rapidly and effectively heated, being introduced into the coolest portion of the heater and discharged from the hottest portion thereof, substantially as described.

No. 50,819. Feed Water Heater.

(*Réchauffeur de l'eau d'alimentation.*)

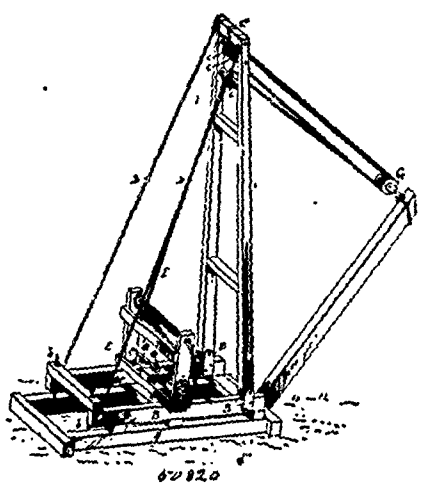


Henry Griffith Keasbey, Ambler, Pennsylvania, U.S.A., 13th December, 1895; 6 years.

Claim. 1st. In a feed water heater of the character described, the chambers B, C, D, etc., having flues therein, means for holding said chambers in contact, the pipes K, M, N, etc., said pipes being located interiorly of the heater, and having their inlets near the tops of said compartments and their outlets near the bottoms thereof, the feed pipe L entering said chamber B, near the bottom thereof, at the point where the products of combustion are coolest, and the feed water outlet pipes P leading from the lowest chamber, near the point where the products of combustion are hottest, in combination with inlet and outlet passages for the products of combustion, substantially as described. 2nd. In a feed water heater, the chambers B, C, D, etc., provided with suitable tube sheets and flues, means for holding said chambers in contact with each other, pipes passing through adjacent tube sheets, and having their inlet near the top of one chamber, and their outlet near the bottom of a chamber thereunder, a water inlet pipe leading into the lower portion of the upper chamber, and an outlet pipe leading from the upper portion of the lowest chamber, and inlet and an outlet passages for the products of combustion, the above parts being combined, substantially as described.

No. 50,820. Machine for Erecting Frame Structures.

(*Appareil pour la construction de charpentes de batisses.*)

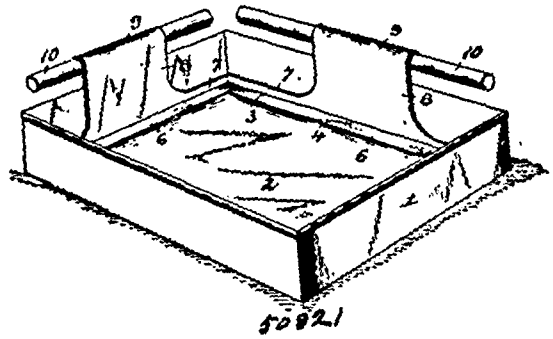


Josiah Fairbank, Helena, Ohio, U.S.A., 13th December, 1895; 6 years.

Claim.—In a machine for use in erecting the frames of buildings, the combination of a base frame A and frame B, connected thereto, an upright C, pivotally connected to the frame B, and having pulleys c, and c^1, c^1, journalled in the upper end thereof, brace rods D, connected to the frame B, and upright and having extensions D^1, an eye c^3, and a cleat c^4, secured to one of the side pieces of the upright, together with a windlass E, mounted on the frame B, and means for adjusting said windlass lengthwise of the frame, and a rope F, which extends from the windlass around the pulleys c and c^1, and around a sheave through the eye c^3, to the cleat c^4, as described and for the purpose set forth.

No. 50,821. Photographic-Developing Tray.

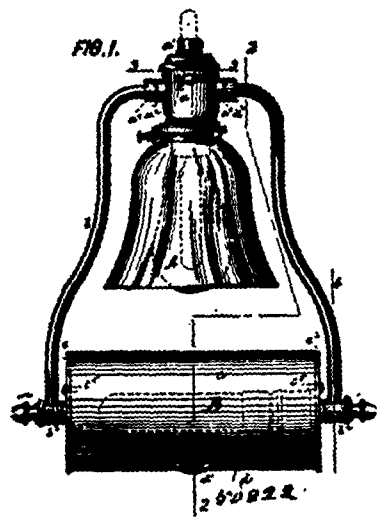
(*Plateau pour développer les photographies.*)



William I. Rood, Spencer, Iowa, in the U.S.A., 13th December, 1895; 6 years.

Claim.—1st. In a photographic developing apparatus, the combination of a pan or dish, the bottom of which is provided at the inner sides and ends with a continuous rectangular counter-sunk or recess, and a holder frame adapted to removably fit within the pan or dish and having its sides and ends registering in said counter-sunk or recess, substantially as set forth. 2nd. In a photographic-developing apparatus, the combination of a pan or dish, the bottom of which is provided at the inner sides and ends with a continuous counter-sunk or recess, and a flanged rectangular holder frame provided at one side and at one end with a handle and adapted to have the side and the end portions thereof register in the counter-sunk or recess of the pan or dish, substantially as set forth. 3rd. A plate or film holder for photographic-developing purposes, the same consisting of a rectangular skeleton frame provided at its outer edge with a continuous upturned retaining flange and at one side and one end with integral upwardly disposed arm extensions terminating at their upper ends in circular beads forming sockets, and right angularly disposed handles fitted in the sockets formed at the upper ends of said arm extensions, substantially as set forth.

No. 50,822. Electric Lamp. (*Lampe électrique.*)



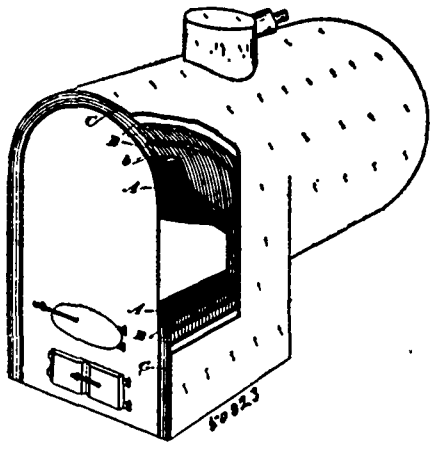
William Henry Sheppard, New York, State of New York, U.S.A., 13th December, 1895; 6 years.

Claim.—An incandescent light socket having bracket arms secured thereto, which bracket arms may or may not swing and have secured at their lower end a shade and support for an electric lamp, the wires being lead through one of the brackets, substantially as specified.

No. 50,823. Boiler Covering. (*Couverture de chaudières.*)

James William McKenzie, Montreal, Quebec, Canada, 13th December, 1895; 6 years.

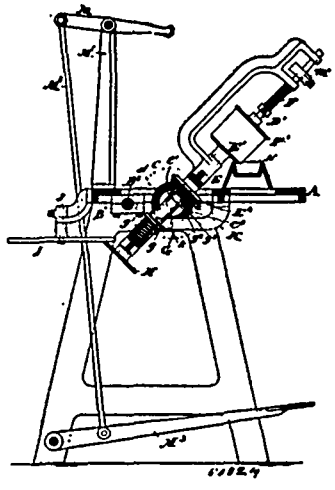
Claim.—1st. As a new article of manufacture a boiler covering comprising a layer of woven wire, a layer or layers of a cement com-



position comprising oatmeal, soapstone, blue clay, slack lime, hardwood saw dust, asbestos fibre suitably mixed with hot water in the proportions specified, and a canvas covering, the whole being suitably stitched and held together as shown and for the purpose specified. 2nd. As a new article of manufacture a boiler covering comprising a layer of woven wire, a layer or layers of a cement composition comprising oatmeal, soapstone, blue clay, slack lime, hard wood saw dust, asbestos fibre suitably mixed with hot water in the proportions specified, a wash composed of asbestos, magnesia, and soapstone, a white duck canvas covering and coats of sizing and asbestos paint, the whole being suitably stitched and held together as shown and for the purpose specified.

No. 50,824. Can Soldering Machine.

(*Machine à souder les boites métalliques.*)

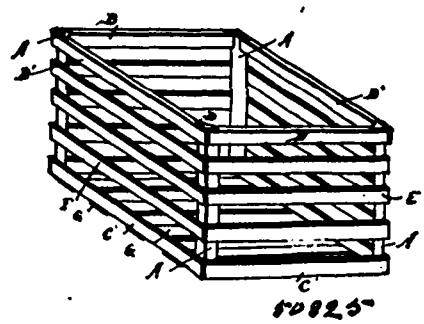


Edward P. Holden, Chicago, Illinois, U.S.A., 13th December, 1895; 6 years.

Claim.—1st. A can soldering machine consisting of a mechanism for clamping the can, mechanism for carrying it to the solder bath, mechanism for revolving it in the solder bath, and means for varying the depth of dip of the can in the bath to correspond with the shape of the can, substantially as described. 2nd. A can soldering machine consisting of mechanism for clamping the can, mechanism for carrying it to the solder bath, mechanism for revolving the can on the solder bath, and a plate shaped like the cross section of the can, for varying the depth of dip of the can in the solder bath, substantially as described. 3rd. A can seaming machine consisting of mechanism for clamping the can, mechanism for revolving the can on its own axis, mechanism for tilting it to the solder bath, and mechanism for varying the depth to which it is dipped as it is revolved, substantially as described. 4th. A can soldering machine consisting of a tilting frame carrying can clamping mechanism, means for revolving the can on its own axis, a solder bath to which the can is tilted, and means for tilting the frame as the can revolves, substantially as described. 5th. A can soldering machine consisting of a horizontally pivoted tilting frame carrying can clamping mechanism, said frame carrying a revolving shaft engaged to the can clamping mechanism, and a plate on the lower end of the shaft adapted to vary the tilt of the frame as it revolves, substantially as described. 6th. A can soldering machine consisting of a horizontally pivoted tilting frame, a shaft journalled therein having means on its upper end to engage the can, and a plate on its lower end below the pivotal point of the frame of the shape of the can in cross section, and adapted when the frame is tilted to bear on a vertically stationary plate, and means for revolving the shaft, substantially as described. 7th. A can soldering machine consisting of a horizontally pivoted tilting frame, a shaft journalled therein having means on its upper end to engage the can, and a plate on its lower end below the pivotal point of the frame of the shape of the can in cross section, and adapted when the frame is tilted to bear on a horizontally revoluble vertically stationary plate, and means for revolving the shaft, substantially as described. 8th. In a can soldering machine, a tilting frame carrying can clamping mechanism, a shaft for revolving the can on its own axis, means for revolving the shaft, and means for disconnecting the revolv'ng mechanism when the frame is in a substantially upright positic. 9th. In a can soldering machine, a horizontally pivoted tilting frame carrying a revolving shaft, a pinion loose on said shaft, a longitudinally movable sleeve keyed to the shaft, adapted to engage the pinion when the frame is tilted, and a stationary arm adapted to disengage the sleeve from the pinion when the frame is upright, substantially as described. 10th. The combination of the tilting frame carrying the clamping shaft D^1, of the lever M adapted to engage and lift the shaft when the tilting frame is upright, substantially as described. 11th. The combination of the tilting frame carrying the can clamping mechanism and can revolving shaft, the latter carrying the plate governing the tilting movement of the frame, of means for revolving said shaft and means for giving the shaft an alternately quick and slow motion, substantially as described.

No. 50,825. Crate for Shipping Fruit, etc.

(*Caisse pour le transport des fruits, etc.*)



Asa S. Sherman, Canastota, New York, U.S.A., 13th December, 1895; 6 years.

Claim.—The improved crate described, comprising the upright corner posts solid and of triangular form in cross section throughout their length, the comparatively thick upper and lower end, and side rails having the undercut recesses D, in their inner sides at their opposite ends receiving the corners of the corner posts, fastening devices permanently connecting the said rails to the outer sides of the corner posts, the intermediate end and side slats permanently connected by fastening devices to the outer sides of the corner posts, said slats being of a less thickness than the upper and lower side and end rails so that their outer sides will rest in the same vertical planes as the outer sides of said rails, and a suitable bottom, all substantially as specified.

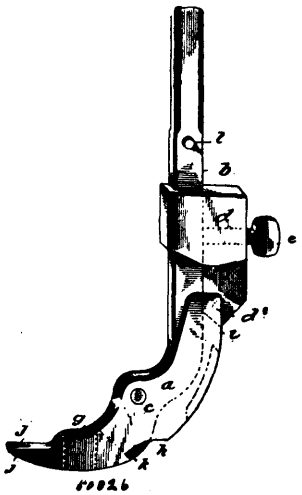
No. 50,826. Tool for Drawing Bolts, etc.

(*Arrache-boulons, etc.*)

Howell Norman Lewis, Green Cove Springs, Florida, U.S.A., 13th December, 1895; 6 years.

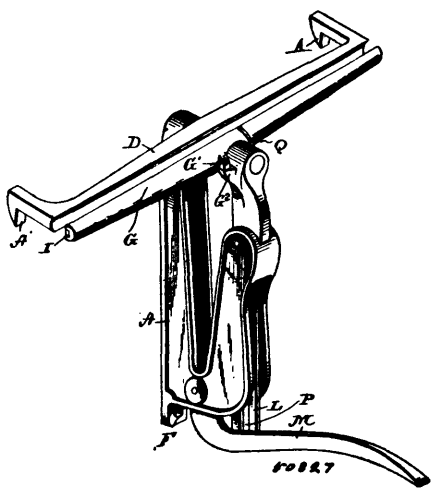
Claim.—1st. The curved shoe recesses as described and having pivoted within its walls a lever the lower end of which forms, with a shoulder of the said shoe, nippers for withdrawing spikes, substantially as shown and described. 2nd. In combination with the curved shoe having a claw at its outer free end, a lever pivoted within a recess in the said shoe, and a slide on the said handle designed to lock the shoe in a fixed position, substantially as shown and described. 3rd. In combination with a shoe recessed to receive a lever, which is pivoted in said recess to the walls of the shoe, apertures in said shoe, one to receive a spike or bolt, the other to receive an extension on a sliding member carried on the handle of the lever, substantially as shown and described. 4th. The shoe having a curved bottom, the lever pivoted within a recess f the shoe, a lower free end of the

said lever extending through an aperture in the shoe, a portion of the walls of the shoe cut away forming a shoulder, combined with a



sliding member having an extended portion which is designed to register in an aperture near the rear end of the shoe, and a thumb-screw for holding the sliding member in a fixed relation, substantially as shown and described.

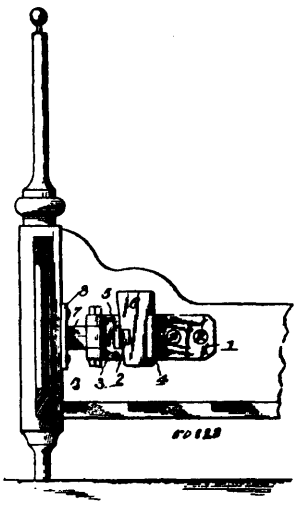
No. 50,827. Saw Clamp. (*Etau pour scies.*)



Aaron Thomas Binkerd, Alleghany, Pennsylvania, U.S.A., 14th December, 1895; 6 years.

Claim.—1st. The combination with the body portion of the saw-clamp, having the pivoted jaw at its upper end provided at its ends with securing spurs, of a slotted lever-arm, fulcrumed in the shorter arm of the body portion of said saw-clamp, a pivoted jaw connected with the upper end of the slotted lever-arm, and an operating lever fulcrumed in the body portion of the saw-clamp and provided with a stud engaging the slotted lever-arm, substantially as specified. 2nd. The combination with the body portion or support, provided with a pivoted jaw having securing spurs, of a slotted lever-arm fulcrumed to the body portion and provided with a grooved jaw having sound deadeners in one of its faces, and an operating lever fulcrumed to the body portion and engaging the slotted lever-arm, substantially as specified. 3rd. The combination with the body portion or support carrying a pivoted jaw provided with angularly projecting arms having securing spurs, of the slotted lever fulcrumed to the body portion and provided with a spring-pressed and sound-deadened jaw, and an operating lever fulcrumed to the body portion of the saw clamp and provided with a stud engaging the slotted lever-arm, substantially as specified. 4th. The combination with the body portion of the saw-clamp having a pivoted jaw provided with securing spurs, of a slotted lever-arm provided with a grooved, pivoted jaw having sound deadeners at its ends, a retaining spring engaging the grooved pivoted jaw, and an operating lever fulcrumed to the body portion and engaging the slotted lever-arm, substantially as specified. 5th. A saw-clamp, comprising a body portion, and a slotted lever-arm fulcrumed thereto, a pivoted clamping-jaw provided with securing spurs, a grooved spring-pressed clamping-jaw provided with sound-deadeners and pivoted to a slotted lever-arm fulcrumed in the body portion, and an operating lever engaging the slotted lever-arm, substantially as specified.

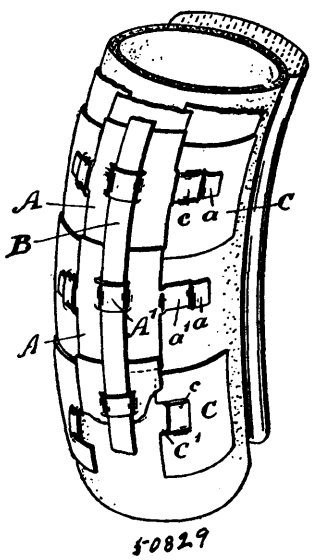
No. 50,828. Bed Clamp. (*Mordache pour bois de lit.*)



Henry Joseph Ney, Pottsville, Pennsylvania, U.S.A., 14th December, 1895; 6 years.

Claim.—A bed clamp consisting of a plate having a reduced end hooked as described, in combination with a hinged section having a central aperture to receive the hooked end of the plate, and further provided with an upturned end, and a wedge engaging the hooked extensions of the plate and hinged section, as and for the purpose described.

No. 50,829. Pneumatic Tyre. (*Bandage pneumatique.*



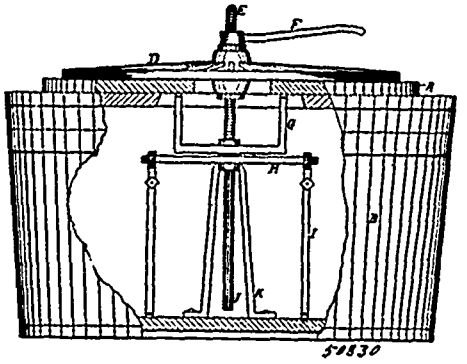
George Whitfield Grote and David Watson Alexander, both of Toronto, Ontario, Canada, 14th December, 1895; 6 years.

Claim.—1st. In a pneumatic tyre, the combination with the rim, tube and tyre or envelope, of a protective covering inserted between the tube and the tyre circumferentially outside the rim and comprising a series of overlapping plates with central metal straps and a band passing through the straps around the entire periphery as and for the purpose specified. 2nd. In a pneumatic tyre, the combination with the rim, tube and tyre or envelope, of a protective covering inserted between the tube and the tyre circumferentially outside the rim and comprising a series of over-lapping plates with central metal straps and a band passing through the straps around the entire periphery and adjustable means for holding the ends of the band together as and for the purpose specified. 3rd. The combination with the rim, tube and tyre or envelope, of a band circumferentially outside the rim and between the tyre and tube and a series of plates suitably connected to the band

as and for the purpose specified. 4th. The combination with the rim, tube and tyre or envelope, of a band and plates suitably connected thereto, situated between the tyre and tube outside the rim and a T-shaped tongue formed at one end of the band and a serrated notch formed on the opposite end of the band as and for the purpose specified. 5th. The combination with the rim, tube and tyre or envelope, of a band and series of plates connected thereto and arc-shaped plates extending on each side of the central plates and means for connecting them to the plates as and for the purpose specified. 6th. The combination with the rim, tube and tyre or envelope, of a band and arc-shaped plates on each side of the band and means for connecting the arc-shaped plates to the band as and for the purpose specified. 7th. The combination with the rim, tube and tyre or envelope, of a band and a series of plates connected thereto and arc-shaped plates extending on each side of the central plates and peculiarly formed tongues a, a^1, extending from the central plates through outwardly projecting straps in the plates as and for the purpose specified. 8th. The combination with the rim, tube and tyre or envelope, of a band circumferentially outside the rim and between the tyre and tube and a series of plates with arc-shaped plates connected to them at each side all arranged in a diagonal series as and for the purpose specified. 9th. The combination with the rim and tube and outer tyre, of a band, a series of central plates and arc-shaped plates connected thereto inserted between the tyre and tube outside the rim, the central plates and arc-shaped plates being arranged to overlapp and the central plates being arranged to over-lap the arc-shaped plates as and for the purpose specified.

No. 50,830. Platform and Tank for Setting Tires.

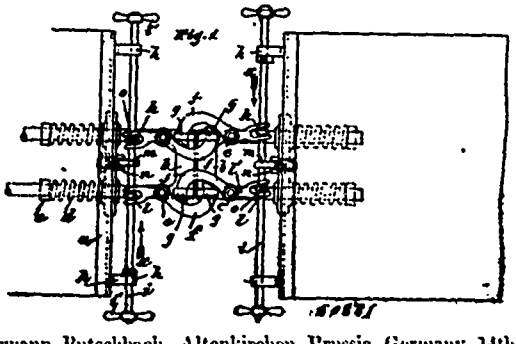
(*Plate-forme et citerne pour poser les bandages.*)



George Edmond Meyer and Alnoio Keillor, both of Wallacetown, and John Nelson Caswell, Dutton, all in Ontario, Canada, 14th December, 1895; 6 years.

Claim.—1st. The combination of the platform A, and the tank B, with the mechanism for tilting the platform into the tank, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the tank B, the cover C, C^1, with the revolving platform A, and the mechanism for tilting the platform into the tank and holding it in position, substantially as and for the purpose hereinbefore set forth.

No. 50,831. Car Coupler. (*Attelage de chars.*)

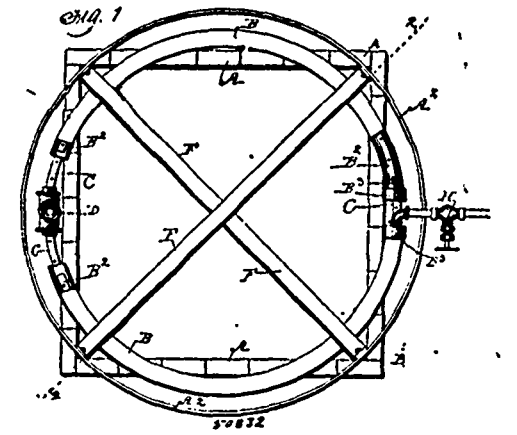


Hermann Butschbach, Altenkirchen, Prussia, Germany, 14th December, 1895; 6 years.

Claim.—1st. A coupling for railroad cars composed of U-shaped straps placed in the cross beams of the cars, carrying each on vertical pins e, two hooks f, and in front of the same, cars g to receive the hooks of the opposite car, whereby the latter are moved by the longitudinal movement of a rock-shaft i. 2nd. A coupling having a shaft placed in bearings on the cross beam a, and provided with a hook m adapted to engage a fixed notch n, when the hooks f are thrown behind cars of the opposite car, so that an accidental displacement of the shaft i is prevented.

No. 50,832. Wagon Tire Heater.

(*Appareil pour chauffer les bandages de roues.*)

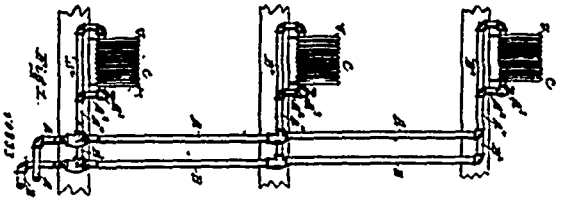


Isaac Harvey, Hartley, Iowa, U.S.A., 14th December, 1895; 6 years.

Claim.—An improved tire heating apparatus, comprising a suitable circular frame having cross pieces for supporting tires therein, a pipe leading from a suitable source of hydro-carbon supply passed around the interior of the frame and perforated at its top, a pipe of larger diameter encircling the aforesaid pipe and closed at its ends, a pipe passed around the interior of the frame directly beneath the aforesaid pipes, closed at its ends and having perforations at its top and a pipe communicating with the central portion of the upper outside pipe and the central portion of the lower pipe, substantially as and for the purposes stated.

No. 50,833. Hot Water Heating Apparatus.

(*Calorifère à eau.*)



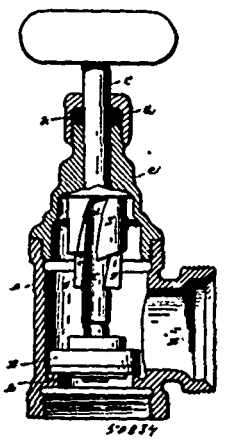
Oliver Schlemmer, Cincinnati, Ohio, U.S.A., 14th December, 1895; 6 years.

Claim.—1st. In a system of piping such as shown in figure 1, a pipe fitting having an inlet and passage F, directly opposite the inlet orifice H, and communicating with an angled branch local feed pipe A^4, A^2, and a passage E, to one side of the main line of the feed conduit A, and extending up and around and having its outlet K, in connection with the next section of feed pipe A, substantially as and for the purposes specified. 2nd. In a system of piping such as shown in figure 1, a pipe fitting having an inlet and passage F, directly opposite the inlet orifice H, and communicating with an angled branch local feed pipe A^4, A^2, and a passage E, to one side of the main line of the feed conduit A, and extending up and around and having its outlet K, in connection with the next section of feed pipe A, the outlet K, being in axial line with the section of feed pipe A, located respectively at opposite ends of fitting D, the fitting D, having the inlet H, and diaphragm G, its lower end G^2, being located to one side of the inner extended plane of the adjacent feed pipe A, so as to cause the passage F, to be altogether opposite the inlet H, substantially as and for the purposes specified. 3rd. In a system of piping such as shown in figure 1, a pipe fitting having an inlet and passage F, directly opposite the inlet orifice H, and communicating with an angled branch local feed pipe A^4, A^2, and a passage E, to one side of the main line of the feed conduit A, and extending up and around and having its outlet K, in connection with the next section of feed pipe A, the outlet K, being in axial line with the section of feed pipe A, located respectively at opposite ends of fitting D, the fitting D, having the inlet H, and diaphragm G, its lower end G^2, being located to one side of the inner extended plane of the adjacent feed pipe A, so as to cause the passage F, to be altogether opposite the inlet H, the diaphragm G, curving around and crossing the interior of the pipe fittings, substantially as shown and described, passage E, extending past the diaphragm G, and having its outlet K, substantially as and for the purposes specified. 4th. In a pipe fitting, the combination of the passage way F, whose mouth is opposite the inlet H, diaphragm G, forming the passage F, and the exterior passage E, within the fitting connected at E^2, to the side of

inlet H, and having suitable outlet and the deflecting projection or flange G^3, located at or near the ring D^4, and projecting into the inlet H, the extended plane of the adjacent surface of the pipe A, and of the surface of the diaphragm G, on the opposite side when extended passing through said projection, substantially as and for the purpose specified. 5th. In a hot water system, the combination of the main section of feed pipe and the fitting D, provided with diaphragm G, passage ways *F and E*, substantially as described, the branch pipe A^4, A^2, radiator and the return pipes E^2, E^2, and E^1, substantially as and for the purposes specified. 6th. In a system to supply hot water to the radiators, the feed pipe A constituting the lower or return pipe B, and provided with the fittings D, D, substantially as shown in figure 3, the upper fitting having its diaphragm extended upward and across as heretofore described, and the lower fitting having its diaphragm extended downward and across, the upper diaphragm being arranged to deflect the hot water from the feed pipe A, into the radiator and the lower diaphragm arranged to deflect the water downward into the pipe A, as a return pipe, substantially as and for the purposes specified.

No. 50,834. Valve. (*Soupape.*)

Fig. 2.



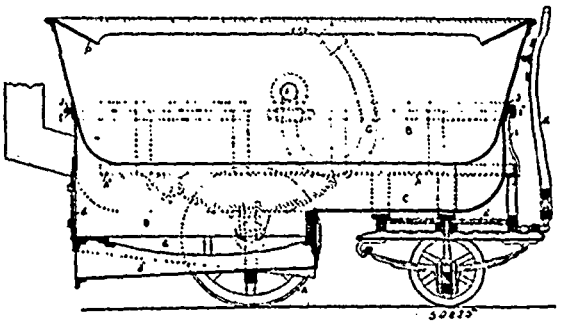
Henry C. Hodges, Detroit, Michigan, U.S.A., 14th December, 1895; 6 years.

Claim.—1st. In a valve, the combination with a casing having a valve seat, of a reciprocating valve stem, a valve thereon, projections on the stem above the valve, a split sleeve having elongated passages between the halves thereof to permit the vertical movement of the projections thereinto, the lower face of each half sleeve being inclined and forming a stop to limit the rotary movement of the stem in opposite directions, and being adapted to force the valve into its seat, substantially as described. 2nd. In combination, with a valve casing provided with a valve seat, a rotary reciprocating valve stem, a valve thereon, lateral projections on the stem, a sleeve held to the casing and divided into parts by vertically disposed spiral slots adapted to be engaged by the projections, said sleeve sections being provided at their lower ends with spiral faces of short pitch adapted to engage the projections and stop the rotation of the valve stem, and also co-act with the projections to crowd the valve against its seat, substantially as described. 3rd. In a valve, in combination with a casing having a valve seat therein, a reciprocating and rotary valve stem having lateral projections thereon, a sleeve held to the casing divided into sections by vertical slots into which the projections on the stem engage, oppositely inclined engaging forces on the lower end of the sleeve sections, adapted to form stops for the projections that align with the slots, substantially as described.

No. 50,835. Method of and Apparatus for Removing Snow, Etc. (*Méthode et appareil pour enlever la neige, etc.*)

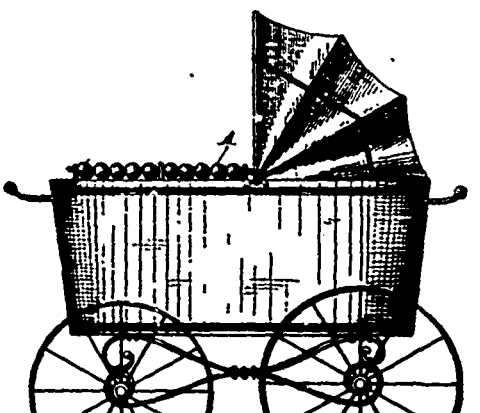
Richard Ripley, Liverpool, England, 14th December, 1895; 6 years.

Claim.—1st. The improvement in apparatus applicable for melting snow and ice, which consists in forming them of a snow receptacle or tank having a spout or opening for discharging the snow and ice when melted into the street gutter or drain, in combination with a fire grate or heating furnace and channels or flues, the latter formed in three parts, one for the forward passage of the heat from the furnace along the bottom of the tank, and the others for conveying the heat back along the bottom of the tank to the ascending flues or chimneys at the rear, substantially as described. 2nd. In an apparatus applicable for melting snow and ice, the combination with a receptacle such as B, having an open top for charging it with snow or ice, and a discharge opening in the side or bottom thereof, of a hydrocarbon or vapour burner located underneath the receptacle, and a tank for storing and feeding oil to the said burner, substantially as and for the purpose described. 3rd. An apparatus applicable for melting snow and ice for use in scavenging the streets,



which consists in the combination of an open receptacle or pan into which the snow and ice to be melted is thrown, a furnace and flues for melting the contents of the said pan, and a spout or opening in the side or bottom of the receptacle for discharging the snow and ice when melted into the street gutter or drain, substantially as set forth. 4th. The combination with the draught frame, of a body mounted upon the same and composed of an open tank with furnace and flues for heating the same, the said tank being provided with a discharge opening having a spout or hosepipe, substantially as and for the purpose described. 5th. An apparatus applicable for melting snow and ice having a furnace and flues mounted upon the draught frame of the vehicle, in combination with a tank for holding the snow or ice to be melted, said tank, furnace and flues being so arranged that they can be removed from the frame, the tank separated from the furnace and flues, and replaced alone on the frame, substantially as and for the purpose described. 6th. The combination with the draught frame, of a snow or water tank, and a furnace and flues for heating the same, the tank and the furnace and flues being mounted on the frame in such a manner that they are detachable therefrom and from each other, and the tank remounted alone upon the frame, substantially as and for the purpose described. 7th. The combination with the tank, of a rim or lip P arranged around the top of the tank and projecting inwardly, substantially as and for the purposes set forth. 8th. The combination with the water tank of the sockets L secured in the bottom of the said tank pipes M supplying the perforated sprinkler and secured in or removed from the said sockets, and valves for controlling the supply of water from the tank to the pipes substantially as set forth. 9th. The combined arrangement and construction of parts forming my improved apparatus, substantially as described and shown in reference to figures 1 to 5, and figure 6 respectively of the accompanying drawings.

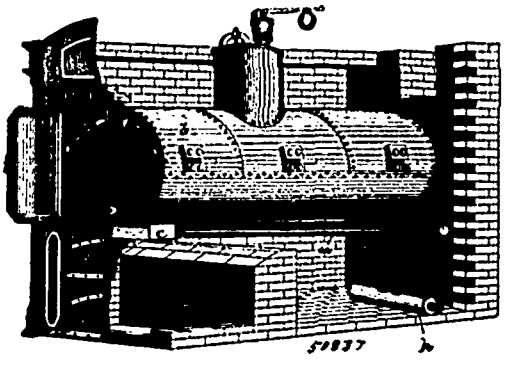
No. 50,836. Baby Carriage. (*Voiture d'enfant.*)



Julius Paulsen, Neuenkirchen, Prussia, Germany, 16th December, 1895; 6 years.

Claim.—A baby's carriage having on the edge of the basket, balls A, A designed to prevent the falling out of babies by letting the hands of the same slip off, when the trial to rise is made.

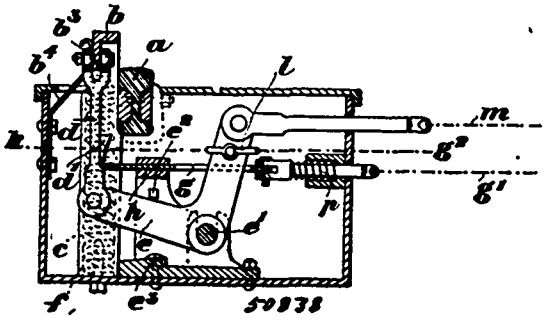
No. 50,837. Steam Generator and Water Circulator.
(*Générateur à vapeur et tubes pour la circulation de l'eau.*)



The Hascall Richards Steam Generator Company, assignee of James Joseph Bush, both of Boston, Massachusetts, U.S.A., 16th December, 1895; 6 years.

Claim.—1st. The combination, with a boiler, of a steam generator and water circulator, consisting of a series of pipes, as A and A^1, arranged immediately below the boiler and in the fire box or flame-chamber, communicating with the lower portion of the rear end of the boiler, and at the other end of said pipes, a partitioned water box forming separate chambers with which said series of pipes are independently connected, and means for establishing communication between said box and the boiler at or near the top thereof, substantially as and for the purposes set forth. 2nd. The combination, with a boiler, of a steam generator and water circulator, consisting of a series of pipes, as A and A^1, arranged immediately below the boiler and in the fire box or flame-chamber, communicating at one end through expansion headers, as *d*, having slip-joints *e*, and a pipe at one end of each header which communicates with the boiler at or near the bottom thereof, and at the other end of said series of pipes, a partitioned water box forming separate chambers with which said series of pipes are independently connected, and pipes connected with said box for establishing communication between said box and the boiler at or near the top thereof, substantially as and for the purposes set forth. 3rd. The combination, with a boiler, of a steam generator and water circulator, consisting of a series of pipes, as A and A^1, arranged immediately below the boiler and in the fire box or flame-chamber, communicating at one end through expansion headers, as *d*, having screw-threaded teats d^2, a perforated cap e^1, on each teat and a packing in each cap, forming slip-joints, a pipe at one end of each header which communicates with the boiler at or near the bottom thereof, and at the other end of said series of pipes, a partitioned water box forming separate chambers with which said series of pipes are independently connected, and pipes connected with said box for establishing communication between said box and the boiler at or near the top thereof, substantially as and for the purposes set forth. 4th. The combination, with a boiler, of a steam generator and water circulator, consisting of a series of pipes, as A and A^1, arranged immediately below the boiler and in the fire box or flame-chamber, communicating at one end through expansion headers, as *d*, having slip-joints *e*, an elbow at one end of each header, said elbows having openings f^2, f^3, and f^6, pipes in said elbows connecting them with the boiler at or near the bottom thereof, pipes also connecting said elbows with a mud drum, and at the other end of said series of pipes, a partitioned water box forming separate chambers with which said series of pipes are independently connected, and pipes connected with said box, for establishing communication between said box and the boiler at or near the top thereof, substantially as and for the purposes set forth. 5th. The combination, with a boiler, of a steam generator and water circulator, consisting of a series of pipes, as A and A^1, arranged immediately below the boiler and in the fire box or flame-chamber, communicating at one end through expansion headers, as *d*, having slip-joints *e*, and a pipe at one end of each header which communicates with the boiler at or near the bottom thereof, and means at the other ends of said series of pipes, for establishing communication at or near the top of the boiler, substantially as and for the purposes set forth. 6th. The combination, with a boiler, of a steam generator and water circulator, consisting of a series of pipes, as A and A^1, arranged immediately below the boiler and in the fire box or flame chamber communicating at one end through expansion headers as *d*, having screw-threaded teats d^2, a perforated cap e^1 on each teat, and a packing in each teat, forming slip joints, and a pipe at one end of each header which communicates with the boiler at or near the bottom thereof, and means at the other ends of said series of pipes, for establishing communication at or near the top of the boiler, substantially as and for the purposes set forth. 7th. The combination with a boiler, of a steam generator and water circulator, consisting of a series of pipes, as A and A^1, arranged immediately below the boiler and in the fire box or flame-chamber, communicating at one end through expansion headers *d*, having slip joints *e*, an elbow at one end of each header, said elbows having openings f^2, f^3 and f^6, pipes in said elbows for connecting them with the boiler at or near the bottom thereof, pipes also connecting said elbows with a mud drum, and means at the other ends of said series of pipes for establishing communication at or near the top of the boiler, substantially as and for the purposes set forth. 8th. The The herein described header *d* for a steam generator and water circulator, having screw-threaded teats, as d^2, perforated caps e^1 on said teats, and a packing between said teats and caps, and an opening d^3 in one end of said header adapted to receive a nipple, substantially as and for the purposes set forth. 9th. The herein described water box *c* for a steam generator and water circulator, having a partition or wall c^1 integral with the inner sides of the box, forming chambers c^2 and c^3, substantially as and for the purposes set forth.

