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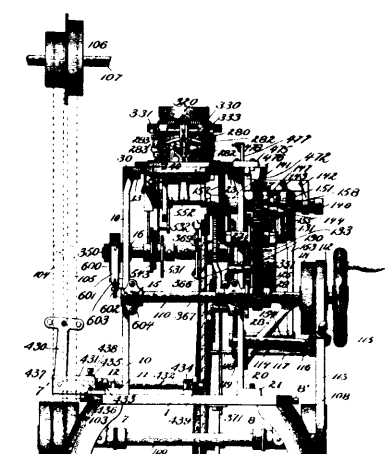
INVENTIONS PATENTED.

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

No. 51,170. Circular Knitting Machine.

(*Machine à tricoter circulaire.*)

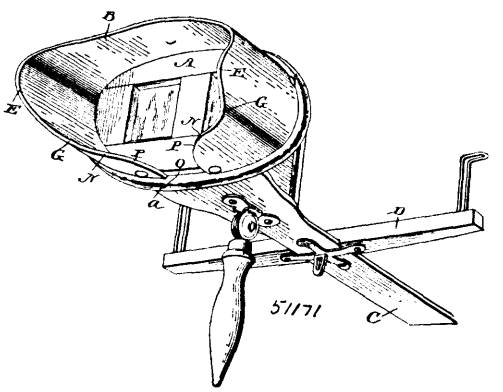


The Providence Knitting Machine Company, Providence, Rhode Island, Assignee of Joseph Albert Burleigh, Laconia, New Hampshire, both in the U.S.A., 1st February, 1896; 6years. (Filed 17th September, 1895.)

Claim.—1st. In a circular knitting machine, the combination of a needle cylinder, a fixed support therefor, a movable support for said needle cylinder, and means for shifting the movable support to bring it into and out of engagement with the needle cylinder for elevating and depressing the latter. 2nd. In a circular knitting machine, the combination of a bed-plate for a knitting head provided with an internal notched flange, a needle cylinder provided on its bottom with studs which project through said notched flange, a cam ring disposed underneath said flange and adapted to engage the studs on said needle cylinder for elevating the latter, and means for shifting said cam ring 3rd. In a circular knitting machine, the combination of a bed-plate for a knitting head provided with an internal notched flange, a needle cylinder provided on its bottom with studs which project through said notched flange, a cam ring disposed underneath said flange adapted to engage the studs on said needle cylinder for elevating the latter, and two separating actuating mechanisms for said cam ring, one of which operates during the knitting of the calf of the leg, and the other during the knitting of the heel and toe. 4th. In a circular knitting machine, the combination of a bed-plate for a knitting head provided with an internal notched flange, a needle cylinder provided on its bottom with studs which project through said notched flange, a cam ring disposed underneath said flange and adapted to engage said studs on said needle cylinder for elevating the latter, said cam ring being provided with a radial arm, a spring retracted slide rod engaging said radial arm, and means for actuating said slide rod. 5th. In a circular knitting machine, the combination of a bed-plate for a knitting head, provided with an internal notched flange, a needle cylinder provided on its bottom with studs which project through said notched flange, a cam ring disposed underneath said flange and adapted to engage said studs on said needle cylinder for elevating the latter, said cam ring being provided with a radial arm, a spring retracted slide rod engaging said radial arm, and two separate mechanisms for actuating said slide rod at different periods. 6th. In a circular knitting machine, the combination of a bed-plate for a knitting head provided with an internal notched flange, a needle cylinder provided on its bottom with studs which project through said notched flange, a cam ring disposed underneath said flange and adapted to engage said studs on said needle cylinder for elevating the latter, said cam ring being provided with a radial arm, a spring retracted slide rod engaging said radial arm, and two separate mechanisms for actuating said slide rod at different periods, one of said mechanisms imparting a partial stroke to said rod to actuate the carm ring and the other operating to thrust said rod and gradually withdraw it whereby said cylinder is gradually lowered 7th. In a circular knitting machine, the combination of a needle cylinder, a vertically movable cam ring disposed below said cylinder and provided with cams on its under side, studs between the needle cylinder and cam ring, detachable supports for said cam ring engaged by said cams, and means for shifting said cam ring to raise or lower it and the needle cylinder. 8th. In a knitting machine, the combination of a needle cylinder, a fixed support therefor, a vertically movable cam ring provided with cams on its under side, studs between the needle cylinder and cam ring, supports for said cam ring engaged by said cam, and means for shifting said cam ring to raise or lower it into and out of contact with the said needle cylinder to elevate and depress said cylinder during the engagement with said cam ring. 9th. In a circular knitting machine, the combination of a knitting head whereof the rotary cam cylinder is provided with separate sets of narrowing and widening cams, and with means for positively throwing the widening cams into operative and inoperative position, a spring actuated lever for actuating said means, and a spring actuated latch for locking said lever, whereby on disengagement of the lever by the latch, the lever moves under the stress of the spring. 10th. In a circular knitting machine, the combination of a knitting head whereof the rotary cam cylinder is provided with separate sets of widening and narrowing cams, and with means for positively throwing the widening cams into operative and inoperative position, a lever for actuating said means, a bracket, and a spring actuated latch pivoted to the side of the bracket, and having a nose to project across the path of said lever for locking it. 11th. In a circular knitting machine, the combination of a knitting head whereof the rotary cam cylinder is provided with separate sets of narrowing and

widening cams and with means for positively throwing the widening cams into operative and inoperative positions, a lever for actuating said means, a spring actuated latch for locking said lever, and an automatic mechanism for actuating said lever. 12th. In a circular knitting machine, the combination of a knitting head whereof the rotary cam cylinder is provided with narrowing and widening cams, and with means for rendering either set of said cams operative while rendering the other set inoperative, a lever for actuating said means, a spring actuated latch for locking said lever, an automatic mechanism for actuating said lever, and an automatic mechanism for releasing said latch. 13th. In a circular knitting machine, the combination of a knitting head whereof the rotary cam cylinder is provided with narrowing and widening cams and with means for rendering either set of said cams operative while rendering the other set inoperative, a lever for actuating said means, a spring actuated latch for locking said lever, a raidial slide carrying a cam for engaging said lever, a stud for releasing said latch and automatic means for actuating said radial slide. 14th. In a circular knitting machine, the combination of a knitting head whereof the rotary cam cylinder is provided with narrowing and widening cams, and with means for rendering either set of said cams operative while rendering the other set inoperative, a lever for actuating said means, a spring-actuated latch for locking said lever, a radial slide carrying a cam for engaging said lever, a stud for releasing said latch, and automatic means for actuating said radial slide, said mechanism being adapted to actuate said slide a full stroke for acting upon said lever, and a partial stroke for releasing said releasing said spring-actuated latch. 15th. In a knitting machine, the combination of a knitting head, a yarn tube adapted to pass the main and reinforcing yarns, and a sliding yarn separating blade within said tube adapted to separate the main and reinforcing yarns when the latter is not required for use, and to permit fibrous contact thereof when both yarns are required. 16th. In a knitting machine, the combination of a knitting head, a yarn tube adapted to pass the main and reinforcing yarns, a sliding yarn separating blade within said tube adapted to separate the main and reinforcing yarns when the latter is not required for use and to permit fibrous contact thereof when both yarns are required, a fixed shear blade in said tube, and a movable shear blade whereby the reinforcing yarn is cut off when not required. 17th. In a knitting machine, the combination of a knitting head machine, a yarn tube for the passage of the main and reinforcing yarns, a slide ring on said tube, a yarn separating blade connected to said ring, automatic mechanism for operating said slide ring in either direction at the required time for separating said yarns or permitting fibrous contact thereof. 18th. In a knitting machine, the combination of a knitting head, a yarn tube for the passage of the main and reinforcing yarns, a slide ring on said tube, a yarn separating blade connected to said ring, automatic mechanism for operating said slide ring in either direction at the required time for separating said yarns or permitting fibrous contact thereof, and a cut-off for the reinforcing yarn. 19th. In a knitting machine, the combination of a knitting head, a yarn guiding tube, a guide block provided with eyes for the yarn passing into said tube, a yarn separating blade adapted to slide in said tube to separate the main and reinforcing yarns or permit fibrous contact thereof, a cutting-off mechanism for the reinforcing yarn, a clamp for holding the cut-off end of said yarn, and automatic means for releasing said clamp when the blade is drawn back. 20th. The combination with a knitting mechanism of a yarn guide, and a yarn holder consisting of an inverted U-shaped clamp, one leg of which projects into said yarn guide and serves to clamp the yarn. 21st. In a knitting machine, the combination of a knitting head, means for supplying the main and reinforcing yarns, a cut off for the reinforcing yarn, a pivoted arm provided with a yarn guide through which the reinforcing yarn is passed, and means for actuating said pivoted arm after the cut off end has benn clamped to effect a slack in the reinforcing yarn preparatory to the feeding thereoff. 22nd. In a knitting machine, the combination of a knitting mechanism, a yarn tube for guiding the main and reinforcing yarns, a pivoted arm provided with a yarn guide, a cut off mechanism between said pivoted arm and the yarn tube, a yarn clamp between the cut off mechanism and the pivoted arm, and means for actuating the cut off mechanism and yarn clamp and subsequently to the latter the pivoted arm, whereby a slack in the yarn is effected preparatory to the subsequent feeding thereoff. 23rd. In a knitting machine, the combination of a knitting head, a narrowing and widening mechanism, and mechanism for clamping the needle cylinder during the narrowing and widening operations. 24th. In a knitting machine, the combination of a knitting head, a narrowing and widening mechanism, means for raising the needle cylinder, and mechanism for clamping the needle cylinder during the narrowing and widening operations. 25th. In a knitting machine, the combination of a supporting frame, a knitting head, mechanism for imparting alternately continuous rotary and reciprocatory motion to the cam cylinder of said knitting head, a cam shaft provided with a number of cams, a stitch enlarging mechanism operated by a cam on said cam shaft, a needle throwing out mechanism controlled by a cam on said cam shaft, a narrowing mechanism controlled by a cam on said cam shaft, a reinforcing yarn mechanism actuated by a cam on said cam shaft, a yarn take-up mechanism actuated by a cam on said cam shaft, a clamping mechanism for the needle cylinder actuated by a cam on said cam shaft, and a widening mechanism controlled by a cam on said cam shaft. 26th. In a knitting machine for the knitting of a stocking, the combination of a knitting head, a driving mechanism for imparting rotary and reciprocatory movements to the cam cylinder of said head, a narrowing mechanism, a widening mechanism, a reinforcing yarn mechanism, a yarn take-up mechanism, means for raising the needle cylinder during the narrowing and widening operations, and a single cam shaft provided with cams for actuating and controlling said mechanisms. 27th. In a knitting machine for the knitttng of a stocking, the combination of a knitting head, a driving mechanism for imparting rotary and reciprocatory movement to the cam cylinder of said head, a narrowing mechanism, a widening mechanism, a reinforcing yarn mechanism, a yarn take-up mechanism, means for raising the needle cylinder during the narrowing and widening operations, a single cam shaft provided with cams for actuating and controlling said mechanisms, a driving ratchet mechanism for said cam shaft provided with dweels, and a mechanism for starting said cam shaft at proper intervals of time. 28th. In a knitting machine, the combination of a knitting head, mechanism for raising the needle cylinder to elongate the stitches, and mechanism for clamping the needle cylinder in elevated position.

No. 51,171. Stereoscope. (*Stéreoscope.*)



Hawley Castle White, North Bennington, Vermont, U.S.A., 1st February, 1896; 6 years. (Filed 9th October, 1895.)

Claim.—1st. A stereoscope provided with a hood which substantially encircles the periphery of the lense frame, leaving a gap which is shaped to closely fit the nose and cheeks, the sides of the said hood being extended to closely fit the temples, and the whole forming a dark chamber, substantially as set forth. 2nd. A stereoscope consisting of an elliptical lense frame and a hood which substantially encircles the periphery of the said frame, having a gap at the centre of its under side, which gap is shaped to closely fit the nose and cheeks, the said hood being constructed with the prominences P, the concavities C, and the extensions E, all arranged and operating to form a dark chamber when applied to the face, substantially as set forth. 3rd. A stereoscope consisting of an elliptical lense frame rabbeted around its entire periphery to form a seat for the hood, a hood which substantially encircles the periphery of the said frame, and has a gap adapted to fit closely the nose and cheeks, a shaft projecting from the said frame, and a picture holder adapted to be adjusted on the said shaft, the said hood being provided with prominences P, concavities C and extensions E, all arranged and combined to form a dark chamber, substantially as set forth. 4th. A stereoscope consisting of a lense frame, a shaft attached thereto, which extends forward of the said frame, and is recessed to fit closly the nose and cheeks, and a hood which extends around the said frame to the sides of the said shaft and is supported thereby, the front part of the said shaft being practically part of the hood, the said hood being also provided with extensions for fitting against the temples to combine with the said recessed shaft in forming a dark chamber, substantially as set forth. 5th. A stereoscope provided with a shaft extending forward of the lense frame and with a hood, the said shaft and hood being conjointly shaped to fit the face of the user so as to form a dark chamber between the eyes and the lenses, substantially as set forth.

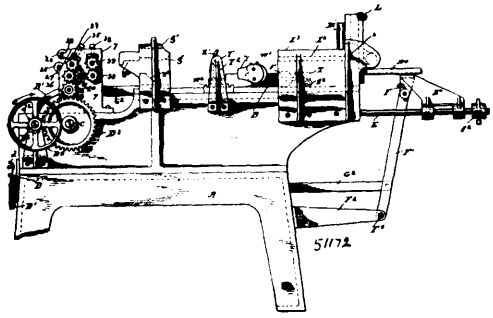
No. 51,172. Machine for Cutting Can Body Blanks.

(*Machine pour couper les ébauches des boîtes en fer blanc.*)

Axle Johnson, Oakland, California, U.S.A., 1st February, 1896; 6 years. (Filed 8th Oct., 1895.)

Claim.—1st. In a machine for trimming sheets of metal and cutting same into proper sized can body blanks, the combination with the cutting knives for cutting and trimming the ends of the sheet of metal, mechanism for receiving the sheet of metal and placing same in line with the cutting knives, the longitudinally-reciprocating carriage which receives the sheet of metal from the feed mechanism devices for receiving the cut sheet of metal from the carriage and operating the cutting knives with the movement of said carriage, and devices for trimming the sides of the sheet of metal and slitting the same into can body blanks. 2nd. In a machine for cutting can

body blanks, the combination with the reciprocating feed mechanism for the sheet of metal, the cutting knives, the longitudinal reciprocating carriage which receives the sheet of metal from the feed mechanism, devices for operating the cutting knives with the movement of the carriage so as to trim the ends of the sheet, the slitting rolls which receive the sheet of metal after the ends have been cut and trim the sides and slit the sheet of metal into proper can body blanks, and the forming rolls which receive and form the can body blanks. 3rd. In a machine for cutting can body blanks, the combination with the reciprocating carriage, the cutting knives operated to cut the sheet of metal by the movement of such carriage, the reciprocating feed bed which receives the sheet of metal and places the same in line with the cutting knives, and the devices for slitting the sheet of metal into can body blanks. 4th. In a machine for cutting can body blanks, the combination with the feed mechanism for the sheet of metal, the mechanism for cutting the ends of the sheet, devices for forming a pocket at one end of the cut sheet of metal and a hook or flange at the opposite end which fits within the pocket when the can body is formed, and mechanism for slitting the cut sheet of metal into can body blanks. 5th. In a machine for cutting can body blanks, the combination with the open reciprocating carriage, the reciprocating feed mechanism for the sheets of metal, the cutting knives secured to the forward end of the reciprocating carriage, the fixed cutting knife secured within the reciprocating carriage, a swinging device carying a cutting knife secured to and within the open portion of the reciprocating carriage which receives and holds the sheet of metal while the ends are being trimmed by the cutting knives, mechanism for throwing the swinging frame over during the movement of the reciprocating carriage, devices for forming a hook or flange at one end of the sheet of metal and a pocket at the opposite end of the sheet of metal during its movement through the machine, the slitting rolls for cutting the sheet of metal in a series of body blanks, and the forming rolls which receive the body blanks from the slitting rolls. 6th. In a can body blank cutting machine, the combination with the reciprocating carriage, the feed mechanism for supplying sheets of metal to the machine, the cutting knives located at the forward end of the reciprocating carriage, the swinging sheet-carrying frame secured to and carried by the reciprocating carriage, the cutting knife secured to the inner end of the swinging sheet-carrying frame, the fixed cutting knife secured within the reciprocating carriage with which the cutting knife of the swinging sheet-carrying frame registers as swung over, and devices for receiving the sheet of metal after the ends have been cut and slitting the same into can body blanks. 7th. In a can body blank cutting machine, the combination with the reciprocating carriage, the cutting knives, the feed mechanism for supplying sheets of metal to the machine, the swinging sheet-carrying frame secured to the reciprocating carriage, devices for throwing the swinging frame over during the movement of the reciprocating carriage, and mechanism for slitting the cut sheet of metal into can body blanks. 8th. In a can body blank cutting machine, the combination with the feed mechanism, the reciprocating carriage which receives the sheet of metal from the feed mechanism, a pair of cutting knives secured to the forward end of the reciprocating carriage, devices for operating said knives with the movement of the carriage, the presser bar secured to and carried by the carriage for holding the sheet of metal while being cut, devices for raising and lowering the presser bar during the movement of the reciprocating carriage, the fixed cutting knife secured to the said carriage, the swinging sheet-carrying frame and devices for throwing the swinging sheet-carrying frame over during the movement of the reciprocating carriage. 9th. In a can body blank cutting machine, the combination with the reciprocating carriage provided with knives for cutting the ends of the sheet of metal during the reciprocal movement thereof, of the rolls for receiving the cut sheet of metal and slitting the same into can body blanks. 10th. In a machine for cutting can body blanks, the combination with the feed mechanism for the sheet of metal, the reciprocating carriage for receiving the sheet of metal from the feed mechanism, the cutting knives secured to and carried by the reciprocating carriage, the swinging frame secured to and carried by the said carriage, the presser bar for holding the sheet of metal while being cut, devices for raising and lowering the presser bar, mechanism for throwing and swinging the sheet-carrying frame over after the outer end of the sheet has been cut in order that the inner end may be cut, and mechanism for receiving the cut sheet of metal and slitting the same into can body blanks. 11th. In a machine for cutting can body blanks, the combination with the reciprocating carriage, the cutting knives secured to and carried thereby and actuated during the movement of the carriage, the devices for forming a hook or flange at one cut end and a pocket at the opposite cut end adapted to receive the hook or flange, mechanism for slitting the cut sheet of metal into can body blanks and the forming rolls which receive the cut blanks from the slitting mechanism and forms the side groove therein and discharge the can body blanks from the machine. 12th. In a machine for cutting the can body blanks, the combination with the reciprocating carriage provided with cutting knives, the swinging sheet-carrying frame secured to and carried thereby, devices for throwing the said swinging sheet-carrying frame over during the movement of the reciprocating carriage, the presser bar for holding the sheet of metal while being cut, and mechanism for receiving the cut sheet of metal and slitting the same into body blanks. 13th. In a machine for cutting can body blanks, the combination with the reciprocating carriage provided with cutting knives, the swinging sheet-carrying frame for receiving and holding the sheet of metal while being cut, and devices for throwing the swinging frame over during the movement of the reciprocating carriage. 14th. In a machine for cutting can body blanks, the combination with the reciprocating carriage which receives the sheet of metal, the cutting knives secured to and carried thereby and devices for operating the cutting knives during the travel of the reciprocating carriage. 15th. In a machine for cutting can body blanks, the combination with the reciprocating carriage, the cutting knives secured to and operated by the movement of the carriage, devices for forming a hook or flange at the end of the sheet of metal after being cut by the first set of cutting knives, the swinging sheet-carrying frame for receiving the sheet of metal and holding the same while being cut, devices for throwing the swinging sheet-carrying frame over after the outer end of the sheet of metal has been cut, so as to cut the opposite end of the sheet as thrown over, the dies for forming a groove or pocket in the last cut end of the sheet after the sheet-carrying frame has been thrown over, the sliding cross-head working within the swinging sheet-carrying frame, devices for moving the cross-head in and out of the swinging sheet-carrying frame as swung over, the rolls for receiving and slitting the cut sheet of metal into can body blanks, and the forming rolls which receive the can body blanks from the slitting rolls and from side grooves in the blanks as passed therethrough. 16th. In a can body blank cutting machine, the combination with the slitting rolls, of the forming rolls which receive the can body blanks and form side grooves therein for holding the ends of the can while the body blank is rolled therearound. 17th. In a machine for cutting can body blanks, the combination of mechanism for receiving sheets of metal and cutting the ends thereof, devices for forming a hook or flange at one end of the cut sheet and a pocket at the opposite end, mechanism for slitting the cut sheet of metal into can bodies, and devices for forming a side groove in the cut body blanks. 18th. In a machine for cutting can body blanks, the combination with the reciprocating feed bed for the sheet metal, of the longitudinally reciprocating mechanism for receiving the sheet of metal from the feed bed and cutting the end thereof, and devices for slitting the cut sheet of metal and discharging the sheet from the machine cut into a number of body blanks. 19th. In a machine for cutting can body blanks, the combination with the feed mechanism for the sheet metal, the reciprocating carriage provided with cutting knives, the swinging sheet-carrying frame, devices for throwing the swinging frame with the movement of the carriage, the sliding cross-head working in and out of the swinging sheet-carrying frame, and devices for moving the cross-head in and out as the swinging sheet-carrying frame is swung back and forth. 20th. In a can body blank cutting machine, the combination with the forming rolls, the guide rolls and movable mechanism for receiving and automatically extracting the formed body blanks from the guide rolls, and removing the same from the machine. 21st. In a can body blank cutting machine, the combination with the extracting jaws, the vertically movable lift plate for placing the can body blanks within the extracting jaws, mechanism for moving the extracting jaws in and out, and a device for opening the extracting jaws as moved outward in order to permit the can body blanks to move from within the said jaws. 22nd. In a can body blank cutting machine, the combination with the extracting mechanism for the body blanks, of the vertically movable lift plate, mechanism for raising and lowering the same, the plunger rod located above the lift plate, the hinged jaws secured upon the plunger rod which receives the body blanks from the lift plate, mechanism for throwing the plunger rod in and out, and a device for opening the hinged jaws as the plunger rod is moved outward in order that the can body blanks may drop therefrom. 23rd. In a can body blank cutting machine, the combination with the mechanism for cutting the ends of the sheet of metal as passed through the machine, and forming a hook or flange at one of the cut ends, and a pocket at the opposite end to receive the hook or flange, and devices for slitting the cut sheet into can body blanks.

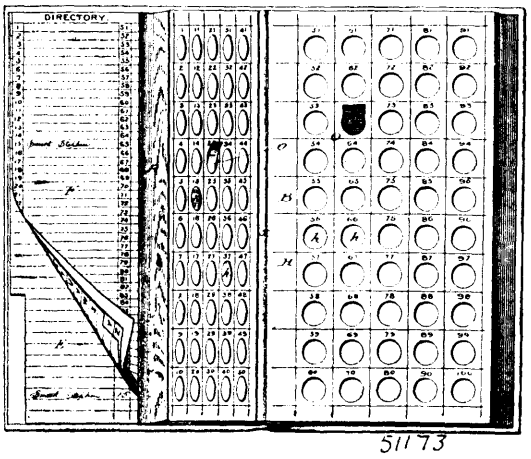


No. 51,173. Receptacles for Holding Coupons, etc.

(*Receptacle pour coupons, etc.*)

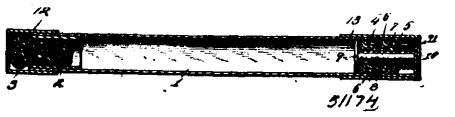
Uriah G. Beck, and Warren F. Beck, both of Almira, New York, U.S.A., 1st February, 1896; 6 years. (Filed 7th November, 1895.)

Claim.—1st. A coupon holder comprising two sections or divisions hinged together, provided with a series of cells or compartments



having spring actuated discs within them to receive coupons through openings adjacent to the discs. 2nd. A coupon holder consisting of two divisions or sections hinged together, enclosed within a cover, a directory and an index also enclosed within the cover, a series of compartments for receiving the coupons, and spring-pressed discs on which the coupons are carried. 3rd. A coupon holder provided with a series of cells or compartments open at opposite ends and each containing a spring provided with discs at opposite ends which are adapted to be removed with the spring through the opening at one end of the compartment. 4th. A coupon holder provided with a series of cells or compartments having plates at opposite ends formed with openings at the opposite ends of the compartments, the springs within the compartments having discs at opposite ends and the buttons which hold the discs in place but permit of their ready removal. 5th. A coupon holder comprising two sections or divisions hinged together, and provided with a series of cells or compartments, each cell or compartment containing a spring with discs at opposite ends, each compartment being suitably numbered on its front face, each disc at the opposite end of each compartment being numbered, in combination with a directory and an index secured to the coupon holder within a suitable cover.

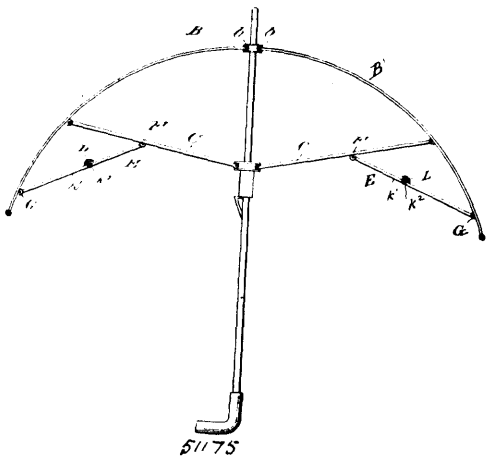
No. 51,174. Fountain Mucilage Holder.
(*Appareil pour contenir du mucilage.*)



Sylvester J. Cripps and John W. Croxall, assignees of Samuel L. Young and James A. Norris, all of East Liverpool, Ohio, U.S. A., 1st February, 1896; 6 years. (Filed 11th November, 1895.)

Claim.—1st. In a fountain mucilage holder, a tubular barrel or reservoir and a dauber or spreader located at one end thereof, in combination with a centrally perforated cork inserted in the opposite or rear end of said barrel, a ferrule partially surrounding and inclosing said cork and left open at both ends and also extended in rear of said cork, a plunger movable through said perforated cork, a disc on the inner end of said plunger, a push button on the outer end thereof sliding within said ferrule, and a spring for holding the plunger disc normally in contact with said cork, substantially as described. 2nd. A fountain mucilage holder comprising a tubular barrel, a spreader or dauber at one end thereof and a covering or protecting cap therefor, in combination with a centrally perforated cork inserted in the opposite end of the barrel, a ferrule or collar surrounding said cork and partially inclosing the same, the integrally formed points or spurs on said ferrule engaging said cork for holding the latter in place, a plunger movable through the perforation in said cork, the disc on the inner end of the plunger, the push button on the outer end of the plunger, the spiral spring disposed around said plunger and interposed between the push button and the cork, and the protecting cap or cover therefor, all arranged substantially as described. 3rd. A fountain mucilage holder comprising a hollow barrel or reservoir, and a spreader or dauber at one end thereof, in combination with a centrally perforated cork inserted in the opposite end of the barrel, a ferrule surrounding said cork and partially inclosing the same, a plunger operating through the central perforation in the cork, and provided with a disc at its inner end, a push button provided with a hollow shank surrounding and engaging the shank of the plunger and also working through the centrally perforated cork, and a spiral spring disposed around the shank of the push button and interposed between said button and the cork, substantially as specified.

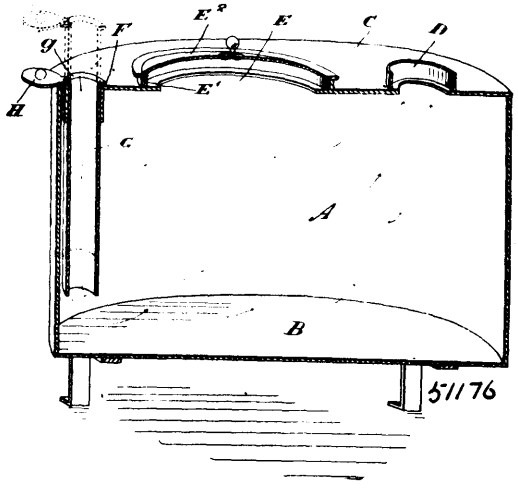
No. 51,175. Umbrella (*Parapluie.*)



Joseph Stark, New York, State of New York, U.S.A., 1st February, 1896; 6 years. (Filed 8th November, 1895.)

Claim.—1st. The combination, with an umbrella, provided with the usual ribs or bows, and inner braces, of stays which are pivotally connected with said braces, and with the outer ends of the ribs or bows, said stays being composed of separate sections which are hinged together, substantially as shown and described. 2nd. The combination, with the bows or ribs of an umbrella, and the inner braces thereof, of stays which are pivotally connected at one end of said braces, and at the other with the outer end of the bows or ribs, said stays being composed of sections which are hinged together, and adapted to fold outwardly, substantially as described. 3rd. An umbrella, provided with the usual handle, the usual bows or ribs, and the usual inner braces, said braces being pivotally connected with a sleeve mounted on the handle, and with the ribs or bows, and stays which are pivotally connected with said braces, and with the outer ends of the ribs or bows, said stays being composed of sections which are hinged together, substantially as shown and described.

No. 51,176. Stove. (*Poêle.*)

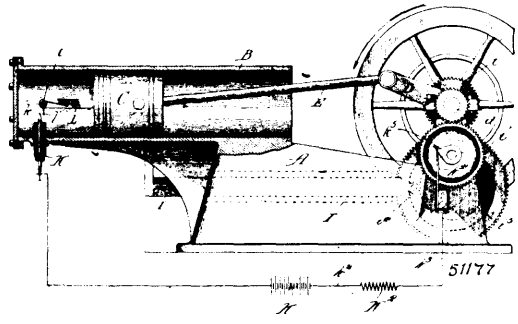


Leonard Meyer, Toronto, Ontario, Canada, 1st February, 1896; 6 years. (Filed 9th November, 1895.)

Claim.—1st. A sheet iron wood stove provided with an imperforate band and bottom, a top provided with a smoke pipe opening, and draught pipe extending downwardly from the top at one end and having its lower end located considerably above the bottom of the stove and a wood opening and cap all arranged, as and for the purpose specified. 2nd. In a stove, the combination with the imper-

forate band and bottom, of the stove pipe opening at one end, the draught pipe extending downwardly from the top at the opposite end and the internal lining extending down from the top to the level of the bottom of the draught pipe and the opening for the wood and suitable cap therefore, as and for the purpose specified. 3rd. In a stove, the combination with the imperforate band and bottom, of the stove pipe opening at one end, the draught pipe extending downwardly from the top at the opposite end into the stove and provided with an upper bend and downwardly extending outside portion and the opening for the wood provided with a suitable cap, as and for the purpose specified.

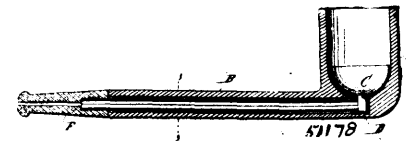
No. 51,177. Explosion Engine and Method of Mixing and Volatilizing Gases in the same. (*Machine explosive et méthode de mélange et volatisation du gaz.*)



Thomas Kane, Chicago, Illinois, assignee of Edward Joel Pennington, Racine, Wisconsin, both in the U.S.A., 1st February, 1896; 6 years. (Filed 2nd November, 1895.)

Claim.—1st. The herein described method of perfecting the volatilization of liquid hydro-carbons, which consists in first compressing a charge of liquid hydro-carbon and air, and then applying an electric spark to the mixture of air and bydro-carbons before final compression thereof, substantially as described. 2nd. In explosion engines, the herein described method of volatilizing and exploding a mixture of gas and air, which consist in first admitting a charge of hydro-carbon and air, then applying an electric spark to the charge previous to final compression thereof, and then igniting the explosive charge by a second electric spark after final compression to explode the same, substantially as described. 3rd. In explosion engines, the method herein described of first admitting an explosive mixture of hydro-carbon oils and air into a cylinder or other receptacle, then primarily heating the explosive charge by an electric spark just previous to the final compression thereof, and the secondarily igniting the explosive mixture by an electric spark after the final compression of such mixture to explode the same substantially as and for the purposes set forth. 4th. In an explosion engine, the combination of a frame portion provided with a cylinder, a reciprocating piston moving in such cylinder, a rigid electrode on one of such portions, the cylinder or reciprocating piston, an elastic electrode formed of a helically coiled spring on the other portion with its free end arranged to contact the rigid electrode and be snapped thereby during the reciprocation of the piston, substantially as described. 5th. In an explosion engine, the combination of a frame portion provided with a cylinder, a reciprocating piston movably mounted therein, an electrode on such cylinder portion and an electrode on the reciprocating piston, both of such electrodes so constructed and arranged that when in an electric circuit they form a primary spark previous to the ending of the backward movement of the piston, and a secondary spark after the piston has begun its forward motion, substantially as described. 6th. In an explosion engine, the combination of a cylinder portion, a reciprocating piston mounted therein, a rigid electrode on such cylinder portion and an elastic electrode on the piston portion, both of such electrodes being so arranged when in electric circuit that a primary electric spark is formed previous to the ending of the backward stroke of the piston, and a secondary spark is formed after the piston has begun its forward motion, substantially as described. 7th. In an explosion engine, the combination of a cylinder portion, a reciprocating piston mounted therein, a rigid electrode mounted in such cylinder, and an elastic helically coiled electrode mounted on such piston portion, both of such electrodes being so arranged that when an electric circuit is formed a primary spark is formed just previous to the end of the backward motion of the piston, and a secondary electric spark is formed immediately after the piston has begun its forward motion, substantially as described. 8th. In an explosion engine, the combination of a cylinder, a reciprocating piston mounted therein, a rigid yoke electrode mounted in the cylinder portion, a supporting bridge mounted on the piston portion, and an elastic helically coiled spring electrode on such supporting bridge portion arranged in connection with the rigid electrode to form an electric spark just previous to the ending of the backward motion of the piston, and a secondary electric spark immediately after the piston has begun its forward motion, substantially as described. 9th. In an explosion engine, the combination of a cylinder made of thin material adapted to rapidly radiate heat, a rigid electrode projecting within the cylinder at or near its head portion, a reciprocating piston mounted on such cylinder, and a spring electrode projecting from the piston portion to contact the rigid electrode just before the piston reaches the final limit of its backward motion and form a primary electric spark, and to form a secondary electric spark immediately after the piston has begun its forward motion, substantially as described. 10th. In an explosion engine, the combination of a frame portion provided with a cylinder, a piston movably mounted therein, and two electrodes arranged to contact with each other during the movements of the piston and form a primary spark previous to final compression of gasses and air, and a secondary exploding spark after such final compression, substantially as described.

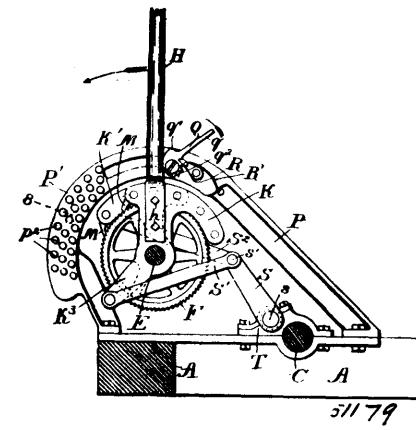
No. 51,178. Pipe. (*Pipe.*)



Charles W. Foster, Brooklyn, New York, U.S.A., 1st February, 1896; 6 years. (Filed 8th November, 1895.)

Claim.—1st. In a pipe, the combination with the bowl and stem, of a removable cup in the bottom of the bowl provided with a downward directed extension, a tube which extends through the stem and communicates with said extension, and a mouth piece connected with said tube and stem, substantially as shown and described. 2nd. In a pipe, the combination with the bowl and stem, of a removable cup in the bottom of the bowl provided with a downwardly directed extension, a tube which extends through the stem and communicates with said extension, and a mouth-piece connected with said tube and stem, said tube being surrounded by an angular chamber, substantially as shown and described. 3rd. In a pipe, the combination with the bowl and stem, of a removable cup in the bottom of the bowl provided with a downwardly directed extension, a tube which extends through the stem and communicates with said extension, and a mouth piece connected with said tube and stem, said tube being surrounded by an angular chamber, and said tube being divided longitudinally, or composed of two separable parts, substantially as shown and described.

No. 51,179. Saw-Mill Set Works. (*Charriot de scierie.*)

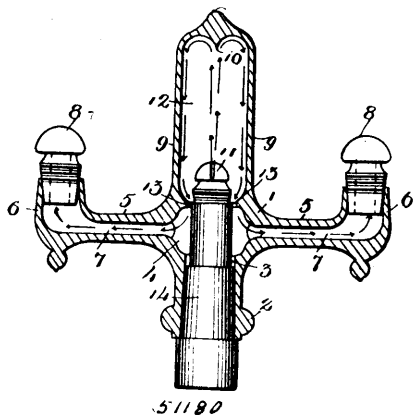


Henry McDermott, Merinette, Wisconsin, U.S.A., 1st February 1896; 6 years. (Filed 8th November, 1895.)

Claim.—1st. In a saw-mill set works organization, the combination with a main set shaft, and gearing connecting said shaft with the knees, of receding springs placed under tension on said shaft and normally tending to withdraw said knees away from the saw line, a gear-wheel fast on said shaft, a counter shaft parallel to said set shaft, a pinion loose on said counter shaft and meshing in the gear-wheel on said set shaft, a spring-actuated clutch coupling normally connecting said pinion to said counter shaft, a hand lever for releasing said clutch coupling, when desired, and ratchet and pawl arrangement mounted on said counter shaft, with a hand lever for turning said ratchets, and so causing said counter shaft and clutch coupling to turn said pinion whereby motion is transmitted to said gear-wheel and to said set shaft, substantially as described. 2nd. In a saw-mill set works organization, the combination with a main set shaft and gearing connecting said shaft with the knees, of receding springs placed under tension on said shaft, and normally tending to withdraw said knees away from the saw line, a counter shaft, a pinion loose thereon, with gearing connecting said pinion with said shaft, a spring-actuated clutch coupling normally connecting said pinion to said counter shaft, a hand lever for releasing said

clutch coupling when desired, a ratchet fast on said counter shaft, a segment provided with spring operated differential pawls engaging in said ratchet, and a hand lever for operating said segment, substantially as described. 3rd. In a saw-mill set works organization, the combination with a main set shaft and gearing connecting said shaft with the knees, of receding springs placed under tension on said shaft, and normally tending to withdraw said knees away from the saw line, a counter shaft, a pinion loose thereon, with gearing connecting said pinion with said set shaft, a toothed clutch coupling adapted to connect said pinion to said counter shaft, a spring normally pressing the members of said clutch coupling into engagement with each other, and a ratchet and pawl arrangement with a hand lever for operating the same, whereby motion may be transmitted to said counter shaft, substantially as described. 4th. In a saw-mill set works organization the combination with the main set shaft, of a counter shaft and gearing connecting the two shafts, a ratchet-wheel fast on said counter shaft, a segment with a plurality of differential spring operated pawls engaging in said ratchet-wheel, a hand lever for moving said segment, and a quadrant provided with a stop to limit the motion of the hand lever in one direction and with a plurality of perforations with pins adapted to slide in and out therethrough and to form a stop to limit the motion of the hand lever in the opposite direction, substantially as described. 5th. In a saw-mill set works organization, the combination with the main set shaft, of a counter shaft and gearing connecting the two shafts, a ratchet-wheel fast on said counter shaft, a segment with a plurality of spring operated pawls pivotally mounted on said counter shaft and having its pawls engage the teeth of said ratchet-wheel, a hand lever adapted to impart a reciprocating motion to said segment and a quadrant provided with an adjustable stop to limit the motion of the hand lever in one direction and with a plurality of perforations, with pins adapted to slide in and out therethrough, and to form a stop to limit the motion of the hand lever in the opposite direction, substantially as described. 6th. In a saw-mill set works organization, the combination with the main set shaft of a counter shaft and gearing connecting the two shafts, a ratchet-wheel fast on said counter shaft, a segment with a plurality of spring operated pawls carried thereby and pivotally mounted on said counter shaft, the said pawls engaging in the teeth of said ratchet-wheels, a hand lever adapted to impart a reciprocating motion to said segment, a quadrant provided with a plurality of perforations, with pins adapted to slide in and out therethrough and to form a stop to limit the motion of the hand lever in one direction, with a cam plate pivoted in the line of travel of the said hand lever, and adapted to form a stop to limit the travel of the said lever in the opposite direction, with teeth in the rear of said cam plate, and a pawl engaging said teeth, substantially as described. 7th. In a saw-mill set works organization, the combination with a ratchet-wheel and a pair of differential pawls, one of said pawls being provided with a rearwardly projecting lug, of a spring interposed between the base of this lug and the top of the adjacent pawl, whereby both pawls are pressed towards the teeth of said ratchet-wheels, substantially as described. 8th. In a saw-mill set works organization, the combination with a ratchet-wheel of a pawl carrier adapted to swing about said ratchet-wheel, and provided with differential pawls arranged in pairs, one of each pair of said pawls, being provided with a rearwardly projecting lug, with a spring interposed between the base of this lug, and the top of the adjacent pawl, whereby both pawls are pressed down on said ratchet-wheel, substantially as described. 9th. In a saw-mill set works organization, the combination with a ratchet-wheel of a pawl carrier adapted to swing about said ratchet wheel, a plurality of angularly adjustable eccentric pins mounted across said pawl carrier, pawls pivoted on said pins, means for adjusting said pins in any desired position, and clamp screws for holding said pins in the desired position, substantially as described.

No. 51,180. Gas Burner. (*Bec à gaz*).

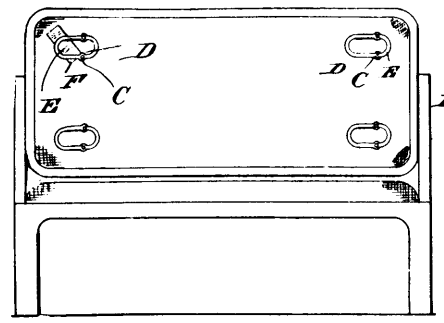


51180

Charles Knapp, St. Louis, Missouri, U.S.A., 1st February, 1896; 6 years. (Filed 11th November, 1895.)

Claim.—1st. A gas burner consisting of a suitable open base and a dome having a closed top, said base adapted to fit over a gas-tip shell and tip carried thereby, and form an annular passage at the basal portion of the dome and around the outer surface of the shell, and suitable arms, having passages, extending outwardly from a point between said base and the basal portion of the dome, substantially as set forth. 2nd. A gas burner comprising a base, an opening in said base, a dome having a closed deflecting top mounted above said opening and in communication therewith, an ordinary shell inserted into said opening, a gas supply tip carried by the upper end of the shell and projecting into said dome, arms located above the base and below the supply tip, passages formed in said arms, and tips carried by said arms from which the flame issues and impinges upon said dome, substantially as set forth. 3rd. A gas burner comprising a base, an opening in said base, an annular enlarged chamber above said opening, a hollow dome, a contracted annular passage at the base of said dome and communicating with the annular chamber, arms carrying suitable tips, passages in said arms in communication with the tips and chamber, a shell passed into the opening of the base and extending into the contracted passage, and a supply tip carried by said shell and projecting into the dome, substantially as set forth.

No. 51,181. Ticket Holder. (*Porte-billets.*)

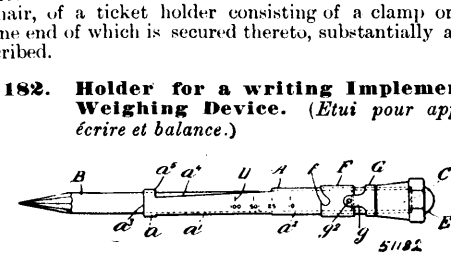


51181

Charles Alvey Brown, Westfield, New Jersey, U.S.A., 3rd February, 1896; 6 years. (Filed 15th November, 1895.)

Claim.—1st. The combination with the back of a car seat or chair, of a holder or clamp secured thereto, and adapted to hold a ticket in connection with the seat or chair, substantially as shown and described. 2nd. The combination with the back of a railway seat or chair, of a ticket holder secured thereto, substantially as shown and described. 3rd. The combination with the back of a railway seat or chair, of a ticket holder consisting of a clamp or similar device, one end of which is secured thereto, substantially as shown and described.

No. 51,182. Holder for a writing Implement and Weighing Device. (*Etui pour appareil à écrire et balance.*)



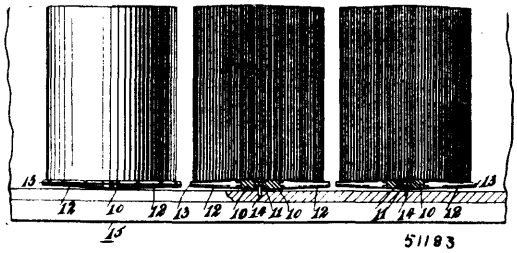
51182

Rudolph William Riess, Germantown, Pennsylvania, U.S.A., 3rd February, 1896; 6 years. (Filed 13th November, 1895.)

Claim.—1st. A holder for a writing implement and weighing device, consisting of a tube or cylinder open at one end for the reception of the writing implement, weighted at the other end and having an eraser applied thereon and a sleeve with a pivotal standard for etablishing a weighing device for coin of different denominations, substantially as and for the purposes set forth. 2nd. A holder for a writing implement and weighing device, comprising a graduated scale tube or cylinder provided with an oblong slot for inserting coin therethrough and with a tapering surface forming a rest for the coin and a slidable sleeve on said tube or cylinder and having a pivotal trunnion forming in operative position a vertical standard for the weighing device, substantially as and for the purposes set forth. 3rd. A holder for a writing implement and weighing device, comprising a slotted counterweighted and graduated scale tube or cylinder with a guide-way for inserting therethrough coin, oblong slits merging into said guide-way, a removable sleeve mounted on said tube or cylinder and provided with a pivotal trunnion forming in operative position a standard for the weighing device, substantially as and for the purposes setforth. 4th A holder for a writing implement and weighing device, comprising a graduated or scaled, cylinder open at one end and weighted at the other end and having an intermediate guide-way and a coin rest, a sleeve provided with a pointer and a movable trunnion connected with said cylinder and slidable thereon, substantially as and for the purposes set forth.

No. 51,183. Means for supporting Carpet Rolls.

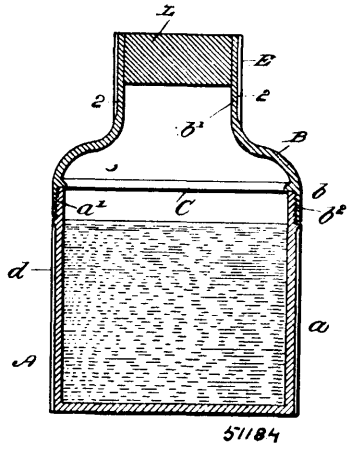
(*Moyen de supporter les rouleaux de tapis.*)



Charles Taylor, Louisville, Kentucky, U.S.A., 3rd February, 1896; 6 years. (Filed 14th November, 1895.)

Claim—1st. The improved base support for carpet rolls, which is double convex, that is to say, has a convex upper and under surface, and provided with a socket in each side, as shown and described. 2nd. The improved base support for carpet rolls, comprising a central disc-like hub having a central socket in its under side to receive a pivot stud, and a series of radial bars projecting from said hub, as shown and described. 3rd. A base support for carpet rolls, comprising a central disc-like hub, radial spaced bars thereon, a binding hand on the outer edged of said bars, and a central perforation in the hub adapted to loosely receive an upright stationary journal stud, substantially as described. 4th. The improved stand for carpet rolls, which consists of a horizontal platform, having short vertical studs fixed in its upper side, and circular base supports for carpet rolls, having a slightly convex face and provided with sockets on the under side, to receive said studs, upon which they are adapted to revolve, as shown and described.

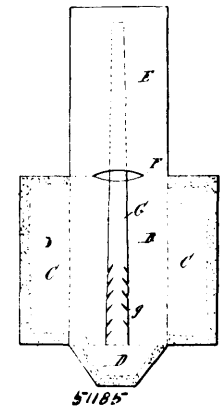
No. 51,184. Mucilage Bottle. (*Bouteille de mucilage.*)



Frederick William Rahmer, Brooklyn, New York, U.S.A., 3rd February, 1896; 6 years. (Filed 15th November, 1895.)

Claim.—1st. A mucilage bottle comprising a body portion and an upper portion, which is detachably connected therewith, said upper portion being contracted to form the neck or nozzle, substantially as shown and described. 2nd. A mucilage bottle, comprising a body portion as A, the upper part of which is provided with a screw thread on its outer surface, an upper removable portion as B, the lower part of which is provided with a screw thread on its inner surface, and with an annular bead as C, and the upger part of which is contracted to form the neck or nozzle, substantially as shown and described. 3rd. A mucilage bottle, comprising a body portion as A, the upper part of which is provided with a screw thread on its outer surface, an upper removable portion as B, the lower part of which is provided with a screw thread on its inner surface, and with an annular bead as C, and the upper part of which is contracted to form the neck or nozzle, the outer walls of the body portion and of the neck or nozzle, being provided with vertical corrugations, substantially as shown and described. 4th. A mucilage bottle, comprising a body portion as A, the upper part of which is provided with a screw thread on its outer surface, an upper removable portion as B, the lower part of which is provided with a screw thread on its inner surface and with an annular bead as C, and the upper part of which is contracted to form the neck or nozzle, the outer wall of the body portion and of the neck or nozzle being provided with vertical corrugations, and a removable cap or cover provided with a downwardly depending rim or flange, which is also corrugated, said cap or cover being provided with a brush, substantially as shown and described.

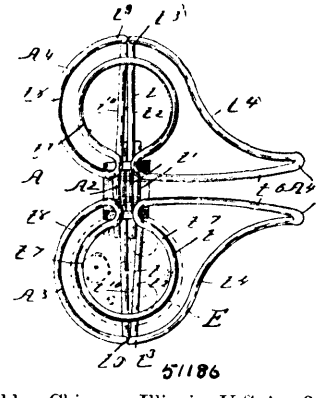
No. 51,185. Envelope. (*Enveloppe.*)



Thomas Rowland Jordan, New York, U.S.A., 3rd February, 1896 0 years. (Filed 15th November, 1895.)

Claim.—1st. An envelope or cover for letters or other articles provided with a small opening in the top thereof through which the letter or other article is inserted. 2nd. An envelope or cover for letters or other articles, having a tongue or strip which may be a part of the envelope or secured thereto on the inside and adapted to engage the letter or other article and retain the same within the envelope, whereby the contents cannot be withdrawn without damage to the envelope. 3rd. An envelope or cover for letters or other articles having a tongue or strip a part of the envelope, or secured upon the inside of the same provided upon the lower edged thereof with oblique incisions or slits adapted to engage and secure the letter or other article, and retain the same within the envelope. 4th. An envelope or cover provided with pointed extensions or projections adapted to be folded inwardly and when folded, to form a central opening in the top of the envelope, and the tongue or strip secured within the envelope and passing through said opening. 5th. An envelope or cover having side flaps and a bottom flap, and the upper extension or flap provided with a creased or recessed portion, in which is formed an opening adapted to receive the matter to be contained by the envelope, and the tongue within the envelope passing outwardly through said opening. 6th. The combination in an envelope having a small mouth or opening with or without, extensions and projections as described of a tongue or slit formed with the said envelope and projecting from the inside through the said mouth, the said tongue or strip having slits, incisions or projections on its lower edge at angles calculated to prevent the withdrawal of the letter or contents of the envelope. 7th. The combination with an envelope of the character described, of a slit or puncture in the letter or contents of the envelope adapted to receive the tongue or strip and engage the incisions or projections on the edges thereof, whereby the letter or contents of the envelope cannot be withdrawn without destroying or severing the said tongue portion of the envelope. 8th. In an envelope having a small mouth or opening two or more smaller apertures in the opposite corners thereof, whereby more room is secured inside of the envelope when inserting the letter or contents and also for the purpose of facilitating the opening of the envelope.

No. 51,186. Bicycle Saddle. (*Selle de vélocipèdes.*)



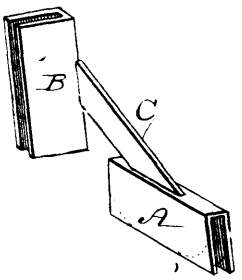
Arthur Jerome Eddy, Chicago, Illinois, U.S.A., 3rd February, 1896; 6 years. (Filed 9th October, 1895.)

Claim.—1st. In a bicycle saddle A, formed of spring frame A^1, comprising bar A^2, and seat sections A^3, the combination of the saddle-supporting block B, and saddle support C, substantially as

described. 2nd. In a bicycle saddle, the combination with the saddle support engaging block, of a transverse seat-supporting bar mounted between its ends at the said block, and a seat frame supported at opposite sides upon the ends of said bar and formed of wire bent to yield more freely at the centre than at the sides of the saddle, the seat frame being yieldingly supported between its front and rear ends on the said bar, to have an up and down rocking motion at said ends, substantially as described. 3rd. In a bicycle saddle constructed as above, the seat-frame formed of wire bent to produce a pomel A^4, at one end and a cantle A^5 at the other end of the frame, and supported at opposite sides between said ends upon the ends of bar A^2, to rock thereon and thus render the saddle readily yielding at the pommel and cantle, substantially as described. 4th. In a bicycle saddle, the combination with the seat sections A^3, of a reinforcing plate or pad E, and a saddle covering D constructed and applied, substantially as described and for the purposes set forth.

No. 51,187. Box Lid Support.

(*Support pour couvercles de boîtes*)

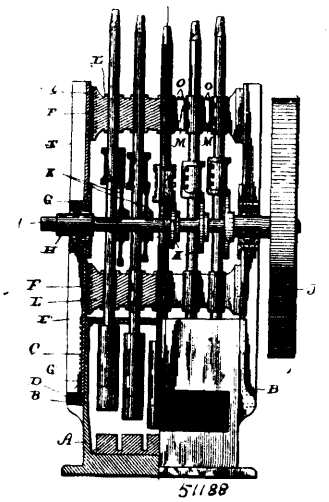


51187

Willmore W. Fowler, Oskaloosa, Iowa, U.S.A., 3rd February, 1896; 6 years. (Filed 8th October, 1895.)

Claim.—1st. A holder for box lids, comprising a part U-shaped in transverse section adapted to overlap and clamp the top edge of one of the end pieces of a box, a like part adapted to overlap and clamp the edge of a box lid and a part connecting the same, for the purposes stated. 2nd. A holder for box lids comprising a part A, adapted to engage and clamp the top and sides of one of the end pieces of a box, a part adapted to overlap and the clamp the edge of a box lid, and a support pivotally attached to one of said clamps and fixed to the other, and a joint in said support, substantially as and for the purposes stated.

No. 51,188. Stamp Mill. (*Bocard.*)

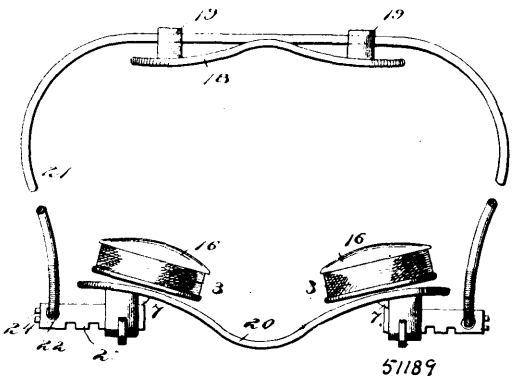


51188

Isaac Barton Hammond, Portland, Oregon, U.S.A., 3rd February, 1896; 6 years. (Filed 14th, November 1895.)

Claim.—1st. In a stamp mill, and in combination with a suitable base and the connecting bearing and operating parts, a standard comprising front and rear angle-irons E, E^1, E^{11}, a central casting G forming a support for the bearing of the main shaft, and castings F, F, adapted to receive the connection between the opposite standards, substantially as described. 2nd. In a stamp-mill, a mortar provided with pockets at opposite sides, in combination with a frame comprising a pair of standards rigidly connected thereto and having their lower ends loosely fitted in the pockets of the mortar, substantially as described. 3rd. In a stamp-mill, a mortar provided with pockets at opposite sides, having cushions set therein, in combination with a frame, comprising a pair of standards rigidly connected thereto, and having their lower ends loosely fitted in the pockets and resting on said cushions, substantially as described. 4th. In a stamp-mill, a guide for a stamp-stem lined with two pieces of rawhide, each pressed half around the stem and having its opposite ends extended between the guide and the cap, substantially as described. 5th. In a stamp-mill, a guide for the stamp-stems thereof, comprising a casting L having recesses formed therein, fitting and receiving one-half of the circumference of the stems, T-shaped projections M between said recesses, caps N fitting between said projections, and provided with lugs *n* resting on the same, and independent wedges O for forcing the caps inwards as desired, all constructed and arranged, substantially as shown and described. 6th. In a stamp-mill, a guide for the stamp-stems thereof, comprising recesses to receive one-half of a stamp-stem, caps to receive the other half, sheet packing encircling the stems and held between the flat portions of the guide and cap, and means for fastening the caps in place, substantially as described. 7th. In a stamp-mill, a guide for the stamp-stems thereof, comprising a casting L having recesses formed therein fitting and receiving one-half of the circumference of the stems, T-shaped projections M between said recesses, caps N fitting between said projections, and provided with lugs *n* resting on the same, independent wedges O for forcing the caps inwards as desired, and sheet packing encircling the stems and held between the flat portions of the guide and caps, all constructed and arranged substantially as shown and described.

No. 51,189. Truss Pad. (*Bandage herniaire.*)



51189

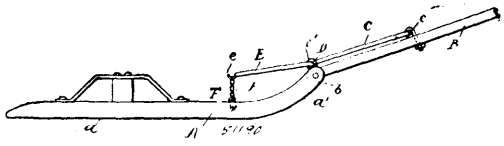
Julius Brickner and Abraham S. Herr, both of Tiffin, Ohio, U.S.A., 3rd February, 1896; 6 years. (Filed 29th July, 1895.)

Claim.—1st. In a truss, the combination with a body band, of a back plate mounted upon the body band and adapted to move freely thereon to adapt itself to the various movements of the body, whereby the pressure is evenly distributed throughout its engaging surface, substantially as set forth. 2nd. In a truss, the combination with a body band having the forward position separated, a front plate mounted upon the said separated front end portions of the body band and bearing the truss pads, and means for securing the said separated ends of the body band to the front plate, of a back plate loosely mounted upon the rear portion of the body, and adapted to conform to the various movement of the body and equalize the pressure thereon, substantially as set forth. 3rd. In a truss, the combination with a body band having its front portions separated, of a front plate, and means for adjustably connecting the separated ends of the body band with the said front plate, substantially as described for the purpose set forth. 4th. In a truss, the combination with the body band having its front end portions separated, of a front plate bearing the truss pads, plugs movably connected to the said front plate, and having transverse openings for the passage of the end portions of the said body band, and binding screws for adjustably connecting the end portions of the body band with the said plugs, substantially as set forth. 5th. A truss pad comprising a base and bearing plate having interposed springs, and a strip or binding of textile fabric closing the space between the two plates and attached to the edge portions of the latter, substantially as and for the purpose described. 6th. In a truss, a plate forming a component part of the pad and having a series of integral retaining points, and a strip of textile fabric having attachment with the said plate by means of the retaining points, substantially as set forth. 7th. A truss pad comprising a plate having integral retaining points contiguous to its edge portion, and a textile fabric having engagement with the said retaining points, the latter being clinched or bent, substantially as and for the purpose set forth. 8th. A truss pad comprising a base and a bearing plate, each having retaining points contiguous to their edge sand held separated by interposed springs, and a strip or binding of textile fabric closing the space between the two plates and having attachment at their edges with the respective plates by means of the retaining points, substantially as set forth. 9th. In a truss pad, the combination of a plate hav-

ing retaining points contiguous to its edge, a textile fabric having engagement with the said plate by means of the said retaining points, and a covering plate having its edge portion bent, or curved, to embrace the edge portion of the first-mentioned plate, and having retaining points to be clinched upon the first-mentioned plate and secure the covering plate in position, substantially as set forth. 10th. In a truss pad, the combination with a base plate having lips punched therefrom, of a reinforcing plate held upon the inner side of the base plate by means of the said lips, the said base and reinforcing plates having a series of threaded openings for the reception of the fastening screw whereby adjustable connection is had of the pad with its supporting structure, substantially as set forth. 11th. In a truss pad, the combination with a plate having loops formed therein, of coil springs having their lower ends passed through the said loops, substantially as and for the purpose described. 12th. The herein-specified truss pad, comprising base and bearing plates having retaining points at their edges and having integral loops, coil springs having their ends thrust through said loops, a textile fabric closing the space between the plates and engaged with the said retaining points, and covering plates having retaining points for securing them in place, substantially as described for the purpose specified.