No. 50,838. Automatic Railway Signal. (*Appareil de signal automatique pour chemins de fer.*)



John Forster, St. Helen's, Lancaster, England, 16th December, 1895; 6 years.

Claim.—1st. In an automatic railway signalling system, the combination of the treadle bar *b* provided with a projecting pin b^2, a connecting rod *d* having a tooth d^1, crank *c* fulcrumed at c^1, stops c^2 and c^3 for regulating the movement of the crank *c*, blade *g* working through a bracket *h*, said blade *g* engaging with a tooth d^1 of the rod *d*, when the treadle *b* is depressed, shackles 1 to which are connected the operating wires of the signals, spring *c* engaging with pins b^2 and *f*, springs b^4 and *p*, the whole apparatus contained in a suitable case and operating that the passage of a train over the treadle *b* at a section (say No. 1, fig. 8) puts the signal at that section to the "Danger" attitude, and at the same time lowers the signal at the section in the rear to the "Safety" attitude through the operation of disengaging the blade *g* from the tooth d^1 of the blade *d* in similar apparatus fixed thereat, all substantially as described and illustrated in the accompanying drawings. 2nd. In an automatic railway signalling system, a treadle such as *b* at section say No. 1, held locked in its depressed position by the blade *g* engaging with the tooth d^1 on the connecting rod *d* or its equivalent, on a train passing over the said treadle bar and released to its normal position by the passage of the train over a similar treadle at section, say No. 2, substantially in the manner described, for the purposes specified, and as illustrated in the accompanying drawings. 3rd. In an automatic railway signalling system, the combination of parts arranged and operating mechanically and substantially as described for the purposes specified and as illustrated in the accompanying drawings. 4th. In railway signalling apparatus, the combination of parts as claimed in Claims 1 and 2 mechanically connected by a connection *n* to a signal arm, the said signal arm being mechanically operated in the usual manner by an operating lever in the signal cabin or suitable spot, the whole operating that while the treadle at section or signal say 2 (fig. 8) must be depressed by the passage of a train as well as the operating lever in the signal cabinet section say 1 (fig. 8) worked to lower the sectional signal at section 1 to the "Safety" attitude, yet either the replacing of the operating lever at No. 1 section or the depression of the treadle adjacent to the signal or section No 1 will replace the No. 1 signal to the "Danger" attitude, substantially as described with reference to the drawings annexed.

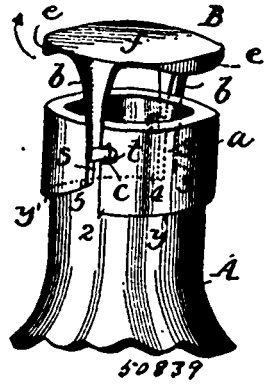
No. 50,839. Bottle Stopper. (*Bouchon de bouteille.*)

Ignatz Martin, assignee of Mathilda Schott, Brooklyn, New York, U.S.A., 16th December, 1895; 6 years.

Claim.—1st. A bottle having an enlargement *a*, and the edges *s*, s^1, and grooves *s*, s^1, having lateral portions *t*, combined with a stopper having a cap portion and depending legs and lugs entering the grooves, all substantially as set forth. 2nd. A bottle provided with an enlargement *a* having cam edges and vertical grooves having lateral portions at the top, combined with a stopper having pendent legs and lugs adapted to said grooves, and adapted to be moved vertically upward above the top of the bottle and swung to one side, or to be depressed and turned to engage its lugs with the inclined

edges to hold the cap in place, substantially as set forth. 3rd. The combination, with a bottle having an enlargement and inclined

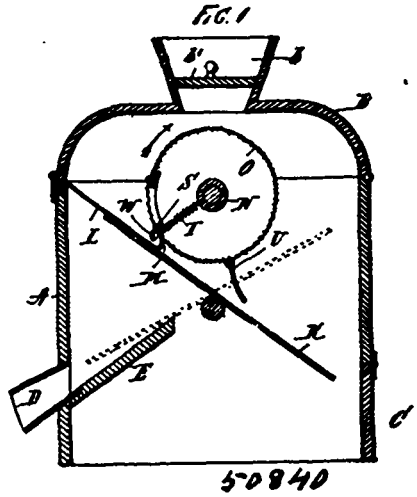
Fig. 1.



edges v, v^1, and vertical grooves with lateral portions t, of a stopper consisting of a cap formed of sheet metal with extensions bent at an angle to the top and folded to form legs b, b, and lugs c, c, substantially as set forth. 4th. The combination of the bottle having the enlargements with inclined edges and grooves, of a stopper having pendent legs and lugs, and provided with a rubber packing or stopper, with or without a metallic plate or washer, substantially as set forth. 5th. The within described improvement in means for stopping bottles, jars, etc., comprising an enlargement upon the bottle or jar with inclined edges and grooves, and a stopper having pendent legs and lugs, all constructed and arranged to operate, substantially as described.

No. 50,840. Ash Sifter. (*Tamis à cendres.*)

FIG. 1



Robert Smith Thwaite, Little Falls, New Jersey, U.S.A., 16th December, 1895; 6 years

Claim.—1st. An ash sifter, comprising a casing, a wire screen drum mounted therein, and provided with a hinged and spring operated door, an opening in the top of said casing, through which the ashes are poured into said drum and means for operating said drum to sift the ashes therefrom, and separate the same from the cinders and other articles, substantially as shown and described. 2nd. In an ash sifter, the combination of a casing, in which is mounted a screen drum, said drum being provided with a hinged door, and said casing with a top or cover, in which is formed an opening, a spring for holding the door on the drum closed, a pivotally supported plate, within said casing, below said drum, and a discharge chute at one side of said casing and means for operating the drum to discharge the ashes into the bottom of the casing, and the cinders and similar articles through said chute, substantially as shown and described. 3rd. In an ash sifter, the combination of a casing, provided with a hinged cover in which is formed a hopper a screen drum mounted in said casing below said hopper, and provided with a hinged and spring operated door, a plate pivotally supported below said drum and a chute in one side of the casing below said plate, and means for operating said drum for discharging the ashes into the bottom of the casing, and the cylinders through said chute, substantially as shown and described. 4th. An ash sifter, comprising a casing which is rectangular in form, and provided with a hinged cover, in which is formed a hopper, a screen drum mounted in said casing, below said hopper, said drum being provided with a hinged door and a spring by which the door is held in the closed position, and said drum being also provided with a hook or projection, a plate pivotally supported in said casing below said drum, a chute at one side of said casing a plate spring connected with the top of the casing, and projecting inwardly and adapted to operate in connection with the hook or projection formed on the spring door, said parts being constructed, combined and arranged, substantially as shown and described.

No. 50,841. Bicycle Costume. (*Vêtement de bicycle.*)

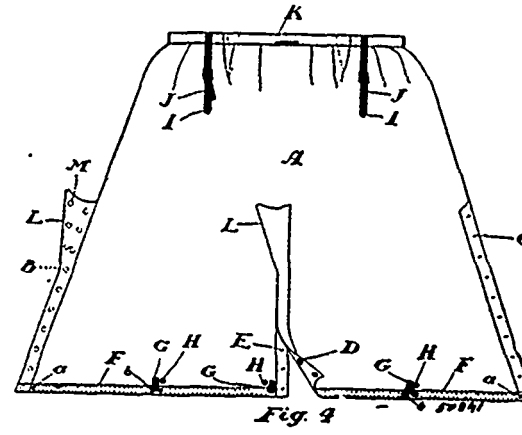
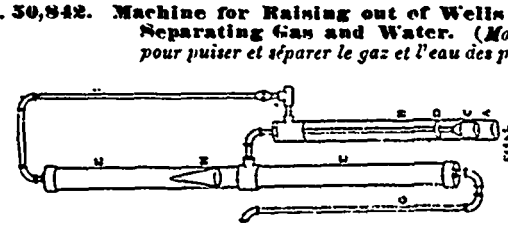


Fig. 4

Frederick James Haworth Hazard, Toronto, Ontario, Canada, 16th December, 1895; 6 years.

Claim.—1st. As a bicycle costume, a skirt partly divided at both the back and front so that the edges of the openings may be fastened together to form a skirt or so fastened as to form a divided skirt or bloomers, substantially as described and for the purpose specified. 2nd. As a bicycle costume, the skirt A, partly divided at both the the back and front in combination with buttons B, D, connected to, and button holes C, E, formed in the edges of the openings, substantially as described and for the purpose specified. 3rd. As a bicycle costume, the skirt A, partly divided at both the back and front, the edges of the openings being provided with buttons B, and D, and button holes C, and E, in combination with the tapes G, adapted to gather in the bottom of each half of the skirt, substantially as described and for the purpose specified. 4th. As a bicycle costume, the skirt A, partly divided at both the back and front, the edges of the openings being provided with buttons B, and D, and button holes C, and E, in combination with the tapes G, adapted to gather in the bottoms of each half of the skirt, and suspenders J, connected to the waist band and provided with buttons I, which may be buttoned into button holes in the ends of the tapes, substantially as described and for the purpose specified. 5th. As a bicycle costume, the skirt A, partly divided at both the back and front, the edges of the openings being provided with buttons B, and D, and button holes C, and E, in combination with fly pieces L, provided with buttons M, substantially as described and for the purpose specified. 6th. As a bicycle costume, the skirt A, partly divided at both the back and front, the edges of the openings being provided with buttons B, and D, and button holes C, and E, in combination with fly pieces L, provided with buttons M, and fly pieces N, provided with button holes O, substantially as described and for the purpose specified.

No. 50,842. Machine for Raising out of Wells and Separating Gas and Water. (*Machine pour puiser et séparer le gaz et l'eau des puits.*)

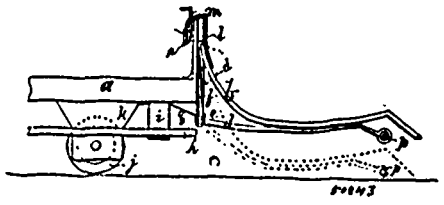


James Decow, Ridgetown, Ontario, Canada, 16th December, 1895; 6 years.

Claim.—1st. The stop plug D, above the bell, or cup-shaped mouth C, so as to form an accumulater or reservoir for the accumu-

lation of the gas, to make the pressure to force the water and gas up the pipe B. 2nd. The forcing the gas and water into the upright cylinder or tank E, E, at or near the centre thereof, and drawing the water off at the bottom by the pipe G, the end of which is carried up in such a way as to get sufficient water pressure to counteract the pressure of the gas so as always keep sufficient water in the bottom of the cylinder or tank E, E, to prevent the gas (which will not pass downwards through the water), *from escaping at the bottom.* 3rd. The tapering funnel or cone-shaped tube H, having the large end downwards, and perfectly tight in the cylinder or tank E, E, and tapering to a very small hole at the other end.

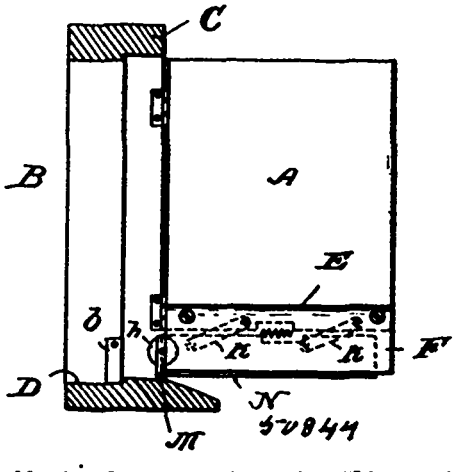
No. 50,843. Car Fender. (*Défense de chars.*)



Olivier Malette, Montréal, Québec, 16th Decembre 1895; 6 ans.

Résumé.— 1°. Dans une agrille de sauvertage à voiture de tramway, la combinaison d'une grille en berceau *b* avec un jeu de charnières *c* attachées au devant de la voiture du tramway et consolidées par les équerres *z*, des axes *d* s'inserant dans les charnieres *c* et assujeties en dessous de la grille de sauvetage en berceau *b*, et des loquets *f* s'abaissant dans les charneres *c* et sur les axes *d*, tel que ci-dessus décrit et pour les fins indiquées. 2°. Dans une grille de sauvetage à voiture de tramway, la combinaison d'un crampon *t* avec une chaîne *o* et une fermeture consistant en un crampon ou mentonnet *n*, et d'un levier ou clenche *m*, le crampon ou mentonnet *n*, traversant la mortaise *r*, tel que ci dessus décrit et pour les fins indiquées.

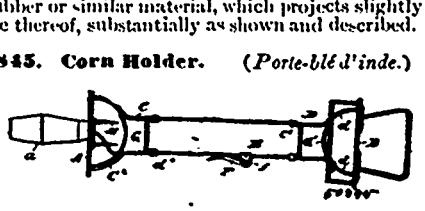
No. 50,844. Door Securer. (*Arrête-porte.*)



Barney Murphy, New Haven, Connecticut, U.S.A., 16th December, 1895; 6 years.

Claim.—The combination with a door, which is hinged in a frame, in the usual manner, of a support secured thereto, on the outer side and transversely of the bottom thereof, and a bar pivotally connected with said support by means of arms or levers, arranged in slots formed therein, and in the support and a spring which connects said bar and said support, said bar being adapted to be depressed when the door is closed, by means of a roller pivotally supported in the end thereof, which is adapted to bear upon the frame of the door, or the plate secured thereto, and said bar being provided with a strip of rubber or similar material, which projects slightly below the lower edge thereof, substantially as shown and described.

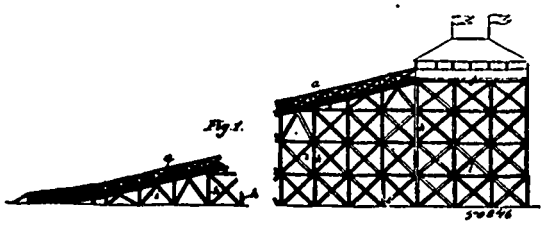
No. 50,845. Corn Holder. (*Porte-blé d'inde.*)



Thomas Hanford Boyce, New York, State of New York, U.S.A., 16th December, 1895; 6 years.

Claim.—A corn holder, composed of heads or end pieces as A and B, each of which is provided with an arm or extension composed of wire bent into the form of a yoke, the end of which are connected with heads or end pieces, and the sides thereof, being adapted to slide one upon the other, and provided with means for locking them in any desired position, said arms or extensions being also provided with braces or stays, which are connected with the *heads or end pieces and one of said heads or end pieces being provided* with a revoluble handle, and the other with a stationary handle, said revoluble handle being provided with inwardly directed prongs and the other head or end piece being provided with a curved or segmental rest or support, substantially as shown and described.

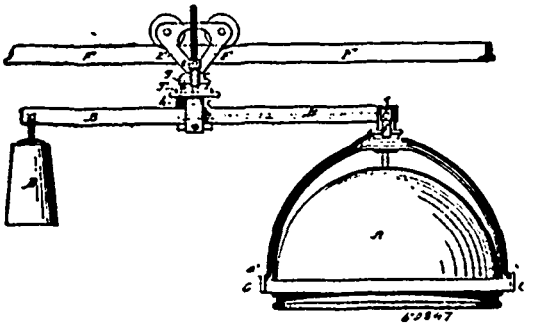
No. 50,846. Gravity Railway. (*Chemin de fer à gravité.*)



Paul Boyton, New York, State of New York, U.S.A., 16th December, 1895; 6 years.

Claim.- 1st. An inclined way or chute having tracks for boats or toboggans, the said tracks and the spaces between them being adapted to receive a body of water from above, in combination with boats provided with runners or wheels and adapted to run on the said track, substantially as set forth. 2nd. The combination with an inclined way or chute, and a boat or the like adapted to traverse said chute, of a rack on said chute, and a pawl on said boat capable of engagement with said rack, substantially as set forth. 3rd. A new means of elevating persons to a high platform, consisting of an inclined way, a flexible, movable cover therefor, and means for moving said cover, substantially as set forth. 4th. The combination of an inclined way formed of a series of strips flexibly connected, a frame, pivoted rollers supporting said strips, a sprocket wheel arranged to engage said rollers, and means for revolving said sprocket wheel, together with a moving hand rail, substantially as set forth. 5th. The combination with a flexible moving way, having a surface composed of parallel strips, with spaces between said strips, and a contiguous platform, of curved abutments on said platform arranged to enter the said spaces between strips, to form a continuous smooth surface between the moving way and the platform, substantially as set forth. 6th. An inclined way or chute, substantially as herein described, having the bracing of the frame-work readily removable, and the higher vertical posts being telescopic to permit of their heighth being altered, substantially as set forth. 7th. A boat having runners or wheels enabling it to traverse tracks on an inclined chute, guide pieces also on said boat to prevent its lateral displacement from said tracks, and a splash board or deflector arranged at either side of the boat, substantially as set forth. 8th. An inclined chute supported upon telescoping struts or the like, and having as a base a floating pontoon, or a hull, substantially as set forth.

No. 50,847. Device for Photographing by Electric Light. (*Appareil pour photographier au moyen de lumière électrique.*)



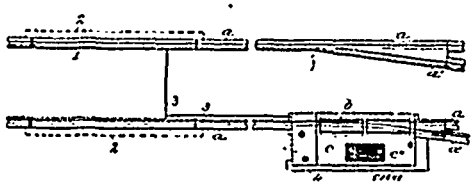
Andrew George Adamson, Glasgow, North Britain, 16th December, 1895; 6 years.

Claim.—1st. The combination of a suitable travelling carriage, having electrical connection with a suitable source of supply, and an incandescent lamp carried by said carriage and having electrical connection therewith, substantially as shown and described. 2nd. A device for use in photographing by electric light, the combination of a suitable source of electric supply, an incandescent lamp having connection with said supply and a transparent reflector for said lamp, substantially as shown and described. 3rd. The combi-

nation of a suitable travelling carriage, having connection with a suitable electric supply, a beam having a turning connection therewith, and a lamp having a turning connection with said beam, and a suitable electric connection between the carriage and lamp, as shown and described. 4th. The combination of a suitable travelling carriage, having connection with an electrical supply, a lamp connected with said carriage, and a variable resistance located between the source of supply and the carriage, as shown and described.

No. 50,848. Electric Railway Switch.

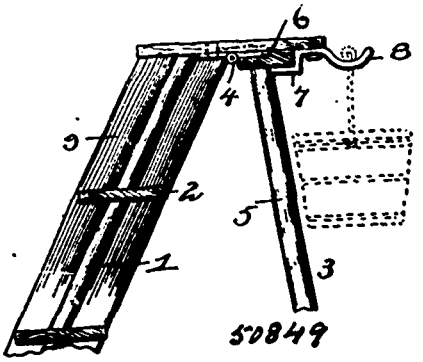
(*Aiguille de chemin de fer électrique.*)



Loyall A. Osborne, Newark, New Jersey, U.S.A., 16th December, 1895; 6 years.

Claim.—1st. An automatic switch, in which is combined a polyhedral body having longitudinal rail treads thereon and arranged to rotate on its longitudinal axis, mechanism for operating said polyhedral body with an intermittent rotary movement in one direction, and electro-magnetic devices operating and governing said mechanism, in a manner substantially as described and for the purpose set forth. 2nd. An improved automatic switch, in which is combined a rotary switch device having treads thereon, and provided with a ratchet head, a pawl communicating an intermittent movement to said rotary switch, and motive mechanism for operating the several parts, substantially as described and for the purpose set forth. 3rd. An improved switch, in which is combined a switch device having an intermittently rotating movement in one direction, and a receptacle or chamber located with relation to said switch whereby the dirt or other similar material taken by the latter will be received into said chamber and from the path of the switch device, substantially as described and for the purpose set forth. 4th. An improved switch, in which is combined a box or chamber having an inclined bottom or lower portion, and a switch having frogs or treads thereon, adapted to rotate in horizontal bearings above said inclined portion, whereby the dirt carried into the chamber by the rotary switch will gravitate to a point of easy access, substantially as described and for the purpose set forth. 5th. An improved switch, in which is combined with a box divided interiorly by partitions into a switch and operating mechanism chambers, the latter being imperviously apart from the former, a switch device arranged on a horizontal journal shaft which extends into the operative mechanism chamber, and means for operating said journal shaft with the connected switch, substantially as set forth. 6th. An improved railway switch, in which is combined with the rails, a polyhedral body with longitudinal rail treads thereon, said body being arranged on a horizontal axis, and mechanisms for operating the same, and electrical devices, governing said mechanism, connecting electrical terminals in advance of said switch, substantially as set forth. 7th. An improved switch, in which is combined a polyhedral body having on its peripheral surfaces longitudinal wheel treads alternately parallel and inclined to planes of the axis of said body, and mechanism controlled by a solenoid arranged in a chamber apart from the said polyhedral body, and said solenoid and electrical connections adapted to be controlled from the car, substantially as described and for the purpose set forth. 8th. An improved railway switch, in which is combined with the rails, a polyhedral body with longitudinal rail treads thereon, said body being arranged on a horizontal axis, and mechanism for operating the same arranged in a separate compartment from the said switch, and electrical devices governing said mechanisms, connecting electrical terminals in advance of said switch, substantially as set forth. 9th. In an automatic railway switch, a box or chamber having an inclined bottom, a horizontal body with longitudinal treads journalled in said chamber, and means for operating the same, substantially as set forth. 10th. In an automatic switch, the combination with the box or chamber, a rotating switch having wheel treads and electrical means for intermitting and rotating the switch, of a key shaft arranged in connection with said box for operating said rotating body locally, substantially as set forth. 11th. The combination with a horizontally journalled rotary switch provided with a head or part constructed for the engagement therewith of operating and locking means, and means for operating said switch and automatically locking and releasing the same, substantially as described and for the purpose set forth. 12th. The combination with a horizontally journalled rotary switch provided with a head or part constructed for the engagement therewith of a locking device, a locking device, and an electrically controlled sliding shaft provided with means for moving said device from locking engagement preliminary to moving the switch, and operating the latter, substantially as described and for the purpose set forth. 13th. The combination with a horizontally journalled rotary switch provided with a head or part constructed for the engagement therewith of a locking device, a locking device, a solenoid and its core, and means operated by said core for moving said device from locking engagement, substantially as described and for the purpose set forth. 14th. The combination with a rotary switch provided with a head or part constructed for the engagement therewith of a locking device, a locking device movably supported or held in normal position in locking engagement with said head or part, and a reciprocatory oscillating shaft having an arm or finger for engaging with said locking device to move the same from locking engagement, substantially as described and for the purpose set forth. 15th. The combination with a switch, provided with a ratchet head or part having inclined teeth on one side, and locking detents on the other, a locking pawl, and an operating pawl engaging the inclined teeth and having a finger engaging the locking pawl to throw the same from locking engagement, substantially as set forth. 16th. The combination with a switch connected with a ratchet head or part having inclined teeth on one side to receive an operating pawl, and locking detents on the other, a locking pawl having an inclined surface, and an operating pawl engaging the inclined teeth and having a finger for engaging the locking pawl to throw the same from locking engagement with said head or part preliminary to moving the latter, substantially as set forth. 17th. An improved switch, in which is combined, a horizontally journalled rotary switch formed in two sections and constructed with an intermediate bearing, and means for rotating said switch, substantially as set forth. 18th. An improved switch, in which is combined with a suitable box or chamber, a horizontally journalled intermittently rotating switch operating in one direction only, and having on its outer sides longitudinal treads adapted to be brought alternately into coincidence with the main and branch rails of the road, and constructed with an intermediate bearing, and means for intermittently rotating said switch in one direction, substantially as set forth. 19th. An improved switch, in which is combined with a box having bearings or supports a horizontally arranged shaft or bar having a switch carrier arranged thereon in sections, and supported in said bearings at its ends and between said sections, and means for operating the switch, substantially as set forth. 20th. In combination with an angular bar or shaft, hollow switch bodies having inwardly projecting ribs engaging said bar or shaft, substantially as set forth. 21st. The combination with the box or chamber having a central and end walls or partitions constructed to receive removable journal boxes, of said removable journal boxes, and a switch body having longitudinal treads on the outer sides, and provided with bearings journalled in said boxes, substantially as set forth. 22nd. An improved railway switch, comprising a horizontally journalled rotary switch provided at one end with a ratchet head, a rod or shaft carrying a pawl for engaging said head, connected with a solenoid core, and a solenoid core and electrical connections, substantially as set forth. 23rd. An improved railway switch, in which is combined, an intermittingly rotative switch having connection with a ratchet head, a solenoid and its core, a rod secured to the core of said solenoid and having a pawl or projection engaging said ratchet head, and means for holding said pawl or projection in operative position for engagement with the said ratchet head, substantially as set forth. 24th. The combination with a box or chamber having walls or partitions recessed at their upper edges, of journal boxes seated in said recesses and having grooves to receive said partitions, a bar or shaft arranged in said journal boxes and removable from the box or chamber, carrying a switch, the longitudinal treads of which are adapted to coincide with the branch and main rails alternately, substantially as set forth. 25th. The combination with a horizontally journalled rotary switch, a ratchet head having locking detents therein, a locking pawl, an operating pawl, means for holding said pawls in operative engagement with said ratchet head, a solenoid actuating said operating pawl, and means for giving return movement to the solenoid core and its attachments when the electric circuit in which the said solenoid is connected, is broken, substantially as set forth.

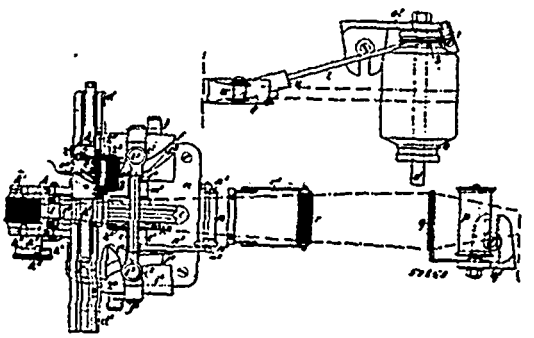
No. 50,849. Step Ladder. (*Echelle à marches.*)



Maxwell Minier, Elmira, New York, U.S.A., 16th December, 1895; 6 years.

Claim.—1st. A step ladder consisting of the standards, steps secured thereon, said standards passing through the steps near the ends thereof and at an oblique angle to the upper surface thereof, guard rails secured to the outer projecting ends of the steps and adapted to cover said ends, and a rear portion or support, substantially as described. 2nd. A step ladder consisting of standards, step secured thereon, a hinged rear portion or support formed with a cross-bar at its upper end, said bar adapted to bear against the under side of the top step of the ladder to limit the outward movement of the support, and a clamp 7 pivoted to the under side of the top step and adapted to swing around under the cross-bar and lock the support in its closed position, substantially as described. 3rd. A step ladder consisting of standards, steps secured thereon, said standards passing through the steps near their ends, guard rails secured to the outer ends of the steps and adapted to cover said ends, a folding rear portion or support formed with the cross-bar 6, and hinged to the under side of the top step as described, the upper surface of said cross-bar adapted to bear against the under side of the top step, and a pivoted clamp 7, formed with hook 8, and adapted to lock the support in either its open or closed position, substantially as described.

No. 50,850. Loom. (*Métier à tisser.*)



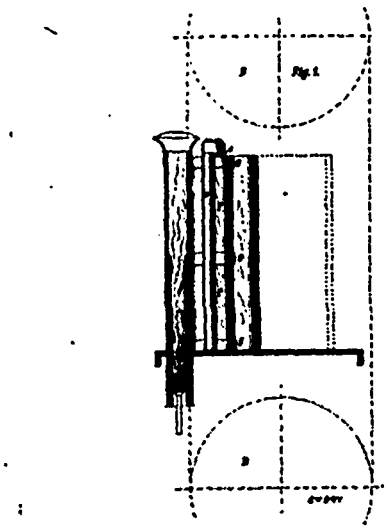
John Poyser, Mansfield, England, 16th December, 1895; 6 years.

Claim.—1st. In a loom for weaving, a batten formed in two parts, one of which is fixed and the other movable, and each being formed with a series of plates or pins having spaces between them through which the upper and lower threads of the warp forming the shed pass, the said two parts of the batten being adapted to coincide in such a manner than when in contact the lower threads of the shed can pass into the fixed part, and the threads from the fixed part into the movable part of the batten under the action of the heddles, substantially as described. 2nd. In a loom for weaving, take-up mechanism consisting of two rollers, one of which is driven by pawl or clutch mechanism operated by a cam through the medium of a lever, in combination with another cam for regulating the oscillation of the operating lever and consequently the amount of rotation imparted to the take-up rollers, whereby the number of weft threads per inch laid in the fabric may be regulated at will, substantially as described. 3rd. In a loom for weaving, the combination with the take-up rollers, the pawl or clutch mechanism for operating one of the rollers, the lever and cam for operating the clutch, and a second cam for regulating the movement of the said lever and consequently the amount of rotation imparted to the take-up rollers, of a graduated dial and finger moving over the said dial and connected with the regulating cam whereby the number of weft threads per inch laid in the fabric may be regulated at will, substantially as described. 4th. In a loom for weaving, the heddle plates, the frame arranged to be moved towards and from the said plates as the shed opens and closes, and the means for moving the frame including a slotted quadrant or section fixed to the frame, and an arm fixed to one of the plates and engaging said quadrant, substantially as described. 5th. In a loom for weaving, an oscillating frame carrying a roller to take up the slack in the warp threads, a slotted segment carried by the said frame, the vertically movable heddle frame, an arm fixed thereto, and carrying a roller working in the slot of the quadrant, in combination with a grooved roller under spring tension to maintain the tension of the warp threads, substantially as described. 6th. In a loom for weaving, the combination with the fixed warp thread guide, and the movable batten, of the shuttle operating behind the said batten, and having a projecting finger which lays the weft thread in front of the batten, substantially as described.

No. 50,851. Process of and Apparatus for the Manufacture of Barrels. (*Procédé et appareil pour la fabrication des barils.*)

Josef Polke, Vienna, Austria, 16th December, 1895; 6 years.

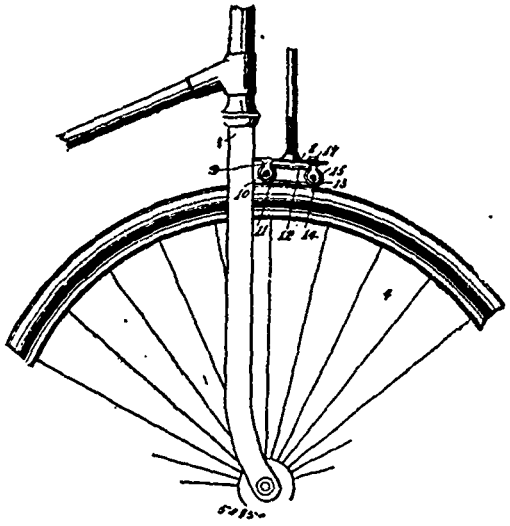
Claim.—1st. A process for the manufacture of bulging barrels, which are formed from cylindrical wooden blanks by compression, this process consisting: (*a*) in the production of the said cylindrical blanks by cutting a log, having a length corresponding to the height of the desired barrel, parallel to the axis thereof into a long, spiral



strip or band of even thickness, and by detaching from this band pieces of a length corresponding to the circumference of a barrel, and bending the pieces thus detached into the form of cylinders; (*b*) in reducing, by compression, the diameter of the cylindrical barrel blanks, thus produced in a measure corresponding to the eventual shrinkage of the wood employed, by driving these blanks through a cylinder, which gradually tapers towards one end by this measure of contraction; (*c*) in the conical compression of first one and then the other end of these cylindrical barrel blanks by pressing them into conical-shaped forms or dies; (*d*) in the forming, by compression, simultaneously with the conical compression of the barrel blanks, of the chimbs or grooves for the barrel heads, by inserting into the said blanks before their conical compression, discs of a diameter and circumferential form corresponding to that of the barrel heads, and of a material harder than the wood of which the barrel blanks are made. 2nd. The device for cutting the spiral strips of wood for the barrel-blanks and for bending these strips into cylinders, consisting of a saw B, of a wedge *a* placed with its edge behind the blade of said saw, one or more heatable pressure rolls *b*, mounted opposite to one side of wedge *a*, and of a pair of rolls *c* and *d*, of equal speed but different diameter, the whole arranged and operating in such manner that wedge *a*, is situated in the cut produced by the saw, while the heated roll or rolls *b*, press against the outside of the strip of wood being detached from the log by the saw, said strip being led between the pair of guide rolls *c*, *d*, whereby it is rolled into the form of a cylinder in the same measure as the cutting of the saw proceeds. 3rd. The apparatus for the cylindrical compression of the barrel blanks, consisting of a body K, the cylindrical interior of which gradually diminishes towards one end in a measure corresponding to the shrinkage of the wood in the cylindrical barrel blanks, body K, provided with an aperture for introducing the barrel blanks to be compressed, and with an expansible piston L, for driving the barrel blanks through the body K, and thereby compressing them. 4th. In combination with the apparatus herein described for the cylindrical compression of the barrel blanks, the apparatus for the conical compression of these barrel blanks, consisting of two press forms or dies M, M^1, conical at one end and of two press forms or dies N, N^1, conical at their end opposite to that of forms M, M^1, forms or dies M, M^1, connected with each other and rocking upon a common shaft, while forms N, N^1, are stationary and have each a piston *n*, respectively n^1, disposed in front thereof, the whole disposed in such manner that either of the two forms or dies M, M^1, may be brought to correspond with the discharge opening of press body K, ready to receive a barrel blank as it leaves said opening, while the other one of said forms M, M^1, will correspond with one of the stationary forms N, N^1, substantially as described. 5th. In combination with the apparatus described for the conical compression of the barrel blanks, a device for forming the chimbs or grooves in the barrel bodies by compressions simultaneously with their conical compression, consisting of one or two discs *s*, s^1, the circumferential form of which corresponds to that of the barrel heads, said discs *s*, s^1, placed into the barrel blanks before their conical compression either singly, or held together by a rod *t*. 6th. In combination with the apparatus described for the conical compression of the barrel blanks, temporary hoops *r*, of a wedge-shaped cross section, fitting into a corresponding recess *p*, at the conical end of press forms M, M^1, N, N^1, the bottom of which recesses *p*, runs parallel to the wider or cylindrical part of said press forms, while the inner surface of hoops *r*, stands even with the conical end of these press forms, so that after a barrel blank has received its conical compression hoop *r*, will remain upon

the end of the barrel and can be removed from the press form together with the barrel body. 7th. In combination with the apparatus herein described for cutting and bending the spiral strips of wood, a device for preventing the breaking or splitting of the wood while being bent, consisting of one ore more metal bands *g*, the bent end *g'*, of which is hooked over the front edge of the wooden strip, and a pair of brake rolls *h*, *i*, between which said metal bands *g*, are passed, and which will offer a certain resistance against advancing of the metal bands *g*, together with the wooden strip as the cutting and bending proceeds, whereby a pressure upon the wood is exerted.

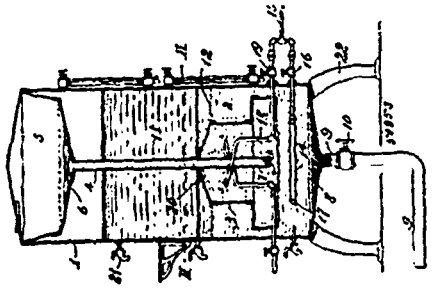
No. 50,852. Bicycle Brake. (*Frein de bicycle.*)



William Laird Stewart, Wilmerding, Pennsylvania, U.S.A., 16th December, 1895; 6 years.

Claim.—1st. The brake for bicycles and the like, comprising a frame, rollers mounted to turn therein, and an endless band carried on said rollers and adapted to engage the wheel tire, substantially as set forth. 2nd. A brake for bicycles and the like, comprising a frame, rollers mounted to turn therein, one of said rollers being provided with means for adjusting it toward and from the other, and an endless band carried on said rollers and adapted to engage the wheel tire, substantially as set forth. 3rd. A brake for bicycles and the like, comprising a frame, a roller mounted to turn therein, a bracket adjustably mounted on the frame, a roller mounted to turn in the bracket, and an endless band carried on said roller and adapted to engage the wheel tire, substantially as set forth. 4th. A brake for bicycles and the like, comprising a slottted frame, a roller mounted to turn thereon, a bracket having screw threaded projections engaging the slots in the frame, nuts engaging said projections, a roller mounted to turn in said bracket, and an endless band carried on said rollers and arranged to engage the wheel tire, substantially as set forth.