No. 51,190. Tongue Support for Sleighs.

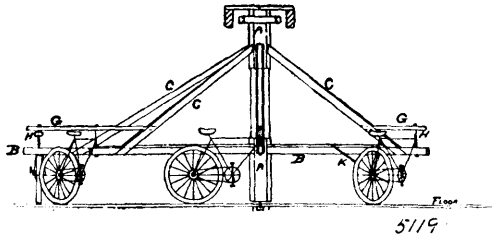
(*Support d'armon de traîneaux.*)



Erwin W. Anderson, Phinelander, Wisconsin, U.S.A., 3rd February, 1896; 6 years. (Filed 13th Jan., 1896.)

Claim.—1st. The combination with a sleigh and its tongue, and crosspiece pivoted to the upwardly projecting ends of the sleigh runners, of the supporting spring provided with the loop C, secured to the tongue, the straight loterally diverging portions D, secured to the cross-bar, and the two longitudinal arms E, arranged over the runners, and the eyebolts and chains adjustably connecting the rear ends of the said arms with the runners, substantially as set forth. 2nd. The combination with a sleigh, and its tongue and crosspiece pivoted to the sleigh runners, of an adjustable tongue support of a single piece of spring steel and provided with a central loop, diverging middle portion *s*, and rearwardly projecting arms having hooks at their ends, the hook bolts securing the said support to the tongue and its cross-piece, and the eyebolts and chains secured to the runners and engaging the said hooks, substantially as set forth.

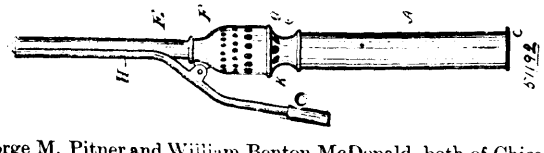
No. 51,191. Machine for Teaching the Art of Bicycle Riding etc. (*Appareil pour apprendre à aller en bicycle.*)



Avard Herbert Miller, Yarmouth, Nova Scotia, Canada, 3rd February, 1896; 12 years. (Filed 26th December, 1895.)

Claim.—A machine consisting of a central revolving post from which radiate arms at the ends of which are attached bicycle wheels, the whole to be propelled by foot power applied to the pedals as in ordinary bicycling, substantially and for the purposes as hereinbefore set forth.

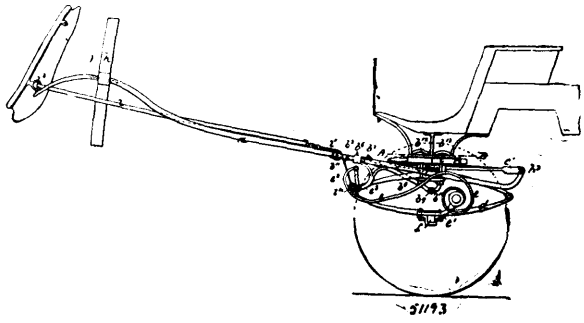
No. 51,192. Curling Iron. (*Fer à friser.*)



George M. Pitner and William Benton McDonald, both of Chicago, Illinois, U.S.A., 3rd February, 1896; 6 years. (Filed 18th October, 1895.)

Claim.—In a curling-iron the combination with a mandrel having a perforate bowl-shaped end, and a clamp, of the hollow handle forming a receptacle for a combustible, and having its butt end closed, and a burner *e* permanently secured in the opposite end of said handle the jet of which projects into said perforate bowl-shaped end, a washer *k*, of solid insulating material surrounding the jet of the burner and secured to a flange projecting therefrom, and said washer and flange provided with air openings for the purpose specified.

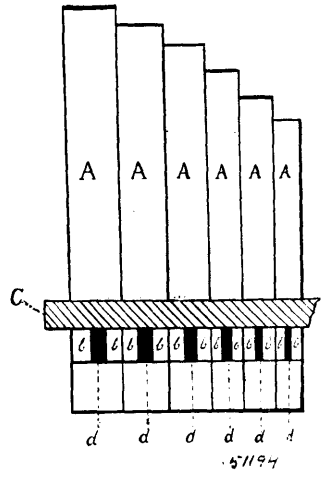
No. 51,193. Appliance for Connecting Animals to Vehicles etc. (*Appareil pour atteler les chevaux aux voitures.*)



Thomas Hargreaves Briggs, Bradford, England, 3rd February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—In appliances for connecting draught animals to vehicles and the like of the nature aforesaid, in which a supporting force and a downwardly bearing force are caused to operate on the animal for the purposes aforesaid, the improved combination of parts hereinbefore described, consisting of: a shaft-frame *b*, pivotally connected to hind and fore parts of the fore-carriage *c*, and fitted with shafts *a*, connected to the animal by belly and back bands *g*, *h*, and with trace deflecting pulleys i^1, springs *e*, applied to the fore-carriage and adapted to raise the fore part of the shaft-frame and support the shafts and part of the weight of the animal at the belly band: and traces *i*, connected to the animal at i^3, and to the vehicle at i^4, in a plane below the pulleys i^1, and engaging with said pulleys so as to be deflected from such plane and caused to form a downwardly open angle adapted to convert the forward pull of the animal into a downward thrust operating directly on the shaft-frame and variably counteracting or overcoming the supporting tendency of the springs, and in the latter event applying a downward pressure to the animal through the back-band: by which improved combination of parts both the supporting force and the counteracting downwardly bearing force are caused to operate on the animal directly through the shafts which are also used in the ordinary manner for guiding and backing the vehicle, as set forth.

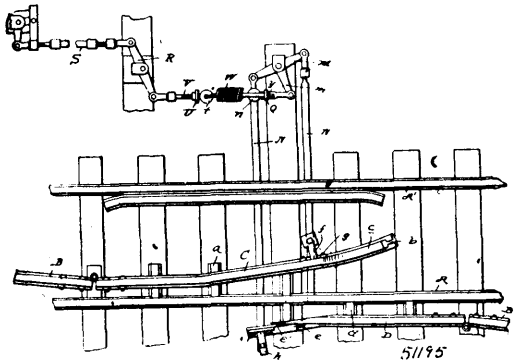
No. 51,194. Organ. (*Orgue.*)



George W. Scribner and William McIntosh, London, Ontario, Canada, 3rd February, 1896; 6 years. (Filed 8th April, 1895.)

Claim.—1st. A series of organ pipes, having openings provided with individual regulators in combination with an additional regulator arranged to simultaneously adjust the size of all the adjusted openings, substantially as described. 2nd. A series of organ pipes provided with openings of equal length, and individual regulators to adjust said openings, substantially as described. 3rd. A series of organ pipes provided with openings of equal length and individual regulators to adjust said openings, in combination with an additional regulator arranged to simultaneously adjust the size of all the adjusted openings, substantially as described.

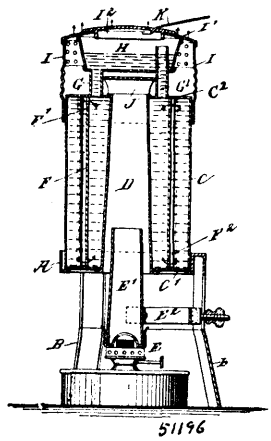
No. 51,195. Railway Frog. (*Rail de croisement.*)



Duncan McPherson, Montreal, Quebec, Canada, 3rd February, 1896; 6 years. (Filed 9th Jan., 1895.)

Claim.—1st. In combination with an unbroken main rail portions of a broken turnout rail arranged upon opposite sides of the main rail, a frog comprising a member connected in a hinged manner with the end of the inner turnout rail portion and having its free portions bent so that its end will rest away from the main rail when it is adjusted against said rail, and a member connected in a hinged manner with the end of the outer turnout rail portion and adapted to be adjusted against the opposite side of the main rail with respect to the first named member, a lever M, having an angular arm *m*, rods connecting the opposite ends of said lever and the frog members, a rod T, for connection with a switch operating mechanism and having a reduced end *z*, a plate adjustably fixed on said rod, a rod connected to said plate and having an eye, a rod P, connected with the arm or branch *m*, of the lever M, and having an eye, a coiled spring having its ends connected to the eyes of rods V, P, and surrounding the rod T, a plate Q, mounted on and secured to the rod P, and having an aperture receiving the reduced end of the rod T, and a weak device for holding the rod T, against movement with respect to said plate Q, substantially as specified. 2nd. The combination of two movable frog members arranged on opposite sides of a main rail and adapted to be thrown in opposite directions on and off the same, a lever, rods connecting the opposite ends of the lever and the frog-members, a rod for connection with a switch operating mechanism, a connection easily changed from rigid to flexible between said rod and the lever and a coiled spring connected with said rod and the lever, substantially as specified.

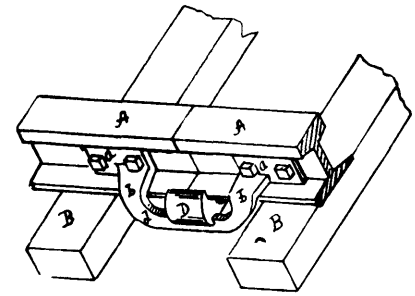
No. 51,196. Heater. (*Calorifère.*)



Herman Gutschmidt, Jersey City, New Jersey, U.S.A., 3rd February, 1896; 6 years. (Filed 8th January, 1896.)

Claim.—A heater comprising the outer corrugated shell C, having heads C^1, C^2, the inner plain cylinder F, having upper and lower openings F^1, F^2, the central heating flue D, extending through the heads C^1, C^2, the tank H, having pipes G, G^1, supporting it above the heads C^2, and connecting its interior at different heights with the water space within the shell C, the higher pipe G^1, forming an air vent at the time shell C is filled with water, a foraminated hood I inclosing the upper end of the shell C, and its water tank H, and having a removable cover I^2 over the upper open end of said tank, the heat from the flue D, discharging under and around the tank H, in the chamber formed by the hood I, substantially as described.

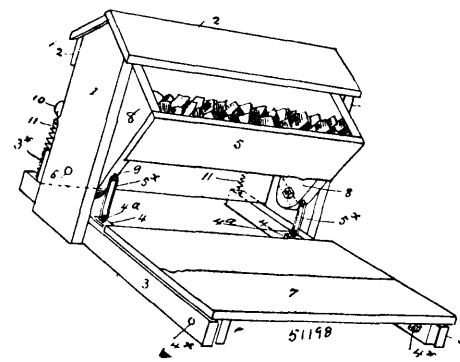
No. 51,197. Rail Joint. (*Joint de rail.*)



Henry J. Schmick, Hamburg, Pennsylvania, U.S.A., 3rd February, 1896; 6 years. (Filed 8th January, 1896.)

Claim.—1st. The combination in a rail joint, of the meeting ends of the rails, trusses secured to the rails and extending across the joint below the bases of the rails, and a supporting block interposed between said trusses and the rail bases, said supporting block being shouldered to engage with the trusses and rails in order to prevent lateral movement, substantially as specified. 2nd. The combination in a rail joint, of the meeting ends of the rails, trusses extending across the joint below the bases of the rails and having downwardly projecting hooked ends engaging with openings in the base flanges of the adjoining rails, and a supporting block interposed between said trusses and the rail bases, substantially as specified. 3rd. The combination in a rail joint, of the meeting ends of the rails, trusses extending across the joint below the bases of the rails, and having hooked ends engaging with the adjoining rails, a supporting block interposed between the trusses and the rail bases and having at one end a hook embracing the rail flanges and forming a chair, and a sliding key adapted to the other end of the supporting block and bearing against one of the trusses, substantially as specified.

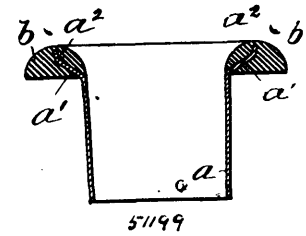
No. 51,198. Salt Trough. (*Auge à sel.*)



Christopher M. Arthur, Bethany, Missouri, U.S.A., 3rd February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—In a device of the character set forth, the combination of uprights supporting a cover or roof, lower sills to which said uprights are secured, a box or trough pivotally mounted between the said uprights and adapted to move under the said cover and having ears projecting rearwardly therefrom, operating beams pivotally connected to the said sills, a platform on the operating beams, links connected to the rear of the operating beams and the lower front portion of the trough or box, and springs attached to the rear of the trough or box and to said projecting ears, substantially as and for the purposes specified.

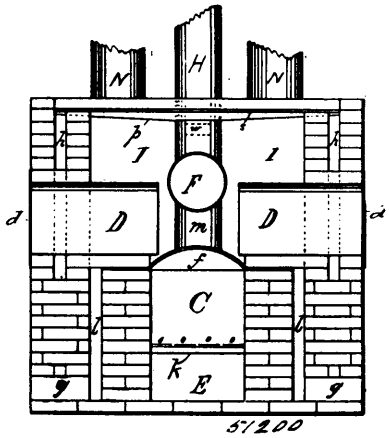
No. 51,199. Eyelet. (*Œillet.*)



Theophilus King Trustee, Boston, assignee of Eleazer, Kempshall, Sharon, both of Massachusetts, U.S.A., 3rd February, 1896; 6 years. (Filed 26th August, 1895.)

Claim.—1st. An eyelet comprising a tubular body, a frusto-conical flange formed on one end of said body, the flange joining the body of the eyelet at an obtuse angle which forms a shoulder adapted to bear on a die plate, and an annular upwardly projecting cutting lip formed on the upper edge of said flange and standing at an angle therewith, as set forth. 2nd. An eyelet comprising a tubular body, a frusto-conical flange formed on one end of said body the flange joining the body of the eyelet at an obtuse angle which forms a shoulder adapted to bear on a die plate, an annular upwardly projecting cutting lip formed on the upper edge of said flange and standing at an angle therewith, and an annular covering moulded on said lip and flange, the lip being formed to cut the mass of covering composition while the latter is being forced down onto the flange, the angle at which said lip projects from the flange ensuring the upward projection of the lip in the moulded covering, as set forth.

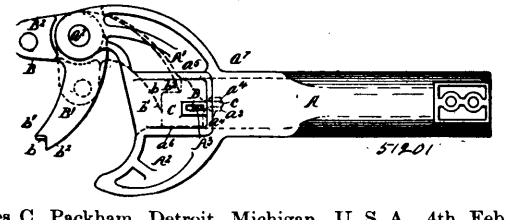
No. 51,200. Heating Furnace. (*Fournaise.*)



Thomas Waller, Truro, Nova Scotia, Canada, 4th February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. A domestic heating furnace having thick outer walls *v*, *v*, *v*, and *u*, with air spaces *h*, *h*, *h*, and having an internal fire box C, and ash pit E, enclosed with brick walls and separated from outer walls by the air spaces *l*, *l*, *l*, substantially as and for the purpose hereinbefore described. 2nd. A domestic heating furnace comprising brick outer walls in which are air spaces, an internal fire box with brick walls separated from the outer walls by the air spaces *l*, *l*, *l*, and one or more ovens, substantially as and for the purpose hereinbefore described. 3rd. In a domestic heating furnace, the combination of the internal fire box C, and the ash pit E, having brick walls and separated from the outer walls by the air spaces *l*, *l*, *l*, with the wood grate bars 0, 0, 0, the coal grate bars Fig. 6, and the arched radiator *f*, substantially as and for the purpose hereinbefore described. 4th. In a domestic heating furnace, the combination of the arched radiator *f*. with the neck *m*, the cylindrical radiator F, the reduced end of the radiator *i*, and the smoke pipe H, substantially as and for the purpose hereinbefore described. 5th. In a domestic heating furnace, the combination of the ovens D, D, and the brick wall *sv*, *v*, *v*, and *u*, with the walls of the internal fire box and ash pit C, and E, substantially as and for the purpose hereinbefore described. 6th. In a domestic heating furnace, the combination of the air spaces *l*, *l*, *l*, with the cold air ducts *g*, *g*, substantially as and for the purpose hereinbefore described and set forth.

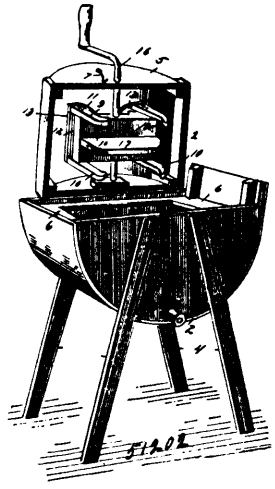
No. 51,201. Car Coupler. (*Attelage de chars.*)



Lewes C. Packham, Detroit, Michigan, U. S. A., 4th February, 1896; 6 years. (Filed 7th January, 1895.)

Claim.—1st. The combination of a coupler, provided with a chambered head, a locking block having a jointed connection with the coupler head, an operating bar connected with the locking block, and a knuckle pivotally engaged in said head provided with a tongue at its outer extremity resting against the front face of the locking block to prevent a link coupling from striking the face of the locking block, substantially as described. 2nd. The combination of a coupler provided with a chambered head, a knuckle pivotally engaged in said head provided with a tongue forked at its outer extremity, a locking block having a jointed connection with the coupler head, and an operating bar connected with the locking block, said block constructed with a laterally extended rib, the front fork of the tongue resting against the front face of the locking block and the rear fork or spur projecting toward said rib when in locked position substantially as set forth. 3rd. The combination of a coupler provided with a chambered head, a knuckle pivotally engaged in said head, a locking block and an operating bar connected with the locking block, said block constructed with a rearwardly projecting shank *c*, jointly engaged within the coupler head, with a laterally extended rib c^1, and with a shoulder c^4 and said head formed with walls adjacent to the lateral faces of the locking block, and with a wall rearward of said rib, substantially as set forth.

No. 51,202. Washing Machine. (*Machine à laver.*)



Neil Kunkel, Oregon, Missouri, U.S.A., 4th February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. In a washing machine, the combination of a body an oscillating body mounted therein, the agitator arms pivotly mounted on the oscillating body at the ends thereof, and yieldingly connected and depending from the oscillating body and adapted to carry clothes back and forth over the washing machine body, and means for operating the oscillating body, substantially as described. 2nd. In a washing machine, the combination of a washing machine body, an oscillating body mounted therein, the agitator bars or arms pivotly mounted on the ends of the oscillating body and depending therefrom, and having their lower terminals bent inward or partially hook-shapek, and a spring connecting the agitator bars or arms at a point above the pivots, substantially as described. 3rd. In a washing machine, the combination of a washing machine body, an oscillating body mounted therein and provided at its ends with stops, the depending agitator bars or arms pivotly mounted at the ends of the oscillating body and engaging the stops thereof, the cap boards mounted on the upper ends of the agitator bars or arms and extending inward over the oscillating body, and a spring connecting the agitator bars of arms and holding them normally in engagement with the stops, substantially as described. 4th. In a washing machine, the combination of a washing machine body, an oscillating body mounted therein, the yieldingly connected agitator arms pivotly mounted on the ends of the oscillating body and depending therefrom, and a rigid centrally arranged longitudinally disposed shield carried by the oscillating body, substantially as described.

No. 51,203. Process of Making Oil Compound.

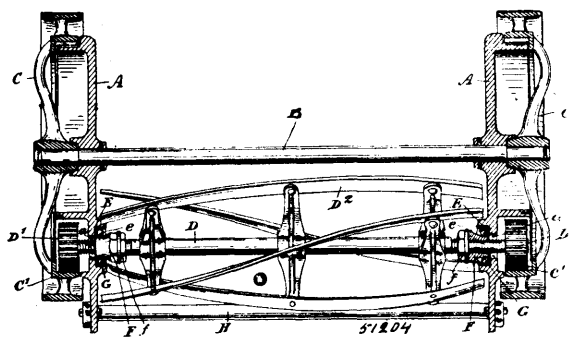
(*Procédé pour faire un composé d'huile.*)

Edward George Kubler and John Martin Beck, both of Akron, Ohio, U.S.A., assignees of Louis Knoche, Hamm, Germany, 4th February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. The oil compound consisting of linseed oil and the oil that is pressed from the nuts or seeds of a tree belonging to the genus ot trees known botanically under the name of euphorbiacca os euphorbiacciæ, mixed in suitable proportions and treated by meand of heat substantially or approximately in the manner specified, anr suitable compound with a suitable quantity of reducer, such for instance, as naphtha or spirits of turpentine, substantially as set forth. 2nd. The oil-compound consisting of linseed-oil and the oil that is pressed from the nuts or seeds of a tree known botanically under the name of aleurites cordata, or elaococca cordata, or dryandra cordata, mixed in suitable proportions and treated by means of heat substantially or approximately in the manner specified, and suitably compound with a suitable quantity or reducer, such for instance, as naptha or spirits of turpentine, substantially as set forth. 3rd. The oil-compound consisting of linseed-oil and the oil that is pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacca

or euphorbiacciæ, mixed in the proportions of about one part in weight of linseed oil to two parts in weight of the tree-seed oil, and treated by means of heat substantially or approximately in the manner specified, and suitably compounded with a suitable quantity of reducer, such for instance, as naptha or spirits of turpentine, substantially as set forth. 4th. The process hereinbefore described, consisting in taking a suitable quantity of linseed-oil, and a suitable quantity of oil pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacca, or euphorbiacciæ, and mixing the same together and heating the oil-compound to a suitable temperature, and maintaining it in a heated condition during a suitable fraction of a day, then allowing it to cool a suitable number of degrees, and then adding and mixing therewith a suitable quantity of a suitable reducer, such for instance, as naphtha or spirits of turpentine, substantially as set forth. 5th. The process hereinbefore described, consisting in mixing together linseed oil and oil pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacca or euphorbiacciæ, in the proportions of about one part in weight of linseed oil to about two parts in weight of the tree-seed oil, and heating the same to a temperature of about 400° Fahrenheit, and maintaining the heated oil compound at said temperature for from two to four hours, then reducing the temperature of the heated compound about 50° Fahrenheit or more, and then mixing therewith a quantity of reducer, such for instance, as naphtha or spirits of turpentine, that in weight shall be equal to about one-third of the weight of the quantity of the oil-compound with which it is mixed, and firstly adding about one-third of the reducer in a luke-warm condition, and then adding the remaining fraction of the reducer at its ordinary temperature, substantially as set forth. 6th. The process hereinbefore described, consisting in taking a suitable quantity of linseed-oil and a suitable quantity of oil pressed from the nuts or seeds of a tree known botanically under the name of aleurites cordata, or elaococca cordata, or dryandra cordata, and mixing the same together and heating the oil compound to a suitable temperature, and maintaining it in a heated condition during a suitable fraction of a day, then allowing it to cool a suitable number of degrees, and then suitably adding and mixing therewith a suitable quantity of a suitable reducer, such for instance, as naphtha, or spirits of turpentine, substantially as set forth.

No. 51,204. Lawn Mower. (*Faucheuse de pelouse.*)



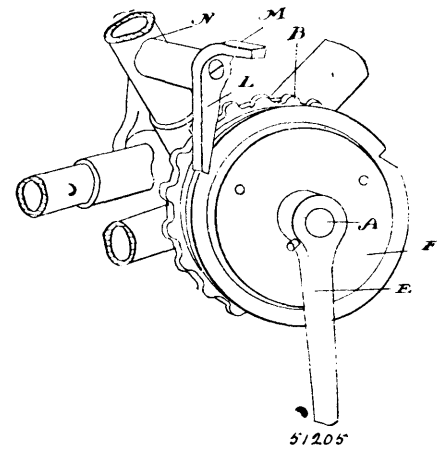
The Firm of David Maxwell & Sons, assignee of David Maxwell, jr., both of St. Marys, Ontario, Canada, 4th February, 1896; 6 years. (Filed 4th January 1896.)

Claim.—1st. In a lawn mower, in combination the end plates held together, as specified, the cup-shaped recesses in the same, the knife cylinder and cone secured at each end of the axle of the cylinder, and the balls between the cones and cup-shaped recesses, and means for driving the cylinder. 2nd. In a lawn mower, in combination, the end plates held together, as specified, the cup-shaped recesses in the same, the knife cylinder, the annular cups L-shaped in cross-section fitting in the recesses, and cones secured at each end of the axle of the cylinder, and the balls between the cones and cup-shaped recesses, and means for driving the cylinder. 3rd. In a lawn mower, in combination the end plates held together as specified, the cup-shaped recesses in the same, the knife cylinder, and cone secured at the ends of the axle of the cylinder and having a curved taper and balls between the cones and cup-shaped recesses and means for driving the cylinder.

No. 51,205. Variable Gear for Foot Propelled Vehicles. (*Train variable pour voitures mises en mouvement par le pied.*)

Harmon Gilmore, Simcoe, Ontario, Canada, 4th February, 1896; 6 years. (Filed 7th January, 1896.)

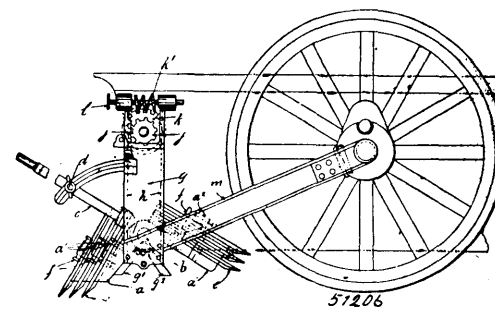
Claim.—1st. A variable gear for foot propelled vehicles, consisting of a crank axle, a crank connected to the crank axle, a disc connected to the inner side face of the crank, a series of pins connected to the inner side face of the disc, pinions mounted on said pins, a planet wheel connected to the inner side face of each of the pinions a sprocket-wheel loosely mounted on the crank axle, a spur-wheel on the hub of the sprocket-wheel, meshing with the planet wheels, an annular gear interposed between the disc and the sprocket-wheel



meshing with the pinions, and means for holding the annular gear stationary when it is desired to increase the speed of the revolution of the sprocket-wheel, substantially as specified. 2nd. A variable gear for foot propelled vehicles, consisting of a crank axle, a crank connected to the crank axle, a disc connected to the inner side face of the crank, a series of pins connected to the inner side face of the disc, pinions mounted on said pins, a planet wheel connected to the inner side face of each of the pinions, a sprocket-wheel loosely mounted on the crank axle, a spur wheel on the hub of the sprocket wheel, meshing with the planet wheels, an annular gear interposed between the disc and the sprocket-wheel meshing with the pinions, teeth on the outer face of the annular gear, a dog adapted to mesh with the said teeth, a lever pivotally connected to the main frame of the bicycle to operate the said dog to throw it into or out of mesh with the said teeth, and dogs pivotally connected to the disc to prevent the reverse movement of the pinions, substantially as specified.

No. 51,206. Road Breaking Machine.

(*Machine brise-chemin.*)



Harry Morrison, Stratford, England, 4th February, 1896; 6 years. (Filed 14th November, 1895.)

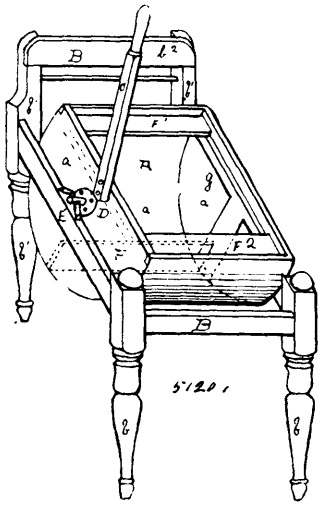
Claim.—1st. The combined road engine and road breaker, substantially as described and illustrated herein. 2nd. In road breakers, a pivoted tool holder carrying tools, beds or supports upon which said tool holder bears, said beds or supports and tool holder being vertically adjustable, substantially as described herein. 3rd. In a road breaking machine, in combination with a pivoted tool holder carrying tools at either side, a frame in which said tool holder is pivoted arranged to slide vertically in guides, substantially as described and illustrated herein. 4th. In a road breaking machine, in combination with a pivoted tool holder and sliding frame, blocks, beds or supports for supporting said pivoted tool holder at the required angle for working upon a road, substantially as described and illustrated herein. 5th. In a road breaking machine, a frame carrying tool holders arranged to slide vertically in guides, substantially as herein described and illustrated.

No. 51,207. Washing Machine. (*Machine à laver.*)

James Lachlin Weir, Chatham, Ontario, Canada, 4th February, 1896; 6 years. (Filed 17th December, 1895.)

Claim.—1st. A washing machine comprising an oscillating tank A, having dash boards F, F^1, F^2, cover *k*, operating handle C, and bearings E, in combination with any suitable frame, all formed and arranged, as and for the purpose hereinbefore set forth. 2nd. An

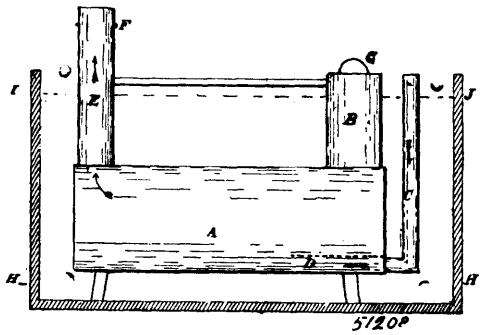
oscillating tank A, having dash boards F, F¹, F², cover K, operating handles C, and bearings E, in combination with any suitable



frame, all formed and arranged as and for the purpose of being used as a churn.

No. 51,208. Furnace Feed Boiler.

(*Alimentateur de chaudière de fournaise.*)

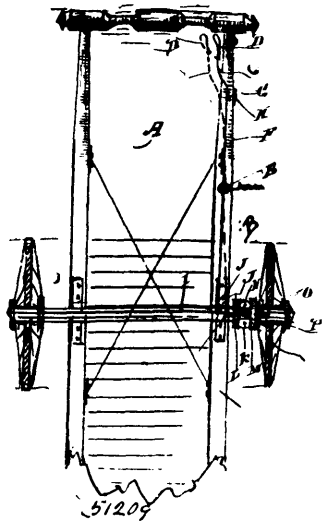


Jonathan McQuaig Gillespie, Blandford, and Bernard Werner, East Zarra, both in Ontario, Canada, 4th February, 1896; 6 years. (Filed 21st December, 1895.)

Claim.—The combination of the furnace a submerged in tank or vat H., substantially as and for the purpose hereinbefore set forth.

No. 51,209. Brake for Baby Carriages.

(*Frein de voiture d'enfant.*)

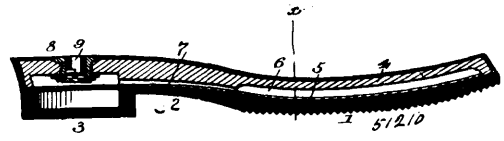


Henry William Morgan, Vancouver, British Columbia, Canada, 4th February, 1896; 6 years. (Filed 24th December, 1895.)

Claim.—The combination of the carriage A, and the self acting automatic brake B, having a vertical lever C, working on center E, setting in motion horizontal brake pin J, having a chair K, with spring N, for releasing and extending automatically brake pin J, from axle I, to spokes O, of wheel P, for brake purposes, substantially as and for the purposes hereinbefore set forth.

No. 51,210. Pneumatic Sole and Heel.

(*Semelle et talon pneumatique.*)

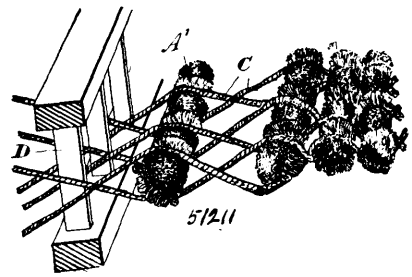


Joseph Lacroix, Fall River, Massachusetts, U.S.A., 4th February, 1896; 6 years. (Filed 13th January 1896.)

Claim—As an improved article, a combined rubber and leather inflatable sole and heel, consisting of the leather portion recessed at the front and heel and formed with a horizontal connecting passage, the covering secured to the under side of said leather portion, the rubber sole and heel secured thereto, the rubber insole, and the inflation valve communicating with the recess in the heel, substantially as described.

No. 51,211. Method of Weaving Rugs.

(*Méthode de tisser les nattes.*)

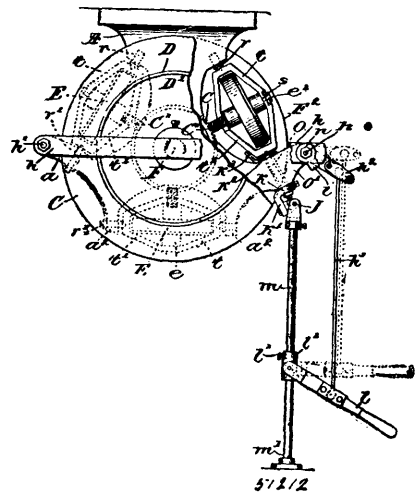


Frederick Bullock and William Douglas, both of Toronto, Ontario, Canada, 4th February, 1896; 6 years. (Filed 2nd December, 1895.)

Claim.—The method herein described of producing a reversible rug from old carpets consisting in cutting the old carpet into strips of suitable length and width, extracting a sufficient number of the upper and lower warp threads on each side of the strip, so as to leave a central core then twisting each strip in the form of a spiral upon such core and introducing this spiral twist as a waft between the upper and lower warp threads of the loom the crossing then warp thread in front of the spiral weft and finally bringing each weft home, as set forth.

No. 51,212. Speed Controlling Mechanism.

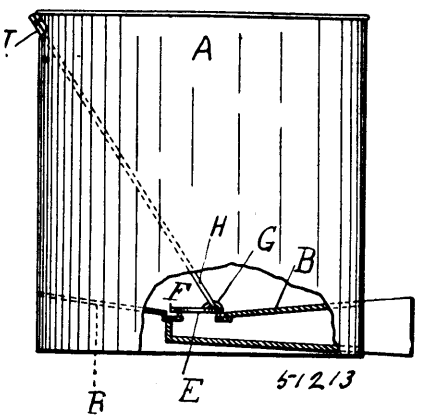
(*Mécanisme pour contrôler la vitesse.*)



Henry Havelock Cummings and Albert D. Crombie, both of Malden, Massachusetts, U.S.A., 4th February, 1896; 6 years. (Filed 18th November, 1895.)

Claim.—1st. A pulley adapted to be continuously rotated, a pulley to be driven, loose with relation thereto, the adjacent faces of said pulleys having annular grooves therein, a friction-wheel interposed between the grooved faces of said pulleys, and a rocking support for said wheel, combined with means connected to one of said pulleys to cause positive movement thereof toward the other pulley to effect the engagement of the friction-wheel and both the grooved pulley faces, to thereby rotate the loose pulley, or to positively withdraw said connected pulley from such engagement with the friction-wheel to stop the rotation of the loose pulley, and a device independent of the position or of the means for actuating said pulleys to turn the rocking support to attain the desired relative speed of the pulleys, substantially as described. 2nd. A pulley adapted to be continuously rotated, a pulley to be driven, loose with relation thereto, the adjacent faces of said pulleys having annular grooves therein, a rocking support, and a friction-wheel mounted thereon in a yielding manner between the grooved faces of said pulleys, combined with means to cause positive relative lateral movement of the pulleys and thereby bring the friction-wheel into joint engagement with the grooved faces of said pulleys, to rotate the loose one, reverse relative movement of the pulleys by said means permitting the yielding of and thereby withdrawing the friction-wheel from said joint engagement and stopping the rotation of the loose pulley, substantially as described. 3rd. A pulley adapted to be continuously rotated, a pulley to be driven, loose with relation thereto, and axially in alignment therewith, said pulleys being relatively movable laterally and having annular grooves in their opposite adjacent faces, a rocking support having fixed bearings, and a friction wheel mounted thereon, between the grooved faces of the said pulleys, combined with means to move said pulleys relatively to bring their grooved faces into engagement with opposite portions of the friction wheel whereby the loose pulley is rotated by but oppositely to the continuously rotated pulley, a device to turn the rocking support and thereby alter the angle of the friction wheel to attain the desired relative speed of the pulleys, and a common actuator, to operate either the support turning device or the means for relatively moving the pulleys, substantially as described. 4th. A pulley adapted to be continuously rotated, a pulley to be driven, loose with relation thereto, and axially in alignment therewith, the adjacent opposite faces having annular grooves therein, a series of rocking supports, a friction wheel mounted in each support and interposed between the grooved faces of the pulleys, and connections between and to rock said supports in unison, combined with means independent of either of said pulleys to actuate said connections and turn the rocking supports to attain the desired relative speed of the pulley, and independent mechanism connected to one of said pulleys to cause positive movement thereof toward or from the other pulley and thereby engagement or disengagement of the friction wheels and the grooved faces of the pulleys, to thereby rotate, or stop the rotation of the loose pulley, substantially as described. 5th. A pulley adapted to be continuously rotated, a pulley loose with relation thereto, and to be driven in either direction, the adjacent opposite faces of said pulleys having annular grooves therein, a clutch member concentric to and rotatable with the loose pulley and adapted to be directly engaged at times with the continuously rotated pulley, to thereby rotate the loose pulley at the same speed and in the same direction and a friction wheel interposed between the grooved faces of the pulleys, combined with means to cause relative movement of the clutch member and continuously rotated pulley, and also to cause engagement or disengagement of the friction wheel and grooved pulley faces, to thereby rotate the loose pulley oppositely the continuously rotated pulley, or to stop the said loose pulley, as desired, substantially as described.

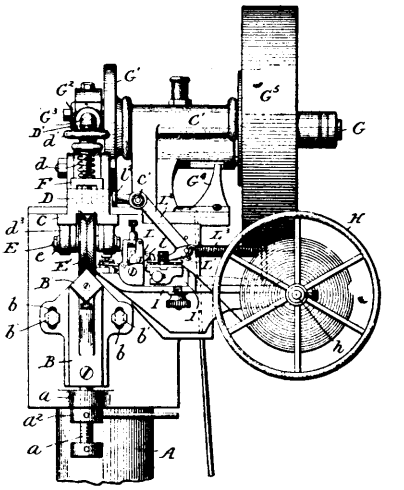
No. 51,213. Milk Receiver. (*Recepteur à lait.*)



Joseph Anselme Gosselin, Drummondville, Québec, Canada, 4 février, 1896; 6 ans. (Filé le 31 décembre, 1895.)

Résumé.—Un récepteur à lait A, pourvu d'un fond de forme conique B, d'un anneau métallique D, d'une trappe E, (articulée sur le dit anneau au moyen d'une penture F) et du dallot J, le tout tel que décrit et pour les fins indiquées.

No. 51,214. Machine for Applying Adhesive Strips to Boxes and other Articles. (*Machine pour appliquer des bandes adhésives aux boîtes et autres objets.*)

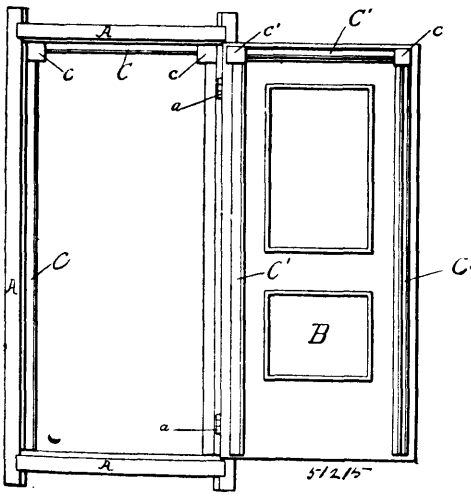


Horace Inman and Harry Ansel Inman, both of Amsterdam, New York, U.S.A., 4th February, 1896; 6 years. (Filed 25th, January, 1896.)

Claim.—1st. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head to reciprocate in a direction substantially parallel with the surface of the box or other article and a roller carried by said head and having its working face conformed to the surface of the box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and to roll over the same, substantially as shown and described. 2nd. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head to reciprocate in a direction substantially parallel with the surface of the box or other article, means to feed forward an adhesive strip over the box or other article, and a roller carried by said head and having its working face conformed to the surface of the box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and to roll over the same, substantially as shown and described. 3rd. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head reciprocating in a direction substantially parallel with the surface of the box or other article, a vertically movable yoke carried by said head, and a roller carried by said yoke and having its working face conformed to the surface of said box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and to roll over the same, substantially as shown and described. 4th. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head reciprocating in a direction substantially parallel with the surface of the box or other article, a vertically movable yoke carried by said head, a spring arranged to press said yoke yieldingly toward said support, and a roller carried by said yoke and having its working face conformed to the surface of said box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and to roll over the same, substantillay as shown and described. 5th. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head reciprocating in a direction substantially parallel with the surface of the box or other article, a roller carried by said head and having its working face conformed to the surface of said box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and to roll over the same, a feed roll to feed the adhesive strip forward, a cam carried by said reciprocating head, and intermediate connections whereby the movement of said cam with said head is caused to effect a forward rotation of said feed roll, substantially as shown and described. 6th. In a machine for applying adhesive strip to boxes and other articles, the combination of a support for the box or other article, a head reciprocating in a direction substantially parallel with the surface of the box or other article, a roller carried by said head and having its working face conformed to the surface of said box or other

article to be operated upon and arranged to lay the adhesive strip upon said box other article and to roll over the same, and feeding mechanism for said strip operated by the forward movement of said head, substantially as shown and described. 7th. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head reciprocating in a direction substantially parallel with the surface of the box or other article, a roller carried by said head and having its working face conformed to the surface of said box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and roll over the same, feeding mechanism for said strip, and a cutting device for said strip carried with said reciprocating head, substantially as shown and described. 8th. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head reciprocating in a direction substantially parallel with the surface of the box or other article, a roller carried by said head and having its working face conformed to the surface of said box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and to roll over the same, and feeding mechanism for said strip, said roller having a cutting edge to sever a portion of said strip as it passes over the same, substantially as shown and described. 9th. In a machine for applying adhesive strips to boxes and other articles, the combination of a support for the box or other article, a head reciprocating in a direction substantially parallel with the surface of the box or other article, a roller carried by said head and having its working face conformed to the surface of said box or other article to be operated upon and arranged to lay the adhesive strip upon said box or other article and to roll over the same, feeding and cutting mechanism for said strip, a spring clamp disposed above said strip, and a finger carried by said head and arranged to co-operate with each spring clamp to press the same upon the strip to hold said strip, substantially as shown and described. 10th. In a machine for applying adhesive strips to boxes and other articles, the combination of a reciprocating head, feeding and cutting mechanism for the adhesive strip and a spring clamp disposed above said strip, and a projection carried by said reciprocating head to co-operate with said spring clamp and cause the same to hold said strip firmly during the movement of said head, substantially as shown and described. 11th. In a machine for applying adhesive strips to boxes or other articles, the combination of a reciprocating head, feeding mechanism for the adhesive strip, devices carried by said reciprocating head to press the strip upon the box or other article, and a cutting device also carried by said head to sever a portion of said strip as the reciprocating head advances, substantially as shown and described.

No. 51,215. Door. (*Porte.*)



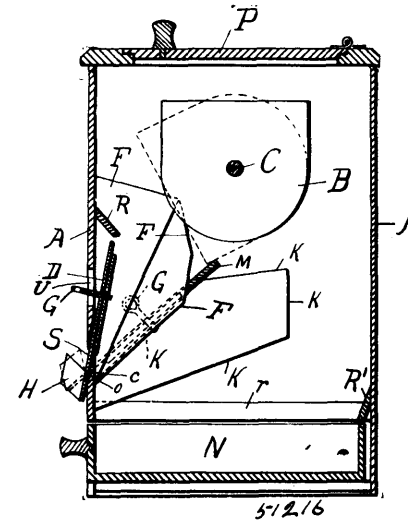
Joseph Wilfrid Picard, Destroismaisons, St. Hyacinthe, Québec, 4 février, 1896 ; 6 ans. (Filé le 14 février, 1895.)

Résumé.—Une porte à laquelle sont clouées des languettes C^1, et les blocs c^1, se fermant dans un cadre pourvu de rainures C et de blocs *c*, le tout tel que décrit et pour les fins indiquées.

No. 51,216. Ash Sifter. (*Crible à cendre.*)

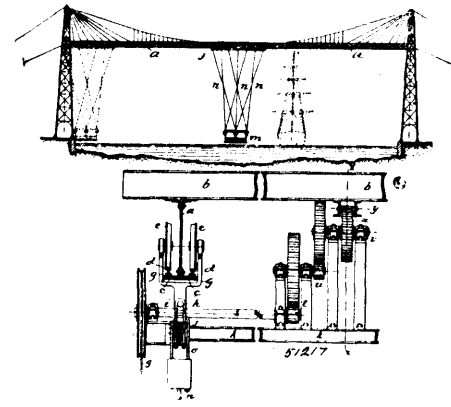
Ovila Cadot, Village de Lorimier, Québec, Canada, 4 février, 1896 ; 6 ans. (Filé le 5 decembre, 1895.)

Résumé.—1° Dans un crible à cendres la combinaison, d'une boîte A munie d'une porte P, à sa partie supérieure, d'une ouverture S dans le devant de la dite boîte, d'un tiroir N à sa partie inférieure, d'une trappe basculante D, avec un sas B fixé sur un arbre C. 2° Dans un crible à cendre la combinaison de la boîte A, munie des planches inclinées R, R^1, et *r* servant à diriger les cendres dans le tiroir N, de la planche M, servant à appuyer le bord du sas B, lorsqu'on le renverse et le bord supérieur de la trappe D lorsqu'on la laisse basculer, des feuilles métalliques F servant à diriger le



charbon vers l'ouverture S et des planches K, servant à soutenir les plaques F, avec la trappe D, et le sas B, le tout tel que décrit et pour les fins indiquées.

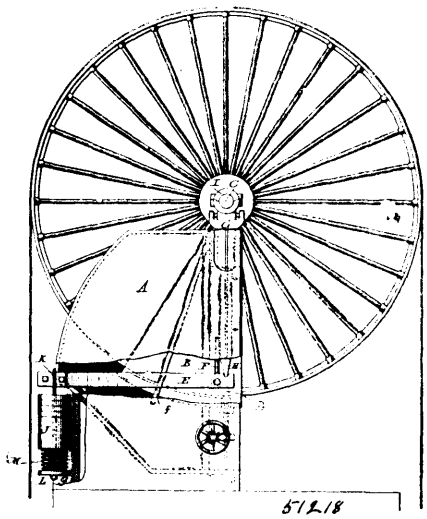
No. 51,217. Means Employed for Transporting Loads from one Point to Another. (*Moyens employés pour transporter un fardeau d'un point à un autre.*)



Ferdinand Joseph Arnodin, de Châteauneuf-sur-Loire, France, et Martin Alberto, de Palacio, de Madrid, Espagne, 4 février, 1896 ; 6 ans. (Filé le 3 décembre, 1895.)

Résumé.—1° La combinaison d'une plate-forme ou chariot transbordeur suspendu à un cadre ou châssis roulant, d'un cadre roulant portant la plate-forme et suspendu par des galets porteurs à un chemin de roulement, d'un pont avec pilones à rotules, sur lequel est établi le chemin de roulement et qui réunit les deux points à relier, et de moyens appropriés pour déterminer la marche en avant ou en arrière du cadre roulant et son arrêt, essentiellement de la manière et dans le but indiqués plus haut. 2° La suspension du cadre de roulement à des galets porteurs montés à billes, disposés par paires de part et d'autre de l'âme de chacune des deux poutres de tête, et reliés au cadre par deux séries d'étriers *g*, *i*, constituant des articulations doubles comme il a été dit plus haut. 3° La combinaison, avec le câdre de roulement suspendu à des galets porteurs disposés par paires de part et d'autre de l'âme de chacune des deux poutres de tête, d'un pignon porté par lui et engrenant avec une cremaillère fixe portée par le point, la rotation de ce pignon étant produite par un moteur quelconque place sur le cadre roulant ou dans le chariot transbordeur comme il à été dit plus haut, le dit moteur, s'il est électrique, pouvant être relié à une source d'électricité disposée sur la rive aussi bien que sur le cadre roulant ou dans un chariot transbordeur. 4° La combinaison du cadre roulant suspendu à des galets porteurs disposés par paires de part et d'autre de l'âme de chacune des deux poutres de tête, avec un moteur placé sur la rive et actionnant un cable funiculaire.

No. 51,218. Band Saw-Mill. (*Scierie à lame sans fin.*)



Dempsey B. Hanson, San Francisco, California, and The Edward P. Allis Company, Milwaukee, Wisconsin, both in the U.S.A., 5th February, 1896; 6 years. (Filed 13th January, 1896.)

Claim.—1st. In a band saw mill, the combination of a main frame provided with guides, a supplemental frame or yoke movable in said guides, an upper band-wheel shaft, and pedestals or supports for said shaft carried by the yoke, the axes of the shaft and pedestals being in a common plane with the guides, substantially as and for the purpose set forth. 2nd. In combination with main frame A, provided with guides or ways *a*, supplemental frame or yoke B, having ribs *c* seated in said guides, pedestals G mounted in the yoke B, shaft C supported by said pedestals, a counterweighted lever for sustaining the pedestals G, and screws for sustaining the yoke B, the shaft C and pedestal G having their axes in a common plane with the guides and ribs *a* and *c*. 3rd. In combination, with the main frame of a band saw mill, a sliding yoke or frame B mounted within the main frame, and provided with lugs *d*, and with stops *f*, stirrups F carried by said lugs, a lever E carried by the stirrups, pedestal G mounted and movable in the yoke, a band-wheel shaft carried by said pedestals, and rods extending from the lever to the pedestals, substantially as and for the purpose set forth. 4th. In combination with frame A, having recess *g*, shaft C, pedestal G supporting said shaft, lever E supporting said pedestale and weight J carried by lever E and located within the recess.

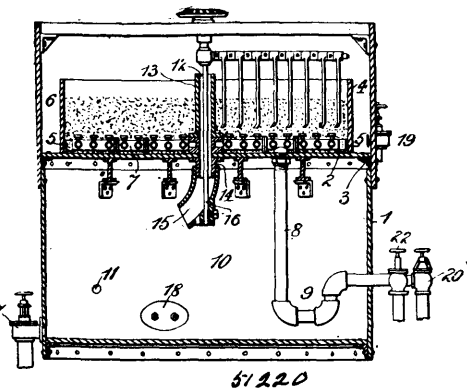
No. 51,219. Oil Product and Process of Producing.

(*Procédé pour la production de produits d'huile.*)

Edward George Kubler, and John Martin Beek, both of Akron, Ohio, U.S.A., assignees of Louis Knoche, Hamm, Westphalia, Germany, 5th February, 1896; 6 years. (Filed 21st December, 1895.)

Claim.—1st. The oil-product consisting of the oil that is pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacca or euphorbiacciæ, treated by means of heat substantially or approximately in the manner specified, and suitably compounded with a suitable quantity of reducer, such for instance, as naphtha or spirits of turpentine, substantially as set forth. 2nd. The oil-product consisting of the oil that is pressed from the nuts or seeds of a tree known botanically under the name of aleurites cordata, or elaococca, cordata, or dryandra cordata, treated by means of heat substantially or approximately in the manner specified, and suitably compounded with a suitable quantity of reducer, such for instance, as naphtha or spirits of turpentine, substantially as set forth. 3rd. The process hereinbefore described, consisting in taking a suitable quantity of oil pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacca or euphorbiacciæ, then heating said oil to a suitable temperature and maintaining it in a heated condition during a suitable fraction of a day, then allowing it to cool a suitable number of degrees, and then adding and mixing therewith a suitable quantity of a suitable reducer, such, for instance, as naphtha or spirits of turpentine, substantially as set forth. 4th. The process hereinbefore described consisting in taking a suitable quantity of oil pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacca or euphorbiacciæ, and heating the same to a temperature of about 400° Fahrenheit and maintaining the heated oil at said temperature for from two to four hours, then reducing the temperature of the heated oil about 50° Fahrenheit, and then mixing therewith a quantity of reducer, such for instance as naphtha or spirits of turpentine, that in weight shall be equal to about one-third of the weight of the quantity of the oil with which it is mixed, and firstly adding about one-third of the reducer in a luke-warm condition and then adding the remaining fraction of the reducer at its ordinary temperature, substantially as set forth. 5th. The process hereinbefore described consisting in taking a suitable quantity of oil pressed from the nuts or seeds of a tree known botanically under the name of aleurites cordata, or claococca cordata, or dryandra cordata, and heating the same to a temperature of about 400° Fahrenheit and maintaining the heated oil at said temperature for from two to four hours, then reducing the temperature of the heated oil about 50° Fahrenheit, and then mixing therewith a quantity of reducer, such for instance as naphtha or spirits of turpentine, that in weight shall be equal to about one-third of the weight of the quantity of the oil with which it is mixed, and firstly adding about one-third of the reducer in a luke-warm condition and then adding the remaining fraction of the reducer at its ordinary temperature, substantially as set forth.

No. 51,220. Filter. (*Filtre.*)

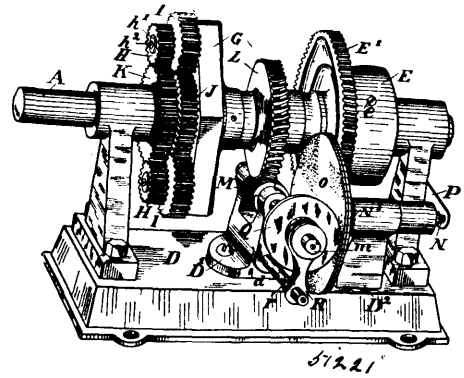


Omar Hestren Jewell, Chicago, Illinois, U.S.A., 5th February 1896; 6 years. (Filed 14th October, 1895.)

Claim.—In a filter the combination of a filter tank, a subsiding tank, and a filter material holding tank, formed as described, with a central communicating passage or opening between said tanks, an agitator for said filter, the shaft of which passes through said central opening, and projects into said subsiding chamber, and a pipe elbow rigidly secured to said shaft, and adapted to be rotated thereby, to give force and direction to the water passing down through said central opening and elbow, for flushing out and removing the sediment from said subsiding chamber, substantially as et forth.

No. 51,221. Driving Mechanism.

(*Mécanisme conducteur.*)

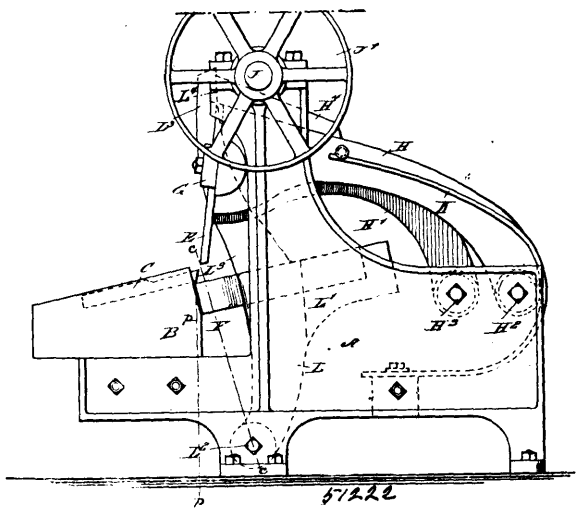


Walter Ames, Toronto, Ontario, Canada, 5th February, 1896; 6 years. (Filed 18th November, 1895.)

Claim.—1st. In a driving mechanism, the combination with a driven-member carrying a gear, of a tubular driving-member rotatably disposed on said driven-member, and carrying a gear parallel with, and adjacent to the driven-member gear, and also carrying a driving-wheel gear remotely disposed relativeiy to its other gear and adapted to receive power, and independently-rotatable member comprising a tubular sleeve supported on said driving-member, and carrying pinions meshing with the parallel gears on the driving and driven-members, respectively, and adapted to transmit power from the driving-member to the driven-member, and also carrying a worm-wheel intermediate of its pinions and the driving-wheels gear of the driving-member, a worm-shaft carrying a worm in mesh with the worm-wheel, a friction-wheel adjustably supported on the

worm-shaft and adapted to control the speed of said worm, and whereby the velocity of the driven-member relatively to the driving-member can be varied independently of the speed of said driving-member, a disc-shaft extending parallel with the driving-member, and carrying a rotating disc in engagement with the friction-wheel and adapted to transmit power thereto, a gear on said disc-shaft in mesh with the driving-wheel gear of the driving-member, and means for holding said disc in frictional engagement with the friction wheel, substantially as described. 2nd. In a driving mechanism, the combination with a driven-member having a gear thereon, of a driving member rotatably support on said driven member and carrying a gear, and also having a driving-wheel gear thereon adapted to receive power, an independently rotatable member comprising a tubular sleeve supported on said driving member and carrying mechanism for transmitting power from the driving member to the driven member, whereby said driven member will be rotated at a given speed from said driving member independently of the speed of the independently-rotatable member, and also carrying a worm wheel, a worm-shaft carrying a worm in mesh with said worm-wheel, an adjustable friction-wheel supported on the worm-shaft and adapted to control the speed of said worm, and whereby the velocity of the driven-member relatively to the driving-member can be varied independently of the speed of said driving-member, a disc-shaft carrying a disc rotatable therewith and in frictional engagement with the friction-wheel, and also carrying a gear in mesh with the driving-wheel gear on the driving member, whereby power is transmitted to the adjustable friction-wheel to vary the speed of rotation of the worm and thereby the driven-member, substantially as described

No. 51,222. Tack Machine. (*Machine à broquettes.*)



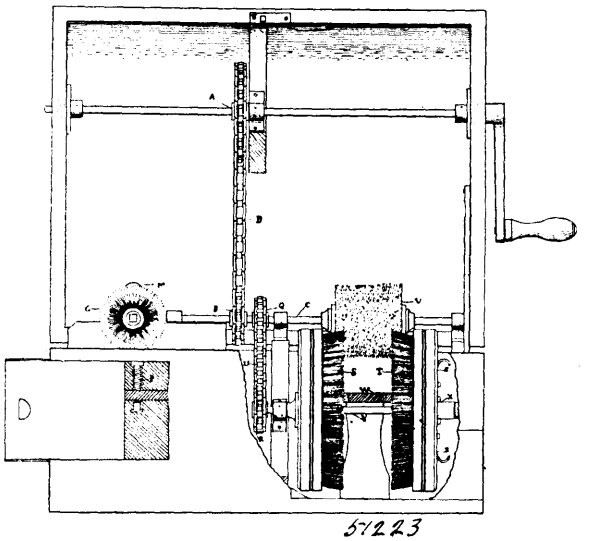
Russel Hathaway, Elbridge Gerry Paul, Cyrus Dexter Hunt, al. of Fairhaven, Massachusetts, U.S.A., 8th February, 1896; 6 years. (Filed 16th November, 1895.)