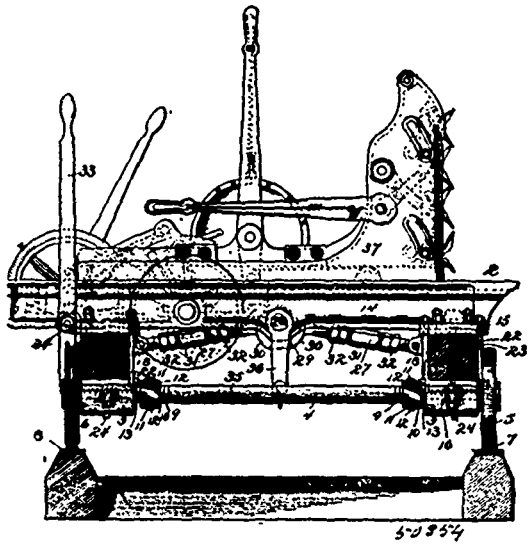
No. 50,853. Oil Purifier. (*Appareil à purifier l'huile.*)



David Harrison McCleland, New York, State of New York, U.S.A. *16th December*, 1895; 6 years.

Claim. 1st. In an oil purifier, the combination of a reservoir for a purifying liquid, a bell or oil receptacle therein having an opening or openings through which the oil may pass into said liquid at a point below the surface of the latter, a pipe for supplying oil to said receptacle, a screen situated in said reservoir in the path of the oil, and means above the screen for drawing off the purified oil, substantially as set forth. 2nd. In an oil purifier, the combination in a reservoir, of a bell open at its under side and situated in the lower portion of said reservoir, and a transverse obstructing screen situated above the point or points of exit from the bell, means for supplying the oil to be purified to said bell, and means above the screen for drawing off the oil, substantially as set forth. 3rd. In an oil purifier, the combination in a suitable reservoir, of a bell adapted to be submerged beneath the purifying liquid, a transverse obstructing screen situated at or above the point or points of exit from said bell, means for washing off the under side of said screen, and a pipe for supplying oil to the bell, substantially as set forth. 4th. In an oil purifier, the combination of a reservoir adapted to contain a purifying liquid, a bell open at its under side situated in said reservoir and having suitable oil-supply devices, a transverse obstructing screen connecting said bell with the walls of the reservoir, and means above the screen for drawing off the oil, substantially as set forth. 5th. The combination with the reservoir, of the bell open at its under side, the screen 12, above the lower edge of said bell, the jet nozzles below the screen, and means for supplying the latter with a vapour or liquid, substantially as set forth. 6th. The combination with the reservoir, of the bell open at its under side, the supply pipe thereon, and the extension of the latter having the perforation 20 within the bell, for the purpose set forth.

No. 50,854. Saw Mill Carriage. (*Châssis de scieries.*)

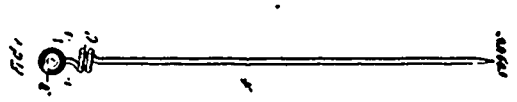


Noah Shaw, Eau Claire, Wisconsin, U.S.A., 16th December, 1895; 6 years.

Claim.—1st. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame rigidly mounted on the axles, head blocks mounted on the frame and having a limited movement transversely and independently thereof, and the rigid bracing connections hingedly attached to the sides of the frame and movably connected with the head blocks, substantially as described. 2nd. In a saw mill carriage, the combination with axles and wheels of a saw mill carriage frame rigidly mounted on the axles, head blocks mounted on the frame and having a limited movement transversely and independently thereof, the movable supports holding the head blocks slightly above the frame, and connections for operating and locking the head blocks against accidental movement on the frame, substantially as described. 3rd. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame rigidly mounted on the axles, head blocks mounted on the frame and having a limited movement transversely thereof, and the connections between the head blocks and the frame for supporting the former slightly above the latter and for operating and locking the head blocks against accidental movement on the frame, substantially as described. 4th. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame rigidly mounted on the axles, head blocks mounted on the frame and having a limited movement transversely thereof, and the oppositely disposed rigid inclined connections extending transversely of the carriage frame from one side to the other, and having their outer ends secured to the frame, and having their inner adjacent ends movably connected with the head blocks, substantially as described. 5th. In a saw mill carriage, the combination of the saw mill carriage frame, axles, wheels and independently constructed head blocks, the head block operating shaft, a lever connected therewith, the eccentric, the turnbuckle rod, and means for connecting the head block with the frame whereby it is allowed to offset independently of the saw carriage, substantially as described. 6th. In a saw mill carriage, the combination with axles and wheel, of a saw mill carriage frame rigidly mounted on the axles, and secured against transverse movement thereon, head blocks having a limited movement transversely of the

frame and independently thereof, an eccentric carried by the head blocks, a connecting rod extending from the eccentric to the frame, and forming a rigid brace and lock, and means for operating the eccentric, substantially as described. 7th. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame mounted on the axles, the head blocks having a limited movement transversely and independently of the frame, an eccentric carried by the head blocks and located centrally thereof, the oppositely disposed inclined connecting rods extending from the eccentric to opposite sides of the frame and bracing and supporting the head-blocks and means for operating the eccentric whereby the head-blocks are moved transversely of the frame independently thereof, substantially as described. 8th. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame mounted on the axles, the head blocks having a limited movement transversely and independently of the frame, a centrally disposed longitudinally arranged shaft provided with an arm and journalled on and carried by the head blocks, an eccentric mounted on the shaft, the oppositely disposed connecting rods extending from the eccentric to opposite sides of the frame, and an operating lever connected with the arm of the shaft, substantially as described. 9th. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame rigidly mounted on the axles, and provided at opposite sides with openings, the head blocks mounted on the frame and having a limited movement transversely and independently thereof, the upper and lower bearing plates carried by the head blocks and the frame, and the shifting and oscillating standards arranged in the openings of the frame and having their ends journalled on the bearing plates and being vertically adjustable through said openings and supporting the head blocks out of contact with the frame, substantially as described. 10th. In a saw mill carriage, the combination of a saw mill carriage frame, independently movable head blocks mounted on the frame, the oscillating standards mounted on the frame and supporting the head blocks out of contact with the same, and means for adjusting the standards vertically, substantially as described. 11th. In a saw mill carriage, the combination of a saw mill carriage frame, independently movable head blocks mounted on the frame, the upper and lower bearing plates carried by the head blocks and the frame, the shifting standards having their ends journalled on the bearing plates and supporting the head blocks out of contact with the frame, and the screws mounted on the frame and supporting the lower bearing plates, and adapted to adjust the standards vertically, substantially as described. 12th. In a saw mill carriage, the combination of a saw mill carriage frame having longitudinal beams provided with vertical openings, the top bearing plates or saddles having upward extending guide flanges and provided with depending flanges embracing the sides of the beams, the bottom plates provided with vertical recesses and having threaded openings below the recesses, independently movable head blocks mounted on the frame, the upper bearing plates carried by the head blocks, the lower bearing plates arranged in the vertical recesses of the bottom plates, shifting standards arranged in the openings of the beams and having their upper and lower edges journalled on said bearing plates, and screws arranged in the threaded openings of the bottom plates for adjusting the standards vertically, substantially as described. 13th. In a saw mill carriage, the combination of a saw mill carriage frame provided with bearings, an axle journalled in the bearings and provided adjacent to the inner ends thereof with threaded portions, and the interiorly threaded clamping collars arranged on the threaded portions of the axle, substantially as described. 14th. In a saw mill carriage, the combination of a saw mill carriage frame provided with bearings, an axle arranged in the bearings and provided adjacent to the inner ends thereof with threaded portions, and the interiorly threaded collars arranged on the threaded portions of the axle, and composed of two separable sections detachably connected at their ends and thereby clamped on the axle, substantially as described. 15th. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame rigidly mounted on the axles, head blocks mounted on the frame and having a limited movement transversely and independently thereof, the oppositely inclined connecting rods having their outer ends hinged to the sides of the frame and composed of inner and outer sections adjustably connected, and means for movably the inner ends of the rods with the head blocks, substantially as described. 16th. In a saw mill carriage, the combination with axles and wheels, of a saw mill carriage frame rigidly mounted on the axles, head blocks mounted on the frame and having a limited movement transversely and independently thereof, and the oppositely inclined connecting rods having their outer ends hinged to the sides of the frame and movably connected at their inner ends with the head blocks, substantially as described.

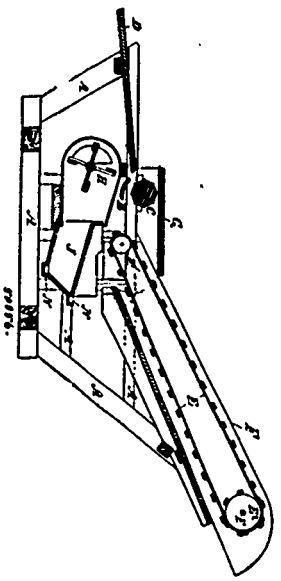
No. 50,855. Hat Pin. (*Epingle pour chapeau.*)



George Covell Lawrence, New York, State of New York, U.S.A., 17th December, 1895; 6 years.

Claim.—1st. A hat pin, provided with a coil adjacent to the end thereof, opposite the point, substantially as shown and described. 2nd. A hat pin, provided with a head and a coil adjacent thereto, substantially as shown and described. 3rd. A hat pin as A, provided with a head as B, and a coil as C, formed the rein, substantially as shown and described.

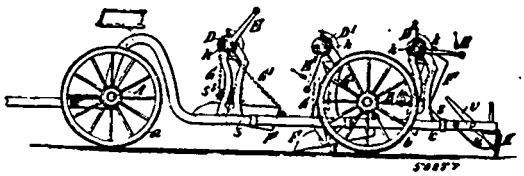
No. 50,856. Threshing Machine. (*Machine à battre.*)



John D. Glen, Dalhousie Station, Quebec, Canada, 17th December, 1895; 6 years.

Claim.—1st. A thrashing machine having in combination with the concave B, cylinder C, feed board D, and cover G, the endless apron straw carrier E, inclining upwardly from the concave, the fan H, located below and forwardly of the concave, the separator J, opening into the fan casing, and a shoe with sieves within the separator, oscillated by an L-shaped arm P, fulcrumed to the main frame, one end pivoted to the shoe and the other to a pitman K, having a wrist pin connection with a pulley E, on the upper shaft of the endless apron, and a belt M, driving said pulley from the cylinder shaft, all substantially as set forth.

No. 50,857. Scraper. (*Grattoir.*)



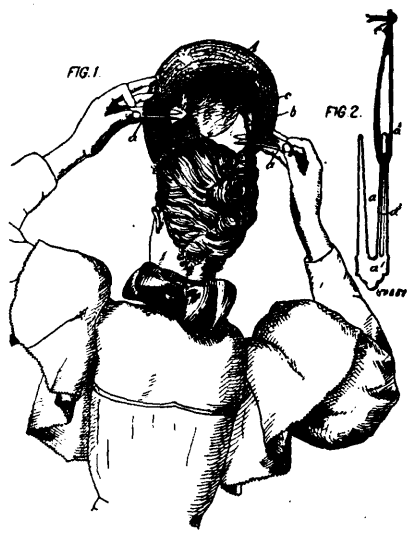
John David Libey, Luna, Indiana, U.S.A., 17th December, 1895; 6 years.

Claim.—1st. A scraper, supported on wheels, and provided with a movable link constituting an adjustable fulcrum, a fixed rear fulcrum for the scraper and hooks attached to the scraper, for engaging the same, mechanism for raising, lowering and tilting the scraper, and a supporting frame supported below the axles, as herein specified. 2nd. In a scraper, the combination of a wheel-supported frame provided with standards, a scraper pivotally connected with the frame, and a double windlass formed of two parts constructed for joint or separate action and constructed to raise the front or rear of the scraper, and a scraper-supporting frame suspended below the axles, substantially as specified. 3rd. In a scraper, the combination, of the wheel-supported frame C provided with the standards c, c^1, the shaft D journalled in the standards, the scraper F, and links s connecting the same with the frame C, the loose collar f, and means for connecting the collar with the shaft D, the chain G^1, connecting the collar f, and the rear end of the scraper, and the chain G, connecting the front of the scraper with the shaft D, substantially as specified. 4th. The combination, with the frame C provided with adjustable scrapers F, of the hinged levelling board H, and lever b for operating the same, substantially as specified.

No. 50,858. Hat Securer. (*Attache pour chapeau.*)

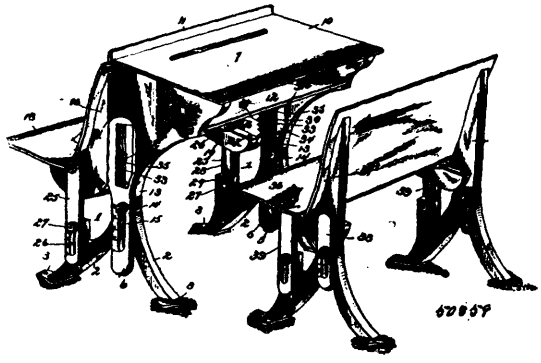
Herman Astrich, Harrisburg, Pennsylvania, U.S.A., 17th December, 1895; 6 years.

Claim.—A hat securer, comprising a solid head, and a plurality of prongs extending therefrom, one of the prongs having a slot ex-



tending longitudinally thereof, the slot being wholly outside the head, substantially as described.

No. 50,859. School Desk and Seat.
(*Pupitre et siège d'école.*)



James J. Baskerville, Duluth, Minnesota, U.S.A., 17th December, 1895; 6 years.

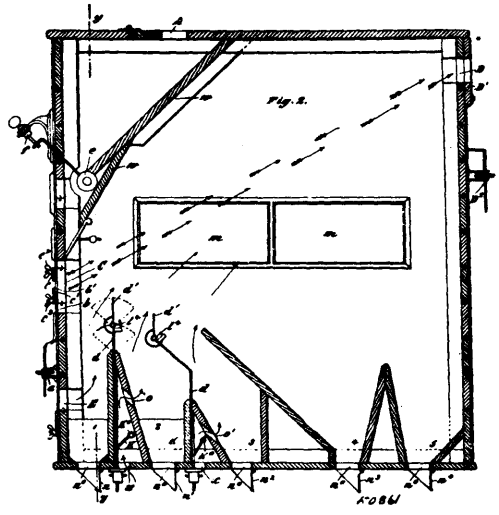
Claim.—1st. In a school desk, the combination with fixed supports or standards, of a desk and a seat mounted for vertical adjustment upon the supports or standards and provided with independent locking devices to secure them in their adjusted positions, and interlocking connections between the seat and desk for providing mutual supports between said parts, substantially as specified. 2nd. The combination, with fixed supports or standards, of a seat and a desk mounted for independent vertical adjustment upon the supports or standards and provided with means for locking them in their adjusted positions, interlocking faces carried respectively by the seat and desk, and means for holding said faces in engagement to secure mutual support of the parts, substantially as specified. 3rd. The combination, with fixed supports or standars, of a seat and a desk provided with depending slotted arms having ribs fitting to slide in grooves in the supports or standards, bolts for securing said arms at the desired vertical adjustment, interlocking racks carried respectively by the seat and desk, and bolts engaging contiguous members of the seat and desk to hold said racks in engagement, substantially as specified. 4th. The combination, with fixed supports or standards, of a desk having depending side arms mounted for vertical adjustment upon the supports or standards, bolts engaging vertical slots in said arms to secure them at the desired adjustment, a seat having back uprights provided with depending slotted arms mounted for vertical adjustment upon the supports or standards, bolts for engaging the slots in said side arms to secure the same at the desired vertical adjustment, racks carried respectively by the depending arms of the desk, and the back uprights of the seat and adapted to interlock to provide mutual support for the desk and seat, and bolts secured in the back uprights extending through vertical slots in the side arms of the desk, and fitted with nuts, said nuts being accessible through openings formed in the side arms contiguous to the slots through which said bolts project, substantially as specified.

No. 50,860. Water Closet. (*Cabinet d'aisance,*)

Henry Benjamin, Dunedin, New Zealand, and Charles William Anderson, Hull, England, 17th December, 1895; 6 years.

Claim.—In any closet, the combination of the seat of such closet, with a sheet or a number of sheets formed into a pad having a centre hole and means of securing to the said closet seat the said pad being formed of detachable sheets capable of being easily removed as required, substantially as and for the purposes described and explained herein.

No. 50,861. Machine for Cleaning and Sorting Grain, etc. (*Machine pour nettoyer et trier le grain, etc.*)



August Schnetzer, Budapest, Hungary, Austrian Hungary, 17th December, 1895; 6 years.

Claim.—1st. In a machine for sorting and cleaning grain and the like, constructed with an exhaust outlet D at one end, and an inlet aperture C at the other end whereby an induced current is caused through the casing, the combinaton of the slide *b* covering the inlet C, and adjusting device *a* moving said slide up or down to vary the position of the inlet, the cut-off slides *c*, c^1 to regulate its area, a series of pockets 1, 2, 3, in which the material is delivered in different grades, vertical slides *d* in the walls of the pockets to regulate the height of said walls, and a second system of air inlets *o*, o^1, etc., at the lower part whereby ascending air currents are applied to the descending materials and the lighter particles therein delivered to the main current, as explained. 2nd. In a machine for sorting and cleaning grain and the like having a casing with an exhaust opening at one end and an adjustable air inlet at the other, the combination of the receiving pockets 1, 2, 3, vertical slides *d*, *d* to vary the height of the separating walls thereof and horizontally adjustable plates d^1, d^1, at top of said slides *d* to vary the horizontal position of the catching edges of the separating walls, as explained. 3rd. A machine for sorting and cleaning grain and the like, constructed with an exhaust aperture at one end and an adjustable air inlet at the opposite end whereby air currents are passed through the machine in approximately horizontal direction, a series of pockets or receptacles at bottom in which the material is delivered in sorted grades, partitions between said receptacles having vertical slides to vary their height, terminating at top in hinged plates, provided with means for securing them at an angle to which they may be deflected, thus enabling the catching edges of the several partitions of the receptacles to be adjusted in horizontal and vertical planes, as set forth. 4th. A machine for sorting and cleaning grain or milling products, constructed with an air inlet at one end, an air outlet at the other end, a series of compartments or channels for receiving the material treated in different grades, and vertically movable slides *d* on the partitions of the compartments or channels, with deflectable upper portions d^1 adapted to be fixed at the desired angle by means of guides or lips 1^2, and thumb nuts 1^3, for the purpose of enabling the catching edge of the several partitions to be adjusted both horizontally and vertically, and the auxiliary air currents to be regulated, substantially as described.

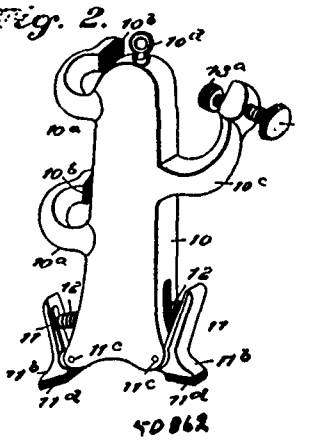
No. 50,862. Door Check. (*Arrête-porte.*)

Thomas Barnes, Rawlins, Wyoming, U.S.A., 17th December, 1895; 6 years.

Claim.—1st. In a door check, the combination with a body attachable to a door, of oppositely spring-pressed dogs, adapted to contact with the floor and hold said door against movement in either direction, substantially as described. 2nd. A door check, comprising a body portion adapted to be removably attached to the free edge of a door, and oppositely movable floor-engaging devices carried by said body portion, and adapted to engage the floor at opposite sides

of the door, substantially as described. 3rd. In a door check, the combination with a body recessed on opposite edges near its lower

Fig. 2.



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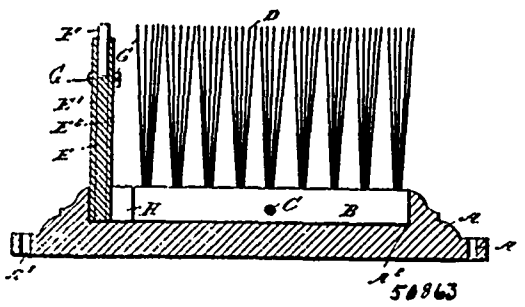
end and spring-pressed dogs having ears pivoted in said recesses, of arms on one edge of the body, having their free ends extended in the same direction, an arm on the opposite edge of the body intermediate of the other arms, and a pressure screw on the intermediate arm, adapted for projection toward or from the pair of arms, substantially as described. 4th. In a door check, the combination with a body recessed near its lower end and on opposite edges and having two spaced arms above one of said recesses, and a single arm above the other recess, the single arm being intermediate of the pair of arms, of two dogs each having a lateral foot portion, and an ear above said foot portion oppositely projected therefrom, the ears being pivoted in the recesses of the body, and springs between the upright members of the dogs and adapted to normally depress the outer edges of the foot portions of said dogs, substantially as described.

No. 50,863. Foot Brush. (*Brosse à chaussures.*)

Fig 1.

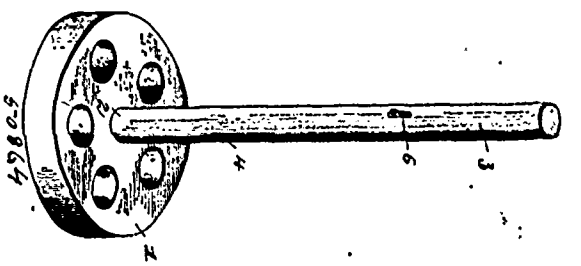


50863

John Mellor, Aspen, Colorado, U.S.A., 17th December, 1895; 6 years.

Claim.—1st. In a foot brush having a head, bristles secured to the head and arising vertically therefrom, a clip arising vertically from one end of the head, and a flexible scraper secured to the clip and held thereby, the operating edge of the scraper being commensurate with the upper ends of the bristles, substantially as described 2nd. A foot brush, consisting of a head having its upper surface formed with a cavity depression, a series of bristles secured in a portion of the cavity and projecting upwardly therefrom, a clip secured in the remaining portion of the cavity and arising vertically from the head, and a flexible rubber scraper secured to the upper end of the clip and capable of vertical adjustment between the parts thereof, the upper end of the scraper being commensurate with the height of the bristles, substantially as described. 3rd. An improved foot brush, consisting of a base having a recess in its upper surface, a brush having flat steel bristles, the back of the brush being of substantially the same height and width as the recess of the base, but of less length than the said recess and secured therein, a clip comprising two spaced plates and clamping screws or bolts, the lower ends of the plates being secured in that portion of the recess of the base not filled by the brush back and spaced from the bristles of the brush, and a rubber scraper adjustably secured between the upper ends of the clip plates with its upper edge projecting above the same and flush with the tops of the bristles of the brush, substantially as described.

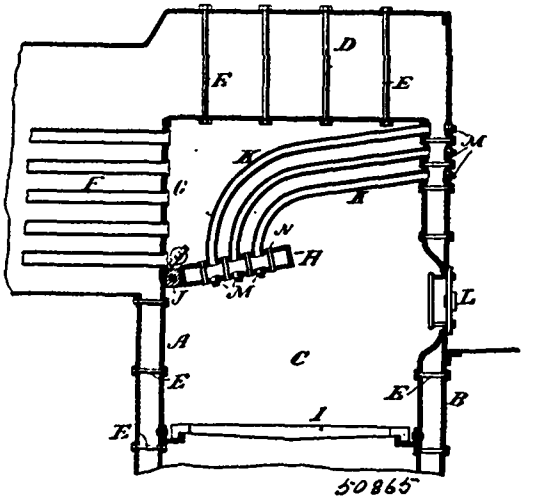
No. 50,864. Churn Dasher. (*Cylindre de baratte.*)



Jacob Joseph Anton Morath, Clayton, Missouri, U.S.A., 18th December, 1895; 6 years.

Claim.—1st. The combination of a dasher having a tubular staff provided at its lower end approximately in the plane of the dasher with a valve-seat, a valve arranged in operative relation with the seat and provided with a stem extending upwardly from the valve through the bore of the staff, and a visible indicator carried by the upper end of the valve-stem within reach of the operator without withdrawing the dasher from the churn, said indicator being at such a distance from the dasher as to be permanently exposed above the contents of the churn, substantially as specified. 2nd. The combination of a dasher having a longitudinal bore terminating at its lower end approximately in the plane of the dasher in a valve-seat and terminating at its upper end in lateral aligned slots, a valve arranged in operative relation with said seat and having a stem extending upwardly through said bore of the staff, and a transverse pin secured in the upper extremity of the stem and extending at its ends into said lateral slots whereby the pin forms a visible indicator to show the position of the valve, and an exposed means for unseating the valve when the operation of the latter is impeded by accumulations in the valve-seat, and whereby the contact of the extremities of the pin with the lower ends of the aligned slots limit the downward movement of the valve, substantially as specified.

No. 50,865. Boiler. (*Chaudière.*)



50865

Joseph J. Bohner, Brooklyn, New York, U.S.A., 18th December, 1895; 6 years.

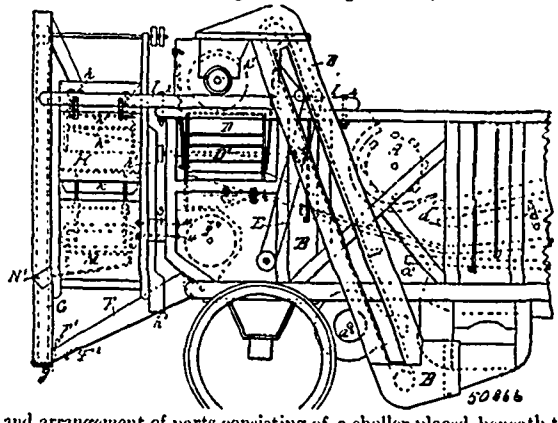
Claim.—The combination, with a boiler having a transverse water heating and circulating water table opening into the water legs, projecting forward from the water back over the grate and terminating some distance from the water front, of a supplementary gang of water heating and circulating tubes connected with the top of said water table, rising therefrom to or near the crown sheet, and extending thence forward into connection with the upper part of the water-front, substantially as set forth.

No. 50,866. Machine for Threshing, Shelling and Dressing Clover. (*Machine à battre, égrener et préparer le trèfle.*)

John Greenslade, Christchurch, Canterbury, New Zealand, 18th December, 1895; 6 years.

Claim.—1st. A combined threshing and clover shelling and dressing machine, consisting of the combination and arrangement of parts, as and for the purposes herein described. 2nd. In a threshing and clover shelling and dressing machine, the combination and arrangement of parts consisting of a sheller placed above the framing of the machine behind the threshing drum so that shelled material may fall directly into the first dressing apparatus placed

beneath it, as and for the purposes herein described. 3rd. In a threshing and clover shelling and dressing machine, the combination



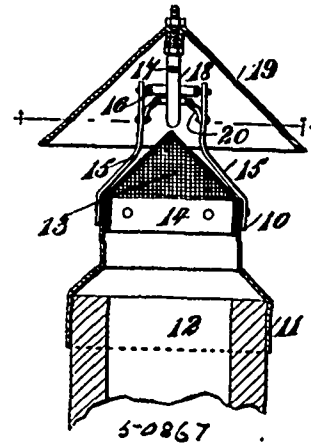
and arrangement of parts consisting of a sheller placed beneath the framing and near the centre of the machine, so that its intake is in position to directly receive the material discharged from the caving riddles and the outlet in position to discharge into the hopper of the elevator, as and for the purposes herein described. 4th. A sheller or awner having detachable segments composed wholly or partially of woven wire or similar reticular material, as and for the purposes herein described. 5th. The combination of a sheller having volute or diagonal ribs in its inner surface with a threshing beater as ordinarily constructed, the ribs on the sheller running in an opposite direction to the ribs on the bars of the beater, as and for the purposes herein described. 6th. The combination of a sheller casing having removable ribs on its inner surface in a line with the axis of the beater spindle, with beater bars having diagonal ribs, as and for the purposes herein described. 7th. A sheller casing with ribs attached by bolts to its inner surface so as to be readily removed when desired to convert the sheller into an awner, as and for the purposes herein described. 8th. The employment in a sheller of removable strips of metal or other material which may be covered with woven wire, and arranged to fill the space between the ribs of the sheller casing, so as to adapt it for use as an awner, as and for the purposes herein described. 9th. The combination, with a sheller casing composed wholly or partially of woven wire of beater bars having diagonal ribs, as and for the purposes herein described. 10th. A disc Y adjustable upon and revolving with the beater spindle Y^1 of a sheller, as and for the purposes herein described. 11th. The combination, with a threshing and clover shelling and dressing machine, of a second or finishing dressing apparatus attached to the rear of the machine so as to be removable if desired, as and for the purposes herein described. 12th. In a threshing and clover shelling and dressing machine, the employment in the dressing apparatus of a conical screen or reticular material, as and for the purposes herein described. 13th. The combination, with the riddle of a seed dressing apparatus of an exhaust fan placed approximately at right angles or parallel therewith, within a dust box attached to the sides of the apparatus, as and for the purposes herein described. 14th. The combination with the threshing-drum spindle of a threshing drum spindle of a threshing and clover shelling and dressing machine of an exhaust fan fixed thereon connected by a pipe or tube with a dust box receiving debris from a dressing apparatus as and for the purposes herein described. 15th. The combination and arrangement of parts constituting the finishing seed dressing apparatus as and for the purpose herein described. 16th. The combination and arrangement of parts herein described whereby the seed after leaving the last riddle of the dressing apparatus falls into a screw conveyor by which it may be either discharged from the machine or passed into a revolving screen as and for the purposes herein described. 17th. The combination with the seed dressing apparatus of shutters arranged to serve the purpose of closing a discharge opening from the machine and an outlet in the chute leading to an elevator conducting the seed to be redressed, alternately as desired as and for the purposes herein described. 18th. The combination with a seed dressing riddle of a gridiron cleaner arranged by springs or their equivalent to press lightly against the underside of such riddle as and for the purposes herein described. 19th. The combination with the finishing dressing apparatus of a threshing and clover shelling and dressing machine of a shute such as (F), Figs. 1, 2 & 4, connecting the discharge opening from the first dresser with a hopper of an elevator attached to the finishing dressing apparatus as and for the purposes herein described. 20th. In a threshing and clover shelling and dressing machine the employment of a closed concave for the purpose of partially shelling the seed as and for the purposee herein described.

No. 50,867. Chimney Cowl or Ventilator.

(*Couvercle et ventilateur pour cheminées.*)

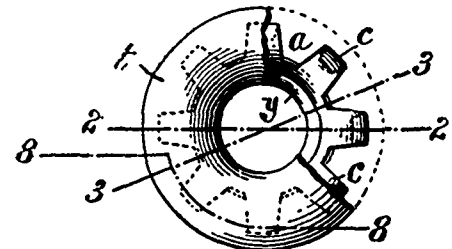
Milo Horace Ingalls, North Granville, and Truman E. Ingalls, Troy, both of New York, U.S.A., 18th December, 1895; 6 years.

Claim – 1st. In a chimney cowl, a flue section adapted for attachment to a chimney or like object, and a cap universally supported



above the said flue section, as and for the purpose set forth. 2nd. In a chimney cowl or ventilator, a flue section adapted for attachment to a support, arms projected therefrom, and a cap universally supported upon the said arms over the flue section, as and for the purpose set forth. 3rd. In a chimney cowl or ventilator, a flue section, arms extending upward therefrom a cap universally mounted upon the said arms over the flue section, and a guard limiting the inclined position of the said cap, substantially as and for the purpose specified. 4th. In a chimney cowl or ventilator, the combination with a flue section, arms projected upward therefrom, a ring pivoted between the said arms, and a cross bar pivotally attached to the said ring, of a cap located above the cross bar, a guide rod secured to the said cross bar and to the central portion of the cap, the said guide rod extending downward through the pivoted ring, and a second and smaller ring located below the pivoted ring, being firmly attached to the said as and for the purpose set forth.

No. 50,868. Eyelet, Lacing Stud, etc. (*Oeillet, etc*)



Albert Latham and James William Nourbourn, both of Springfield, Massachusetts, U.S.A., 18th December, 1895; 6 years.

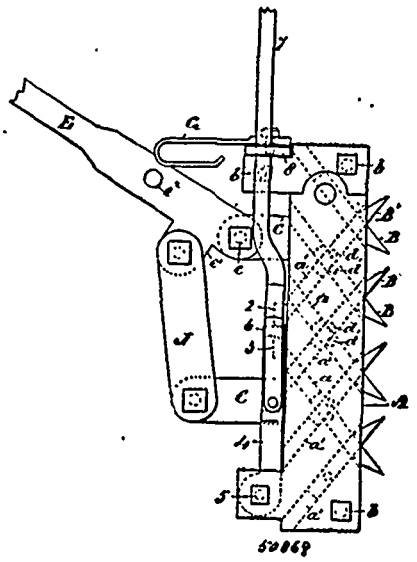
Claim.—1st. An eyelet or analagous fastening having its metallic body constructed at its upper portion with a series of separated marginal members which have besides their radial extensions, also hooked or curling formations, whereby the applied plastic covering material in addition to having a multiplicity of separate engagements or anchorages between and surrounding the said members, each as a whole, also is embedded within each thereof, substantially as described. 2nd. An eyelet consisting of a body having at its top a series of separate radially extending outwardly tapered members which are overturned and inwardly deflected leaving, between them, downwardly opening and upwardly convergent spaces and the plastic material covering the top of the eyelet and surrounding and engaged with the said members, substantially as described.

No. 50,869. Saw Mill Dog. (*Renard de scierie.*)

William Gowen, Wausau, Wisconsin, U.S.A., 18th December, 1895; 6 years.

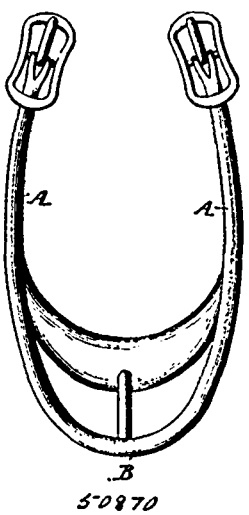
Claim.—1st. The combination of the casing A, A^1, having a central opening provided with oppositely intersecting grooves a, a^1, respectively, dogs B, B^1, sliding in said grooves, dog bars C, C^1, within the casing and interveningly connected loosely to the respective dogs, and a hand lever E, and link J, connecting the dog bars, whereby one set of dogs is projected diagonal to the other set by the dog bars and one lever, as set forth. 2nd. A saw mill dog, comprising a casing A, A^1, intersectingly grooved, dogs B, B^1, therein, dog bars C, C^1, reciprocating said dogs, and a lever E, and link J,

pivotally connecting said dog bars, said lever operating both dog bars successively, to project the dogs, as set forth. 3rd. The com-



bination with the casing A, A^1, dogs B, B^1, and dog bars C, C^1, having lugs 2 and 3 of the lever 7, and arm 4, having a lug 5, intervening said lugs, to limit the projection of the dogs, as set forth. 4th. The dog bars C, C^1, provided with lugs 2, and 3, and a lever 7, operating a lug 6, intervening said lugs, to limit the reciprocation of the dog bars, for the purpose set forth. 5th. A saw mill dog, comprising the casing A, A^1, having diagonal groove a, a^1, dogs B, B^1, sliding therein, dog bars C, C^1, connected thereto and having lugs 2 and 3, lever E, and link J, pivotally connecting both dog bars, and a lever 7, operating to limit the reciprocation of the dog bars by a lug 6, intervening said lugs 2 and 3, as set forth. 6th. A saw mill dog, having two intersecting sets of dogs B, B^1, and dog bars C, C^1, connecting said dogs to an operating hand lever E, to project one set of dogs and then the other set, and retract the same by a reverse motion of the lever, as set forth. 7th. A saw mill dog comprising a casing A, A^1, in one piece provided with a central opening, the opposite faces diagonally grooved, dogs B, B^1, in said grooves, and dog bars C, C^1, in said opening respectively connecting each set of dogs, and a lever E, connecting said dog bars to operate the dogs, as set forth.

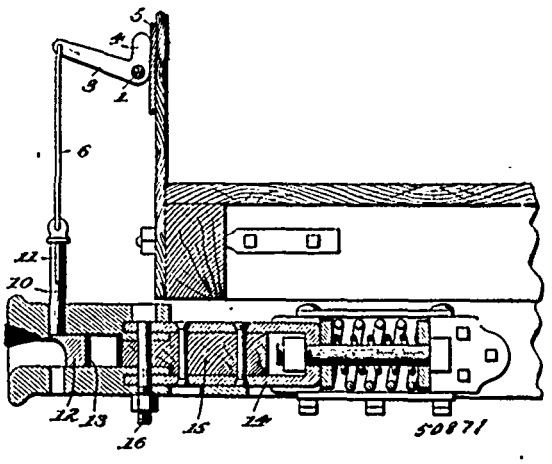
No. 50,870. Crupper (*Croupière*)



Henry Cave, Rangiord, Canterbury, New Zealand, 18th December, 1895; 6 years.

Claim.—A projecting rest or support for the animals' tail formed on or attached to the crupper, substantially as and for the purposes herein described, and illustrated in the annexed drawing.

No. 50,871. Car Coupler. (*Attelage de chars.*)

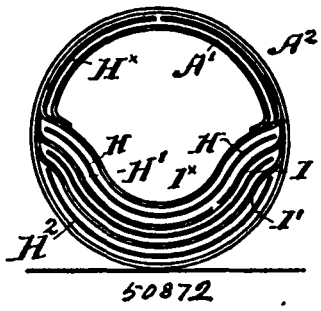


George Washington Clayton, Lebanon, Iowa, U.S.A., 18th December, 1895; 6 years.