Claim.—1st. A tack machine having two cams operating the two levers carrying the leader and lazy knives, said cams being constructed and arranged, as described, to secure the return movement of the lazy knife in unison with the movement of the plate as its edge rises to turn over while the leader is moving down, substantially as and for the purpose set forth. 2nd. A tack machine, having two cams operating the two levers carrying the leader and lazy knives, said cams being constructed and arranged as described, to maintain the lazy knife up and still, while the edge of the plate is turning down, substantially as described and for the purpose set forth. 3rd. In a tack machine, the combination with the gripping lever, of its cam formed with two continuous arcs of eccentrics constructed around different centres, having the arc of the leaving part longer and fuller than the arc of the coming part, substantially as described and for the purpose set forth. 4th. In a tack machine, the combination with the bed die, of the gripping lever centered in a line drawn from the bed die score at a right angle to the plane of the bed die pocket, and a cam for operating said gripping lever, substantially as described and for the purpose set forth. 5th. In a tack machine, the gripping lever, as described, so centered that the tangent of its radius or arc at the point of contact of the dies will coincide with the plane of the bed die, substantially as described and for the purpose set forth.

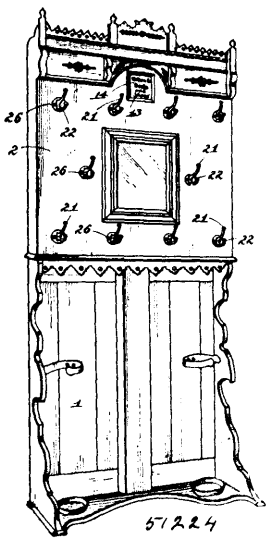
No. 51,223. Machine for Blacking etc. Boots and Shoes. (*Machine pour le cirage des chaussures.*)

William Black, Parish of St. Louis de Gonzague, Quebec, Canada, 5th February, 1896; 6 years. (Filed 6th November, 1895.)

Claim.—1st. The combination of sprocket-wheels and chains with brushes, substantially as and for the purposes hereinbefore set forth. 2nd. The blacking attachment, with the device for dipping and raising it whilst in motion, substantially as and for the purposes set forth. 3rd. The arrangement of the three revolving polishing brushes in combination, and the adjusting device connected therewith, substantially as and for the purposes hereinbefore set forth. The compact arrangement and inclosure of the mechanical parts in, and their attachment to, a box with hinged cover, forming the framework of the machine when in use, and inclosing and protecting it when not in use substantially as and for the purposes hereinbefore set forth.



No. 51,224. Advertising Device (*Appareil de publicité.*)

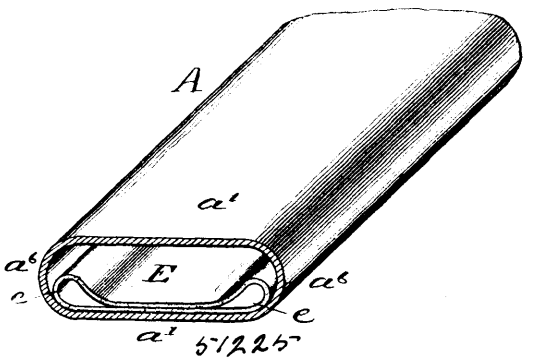


Henry Nicholas Gros, North Tonawanda, New York, U.S.A., 5th February, 1896; 6 years. (Filed 16th November, 1895.)

Claim.—1st. In an advertising device, the combination with a rigidly mounted on a shaft in suitable bearings within the supporting case, of an endles band carrying a series of advertisements adapted to be exposed to view part at a time, through an opening in the front of said case as the endless band is moved the required distance by the partial rotation of said roller, a series of hooks pivoted to the front of the supporting case, each having an arm extending into the case, means connecting each arm with a crank disc mounted loosely on the roller shaft and having a pivoted pawl for operating a ratchet wheel rigidly secured on said shaft, for moving the roller sufficiently to bring one or more advertisements opposite the opening in the front of the case when a hat or weight of any kind is hung upon either one or more of said hooks, substantially as described. 2nd. In an advertising device, the combination with a supporting hat rack cace having a glass covered opening in front, of a shaft located transversely within the case and mounted in suitable

bearings, a grooved roller mounted rigidly on said shaft carrying an endless band having a series of advertisements printed thereon, a roller mounted in a pivoted frame so as to rest on the endless band to prevent it from slipping on the grooved roller, a partition having toothed projections extending into the grooves in the roller to keep the endless band free, a series of crank discs each loosely mounted on said shaft between a ratchet wheel and collar rigidly secured to the shaft so that the discs can turn easily between them, a pivoted pawl on each loose disc adapted to engage with the ratchet wheel next to it, a corresponding series of pivoted hooks at the front of the hat rack case, each hook having an arm extending into the case, and a connecting rod pivoted to each arm having its upper end pivoted to loose disc, whereby when any one or more of the hooks are turned down by means of a weight or article hung thereon, the endless band will be moved and an advertisement will be brought to view, substantially as described. 3rd. In an advertising device, the combination with a grooved roller mounted on a transverse shaft in suitable bearings in the supporting case of an advertiting band mounted on said roller so that as the roller turns, the advertisements will pass and be visible through an opening in the front of said case, a series of pins projecting out from the end of said roller, a bell secured to a bracket within the supporting case, a pivoted arm carrying the hammer having the extremity of the short end of the arm in the pathway of said pins when the roller rotates, a pivoted hook upon which the article is hung to operate the device having an arm extending into the case and means connected with said arm and with a pawl and ratchet on the roller shaft for operating said roller and thereby sounding an alarm and presenting an advertisement to view every time any article or weight is hung upon said hook, substantially as described. 4th. In an advertising device, the combination with a roller rigidly mounted on a shaft in suitable bearings within the supporting case, of an endless band carrying a series of advertisements adapted to be exposed to view one at a time, through an opening in the front of said case as the endless band is moved the required distance by the partial rotation of said roller, a series of hooks pivoted to the front of the supporting case, each having an arm extending into the case, means connecting each arm with a crank disc mounted loosely on the roller shaft and having a pivoted pawl for operating a ratchet wheel rigidly secured on said shaft, for moving the roller sufficiently to bring an advertisement opposite the opening in the front of the case when a hat or weight of any kind is hung upon either one or more of said hooks, substantially as described.

No. 51,225. Process of and Apparatus for Vulcanizing Inner Elastic Air Tubes for Pneumatic Tires. (*Procédé et appareil de vulcanisation des tubes élastiques à air pour l'intérieur des bandages pneumatiques.*)

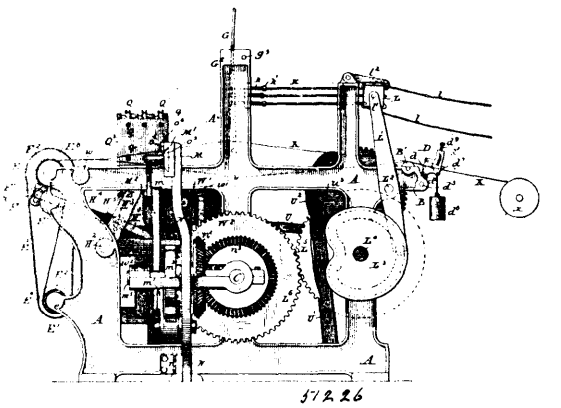


Fred W. Morgan and Rufus Wright, assignees of Ernest Willard Young, both of Chicago, Illinois, U.S.A., 5th February, 1896; 6 years. (Filed 19th August, 1895.)

Claim.—1st. The within described improvement in the process of producing inner elastic air-tubes for pneumatic tires, consisting in forming the tube of unvulcanized rubber, confining it within a chamber formed by the interior of a shell or casing causing the confined tube to flatten of its own accord and without weight or pressure upon it, and vulcanizing the flattened tube thus arranged and free from superposed weight, by superficially exposing the shell or casing within a vulcanizer and permitting the steam to have access to the chamber within such shell or casing only by passing through steam filtering material. 2nd. The within described improvement in the process of producing inner elastic air-tubes for pneumatic tires, consisting in forming the tube of unvulcanized rubber, confining it within a chamber formed by the interior of a shell or casing, causing the confined tube to flatten of its own accord except along the resulting longitudinal edge portions thereof, and upholding the latter so as to allow them to assume and maintain a curved form in cross-section, and vulcanizing the tube thus arranged, so as to produce a normally flattened inner elastic air-tube adapted for service in a pneumatic tire. 3rd. The within described improvement in the process of producing inner elastic air-tubes for pneumatic tires, consisting in confining the tubes in an unvulcanized condition in chambers formed within shells or cases, flattening the confined tubes without the application of weight or pressure, piling the cases in separated layers within a vulcanizer, and vulcanizing the tubes by superficially exposing the cases to steam and permitting the latter to enter the cases only through filtering material. 4th. As an improvement in apparatus for vulcanizing inner elastic air-tubes for pneumatic tires in a flattened condition a shell or case providing a chamber wherein the unvulcanized tube can flatten of its own accord, and having ports covered with filtering material, substantially as described. 5th. As an improvement in apparatus for vulcanizing inner elastic air-tubes for pneumatic tires in a flattened condition, a shell or case A provided with ports covered with steam filtering material and having a flat bottom a, and curved or inclined sides a^6, the width of the flat bottom being less than the width of the proposed flattened air-tube whereby the edge portions of the flattened tube shall be supported by the inclined or curved sides, substantially as described. 6th. As an improvement in apparatus for vulcanizing inner elastic air-tubes for pneumatic tires in a flattened condition, the flattened tubular case A provided with ports a^2 covered with steam filtering material, and also having its ends temporarily capped by such material, substantially as described. 7th. The within described improvement in vulcanizing inner air-tubes for pneumatic tires, consisting in arranging the tubes in an unvulcanized condition, in separated layers within a vulcanizer, allowing the tubes to flatten of their own accord and during the process of vulcanization maintaining them free from weight, and vulcanizing them in such flattened condition, for the purpose described.

No. 51,226. Loom for Weaving Cane.

(*Métier à tisser la canne.*)



Ford, Johnson & Co., assignee of Edmund Morris, both of Michigan City, Michigan, U.S.A., 5th February, 1896; 6 years. (Filed 2nd Dec., 1895.)

Claim.—1st The combination with the warp-feeding and shed-forming mechanism of a loom, of a rising and falling grooved carrier bar, individually movable tension devices mounted in the grooves of the bar and each bearing on its respective thread, and a roller interposed between the tension devices and the shed forming mechanism and travsrsed by the warp threads. 2nd. The combination with the wrap-feeding mechanism of a loom, of a rising and falling carrier-bar having guide grooves for the wraps, and individually movable, spring-controlled tension devices, mounted in the grooves of the bar. 3rd. The combination with the warp-feeding mechanism of a loom, of the rising and falling carrier-bar having guide grooves for the warps, a weight suspended from the carrier-bar, and individually-movable, spring-controlled tension devices mounted in the grooves of the bar. 4th. The combination with the warp-feeding mechanism of a loom, of individually-movable handle-bars, each having an eye movable across the horizontal plane of the fabric, or the plane in which the picker moves, and each carrying a single warp thread, mechanism for moving the heddle bars in opposite directions to form the shed, jacquard mechanism for deciding which bars are to be elevated and which depressed, and individually-movable tension devices, each acting on its proper thread. 5th. The combination with the warp-feeding mechanism of a loom, of individually-movable heddle bars, corresponding in number with the number of warp threads, and each carrying its respective warp thread, the supports to which each of the heddle bars is removably connected, mechanism for moving each or any of the heddle-bars from engagement with one support into engagement with the other support, and mechanism for moving the supports in opposite directions to move all of the heddle bars simultaneously to form the shed, substantially as described. 6th. The combination with the warp-feeding mechanism of a loom, of individually-movable heddle-bars, each having an eye for a single warp thread and which is movable across the horizontal plane of the fabric, or the plane in which the picker moves, mechanism for operating all of these bars simultaneously to move their eyes in opposite directions across the horizontal plane of the fabric, and jacquard mechanism for deciding which bars are to be elevated and

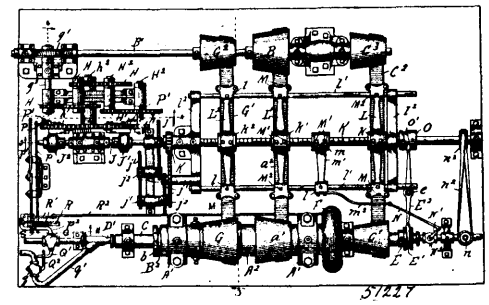
which are depressed. 7th. The combination with the warp-feeding mechanism of a loom, of individually-movable heddle-bars each carrying a warp thread, the upper and lower grooved cross-bars, each of which is adapted to support any or all of the heddle bars, mechanism for moving the cross-bars vertically, and mechanism for moving any or all of the heddle bars into engagement with either of the cross-bars. 8th. The combination with the warp-feeding mechanism of a loom, of individually-movable heddle-bars, each carrying a warp thread, means for actuating these bars to form a shed, and a series of pivoted blocks through each of which a heddle-bar slides longitudinally. 9th. The combination with the warp-feeding mechanism of a loom, of individually-movable heddle-bars, each carrying a warp-thread, a series of pivoted blocks through each of which a heddle-bar slides longitudinally, upper and lower grooved cross-bars with which laterally projecting lugs on the heddle-bars are adapted to engage, mechanism for moving the cross-bars alternately in opposite directions relatively to the warp, jacquard mechanism for oscillating the heddle-bars towards and from the lifting-bars, and means for actuating the jacquard mechanism. 10th. A heddle-bar having laterally projecting lugs on its opposite sides, one above the other, and an eye intermediate the lugs for the passage of warp-thread. 11th. A heddle-bar, angular in cross-section, having laterally projecting lugs on its opposite sides, one above the other, and an eye intermediate the lugs for the passage of a warp-thread. 12th. The combination with warp-feeding and shed-forming mechanism, of the picker, a weft-thread carrier and positively driven rolls for drawing the weft-thread from its carrier to feed the picker. 13th. The combination with warp-feeding and shed-forming mechanism, of the picker, a series of weft-thread spools or carriers, and positively driven rolls for drawing the weft-threads from their carriers to feed the picker. 14th. The combination with warp-feeding and shed-forming mechanism, of a picker, a weft-thread carrier, positively-driven rolls for drawing said thread there from to feed the picker, and means for severing the weft-thread inserted in the fabric from the other portion thereof. 15th. The combination with warp-feeding and shed-forming mechanism, of the picker, a weft-thread carrier, devices for feeding the weft-thread from its carrier and producing a slack portion thereof, and means for supporting the end of the thread in the line of movement of the picker. 16th. The combination with warp-feeding and shed-forming mechanism, of the picker, weft-thread carriers, positively-driven rolls for feeding the weft-threads to the picker, devices for supporting the ends of the weft-threads, and means for moving the weft-thread feeding rolls relatively to the line of movement of the picker. 17th. The combination with warp-feeding and shed-forming mechanism, of a sliding carriage supporting a series of rolls for feeding the weft threads, a picker and means for positively actuating said rolls, carriage and picker. 18th. The combination with warp-feeding and shed-forming mechanism, of a picker, a sliding carriage supporting a series of devices for feeding the weft-threads towards the picker, and means for positively actuating said feeding devices, carriage and picker. 19th. The combination with warp-feeding and shed-forming mechanism, of a picker, a sliding carriage supporting a series of devices for feeding weft-threads towards said picker, means for positively actuating both the picker and weft-thread feeding devices, and mechanism for moving the sliding carriage both horizontally and vertically. 20th. The combination with warp feeding and shed-forming mechanism, of a picker, means for actuating it, a sliding carriage supporting two or more series of ranks of weft thread feeding rolls, means for positively actuating that pair only of rolls opposite the line of movement of the picker, and mechanism for moving the carriage both horizontally and vertically. 21st. The combination with warp feeding and shed-forming mechanism, of a picker and means for actuating it, a sliding carriage, a series of ranks of weft-thread feeding rolls carried thereby, friction wheels engaging the rolls, a shaft carrying a single friction wheel adapted successively to engage with the friction wheels which drive the rolls, and means for driving said shaft. 22nd. The combination with warp-feeding mechanism, of a picker, means for actuating it, individually-movable heddle-bars, means for actuating them, a weft-thread carrier, and devices for drawing the weft-thread therefrom to feed the picker.

No. 51,227. Centrifugal Separator.

(*Séparateur centrifuge.*)

Orrin Burton Peck, Chicago, Illinois, U.S.A., 5th February 1896; 6 years. (Filed 12th August, 1895.)

Claim.—1st. In a centrifugal separator, the combination of a rotatable separating surface, and means for effecting agitation of material, while in a submerged state thereon, to assist separation, substantially as described. 2nd. In a centrifugal separator, the combination of a rotatable separating surface, and means through combined mechanical and aqueous forces for effecting agitation of material, while in a submerged state thereon, to assist separation, substantially as described. 3rd. In a centrifugal separator, the combination of a rotatable separating surface, means for effecting agitation of material thereon while separating and removing lighter substances, and intermittently removing the heavier, substantially as described. 4th. In a centrifugal separator, the combination of a rotatable separating surface, means for effecting agitation of material, while in a submerged state thereon, to assist separation, means for intermittently or periodically stopping the flow of material to the separator, and means for intermittently removing the heavier ma-

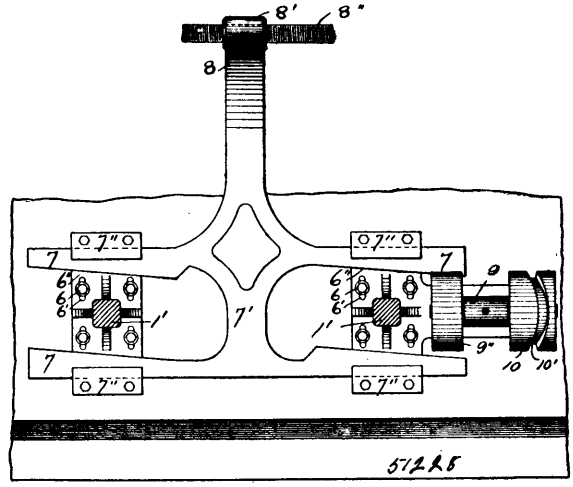


terial, substantially as described. 5th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, an agitator in proximity thereto, and means for imparting different speeds of rotation to one of them to effect varying degrees of agitation of material over the separating surface, substantially as described. 6th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, a rotatable agitator in proximity thereto, and means for varying the speed of rotation of said agitator to effect different degrees of agitation of material over the separating surface, substantially as described. 7th. In a centrifugal separator, the combination of a rotatable separating surface, a rotatable agitator in proximity thereto, and means for varying the speed of rotation of said agitator to effect different degrees of agitation of material over the separating surface, substantially as described. 8th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, an agitator in proximity thereto, means for imparting different speeds of rotation to one of them to effect varying degress of agitation over the separating surface, and means for causing a flow of liquid to remove separated material, substantially as described. 9th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, a rotatable agitator to separate lighter material, and means for increasing the speed of rotation of said agitator to effect the removal of heavier substances, substantially as described. 10th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, a deflector for guiding material along near said separating surface rotating at varying speeds, and agitating means carried by said deflector, substantially as described. 11th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, and means for securing aqueous impact force over that portion of the surface where separation is being effected to cause the suspension of lighter substances, substantially as described. 12th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, means for securing aqueous impact force over that portion of the surface where the separation is being effected to cause the suspension of lighter substances, and means for removing the heavier substances by increased impact force, substantially as described. 13th. In a centrifugal separator, the combination of a separating surface upon which the material is in a submerged state, and rotatable means for securing aqueous impact force over that portion of the surface where separation is being effected to cause the suspension of lighter substances, substantially as described. 14th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, and means for securing varying degrees of aqueous impact force over that portion of the surface where separation is being effected to cause the suspension of lighter substances, substantially as described. 15th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, and means for securing aqueous impact and impellent force over that portion of the surface where separation is being effected to cause the suspension and removal of the lighter substances, substantially as described. 16th. In a centrifugal separator, the combination of a rotatable separating surface, and means for securing pulsatory aqueous impact force over that portion of the surface where separation is being effected to cause the suspension of lighter substances, substantially as described. 17th. In a centrifugol separator, the combination of a rotatable separating surface upon which the material is in a sumerged state, and means for securing varying degrees of centrifugal force, and aqueous impact and impellent forces to effect the separation of lighter and heavier substances and their removal, substantially as described. 18th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, means for securing aqueous impact force over that portion of the surface where separation is being effected to cause the suspension of lighter substances, means for stopping the flow of material to the separator and increasing the flow of liquid thereto during the removing period, and starting the flow of material and decreasing the flow of liquid during the separating period, substantially as described. 19th. In

a centrifugal separator, the combination of a rotatable vessel or cylinder, a shaft or cylinder, extending through the same, such shaft provided with two hollow sections each communicating with a supply pipe or conduit, and provided with orifices or perforations communicating with the vessel or cylinder, substantially as described. 20th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, conduits for supplying material and liquid thereto, and means for effecting the removal of heavier substances by increasing the speed of rotation while the flow of material is stopped, substantially as described. 21st. In a centrifugal separator, the combination of a rotatable, vibratable separating surface upon which the material is in a submerged state, conduits for supplying material and liquid thereto, and means for effecting the removal of heavier substances by increasing the intensity of vibration while the flow of material is stopped, substantially as described. 22nd. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, conduits for supplying material and liquid thereto, and means for effecting the removal of heavier substances by increasing the speed of rotation, substantially as described. 23rd. In a centrifugal separator, the combination of a rotatable separating surface, and agitating means movable in a direction transverse to the path of rotation of said surface, substantially as described. 24th. In a centrifugal separator, the combination of a rotatable separating surface, and agitating means movable in a direction transverse to the path of rotation of such surface upon a supporting body maintained at a constant distance therefrom, substantially as described. 25th. In a centrifugal separator, the combination of a rotatable separating surface, and rotatable agitating means movable in a direction transverse to the path of rotation of such surface, upon a supporting body maintained at a constant distance therefrom, substantially as described. 26th. In a centrifugal separator, the combination with a rotatable separating surface, of agitating means, the two relatively movable in a direction transverse to the path of rotation, substantially as described. 27th. In a centrifugal separator, the combination with a rotatable separating surface, of agitating means, mounted upon a supporting body maintained at a constant distance therefrom, the two relatively movable in a direction transverse to the path of rotation, substantially as described. 28th. In a centrifugal separator, the combination of a rotatable separating surface, and agitating means automatically reciprocating in a direction transverse to the path of rotation, substantially as described. 29th. In a centrifugal separator, the combination with a rotatable separating surface, of agitating means, the two relatively, automatically movable in a direction transverse to the path of rotation, substantially as described. 30th. In a centrifugal separator, the combination of a rotatable vessel or cylinder, and an agitating shaft or cylinder passing in a water-tight manner through one end thereof, the two relatively movable in a direction transverse to the path of rotation of said vessel, substantially as described. 31st. In a centrifugal separator, the combination of a rotatable vessel or cylinder, a material supply pipe or conduit communicating therewith in a manner to secure pressure through the vessel, means for effecting agitation of the material with said vessel, and means for effecting endways movement back and forth of the agitating means, substantially as described.. 32nd. In a centrifugal separator, the combination of a rotatable separating surface, and agitating means movable toward and from such surface, substantially as described. 33rd. In a centrifugal separator, the combination, of a rotatable separating surface, and agitating means movable in a direction transverse to the path of rotation of said surface, and toward and from the same, substantially as described. 34th. In a centrifugal separator, the combination of a rotatable vessel or cylinder, an inner perforated frame or cylinder, pins within said perforations, and means for projecting and withdrawing the same, substantially as described. 35th. In a centrifugal separator, the combination of a rotatable vessel, rotatable agitating means movable along the axis of rotation thereof, and engaged by a reciprocating bushing to effect such movement, substantially as described. 36th. In a centrifugal separator, the combination of a rotatable separating surface, and aqueos impact means to effect agitation of material thereon, the two being relatively movable in a direction transverse to the path of rotation, substantially as described. 37th. In a centrifugal separator, the combination of a rotatable separating surface, and rotatable aqueous impact means to effect an agitation of material thereon, movable in a direction transverse to the path of rotation, substantially as described. 38th. In a centrifugal separator, the combination of a rotatable separating surface upon which the material is in a submerged state, a deflector or cylinder in proximity thereto, and means for producing a wash or wave motion in the channel between them by rapidly varying the size thereof, substantially as described. 39th. In a centrifugal separator, the combination of a rotatable conical vessel, a conical deflector therein, and means for producing a wash or wave motion in the channel between them by imparting to one of them a rapid reciprocation, substantially as described. 40th. In a centrifugal separator, the combination of a rotatable separating surface, and aqueous means to effect agitation of material thereon, the two being relatively, gradually movable in a direction transverse to the path of rotation, and at the same time quickly movable back and forth to a lesser extent in the same direction, substantially as described. 41st. In a centrifugal separator, the combination of a conical shaft provided with jet orifices, said shaft being movable longitudinally on its axis, substantially as described. 42nd. In a centrifugal separator, the combination with a rotatable conical separating surface, of conical aqueous impact means to effect agitation of material thereon, the two being relatively movable in a direction transverse to the path of rotation, substantially as described. 43rd. In a centrifugal separator, the combination of a conical separating vessel, and an inner conical shaft or deflector forming therewith an intermediate channel or passage, the two being gradually relatively movable in such manner as to enlarge said channel during the separating period and decrease it during the removing period, and means for securing at the same time a shorter, quicker movement thereof, substantially as described. 44th. In a centrifugal separator, the combination of a conical separating vessel, and an inner conical shaft or deflector forming therewith an intermediate channel or passage, the two gradually relatively movable in such manner as to enlarge said channel during the separating period and decrease it during the removing period, means for securing at the same time a shorter, quicker movement thereof, and automatic means for effecting such movements, substantially as described. 45th. In a centrifugal separator, the combination of a rotatable treatment vessel, and rotatable separating mechanism therein, means for varying the speed of rotation, and friction rolls connected thereto and actuated by revolving friction surfaces to accomplish this variation, each surface being composed of movable sections whereby its extent and position may be changed, substantially as described. 46th. In a centrifugal separator, the combination of a rotatable treatment vessel, and rotatable separating mechanism therein, means for varying the speed of rotation, friction rolls connected thereto by intermediate gearing, and actuated by revolving friction surfaces to accomplish this variation, substantially as described. 47th. In a centrifugal separator, the combination of a rotatable vessel, means for supplying material and liquid thereto, valves for regulating the flow thereof, and a rotating wheel having projecting portions contacting intermittently therewith for actuating such means, substantially as described. 48th. In a centrifugal separator, the combination of a rotatable vessel, means for producing agitation in said vessel, means for supplying material and liquid thereto, valves for regulatig the flow thereof, and a rotating wheel having projecting portions contacting intermittently therewith for actuating such means, substantially as described.

No. 51,228. Centrifugal Separator.

(*Séparateur centrifuge.*)



Orrin Burton Peck, Chicago, Illinois, U.S.A., 5th February, 1896; 6 years. (Filed 12th August, 1895.)

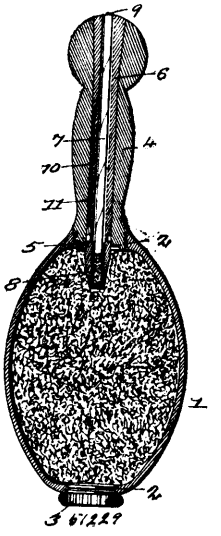
Claim.—1st. In a centrifugal separator, the combination of a rotatable separating surface, and means for securing aqueous currents over said surface in a direction transverse to the path of rotation, and in said path, substantially as described. 2nd. In a centrifugal separator, the combination of a rotatable separating surface, and means for securing aqueous currents over said surface, of varying degrees of force, in a direction transverse to the path of rotation and in said path, substantially as described. 3rd. In a centrifugal separator, the combination of a rotatable separating surface, a deflector or cylinder in proximity thereto, and means for securing annular currents over said surface by rotating them at a differential speed, substantially as described. 4th. In a centrifugal separator, the combination of a rotatable separating surface, a smooth deflector or cylinder in proximity thereto, and means for securing annular currents over said surface by rotating them at a differential speed, substantially as described. 5th. In a centrifugal separator, the combination of a rotatable separating surface, means for starting material in motion in the separator by securing annular currents over said surface, and non-rotatable means for varying the intensity of said annular currents, substantially as described. 6th. In a

centrifugal separator, the combination of a rotatable separating surface, means for securing annular currents over said surface, and means movable toward and from the surface for varying the intensity of said annular currents, substantially as described. 7th. In a centrifugal separator, the combination of two or more cylinders, one within the other, and means for securing annular currents therein by varying the relative position of the axes of said cylinders, substantially as described. 8th. In a centrifugal separator, the combination of a rotatable separating surface, means for securing aqueous currents over said surface in the path of rotation, and means which may be operated independently thereof for securing agitation of material over the separating surface, substantially as described. 9th. In a centrifugal separator, the combination of a rotatable separating surface, means for securing aqueous currents over said surface in the path of rotation, and means for securing aqueous impact force over the separating surface to effect agitation of material, substantially as described. 10th. In a centrifugal separator, the combination of a rotatable separating surface, a deflector or cylinder in proximity thereto, and means for gradually increasing the width of the channel or passage between them during the separating period, and rapidly decreasing the same to effect the discharge of heavier substances, substantially as described. 11th. In a centrifugal seprator, the combination of a rotatable separating surface, a deflector or cylinder in proximity thereto, and means for gradually increasing the width of the channel or passage between them during the separating period, and rapidly decreasing the same to a less width than at the beginning of said separating period to effect the discharge of heavier substances, substantially as described. 12th. In a centrifugal separator, the combination of a rotable separating surface, a deflector or cylinder in proximity thereto, means for gradually increasing the width of the channel or passage between them during the separating period, and rapidly decreasing the same to a less width than at the begining of said separating period to effect the discharge of heavier substances, and again rapidly increasing the width to the initial point for beginning separation, substantially as described. 13th. In a centrifugal separator, the combination of a conical treatment vessel, a conical deflector or cylinder in proximity thereto, and means for relatively moving the two gradually to increase the width of a channel or passage between them during the separating period, and rapidly in the opposite direction to effect the discharge of heavier substances, substantially as described. 14th. In a centrifugal separator, the combination of a rotatable treatment vessel, discharge passages for the separated material therefrom, and passages nearer to the axis of rotation for the separate discharge of comparatively clear liquid, substantially as described. 15th. In a centrifugal separator, the combination of a rotatable treatment vessel, discharge passages for the separated material therefrom delivering to a trough or receptacle, and passages nearer to the axis of rotation for the discharge of comparatively clear liquid to a separate trough or receptacle, substantially as described. 16th. In a centrifugal separator, the combination of a rotatable treatment vessel, a deflector or cylinder therein, and removable wearing plates on said deflector near the discharge end of the treatment vessel, substantially as described. 17th. In a centrifugal separator, the combination of a rotatable treatment vessel, a deflector or cylinder therein, and adjustable, removable wearing plates on said deflector near the discharge end of the treatment vessel, substantially as described. 18th. In a centrifugal separator, the combination of a rotatable treatment vessel, a deflector or cylinder therein, removable wearing plates on said deflector near the discharge end of the treatment vessel, and openings in said end of the vessel registering with the plates, substantially as described. 19th. In a centrifugal separator, the combination of a rotatable treatment vessel, and a deflector or cylinder therein composed of removable sections, substantially as described. 20th. In a centrifugal separator, the combination of a rotatable vessel or cylinder, means for vibrating the same, and a deflector for guiding material along near the separating surface, substantially as described. 21st. In a centrifugal separator, the combination of two or more rotatable cylinders, one within the other, one of which is provided with a separating surface upon which the material is in a submerged state, and means for vibrating the same, substantially as described. 22nd. In a centrifugal separator, the combination of a light or thin vibratable cylinder, a rotatable support for the same, and means for vibrating said cylinder, substantially as described. 23rd. In a centrifugal separator, the combination of a rotatable cylinder, a light or thin cylinder located therein, elastic means interposed between the cylinders to movably support the inner, and means for vibrating said inner cylinder, substantially as described.

No. 51,229. Hand Grenade. (*Grenade à main.*)

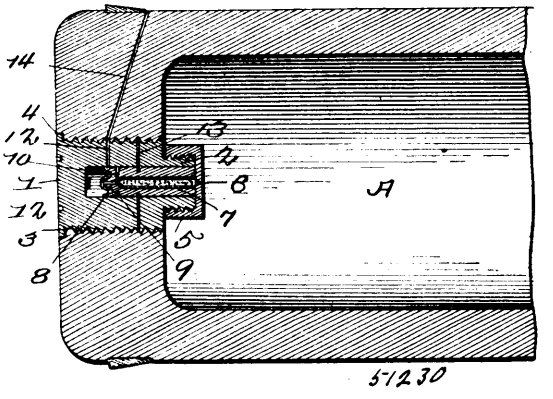
George Maltby Hathawa, New York, State of New York, U.S.A., 5th February, 1896; 6 years. (Filed 4th November, 1895.)

Claim.—1st. A hand grenade, comprising a vessel containing an explosive compound, a tubular extension or handle, and a capped and primed fuse extending through said handle, the capped end of said fuse extending into the charge in the vessel, and the primed and extending out of the handle, and provided with a waterproof igniting pellet whereby the grenade may be fired by the frictional ignition of the outer end of the fuse and the percussion action of the cap at the inner end of said fuse, substantially as specified. 2nd. The combination, in a hand grenade, with a vessel containing an explosive compound, of a detachable handle, carring a detachable fuse having one end provided with a percussion cap, adapted to be inserted



within the charged vessel, and the other end provided with a waterproof pellet or coating of composition, adapted to be ignited by frictional contact, substantially as specified. 3rd. The combination, in a hand grenade, with a vessel for containing an explosive compound and provided with a detachable handle, of a detachable sheath carrying a fixed fuse having at one end a frictional-igniting pellet and at the other end a percussion cap, substantially as specified. 4th. The combination, in a hand grenade, with a vessel for containing an explosive compound and provided with a detachable handle, closed at one end by a repturable disc, of a detachable sheath carrying a fixed fuse, having at one end a frictional igniting pellet and at the other end a percussion cap, said sheath being held within the handle by a frictional contact, substantially as specified.

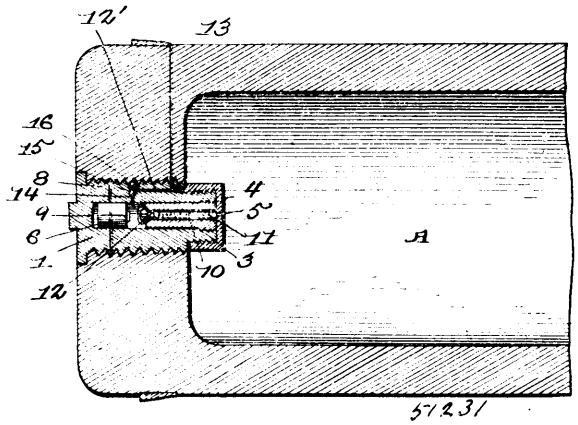
No. 51,230. Shell Fuse. (*Fusée d'obus.*)



George Maltby, Hathawa, New York, State of New York, U.S.A. 5th February, 1896; 6 years. (Filed 4th November, 1894.)

Claim.—1st. The combination with the body of the fuse-case having a forward extension and an internal axial recess, of the fuse-holder normally fastened in said recess and provided with an annular groove near its rear, communicating with its interior and the recess in the fuse case by means of suitable passages, the body of the said case being provided with a passage which is closed by the rear of the fuse-holder when the same is in normal position, and which registers with the annular groove in the fuse-holder when the same falls back at the discharge of the shell, to permit the escape of the gases, substantially as specified. 2nd. A chambered fuse-case having a combined fuse-holder and striker normally fastened in said chamber, the said fuse-holder being provided with vents which register with a vent in the fuse-case when it is displaced at the discharge of the gun, to permit the escape of the gases developed, substantially as specified. 3rd. A shell-fuse for projecticles, consisting of a cylindrical case having a forward cylindrical extension of less diameter than the body of said case and an internal chamber for the firing devices, the body of the case being provided with left-handed screw-threads, and the extension with right-hand screw-threads, for the purpose described, and a perforated removable cap seated on the end of said extension to confine the fuse-holder and fuse within the internal chamber during the flight of the shell.

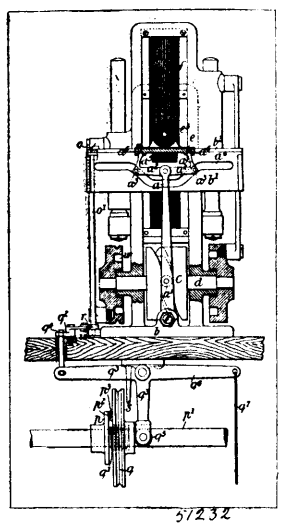
No. 51,231. Shell Fuse. (*Fusée d'obus.*)



George Maltby Hathaway, New York, State of New York, U.S.A., 5th February, 1896; 6 years. (Filed 4th November, 1895.)

Claim.—1st. A shell fuse consisting of a cylindrical case formed with an externally screw-threaded extension and carrying a normally restrained striker and a fixed fuse-holder provided with a nipple having gas vents, and with an internally screw-threaded perforated cap screwed upon said extension to protect the fuse, substantially as specified. 2nd. A shell-fuse consisting of a cylindrical chambered block of metal, provided with a fixed fuse-holder and suitable firing devices, a passage leading from the chamber through the wall of the plug, and a valve located in a chamber connecting with the passage, to close the same normally but to permit the gas developed by the explosion of the shell to escape, substantially as specified.

No. 51,232. Loom for Weaving. (*Métier à tisser.*)

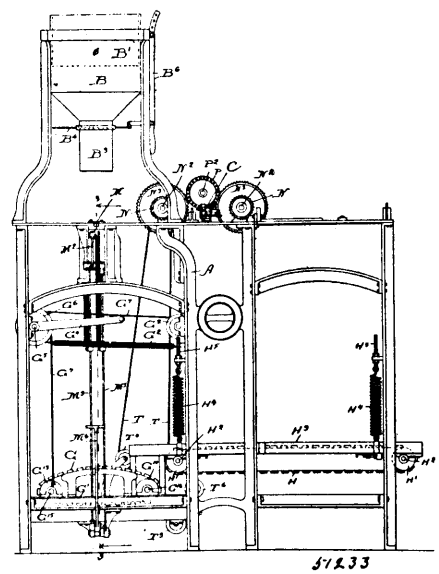


John Payser, Mansfield, England, 5th February, 1896 years. (Filed 3rd August, 1895.)

Claim.—1st. In a loom for weaving, shuttle actuating mechanism consisting of an oscillating picker lever carrying radial pickers adapted to engage with the shuttle and operated by means of a cam slot in such a manner that one of the said pickers engages with the shuttle before the other leaves it, substantially as described. 2nd. In a loom for weaving, healds or heddles the eye bars of which are formed of flat strips of metal rivetted together, substantially as described with reference to figures 9 and 10 of the accompanying drawings. 3rd. In a loom for weaving, the combination with the clutch for operating the take-up rollers of a link and a lever adjustable relatively with one another whereby the feed movement of the take-up rollers can be varied, substantially as hereinbefore described, with reference to figures 1, 2 and 3 of the accompanying drawings. 4th. In a loom for weaving, the combination with the feed movement of the take-up rollers, of means for adjusting and locking the said rollers, substantially as hereinbefore described, with reference to figures 4, 7 and 11 to 14 of the accompanying drawings. 5th. In a loom for weaving, let-off mechanism constructed and arranged, substantially as hereinbefore described and illustrated with reference to figures 1 and 3 of the accompanying drawings. 6th. In a loom for weaving, let-off mechanism constructed and arranged, substantially as described, with reference to figures 4, 7 and 8 of the accompanying drawings. 7th. In a loom for weaving, the combination with the let-off rollers of means for positively actuating them from the take-up rollers as hereinbefore described, and illustrated in figure 15 of the accompanying drawings. 8th. In a loom for weaving, a shuttle constructed and arranged, substantially as described, with reference to figure 16 of the accompanying drawings. 9th. In a loom for weaving, the combination with the shuttle of means for positively taking up the slack of the weft thread, substantially as hereinbefore described, with reference to figure 17 of the accompanying drawings. 10th. In a loom for weaving, the improved shuttle hereinbefore described, and illustrated in figures 18 and 19 of the accompanying drawings. 11th. In a loom for weaving, the improved shuttle described, with referenee to figures 20, 21 and 22 of the accompanying drawings. 12th. In a loom for weaving, the combination with mechanism for stopping the loom, of a bolt actuated by the take-up lever of the shuttle on the breaking of the weft thread, substantially as hereinbefore described, with reference to figures 5, 7 and 19 of the accompanying drawings. 13th. In a loom for weaving, having mechanism for stopping the same on the breakage of the weft thread, the combination with such mechanism of means whereby on the breaking of a warp thread the loom will also be stopped, substantially as hereinbefore described, with reference to figures 4, 5 and 7 of the accompanying drawings. 14th. In a loom for weaving, having mechanism for stopping the same adapted to be operated on the breakage of one of the weft threads, a take-up lever having an extension designed to operate the stopping mechanism, substantially as hereinbefore described, and illustrated in figure 20 of the accompanying drawings. 15th. In a loom for weaving, the arrangement wherein the upper fixed part or guide-piece of the batten is dispensed with the movable part of the batten only being used, substantially as described. 16th. In a loom for weaving, a batten having two movable parts, the reeds or pins on which parts are designed to alternately coincide and separate, substantially as described, with reference to figures 4, 6, 7, 23 and 24 of the accompanying drawings. 17th. In a loom for weaving, the spring-guide for the woven fabric hereinbefore described, and illustrated in figures 25 and 26 of the accompanying drawings. 18th. In a loom for weaving, the spring-guide hereinbefore described, and illustrated in figures 27, 28 and 29 of the accompanying drawings. 19th. The improved construction and arrangement of loom hereinbefore described, with reference to figures 1 to 3, 9, 10, 16, 25 and 26 of the accompanying drawings. 20th. The improved construction and arrangement of loom hereinbefore described, with reference to figures 4 to 8, 18, 19 and 27 to 29 of the accompanying drawings.

No. 51,233. Sack Filling and Sewing Machine.

(*Machine à remplir et coudre les sacs.*)



Arthur T. Timewell, Chicago, Illinois, U.S.A., 5th February, 1896; 6 years. (Filed 27th May, 1895.)

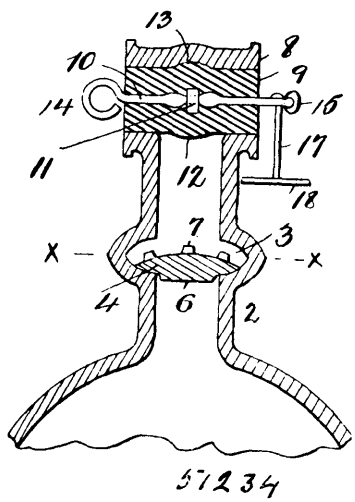
Claim.—1st. The combination with a bag filling and measuring device, of an opening and closing movable or travelling sack holder, a track or way along which said holder moves, a carrier for conveying the sack along, and a stationary sewing device or mechanism for sewing the mouth of the sack as it is conveyed along, substantially as specified. 2nd. The combination with a sack filling

and measuring device, of an opening and closing movable sack holder, and a stationary sewing mechanism, substantially as specified. 3rd. The combination with a sack filling and measuring device, of a movable sack-holder, a sack carrier, and a stationary sewing device or mechanism, substantially as specified. 4th. The combination with a sack filling device, of a series of movable sack-holders and a sewing device or mechanism, substantially as specified. 5th. The combination with a sack-filling device, of a series of movable sack holders, a slotted track or way along which said holders travel and a stationary sewing device, substantially as specified. 6th. In a sack filling and sewing machine, the combination with a sack filling device, of a movable sack holder, a sewing device and a thread cutting device, substantially as specified. 7th. In a sack filling and sewing machine, the combination with a sack filling device, of a movable sack holder, a track or way for the holder, a sewing device, and a thread cutting and holding device, substantially as specified. 8th. In a sack filling and sewing machine, the combination with a sack filling device, of a movable sack holder, a track or way for the holder, a sewing device and a thread cutter and holding device comprising two opening and closing spring-actuated sliding bars, furnished with a projection in the path of the sack holder, substantially as specified. 9th. In a sack filling and sewing machine, the combination with a sack filling device, of a movable sack holder, a track or way for said holder, a sewing device, a sack carrier mounted on a frame provided with spring or yielding support to admit sacks of varying lengths or heights to pass between said track and said carrier, substantially as specified. 10th. The combination with a sack filling device, of an opening and closing movable sack holder, a track or way for the holder, mechanism for propelling the holder along said track, and means for closing the sack holder, the whole being combined, adapted and arranged to cause the closing of the sack holder to throw it into engagement with said sack holder propelling mechanism, substantially as specified. 11th. The combination with a sack filling device, of an opening and closing movable sack holder, a track or way for the holder, mechanism for propelling the holder along said track, and means for closing the sack holder, the whole being combined, adapted and arranged to cause the closing of the sack holder to throw it into engagement with said sack holder propelling mechanism, said track or way having a closed end or abutment at the filling position end thereof for the rear end of the sack holder to abut against as it is being closed, substantially as specified. 12th. The combination with a sack filling device, of a series of movable sack holders, a track or way for said holders, and a sewing device, said track or way having an open mouth at its discharge end to prevent one holder therein from obstructing the movement of a succeeding holder, substantially as specified. 13th. The combination with a sack filling device, of a movable sack holder, a slotted track or way for said holder, and a sewing device having a frame secured at one of its ends only to the frame of the machine at one side of said slotted track to prevent vibrations of the machine from interferring with the operation of the sewing mechanism, substantially as specified. 14th. The combination with a sack filling and measuring device, of a movable sack holder furnished with movable or withdrawable devices for engaging the mouth of the sack, a track or way for the holder, and a sewing device, substantially as specified. 15th. The combination with a sack filling and measuring device, of a sack conveyor and a sack sewing mechanism, substantially as specified. 16th. The combination with a sack filling and measuring device, of a series of movable sack holders, a track or way for the holders, a sack sewing mechanism and a sack conveyor, substantially as specified. 17th. The combination with a sack filling and measuring device, of a series of movable sack holders, a track or way for the holders, a stationary sewing mechanism, an up and down movable and vibrating sack carrier for supporting the sack at the filling station and moving it therefrom, substantially as specified. 18th. The combination with a sack filling and measuring device, of a series of movable sack holders, a track or way for the holders, a stationary sewing mechanism, and up and down movable or vibrating sack carrier for supporting the sack at the filling station and moving it therefrom, a second sack carrier for conveying the sack past the sewing mechanism and discharging the same from the machine, substantially as specified. 19th. The combination with a sack filling and measuring device, of a series of movable sack holders, a track or way for the holders, a stationary sewing mechanism, and up and down movable or vibrating sack carrier for supporting the sack at the filling station and moving it therefrom, and a second sack carrier for conveying the sack past the sewing mechanism and discharging the same from the machine, said second mentioned sack carrier being provided with a yielding or spring support, substantially as specified. 20th. The combination with a sack filling device, of an opening and closing movable sack holder furnished with movable devices for engaging the mouth of the sack, a track or way for the holder, a sewing device, and means for operating said movable sack holding devices on the holdar by the opening and closing of the holder, substantially as specified. 21st. The combination with a sack filling device, of a movable sack holder, a track or way for the holder, a sewing device provided with a clutch operating arm projecting in said track or way in the path of the holder, so that the movement of said holder along said track will serve to throw said sewing device in and out of gear, substantially as specified. 22nd. The combination with a sack filling device, of an opening and closing spring actuated sack holder, a track or way for said holder provided with side walls for holding said sack holder closed during the sewing operation, and a sewing device, substantially as specified. 23rd. The combination with a sack filling device, of an opening and closing spring actuated sack holder, a track or way for said holder provided with side walls for holding said sack holder closed during the sewing operation, and a sewing device, the side walls of said track or way diverging at the discharge end of the machine to permit the spring actuated holder to be automatically opened by its spring, substantially as specified. 24th. The combination with a sack filling device, of an opening and closing spring actuated sack holder, a track or way for said holder provided with side walls for holding said sack holder closed during the sewing operation, and a sewing device, the side walls of said track or way diverging at the discharge end of the machine to permit the spring actuated holder to be automatically opened by its spring, said holder being provided with movable sack holding devices operated by the opening and closing of the holder, substantially as specified. 25th. The combination with an opening and closing sack holder furnished with a rack, of a track or way therefor, a sack sewing mechanism, and revolving gears engaging said rack for propelling the sack holder along said track, said track having side walls to hold the holder closed, said side walls diverging at the discharge end of the machine to permit the holder to open, substantially as specified. 26th. The combination with a sack filling and measuring mechanism, of an opening and closing sack holder for holding the sack open while being filled and closed while being sewed, a sack sewing device, and means for closing said sack holder, substantially as specified. 27th. The combination with a sack filling mechanism, of an opening and closing sack holder for holding the sack open while being filled and closed while being sewed, a sack sewing device, and mechanism for closing said holder, said sack closing mechanism, a pair of oppositely moving sliding bars, levers M^2, M^2, levers M^4, M^5, pivoted together and connected to said levers M^2, M^2, by links M^3, M^3, substantially as specified. 28th. The combination with a sack filling device, of a sewing device, a movable sack holder, a track or way for said holder, an intermittently moving up and down vibrating said carrier G, mechanism for vibrating said carrier up and down, mechanism for driving said carrier, a clutch for throwing the carrier into gear with its driving mechanism, and a cam for operating said clutch automatically by raising said carrier to its limit, substantially as specified. 29th. The combination with a sack filling device, of a sewing device, a movable sack holder, a track or way for said holder, an intermittently moving up and down vibrating sack carrier G, mechanism for vibrating said carrier up and down, mechanism for driving said carrier, a clutch for throwing the carrier into gear with its driving mechanism, and a cam for operating said clutch automatically by raising said carrier to its limit, and a second continuously moving sack carrier H, substantially as specified. 30th. The combination with a sack filling device, of a sewing device, a movable sack holder, a track or way for said holder, an intermittently moving up and down vibrating sack carrier G, mechanism for vibrating said carrier up and down, mechanism for driving said carrier, a clutch for throwing the carrier into gear with its driving mechanism, and a cam for operating said clutch automatically by raising said sack carrier to its limit, a second continuous moving sack carrier H, and spring supports for said carrier H, substantially as specified. 31st. The combination with a movable sack holder, of a track or way therefor, a sewing device, and a thread cutting device, substantially as specified. 32nd. The combination with a movable sack holder, of a track or way therefor, a sewing device, and a thread cutting device and thread holding device, substantially as specified. 33rd. The combination with a movable sack holder, of a track or way therefor, a sewing device, and a spring actuated thread cutting device having an arm or projection projecting into the path of said holder, substantially as specified. 34th. The combination with a movable sack holder, of a track or way therefor, a sewing device, and a spring actuated thread holding and cutting device having an arm or projection projecting into the path of said holder, substantially as specified. 35th. The combination with a sack filling and measuring device of a sack sewing device, a movable sack holder, and a slotted track or way for such holder extending from said filling device to said sewing device, substantially as specified. 36th. The combination with a sack filling and measuring device of a sack sewing device, a movable sack holder, and a slotted track or way for such holder extending from said filling device to said sewing device, and means for moving said sack holder along said track or way, substantially as specified. 37th. The combination with a sack filling and measuring device of a sack sewing device, a movable sack holder and a slotted track or way for such holder extending from said filling device to said sewing device, and means for moving said sack holder along said track or way, and a sack carrier, substantially as specified. 38th. The combination with a sack filling device of a sack sewing device, a movable sack holder, and a slotted track or way for such holder extending from said filling device to said sewing device, and means for moving said sack holder along said track or way, the devices on said sack holder for engaging the mouth of the sack being movable to facilitate the release or discharge of the filled and sewed sack, and a sack carrier, substantially as specified. 39th. The combination with a sack filling device of a sack sewing device, a series of movable sack holders, and a slotted track or way for such holders extending from said filling device to said sewing device, substantially as specified. 40th. The combination with a sack filling device

of a sack sewing device, a series of movable sack holders, and a slotted track or way for such holders extending from said filling device to said sewing device, and means for moving said sack holders along said track or way, substantially as specified. 41st. The combination with a sack filling and measuring device of a sack sewing device, a movable sack holder, and a slotted track or way for such holder extending from said filling device to said sewing device, and means for moving said sack holder along said track or way, the devices on said sack holder for engaging the mouth of the sack being movable to facilitate the release or discharge of the filled and sewed sack, substantially as specified. 42nd. The combination with a sack filling device of a stationary sack sewing device, a movable sack holder, a track for said holder, and an adjustable sack carrier to accommodate sacks of different size, substantially as specified. 43rd. A sack holder comprising opening and closing bars D^1, furnished with spring actuated rock shafts d^1, provided with hooks or pins d, substantially as specified. 44th. A sack holder comprising opening and closing jaws D^1, furnished with spring actuated rock shafts d^1, provided with hooks or pins d, and cams d^3, for operating said rock shafts by the opening of said bars D^1, substantially as specified. 45th. The combination with a sack holder, of a track or way therefor, a sewing mechanism and a device operated by the passage of the holder along said way for putting the sewing mechanism into and out of operation, substantially as specified. 46th. The combination with a sack holder, of a track or way therefor, a sewing mechanism and a device operated by the passage of the holder along said way for putting the sewing mechanism into and out of operation, and a thread cutting device, substantially as specified.

No. 51,234. Non-Fillable Bottle.

(*Appareil pour empêcher le remplissage des bouteilles.*)



Daniel Hepp, Chicago, Illinois, U. S. A., 5th February, 1896 6 years. (Filed 9th Dec., 1895.)

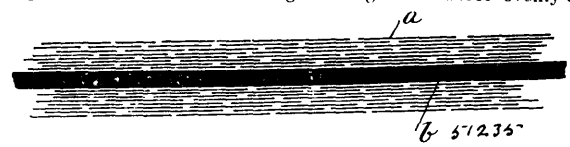
Claim.—1st. A bottle having a three-way nozzle, and means for closing the same, substantially as shown and described. 2nd. A bottle having a three-way nozzle, an automatic valve located in the neck thereof, and means for closing the nozzle, substantially as described. 3rd. A bottle having a three-way nozzle, an automatic valve in the neck thereof below the nozzle, operating to permit of the discharge of the contents of the bottle but to prevent the refilling thereof, said nozzle being closed by means of a plug inserted transversely to the neck of the bottle, substantially as shown and described. 4th. A bottle provided with a three-way nozzle and having an automatic valve in the neck thereof, said nozzle being closed by a plug inserted transversely to the line of the neck of the bottle, said plug being provided with a rod extending through the same, to which is hinged a cap or plate constructed, substantially as described. 5th. A bottle provided with a three-way nozzle and having an automatic valve in the neck thereof, and the nozzle being closed by a plug inserted transversely to the discharge orifice of the neck, said plug being provided with a rod extending longitudinally therethrough and provided with means to prevent its withdrawal, and being pivotally connected at one end with a plate adapted to partially close one of the nozzle openings by means of an arm secured to said plate, substantially as shown and described.

No. 51,235. Covering for Electric Wires.

(*Couverture pour fils électrique.*)

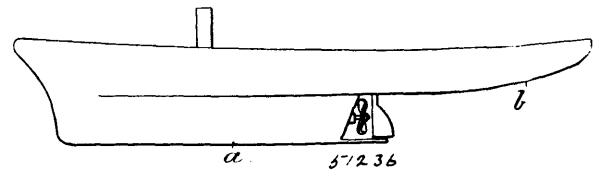
Franklin S. Randall, Philadelphia, Pennsylvania, U.S.A., 5th February, 1896; 6 years. (Filed 10th June, 1895.)

Claim.—The combination with an electric conductor of an insulating covering therefor, consisting of straightened fibres evenly ap-



plied parallel with the conductor, the said straightened fibres consisting of silver which has been drawn longitudinally until the fibres have been rendered parallel.

No. 51,236. Hull of Vessels. (*Coque de vaisseaux.*)

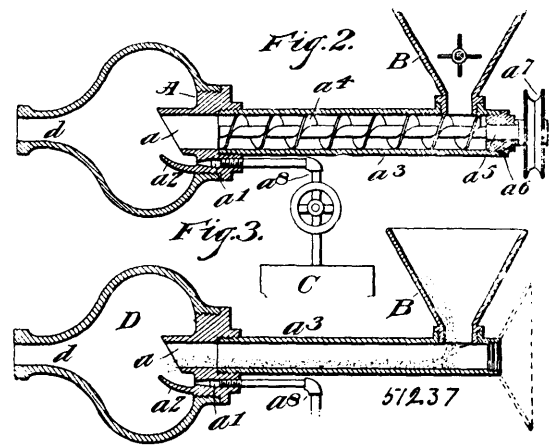


Gilbert T. Brewer, Hoboken, New Jersey, U.S.A., 5th February, 1896; 6 years. (Filed 16th Oct., 1895.)

Claim.—The combination in the hull of a vessel, of the short narrow deep draft lower section and the superimposed long wide shallow section joined one upon another, the excess of the length of the upper section forming a plain bottomed over-hang at the stern of the lower section, and the excess of the breadth of the upper section likewise overhanging the sides of the lower section, substantially as described.

No. 51,237. Apparatus for Burning Coal Dust, etc.

(*Appareil pour brûler la poussière de charbon.*)



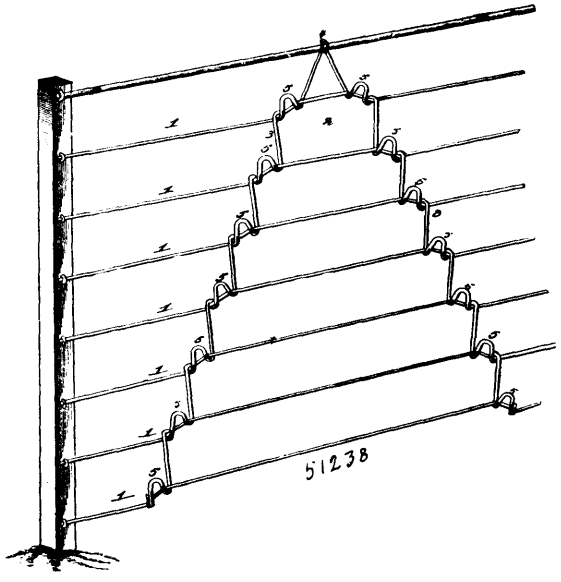
Colin William Claybourne, Indianapolis, Indiana, U.S.A., 6th February, 1896; 18 years. (Filed 28th February, 1895.)