Claim.—1st. The combination, in a car coupling device of the crank handle, as 2, and the switchman's indicator, provided with means for engaging the said crank handle and positively locking and retaining the said indicator in a raised and outwardly projecting position, substantially as described. 2nd. The switchman's indicator, as 7, pivoted to the outer wall of the car body and adapted in its lowered position to serve as a step and in its raised position to engage the crank handle of the operating device, in substance as described. 3rd. The combination, in a car coupling of a draw bar, a draw head, a coupling pin, a rod provided with a crank handle for raising and lowering the pin, a switchman's indicator having an arm to engage the crank handle and lock it in a raised position, connecting means between the pin and the rod consisting of the arm 3 having the projection 4 engaging the plate 5, and the rod 6, substantially as described. 4th. The combination, in a car coupling of the following elements to wit: the draw head 9 having a door and spring, a strap 14 bent upon itself and joined to the coupling head by bolt 16, the filling piece 15 snugly fitting the opening in the rear of the coupling head, and the tail bolt adapted to be withdrawn as shown, in substance as set forth. 5th. The car coupling composed of the tail bolt, the strap 14, the filling piece 15, the coupling head 9 having the door and spring adapted to support the coupling pin, and the bolt 16 passing through both the strap and coupling head and detachably securing one to the other, whereby a broken coupling head can be easily and cheaply replaced, substantially as described. 6th. The car coupling of the tail bolt, the strap 14, the filling piece 15, the coupling head 9, the bolt 16, and the coupling pin having the ribs 9, as shown adapted to the opening 9^1, 9^1, in the coupling head, substantially as described. 7th. The coupling consisting of the casting 9, having a longitudinal opening from end to end, a strap 14, bent upon itself as shown, the filling piece 15, located between the arms of the strap and its forward end fitting the longitudinal opening in casting 9, the bolt 16, passing through the casting, strap and filling piece, and the tail bolt, in substance as set forth. 8th. The combination in a car coupling of the rod 1, having the crank handles 2, 2, the arm 3, having the projection 4, the rod 6, the coupling pin 10, the draw head 9, the strap 14, the filling piece 15, and the bolt detachably securing the draw head to the strap, substantially as described. 9th. The combination in a car coupling device of the draw bar strap, bent to a U-shape as shown, the coupling head, detachably secured to the strap by a bolt, the coupling pin having the ribs, the rod 6, the arm 3, the rod 1, having the crank handle 2, and the switchman's indicator having the arm 8, to engage the handle to hold the pin in a raised position, substantially as described. 10th. In a car coupling device the means for raising and lowering the pin consisting of the rod 6, the arm 3, having the projection 4, which in its raised position engages the plate 5, the journalled rod 1, and the crank handles, and the switchman's device engaging one of the crank handles to hold it in a raised position, substantially as described, whereby by reason of the projection 4, engaging the plate 5, the coupling pin cannot be entirely withdrawn. 11th. The coupling device consisting of a draw bar strap, U-shaped as shown, a coupling head joined to the strap by a bolt whereby the head can be easily renewed when broken, a coupling pin, a rod having crank handles, means for locking the same in a raised position, an arm as 3, having the projection 4, engaging in its highest position the plate 5, and the rod 6, substantially as described. 12th. In a car coupling the combination of the strap 14, the coupling head 9, having the pivoted door 12, and spring 13, adapted to be inserted in position through the rear opening of the head, the filling piece 15, snugly fitting the said opening, and the bolt 16, substantially as described.

No. 50,872. Inflatable Wheel Tire.

(*Bandage pneumatique de roues.*)



Anthony Pulbrook, West Kensington, England, 18th December, 1895; 6 years.

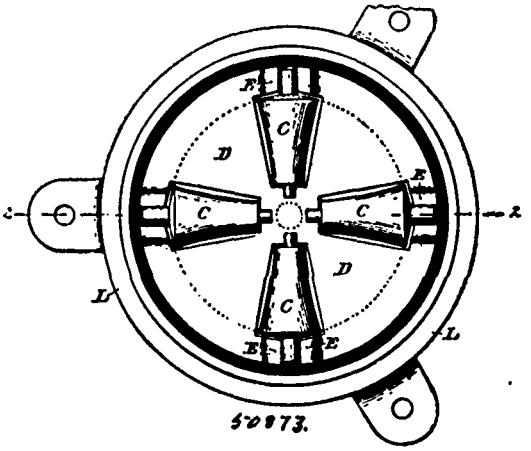
Claim.—1st. An inflatable wheel tire composed of tubes of india-rubber or other suitable elastic material placed inside one another forming laminations, with air spaces between them, the pressure of the compressed air introduced into the innermost tube being transmitted to the air in the said air spaces, substantially as described with reference to the figures 1, 2 and 3 of the drawings, and for the purpose specified. 2nd. An inflatable wheel tire composed of tubes of india-rubber or other suitable elastic material placed inside one another, forming laminations with air spaces between them, having flexible material which is more or less non-puncturable, or more or less difficult to puncture, interposed in the air spaces, or in some of them, between the said laminations, substantially as described with reference to figures 1, 2 and 3 of the drawings, and for the purpose specified. 3rd. In inflatable wheel tires, the use of more or less non-puncturable material, or material difficult to puncture, enclosed in separate air tight chambers composed of air spaces between india-rubber and other elastic and air tight material cemented to the inflatable tube or the outer covering thereof, substantially as described with reference to figures 6, 7 and 8 of the drawings. 4th. A pneumatic or inflatable wheel tire constructed with separate air-tight chambers composed of stretchable air tight material, substantially as described with reference to figures 1, 2, 3, 4, 5, 6, 7 and 9 of the drawings. 5th. A cover for pneumatic or inflatable wheel tire constructed with separate air tight chambers composed of stretchable air tight material, substantially as described with reference to figure 8 of the drawings. 6th. In pneumatic tires, the use of more or less unpuncturable material, or material difficult to puncture, enclosed in separate air tight chambers, substantially as described with reference to figures 1 to 9 of the drawings. 7th. The use of the skins of fish or other water animals as substances for preventing the puncturing of the inflatable tubes of pneumatic tires, substantially as described. 8th. The use of the skins of fish or other water animals as protecting envelopes or covers for the inflatable tubes of pneumatic tires, substantially as described. 9th. A reservoir or inner tube for pneumatic tires, consisting of a flat tube or bag arranged and applied within the outer or ordinary inflatable tube so as to stand when not inflated in a plane transverse to the axis of the wheel, substantially as described with reference to figures 10, 11 and 12 of the drawings. 10th. The method of connecting together the ends of the tubes of pneumatic tires, by closing such ends air tight and inserting and securing one in the other substantially as described with reference to figures 13 and 14 of the drawings. 11th. An inflatable tire having air tight ends, one end having the projection and the other the socket to receive the same, the said projection and socket having a circumferential groove or corrugation, substantially as described. 12th. An inflatable tyre having air-tight ends with a projection on one end adapted to fit into a socket on the other end, the said projection and socket having circumferential locking portions engaging each other, substantially as described. 13th. The use of the skins of fishes having a thorny, spiked or rough surface, on the outside or tread of wheel tyres for the purpose of preventing slipping or skidding thereon, substantially as described. 14th. In an inflatable wheel tyre, the use of leather treated with balata, as a material for the inflatable tubes or for the coverings therefor, substantially as described. 15th. Protecting the pneumatic or inflatable tube of a tyre from puncture by subjecting it, or other protecting material outside such tube to equal or nearly equal pressure of a compressible fluid on both sides, substantially as described.

No. 50,873. Roller Thrust Bearing.

(*Butée à rouleaux.*)

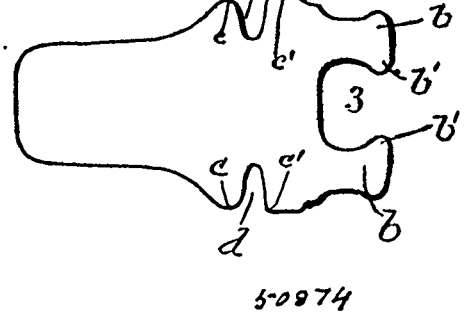
John Rowland Burdick, New York, State of New York, U.S.A., 18th December, 1895; 6 years.

Claim.—The combination, with the bearing head of an axle or shaft, curved substantially on a sphere having its centre in the axis



of the shaft or axle, of a nest of bearing rollers radiating substantially from said axis and curved longitudinally on the same sphere as the bearing head, substantially as set forth.

No. 50,874. Sap Spout. (*Gargouille à sève.*)



James Davidson, Montreal, Quebec, Canada, 18th December, 1895; 6 years.

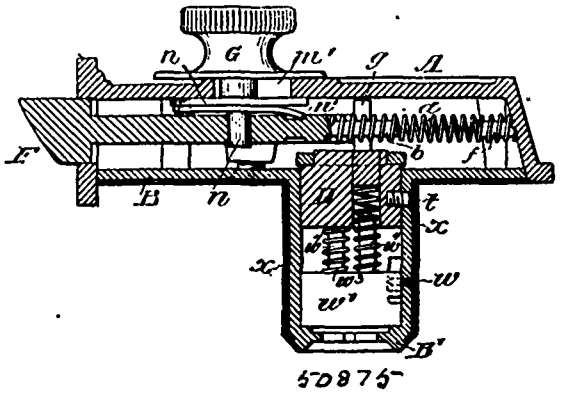
Claim.—1st. As a new article of manufacture, a sap spout formed from a sheet metal blank turned up into tubular form with the outer side edges turned toward and adjacent to but disconnected from each other, substantially as described. 2nd. As a new article of manufacture, a sap spout formed from a sheet metal blank turned up into tubular form but with its edges separated by an open slit, as and for the purpose set forth. 3rd. As a new article of manufacture, a sap spout having rearward claw-like extensions for the purpose set forth. 4th. As a new article of manufacture, a sap spout having its rear portion cut away as at 3 and rearward extensions on either side of the opening, for the purpose set forth. 5th. As a new article of manufacture, a sap spout formed from a sheet metal blank turned up into tubular form with the outer side edges turned toward and adjacent to but disconnected from each other and having an open space 3, in the rear portion, with claw-like extensions on either side, substantially as shown and described.

No. 50,875. Latch Lock. (*Loquet-serrure.*)

Frank Soley, Philadelphia, Pennsylvania, U.S.A., 18th December, 1895; 6 years.

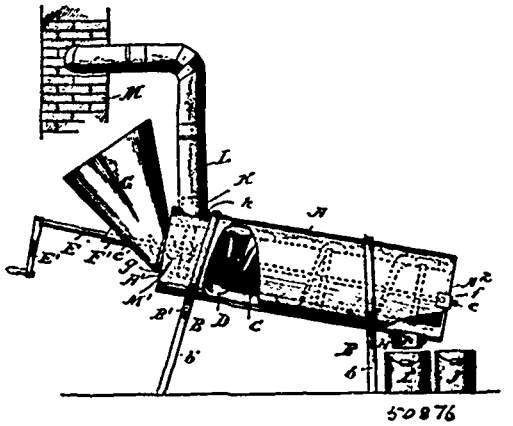
Claim.—1st. The combination of the lock casing and its tumbler carrier, with a sliding latch bolt having at the inner end upper and lower legs with oppositely projecting lugs whereby the bolt can be reversed, substantially as specified. 2nd. The combination in a latch lock, of the casing with the sliding latch bolt, the sliding knob engaging said bolt and free to turn, the locking plate carried by said knob, and a lug on the inside of the casing for engaging with said plate when the same is turned out of line with the latch bolt stem, substantially as specified. 3rd. The combination in a latch lock, of the casing, the sliding latch bolt, the sliding knob engaging with said bolt and free to turn, the locking plate carried by said knob, and lugs within the casing, one of said lugs engaging with the lower portion of the locking plate, and the other with the upper portion of the same when said plate is turned out of line with the latch bolt stem, substantially as specified. 4th. The combination in a latch lock, of the casing, the sliding latch bolt, the sliding knob engaging

with said bolt and free to turn, the locking plate carried by said knob and adapted to engage with one or more lugs on the inside of



the casing when turned out of line with the latch bolt stem, and a spring carried by said locking plate and serving by engagement with the latch bolt stem to prevent accidental displacement of the locking plate when the same is adjusted so as to retain the bolt in the retracted position, substantially as specified. 5th. The combination of the tumbler carrier and its tumblers, the tubular casing containing said carrier, a segmental fence plate contained in a slot in said casing and projecting into the carrier so as to engage with the tumbler, and an external tube for holding said fence plate in the slot of the casing, substantially as specified. 6th. The combination of the tumbler carrier, the tumblers, the slotted casing and the external tube slipped onto the casing and retained in position thereon, by having its front end bent into a recess in said casing, substantially as specified. 7th. The combination of the latch operating arm, with the tumbler carrier having a reduced portion adapted to an opening in the hub of the arm, and rivetted down on the inner face of said hub, substantially as specified. 8th. The combination of the tumbler carrier and its tumblers, the tubular casing containing said carrier, and a fence plate let into a slot in said casing, substantially as specified.

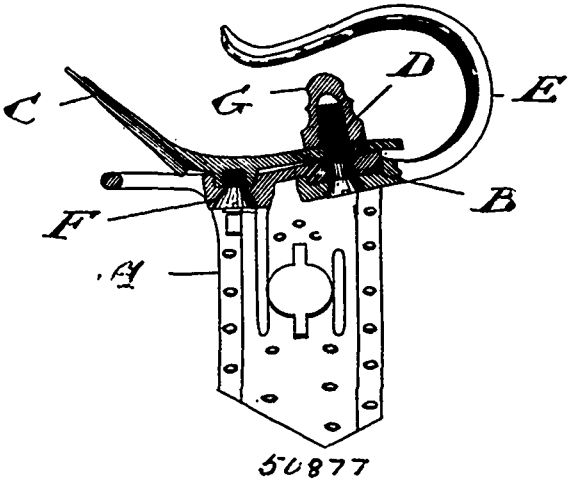
No. 50,876. Ash Sifter. (*Crible à cendre.*)



Fillmore A. Pearson, Rutland, Vermont, U.S.A., 18th December, 1895; 6 years.

Claim.—1st. An improved ash sifter, comprising the inclined shell or casing having the open lower end and the opening *h*, legs or supports B, B, the inclined rotary screen mounted in the casing and provided with the worm D, and the longitudinal shaft E, having the projecting operating end e^1, and the hopper G, provided with the neck or extension *g*, entering the upper end of the screen, substantially as set forth. 2nd. An improved ash sifter, comprising the inclined casing or shell having the open lower end and the closed upper end and provided with the opening *k*, the inclined rotary screen mounted in the casing and provided with the spiral worm D, and the longitudinal operating shaft, the hopper entering the front end of the casing and the upper end of the rotary screen, and the dust pipe L, connected with the opening *k*, and extending to a chimney or other suitable point, substantially as set forth. 3rd. The herein described ash sifter, consisting of the inclined casing or shell A, having the open lower end and the closed upper end and provided with the cross piece F, and the openings *h* and *k*, from which respectively extend the pipes H and K, the leg pieces B, B, formed in a single piece comprising the central portion *b*, and the diverg ent legs b^1, b^1, and provided with the securing rod or bolt B^1, the inclined rotary screen C, mounted in the casing and provided with the spiral worm D, and the longitudinal shaft E, having the projecting ends *e* and e^1, the hopper G, having the neck or extension *g*, entering the front end of the casing and the upper end of the screen, substantially as set forth. 4th. In an ash sifter of the class described, comprising the inclined casing or shell having an open lower end and a closed upper end, and an inclined rotary screen mounted in the casing, a dust pipe L, extending from the top of the upper closed end of the inclined casing to a chimney or other suitable point, substantially as set forth. 5th. The combination, with the casing or shell, of the leg pieces B, B, formed in one piece and comprising a central portion *b*, corresponding to and embracing the casing, divergent legs b^1, b^1, and a transverse rod or bolt passing through divergent legs at a point below the central portion, substantially as and for the purpose set forth. 6th. In an ash sifter, comprising the inclined casing or shell having an open lower end and closed upper end, the inclined rotary screen mounted in the casing and provided with a longitudinal operating shaft, and the hopper having a neck or extension entering the closed front end of the casing and the upper end of the screen, the dust pipe L, extending from the top of the upper closed end of the inclined casing to a chimney or other suitable point, substantially as set forth. 7th. An ash sifter having an inclined casing or shell provided with an open lower end, an inclined rotary screen mounted in longitudinal position within the casing and of less diameter than the latter and provided with an exteriorly-arranged spiral worm or fin occupying the space between the screen and the casing, and a hopper entering the upper end of the screen, substantially as set forth.

No. 50,877. Check Hook. (*Crochet de sellette.*)



Thomas Woodbridge, Toronto, Ontario, Canada, 18th December, 1895; 6 years.

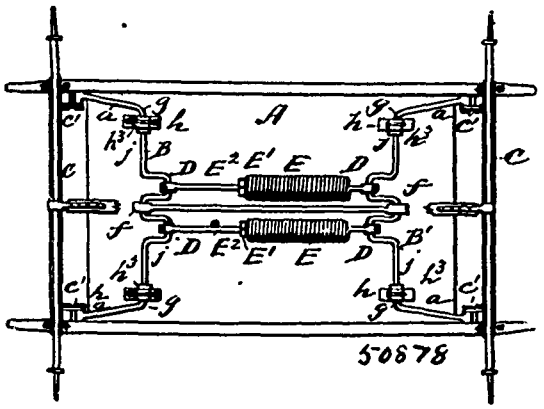
Claim.—1st. A hook having its lower portion clamped beneath the saddle tree by a bolt passed upward through the hook and saddle tree, and clamped by a nut which is extended upwardly towards the upper part of the hook to form a safety piece, substantially as and for the purpose specified. 2nd. The saddle tree A, in combination with the hook E, the bolt D, having its head countersunk in the hook B, and the nut G, extending upwardly to within a short distance of the upper part of the hook to form a safety piece, substantially as and for the purpose specified. 3rd. The saddle tree A, having a projection B, formed thereon, in combination with the hook E, notched to receive the said projection, the seat C, the bolt D, having a slotted head countersunk in the hook, and the nut G, extending upwardly to within a short distance of the upper part of the hook, to form a safety piece, substantially as and for the purpose specified.

No. 50,878. Vehicle Spring. (*Ressort de voiture.*)

Arthur Wardsworth Burdick, Fresno, California, U.S.A., 18th December, 1895; 6 years.

Claim.—1st. The vehicle spring, comprising the torsional bails or bars B, B^1, loosely connected to the running gear, and having their transverse arms formed with cranks, bearings for said arms on the under side of the vehicle body, collars on said arms adjacent to said bearings for preventing lateral play, the longitudinal helical springs E, connecting the opposite cranks of said arms, and a rigid longitudinal bar F, connecting said arms between said springs and having a fork *f*, at each end, substantially as specified. 2nd. The vehicle spring having the bails or bars B, B^1, loosely connected to the running

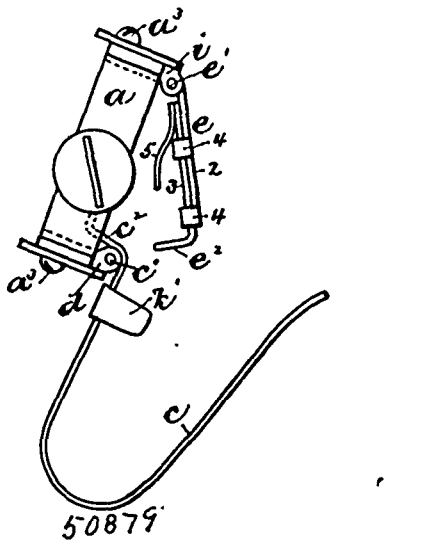
gear and to the vehicle body, and the adjustable spring connections E, E^1, E^2, between said bails or bars, and means for preventing



lateral movement of the body in said bails or bars B, B^1, and the rigid bar F, all substantially as specified.

No. 50,879. Clip for Bicycle Pedal.

(*Tenaille pour pédales de bicycles.*)

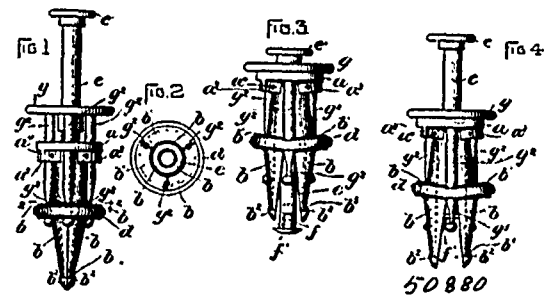


Frederick Myers, New York, State of New York, U. S. A., 19th December, 1895; 6 years.

Claim.—1st. A bicycle-pedal, a toe-clip pivoted thereto, and adapted to swing loosely thereon, said clip having an arm or extension at the rear of its pivot, and a clip-adjusting arm pivoted to the pedal and arranged to be pressed against the arm of the clip by the rider's foot, to move said clip to its operative position. 2nd. A bicycle pedal toe-clip provided with side-guides for the rider's foot, and with means for connection with the pedal. 3rd. A bicycle toe-clip provided with a transverse flexible metal strip bent upwardly at points near its ends to form side-guides. 4th. A bicycle pedal attachment comprising a hinge-member adapted to be secured to one of the side plates of the pedal, and a toe-clip pivotally connected to said plate and provided with an arm or extension at the rear of said pivotal connection. 5th. A bicycle pedal attachment comprising a hinge-member adapted to be secured to one of the side plates of the pedal, a toe-clip pivotally connected to said member, and provided with an extension at the rear of its pivot, a toe-clip adjusting arm formed to engage said extension, and a hinge-member pivotally connected to said arm and adapted to be attached to the other side plate of the pedal. 6th. A bicycle pedal attachment comprising hinge-members adapted to be secured to the side-plates of the pedal, a toe-clip pivotally connected to one member, and having an extension at the rear of its pivot, and an adjustable arm pivotally connected to the other member, and formed to engage said extension. 7th. A bicycle pedal attachment comprising hinge-members adapted to be secured to the side-plates of the pedal, a toe-clip pivotally connected to one member, and having an extension at the rear of its pivot, an arm pivotally connected to the other member and formed to engage said extension, and a spring arranged to normally force said arm out of engagement with the extension. 8th. A bicycle pedal having its journal advanced forward of its middle part, and carrying a toe-clip at the front side, the position of the journal with respect to the middle of the pedal causing a counter-balancing effect, substantially as described.

No. 50,880. Tool for Repairing Pneumatic Tyres.

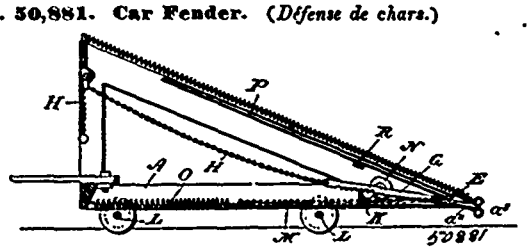
(*Outil pour réparer les bandages pneumatiques.*)



Frederick Myers, New York, State of New York, U.S.A., 19th December, 1895; 6 years.

Claim.—1st. A tire-repairing tool comprising a suitable head having a set of separable jaws together constituting a longitudinally divided tube, an expanding device on the exterior of said tube, and a plug-holding plunger longitudinally movable within the tube. 2nd. A tire-repairing tool comprising a suitable head having a set of separable jaws together constituting a longitudinally divided tube and formed with external projections, an expanding device engaged with said projections, and a plug-holding plunger within the tube. 3rd. A tire-repairing tool comprising a head having a central orifice, a series of separable jaws loosely attached to said head and constituting a longitudinally divided expansible tube or guide having a penetrating tapered end, said jaws being provided with external sectional projections, a contracting band or spring applied to said projections to normally contract the tube, and means for expanding said tube, substantially as described. 4th. A tire-repairing tool comprising a head having a central orifice, a series of separable jaws projecting downwardly from said head and constituting a longitudinally divided expansible tube or guide having a penetrating tapered end, said jaws being provided with external sectional projections, a contracting band or spring applied to said projections to normally contract the tube, and a plug-holding plunger movable within said tube or guide, and means for expanding said tube. 5th. A tire-repairing tool comprising a head having a central orifice and a series of guides, a series of separable jaws pivoted to the head and constituting a longitudinally divided expansible tube or guide having a penetrating tapered end, said jaws having external sectional projections, a contracting band applied to said projections to normally contract said tube or guide, a collar having a series of tapered or wedge-shaped pins fitted to slide in the guides and interposed between the projections on the jaws, substantially as and for the purpose specified. 6th. A tire-repairing tool comprising a suitable head having a set of separable jaws together forming an expansible tube, the said jaws tapering to bring the tube to a point and being formed with well-defined enlargements back of the points to provide shoulders to bear against the inner side of the tire, means for expanding the tube, and means for inserting the plug, substantially as described.

No. 50,881. Car Fender. (*Défense de chars.*)



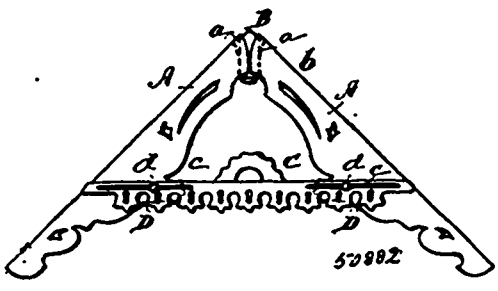
Jacob Leopold Schuman, Kingsbridge, New York, U.S.A., 19th December, 1895; 6 years.

Claim.—1st. A guard or fender for tramway cars, consisting of a truck which is triangular in form in longitudinal vertical section, the forward end of which on the upper side is cut away forming a triangular space, in which is hinged a supplemental frame being provided with a covering of wire netting or similar material, and said supplemental frame being provided near its outer end with a cross rod with which is connected centrally thereof a chain or cord which extends backward, and passes under a pulley and is connected at its inner end with a spring, substantially as shown and described. 2nd. A guard or fender for tramway cars, consisting of a truck which is triangular in form, in longitudinal vertical section, the for-

ward end of which on the upper side is cut away forming a triangular space, in which is hinged a supplemental frame, said main truck or frame and supplemental frame being provided with a covering of wire netting or similar material, and said supplemental being provided near its outer end with a cross rod with which is connected, centrally thereof, a chain or cord which extends backward and passes under the pulley and is connected at its inner end with a spring, and a sliding frame or plate connected with the bottom of the truck or main frame, the rear end of which is connected with said spring and adapted to be operated thereby, whereby when the supplemental frame is thrown upward, the sliding frame or plate will be projected forward and returned to its normal position when the supplemental frame is lowered, substantially as shown and described. 3rd. A fender or guard for tramway cars, consisting of a truck which is triangular in form in longitudinal vertical section, and the front end of which is provided with a hinged supplemental frame, said supplemental frame being also provided with an auxiliary frame which is pivotally connected therewith and extended backward and adapted to rest upon a cross bar of the main frame, whereby the supplemental frame may be raised or thrown upward, substantially as shown and described. 4th. A fender or guard for tramway cars, consisting of a truck which is triangular in form, in longitudinal vertical section, and the front end of which is provided with a hinged supplemental frame, said supplemental frame being also provided with an auxiliary frame which is pivotally connected therewith and extended backward and adapted to rest upon the cross bar of the main frame, and whereby the supplemental frame may be raised or thrown upward, said supplemental frame being also provided with a rack bar which is connected therewith and extended backward and adapted to rest on a cross plate connected with the main frame, said bar being also provided with a chain, which extends back and is adapted to be operated from the platform of the car, substantially as shown and described. 5th. A fender or guard for tramway cars, consisting of a truck which is triangular in form in longitudinal vertical section and the front end of which is provided with a hinged supplemental frame, said supplemental frame being also provided with an auxiliary frame which is pivotally connected therewith, extended backward and adapted to rest upon the cross bar of the main frame, and whereby the supplemental frame may be raised or thrown upward, said supplemental frame being also provided with a rack bar which is connected therewith, and extended backward and adaped to rest on the cross plate connected with the main frame, said bar being also provided with a chain which extends back and is adapted to be operated from the platform of the car, and said supplemental frame being also provided with a cross bar with which is connected a chain which extends backward and is connected with a spring which is secured to the rear end of the main truck or frame, said support and said chain connected with a sliding plate or frame which is adapted to be projected in front of the fender or car frame, substantially as shown and described.

No. 50,882. Gable Ornament for Buildings.

(*Ornement pour pignons de bâtisses.*)



John S. Burton, Danville, Illinois, U.S.A., 19th December, 1895 6 years.

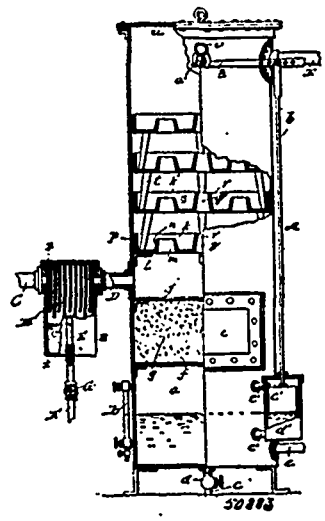
Claim.—1st. An adjustable gable ornament having converging strips A, A, united by a movable joint, and an extension brace connecting said strips, substantially as specified. 2nd. An adjustable gable ornament having the converging strips A, A, the joint piece B, seated in grooves or recesses in the meeting ends of said strips, and a transverse brace C connecting said strips and having slots therein loosely engaged by bearings on the said strips A, A, substantially as specified. 3rd. An adjustable gable ornament having converging strips A, A, united by a movable joint, and a brace connecting said strips, and means for adjusting said brace to correspond to the angular relation of said strips to each other, substantially as specified.

No. 50,883. Feed Water Purifier.

(*Appareil à purifier l'eau.*)

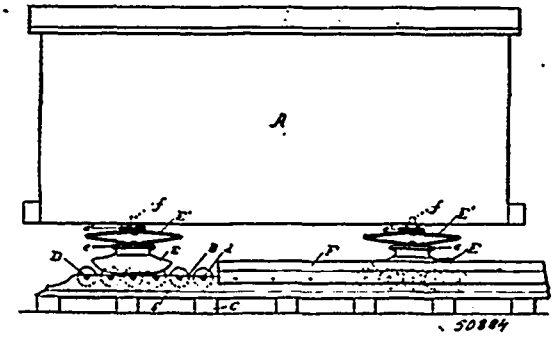
Chas. H. Snyder, Jackson, Michigan, U.S.A., 19th December, 1895; 6 years.

Claim.—The water heating and purifying apparatus described, comprising the filter having the casing, and a filtered water



chamber at its bottom, a pan arranged above the water chamber and having openings in its bottom surrounded by walls of less height than its side walls, a body of filtering material arranged between the pan and filtered water chamber, a discharge pipe connected with said chamber, a water induction pipe communicating with the interior of the casing above the pan, a discharge pipe for steam communicating with the casing above the pan, a valve arranged in the water induction pipe, the lever z connected with the said valve, the cylinder d^1 connected with the filtered water chamber, a float arranged in said cylinder and carried by a rod connected to the lever z, and the oil separator having the casing provided with an opening in one side for connection with a source of steam supply, and a discharge opening in its opposite side connected by a pipe with the filter casing at a point between the filtering material and the pan, and the plurality of foraminated plates disposed within the casing between the openings thereof, and provided with a series of vertical corrugations, substantially as specified.

No. 50,884. Railway. (*Chemin de fer.*)



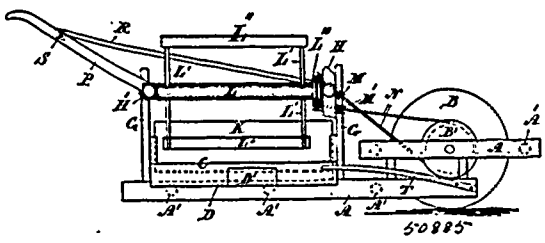
Vital Alfred Emond, Quebec City, Quebec, Canada, 19th December, 1895; 6 years.

Claim.—1st. In a railway, the combination, with rails provided with longitudinal grooves, of a series of double-conical rollers journalled in the side portions of the rails and running in the said grooves, and a car body mounted on runners sliding on the said rollers, substantially as set forth. 2nd. In a railway, the combination, with rails provided with longitudinal grooves, of a series of double-conical rollers journalled in the side portions of the rails and running in the said grooves, runners sliding on the said rollers, a car body plates secured to each pair of runners, plates centrally pivoted to the end portions of the car body, and springs interposed between the said plates, substantially as described and shown. 3rd. In a railway, a rail provided with an upper longitudinal groove, flanges at its base, longitudinal grooves or conduits in its base, longitudinal grooves or conduits in its undersurface and a series of double-conical rollers journalled in the sides of the said rails and running in the said upper groove, substantially as set forth. 4th. In a railway, the combination, with a longitudinal rail, and a series of double-

conical rollers carried thereby, of an inverted V-shaped runner bearing on the said rollers, and cover plates secured to the rail and holding the said rollers and runners in position, substantially as set forth.

No. 50,885. Machine for Destroying Insects.

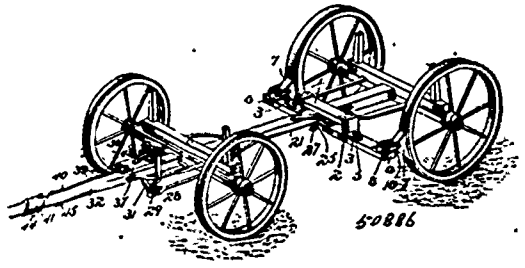
(*Machine pour détruire les insectes.*)



William Albert McLaren, Lower Rollo Bay, Prince Edward Island, Canada, 19th December, 1895; 6 years.

Claim.—1st. The combination with a supporting frame, carried by a ground-wheel having pulley sheaves at the side, of a trough C, and divisional board K, a frame mounted on the supporting frame A, and carrying rotary beaters, driven from the ground-wheel by endless bands or cables and a series of pulley sheaves, as set forth. 2nd. A machine for destroying insects on vines, comprising a wheelbarrow frame, a trough carried thereby, a divisional board above the trough, rotary beater carried by a frame carried by the main frame, and sheaves and endless bands or cable rotating said beaters, as set forth.

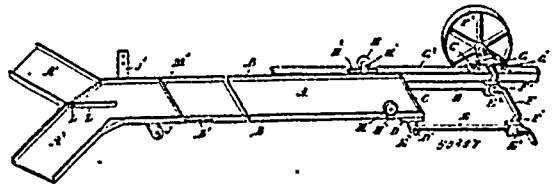
No. 50,886. Vehicle Brake. (*Frein de voiture.*)



Benjah Wilcox, Gibson, New York, U.S.A., 19th December, 1895; 6 years.

Claim.—1st. In a brake, a brake-shoe support comprising an attachment plate provided with upward-extending ears, a swinging frame hinged to the ears and provided with rearward-extending arms adapted to receive between them a brake-shoe, and a spring connected with the swinging frame and arranged to hold the same in operative position and also when swung forward, substantially as described. 2nd. In a brake, a brake-shoe support comprising an attachment plate having a depending flange provided with an inclined rear face, a swinging frame arranged on the upper face of the attachment plate and terminating above the said inclined face of the flange and arranged to swing forward to rest upon the front portion of the attachment plate, a spring connecting the swinging frame with the attachment plate and arranged to hold the former in either of its positions, combined with a brake-shoe pivotally connected to the swinging frame and having an inclined front face resting upon the inclined face of the flange, substantially and for the purpose described. 3rd. In a brake, a brake-shoe support comprising an attachment plate provided at its rear end with a depending flange, and having at its front a longitudinally-disposed housing and provided at opposite sides with upward extending ears, a swinging frame consisting of a transverse portion having a forward-projecting tongue and opposite sides projecting in advance and in rear of the transverse portion and forming forward-extending ears and rearward-extending arms, said forward-extending ears being pivoted to those of the attachment plate, and a spring arranged in the housing of the attachment plate and connected with the tongue of the swinging frame, combined with a brake shoe pivoted between the rearward-extending arms of the swinging frame, substantially as described. 4th. In a brake, the combination with the running-gear, of a transverse bar mounted upon the rear portion thereof and located above the rear bounds, depending drop-brackets mounted on the ends of the transverse bar and having horizontal portions at their bottoms, brake-levers fulcrumed on the lower faces of the horizontal portions of the brackets, brake-shoes mounted on the brake-levers, and means for automatically operating the brake-levers, substantially as described. 5th. In a brake, the combination with a running-gear, of brake-levers fulcrumed thereon and carrying brake-shoes, a longitudinally-disposed connecting rod, a transverse connecting bar pivotally attached to the ends of the brake-levers and provided with a horizontal opening and receiving the connecting rod, and a collar journalled on the transverse connecting bar and provided with a clamping screw and receiving the connecting rod, substantially as and for the purpose described. 6th. In a brake, the combination with a running-gear, of brake-levers fulcrumed thereon and having their inner ends bifurcated, brake-shoes mounted on the outer ends of the levers, a transverse connecting bar having slotted ends pivoted in the bifurcations of the levers, said connecting bar having a horizontal opening and provided with upper and lower portions forming the same, a longitudinal connecting rod passing through the horizontal opening of the connecting bar, a collar journalled on the upper and lower portions of the connecting bar and receiving the connecting rod, and a clamping screw mounted on the collar and engaging the connecting rod, substantially as described. 7th. In a brake, the combination with a running-gear, of brake-levers fulcrumed thereon, a slide mounted on the tongue and provided with upward-extending slotted ears, an approximately vertically-disposed lever having opposite sides fulcrumed on the tongue and extending above the same and provided with a transverse connecting pin arranged in the slots of said ears, connections between the vertically disposed lever and the brake-levers, and means for operating the slide, substantially as described. 8th. In a brake, the combination with a running-gear, of brake-levers fulcrumed thereon, a lever fulcrumed on the tongue and having opposite sides extended above the tongue and provided with a transverse connecting pin, connections between said levers, a slide mounted on the tongue and provided with upward extending slotted ears receiving the transverse connecting pin and provided with shouldered notches for engaging the same, and means for operating the slide, substantially as described. 9th. In a brake, the combination with a running-gear, of brake levers fulcrumed thereon, an upward-extending lever fulcrumed on the tongue and having opposite sides extending above the same, connections between said levers, a guide mounted on the tongue and having flanges forming rear shoulders, a slide arranged on the guide and having a rear depending portion for engaging said shoulders, slotted ears projecting upward from the slide, a pin connecting the sides of the upward-extending lever and arranged in the slots of said ears, and means for operating the slide, substantially as described. 10th. The combination with a brake-shoe, of a brake-shoe support comprising an attachment plate adapted to be secured to any ordinary brake-bar or lever and having a housing, a swinging frame connecting the brake-shoe with the attachment plate, and a spring mounted in the housing and connected with the swinging frame, and adapted to hold the latter in operative position, and also when the same is swung forward for maintaining the brake-shoe out of engagement, substantially as described.