Claim.—1st. In an apparatus for burning coal-dust, or other granular or pulverized fuel, in combination with a conduit and a source of supply of the granular or pulverized fuel feeding into such conduit, an enlarged mixing chamber into which the conduit discharges, having a suitable discharge mouth, a source of supply of steam, and a conduit for the same discharging into the mixing chamber past the mouth of the fuel passage, substantially as and for the purpose specified. 2nd. In an apparatus for burning coal-dust, or other grandular or pulverized fuel, in combination with the enlarged mixing chamber having a suitable discharge mouth, a stem jet entering such chamber, and the feed conduit connected with a source of supply of the fuel, and having its forward end projecting into the chamber, to a point forward of the discharge mouth of the steam passage, substantially as and for the purpose shown and described. 3rd. In an apparatus for burning coal-dust, or other pulverized or granular fuel, in combination with a conduit, a source of supply of the granular or pulverized fuel, and means for feeding the same through the conduit, an enlarged mixing chamber into which the fuel is discharged, having a suitable discharge mouth, a source of supply of fluid under pressure, and a conduit for the same entering the chamber so that the fluid will come in contact with the fuel entering the chamber and mingle with the same, substantially as and for the purpose specified. 4th. In an apparatus for burning coal-dust, or other pulverized or granular fuel, in combination with a conduit, and means for supplying and feeding the pulverized or granular fuel through the same a second conduit connected with a source of supply of fluid under pressure, an enlarged mixing chamber around the place where the two conduits discharge, having a suit-

able discharge mouth, and the deflector extending at an angle forward and inward across the path of the jet entering through the fluid conduit and toward a line through the fuel conduit, substantially as and for the purpose shown. 5th. In an apparatus for burning coal-dust, or other pulverized or granular fuel, in combination with a conduit and means for supplying and feeding the pulverized or granular fuel through the same, a second conduit connected with a source of supply of fluid under pressure, a bulb surrounding the place where such conduits discharge, having its interior chamber expanding suddenly forward, and then contracted down to a smaller discharge mouth, and a deflector to direct the fluid entering the chamber forward and inward at an angle to a line through the fuel conduit, substantially as and for the purpose set forth. 6th. In an apparatus for burning coal-dust or other pulverized or granular fuel, in combination with a source of supply of such fuel, and means for feeding the latter from the same, a conduit through which the fuel is fed, a second conduit connected with a source of supply of steam, and a bulb having an enlarged chamber into which the fuel and steam conduits discharge, and within which the fuel and steam are mingled together, and a reduced discharge opening, substantially as and for the purpose described. 7th. In an apparatus for burning coal-dust, or other granular fuel, in combination with the enlarged mixing chamber having a suitable discharge mouth, a passage for steam into said chamber, the fuel conduit extended into the same with its discharge end inclined rearward and downward, and a deflector adjacent to the mouth of the steam passage to guide the steam past the inclined end of the fuel conduit, substantially as and for the purpose shown. 8th. The improved process of burning coal-dust, or other pulverized or granular fuel, which consists in feeding such fuel into an enlarged chamber with a suitable discharge opening, and bringing into contact with it as it enters such a chamber, an expansible fluid under pressure, to separate the particles of fuel and whirl them around with the fluid within the chamber before they reach and pass from the discharge opening, substantially as and for the purpose specified.

No. 51,238. Tension Device for Wire Fences.

(*Appareil de tension pour clôtures en fil de fer.*)



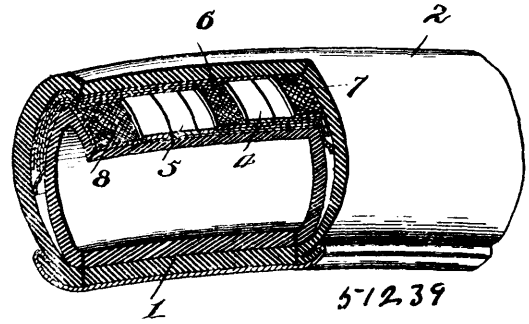
James E. Jones, Atlanta, New York, U.S.A., 6th February, 1896; 6 years. (Filed 12th January, 1895.)

Claim.—A tension device for the runners of a wire fence, the same consisting of a wire stay of smaller gage than and intersecting the runners, and provided at its intersection with each runner with a loop coiled upon an inclined or offset portion of the runner, the straight portions of the stay contiguous to and upon opposite sides of each runner intersecting the offset portion of the runner near its extremities and being out of alignment with each other, whereby tensile strain in opposite directions upon said contiguous portions of the stay, produced by twisting the interposed loop around the runner, increases the angle of deflection of the offset portion of the runner and thereby increases the tension thereof without causing the intertwisting of the stay and runner, the length of stay wire required at the initial construction for making the loop and twist being supplied by the slack of the stay, as it is applied to the runners, successively, to avoid drawing the runners toward each other out of parallel position, substantially as specified.

No. 51,239. Pneumatic Tire. (*Bandage pneumatique.*)

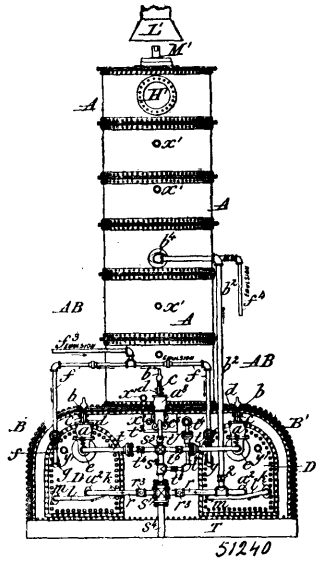
Clarence B. Bowlin, Burr Oak, Michigan, U.S.A., 6th February, 1896; 6 years. (Filed 19th July, 1895.)

Claim.—1st. As a new article of manufacture, the herein described protective shield for inflatable tires, the same comprising a plurality



of layers of metallic strips and webbing or fabric, alternately arranged and cemented together, the terminal layers being of webbing or fabric and one of them being extended beyond the metallic layers to provide means for the attachment of the shield to the inner surface of the shoe of a tire, substantially as specified. 2nd. The combination with a tire having an exterior shoe and an inclosed inflatable tube, of a protective shield, of less width than the circumference of the inflatable tube, and adapted to be attached permanently to the inner surface of the shoe to cover the said inner surface of the tread or exposed portion of the same, said shield comprising alternate layers of continuous webbing or fabric and interposed transversely arranged metallic strips, the strips in each layer being arranged with their contiguous edges out of contact and the strips in one layer being arranged to break joints with the strips in the adjacent layer, said alternate layers of webbing or fabric and metallic strips being connected by cement or adhesive material and the inner layer of webbing or fabric, or the layer which is adjacent to and comes in contact with the surface of the inflatable tube, being extended laterally beyond the edges of the other layers to form an edge for attachment by cement or adhesive material to said inner surface of the shoe, whereby the inflatable tube is removably arranged within the tube, substantially as specified. 3rd. The herein described protective shield for the exposed sides or treads of tires, comprising duplicate parallel layers of transversely-disposed metallic strips disposed in the layers at intervals to avoid friction between adjacent edges, and the strips in each layer being arranged to break joints with the strips in the other layer, an interposed layer of fabric to the opposite surfaces of which the metallic strips are secured by cement or other adhesive material, and outer and inner layers of fabric secured by cement or adhesive material to the exposed surfaces of the layers of metallic strips, the lateral edges of the inner layer of fabric being extended beyond the ends of the metallic strips to form flaps for attachment to the inner surface of a tire, substantially as specified.

No. 51,240. Process of and Apparatus for Manufacturing Gas. (*Procédé et appareil pour la fabrication du gaz.*)

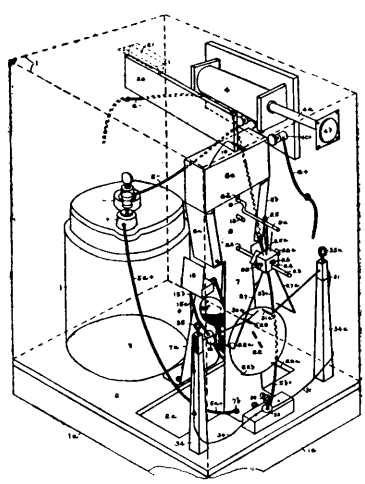


William Frank Browne, New York, State of New York, U.S.A., 6th February, 1896; 6 years. (Filed 28th August, 1895.)

Claim.—1st. The process of manufacturing gas which consists in subjecting a mass of carbon contained in a suitable apparatus to the direct action of a flame or flames from burning hydrocarbon or carbonaceous material, with or without steam, until the said mass of carbon is heated to incandescence, then continuing the flame or flames, and passing the products of combustion continuously through the incandescent material, and collecting the resulting gas. 2nd. The process of manufacturing gas which consists in first heating a mass of carbon contained in a suitable apparatus to incandescence in any suitable manner, then continuously passing the flame or flames and products from an independent supply of burning carbonaceous material through said incandescent carbon, and collecting the resulting gas. 3rd. The herein described process of making gas which consists in first producing gas or gaseous vapour by forcing an emulsion of water and hydrocarbon into heated conduits, then forcing the resultant gas or gaseous vapour from said conduits into a furnace and burning and decomposing it, thence passing the resulting flame and products into heated incandescent carbonaceous matter, whereby such matter becomes oxidized by the free oxygen contained in said products of combustion and decomposition, and conducting off the resulting gas. 4th. The process of disassociating the elements of water for the purpose of utilizing the oxygen thereof for oxidizing carbonaceous matter and producing a heating gas, which consists in discharging a gaseous vapour from water and carbonaceous matter into a highly heated flame, wherein said vapour becomes decomposed, and continuously passing the resulting hot products into a mass of incandescent carbon and conducting off the resulting gas. 5th. The herein described process of making and distributing gas under pressure, which consists in forcing an emulsion of water and carbonaceous matter through heated receivers or conduits, thereby generating a gaseous vapour under high pressure, discharging such vapour, together with a supply of air, into a heated furnace and therein burning the carbonaceous matter or the gaseous vapor and disassociating the oxygen and hydrogen, forcing these hot gases and products of combustion directly into a body of incandescent carbonaceous material, thereby oxidizing said material and forming carbon monoxide and forcing the resulting mixed gases out of the generator. 6th. The process of manufacturing gas which consists in first generating heating gas in a body of incandescent carbonaceous material, then carburetting such gas by forcing hydrocarbon liquid by means of highly heated gas or gaseous vapour into said body of carbonaceous material and mixing the resulting hydrocarbon vapour with said heating gas. 7th. The process of manufacturing gas which consists in forcing water and carbonaceous matter through heated receivers or conduits, burning the resulting gas or gaseous vapour and passing the hot products into a body of incandescent carbon, thereby making water-gas, and, at the same time, carburetting such gas by forcing hydrocarbon into said body of carbon. 8th. The process of manufacturing gas which consists in generating a gaseous vapour from an emulsion of water and carbonaceous matter in heated conduits, then burning such vapour and passing the resulting gaseous products into a body of incandescent carbonaceous material, thereby oxidizing the same and producing fixed gas, and at the same time separately generating hydrocarbon vapour and passing it into the body of incandescent carbonaceous material for carbureting said fixed gas and producing a high candle power illuminating gas. 9th. The process of manufacturing gas which consists in first generating a combustible gaseous vapour, then burning such vapour and passing the flame and hot products into the base of a body of incandescent fuel, thereby heating it to incandescence and then continuously passing the gaseous products up through said body of fuel for converting them into fixed gas, and at the same time burning gaseous vapour in contact with freshly supplied carbonaceous material at the top of the generating chamber, thereby distilling volatile hydrocarbons from said material and continuously passing them and the gaseous products down through the body of carbonaceous material and converting them into fixed gas, and finally conducting the gases off from the middle portion of the cupola or generating chamber. 10th. The process of generating gas which consists in supplying peat to a generating chamber, burning a combustible gaseous vapour in contact with the freshly supplied peat, thereby distilling volatile hydrocarbons therefrom and producing incandescent coke, and passing said hydrocarbons and the gaseous products down through said body of coke for converting them into fixed gas. 11th. A gas generator having a combustion chamber in which hydrocarbon is burned, with or without the addition of steam, and which connects with a cupola or compartment for containing carbon in fragments, which compartment is separated from the said combustion chamber by a series of columns or bars made of refractory material, the said column or bars being so constructed as to hold in place the broken carbon, while permitting the flame and gases from the burning hydrocarbon to impinge on the carbon, substantially as shown and described. 12th. In combination, with a closed cupola gas generator, containing carbonaceous matter an auxiliary combustion furnace, a series of columns or bars, forming flues or ports between said combustion furnace and the base of the cupola, a series of conduits or coils arranged in the combustion furnace, pipes for supplying the conduits with carbonaceous matter and water or steam, and a pipe connecting the conduits with the interior of said auxiliary combustion furnace for burning the gaseous vapour generated in said conduits, substantially as described. 13th. The combination, with a cupola gas generator or chamber for containing fuel, of an auxiliary combustion furnace, having gas and air supply pipes, and connecting with the base of the cupola, one or more auxiliary combustions chambers, having gas and air supply pipes, connecting with the top of the cupola and a gas take-off pipe connecting with the middle portion of the cupola, substantially as described. 14th. In combination with a gas generator, a device for forming fuel therein, under pressure, consisting of a cylinder provided with a supply opening, a piston, a gate valve and means for operating the piston and valve, substantially as described. 15th. A cupola gas generator, having at the bottom, a downward extension containing rotary supporting bars, provided with stuffing boxes in the walls for making tight joints and dipping at its lower end into a water seal in combination with a water seal tank, substantially as described. 16th. A furnace having its lower end closed by a water chamber, provided with a water supply pipe, and a discharge pipe leading therefrom and connecting with a pump for drawing off ashes, substantially as described. 17th. A cupola gas generating furnace constructed with a tight feeding device, and having its lower end closed by a water chamber or tank which is provided with a water supply pipe, and a discharge pipe leading therefrom, and connecting with a pump for drawing off ashes, whereby said furnace may be charged with fuel and the ashes removed without opening it and admitting external air, substantially as described. 18th. A cupola gas generating furnace for continuously manufacturing gas constructed with a tight fuel feeding device, and having its lower end closed by a tight water chamber or tank, which is provided with a water supply pipe, and a discharge pipe leading therefrom and connecting with a pump for drawing off ashes, said cupola also having means for continuously supplying it with a combustible carbonaceous material and oxygen for generating gas, substantially as described. 19th. In combination with the wall of the cupola furnace, a heating coil for generating carburetted hydrogen gas, supply pipes for hydrocarbon liquid and steam or vapour, and means for discharging the rich carburetted hydrogen gas from said coil into the cupola chamber for carburetting the water gas made in said chamber, substantially as described. 20th. A cupola gas generator having placed in its walls one or more coils of pipe for circulating and heating water, thereby utilizing heat which would be radiated and lost, in combination with a steam generator and pipes connecting it with the inlets and outlets of said coil or coils in the wall of the cupola, substantially as described. 21st. In combination with the cupola and its gas take-off pipe, a vertical steam generator SB, having a gas drum receiving hot gas from the cupola, a chamber above said drum, tubes connecting said drum and chamber forming in the top of the boiler, a steam drying chamer said steam generator also having a lower tube sheet, a seal chamber, a dip pipe and a gas outlet pipe, substantially as described. 22nd. In a gas apparatus a washer-scrubber constructed of sections or chambers bolted together and provided each with an annular through or seal cup, a dome or hood resting at its lower edge in said cup, said washer-scrubber having a gas inlet pipe at the bottom and an outlet pipe at the top, and also having a cold water supply pipe discharging upon the upper hood or dome, substantially as and for the purpose described. 23rd. The combination with the air inlet and valve chambers, *a*, having a valvet seat, of a conical valve bearing upward in said seat, a cord or chain connected to said valve and passing up over a pulley and connecting with a counterweight, such as *d*, substantially as described.

No. 51,241. Coin Controlled Machine.

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



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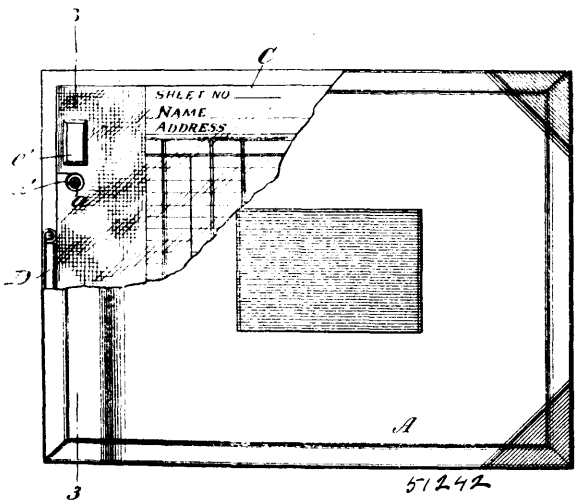
Isaac Richardson, Cleveland, and William Allen Tibbits, South Kirtland, both in Ohio, U.S.A., 6th February, 1896; 6 years. (Filed 17th October, 1895.)

Claim.—1st. In a coin controlled machine, a time-glass supported on pivots, in combination with an electric circuit, the time-glass being adapted to be partially turned on its pivots by the dropping of a coin in the machine to open the electric circuit, substantially as described. 2nd. In a coin controlled machine, a time-glass supported upon pivots and having an adjustable balance weight, the time-glass being adapted to be turned a partial revolution by the dropping of a coin into the machine, substantially as described. 3rd. In a coin controlled machine, a time-glass supported on pivots and having an adjustable balance weight, in combination with an electric circuit, the time-glass being adapted to be partially turned on its pivots by the dropping of a coin in the machine to open the electric circuit, substantially as described. 4th. In a coin controlled machine, a time-glass supported by pivots, a weight having adjustment longitudinally of the time-glass, an adjustable balance weight, and coin baskets at the ends of the time-glass, the time-glass being adapted to be turned through a partial revolution by the striking of a coin in one of the coin baskets, substantially as described. 5th. In a coin controlled machine, a pivoted frame inclosing a time-glass, baskets upon the ends of the pivoted frame, and a balance weight, substantially as described. 6th. In a coin-controlled machine, a pivoted frame, a weight for adjusting the weight of the frame longitudinally to its length, a basket at each end of the frame, and a balance weight, substantially as described. 7th. In a coin-controlled machine, an electric circuit, a pivoted frame carrying coin basket at its ends, a disc that rotates with the pivoted frame, electric contacts on the disc whereby the electric circuit is opened and closed by the turning of the disc, substantially as described. 8th. In a coin-controlled machine, an electric circuit, a time-glass carried by a pivoted frame having coin-baskets at its ends, a disc that rotates with the pivoted frame, electric contacts on the disc whereby the electric circuit is opened and closed by the turning of the disc, substantially as described. 9th. In a coin-controlled machine, a switch box having therein a pivoted balanced switch, guides below the switch, and a chute leading to the switch, substantially as described. 10th. In a coin-controlled machine, an electric circuit, a pivoted frame adapted to be turned through a partial revolution by the striking of a coin upon one end of the pivoted frame, and connection between the pivoted frame and the electric circuit whereby the circuit is opened and broken by the turning of the pivoted frame, substantially as described. 11th. In a coin-controlled machine, an electric circuit, a disc having contacts thereon, whereby the turning of the disc opens and breaks the electric circuit, and stops for limiting the turning of the disc, substantially as described. 12th. In a coin-controlled machine, an electric circuit, a coin switch, a crank lever operated by the coin switch, a disc having contrcts therein whereby the turning of the disc open and breaks the electric circuit, stops upon the periphery of the disc, and hooked rods operated by the crank lever that is operated by the coin switch to limit the turn of the disc, substantially as described. 13th. In a coin-controlled machine, a pivoted frame, a disc having stops on its periphery that turns with the pivoted frame, a coin-switch, a crank lever operated by the coin-switch, and hooked rods adapted to engage the stops on the disc by the movement of the crank lever, substantially as described.

No. 51,242. Binder and Sheets Therefor.

(*Serre-papier.*)



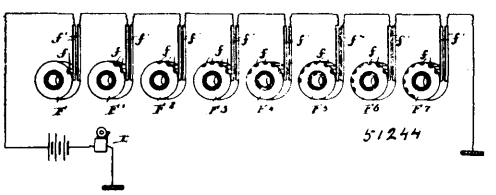
Robert James Copeland and Harry Edward Date, both of New York, State of New York, U.S.A., 6th February, 1896; 6 years. (Filed 19th November, 1895.)

Claim.—1st. In a binder, the combination of one or more extensible posts fixed to a suitable back and adapted to pass through an aperture or apertures in a sheet of paper or other fabric, and one or more removable posts adapted to pass through another aperture or other apertures in the sheet, substantially as set forth. 2nd. In a binder, the combination of one or more extensible posts, whose members are permanently connected together fixed to a suitable back and adapted to pass through an aperture or apertures in a sheet of paper or other fabric, and one or more removable posts adapted to pass through another aperture or other apertures in the sheet, substantially as set forth. 3rd. In a binder, the combination of one or more extensible posts fixed to a suitable back, and adapted to pass through an aperture or apertures in a sheet of paper or other fabric, and one or more removable posts engaging the back adapted to pass through another aperture or other apertures in the sheet, substantially as set forth. 4th. In a binder, the combination of one or more extensible posts fixed to a suitable back and adapted to pass through an aperture or apertures in a sheet of paper or other fabric, one or more removable posts adapted to pass through another aperture or other apertures in the sheet, and means for locking the posts in place, substantially as set forth. 5th. In a binder, the combination of one or more extensible posts fixed to a suitable back, said posts or each of them comprising a tube fixed at one end to the back and a stud sliding therein, said post or posts adapted to engage an aperture or apertures in a sheet of paper or other fabric, with one or more removable posts adapted to pass through another aperture or apertures in the sheet, substantially as set forth. 6th. A sheet of paper or other fabric adapted to be secured in a binder and provided with one or more open apertures and one or more closed apertures, said apertures adapted to engage posts in the binder whereby when the post or posts engaging the closed aperture or apertures are disengaged, the sheet may be withdrawn from the binder or inserted in its proper place in the binder without removing the post or posts engaging the open aperture or apertures from their proper places, substantially as set forth. 7th. A sheet of paper or other fabric adapted to be secured in a binder and provided with two closed and two open apertures, each adapted to engage a separate post of the binder whereby when the posts engaging the closed apertures are disengaged a sheet may be withdrawn from the binder or inserted in its proper place in the binder without removing the posts engaging from the open apertures from their proper places, substantially as set forth. 8th. The combination, with a binder provided with two posts, of a plurality of sheets of paper or other fabric, each sheet being provided with an open aperture and a closed aperture, one of said posts engaging the open apertures of the sheets and the other post engaging the closed apertures, and removable therefrom, whereby when the post engaging the closed apertures is removed from said apertures a sheet may be disengaged from the other post by slipping its open aperture off the other post and without displacing the remaining sheets from their proper position, substantially as set forth. 9th. The combination of a binder provided with a suitable back and two posts, with a plurality of sheets of paper or other fabric, each sheet being provided with an open aperture and a closed aperture, one of said posts passing through the open apertures of the sheets and so connected to the back that it cannot be withdrawn from said apertures, the other part passing through the closed apertures and adapted to be withdrawn therefrom, whereby when the post passing through the closed apertures is withdrawn therefrom a sheet may be withdrawn from the binder without displacing the other sheets by slipping its open aperture off the other post, substantially as set forth. 10th. The combination of a binder provided with a suitable back and two posts, with a plurality of sheets of paper or other fabric, each sheet being provided with an open aperture and a closed aperture, one of said posts being extensible and passing through the open apertures of the sheets and so connected to the back that it cannot be withdrawn from said apertures, the other post passing through the closed apertures and adapted to be withdrawn therefrom, whereby when the post passing through the closed apertures is withdrawn therefrom a sheet may be withdrawn from the binder without displacing the other sheets by slipping its open aperture off the other post, substantially as set forth. 11th. The combination, with a binder provided with two posts, of a plurality of sheets of paper or other fabric, each sheet being provided with an open aperture and a closed aperture, one of said posts engaging the open apertures of the sheets and the other post engaging the closed apertures and removable therefrom, and means for locking the posts in said apertures whereby when the post engaging the closed aperture is removed from said apertures a sheet may be disengaged from the other post by slipping its open aperture off the other post and without displacing the remaining sheets from their proper position, substantially as set forth. 12th. The combination of a binder provided with a suitable back and two posts, with a plurality of sheets of paper or other fabric, each sheet being provided with an open aperture and a closed aperture, one of said posts passing through the open apertures of the sheets and so connected to the back that it can not be withdrawn from said apertures, the other post passing through the closed apertures and adapted to be withdrawn therefrom, and means for locking the posts in said apertures wherby when the post passing through the closed apertures is withdrawn therefrom a sheet may be withdrawn from the binder without displacing the other sheets by slipping its open aperture off the other post, substantially as set forth. 13th. In a binder the combination of a back, two extensible posts each comprising a tube fixed to the back and a stud sliding therein, said studs being connected together at their outer ends, with two other posts each comprising a tube fixed to the back and a removable stud entering

said tube, and means for locking the posts in place, substantially as set forth. 14th. In a binder the combination of a back, two extensible posts each comprising a tube fixed to the back and a stud sliding therein, said stud being connected together at their outer ends, with two other posts each comprising a tube fixed to the back and a removable stud entering said tube, means for locking the posts in place, and a plurality of sheets of paper or other fabric each provided with two open apertures and two closed apertures, said open apertures being engaged by the extensible posts and said closed apertures being engaged by the removable posts, whereby when the removable posts are removed a sheet may be disengaged from the binder or inserted therein by slipping its open aperture off or on the extensible post, substantially as set forth. 15th. In a binder the combination of two backs, one or more extensible posts having their opposite ends connected to the backs, and adapted to pass through an open aperture or apertures of a sheet of paper or other fabric, and one or more posts adapted to pass through a closed aperture or apertures of said sheet add removable therefrom, and arranged to be secured in place between the covers, substantially as set forth.

No. 51,243. Coat and Jacket Supporting Device.

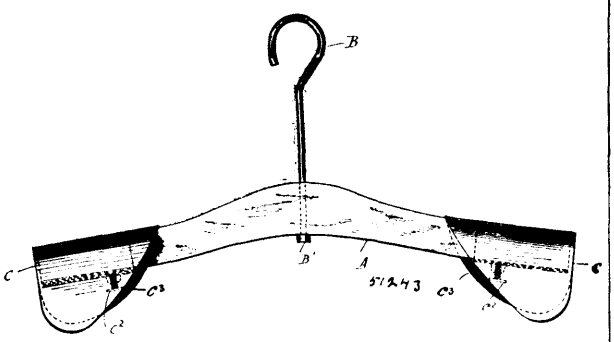
(*Support pour habits.*)



Arthur Frank May and John Henry Cartwright, both of Leicester, England, 6th February, 1896; 6 years. (Filed 27th Dec. 1895.)

Claim.—1st. In a coat supporting device, the combination of a bar, shoulder plates or equivalent thereon and sleeves or other means for adjusting and fixing the said plates on the said bar and relativiely to each other, substantially as described. 2nd. A coat supporting device comprising a bar A, hook B, or equivalent means attached thereto, shoulder devices C, on the said bar adjustable relatively to each other, substantially as and for the purpose described. 3rd. The improved coat supporting device consisting of bar A, hook B, shoulder plates C, sleeves C^1, set screws C^2, substantially as described.

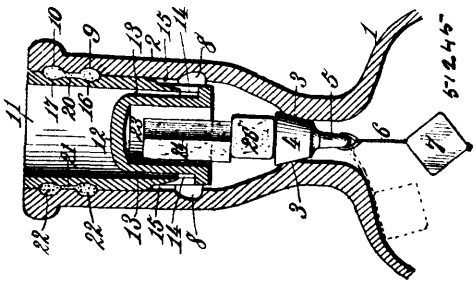
No. 51,244. Automatic Safety Device for Electric Circuits. (*Appareil automatique de sureté pour circuits électriques.*)



Lewis G. Rowand, Camden, New Jersey, U.S.A., 6th February, 1896; 6 years. (Filed 23rd Dec., 1895.)

Claim.—1st. The combination with an electric circuit, of a normally closed switch in said circuit, an electric device in a closed shunt with said circuit and adapted to control said switch, the resistance of said device being greater than the resistance of the circuit, the arrangement being such that when the resistance of the circuit is unduly increased said device is energized and said switch is opened. 2nd. The combination with an electric circuit, of a normally closed switch at the commencement of said circuit, an electric device in a closed shunt with said circuit and adapted to control said switch, the resistance of said device being greater than the resistance of the circuit, the arrangement being such that when the resistance of the circuit is unduly increased said device is energized and said switch is open. 3rd. The combination with an electric circuit, of a plurality of normally closed switches in said circuit, each switch being controlled by an electric device in a closed shunt with said circuit, the resistance of which device being greater than the resistance of the circuit, the arrangement being such that when any device is energized its corresponding switch is operated to open the circuit at said switch. 4th. In combination with multiple electric circuits, each being provided with a normally closed switch, an electric device in a closed shunt with its corresponding circuit and controlling its corresponding switch, the resistance of each of said devices being greater than the resistance of its corresponding circuit, the arrangement being such that when any of said devices is energized its corresponding switch is operated and its circuit broken. 5th. In combination with multiple electric circuits each being provided at its commencement with a normally closed switch, an electric device in a closed shunt with its corresponding circuit, and controlling its corresponding switch, the resistance of each of said devices being greater than the resistance of its corresponding circuit, the arrangement being such that when any of said devices is energized its corresponding switch is operated, and its circuit broken. 6th. In combination with multiple electric circuits, a plurality of normally closed switches in each of said circuits, each switch being controlled by an electric device in a closed shunt with its corresponding circuit, the resistance of each of said devices being greater than the resistance of its corresponding circuit, the arrangement being such that when any device is energized its corresponding switch is operated to open its corresponding circuit at said switch. 7th. In combination with an electric circuit, a normally closed switch in said circuit, an electric device in a closed shunt with said circuit and adapted to control said switch, the resistance of said device being greater than the resistance of the circuit, the arrangement being such that when resistance of the circuit is unduly increased said device is energized and said switch is opened, a circuit independent of the first mentioned circuit, a signalling device in said circuit adapted to be thrown into action when the electric device is energized, and a receiving device in said circuit. 8th. The combination with an electric circuit, of a plurality of normally closed switches in said circuit, each switch being controlled by an electric device in a closed shunt with said circuit, the resistance of which device being greater than the resistance of the circuit, the arrangement being such that when any device is energized its corresponding switch is operated to open the circuit at said switch, a circuit independent of the first mentioned circuit, signally devices equal in number to said switches, and the corresponding signalling device, being adapted to be thrown into action when its corresponding switch is opened, and a receiving device in said circuit. 9th. In combination with multiple electric circuits, each being provided with a normally closed switch, an electric device in a closed shunt with its corresponding circuit and controlling its corresponding switch, the resistance of each of said devices being greater than the resistance of its corresponding circuit, the arrangement being such that when any of said devices is energized its corresponding switch is operated and its circuit broken, a circuit independent of the first mentioned circuit, signalling devices equal in number to said switches, and the corresponding signalling device being adapted to be thrown into action when its corresponding switch is opened, and a receiving device in said circuit. 10th. In combination with multiple electric circuits, a plurality of normally closed switches in each of said circuits, each switch being controlled by an electric device in a closed shunt with its corresponding circuit, the resistance of each of said devices being greater than the resistance of its corresponding circuit, the arrangement being such that when any device is energized its corresponding switch is operated to open its corresponding circuit at said switch, a circuit independent of the first mentioned circuit, signalling devices equal in number to said switches and the corresponding signalling device being adapted to be thrown into action when its corresponding switch is opened, and a receiving device in said circuit. 11th. The combination, with an electric circuit of a normally closed switch in said circuit, an electric device in a closed shunt with said circuit and adapted to control said switch, the resistance of said shunt circuit being greater than the resistance of the circuit, the arrangement being such that when the resistance of the circuit is unduly increased said device is energized and said switch is opened. 12th. The combination with an electric circuit of a plurality of normally closed switches in said circuit, each switch being controlled by an electric device in a closed shunt with said circuit, the resistance of which shunt circuits being greather than the resistance of the circuit, the arrangement being such that when any device is energized its corresponding switch is operated to open the circuit at said switch. 13th. In combination with an electric circuit, a normally closed switch in said circuit, an electric device in a closed shunt with said circuit and adapted to control said switch, the resistance of said shunt circuit being greater than the resistance of the circuit, the arrangement being such that when the resistance to the circuit is unduly increased said device is energized and said switch is opened, a circuit independent of the first mentioned switch, a translating device in said circuit, adapted to be thrown into action when the electric device is energized, and a receiving device in said circuit. 14th. The combination with an electric circuit, of a plurality of normally closed switches in said circuit, each switch being controlled by an electric device in a closed shunt with said circuit, the resistance of which shunt circuits being greater than the resistance of the circuit, the arrangement being such that when any device is energized its corresponding switch is operated to open the circuit at said switch, a circuit independent of the first mentioned circuit, translating devices equal in number to said switches, and the corresponding translating device being adapted to be thrown into action when its corresponding switch is opened, and a receiving device in said circuit.