No. 50,887. Apparatus for Conveying Grain, Minerals and the Like. (*Appareil pour le transport des minerais.*)

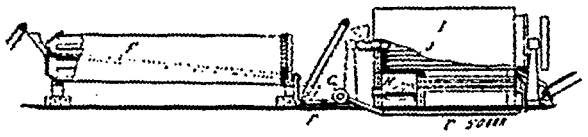


Charles Thompson, Grantham, England, 19th December, 1895; 6 years.

Claim.—1st. The combination of an inclined conveyer, and means for imparting a reciprocating straight line motion to the same, substantially as and for the purpose specified. 2nd. The combination of an inclined conveyer having a widened portion at its receiving end, and means for imparting a reciprocating straight line motion to the same, substantially as and for the purpose specified. 3rd. The combination of an inclined conveyer, means for imparting a reciprocating straight line motion to the same, and anti-friction rollers supporting said conveyer, substantially as and for the purpose specified. 4th. The combination of an inclined conveyer, having branches diverging from the same, and means for imparting a reciprocating straight line motion to said conveyer, substantially as and for the purpose specified. 5th. The combination of an inclined conveyer having branches diverging from the same, anti-friction rollers supporting said conveyer and its branches, and means for imparting reciprocating straight line motion to the same, substantially as for the purpose specified. 6th. The combination of an inclined conveyer, means for imparting a reciprocating straight line motion to the same, rollers supporting said conveyer, and anti-friction rollers at the sides for limiting the lateral motion the reof, substantially as and for the purpose specified. 7th. The combination of an inclined conveyer, a crank shaft suitably supported and driven, and connecting means between the conveyer and said crank shaft, substantially as and for the purpose specified. 8th. The combination of an inclined conveyer, a crank shaft suitably supported and driven, and rods connecting the receiving end of the conveyer to the said crank shaft, substantially as and for the purpose specified.

No. 50,888. Machine for Preparing Peat Fuel.

(*Machine pour préparer la tourbe.*)

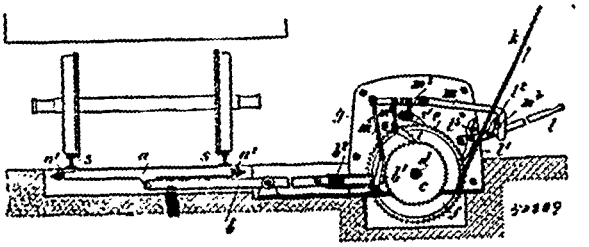


The Ontario Peat Fuel Company, Toronto, Ontario, assignee of Archibald A. Dickson, Cote St. Antoine, Quebec, both in Canada, 19th December, 1895; 6 years.

Claim.—1st. The method or process of removing the surplus moisture from peat and other absorbent materials, which consists in carrying such material through a drying chamber or cylinder in opposition to a hot current or blast consisting of the products of combustion from the heating furnace, the material being admitted at one end of the chamber or cylinder, and the current or blast at the other, substantially as and for the purpose set forth. 2nd. The method or process of removing the surplus moisture from peat and other absorbent materials, which consists in carrying such material through a chamber or cylinder, in opposition to a current of dry or heated air, such movement of material commencing at the feed-ingress and coolest end of the chamber or cylinder, and progressing towards the point of egress and hottest area, or opposite end of same, whereby the damp vapours are constantly driven off from the material and prevented from being re-absorbed therein, substantially as set forth. 3rd. The method or process of removing the surplus moisture from peat, and other absorbent materials, which consists in carrying such material through a revolving chamber or cylinder, and agitating or tossing the material while passing therethrough, in opposition to a current of dry or heated air, such movement of material commencing at the feed-ingress and coolest end of the chamber or cylinder, and progressing towards the point of egress and hottest area, or opposite end of same, whereby the damp vapours are constantly driven off from the material and prevented from being re-absorbed therein, substantially as set forth. 4th. The within described process of preparing peat, first by partially drying it without breaking its fibre, then forcing it into one or more formers in such a manner as to simultaneously form, compress, remove the air and coat the outer surface with an atmospheric-resisting substance, without the application of artificial heat, substantially as specified. 5th. The within described process of preparing crude peat, by partially drying it without disintegration, then simultaneously forming, compressing, removing the air and coating the outer surface with an atmospheric-resisting substance in such a manner as to preserve the volatile combustible elements indigenous to peat, without the application of artificial heat, the whole substantially as described. 6th. The within described process of preparing crude peat by partially drying it without disintegration, forming, compressing, removing the air, coating the outer surface with an atmospheric-resisting substance while preserving the volatile combustible elements indigenous to peat, in such a manner that each charge of peat receives a uniform compression irrespective of the specific gravity of the crude material, without the application of artificial heat, the whole substantially as described. 7th. The within described process of preparing peat, by forcing the crude material against a porous surface provided with means for carrying away the water from the peat, substantially as and for the purpose specified. 8th. The within described process for preparing peat, by forcing the crude material against a porous surface provided with means for carrying away the water from the peat, and then carrying the peat through a chamber having a current of air passing through it, substantially as and for the purpose specified. 9th. The within described process for preparing peat, by forcing the crude material against a porous surface provided with means for carrying away the water from the peat, and then carrying the peat through a chamber having a current of air passing through it and means for agitating the peat, substantially as and for the purpose specified.

No. 50,889. Apparatus for Converting Power.

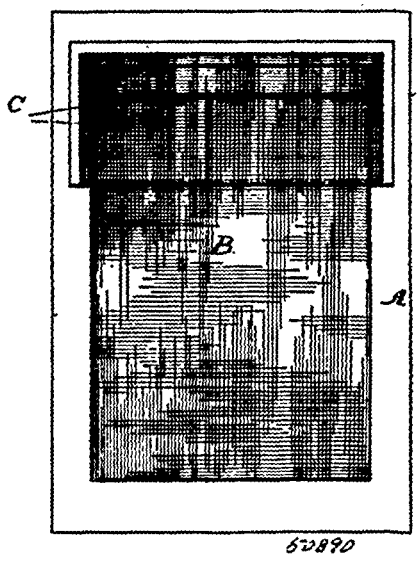
(*Appareil pour convertir la force.*)



John Ferdinand Robert Knobloch, Max Bachur and James Heyn, all of Hamburg, Germany, 20th December, 1895; 6 years.

Claim.—In an apparatus for converting into available power the oscillations imparted to supporting mediums of any description by loads moved over them or by strokes or shocks applied to them, the combination of a lever arrangement consisting of balancing beam located under the vibrating supports or beds and a lever supporting such beam, with suitable means, such as weighted gearing, actuated by said supporting lever and designed to convert the movements imparted to the same into motive power and for storing such power, substantially as set forth.

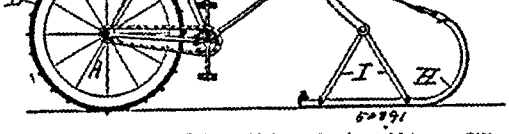
No. 50,890. Fly Screen. (*Châssis pour moustiquaire.*)



Sarah Anne Montgomery Lucas, assignee of Samuel Robert Lucas, both of Deloraine, Manitoba, Canada, 20th December, 1895; 6 years.

Claim.—A fly screen having a frame A, and the wire cloth covering B, secured to the frame so as to form an upward projecting pocket, or recess, in the angle of which are formed the holes C, substantially as and for the purpose herein shown and described.

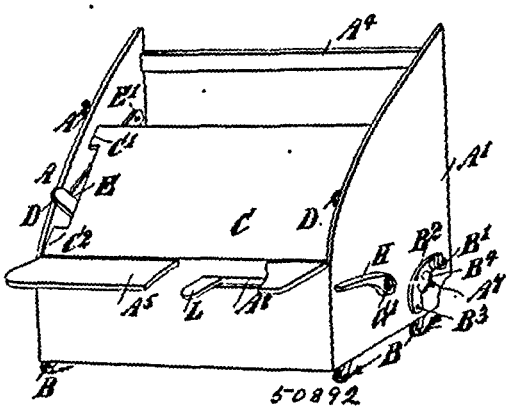
No. 50,891. Ice Velocipede. (*Velocipède-traîneau.*)



Frank H. Ray, assignee of William Fahrig, both of Chicago, Illinois, U.S.A., 20th December, 1895; 6 years.

Claim.—1st. In ice velocipedes, the combination of a bicycle frame a driving wheel provided with a cushioned tire, a sheet metal outer covering for such tire, having a number of spikes associated therewith and one or more runners secured to the front fork of the bicycle, substantially as described. 2nd. In ice velocipedes, the combination of a bicycle frame, a driving wheel provided with a cushioned tire, a sheet metal outer covering for such tire, a series of independent cushioned spikes attached to said covering, a set of spring metal clips for securing such covering and wheel rim together and a set of one or more runners secured to the front fork of the bicycle frame, substantially as described. 3rd. In ice velocipedes, the combination of a driving wheel adapted to be attached to a bicycle frame, a sheet metal strip forming an outer covering for the cushioned tire, and a series of independent cushioned spikes attached to such covering, consisting of a headed spike on the inner side, a metal washer rigidly attached to the outside and a cushioned washer interposed between such outer washer and the metalic covering, substantially as described. 4th. In ice velocipedes, the combination of a driving wheel adapted to be attached to a bicycle frame, a sheet metal strip forming an outer covering for the cushioned or pneumatic tire, and a series of independent cushioned spikes attached to such covering consisting of a headed spike on the inner side, a metal washer rigidly attached to the outside and a cushioned washer interposed between such outer washer and the metallic covering, and a set of spring metal clips for securing such wheel and covering together, substantially as described.

No. 50,892. Adjustable Foot Rest. (*Appui-pieds.*)



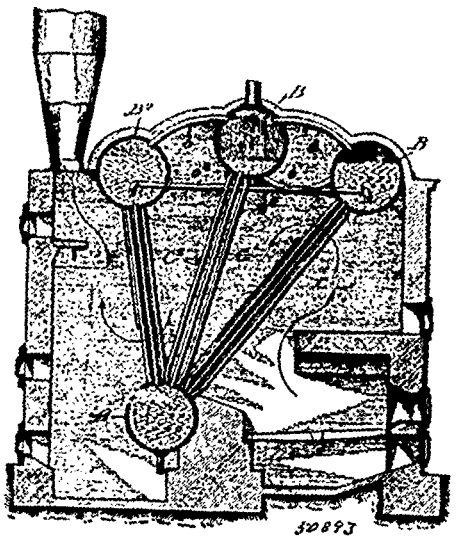
Rufus Day Brown, Gardner, Massachusetts, U.S.A., 20th December, 1895; 6 years.

Claim.—1st. An adjustable foot rest, comprising a wheeled casing open at the bottom and back, and a platform or shelf held adjustable in said casing, substantially as shown and described. 2nd. A device of the class described, provided with a foot shelf or platform mounted to turn, substantially as shown and described. 3rd. A device of the class described, provided with a foot shelf or platform having a limited swinging motion in a horizontal plane, substantially as shown and described. 4th. A device of the class described, comprising a foot shelf or platform, and arms adapted to be raised and lowered and on which the said shelf is mounted to turn, substantially as shown and described. 5th. A device of the class described, comprising a foot shelf or platform, arms adapted to be raised and lowered and on which the said shelf is mounted to turn, and means, substantially as described, for raising said arms, as set forth. 6th. A device of the class described, comprising a foot shelf or platform, arms adapted to be raised and lowered and on which the said shelf is mounted to turn, and means, substantially as described, for lowering said arms, as set forth. 7th. A device of the class described, comprising a foot shelf or platform, arms adapted to be raised and lowered and on which the said shelf is mounted to turn, means substantially as described, and for raising said arms, and means substantially as described, for locking said arms in place when raised, as set forth. 8th. A device of the class described, comprising a casing, a foot shelf or platform extending between the sides of said casing, arms in which the said shelf is mounted to turn, a bar connecting the arms with each other, a hook engaging said bar and secured on a transverse shaft journalled in the sides of the casing, and a treadle on the end of the said shaft and under the control of the operator, substantially as shown and described. 9th. A device of the class described, comprising a casing, a shelf extending between the sides of the casing, on which sides said shelf is mounted to turn, a cross-bar connecting the arms with each other, a spring-drawn arm having an inclined top adapted to engage said cross-bar, and an arm, under the control of the operator, for imparting a swinging motion to said spring drawn arms, substantially as shown and described. 10th. A device of the class described, provided with a casing supported on castors, and levers fulcrumed on the sides of said casing and adapted to swing and extend beyond the back of the casing, each of the levers carrying a castor at its free end, substantially as shown and described.

No. 50,893. Boiler. (*Chaudière.*)

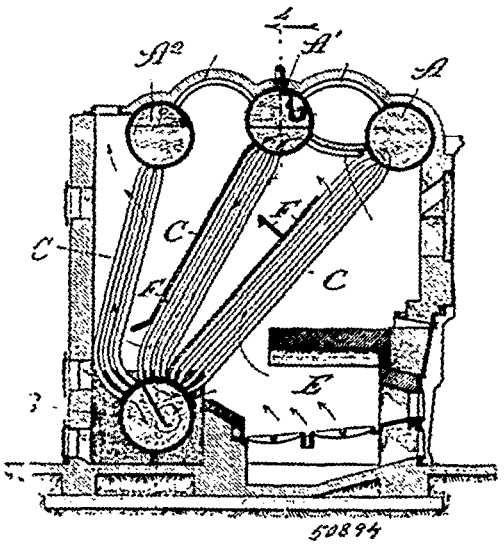
Edward Reilly Stettinius, Chicago, Illinois, U.S.A., 20th December, 1895; 6 years.

Claim.—1st. In a water-tube boiler, the combination of a lower drum or drums, three elevated drums, banks of tubes connecting the lower drum or drums with the elevated drums, and a pipe or pipes inside the furnace connecting the front and rear elevated drums, whereby water may circulate from front to rear, substantially as described. 2nd. In a water-tube boiler, the combination of a lower drum or drums, three elevated drums, banks of tubes connecting the lower drum or drums with the elevated drums, a pipe or pipes inside the furnace connecting the front and middle elevated drums, and a pipe or pipes inside the furnace connecting the front and rear elevated drums, whereby water may circulate from front to rear, substantially as described. 3rd. In a water-tube boiler, the combination of a lower drum or drums, three elevated drums, banks of tubes connecting the lower drum or drums with the elevated drums, a pipe or pipes inside the furnace connecting the front and middle elevated drums, and a pipe or pipes inside the furnace connecting



the rear and middle elevated drums, whereby water may circulate through all the elevated drums, substantially as described.

No. 50,894. Steam Boiler. (*Chaudière à vapeur.*)

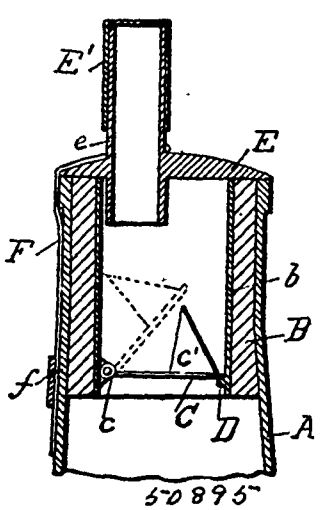


Harry Shafer Pell, Akron, Ohio, U.S.A., 20th December, 1895; years.

Claim.—1st. In a water-tube boiler, the combination of elevated steam and water drums communicating with each other, a lower mud drum or drums, and tubes communicating between the elevated steam and water drums and lower mud drum or drums and sustaining the weight of the mud drum or drums and their contents, whereby provision is made for expansion and contraction of the drums and tubes, substantially as described. 2nd. In a water-tube boiler, the combination of elevated steam and water drums, pipes connecting the steam and water drums, a drip pan in one of the elevated steam drums under the end of the steam pipe for separating water from steam, a lower mud drum or drums, and tubes communicating between the elevated steam and water drums and lower mud drum or drums, substantially as described. 3rd. In a water-tube boiler, the combination of elevated steam and water drums, a lower mud drum, tubes connecting the lower mud drum with the elevated steam and water drums, a rear elevated feed drum, a rear lower mud drum, tubes connecting the feed drum with the rear lower mud drum, and means for introducing water into the elevated feed drum and passing it to the forward part of the boiler, substantially

as described. 4th. In a water-tube boiler, the combination of a rear elevated feed drum, a rear lower mud drum, tube connecting the rear lower mud drum with the elevated feed drum, a front lower mud drum, a pipe or pipes connecting the rear and front lower mud drums, elevated steam and water drums having steam and water communication with each other, and tubes connecting the front lower mud drum with the elevated steam and water drums, substantially as described. 5th. In a water-tube boiler, the combination of elevated steam and water drums having communication with each other, a rear lower mud drum, tubes connecting the rear lower mud drum with the rear elevated drum, a front lower mud drum, tubes connecting the front mud drum with some of the elevated drums, and means for feeding water into the rear part of the boiler, substantially as described. 6th. In a water-tube boiler, the combination of elevated drums having steam and water communication with each other, a lower mud drum, tubes connecting the elevated drums with the lower mud drum, a lower feed drum, tubes connecting the lower feed drum with one of the elevated drums, and means for supplying water to the lower feed drum, substantially as described. 7th. In a water-tube boiler, the combination of three elevated steam and water drums, a front lower mud drum, tubes connecting the front mud drum with each of the elevated drums, pipes affording steam and water communication between the front and middle drums, and steam communication between the rear and middle drums, a rear lower feed drum, tubes connecting the feed drum with the rear elevated drum, and means for supplying water to the feed drum, substantially as described. 8th. In a water-tube boiler, the combination of a lower feed drum communicating with a source of water supply, a rear elevated drum, tubes connecting the feed drum with the rear elevated drum, a middle elevated drum, pipes connecting the rear and middle elevated drum, a lower mud drum, tubes connecting the middle elevated drum with the mud drum, a front elevated drum or drums tubes connecting the mud drum with the front elevated drum or drums, and means for drawing off steam from the middle and front elevated drums, whereby water may be introduced into the lower feed drum, carried up to the rear elevated drum, across to the middle elevated drum, down to the mud drum, and up to the front elevated drum or drums, substantially as described. 9th. In a water-tube boiler, the combination of three elevated steam and water drums communicating with each other, a lower mud drum, tubes connecting the mud drum with the elevated steam and water drums, a lower feed drum, an elevated feed water drum, tubes connecting the lower feed drum with the elevated feed water drum, pipes connecting the elevated feed water drum with one of the steam and water drums, and means for supplying water to the lower feed drum, substantially as described. 10th. In a water-tube boiler, the combination ot elevated steam and water drums, a lower mud drum, banks of tubes connecting the elevated drums with the lower mud drum, and an out-side circulating pipe communicating with the elevated drums and lower mud drum, substantially as described. 11th. In a water-tube boiler, the combination of elevated steam and water drums, a lower mud drum, banks of tubes connecting the elevated drums with the lower mud drum, a horizontal pipe outside the brick-work communicating with the elevated steam and water drums, and a vertical pipe outside the brick-work communicating with the horizontal pipe and the lower mud drum, substantially as described.

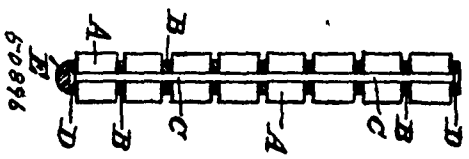
No. 50,895. Bottle Closure. (*Bouchon de bouteille.*)



Arthur Stockdale Jackson, Montreal, Quebec, Canada, 20th December, 1895; 6 years.

Claim.—1st. The combination, with the neck of a bottle and its cork, of a tube inserted in the cork and provided with a hinged plate normally closing the passage through the said tube, and a plate secured over the top of the cork and provided with a small projecting tube through which the contents of the bottle may be poured out, substantially as set forth. 2nd. The combination, with the neck of a bottle and its cork, of a tube inserted in the cork and provided with a hinged plate normally closing the passage through the said tube, a plate secured over the top of the cork and provided with a small projecting tube, a flexible fastening encircling the said small tube, and a seal securing the ends of the said fastening to the bottle, substantially as set forth.

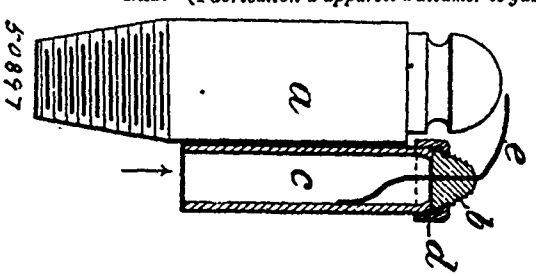
No. 50,896. Stair Tread, Etc. (*Marche, etc.*)



Joseph Thomas Andrews, Greenwich, London, England, 20th December, 1895; 6 years.

Claim.—1st. A tread or wearing surface for stairs or for other purposes composed of wooden blocks arranged in rows between bars and supported by bolts or rivets so as to present a surface of the blocks at each side, substantially as hereinbefore described. 2nd. The construction of treads or wearing surfaces for stairs or for other purposes, substantially as hereinbefore described and shown in the accompanying drawings.

No. 50,897. Manufacture of Mediums for Igniting Gas. (*Fabrication d'appareil à allumer le gaz.*)



John Frederick Duke, London, England, 20th December, 1895; 6 years.

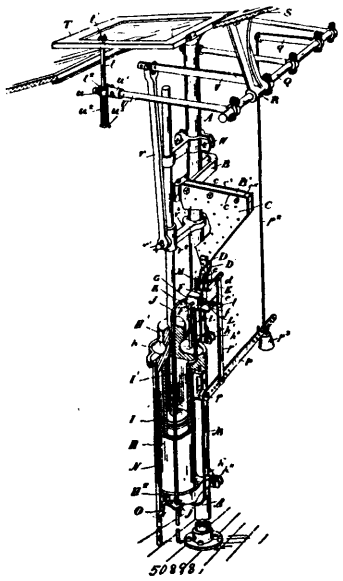
Claim.—1st. As a new article of manufacture a medium for igniting gas by its own action in the manner set forth, said medium consisting of a block of porous material in the pores of which platinum black is contained. 2nd. As a new article of manufacture a medium for igniting gas by its own action in the manner set forth, said medium consisting of a block of meerschaum in the pores of which platinum black is contained. 3rd. The process or method of manufacturing a medium for igniting gas by its own action which consists in causing a block of porous material to absorb a solution of a platinum salt, and then subjecting said block to the action of a substance which will reduce the platinum salt to the metallic state within the pores of the material in so finely divided a form as to constitute platinum black, substantially as set forth. 4th. The process or method of manufacturing a medium for igniting gas by its own action which consists in causing a block of meerschaum to absorb a solution of a platinum salt and then subjecting said block to the action of a substance which will reduce the platinum salt to the metallic state within the pores of the material in so finely divided a form as to constitute platinum black, substantially as set forth. 5th. The process or method of manufacturing a medium for igniting gas by its own action which consists in causing a block of porous material to absorb a solution of bi-chloride of platinum and then subjecting said block to the action of carburetted hydrogen, substantially as hereinbefore described whereby the bi-chloride of platinum is reduced to, the metallic state within the pores of said material in so finely divided a form as to constitute platinum black, as set forth. 6th. The process or method of manufacturing a medium for igniting gas by its own action which consists in causing a block of meerschaum to absorb a solution of bi-chloride of platinum and then subjecting said block to the action of carburetted hydrogen substantially as hereinbefore described, whereby the bi-chloride of platinum is reduced to the metallic state within the pores of said material in so finely divided a form as to constitute platinum black, as set forth.

No. 50,898. Ventilating Apparatus.
(*Appareil de ventilation.*)

Robert William King, Toronto, Ontario, Canada, 20th December, 1895; 6 years.

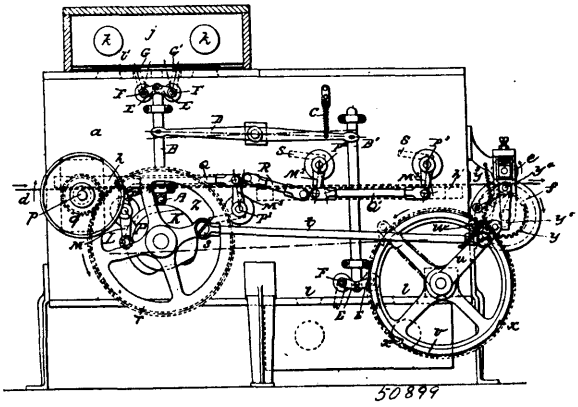
Claim.—1st. In a ventilating apparatus the combination with a suitable thermostat and double-acting valve provided with a suitable supply pipe and actuated from the thermostat upon a rise or fall of

temperature, of a cylinder provided with a piston and rod and pipes leading from the double-acting valve through both heads of the



cylinder, actuating means connecting the piston rod and shutters, and auxiliary means for controlling the action of the double-acting valve through the thermostat shutters when actuated as specified. 2nd. In a ventilating apparatus the combination with a suitable thermostat and double-acting valve provided with a suitable supply pipe and actuated from the thermostat upon a rise or fall of temperature, of a cylinder provided with a piston and rod and pipes leading from the double-acting valve through both heads of the cylinder, the shutters, actuating arms for the shutters secured to the common rock shaft and rods connecting the shutters to the actuating arms, means for operatively connecting the rock shaft to the piston rod of the cylinder and auxiliary means for controlling the action of the double-acting valve through the shutters when actuated as and for the purpose specified. 3rd. In a ventilating apparatus the combination with a suitable thermostat and double-acting valve provided with a suitable supply pipe and actuated from the thermostat upon a rise or fall of temperature, of a cylinder provided with a piston and rod and pipes leading from the double-acting valve through both heads of the cylinder, the shutters, actuating arms for the shutters secured to the common rock shaft, rods connecting the shutters to the actuating arms, an arm secured to the rock shaft at one end and connected by a rod to a sleeve secured on the piston rod and auxiliary means for controlling the action of the double-acting valve through the shutters when actuated as specified. 4th. The combination with the shutters, rock shaft, arms, and rods connected to the shutters and extending through the ends of the arms and means for rocking the shaft, of a spring extending between the arm and a stop secured on the lower end of the connecting rod, as and for the purpose specified. 5th. The combination with the shutters, rock shaft, arms and rods connected to the shutters extending through the ends of the arms and provided with stops designed to normally abutt the end of the arm and means for rocking the shaft, of a spring extending between the arm and a stop secured on the lower end of the connecting rod, as and for the purpose specified. 6th. In a ventilating apparatus, the combination with a thermostat comprising two pairs of plates, each pair being made up of a metal plate and a rubber plate, down hangers from the ends of the pairs connected by a pin, a double-acting valve provided with a suitable supply pipe, the double-headed cylinder and pipes connecting the ports of the valve to the interior of the cylinder through each end, and auxiliary means operated by the pin extending between hte down hangers for controlling the supply of water to the cylinder both above and below the piston, as and for the purpose specified. 7th. In a ventilating apparatus, the combination with a thermostat comprising two pairs of plates, each pair being made up of a metal plate and a rubber plate, down hangers from the ends of the pairs connected by a pin, a double-acting valve provided with a suitable supply pipe, a double-headed cylinder and pipes connecting the ports of the valve to the interior of the cylinder through each end, a bent lever having a forked end straddling the pin extending between the down hangers, a link secured on the end of the double-acting valve, and having its upper end forming a pivot for the bent lever, and means operatively connecting the rock shaft, actuated by the piston rod to the lever controlling the operation of the double-acting valve, as and for the purpose specified. 8th. In a ventilating apparatus, the combination with a thermostat comprising two pairs of plates, each pair being made up of a metal plate and a rubber plate, down hangers from the ends of the pairs connected by a pin, a double acting valve provided with a suitable supply pipe, a double-headed cylinder and pipe connecting the ports of the valve to the interior of the cylinder through each end, a bent lever having a forked end straddling the pin extending between the down hangers, a link secured on the end of the double-acting valve and having its upper end forming a pivot for the bent lever, and the rod p^1, lever P, rod p^2, arm q, and rock shaft Q, all actuated as and for the purpose specified. 9th. In a ventilating apparatus, the combination with the thermostat and the pin a deriving a lateral movement therefrom, of the valve F^1 provided with the ports f^1, f^2, f^3, f^4, and the valve box provided with the ports g, g^1 and g^2, the supply pipe for the port f^3, the drip pipe for the port g^1, and the double-headed cylinder provided with a piston and rod, a pipe connecting the port g^2 to the upper end of the cylinder, and a pipe connecting the port g to the bottom of the cylinder, and means for controlling the relation of the ports f^1 to the port g, and the port f^3 to the ports g^1 and g^2 simultaneously and for controlling the position of the ports f^3 to the port g^2, and the port f^3 to the ports g and g^1 simultaneously, as and for the purpose specified. 10th. In a ventilating apparatus the combination with the thermostat and the pin d, deriving a lateral movement therefrom, of the valve F^1, provided with the ports f^1, f^2, f^3, f^4, and the valve box provided with the ports g, g^1 and g^2, the supply pipe for the port f^3, the drip pipe for the port g^1, and the double-headed cylinder provided with a piston and rod, a pipe connecting the port g^2, to the upper end of the cylinder, and a pipe connecting the port g, to the bottom of the cylinder, and a lever E, fulcrumed on the pin d, connected by the link F, to the valve F^1, and operated from the rock shaft Q, as and for the purpose specified. 11th. The combination with the thermostat, cylinder, piston and rod and the tubular standard for supporting the same, of the double-acting valve supported on the upper supply pipe for the double-headed cylinder, and connected to the bottom of the cylinder by a pipe, and the drip pipe leading from the valve to the saucer-shaped head of the cylinder, and the down pipe from the saucer-shaped head, as and for the purpose specified. 12th. The combination with the thermostat, cylinder, piston and rod and the tubular standard for supporting the same, of the double-acting valve supported on the upper supply pipe for the double-headed cylinder, and connected to the bottom of the cylinder by a pipe and the relief tap at the bottom of the cylinder, as and for the purpose specified. 13th. The combination with the shutters and their operating apparatus, of yielding means interposed between the apparatus and the shutters to control the closing of the same, as and for the purpose specified. 14th. In a ventilating apparatus the combination with the thermostat and actuating means for the double-acting valve operated therefrom, of the double-headed cylinder and pipes connecting the ports of the valve to the interior of the cylinder through each end above and below the piston, as and for the purpose specified. 15th. In a ventilating apparatus the combination with the thermostat and actuating means for the double-acting valve operated therefrom, of the double-headed cylinder and pipes connecting the ports of the valve to the interior of the cylinder through each end above and below the piston, and auxiliary means interposed between the thormostat and the valve for controlling the supply of water to the cylinder both above and below the piston, as and for the purpose specified.

No. 50,899. Method of Reproducing Prints by Photograpy, etc. (*Méthode de réproduire des gravures par la photographie, etc.*)



William Friese-Greene, Chelsea, London, England, 20th December, 1895; 6 years.

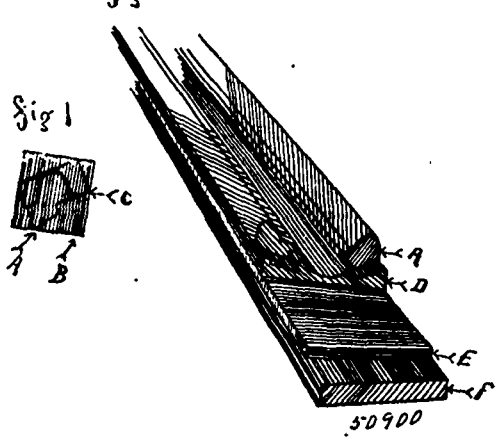
Claim.—1st. The printing of illustrated newspapers, wall papers, and the like by means of light from photographic or other negatives, substantially as hereinbefore described. 2nd. The mode hereinbefore described of printing or reproducing by means of photography a number of copies from the same negative or negatives, which mode consists in causing a band of sensitized material to travel intermittently through a chamber in which a negative or negatives are placed, and in temporarily exposing a fresh section of the said sensitized band and the negative or negatives to the light in the said chamber after each intermittence in the movement of the sensitized

band, whereby a photograph from the negative becomes reproduced upon the said section, substantially as set forth. 3rd. The combination in a photographic printing machine of means for giving intermittent motion through the machine to sensitized material, means for temporarily exposing a fresh section of the sensitized material to the light after each intermittent movement, and means for steadying the said sensitized material during the exposure, substantially as and for the purpose hereinbefore described. 4th. In a photographic printing machine, the combination with a chamber through which sensitized material is caused to travel intermittenly, of an enclosed box containing a lamp, apertures for the passage of light from the said box to the said chamber and time shutters for closing and opening the said apertures, substantially as and for the *purpose hereinbefore described. 5th. In a photographic printing* machine, the combination with a chamber through which sensitized material is caused to pass intermittently, of an enclosed box containing a lamp, apertures for the passage of light from the said box to the said chamber, time shutters for closing and opening the said apertures, and steadying plates to press upon the sensitized material while the shutters are open and the sensitized material is exposed to the light, substantially as and for the purpose hereinbefore described. 6th. In a photographic printing machine, the combination of two chambers through which successively sensitized material travels intermittently, an enclosed box containing a lamp on the upper side of the one chamber, an enclosed box containing a lamp on the under side of the other chamber, apertures for the passage of light from the said boxes to the respective chambers, and time shutters for closing and opening the said apertures, whereby the said sensitized material is printed upon one face in the first chamber and upon the other face in the second chamber, substantially as hereinbefore described. 7th. The improved photograph printing machine, whether in its double or single form, constructed and working, substantially as hereinbefore described.

No. 50,900. Mode of Constructing Bicycle and Vehicle Rims. (*Methode de fabriquer des jantes pour roues de bicycle et voiture.*)

Fig 2

Fig 1

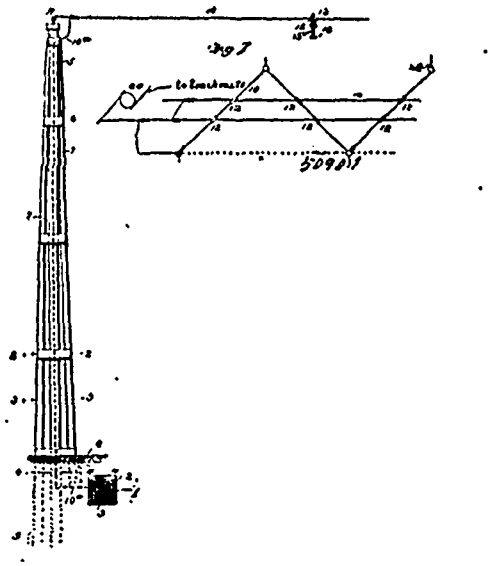


John H. Kydd and John B. Mitchel, both of Bowmanville, Ontario, Canada, 20th December, 1895; 6 years.

Claim.—1st. The combination of the wood tongue strips A, the grooved wood strip D, having the grain running around the rim, the crossbanded wood strip E, and the wood strip F, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the wood tongues A, which are cut on the bevel with the grain running at right angles to strip D, which cannot be broken off, and the wood grooved dovetailed strip D, and the crossbanded wood strip E which prevents the rim from splitting, substantially as and for the purposes herembefore set forth. 3rd. The beveled end grained wood tongue strips A, having the grain standing at right angles to the lengthwise running grain of wood strips D, and laying at an angle of forty-five degrees from cross grain of wood strip D, substantially as set forth. 4th. The combination of the crossbanded wood strips E, having grain of the wood running across at right angles to wood strip D, substantially as and for the purposes herembefore set forth. 5th. The combination of the wood strips F, having the grain of the wood running around the rim, the same as wood strip D, substantially as and for the purpose hereinbefore set forth. 6th. The combination of the wood tongue strips A, glued into the dovetailed wood strip D, the wood strip D, glued on to the crossbanded wood strip E, and the crossbanded wood strip E, glued on to the wood strip F, substantially as and for the purpose hereinbefore set forth.

No. 50,901. Electric Railway.

(*Chemin de fer électrique.*)

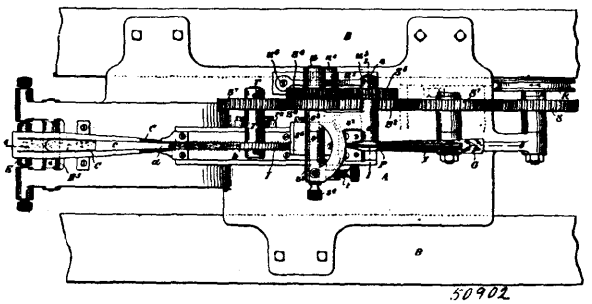


John Cummings Henry, Westfield, New Jersey, U.S.A., 20th December, 1895; 6 years.

Claim.—1st. In combination with a source of electricity, a railway track electrically connected to one pole thereof, a main feed conductor connected to the other pole thereof, posts arranged along the said track on opposite sides thereof, guy-wires supported on said posts across the track and electrically connected with said main feed conductor and working conductors suspended over the track by said guy-wires and in electrical connection therewith, substantially as set forth. 2nd. In combination with a railway track, posts arranged along and on both sides of the same, and having insulators substantially as described, guy-wires supported from said posts, by said insulators and feed and working conductors, both in electrical connection with said guy-wires. 3rd. The combination of guy-wires, one or more working conductors and hangers of conducting material, *through which said guy-wires pass without break from side* to side of the street for supporting said working conductor or conductors directly from said guy-wires without insulation, said hangers being adjustable on the guy-wires. 4th. The combination of one or more travelling motors, an overhead working conductor or conductors electrically connected thereto, a series of posts staggered on opposite sides of said working conductor or conductors, and diagonal guy-wires supported on said posts and supporting said working conductor or conductors. 5th. In an electric railway, the combination of a working conductor, posts staggered on opposite sides thereof, and a continuous guy-wire for said working conductor stretched diagonally back and forth from post to post. 6th. In an electric railway system, the combination of a working conductor forming part of the electric circuit, posts staggered on opposite sides thereof, and an electrically continuous guy-wire for said working circuit connected thereto and forming part of the conducting circuit and stretched back and forth from post to post, substantially as set forth. 7th The combination of the working conductor of an electric railway, having guy-wire supports, of a series of guy-wire-supporting posts staggered on opposite sides of the track. 8th. In an electric railway system, the combination of a supply conductor supported from poles along the roadway, suspended working conductors over the track and branch conductors at intervals connecting the supply and working conductors. 9th. In an electric railway system, the combination of the track, a line of posts on each side thereof, and an overhead wire system comprising feed and guy or span wires carried by said posts and working conductors suspended from the span wires over the track, substantially as set forth. 10th. In an electric railway system, the combination of the track, a line of hollow posts at each side thereof, span wires carried by said posts, working conductors suspended from said span wires, and extending along the way over the track, a buried feeding conductor and branch wires connecting at intervals the feeding and working conductors and passing through said posts, substantially as set forth. 11th. In an electric railway system, the combination of the track, hollow posts arranged along the same, span wires carried by said posts, working conductors extending along the way over the track suspended from said span wires and in electric connection therewith, a buried feeding conductor, and branch wires connecting at intervals the feeding conductor to said span wires, and passing through said posts, substantially as set forth.

No. 50,902. Cigarette Machine. (*Machine à cigarette.*)

Fig. 1

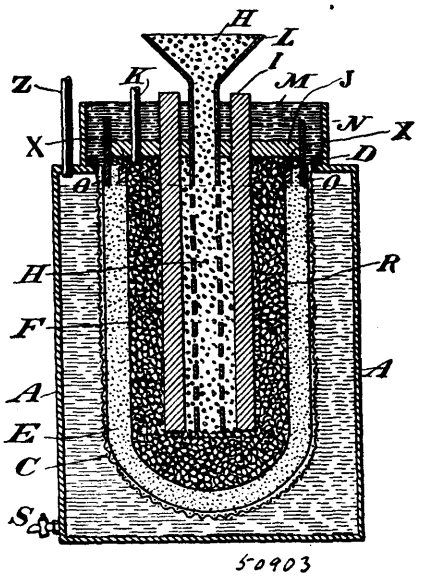


Michael Kirshner, Salem, Virginia, U.S.A., 20th December, 1895; 6 years.

Claim.—1st. In a cigarette machine of the kind described, the combination substantially as set forth, of a filler compressing-wheel arranged to revolve in the filler channel, and a support forming a hood over such channel, whose forward end is in close proximity with the periphery of the compressing-wheel and whose rear end carries a small pressure-resisting roller arranged to operate within the wrapper, and to co-operate with a crimping-wheel arranged to operate outside of the wrapper. 2nd. In a cigarette machine of the kind described, the combination substantially as set forth, of a grooved wheel arranged to revolve in the filler channel to compress the advancing filler, and a support having a concave under surface raised slightly above the grooved periphery of the wheel at its lowest point and arranged to form a hood above said channel, the forward end of the support being rounded and fitted to the periphery of the grooved wheel and its rear end carrying a small pressure-resisting roller arranged to operate within the wrapper and to co-operate with a crimping-wheel located outside of the wrapper. 3rd. In a cigarette machine which operates to advance a wrapper and a superimposed filler under a pressure-resisting support and to wrap the wrapper around the filler, and fold its opposite edges into a seam, the combination substantially as set forth, of a thinned-down edge of the support and a device arranged on either side of such thinned-down edge, for the purpose of folding over the opposite edges of the wrapper, when brought into contact with each other, into a seam. 4th. In a cigarette machine which operates to advance a wrapper and a superimposed filler under a pressure-resisting support and to wrap the wrapper around the filler and fold its opposite edges into a seam, the combination substantially as set forth, of the support J, and plates K and L, whose edge faces are shaped to direct and hold the wrapper to the outer wall of the support, and the plates M and N, whose edge faces are properly shaped and operate to fold the wrapper edges over to form a seam. 5th. In a cigarette machine which operates to secure the opposite engaged wrapper edges into a seam by crimping or indenting, the combination substantially as set forth, of a support and a revolving pressure-resisting roller mounted thereon and arranged to operate within the wrapper and a lubricant chamber formed in the support or an extension thereof and located in proximity to the said roller, for the purpose described. 6th. In a cigarette machine which operates to secure the opposite engaged wrapper edges into a seam by crimping or indenting, the combination substantially as set forth, of a support, a roller mounted thereon and arranged to revolve within the wrapper and a lubricant chamber constructed in said support and adapted to contain textile waste or other fluid lubricant-absorbing material and separated from the roller by a partition, and means to convey the lubricant from the chamber to the roller. 7th. In a cigarette machine which operates to secure the opposite engaged wrapper edges into a seam by crimping or indenting, the combination substantially as set forth, of a support, a roller mounted thereon and arranged to revolve within the wrapper, and a lubricant chamber constructed in said support and adapted to hold oil or other fluid lubricant and separated from the roller by a partition, and a strand or threads of textile material passing from the lubricant chamber over the partition to the face of the roller, for the purpose described. 8th. In a cigarette machine which operates to secure the engaged wrapper edges into a seam by pressure, the combination substantially as set forth, of a revolving wheel arranged to act upon the wrapper seam, a bell-crank lever to one of whose arms the wheel is suspended and a screw arranged to operate upon the other arm of the lever to rock the lever upon its bearing and increase or diminish the pressure of the wheel upon the seam. 9th. In a cigarette machine in which the wrapper seam is operated upon by a revolving wheel whose shaft is driven by a train of gear wheels, the combination substantially as set forth, of gear wheels S^4 and S^5, the wheel S^4, being mounted upon a standard u^2, capable of adjustment to bring the wheel S^4, nearer or farther from wheel S^5, and means for effecting such adjustment. 10th. The combination of the following named devices when constructed and secured to a frame and adapted to be attached to a cigarette machine as a single part or piece, namely, a channel through which the wrapper and superimposed filler are advanced, a filler compressing wheel arranged to revolve in the channel, a support forming a hood to the channel, its forward end being in proximity with the compressing wheel and its rear end carrying a pressure-resisting device, devices to wrap the wrapper around the filler and bring its opposite edges into engagement with each other, devices for folding the engaged wrapper edges into a seam, a crimping wheel arranged to revolve outside the wrapper and to co-operate with the pressure-resisting device within the wrapper to secure the seam, devices to trasmit power to revolve the filler-compressing and crimping wheels in the desired direction and devices for applying and regulating the pressure of the crimping wheel.

No. 50,903. Electrolytic Apparatus.

(*Appareil électrolytique.*)

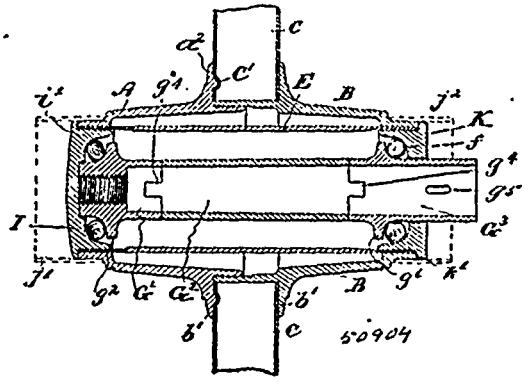


Isaiah Lewis Roberts, Brooklyn, New York, U.S.A., 20th December 1895; 6 years.

Claim.—1st. The improvement herein described in methods of decomposing metallic salts by electrolysis, which consists in maintaining by continuous feeds the supply of crystals in the anode compartment and in contact with the anode, up to the level of the solution in said compartment, as set forth. 2nd. In an electrolytic apparatus, the combination with the cathode tank and anode of a closed chamber or compartment containing the anode and formed by a partition composed of or containing a material that renders it substantially non-porous or impervious to fluids under normal conditions, the anode compartment being prolonged below the tank in a drain pipe or passage in which the acids or heavier impurities may collect by gravity, as set forth. 3rd. The combination of a cathode tank, an anode supported therein, a mass of coal dust around the anode, and a drain pipe or passage from the bottom of the mass of coal dust for carrying off the impurities resulting from chemical action at the anode, as set forth. 4th. The combination of an iron cathode tank, an anode supported therein, a mass of granular carbon or the like surrounding the anode, a diapragm or partition of pulverized coal confined in a bag and surrrounding the granular carbon, and a gravity drain pipe from the bottom of the mass of granular carbon for carrying off the impurities therein resulting from the chemical action, as set forth. 5th. In an apparatus for the electrolysis of metallic salts, the combination of a cathode, an anode and a substantially non-porous or amorphous electrolytic diaphragm between the same, a cover or seal by which the electrode compartments are closed, and a feed tube extending through the cover into an open space in which the anode is exposed, and opening into said space below the water level, the feed tube being of such character as to admit a continuous supply of crystals of the salt to be decomposed into the open space in the anode compartment, as set forth. 6th. In an apparatus for the electrolysis of metallic salts, the combination of a cathode, and an anode made hollow or with an opening extending through it, an amorphous electrolytic diaphragm interposed between the cathode and anode, a cover or seal closing the electrode compartments, a feed-tube extending through the cover into the space within the anode, and opening into the same below the water-line, the feed tube being of such diameter as to admit a continuous supply of crystals of the salt to be decomposed into the hollow anode, as set forth. 7th. In an apparatus for the decomposition of metallic salts, the combination of a cathode and an anode, an amorphous electrolytic diaphragm interposed between the same, a mass of broken charcoal between the diaphragm and the anode and in contact therewith, a feed tube extending into an open space within the anode, and adapted to admit to the sur-

face of the anode a continuous supply of the crystals of the salt to be decomposed, as set forth. 8th. The combination in an electrolytic cell of an anode consisting of a conducting body or bodies of carbon surrounded and in contact with a protecting conducting body of retorted or carbonized anthracite coal, substantially as described. 9th. A diaphragm for electrolytic cells composed of an insoluble non-conducting and non-coherent powder, and a gelatinizable binding material, as set forth. 10th. *A diaphragm for electrolytic cells* composed of an insoluble non-conducting pulverized substance and a gelatinizable silicate, as set forth. 11th. The method or process herein described of producing an electrolytic diaphragm which consists in forming a paste of an insoluble non-conducting pulverized substance, and a solution of silicate of soda or potash, forming said paste into the desired shape, providing temporary supports for the same and gelatinizing the solution by electrolytic action, as set forth. 12th. An electrolytic diaphragm composed of powdered anthracite coal and a gelatinizable silicate, as set forth. 13th. In an electrolytic apparatus, the combination with the electrodes of a soluble diaphragm interposed between the same and composed of crystals of the salt to be decomposed in a finely divided condition, and a means such as a feed tube for maintaining a supply of crystals to replace those dissolved, as set forth. 14th. The combination with a tube or vessel having three branches or legs, of electrodes in the side branches, and a mass of salt crystals in the central branch, as and for the purpose set forth.

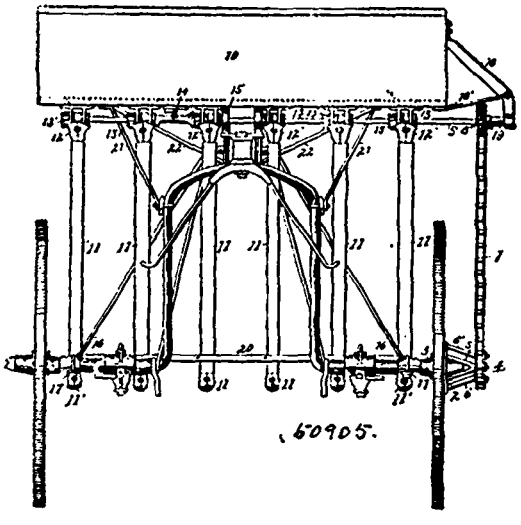
No. 50,904. Vehicle Wheel, etc. (*Roue de voiture, etc.*)



Sam Thomas Richardson, Alfred Smallwood and Richard Price, all of Birmingham, England, 20th December, 1895; 6 years.

Claim.—1st. The herein described improvement in the hubs of road vehicle wheels, consisting in making the said hub in two principal ring-like parts as if it were divided in a plane at right angles to the axle, and corresponding with the face of the spokes, one of the said ring-like parts having recesses in which the ends of the spokes fit, and the other said ring-like part being adapted to fit against and engage with the spokes to keep the same in the said recesses, the said two ring-like parts being screwed or otherwise removably secured together so as to permit of their being separated to remove or replace a spoke when required, substantially as herein set forth. 2nd. In a vehicle wheel, and in combination with the spokes, a hub made of two principal ring-like parts A and B, of which the part B is made with the recesses b^1, in which the ends of the spokes fit the other part A, fitting against the spokes and being provided with a ring or projection a^1, to engage with recesses therein, the said two parts of the hub being removably fixed together and threaded on the axle box, substantially as set forth. 3rd. The herein described improvement in the hubs of common road and other like vehicles consisting in making the said hub in three principal ring-like parts, namely, a central ring-like part having recesses in which the ends of the spokes fit and two outer ring-like parts adapted to fit against and be secured to the central part, the said three parts being threaded and secured on to the axle box, substantially as set forth. 4th. In a ball bearing axle box for the wheels of common road and other vehicles, the combination of a sleeve made in three parts such as G^1, G^2, G^3, fitted together and adapted to fit on to the axle arm, and having projecting collars such as g^1, g^2, forming the ball races, a tubular axle box such as E, surrounding the said sleeve and provided with end collars such as 1 and K, screwed therein and forming with the collars g^1, g^2, the ball races for the balls, substantially as herein described. 5th. The improved combined hub and ball-bearing axle box hereinbefore described with reference to Figs. 1, 2 and 3 of the accompanying drawings, consisting of the two ring-like parts A, and B, fitted together and holding the spokes as set forth, a tube or liner E, on which the two parts A and B are fitted, the collars 1 K, screwed into said liner and forming ball races, and the two sets of balls *f*, adapted to roll against the collars 1 K, and collars g^1, g^2, formed on the axle arm, or on a sleeve adapted to be threaded thereon, substantially as set forth. 6th. The improved combined hub and ball-bearing axle box hereinbefore described with reference more particularly to Figs. 1, 2 and 4, of the accompanying drawings, consisting of three ring-like parts A, B, and D, fitted together and holding the spokes between them as set forth, a tube or liner E, on which the three parts A, B and D, are fitted, the collars 1 K, screwed into said liner and forming the ball races, and the two sets of balls *f*, adapted to roll against the collars 1 K, and collars such as g^1, g^2, formed on the axle arm, or on a sleeve adapted to be threaded thereon, substantially as set forth. 7th. The improved combined hub *and ball-bearing axle box* hereinbefore described with reference more particularly to Fig. 7 of the accompanying drawings, consisting of three ring-like parts A, B and D, and washer M, fitted together and holding the spokes as set forth, a tube or liner E, on which the parts A, B, D and M, are fitted, the collars 1, K, screwed into said liner and forming the ball races, and the two sets of balls *f*, adapted to roll against the collars 1, K, and collars such as g^1, g^2, formed on the axle arm or on a sleeve adapted to be threaded thereon, substantially as set forth. 8th. Making spokes for vehicle wheels each of a thin taper solid drawn steel or other suitable metallic tube which is of oval section changing into a rectangular oblong section at that end which fits in the wheel hub, substantially as hereinbefore described and shown by Figs. 9, 10 and 11 of the accompanying drawings. 9th. In an oval taper tubular metal spoke of the kind denoted under claim 8 for vehicle wheels, the combination with the oblong rectangular and of the same of the cross notch c^1, for engaging with the hub and the plug P, fixed in the outer end of the spoke for the screw Q, which secures the spoke to the wheel rim. 10th. In a road vehicle wheels the method of securing the tubular spokes to the wheel rim consisting of a plug fixed in said spoke and a screw passing through the wheel rim into said plug as hereinbefore described and shown by Fig. 13, of the accompanying drawings. 11th. In a vehicle wheel the combination of the hub made in the two parts A and B, for the removal of the spokes, the thin taper metallic tubular spokes C, fitted in said hub, the hollow crescent-shaped wheel rim s^1, s^2, fixed to said spokes, the inflated air tube V, contained within the rim C, and the india-rubber tread portion U, of the tyre fitting on the air tube V, and projecting through the crescent-shaped rim C, the whole forming a metallic wheel with a pneumatic tyre, substantially as described and shown by the accompanying drawings.

No. 50,905. Grain Seeder. (*Semoir.*)



Marion D. Woodruff, Lincoln, Illinois, U.S.A., 20th December, 1895; 6 years.

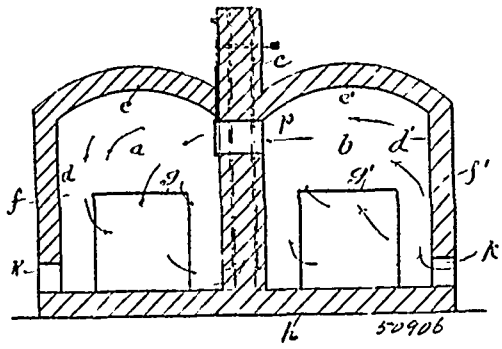
Claim.—In an attachment for cultivators, the clutch composed of the following parts, viz., rim 2, bars 5, rods 6 and 6^1, and sprocket-wheel 4, secured to one of the bearing wheels, in combination with the chain 7, sprocket-wheel 8, secured on feed shaft 9, braces 18 and 18^1, 21 and 22, and the feed spout 11, and scatterer 11^1, substantially as shown and described.

No. 50,906. Kiln. (*Four.*)

George Edward Stagg, Shakespeare, Ontario, Canada, 20th December, 1895; 6 years.

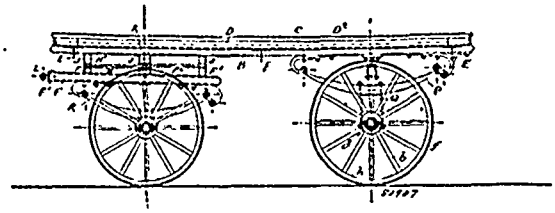
Claim.—1st. A down draught kiln having two or more chambers divided by a wall, separate chimney flues communicating with each chamber, and a communicating passage or passages between the chambers, with means for controlling the draft through such chimney flues and passages for the purpose set forth. 2nd. A down draught kiln having adjoining burning chambers with chimney flues and communicating passages whereby the heat from one chamber can be taken directly to the chimney flue thereof or to the other chamber for the purpose set forth. 3rd. In a kiln, the combination

of the adjoining chambers *a*, *b*, having suitable fire holes and drawing apertures, dividing wall *c*, having chimney flues m^1, m^2, etc.,



and openings a^1, b^1, etc., with controlling dampers and also having transverse passages *p*, with controlling dampers, substantially as and for the purpose set forth.

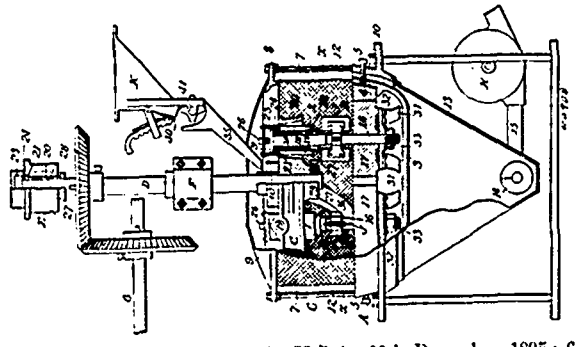
No. 30,907. Wagon, etc. (*Wagon, etc.*)



Thomas Daniel Stagg and Edward Robson, both of Hull, England, 20th December, 1895; 6 years.

Claim.—1st. In a vehicle of the class described, a body constructed of sole pieces B, sides D, ends D^1 and cross braces E, all formed of metal rolled to suitable sections and riveted or bolted together, substantially as and for the purposes herein set forth. 2nd. In a vehicle of the class described, an under carriage, constructed of longitudinal pieces F, cross pieces F^1, F^2, all formed of metal rolled to suitable sections and riveted or bolted together, substantially as and for the purposes herein set forth. 3rd. In a vehicle of the class described, in combination, an axle-tree formed of flanged channel pieces M, M^1, and an axle bar N, substantially as herein set forth. 4th. A vehicle wheel, consisting of the combination of a hub S, with bush T, flanges *d*, a dust cap Z, and lubricator *k*, a felloe *a*, of channel section, a tyre *f*, spokes *b*, connected to said felloe *a* and flanges *d*, all constructed of metal, substantially as herein set forth. 5th. The combination, with a wheel constructed as set forth in the preceding claim, of flat rings *h*, substantially as and for the purpose herein set forth. 6th. The combination, with a wheel constructed as set forth in claim 3, of a hoop *f*, substantially as and for the purpose set forth. 7th. The combination with a vehicle wheel, constructed as set forth in either of the claims 3, 4 or 5, of an axle-bar N, and hardened steel anti-friction rollers V, substantially as and for the purpose herein set forth. 8th. As a new article of manufacture, a lurry constructed substantially as herein described and shown with reference to the accompanying drawings.

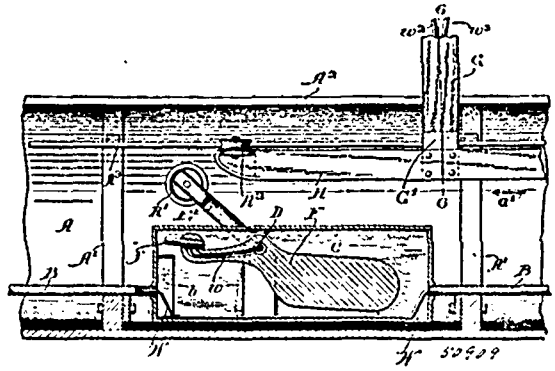
No. 30,908. Pulverizing Machine. (*Broyeur.*)



John C. Clark, Atlanta, Georgia, U.S.A., 26th December, 1895; 6 years.

Claim 1st The combination in a pulverizing mill, of a revolving shaft provided with a cross-head, boxes swinging upon said cross-head, and a shaft carrying a crushing roller at the lower end, and a brass secured removably in each box, and a head upon the shaft having a bearing upon the top of the brass, substantially as set forth. 2nd. In a pulverizing mill, a bearing consisting of a box, a brass within the box, and a shaft passing through the box and provided with a head resting upon the upper end of the brass, substantially as set forth. 3rd. The combination in the bearing of a pulverizing mill, of a box, a brass within the box and removable therefrom, a shaft having a head at the upper end, and a detachable ring below said head and bearing upon the upper end of the brass, substantially as described. 4th. The combination in the bearing of a pulverizing mill, of a box, a brass within but shorter than the box, the latter constructed to form an oil chamber above the brass, a shaft provided with a head within said oil chamber, a gland below the brass, and a follower for confining the gland in place, substantially as described. 5th. The combination of the revolving shaft D, cross-head, suspended boxes, shafts 16 provided with rollers and turning in said boxes, and cock head bearings arranged centrally above the shaft, substantially as set forth. 6th. The combination with the mortar and revolving pestles having rotating rollers, of chutes arranged to deliver the incoming material to a position between the adjacent faces of each roller and the grinding face of the mortar, substantially as set forth. 7th. The combination of the mortar, shaft D having a cross head supporting the pestles, and a chamber *w*, a chute for delivering material to said chamber, and chutes extending from said chamber outward and downward, substantially as set forth. 8th. The combination with the chute 35, and hopper, of a gate 40, and a bladed shaft 41, substantially as described.

No. 30,909. Electric Railway. (*Chemin de fer électrique.*)



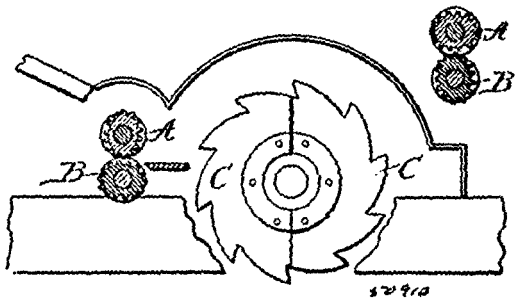
George E. Baird, Chicago, Illinois, U.S.A., 26th December, 1895; 6 years.

Claim.—1st. The combination with a track and a car moving thereon and provided with a suitable motor, of the arm G, dependent from the car, the parallel contact bars H, H^1, supported by said arm, the lines of pipe sections B, B^1, and chambers C, C^1, and conducting wires W, W^1, lying within said pipe section and chambers, respectively, and insulated except at points of exposure within the chambers, the contact brushes *b*, b^1, attached to said wires the oscillating levers F, F^1, provided with the contact blocks *f*, f^1, adapted to be brought into contact with the brushes *b*, b^1, and members attached to the levers F, F^1, and lying outside the chambers C, C^1, said members being adapted to be actuated by the contact bars, H, H^1, respectively, as the car moves along the track, whereby the wires W, W^1, may be brought into electrical connection with the motor. 2nd. The combination with the track and the car moving thereon and provided with a suitable electric motor, of the arm G, dependent from the car, the transverse bar G^1, supported by the arm, the contact bars H, H^1, supported by the bar G^1, and spaced with reference to each other by the transverse bars *h*, the suitably supported lines of pipe sections B, B^1, and chambers C, C^1 the conducting wires W, W^1, enclosed in said pipe sections and chambers and insulated except at points of exposure within said chambers, the contact levers lying within the chambers and adapted to make electrical contacts with said wires, and levers lying outside the chambers and connected with said contact levers, the contact bars H, H^1, being adapted to actuate in succession, the contact devices of said lines respectively, as the car moves along the track, whereby a circuit may be closed to said wires and said motor. 3rd. The combination with the conduit, the pipe sections and chambers supported therein, the conducting wires lying within said pipes and chambers and the contact devices constructed and operated substantially as described, of the hanger G, and the contact bars, H, H^1, supported by said hanger and adapted to actuate said contact devices, each of said hangers being formed of a bar of conducting metal terminating in blocks of non-conducting material having their lower edges inclined outward and upward, substantially as shown and described. 4th. The combination with the conduit provided with the guide rails A^3, A^3, the two suitably insulated conductors lying therein and the two sets of contact devices connected with said conductors respectively of the dependent arm G, the parallel contact bars H, H^1, supported by the arm and spaced

with reference to each other and the rollers R^2, R^2, mounted on said contact bars and adapted to impinge upon said guide rails and regulate the lateral position of said contact bars thereby insuring the actuation of said contact devices by the bars respectively, substantially as shown and described. 5th. In an electric railway, the combination with a suitable track, and a car moving thereon, and operated by a suitable electric motor, of a main conducting wire extending along the line of the track and insulated except at suitably separated points of exposure, oscillating conducting-levers normally out of contact with said wire, but adapted to be forced into contact therewith at said points of exposure, respectively, rollers connected with said levers, and a conducting hanger dependent from the car in electrical connection with said motor, and adapted to strike said rollers successively as the car moves along the track, and thereby to press said levers into contact with said wire and establish electrical connection between said wire and said motor.

No. 50,910. Corn Husker, etc.

(*Appareil à éplucher le blé-d'inde, etc.*)



George W. Packer, Rock Falls, Illinois, U.S.A., 26th December, 1895; 6 years.

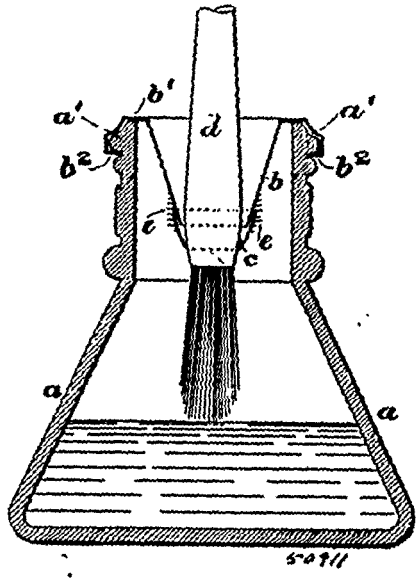
Claim.—1st. In a fodder-shredder, the combination, with the shaft D, of collars H thereon, each of said collars comprising a cylindrical hub and two transversely perforated cylindrical spiral rims, each rim being of substantially the same thickness as the length of the hub, and the pitch of the spiral being such that one side of each end of one of the spirals will be substantially even with the opposite side of the adjacent end of the other spiral, shredding-blades between the rims of the different collars, and pins through the blades and into the rims, substantially as set forth. 2nd. In a fodder-shredder, the combination, of a shaft D, shredder-blades p, arranged spirally upon said shaft, and collars H, consisting of a tubular centre adapted to be seated on said shaft, and segmental blade rests formed obliquely in opposite directions on the periphery of said tubular centre, and adapted to receive the aforesaid blades, substantially as set forth. 3rd. In a fodder-shredder, the combination, with a frame, of a bracket secured thereto, the upper position of which is provided with a set screw, a shaft journalled in one leg of the bracket, a sprocket-wheel, a gear-wheel and a yoke upon the shaft, a roller journalled in the free end of the yoke, a second roller journalled in the frame adjacent the first-mentioned roller, one end of which is provided with a sprocket-wheel, an idle-wheel, a sprocket chain over the two sprocket-wheels and the idle-wheel, and a spring between the free end of the yoke and the upper end of the bracket, substantially as set forth. 4th. In a corn husking machine, the snapping rollers A, B, formed oblong in cross-section and provided with fluted and ridged sides adapted to mutually engage, substantially as set forth. 5th. In combination with husking rollers D, regulators 23, provided with sloping bases 25 and suspended over the interval between said rollers and adapted to have a longitudinal, orbital movement in the line of said roller, substantially as shown and for the purpose described. 6th. In a fodder-shredder, peripheral rotating teeth, seated with their engaging points in a spiral or in sections of a spiral, substantially as set forth.

No. 50,911. Bottle for Gum, Etc.

(*Bouteille à mucilage, etc.*)

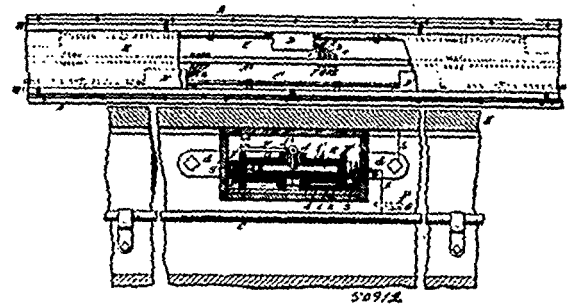
George Musgrove, Brixton Hill, England, 26th December, 1895; 6 years.

Claim.—1st. A bottle for gum and the like, having its cap provided with a depressible thimble or ferrule supporting the brush, and with a spring for keeping such thimble or ferrule normally in its raised position, substantially as described. 2nd. The combination in a bottle for gum and the like, of a funnel-shaped cap, a depressible thimble or ferrule supporting the brush and fitting over the lower part of such funnel-shaped cap, and a spiral spring surrounding the funnel-shaped cap and secured thereto and to the thimble or ferrule so as to keep the latter normally in its raised position, substantially as described. 3rd. The combination in a gum or like bottle, of a bottle proper having a recessed upper edge, a funnel-shaped cap provided with clips to engage with said edge and a depressible thimble or ferrule normally held in its raised position by a spring,



substantially as described. 4th. The combination of the bottle proper a, provided with the projecting edge a^1, recessed at a^2, the funnel-shaped cap b, provided with the rim b^1, and clips b^2, the depressible thimble or ferrule c, and the spring d for retaining the said thimble or ferrule normally in its raised position, substantially as described.

No. 50,912. Electric Railway. (*Chemin de fer électrique.*)



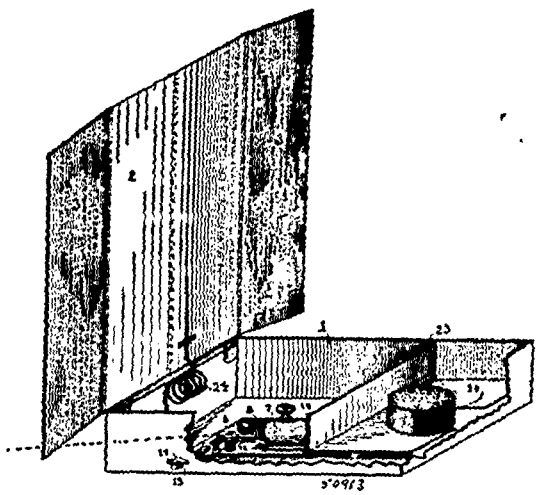
John H. Guest, Boston, Massachusetts, U.S.A., 26th December, 1895; 6 years.

Claim.—1st. In an electric railway system, the combination substantially as described, of a closed conduit having surface or contact conductors normally disconnected from the sources of working or power current, magnetizable circuit closers within said conduit, and electro-magnetic switches controlled by the same for connecting the surface conductor with the source of working or power current. 2nd. The combination, with a magnet on the car and an armature therefor on the permanent way for closing the switch for one section, of a resetting magnet on the permanent way for opening the switch, energized by current flowing to another section when the car reaches the latter. 3rd. The combination with each section of working conductor, of resetting circuits closed therethrough to sections both to the front and rear of said section and including at each such section the coils of an unsetting electro-magnet. 4th. In an electric railway system, the combination with the magnet on the car, of an armature therefor, a switch connected to said armature for closing the connection for a section of working conductor, and a solenoid magnet also connected to said switch, and having its core arranged to work in a horizontal line, said solenoid having a coil in a circuit completed when the switch is closed, as and for the purpose described. 5th. In an electric railway system, the combination with a magnet on a car, of an armature on the road-bed actuated thereby to close a switch in a connection between a section of working conductor and the source of power current, and an electro magnet located in said section and acting when energized to maintain said connection in closed circuit condition either through said initial switch or through an auxiliary switch, substantially as set forth. 6th. In an electric railway, the combination, substantially as described, of a conduit the sides of which are formed of insulating material, contact

rails divided into sections and supported upon the sides of the conduit at their upper edge, said contact rails being normally insulated from the power circuit and forming at opposite sides of the conduit opposite poles or terminals of the system, and automatic switch-boxes within said conduit for connecting and disconnecting said rails from the main leading and returning wires, as and for the purpose described. 7th. The combination, substantially as described, with the conduit having the automatic switch-boxes mounted within it, of the longitudinal support for the cover of said conduit, and studs or rods mounted in said support forming means for attachment of the switch terminals and for interconnecting the terminals of different switch-boxes. 8th. The combination with the two lines of sectional working conductor forming the positive and negative sides of the system and switches for connecting the same with the power circuits or conductors, of resetting electro-magnets operating on said switches to open the connections, the coils of the resetting-magnets for one side being in the connections of the sections of working conductor for the other side. 9th. The combination with the two lines of working conductor forming plus and minus sides of the system and the switches therefor, of resetting coils for the switches of each side controlled over the circuits of the sections on the other side. 10th. The combination with a working conductor, of a trolley or collector-wheel making frictional or rubbing contact therewith, an independent driving trolley-wheel running on a surface independent of said working conductor, and means for pressing the trolley-wheel into rubbing connection with the working conductor. 11th. The combination with the conduit and the automatic switches, of the cover plate for the conduit made of magnetic material and provided with openings over said switches, and plates for closing said openings divided down to the space containing the switches by a strip of non-magnetic metal for the purpose set forth. 12th. In an electric railway system, the combination, substantially as described, of two lines of working conductor beneath the car exposed at the street surface and divided into sections and forming respectively the positive and negative sides of the system, the sections on one side of the system being arranged to break joint with the sections on the other, and automatic switches for closing the connection between the sections of working conductor and the power circuit and disconnecting a section to the rear of the car, as and for the purpose described. 13th. The combination with the switch-actuating electro-magnet on the car charged by current taken up by the car through said switch, of a supplemental generator on the car, an automatic circuit controller responsive to interruption in the normal flow of the current through said switch-actuating electro-magnet for completing the circuit of the supplemental generator through the same, and a signal for announcing such interruption.

No. 50,913. Flash-Light Apparatus.

(*Appareil de lumière à éclat.*)



George T. Shiras, Alleghany, Pennsylvania, U.S.A., 26th December, 1895; 6 years.

Claim.—1st. The combination of a box, a flash-light powder box contained in the same, an explosive in close proximity with said powder box, means for firing said explosive and a lid to said first named box, to act as a reflector and shield when thrown up. 2nd. The combination of a box, a cover for the same, folding wings on said lid, a flash-light powder box contained in said first box, an explosive in proximity with said powder box, and means for firing said explosive. 3rd. The combination of a box, a support in said box for a flash light powder box, said powder box having an opening in the bottom and ears on said bottom, and pins extending from said support to slip through said ears. 4th. The combination of a box, a support in said box for a flash-light powder box, said flash-light powder box, an explosive lodged in said support, and a firing pin to discharge said explosive. 5th. The combination of a box, a removable bed plate in said box having a guide for a spring actuated firing pin, said firing pin, an explosive in the line of movement of said pin, and a flash-light powder box in proximity with said explosive. 6th. The combination of a box, a flash-light powder box contained in said box, a fuse extending from said powder box, an explosive in proximity to said fuse, and a spring-actuated firing pin to discharge said explosive. 7th. The combination of a box, a flash-light powder box contained in said box, an explosive in proximity to said powder box, a spring actuated firing pin to discharge said explosive, a trigger to hold said pin, and a pushing device to release said trigger. 8th. The combination of a box, a flash light powder box contained in said box, an explosive in proximity to said powder box, a spring actuated firing pin to discharge said explosive, trigger to hold said pin and a pulling device to release said trigger.

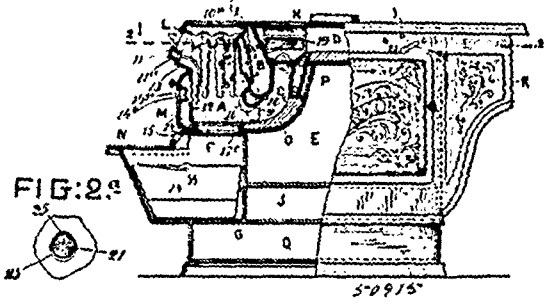
No. 50,914. Process of Making Beer.

(*Procédé pour la fabrication de bière.*)

John Colt Pennington, Paterson, New Jersey, U.S.A., 26th December, 1895; 6 years.

Claim.—1st. As a step in making beer, the process of completely sterilizing the wort by heating it, then cooling it, allowing any residual spores to germinate, and then further heating and cooling it, the whole under careful exclusion of extraneous spores and germs, substantially as set forth. 2nd. The new process of making beer, which consists in producing a suitable wort, then thoroughly sterilizing this wort by alternate heating and cooling after mashing, as above described, and then sowing the sterilized wort with pure yeast, the entire procedure being conducted with exclusion of extraneous spores or germs, substantially as set forth. 3rd. The process of making beer, which consists in heating the wort two or more times to about the boiling point, at intervals of from six to twelve hours, cooling it between each heating under exclusion of extraneous spores and germs, and then sowing it with pure yeast under exclusion of other germ matter, substantially as set forth.

No. 50,915. Stove or Range. (*Poêle de cuisine.*)



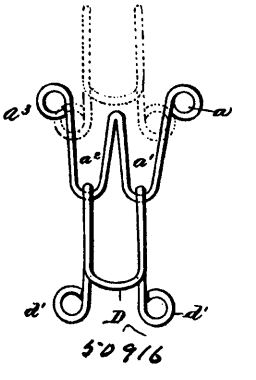
Edwin Ruthven Cahoone, Newark, New Jersey, U.S.A., 26th December, 1895; 6 years.

Claim.—1st. A stove or range having a fuel magazine, a back flue C, and a hollow partition separating said fuel magazine from said flue, said partition having upright ribs on its front face, and the grooves between said ribs being deepest at their upper ends, and becoming gradually shallower toward their lower ends, substantially as set forth. 2nd. A stove or range having a fuel magazine, a back flue C, and a hollow partition separating said fuel magazine from said flue, the partition having upright ribs on its front face and a recessed, apertured or perforated strip next below said ribs, substantially as set forth. 3rd. A stove or range having a fuel magazine, a back flue C, and a partition separating the fuel magazine from the flue, said partition having upright ribs on its front face, the grooves between said ribs deepest at their upper ends, and a recessed, apertured or perforated strip immediately below said ribs, substantially as set forth. 4th. A stove or range having a fuel magazine, a flue C, and a hollow partition separating said fuel magazine from said flue, said partition consisting of two sections, joined along a longitudinally extending line of division, and the front section having in it apertures for the passage of air therefrom to the magazine, substantially as set forth. 5th. A stove or range having a fuel magazine a flue C, and a hollow partition separating said fuel magazine from said flue, said partition having double apertured front walls with an air space between said walls, substantially as set forth. 6th. A stove or range having a fuel magazine, a flue C, and a hollow partition separating said fuel magazine from said flue, said partition having a hollow shoe on its convex lower edge, whereby an air chamber is formed between said shoe and the wall of the partition, and apertures in said wall to admit air to said air chamber, substantially as set forth. 7th. A stove or range having a fuel magazine, a flue C, and a hollow partition separating said fuel magazine from said flue, said partition having a shoe on its convex lower edge, an air chamber being formed between said shoe and the wall of the partition, apertures in said wall to admit air to said chamber, and ribs or projections on the convex face of said shoe, substantially as set

forth. 8th. A stove or range having a fuel magazine, a flue C, and a hollow partition separating said fuel magazine from said flue, said partition having a hollow shoe on its convex lower edge, whereby an air chamber is formed between said shoe and the wall of the partition, apertures in said wall to admit air to said chamber, transversely arranged ribs on the convex face of the shoe, and apertures or perforations in the shoe for the escape of air to the fire therethrough, substantially as set forth. 9th. A stove or range having a fuel magazine, a flue C, and a hollow partition separating said magazine from said flue, this partition having an apertured, inner front wall, and a removable front wall or shield provided with upright ribs on its front face, and with an apertured or perforated strip at its lower part, as set forth. 10th. A stove or range having a fuel-magazine, a flue C, and a hollow partition separating the magazine from said flue, this partition having an apertured, inner front wall, an outer front wall, also apertured at its lower part, and an air-space between said walls, substantially as set forth. 11th. A stove or range having a fuel magazine, a flue C, and a hollow partition separating said magazine from said flue, this partition having a removable wall or shield 8 on its inner front wall, provided with vertically arranged grooves which are deepest at their upper ends, and a recessed perforated bottom strip 8^b, an air chamber being formed between the inner front wall of said partition and the said shield, substantially as set forth. 12th. A stove or range having a fuel magazine, a flue extending upwards from the bottom of said magazine, said stove having in its side at the upper end of said flue an opening, provided with a door to admit a holder for toasting, and a partition separating the upper portions of said fuel magazine and flue, and extending downwards to form a contracted throat at the lower portions thereof, whereby the coke or fuel in the magazine is restrained from entering said flue, and withheld at a distance from said opening, substantially as described. 13th. A stove or range having a fuel magazine, a flue C, a partition separating said flue from the magazine, a movable front to the magazine, said front having apertures and upright ribs, and a movable stove-front exterior to said ribbed front, an air-space being formed between said fronts, substantially as set forth. 14th. A stove or range having a fuel magazine, a flue C, a partition separating said flue from the magazine, a movable stove-front M, a movable grating or inner front, and a window plate mounted removable in the front M, substantially as set forth. 15th. A stove or range having a fuel magazine, a flue C, a partition separating said flue from said magazine, a stove-front, a window plate set therein, said plate having a mica window with apertures or perforations about it for the admission of air to the stove, and a box or cap at the inside of and on said plate and covering said window, said box having an apertured or perforated bottom opposite the window, substantially as described. 16th. In a stove or range for burning soft coal, the combination with the convex, ribbed lining 13 below the charging door, of the stove-front M, and the inner ribbed front or lining, the ribs on the latter registering with those of the former at their upper end and forming continuations thereof when the parts are in place, as set forth. 17th. In a stove or range for burning soft coal, the combination of the partition extending downwardly between the fuel magazine and the flue, and forming at the bottom a contracted throat between the two to oppose the passage of coke into said flue, and the fire-bed for said coke comprising a fixed grid having slots, a sliding grid having also slots, said upper and lower slots being adapted to register, substantially as described. 18th. In a stove for burning soft coal, the combination with the partition or duct having ribs or projections at its lower edge, of the fuel-supporting bed having a raised shoulder at its rear edge, whereby obstacles are formed to oppose the forcing back of the coke or fuel under said partition, substantially as set forth. 19th. A stove or range having an opening 35 in its top plate, provided with rabbetted margins to receive a slide for closing said opening, and having a slide 34, provided with a T-piece 36, adapted to take under the edges of the opening when the slide is in place, and retain it, substantially as set forth. 20th. A stove or range having a fuel magazine, a flue C, a partition separating said flue from said magazine, and end plates or linings 10 and 10^x, in said magazine and flue, respectively, said plates 10^x, taking behind the back wall of said flue at their rear edges, substantially as set forth. 21st. A stove or range having a fuel magazine, a back flue C, and a hollow partition separating said flue from the magazine, said partition having a protecting shoe at its lower edge with an air-space or chamber between the wall of the shoe and the wall of the partition, substantially as set forth. 22nd. A stove or range having a transverse partition in the combustion chamber thereof and said partition having a protecting shoe on its lower edge provided with projecting ribs extending transversely of the partition. 23rd. The fire-box of a stove having at one or more of its sides upright flues open at their front sides, which are adapted to be closed by the fuel in the fire-box, and said flues being deepest at their upper ends, such extra depth being produced by the outward projection of the ribs separating said flues, substantially as set forth. 24th. In a stove or range, the combination with the stove-front, of the window plate set therein, said plate having a mica window, with apertures or perforations about it for the admission of air in jets to the stove, and a box or cap at the inside of and on said plate and covering said window, said box having an apertured or perforated bottom opposite the window, substantially as described. 25th. A stove having in it a mica window, a trunk on the inner face of the wall in which the window is placed, said trunk embracing said window and projecting into the interior of the stove, and an apertured or perforated plate covering the inner end of said trunk, substantially as described. 26th. In a stove or range, having a fuel magazine and an upwardly extending flue, the combination with the partition extending downwardly between said magazine and flue, whereby the heated products of combustion are carried to the lower part of the fire-box and the fuel therein rendered incandescent, of the grate in front of said incandescent fuel, the movable stove-front, and the removable boiler-casing located in front of said grate, substantially as described. 27th. A stove or range having a fuel magazine and flue, and a transverse air-duct and partition which separates the fuel magazine from the flue, said duct being suspended from a removable section of the top plate of the stove or range in front of the front pot-holes, substantially as set forth. 28th. A stove or range having a fuel magazine and flue, and provided with a divided top-plate one section of which is arranged in front of the front pot-holes, and a removable, transverse air-duct and partition which is arranged under said front section and separates the fuel magazine from the flue, substantially as set forth. 29th. A stove or range having a fuel chamber therein provided with a transverse air-duct, said duct having a pocket at its upper part, the top plate of the stove having air-inlets, to admit air to said pockets. 30th. The combination with a stove or range having in it a fuel chamber, of a metal air-duct extending transversely across said chamber, said duct being provided at its narrow lower part with a protecting shoe, and at its upper part with a pocket extending toward the front of the stove and adapted to receive air through apertures in the stove top. 31st. A stove or range for burning bituminous coal, having a fuel magazine, a transverse air-duct and partition, and a gas-flue back of said partition, the back wall of said flue being formed of a curved lining at its lower part, and a water-back above said lining and resting thereon, as set forth. 32nd. A stove or range for burning bituminous coal, having a fuel magazine, a transverse air-duct and partition, a gas-flue back of said duct, a charging door and an imperforate fire-bed, and having a hinged front, extending from the fire-bed up nearly to the charging door and protected with a suitable lining, said front forming the front wall of the fuel chamber, substantially as set forth. 33rd. A stove for burning bituminous coal, having in its side at the top plate a downwardly inclined apertured extension, and a peep-window of mica at the upper end of said extension, substantially as set forth. 34th. A stove or range for burning bituminous coal, having a transverse air-duct and a gas-flue back of said duct, and having also a peep-window of mica in the side of the stove at the end of said flue, said window being situated at about the level of the top of the stove, substantially as set forth. 35th. A stove or range having a fuel magazine, a gas-flue, and a transverse, pendent, hollow partition between said magazine and gas-flue, the back wall of said gas flue having the peculiar ogee form shown, that is, a concavity at its lower part and a substantially vertical middle portion, whereby the gases are deflected upward, and a backwardly flared upper part, as set forth. 36th. A stove or range for burning bituminous coal, having a fuel-magazine, and a transverse air-duct and partition at the rear of the same, and having a removable front between the fire-bed and the charging doors which front forms the front wall of the fuel magazine and extends down to the fire-bed, whereby the fire-box may be opened for the removal of coke and unburned fuel.

No. 50,916. Fastening Device for Garments, Etc.

(*Agrafe pour vêtements, etc.*)



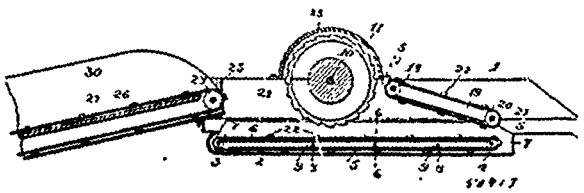
Moses Victor Safford, New York, State of New York, U.S.A., 26t December, 1895; 6 years.

Claim.—1st. A fastening device consisting of two parts, each of which is composed of wire, and one of which is bent to form a double loop, and provided with rings by which it may be connected with a garment or other article, and the other of which is bent to form a loop-hook, and is also provided with rings by which it may be secured to a garment or other article, said parts being constructed, combined and arranged, substantially as shown and described. 2nd. A fastening device for garments or

other articles consisting of two parts, each of which is composed of wire, and one of which is provided with double loops formed from the central portion of the wire and rings formed from the ends thereof, the central portion which forms the adjacent sides of the double loops being carried back approximately to the rings and the other of which is composed of a loop-hook, said loop-hook being formed of the central portion of a wire the ends of which are formed into rings, said loop-hook being adapted to engage with the double loops of the part first specified, substantially as shown and described. 3rd. A fastening device for garments, consisting of two parts each of which is formed of wire, and one of which is provided with a double loop, and the other of which is provided with a loop-hook, said parts being adapted to be connected with the garment and to operate, substantially as shown and described.

No. 50,917. Band-Cutter and Feeder.

(*Coupe-hart et alimentateur.*)

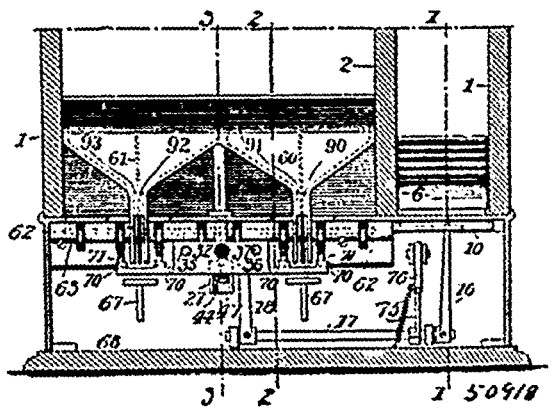


Isaac Abraham Crisp, James Albert Stevenson and Henry Clinton Davis, all of Halsey, Oregon, U.S.A., 27th December, 1895; 6 years.

Claim.—1st. In a device of the class described, the combination with a supporting framework, and a horizontal shaft 3, arranged transversely therein, of an apron carried at one end by said shaft, a horizontal plate 6, arranged between the upper and lower sides of the apron and parallel with and contiguous to the plane of the upper side of the apron to support the latter intermediate of its ends, a roll mounted upon said plate and supporting the other end of the apron, and means for adjusting said plate and the roll carried thereby in a horizontal plane, said means consisting of bolts engaging slotted depending flanges of the horizontal plate, substantially as specified. 2nd. The combination with a supporting framework, having side plates provided with horizontal slots 9, of a shaft 3, means to operate said shaft, a horizontal plate 6, provided with depending side-flanges bolts extending horizontally and transversely through said flanges and engaging the said slots in the side plates, a roller 4, carried by said plate 6 at the opposite end from the shaft 3, an apron travelling upon the shaft 3, and roll 4, band-cutting mechanism arranged above said apron, and means for locking said bolts at the desired adjustment, the horizontal plate being arranged parallel with and adjacent to the upper or operating side of the apron to prevent deflection thereof, substantially as specified.

No. 50,918. Advertising and Vending Apparatus.

(*Appareil de publicité et de vente.*)

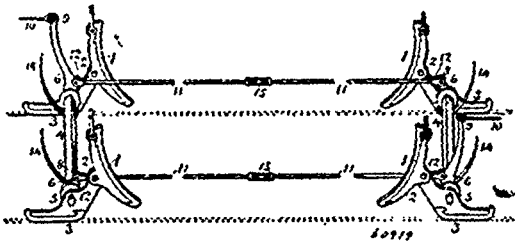


Siegfried Silberberg, assignee of Frank Morton Archer, both of New York, State of New York, U.S.A., 27th December, 1895; 6 years.

Claim.—1st. A combined vending and advertising apparatus, comprising a chamber having a support for a number of articles to be sold, and a chamber constituting the advertising portion of the machine, the chambers being arranged adjacent to each other and being separated by a suitable partition, in combination with a coin passage choked by a lever upon a rocking shaft, a push-rod adapted to tilt the said lever and the shaft through the medium of the coin, a channel leading up into the advertising chamber and a spring at the bottom of the said channel, the said spring being released when the push-rod has been fully operated, whereby one of the articles of sale is dropped, and at the same time the coin is thrown up into the upper portion of the advertising chamber, as described and for the purposes set forth. 2nd. A coin apparatus for vending and advertising articles of sale, the same comprising a coin passage which is choked by a lever upon a rocking shaft, a push-rod adapted to tilt the said lever and shaft through the medium of the coin, a support for a number of articles of sale, the said support being connected with the said shaft, a flexible or movable strip lying vertically alongside the articles for sale, except the lowermost of the said articles, and a projection or lug connected with the said shaft and extending into range with the said strip, whereby on the insertion of a coin and the operation of the push-rod, the support for the articles of sale will be momentarily removed and the remaining articles of sale will be held in place by friction, as described and for the purposes set forth. 3rd. A combined advertising and vending apparatus comprising compartments for the receipt of coins and other spaces for allowing the coins to pass through, the said spaces being choked by catches supporting the floors of the said compartments, a separate chamber having a support for the articles of sale, in combination with a coin passage choked by a lever upon a rocking shaft, a push-rod adapted to tilt the said lever and shaft through the medium of the coin, a channel leading to the space above the said compartments, and a spring at the bottom of the said channel, the said spring being released when the push-rod has been fully operated, whereby, one of the articles of sale may be dropped, and at the same time the coin be carried into a position to fall into one of the said compartments or into one of the spaces behind the same, as described and for the purposes specified.

No. 50,919. Railway Brake.

(*Frein pour chars de chemin de fer.*)



Thomas Henry Allen, Toronto, Ontario, Canada, 27th December, 1895; 6 years.

Claim.—1st. In a railway brake, the combination of a wheel brake having means to attach a rail brake thereon, the rail brake jointed to said wheel brake, and a bar having a rail brake on each end thereby adapted to couple said rail brakes in pairs transverse of a truck, substantially as shown and described. 2nd. In a railway brake, the combination of a wheel brake having means to attach a rail brake thereon, the rail brake jointed to the wheel brake, a bar having a rail brake on each end, and the pair of levers on said bar and between said rail brakes, substantially as shown and described. 3rd. In a railway brake, the combination of a wheel brake having means to attach a rail brake thereon, the rail brake jointed to the wheel brake, the bar having a rail brake on each end, the pair of levers on said bar and between said rail brakes thereon, and the rods jointed to and connecting said levers in pairs longitudinal of the truck equipped therewith, substantially as shown and described. 4th. In a railway brake, the combination of a wheel brake adapted to have a rail brake jointed thereon, the rail brake jointed to the wheel brake, the bar adapted to carry a rail brake on each end, the pair of levers disposed on said bar as specified, the rods jointed to said levers, the turn-buckle in each of said rods to enable the same to be adjusted in length thereby providing compensation for wear of the brake shoes and for throw of said levers and the curved springs carried by the truck frame and supporting said bars when the brakes are released, substantially as shown and described. 5th. A railway brake applicable from either end separately or both ends of the car simultaneously and composed of the combination of the pair of levers at each end of the car, the longer of each pair being connected to the brake shaft at the corresponding end of said car, the pair of longitudinal rods jointed to connect said pairs of levers in pairs longitudinal of the car and act as movable fulcrums a fixed distance apart at their ends, the shafts having the lower ends of said levers secured thereon, the rail brakes carried on the ends of said shafts and thereby coupled in pairs transverse of the car, and the wheel brakes jointed by their rear central portions to the uppermost extensions of said rail brake, substantially as shown and described.

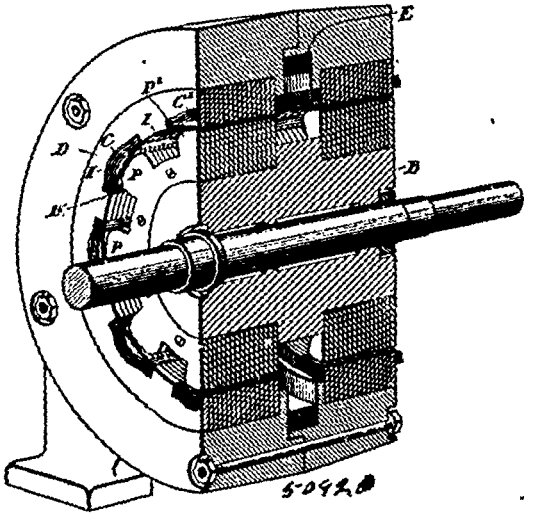
No. 50,920. Alternating Current Generator.

(*Générateur de courant alternatif.*)

John Forrest Kelly, Pittsfield, Massachusetts, U.S.A., 27th December, 1895; 6 years.

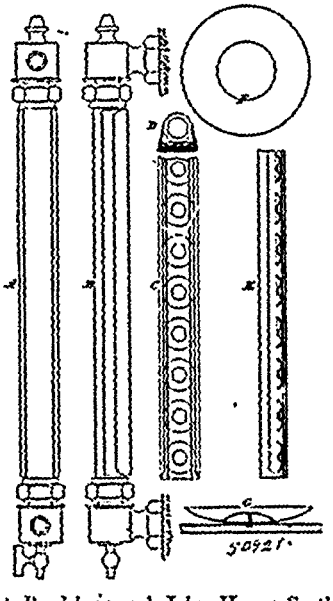
Claim.—1st. In an alternating current generator, the combination of a field magnet and an armature having opposing faces, one of which bears to the other the definite relation expressed by the formula of an inverse sinusoidal curve, substantially as specified and

described. 2nd. An alternating current generator, having a single exciting coil and a suitable armature, and two groups of multo field



pole pieces on opposite sides of the exciting coil, the faces of said pole pieces being so shaped that their curvature referred to the opposing armature surface may be expressed by the formula of an inverse sinusoidal curve, substantially as specified and described. 3rd. In an alternating current generator, the combination of an armature frame, having a cylindrical inner surface with a field magnet core mounted within said frame, and having pole pieces with curved surfaces, whose curve with relation to the opposing cylindrical surface may be expressed by the formula of an inverse sinusoidal curve, substantially as specified and described.

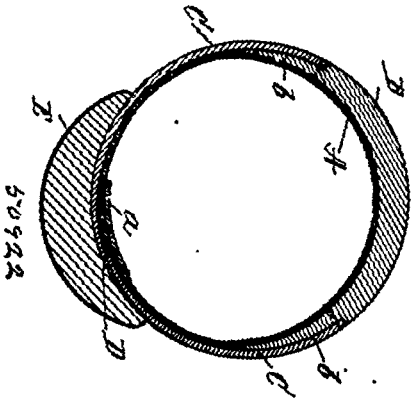
No. 50,921. Water Gauge Indicator. (*Indicateur d'eau.*)



George Tennent Bradshaw and John Henry Southeran, both of Lindsay, Ontario, Canada, 27th December, 1895; 6 years.

Claim.—1st. In the combination with a gauge glass, a carboned trough with the sides straight or concave to absorb the rays of light and prevent their reflection. 2nd. The trough constructed with double leaf spring sides so as to clasp the gauge glass tightly and hold the appliance in position. 3rd. A layer of asbestos between the double back of trough to prevent the heat from injuring the bright metal of the appliance. 4th. A row of convex circular yellow discs of brass or gold plate or other yellow metal to make a contrast to the gauge glass and contents. 5th. A row of white concave circular rims, preferably of silver or other bright metal surrounding the convex yellow central discs so as to concentrate and focus the light on the same. 6th. A combination of the carboned trough, the convex and concave discs and the asbestos protector as and for the purpose described, and attached to or used with an ordinary steam gauge glass to indicate the height of water in the boiler by the appearance of the discs.

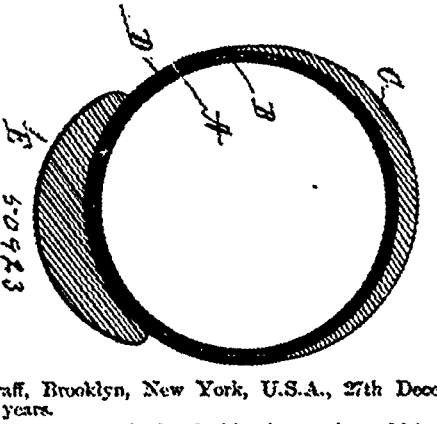
No. 50,922. Bicycle Tire. (*Bandage de bicycle.*)



Andrew Graff, Brooklyn, New York, U.S.A., 27th December, 1895; 6 years.

Claim.—1st. A tubular pneumatic tire, for bicycles or other vehicles, comprising a flexible tube to the outer portion of which is secured an annular reinforcing strip which extends part way around said tubular tire, said tire being also provided with brads or prongs which project from the outer bearing surfaces thereof, substantially as shown and described. 2nd. A tubular pneumatic tire for bicycles and other vehicles, comprising a flexible tube to the outer portion of which is secured an annular reinforcing strip which extends part way around said tubular tire, said tire being also provided with brads or prongs, which project from the outer bearing surfaces thereof, said reinforcing strip being placed within the tubular tire and said brads or prongs being provided with heads and passing outwardly through said tire, substantially as shown and described. 3rd. A tubular pneumatic tire for bicycles or other vehicles, comprising a flexible tube to the outer portion of which is secured an annular reinforcing strip which extends part way around said tubular tire, said tire being also provided with brads or prongs, which project from the outer bearing surfaces thereof, said reinforcing strip being placed within the tubular tire, and said brads or prongs being provided with heads and passing outwardly through said tire, and being also held in place by said reinforcing strip, substantially as shown and described. 4th. A tubular pneumatic tire for bicycles or other vehicles, comprising a flexible tube to the outer portion of which is secured an annular reinforcing strip which extends part way around said tubular tire, said tire being also provided with brads or prongs, which project from the outer bearing surface thereof, said reinforcing strip being placed within the tubular tire, and said brads or prongs being provided with heads and passing outwardly through said tire, and being also held in place by said reinforcing strip, and an inner flexible tube placed within the tubular tire and within said reinforcing strip, substantially as shown and described.

No. 50,923. Pneumatic Tire. (*Bandage pneumatique.*)

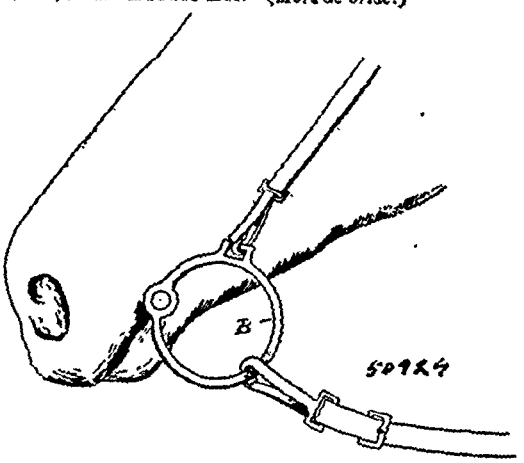


Andrew Graff, Brooklyn, New York, U.S.A., 27th December, 1895; 6 years.

Claim.—1st. A pneumatic tire, for bicycles or other vehicles, comprising a rubber tube, a canvas tube which enclosed the same, a reinforcing or bearing section of sole leather, which extends around the tire, and also encloses the outer half thereof, in cross-section, and a rubber covering which encloses the inner portion of the tire, and connects with the edges of the outer or bearing section thereof,

said parts being constructed, combined and arranged, substantially as shown and described. 2nd. The combination with a pneumatic tire, composed of an inner tube or rubber, which is enclosed by a tube of canvas, of an outer or bearing section of sole leather, or similar material, which surrounds the same, and extends part way around the tire in cross-section, and a covering for the inner portion thereof, which extends around that part of the tire not covered by the outer or bearing portion of leather, said parts being constructed, combined and arranged, substantially as shown and described.

No. 50,924. Bridle Bit. (*Mors de bride.*)

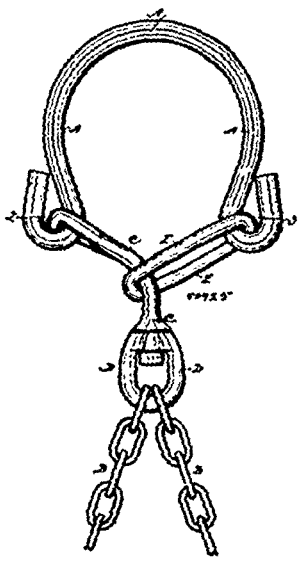


Richard Alexander Shute, San Diego, California, U.S.A., 27th December, 1895; 6 years.

Claim.—An improved driving bit consisting of a mouth bar, the outer ends of which are enlarged, rings upon said ends and held against movement so as to be rigid with the mouth bar, said rings diverging and provided with means for the attachment of the driving reins, the upper sides of said rings also being provided with slotted openings for the reception of the head-stall strap.

No. 50,925. Tie Chain for Cows, Etc.

(*Chaîne pour attacher les vaches, etc.*)



Samuel O. Greening, Hamilton, Ontario, Canada, 27th December, 1895; 6 years.

Claim.—In a tie chain, the large open ring A, having eyelet ends to receive the swivel D, with tie chain by means of its bent connection C, and the connecting link E, all arranged, constructed and combined, substantially as and for the purpose hereinbefore set forth.

No. 50,926. Process of Treating Textile Fibres.

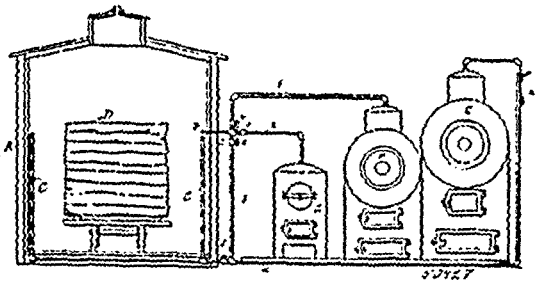
(*Procédé de traitement des tissus.*)

Alfred Francis Bilderbeck Gomess, South Kensington, England, 27th December, 1895; 6 years.

Claim.—1st. In the process for the treatment of textile vegetable fibres, soaking the ribbons in dilute nitric acid, and then neutralising the acid by placing the ribbons in an alkaline bath, substantially as and for the purpose set forth. 2nd. In the process for the treatment of textile vegetable fibres, soaking the ribbons in dilute nitric acid, then neutralising the acid by placing the ribbons in an alkaline bath, then boiling said ribbons in a solution of a caustic alkaline base and zinc, so that one of the compounds formed will be hyroxylamine 3rd. In the process for the treatment of textile vegetable fibres, the employment of zinc in conjunction with an alkali for the purpose hereinbefore described. 4th. The process for the treatment of textile vegetable fibres, substantially as hereinbefore described.

No. 50,927. Process of Preserving Wood Fibre.

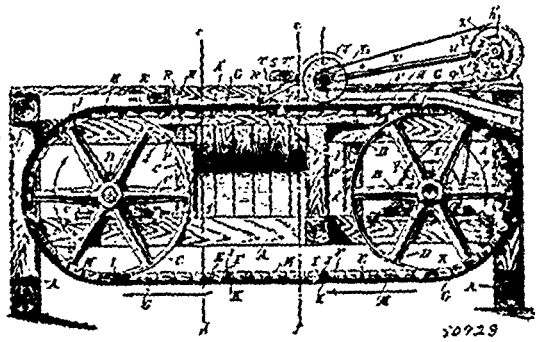
(*Procédé pour la préservation de fibres de bois.*)



James R. Bate, Cincinnati, Ohio, U.S.A., 27th December, 1895; 6 years.

Claim.—The process of preserving wood fibre, which consists in first placing the wood in a suitably heated kiln, and then subjecting it to the direct action of oil mixed steam, a solution of soda ash, or analogous alkali, then subjecting said wood to the action of gases produced by the combustion of carbon, chloride of sodium and sulphur.

No. 50,928. Machine for Manufacturing Wood Wool, etc. (*Machine pour fabriquer de la laine de bois.*)

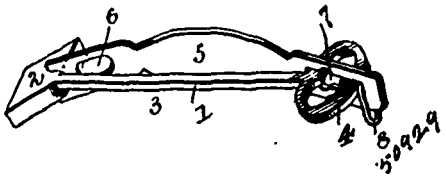


Caesar Hass, Burdett Road, Limehouse, London, England, 27th December, 1895; 6 years.

Claim.—1st. The improvements in and connected with machines for the manufacture of wood wool or similar product, substantially as herein set forth. 2nd. So attaching metal transversely arranged slats that a portion of each is connected directly to an endless band and the other or extensions therefrom have other or shorter plates affixed and to ride on and be guided by tracks on an underframe, some of said extensions carrying the knives or cutters by which the wood is reduced in striated and plain order alternately, as set forth. 3rd. In a machine for manufacturing wood wool and the like, attaching a continuous row of metal slats transversely on an endless band, each slat being of greater length than the width of the endless band and carrying metal plates or working faces at the parts outside of the band, certain slats and plates being provided with knives, or grooves or scorers, the slats being kept a slight distance apart by projecting corners or distancing pieces, and in such a manner that each slat will support its neighbour edgeways, and thus in conjunction with the guides and tracks form a complete solid table to give sufficient resistance to the pressure of the knives against the wood, as set forth. 4th. In a machine for manufacturing wood wool or the like, providing a small roller or rollers suspended by a frame or frames for the wood under operation to abut against, said roller or rollers being placed near the working line of the knives or cutters, that when the wood is cut down that its bearing surface joint is just below the centre line of the roller, it will force the roller upwards and be ejected by the knives from the machine, as set forth. 5th. In a machine for making wood wool or the like, providing a

knife cleaner consisting of a wood or other roller driven at a far greater speed than the knives' motions' but in the same direction, for removing chips or other debris from the knives' cutting edges, as set forth, the cleaner being arranged substantially as shown. 6th. The construction of multiple cutter appliance hereinbefore described and shown, consisting of two plates having of their faces grooved for clamping between them a number of cutters or grooves which are adjustable as to depth of cut and held in line with each other by a lipped plate also arranged between the grooved plates, as set forth.

No. 50,929. Door Securer. (*Arrête-porte.*)



Amos Bassett Buckland, Rochester, New York, U.S.A., 27th December, 1895; 6 years.

Claim.—The herein described improvement, consisting of a spring plate having a recess at one of its ends and an elongated aperture at its other end, adapted for use in the manner and for the purpose described.

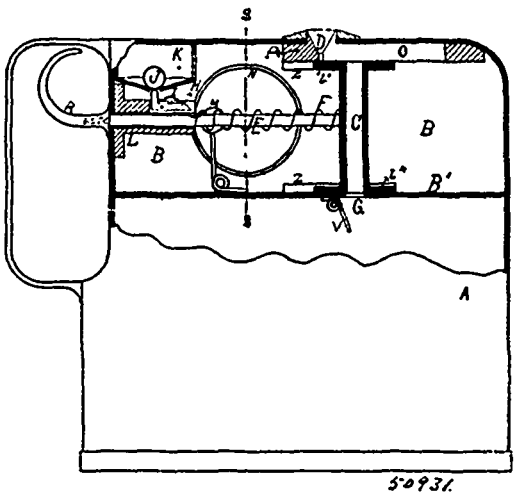
No. 50,930. Process of Manufacturing Rubber Soles.

(*Procédé de fabrication de semelles de caoutchouc.*)

George Read Davis and Frederick Herbert Carter Miles, both of Saint John, New Brunswick, Canada, 27th December, 1895; 6 years.

Claim.—The compounding of the pure rubber-gum or stock (so called) with sand, or powdered pumice-stone, or powdered emery, substantially as and for the purpose hereinbefore set forth.

No. 50,931. Fare Box. (*Boîte à billets.*)



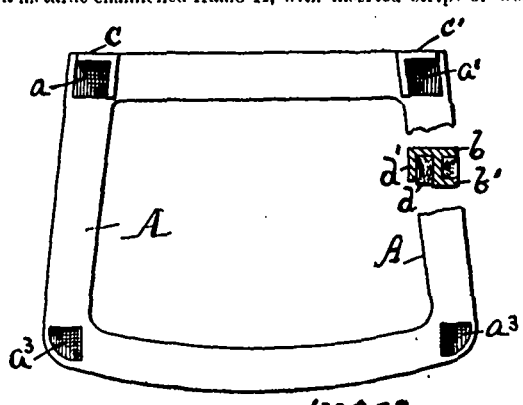
Joseph Clément and Alexander Clément, both of Montreal, Quebec, Canada, 27th December, 1895; 6 years.

Claim.—1st. A fare box having a rectangular sliding slit C, with enlarged heads, interposed between an upper receiving slot D, and a lower discharging slot G, and means for causing said sliding slit to slide forward and backward, to alternately close and open the slots D and G, for the purpose set forth. 2nd. In a fare box, a slot D, composed of a magnet O, and of a piece of non-magnetic material, for the purposes of preventing pieces of metal which can be attracted by the magnet from being inserted therein, as shown and described. 3rd. In a fare box, the combination of compartment K, with lead ball J, lever H, rod F, and sliding slit C, as and for the purposes shown and described. 4th. In a fare box, the combination of a magnet and sliding slit operated by a rod having a finger hook and a spring with a stopping device composed of a lever having a spring to hold one of its ends in a notch in the operating rod, when the box is tilted, for the purpose of preventing the passing back of coins from the box into the slit and from the slit out in the slot, as described. 5th. In a fare box, the combination of the box K, having an inclined bottom and a leaden ball J, place therein with a lever H, having spring I, for the purpose set forth.

No. 50,932. Furniture. (*Meuble.*)

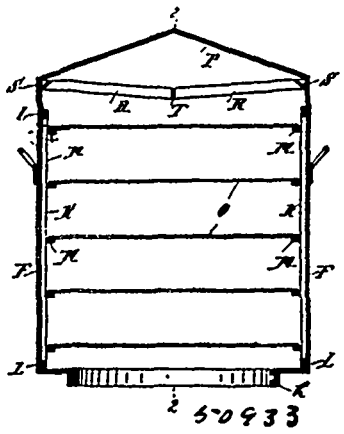
Guillermo A. Farini, Dartmouth Lodge, Forest Hill, England, 28th December, 1895; 6 years.

Claim.—1st. The combination in a chair, couch, settee or the like, of a metallic channelled frame A, with inserted strips of wood or



like material, as shown and for the purpose set forth. 2nd. In construction chairs, couches, settees or the like, the combination of a metallic frame having orifices or perforations and projecting lugs, with legs of wood or other substance attached thereto, as herein described.

No. 50,933. Cooking Vessel. (*Ustensile de cuisine.*)



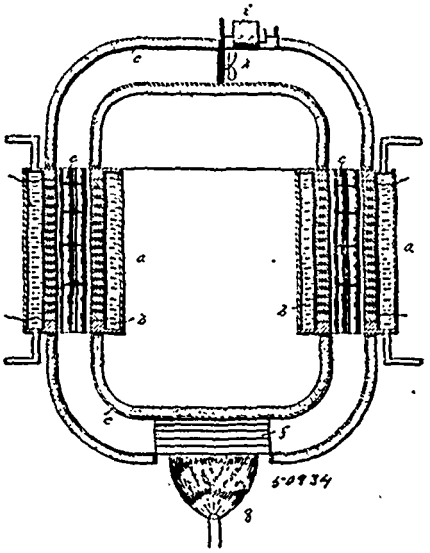
May Eliza Sheldon, Allentown, Pennsylvania, U.S.A., 28th December, 1895; 6 years.

Claim.—1st. A combined boiler and steamer, comprising a boiler having a removably perforated partition plate, and a removable cap or cover, and a steamer provided with a central opening in the bottom, and a depending rim or flange which is adapted to fit within the top of the boiler, said steamer being constructed, combined and arranged, substantially as herein shown and described. 2nd. A combined boiler and steamer, comprising a boiler having a removable perforated partition plate, and a removable cap or cover, and a steamer provided with a central opening in the bottom, and a depending rim or flange which is adapted to fit within the top of the boiler, and being provided with a hinged door at one side, and the sides thereof, adjacent to the hinged door being provided with vertical frames, which are adapted to support a plurality of perforated partition plates, said partition plates being adapted to receive articles to be steamed, substantially as shown and described. 3rd. A combination boiler and steamer, comprising a boiler having a removable perforated partition plate, and a removable cap or cover, and a steamer provided with a central opening in the bottom, and a depending rim or flange which is adapted to fit within the top of the boiler and being provided with a hinged door at one side and the sides thereof, adjacent to the hinged door being provided with vertical frames, which are adapted to support a plurality of perforated partition plates, said partition plates being adapted to receive articles to be steamed, said partition plates being also removable and said steamer being provided with means for collecting the water of condensation, and conducting the same back into the boiler, substantially as shown and described. 4th. A combined boiler and steamer, comprising a boiler having a removable perforated partition plate, and a removable cap or cover, and a steamer provided with a central opening in the bottom, and a depending rim or flange which is adapted to fit within the top of the boiler, and being provided with a hinged door at one side, and the sides thereof adjacent to the hinged door being provided with

vertical frames, which are adapted to support a plurality of perforated partition plates, said partition plates being adapted to receive articles to be steamed, said partition plates being also removable, and said steamer being provided with means for collecting the water of condensation, and conducting the same back into the boiler, said means consisting of an inclined top, and troughs or ways formed within the steamer around the bottom of the top which are adapted to receive the water of condensation therefrom, and to conduct the same back to the boiler, substantially as described.

No. 50,934. Underground Electric Railway.

(*Chemin électrique souterrain.*)

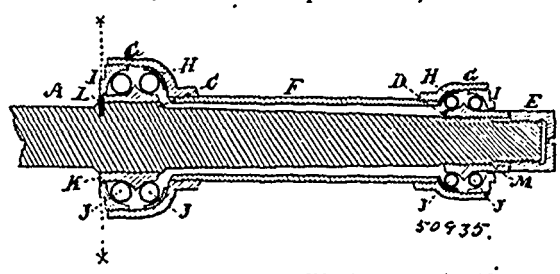


Oscar Axel Enholm, New York, State of New York, U.S.A., 28th December, 1895; 6 years.

Claim.—1st. An underground electric railway system comprising a main conductor, an auxiliary conductor composed of separate or insulated sections, switch mechanism for connecting said sections successively with the main conductor, and positive mechanism connecting said switch mechanism together so that the operation of one switch to close the circuit from the main conductor to an auxiliary conductor section will mechanically operate to cut out another of said sections from circuit with the main conductor, substantially as described. 2nd. An underground electric railway system, comprising a main conductor, an auxiliary conductor composed of separate or insulated sections, switch mechanisms for connecting said sections with said main conductor, said switch mechanisms comprising contacts connected with the conductor sections, a contact connected with the main conductor, a movable contact for closing the circuit between the main conductor, and two conductor sections, a crank or arm connected with said movable contact, another crank arm operated conjointly with the first mentioned crank or arm, a lever or arm for actuating said cranks, and rods connecting the opposing cranks of succeeding switch mechanisms whereby when one switch is operated to close the circuit, another switch will be operated to break the circuit through it, substantially as set forth. 3rd. An underground electric railway system comprising a main conductor, an auxiliary conductor composed of separate or insulated sections, with mechanisms for connecting said sections with said main conductor, said switch mechanisms comprising contacts connected with the conductor sections, a contact connected with the main conductor, a rotative contact normally in circuit with the main conductor and having portions to engage the contacts of the conductor sections, a crank or arm connected with said rotative contact, another crank or arms whereby they operate to approach and recede from each other conjointly, and rods connected with the opposing cranks of the successive switch mechanisms, said rods having movable connection with said cranks or arms, the cranks connected with the contact plates having independent motion with respect to its connected rod to permit it to move a certain distance before actuating its respective rod, substantially as and for the purposes specified. 4th. An underground electric railway system comprising a conduit an auxiliary conductor of separate or insulated sections carried within said conduit compartments or manholes located at suitable distances apart and connected with the side of said conduit, switch mechanisms located within said compartments or manholes, and comprising a movable contact having a rock shaft projecting into said conduit, said rock shaft carrying a lever or arm for engagement with a trolley wheel or roller, a main conductor having a branch contact for said switch mechanism in normal engagement with said movable contact, a separate contact for each switch mechanism connected with said adjoining conductor sections, a crane or arms connected with each movable conductor, a separate arm for each switch mechanism and gearing between each pair of said cranks or arms, and rods and connections connecting the opposing cranks or arms of the successive switch mechanisms, all arranged for operation, substantially as set forth. 5th. A switch mechanism comprising a movable contact, a contact 29, in normal engagement therewith, contacts 31 and 32 normally out of engagement therewith, the movable contact having portions adapted to engage the contacts 31 and 31*a*, a crank or arm connected with said movable contact, a separate crank or arm and device for causing joint operation of said cranks or arms to move them toward and from each other as and for the purpose specified. 6th. A switch mechanism comprising a box 19, an insulating plate 18, carried thereby, a rock shaft 22, a contact carried thereby, a contact 29, normally in engagement therewith, contacts 31 and 31*a*, normally out of engagement therewith, said movable contact having portions 28 and 28*a*, to engage the contacts 31 and 31*a*, a crank or arm 34, connected with the shaft 32 and having gears 35, a separate crank or arm having gears 36 to engage the gears 35 and a lever or arm 38, connected with the crank 37 whereby said cranks or arms are operated conjointly, as and for the purpose specified.

No. 50,935. Ball Bearing Axle.

(*Coussinet à boule pour essieux.*)

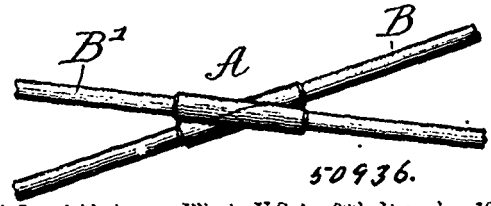


Edgar D. Misner and George A. Weightman, both of Brantford, Ontario, Canada, 28th December, 1895; 6 years.

Claim.—In a ball bearing axle and boxing comprising an axle A, shoulder B, raised parallel bearing surface C, screw threaded bearing surface D, jamb nut E, tube F, shells G and G, cups H and H, octegan end cups I and I, two rows of balls at each end of boxing J, J, and J, J, cone K, pin L, cone M, all formed, arranged and combined, substantially as and for the purpose hereinbefore set forth.

No. 50,936. Clamp for Crossed Wires.

(*Agrafe pour fils de fer croisés.*)



Axel Levedahl, Aurora, Illinois, U.S.A., 28th December, 1895; 6 years.

Claim.—1st. The combination, with wires which cross each other at an acute angle, of a connecting clamp for uniting the same, consisting of a single piece of sheet metal which is bent to form two intersecting tubular parts or sockets located in different planes, both of which sockets embrace the spokes at both sides of the intersection of the same, and which also has connecting webs which extend between and rigidly unite the end portions of said tubular parts of sockets, substantially as described. 2nd. A sheet metal clamp, comprising opposite sides diverging from the centre towards each end thereof, joined by an irregular shaped convex bottom portion, forming in conjunction with said divergent sides two U shaped channels of unequal depth intersecting with each other at an acute angle and adapted to be clamped about, and when so clamped to fit and retain, two crossed wires or rods at their intersections, substantially as described.

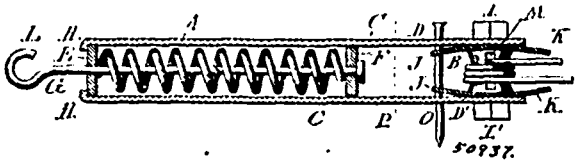
No. 50,937. Wire Tightener, Etc.

(*Tendeur de fil de fer, etc.*)

Walter A. Badger, Bellefontaine, Ohio, U.S.A., 28th December, 1895; 6 years.

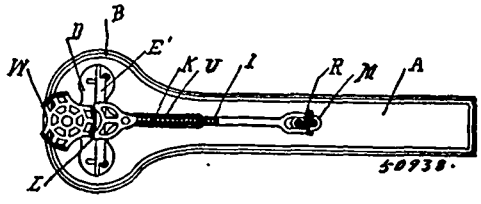
Claim.—1st. A combined tightener and spring tension for wire fences, consisting of a spring actuated rod, a casing inclosing the same provided at one end with a retaining flange, and at the other with projecting ears, a rod having star shaped flanges and a square ended shaft journalled in said ears, and a removable stop pin held

in perforations formed in the ears adjacent to the bearings of the reel, all substantially as shown and described. 2nd. The combination, with a spring actuated rod, a casing inclosing the same, provided at one end with a retaining flange, and at the other with projecting ears, a reel having star-shaped flanges and a square ended shaft journalled in said ears, and a removable stop pin held in perforations formed in the ears adjacent to the bearings of the reel, of a divided fence wire, one end of which is secured to the reel shaft, and the other to the extremity of the spring actuated rod, all substantially as shown.



No. 50,938. Ironing Board Support.

(*Support de table à repasser.*)



George Alexander McKenzie, West Bay City, Michigan, U.S.A., 28th December, 1895; 6 years.

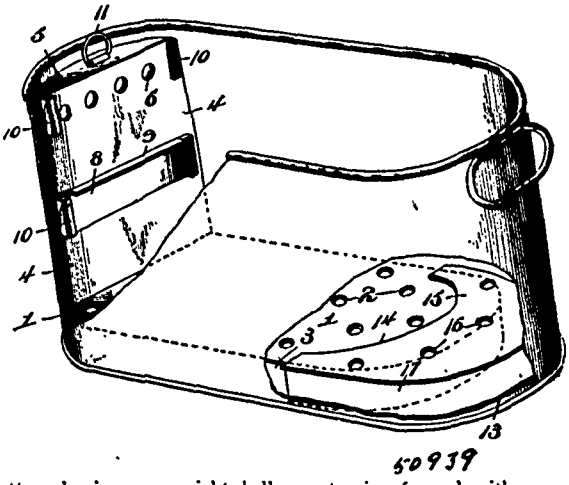
Claim.—1st. In ironing board supports, the wall piece A, the lower brace I, journalled to the said wall piece, the face plate D, provided with a supporting flange E, the disc O, provided with a downwardly extending wedged shaped flange, the link U, provided with one open end with its prongs bent inward and hooked around the downwardly extending portion of the said face plate D, with its hooks extending through the opening G, and the said iron stand W, in combination with the ironing board C, and the groove T, provided on its upper side, near the square end and its triangular shaped stiffening device V, substantially as described. 2nd. In ironing board supports, the shirt collar band support consisting of a cylindrical shaped block A^1, the zigzag frame B^1, provided with the lower coil D^1, the U-shaped bend E^1, the rectangular shaped bend F^1, and the hook C^1, seated into and secured to the centre of the said cylindrical shaped block A^1, in combination with the ironing board C, substantially as described. 3rd. In ironing board supports, the brace I, and its notches K, K, K, its lower end journalled to the wall piece A, at R, by means of the bearing M, the link U, intersecting with the said notches, the face plate D, and the disc O, provided with the downwardly extending wedged shaped flange, and the said iron stand W, substantially as described. 4th. In ironing board supports, the wall piece A, the face plate D, provided with the upper brace or flange E, with its outer edge turned downward, the lug F, the square opening G, the opening Z, and the screw holes H, H, H, H, the lower brace I, provided with a journal J, on its lower end, with its upper end flanged and drawn to a feather edge and slightly curved inward at L, and the notches K, K, K, the journal box M, the said journal box secured to the wall piece A, and the brace I, journalled thereto, the link U, provided with one open end and hooked around the downwardly extended arm of the face plate D, with its hooks projecting through the opening G, and its opposite end astride of the said brace I, the disc O, with its wedge shaped flange and the ironing board C, substantially as described.

No. 50,939. Steam Cooker, etc.

(*Appareil pour cuire à la vapeur, etc.*)

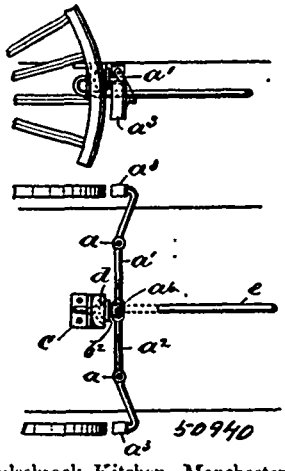
Joseph B. Brown, Salem, Oregon, U.S.A., 28th December, 1895; 6 years.

Claim.—1st. An attachment for steaming and cooking comprising a perforated false bottom, having an upright hollow extension provided with a series of horizontally-disposed openings arranged at different levels, and a gate common to the series of openings and adapted to be shifted from one set of openings to the other, whereby the attachment can be used in connection with a large or small quantity of food or articles, substantially as set forth. 2nd. An attachment for steaming and cooking, comprising a perforate false bottom having an upright hollow extension provided with a series of horizontally-disposed openings arranged at different levels, and having vertical ways at the ends of each set of openings, and a gate adapted to be applied to the exterior of the hollow extension, and to be shifted from one set of openings to the outer, whereby the attachment is adapted for a large of small quantity of food or articles, substantially as specified. 3rd. The combination with an attachment for steaming and cooking, comprising a perforate false



bottom having an upright hollow extension formed with escape openings, of an extensible and section comprising a crescent-shaped top having openings formed therein, and a depending flange at the outer edge of the said top, substantially as described for the purpose set forth. 4th. As an improved article of manufacture, an attachment for steaming and cooking comprising a perforate false bottom having a depending flange, and provided at one end with an upright hollow extension which is curved on its outer side and flattened on its inner side, and which extends approximately the full width of the bottom, said extension being closed at its upper end, and having at different levels in its inner flattened side a series of horizontally-disposed openings, a shiftable gate common to each set of openings and adapted to close one or the other thereof, and an extensible end section, substantially as described for the purpose set forth.

No. 50,940. Fluid Pressure Brake. (*Frein.*)



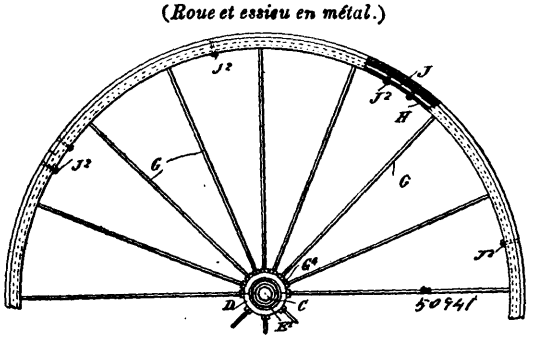
John George Aulsebrook Kitchen, Manchester, England, 28th December, 1895; 6 years.

Claim.—1st. The method or manner of operating ordinary lever and band brakes for vehicles by means of apparatus in conjunction therewith for producing and applying fluid pressure actuated by the hand or foot of the operator. 2nd. The construction and use of apparatus consisting of a distensible and contractible chamber or body, pump or forcing apparatus adapted to be worked by the hand or foot, and a pipe connecting the distensible chamber and pump and provided with a release valve, in conjunction with and for applying ordinary wheel brakes directly or through levers to the wheels of a vehicle. 3rd. The combination with a wheel brake of a distensible and contractible chamber or body, acting thereon directly or through levers, a forcing apparatus or pump, a pipe connecting the said chamber or pump, and provided with a release valve, substantially as described. 4th. The combination with a vehicle of a distensible and contractible chamber fixed to a carrier attached to the vehicle, a pump operated by the foot in one direction and a spring in the other direction, a pipe connecting said chamber and pump and provided with a release valve, a metallic plate fixed to the said chamber bearing upon brake levers at one end of each of said levers, and brake blocks attached to the other end of said levers. 5th. The combination of a pump operated by the hand or foot, a

pipe attached to said pump and provided with a release valve, a distensible and contractible chamber in connection with said pump and fixed to a carrier attached to a vehicle, a metal plate fixed to the free face of the chamber, and a brake band attached at one end to the said metal plate and at the other end to said carrier, the ends of the band crossing each other. 6th. The combination with a vehicle of a distensible and contractible chamber fixed to a carrier attached to said vehicle, and operating the brakes of said vehicles by its distension and contraction, a pipe connecting said chamber to a pump operated by, hand or foot and having an angular piston rod, a plate revolvably connected to the top of the pump and embracing said piston rod, and a release valve fitted to the connecting pipe and operated by the turning of said plate.

No. 50,941. Metallic Wheel and Axle.

(*Roue et essieu en métal.*)



Isaac Davis, High Street, Armodale, Colony of Victoria, 28th December, 1895; 6 years.

Claim.—1st. In a metallic wheel and axle for carriages and other road vehicles an axle as A, having a solid collar such as A^1, formed at its outer end in combination with the ordinary inner collar or shoulder such as A^2, and the divided axle-box and hub such as B and D, respectively, substantially as herein described and as illustrated in my drawings. 2nd. An axle-box such as B, for metallic wheels of carriages and other road vehicles made in two parts or halves divided longitudinally and of circular or polygonal section and furnished with projections or lugs such as B^1, and with an end screw cap adjuster such as C, substantially as herein described and as illustrated in Figs. 4, 5, 9 and 10 of my drawings. 3rd. A hub such as D, for metallic wheels of carriages and other road vehicles made in two parts or halves divided longitudinally and having its central hole or core made to fit an axle-box, as covered by claim 2, said core being provided with recesses such as D^2, and each half of hub provided with holes to receive the countersink ends of the spokes G, and the two parts secured or coupled together by annular nuts or lock rings such as E and E^1, substantially as herein described and as illustrated in Figs. 1, 2, 3, 4, 5, 9 and 10 of my drawings. 4th. In a metallic wheel for carriages and other road vehicles, the rim H, and tire J, both made of channel sections and in parts or sections and secured together and to the spokes G, as herein described and as illustrated in Figs. 1, 2, 6, 7, 8 and 11 of my drawings. 5th. In metallic wheels for carriages and other road vehicles, the divived or two part hub such as D, provided with holes to receive spokes such as G, G^2, and which spokes are threaded through said holes from the internal surface of hub substantially as herein described and as illustrated in Figs. 3, 4 and 6 of my drawings. 6th. A metallic wheel and axle for carriages and other road veihicles consisting of the tire J, rim H and spokes G, secured together as specified and the said spokes being threaded through and secured by countersink ends and lock nuts to the divided or two part hub such as D, in combination with the divided axle-box such as B, the coupling nuts such as E and E_1, and with either the axle shown in Figs. 4, or Fig. 9, of my drawings.

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

4175. BERNARD JAMES COGHLIN, 3rd five years of No. 22,990, from 11th December, 1895. Springs for Railway Cars, December 2nd, 1895.

4176. THE ENTERPRISE MANUFACTURING COMPANY (assignee), 2nd and 3rd five years of No. 35,646, from 20th December, 1895. Meat Cutter, December 3rd, 1895.

4177. HUGH GOURLAY, 2nd five years of No. 35,628, from 18th December, 1895. Plough Colter, December 4th, 1895.

4178. THOMAS RUDDELL, 3rd five years of No. 22,966, from 9th December, 1895. Automatic Apparatus for Watering Live Stock, December 5th, 1895.

4179. JOHN ROBERTSON CAMPBELL, 2nd five years of No. 35,736, from 10th January, 1895. Snow Shoe for Sleigh Runners, December 6th, 1895.

4180. THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,569, from 9th December, 1895. Electrical Conductors, December 7th, 1895.

4181. THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,572, from 10th December, 1895. Electric Railway Conduit, December 7th, 1895.

41 THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,584, from 10th December, 1895. Electric Engine, December th, 1894.

4183. THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,585, from 10th December, 1895. Electric Engine, December 7th, 1895.

4184. THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,586, from 10th December, 1895. Electric Railway Train System, December 7th, 1895.

4185 THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,587, from 10th December, 1895. Conduit for Electric Conductors, December 7th, 1895.

4186. THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,686, from 3rd January, 1896. Support of Electric Conductors, December 7th, 1895.

4187. THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,708, from 3rd January, 1896. Machine for Covering Wire, December 7th, 1895.

4188. THE CANADIAN GENERAL ELECTRIC COMPANY (assignee), 2nd five years of No. 35,717, from 8th January, 1896. Pulsating Current Motor, December 7th, 1895.

4189. JAMES TELFER, Jr., 2nd five years of No. 35,576, from 10th December, 1895. Shovel, December 9th, 1895.

4190. COLBORNE POWELL MEREDITH, 2nd five years of No. 35,565, from 9th December, 1895. Lawn Mower, December 9th, 1895.

4191. THE RICHARDSON LOCK NUT COMPANY (assignee), 2nd five years of No. 35,914, from 2nd February, 1896. Nut Lock, December 10th, 1895.

4192. HELEN ADELE WELLS, 2nd five years of No. 35,613, from 15th December, 1895. Suspensories, December 13th, 1895.

4193. THOMAS THIMBLE, 2nd five years of No. 35,612, from 15th December, 1895. Bullet Blank, December 14th, 1895.

4194. WILLIAM HANSON HOWARD, 2nd five years of No. 35,625, from 18th December, 1895. Art of Packing Stockings in Pairs, December 16th, 1895.

4195. GEORGE WILLIAM SMILLIE, 2nd five years of No. 35,614, from 16th December, 1895. Car Coupler, December 16th, 1895.

4196. VICTOR LEMIEUX, 2nd five years of No. 35,631, from 18th December, 1895. Snow Shovel, December 17th, 1895.

4197. FAUTEUX & CIE (assignee), 2nd five years of No. 35,673, from 27th December, 1895. Pulley for Clothes Lines, December 18th, 1895.

4198. HERBERT L. STILLMAN, 2nd five years of No. 35,666, from 24th December, 1895. Railway, December 18th, 1895.

4199. GUSTAVUS MICHALLIS and WILLIAM TURNER MAYER, 3rd five years of No. 23,245, from 20th January, 1896. Method of Making Chloroform and Acetic Acid, December 20th, 1895.

4200. MARVIN ANTHONY CALDWELL, 2nd and 3rd five years of No. 35,690, from 3rd January, 1896. Washing Machine, December 24th, 1895.

4201. PHŒNIX ACTIEN GESELLSCHAFT für BERGBAN und HUTTENBETRIPB (assignee), 2nd five years of No. 35,880, from 23rd January, 1896. Method of Making Steel or Iron, December 24th, 1895.

4202. FRANK BURNS, 2nd five years of No. 35,679, from 30th December, 1895. Type-Writing Machine, December 26th, 1895.

4203. GEORGE WILLIAM DRYDEN, 2nd five years of No. 35,672, from 27th December, 1895. Pulley, December 26th, 1895.

4204. WILLIAM FRANKLIN GARDNER, 3rd five years of No. 23,066, from 4th January, 1896. Time Controlling and Correct[illegible]tem, December 27th, 1895.

TRADE-MARKS

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

5478. ALEXANDER AUGUSTUS BARTHELMES, Toronto, Ont. Piano Actions, 3rd December, 1895.

5479. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. General Trade Mark, 3rd December, 1895.

5480. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. Biscuits Containing Powdered Meat, 3rd December, 1895.

5481. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. A Compound of Chocolate and Meat, 3rd December, 1895.

5482. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. A Compound of Cocoa and Powdered Meat, 3rd December, 1895.

5483. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. Croquettes of Chocolate Containing Powdered Meat, 3rd December, 1895.

5484. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. A Compound of Granular Soluble Chocolate and Powdered Meat, 3rd December, 1895.

5485. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. Bread Containing Powdered Meat, 3rd December, 1895.

5486. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 12 rue du Peyrat, Lyons, France. Beef Pâtés, 3rd December, 1895.

5487. FIRMIN DELANGLE, President of La Société Anonyme, LA TILIA, SOCIETE GENERALE DE CONSERVATION DES VIANDES, 14 rue du Peyrat, Lyons, France. Chocolate Pastilles Containing Powdered Meat, 3rd December, 1895.

5488. } THE VICTORIA CANNING COMPANY OF BRITISH COLUMBIA, LIMITED LIABILITY, Victoria, B.C. Canned Salmon, 4th
5489. } December, 1895.

5490. HENRY MARQUETTE, Smith's Falls, Ont. A Proprietary Medicine for the cure of Rheumatism, 5th December, 1895.

5491. JOHN GOWANS, JAMES G. KENT & JOHN G. KENT, Toronto, Ont., trading as GOWANS, KENT & CO. Lamp Chimneys, 7th December, 1895.

5492. JOHN ALEXANDER McLAREN, Perth, Ont. Canadian Scotch Whisky, 9th December, 1895.

5493. COCKSHUTT PLOW COMPANY, L'D., Brantford, Ont. Plows and parts thereof, 9th December, 1895.

5494. FRASER & STIRTON, London, Ont. Cigars, 9th December, 1895.

5495. ANDREW USHER & CO., Edinburgh, Scotland. Scotch Whisky, 10th December, 1895.

5496. JOEL B. WOLFE, New York, N. Y., U.S.A. A Cordial (Wolfe's Schiedam Aromatic Schnapps), 12th December, 1895.

5497. THE ANDERSON FURNITURE COMPANY, LIMITED, Woodstock, Ont. Baby Carriages, 14th December, 1895.

5498. WALTER IREDALE, Hamilton, Ont. Meat Pies, 16th December, 1895.

5499. JONATHAN HARRIS & SONS, LIMITED, Cockermouth, Cumberland County, England. Threads of all kinds, 18th December, 1895.

5500. THE STAR CYCLE COMPANY, LIMITED, of Star Cycle Works, Wolverhampton, Stafford County, England. Cycles and parts thereof, 18th December, 1895.

5501. GEORGE ADAMS & SONS, LIMITED, of Mars Ironworks, Wolverhampton, England. Black Iron and Steel Sheets, and Galvanized Iron and Steel Sheets, Plain and Corrugated, 18th December, 1895.

5502. PEEK BROTHERS & WINCH, LIMITED, London, England. Tea, Coffee, Cocoa and Spices, 23rd December, 1895.

5503. HITZACKER BRUNNEN VERWALTUNG, Hamburg, Germany. Mineral and Aerated Waters, 23rd December, 1895.

5504. MARSHALL-WELLS HARDWARE COMPANY, Duluth, Minnesota, U.S.A. Hardware, Machines and Miscellaneous Goods, 26th December, 1895.

5505. AUGUSTUS M. PIPER, Toronto, Ont. Coffees, Spices, Cocoas, Chocolates, Cream of Tartar, Mustard, Baking Powder and Herbs, 27th December, 1895.

5506. THE PATENT BORAX COMPANY, LIMITED, Birmingham, England. General Trade Mark, 27th December, 1895.

5507. THE AMERICAN TYRE COMPANY, Toronto, Ont. Tires, Bicycles and the parts thereof, 28th December, 1895.

5508. THE MECHANICAL FABRIC COMPANY, Providence, Rhode Island U.S.A. Bicycle Tires, 28th December, 1895.

5509. COOPER & COMPANY, Glasgow, Scotland. Tea, 30th December, 1895.

COPYRIGHTS

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

8238. FROLIC OF THE SPRITES. By Arthur W. Hughes. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 2nd December, 1895.

8239. PNEUMATIC TWO-STEP. By E. Emile Farringer. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 2nd December, 1895.

8240. A VICTORY WON. By Annie S. Swan. William Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 2nd December, 1895.

8241. CONSUMPTION: ITS NATURE, CAUSES AND PREVENTION. By Edward Playter, M.D. William Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 2nd December, 1895.

8242. DORIS, THE VILLAGE MAIDEN. Words and Music George Maywood. Whaley, Royce & Co., Toronto, Ont., 4th December, 1895.

8243. MY BEST GIRL'S A BORN AND BRED NEW YORKER. Song. By John Stromberg. Whaley, Royce & Co., Toronto, Ont., 4th December, 1895.

8244. WHAT RIGHT HAS HE ON BROADWAY? Words by Harry Dillon. Music by Nat. Mann. Whaley, Royce & Co., Toronto, Ont., 4th December, 1895.

8245. CONDENSED TABLE OF ENGLISH LITERATURE. Compiled by Rev. J. O. Miller, M.A. The Copp, Clark Company (Ltd.), Toronto, Ont., 4th December, 1895.

8246. CHRONOLOGIE DE L'HISTOIRE DU CANADA. Par l'Abbé L. N. Bégin, S.T.D. Charles Octave Gagnon, Prêtre, Québec., Qué., 5 décembre, 1895.

8247. THE GYMKHANA TWO-STEP. By Fforde E. MacLoghlin, Hamilton, Ont., 6th December, 1895.

8248. LOVED AND LOST AWHILE. Words and Music by G. W. Johnson, Toronto, Ont., 7th December, 1895.

8249. ONLY ME. Words by Walter H. Ford. Music by John W. Bratton. Whaley, Royce & Co., Toronto, Ont., 7th December, 1895.

8250. REVUE CANADIENNE, DECEMBRE, 1895. C. O. Beauchemin & Fils, Montréal, Qué., 7 décembre, 1895.

8251. THRIFT POLICIES. The Sun Life Assurance Company of Canada, Montréal, Que., 10th December, 1895.

8252. LADY'S VISITING LIST. Wm. Tyrrell & Co., Toronto, Ont., 10th December, 1895.

8253. THE CANADIAN MAGAZINE, DECEMBER, 1895. The Ontario Publishing Company (Ltd.), Toronto, Ont., 10th December, 1895.

8254. SWINGING HER PETS. Chromo-lithograph. The Royal Soap Company, Winnipeg, Man., 10th December, 1895.

8255. THE YOUNG HUNTSMAN. Chromo-lithograph. The Royal Soap Company, Winnipeg, Man., 10th December, 1895.

8256. THE YOUNG BLACKSMITH. Chromo-lithograph. The Royal Soap Company, Winnipeg, Man., 10th December, 1895.

8257. BESIDE THE BONNIE BRIER BUSH. By Ian Maclaren. Hodder & Stoughton, London, England, 10th December, 1895.

8258. THE KING OF THE WIND. Song for Bass. Words by J. Philip Cunmore. Music by Hastings Weblyn. The Anglo-Canadian Music Publishers' Association (Ltd.) London, England, 11th December, 1895.

8259. THE FARMERS MARKET MEMORANDUM. Thomas Paterson, Peterborough, Ont., 11th December, 1895.

8260. THE PEERLESS MARKET BASKET LABEL AND GUIDE. Thomas Paterson, Peterborough, Ont., 11th December, 1895.

8261. HUGHES' DECIMAL TAXATION TABLES. William Romer Hughes, Toronto, Ont., 11th December, 1895.

8262. THE POOR OLD 'ORSE. Words and Music by H. E. Kayll, Rat Portage, Ont., 12th December, 1895.

8263. GEOGRAPHICAL HANDBOOK OF THE COUNTY OF GREY. By N. W. Campbell, Durham, Ont., 13th December, 1895.

8264. WALTZING WITH THE GIRL YOU LOVE. Words and Music by Arthur Seldon. Whaley, Royce & Co., Toronto, Ont., 14th December, 1895.

8265. YE MARINERS OF ENGLAND. Part Song. Words by Thomas Campbell, Music by Percival J. Illsley, Mus. Bach., Whaley, Royce & Co., Toronto, Ont., 14th December, 1895.

8266. CAT AND CRADLE STORIES. By Mrs. Catharine Parr Traill. Wm. Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 16th December, 1895.

8267. CANADIAN WILD FLOWERS. Agnes Chamberlin, Lakefield, Ont., 16th December, 1895.

8268. BRANTFORD CITY DIRECTORY, 1896. Temporary Copyright. Published in the "Canadian Nationalist and Brant Commercial," of Brantford, Ont. Brantford Publishing Company, Brantford, Ont., 16th December, 1895.

8269. VARSITY TWO-STEP. March by W. Alan Sadler. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 17th December, 1895.

8270. BOOK-KEEPING MADE EASY. By The Brothers of the Sacred Heart, Arthabaskaville, Que., 18th December, 1895.

8271. CONFEDERATION. Print. Richard R. Stevenson, Montreal, Que., 18th December, 1895.

8272. MANUEL DE DROIT CIVIQUE. Par C. J. Magnan, Québec, Qué., 19 décembre, 1895.

8273. BRITISH EMPIRE EXPOSITION AND INTERNATIONAL DISPLAY OF ALL NATIONS OFFICIAL JOURNAL, DECEMBER, 1895. Geo. C. Huttemeyer, Montreal, Que., 20th December, 1895.

8274. HERE AND THERE IN THE HOME LAND. England, Scotland and Ireland as seen by a Canadian. By Canniff Haight, Toronto, Ont., 20th December, 1895.

8275. THE EVERETT SCHOTTISCHE. Music by W. S. Thompson. Arranged by M. J. Sage. J. L. Orme & Son, Ottawa, Ont., 20th December, 1895.

8276. HISTORY OF THE COUNTY OF LUNENBURG. By Mather Byles DesBrisay. Second Edition. M. B. DesBrisay, Bridgewater, N.S., 21st December, 1895.

8277. INSURANCE PLANS OF BUCKINGHAM, INCLUDING MASSON OR BUCKINGHAM STATION, IN QUEBEC, MATTAWA, AND ROCKLAND, IN ONTARIO. C. E. Goad, Montreal, Que., 21st December, 1895.

8278. FASHIONS. An Illustrated Monthly Journal for Canadian Women. Vol. I., No. 2. December, 1895. Christmas Number. David Irvine Barnett, Toronto, Ont., 21st December, 1895.

8279. THE MODERN PIANIST. A Choice Selection of Music, by Standard Composers, for the Pianoforte. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 21st December, 1895.

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