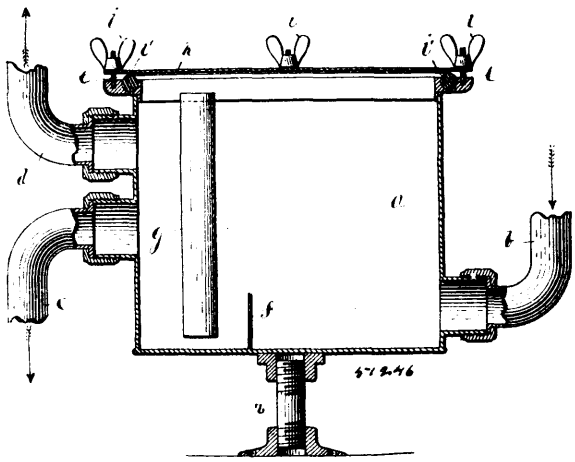
No. 51,245. Device to Prevent the Refilling of Bottles. (*Appareil pour empêcher le remplissage des bouteilles.*)



Patrick Bownley, New York, State of New York, U.S.A., and Robert Bustin, St. John, New Brunswick, Canada, 6th February, 1896; 6 years. (Filed 9th December, 1895.)

Claim.—1st. In devices for preventing the refilling of bottles, a buoyant locking device located intermediate a stopper valve and a permanently secured outer stopper having passages, substantially as described. 2nd. In devices for preventing the refilling of bottles, the combination with a bottle neck having a valve-seat therein, and a stopper permanently secured in the outer portion of the bottle neck and provided with passages, of a valve fitted to the said valve-seat of the bottle neck and a weight suspended from said valve, substantially as described. 3rd. In devices for preventing the refilling of bottles, the combination with a bottle neck having a valve-seat and valve therein and an internal annullar groove intermediate said valve seat and the outer end of the bottle neck, of a tubular stopper permanently secured in the outer portion of the bottle neck and having an outer open end and an inner closed end, the said closed inner end of said stopper being extended within the tubular portion of the stopper to form a crown surrounded by an annular space and the said tubular portion of the stopper being reduced in diameter at its inner end and provided with a series of openings having their upper edges beveled upward and outward to an annular space between the said stopper and bottle neck and above the annular groove therein, whereby obstruction is presented to the entrance of a wire to insert the stopper valve, substantially as described. 4th. In devices for preventing the refilling of bottles, the combination with a bottle neck having near its outer end one or more internal annular grooves, of a tubular stopper provided with one or more internal annular grooves, of a tubular stopper proviped with one or more coinciding with the said internal annular groove or grooves of the bottle neck, for reception of cementing material to permanently secure the said stopper, substantially as described. 5th. In devices for preventing the refilling of bottles, the combination with a bottle neck having a valve seat and valve therein, and a stopper permanently secured in the bottle neck and provided with passages, of a buoyant locking device intermediate the said stopper and valve, and adapted to be floated by introduction of a liquid to the bottle neck and thereby extended between and in bearing contact with said valve and stopper to prevent unseating of the valve by jolting, substantially as described. 6th. In devices for preventing the refilling of bottles, the combination of a bottle neck having valve seat 3, and internal annular groove 8, the valve 4, the tubular stopper 11 permanently secured in the bottle neck above said valve, and provided at its inner end with crown 12 and openings 14, and the buoyant bodies 24 and 26 flexibly connected and located between the valve 4 and 12, substantially as described.

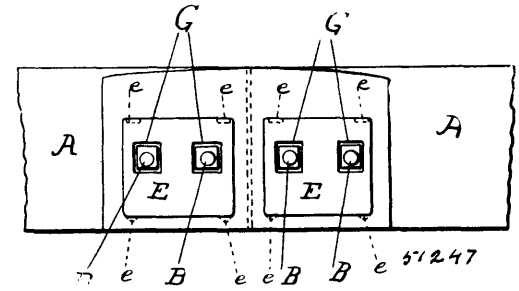
No. 51,246. Grease Trap. (*Purge à graisse.*)



Edward H. Donahoe, Peoria, Illinois, U.S.A., 6th February, 1896; 6 years. (Filed 10th August, 1895.)

Claim.—In a grease trap, a receptacle having an inlet opening at one end near the bottom thereof, a pipe leading thereto arranged outside the vertical lines of the receptacle, an outlet opening at the other end near the top thereof, a partition arranged across said receptacle and dividing it into two compartments, said partition extending from a horizontal plane above the surface of the water in said receptacle to a plane below the surface, there being free and unobstructed communication between said compartments above and below said partition for the circulation of air and the flow of the water, a deflecting plate in one of said compartments arranged between the inlet opening and the said partition, and extending up from the bottom of said compartment and ending at points in the horizontal planes of the inlet opening, and a vent pipe, substantially as set forth.

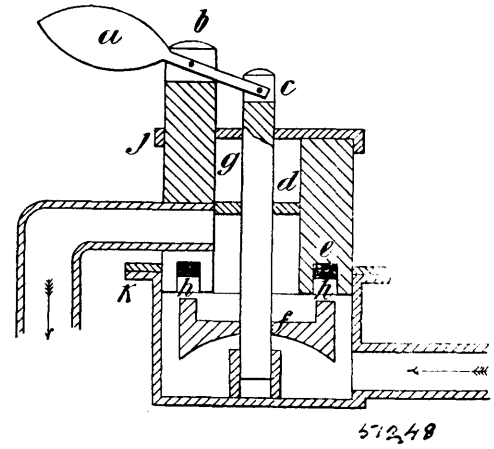
No. 51,247. Fish-Plate. (*Eclisse.*)



Anthyme Joseph Roy et Joseph Boucher tous deux de l'Isle Verte, Québec, Canada, 6 fevrier, 1896; 6 ans. (Filé le 23 novembre, 1895.)

Résumé.—Une éclisse D, dont le sommet se trouve exactement à la hauteur du dessus des rails, combinée avec la pièce métallique E, pourvue des pointes *e*, et des trous G, servant d'arrête-écrou, le tout tel que décrit et pour les fins indiquées.

No. 51,248. Tap. (*Robinet.*)

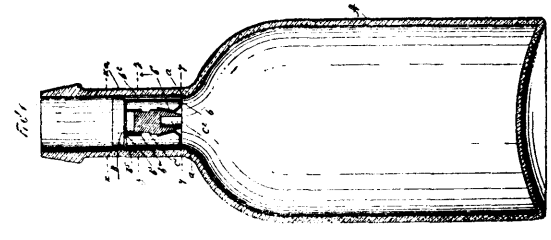


Arthur Exell Mears, and William Henry Last, both of Working, Surrey, England, 7th February, 1896; 6 years. (Filed 31st October, 1895.)

Claim.—A self closing tap operated by weighted lever, actuating piston rod provided with piston or cup working in groove or recess to close the tap, substantially as hereinbefore set forth and described.

No. 51,249. Non-Fillable Bottle.

(*Appareil pour empêcher le remplissage des bouteilles.*)

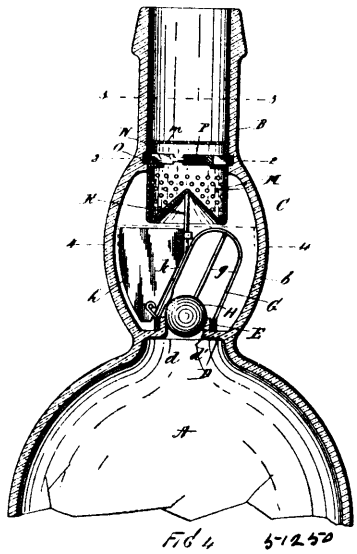


William Conner Sherman, Orlando, Florida, U.S.A., 7th January, 1896; 6 years. (Filed 31st December, 1895.)

Claim.—1st. In a non-fillable bottle, the neck of which is provided with an inwardly directed annular flange, the cylindrical plug or attachment secured within the neck of said bottle and adapted to rest upon the annular flange, said attachment being provided with an automatic operating valve. 2nd. A bottle having an annular inner flange upon the neck thereof, the cylindrical attachment or plug adapted to open said flange, said plug having a vertically movable valve and the longitudinal top or opening in the periphery of said plug to admit air within the bottle. 3rd. A bottle having an inner annular flange, the cylindrical plug or attachment secured within the neck of the bottle upon said flange, the annular flange upon the top of said plug and the flaring valve seat in the bottom of the same, and the valve secured within the same and adapted to close the opening in the lower portion of said attachment. 4th. A bottle having an inner annular flange the cylindrical plug or attachment secured within the neck of the bottle, and having a flaring valve seat, the movable valve secured between the flaring valve seat and the depending annular flange, and the radial slots in the central opening top of said attachment, which prevents the re-filling of the bottle.

No. 51,250. Non Refillable Bottle.

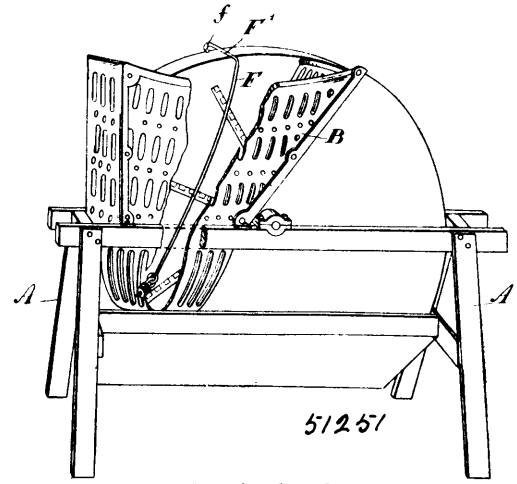
(*Appareil pour empêcher le remplissage des bouteilles.*)



William Murray, James Archibabld Johnston, and Joseph Kellow, jr., all of Laurel Hill, New York, U.S.A., 7th February, 1896; 6 years. (Filed 10th Jan., 1896.)

Claim.—1st. A bottle, or similar vessel, provided with a neck, having a partition plate at the bottom thereof, in which is formed a central opening, around which is formed an upwardly directed annular flange, a cage, the lower end of which surrounds said flange and is free to revolve thereon, said cage being held at an angle thereto, a weight secured to the inner inclined side of said cage, a ball valve located therein, and a central vertical rod also secured to said cage, said rod being pivotally supported at its upper end, subtantially as shown and described. 2nd A bottle or similar vessel, provided with a neck having a partition plate at the bottom thereof, in which is formed a central opening, around which is formed an upwardly directed annular flange, a cage, the lower end of which surrounds said flange and is free to revolve thereon, said cage being held at an angle thereto, a weight secured to the inner inclined side of said cage, a ball valve located therein, and a central vertical rod also secured to said cage, said rod being pivotally supported at its upper end, and a tube secured in the neck, the lower end of which forms said pivotal support, and the upper end of which is closed, the side walls of said tube, and the upper end thereof, being alto perforated, substantially as shown and described. 3rd. A bottle or other vessel provided with a partition plate, at the bottom of the neck thereof, having a central port or opening around which is formed an upwardly directed flange, a cage mounted on said partition plate, the lower end of which surrounds said flange and is free to revolve thereon, a ball valve located in said cage, and adapted to close said port or opening said cage being supported at an angle to said port or opening, and provided at its inner inclined side with a weight, which operated to hold the cage so that the valve will roll to the bottom thereof, when the bottle is tilted or held sidewise, substantially as shown and described. 4th. A bottle or other vessel provided with a partition plate, at the bottom of the neck thereof, having a central port or opening around which is formed an upwardly directed flange, a cage mounted on said partition plate, the lower end of which surrounds said flange and is free to revolve thereon, a ball valve located in said cage, and adapted to close said port or opening, said cage being supported at an angle to said port or opening, and provided on its inner inclined side with a weight, which operates to hold the cage so that the valve will roll to the bottom thereof, when the bottle is tilted or held sidewise, said cage being also provided with a central upwardly directed rod, the upper end of which is pivotally supported substantially as shown and described. 5th. A bottle, or similar vessel, provided with a neck having a partition plate at the bottom thereof, in which is formed a central opening, around which is formed an upwardly directed annular flange, a cage, the lower end of which surrounds said flange and is free to revolve thereon, said cage being held at an angle thereto, a weight secured to the inner inclined side of said cage, a ball valve located theirein, and a central vertical rod also secured to said cage, said rod being pivotally supported at its upper end, and a tube secured in the neck, the lower end of which forms said pivotal support, and the upper end of which is closed, the side walls of said tube, and the upper end thereof, being also perforated, said tubular attachment being held in position by means of a cross bar which passes therethrough, and the ends of which project into an annular groove formed in the inner walls of the neck of the bottle, said cross bar being composed of sections, one of which is provided with a central bore at its inner end, and a spring located therein, and the other of which is provided a shank which projects into said central bore, substantially as shown and described.

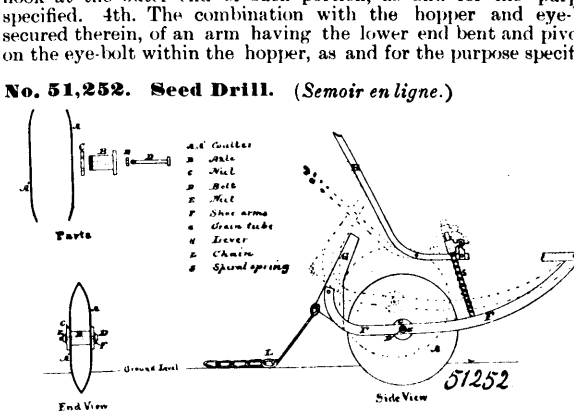
No. 51,251. Root Cutter. (*Coupe-racine.*)



John Sillick, Culross, Ontario, Canada, 7th February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—1st. In a root cutter, the combination with the hopper, of an internal arm pivoted at the lower part of the hopper and extending upwardly, as shown and for the purpose specified. 2nd. In a root cutter, the combination with the hopper, of an internal arm pivoted at the lower part of the hopper extending upwardly and provided with a bent upper portion, as shown and for the purpose specified. 3rd. In a root cutter, the combination with the hopper, of an internal arm pivoted at the lower part of the hopper and extending upwardly and provided with a bent upper portion and a hook at the outer end of such portion, as and for the purpose specified. 4th. The combination with the hopper and eye-bolt secured therein, of an arm having the lower end bent and pivoted on the eye-bolt within the hopper, as and for the purpose specified.

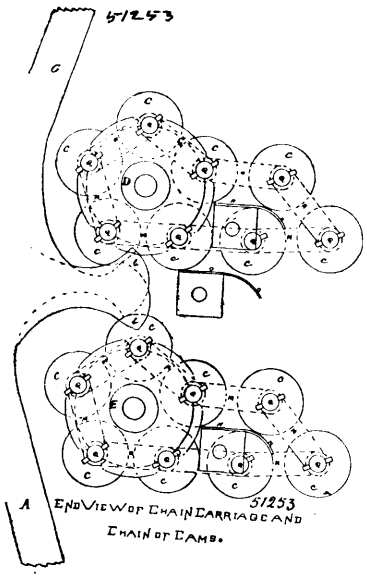
No. 51,252. Seed Drill. (*Semoir en ligne.*)



Everard Percival Ferguson, Arthur, Manitoba, Canada, 7th February, 1896; 6 years. (Filed 31st December, 1895.)

Claim.—1st. The combination of parts A A, to form a coulter, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the coulter A A, with the axle B, and the bolt D, and the shoe arms F F, substantially as and for the purpose hereinbefore set forth.

No. 51,253. Loom. (*Métier à tisser.*)

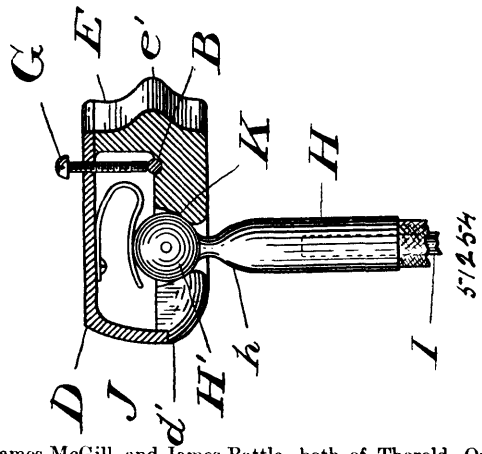


Arthur John Davidson and John McDougald, both of Westville, Nova Scotia, Canada, 7th February, 1896; 6 years. (Filed 14th January, 1896.)

Claim.—1st. In mechanism for actuating the heddles and shuttle boxes of looms, the combination of the corrugated cylinders D and E, each comprising two sections X and Y, having flanges *a*, provided with slots *d*, circumferentially a shaft V, connecting said two sections, said shaft carrying a cog-wheel *z*, and journalled at the ends in suitable standards, substantially as and for the purpose set forth. 2nd. In mechanism for actuating heddles and shuttle boxes of looms, the combination of two chains of revolving discs C, connected rotatively by links M, sleeved on the journals, the corrugated cylinders D and E, meshing with said discs, and the aprons N and O, guiding said discs, as set forth. 3rd. In mechanism for actuating heddles and shuttle boxes of looms, the combination of the pivoted jacks A, having an arm *h*, and rotary discs C, connected by an endless chain of links M, rocking said jacks, and cords connecting the jacks and heddles, for opening the warp to pass the shuttles, as set forth. 4th. In mechanism for actuating heddles and shuttle boxes of looms, the combination of the oscillating jacks A, having an actuating arm *b*, and an arm G, having a segment gear *h*, the series of rolling discs C, engaging said arms *h*, and a vibrating gear P, and lever F, operated by said segment gear *h*, substantially as and for the purpose set forth. 5th. In mechanism for actuating the heddles and shuttle boxes of looms, the combination with the jacks A, having an arm *h*, and arm G, provided with a segment gear *h*, of the vibrating gear P, meshing with said gear *h*, and centrally pivoted to rock, the horizontal levers F, pivoted at one end to the vibrating gear P, and chain belts connecting the other end to the shuttle boxes, for raising and lowering said shuttle boxes, substantially as set forth.

No. 51,254. Electrical Conductor.

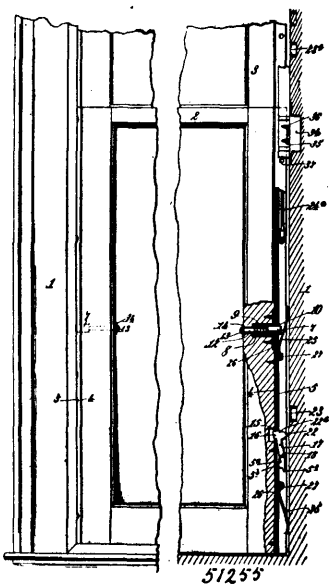
(*Conducteur électrique pour lumières à arc.*)



John James McGill, and James Battle, both of Thorold, Ontario, Canada, 7th February, 1896; 6 years. (Filed 11th January, 1896.)

Claim.—1st. In a device of the class specified, the combination with the insulator, of a ball and socket metal connection between the end of the loop line wire leading to the lamp and the wire carried by the insulator leading from the line, substantially as described and specified. 2nd. In a device of the class specified, the combination with the insulator A, of the wire B, jaw E, connected with the wire B, and having a socket K formed therein, ball H^1, connected with the wire I, and seated in said socket K, substantially as described and specified. 3rd. In a device of the class specified, the combination with the insulator A, of the wire B, jaw E, slotted at d^1, connected with the wire B, and having a socket K, formed therein, ball H^1, connected with the wire I and seated in said socket K, substantially as described and specified. 4th. In a device of the class specified, the combination with the insulator A, grooved at *a*, of the wire B, jaw E, slotted at d^1, connected with the wire B, and having a socket K formed therein, ball H^1, connected with the wire I, and seated in said socket K, and spring J adapted to bear on the ball H^1, substantially as described and specified. 5th. In a device of the class specified, the combination with the insulator A, of the wire B, upper jaw D and lower jaw E, slotted at d^1, and suitably connected to the upper jaw, metal cap H with ball H^1, and hollow shank and neck *h*, socket K, contact screw G, spring J, and loop line wire I, substantially as described and specified. 6th. In a device of the class specified, the combination with the grooved insulator A, of the wire B, upper jaw D, and lower jaw E, slotted at *d*, fitting into each other at the shoulder *d*, and slot d^1, and provided with the hole *e* for the wire B, insulating sheet C, clamping screws F, contact screw G, metal cap H, with hollow shank and neck *h*, and ball H^1, socket K, spring J, suitably connected to the upper jaw, and loop line wire I, substantially as described and specified. 7th. In a device of the class specified, the combination with the insulator A, grooved at *a*, of the wire B, upper jaw D, and lower jaw E, slotted at *d*, and having a projection c^1 formed thereon to fit the groove in the insulator, the wire B adapted to pass through the hole *e*, insulating sheet C, clamping screws F, contact screw G, metal cap H, with hollow shank and neck *h*, and ball H^1, socket K, spring J suitably connected to the upper jaw and loop line wire I, substantially as described and specified.

No. 51,255. Window Sash. (*Cadre de châssis.*)

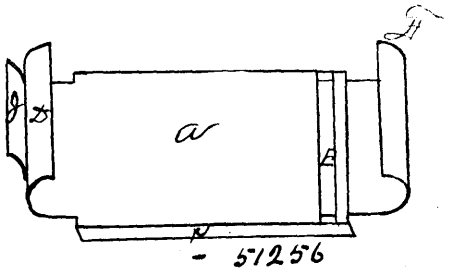


Philip Stover Riddelle, Woodstock, Virginia, U.S.A., 7th February, 1896; 6 years. (Filed 14th January, 1896.)

Claim.—1st. The combination with a slide-bar and a sash-frame pivotally mounted on the slide-bar, of a latch carried by the slide-bar and adapted to engage the sash-frame and hold it locked to the slide-bar, and means, substantially as described for causing the latch to automatically move out of engagement with the sash-frame when the latter and the slide-bar reach a certain point in their ascending or descending movements. 2nd. The combination of a slide-bar, a sash-frame pivotally mounted on the slide-bar, a latch carried by the slide-bar, adapted to engage and lock the sash-frame and having an arm or projection, and a window-frame having a recess to receive the said arm or projection of the latch and into which said arm or projection springs when the sash-frame and the slide-bar reach a certain point in their ascending or descending movements 3rd. The combination of a slide-bar, a sash-frame pivotally mounted on the slide-bar, a latch carried by the slide-bar and adapted to engage and lock the sash-frame, a spring acting upon the latch and tending to move the same out of engagement with the sash, and a window-frame acting upon a part of the latch to hold it in engagement with

the sash-frame and provided with a recess into which a part of the latch springs when the sash-frame and the slide-bar reach a certain point in their ascending or descending movements. 4th. The combination with a slide-bar and a sash-frame pivotally mounted on the slide-bar, of a pivoted, swinging latch mounted on the slide-bar and adapted to engage and lock the sash-frame thereto, and means, substantially as described, for causing the latch to swing on its pivoted bearing and automatically move out of engagement with the sash-frame when the latter and the slide-bar reach a certain point in their ascending or descending movements. 5th. The combination with a channelled slide-bar and a sash-frame pivotally mounted on said slide-bar, of a latch pivotally mounted in the channelled slide-bar and adapted to engage and lock the sash thereto, and means, substantially as described, for causing the pivoted latch to swing and automatically move out of engagement with the sash-frame when the latter and the channelled slide-bar reach a certain point in their ascending or descending movements. 6th. The combination with a slide-bar and a sash-frame pivotally mounted on the slide-bar, of a latch pivoted to the slide-bar and having a locking-head and an arm or projection, a spring acting on the latch to press the locking-head out of engagement with the sash-frame, and a window-frame acting on the arm or projection of the latch to hold the locking-head in engagement with the sash and provided with a socket into which the arm or projection of the latch springs when the sash-frame and the slide-bar reach a certain point in their ascending or descending movements. 7th. The combination, with a channelled slide-bar and a sash-frame pivotally mounted on the slide-bar, of a latch pivotally mounted on the channelled slide-bar and having a locking-head and a bevelled arm or projection, a spring acting on the latch to press the locking head thereof out of engagement with the sash-frame and a window-frame having a socket into which the bevelled arm or projection of the latch springs when the said arm or projection registers with said socket. 8th. The combination, with a channelled slide-bar, a sash-frame pivotally mounted on said slide-bar, and a window-frame, of anti-rattling friction springs, each composed of a flattened metallic plate having reversely curved portions at its extremities, one curved portion being adjustably secured to the channelled slide-bar and the other curved portion constituting a runner or shoe which bears directly against the surface of the jamb of the window-frame. 9th. The combination, with a channelled slide-bar, a sash-frame pivotally mounted on the slide-bar, and a window-frame, of anti-rattling friction springs, each composed of a flattened metallic plate having reversely curved portions at its ends, one of which portions bears directly against the jamb of the window-frame and the other against the surface of the slide-bar, and an adjustable nut and bolt engaged with the said spring in just a position to the curved portion which bears against the slide-bar for the purpose of adjusting or varying the tension of the spring.

No. 51,256. Ice Creeper. (*Grappin.*)



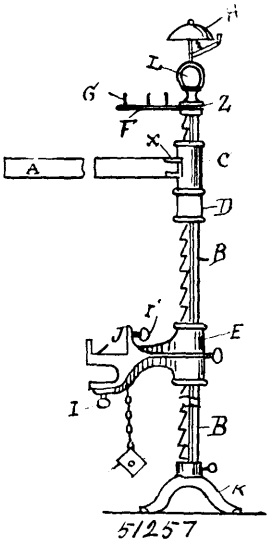
Richard S. Walsh, Quyon, Quebec, Canada, 7th February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—1st. An ice creeper comprising a flat heel plate A, with the side of said heel plate turned down C so as to catch in the ice, also a side clamp D formed by turning the end of said heel plate up, D to catch on the side of the heel, and a slot cut in the opposite end E, for opposite clamp F to pass through, as shown and described for the purpose set forth. 2nd. A side clamp F constituted so as to slide back and forth in the slot E, in said heel plate A, and fixed with several slots H, cut in the end passing under the said heel plate A for adjusting said creeper to fit any size of a boot, as shown and described for the purpose set forth. 3rd. A clasp I, made to pass through the slots H, and so bent as to pass up round the side of the clamp D in such a way as to hold it, substantially as described, as and for the purpose hereinbefore set forth

No. 51,257. Table. (*Table.*)

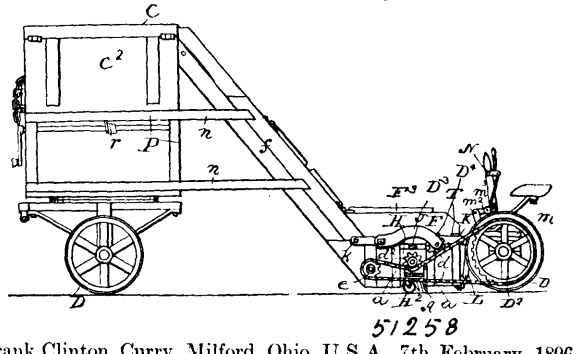
George Shear and Andrew W. Quinlan, both of Joliet, Illinois, U.S.A., 7th February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—In an adjustable table, the combination of the post B having the series of downwardly projecting bevel-faced ratchet-teeth, and having the longitudinal groove Y, the base K for supporting said post, the collar D having its lug W on its inner wall and formed to fit the bevel face of said ratchet teeth, the collar C having the integral arm X having a longitudinal groove, table board A, fitting said groove, bracket E having the clamping jaws J, I,



and the movable plate Z having the shelf F, the cushion L and the bell H, substantially as and for the purposes set forth.

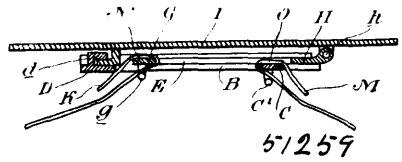
No. 51,258. Street Sweeper. (*Balayeuse de rue.*)



Frank Clinton Curry, Milford, Ohio, U.S.A., 7th February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—1st. In a street sweeper, the combination of a forward truck, a deposit-box mounted thereupon, an inclined casing connected therewith, a cylinder brush and an endless carrier within said casing, a rear truck, bars K connecting the lower end of the casing and the rear truck, bars L pivoted to the lower end of the casing, and means upon the rear truck for elevating and lowering said latter bars, all substantially as described. 2nd. In a sweeper, the combination of a casing, a cylinder brush and an endless carrier suitably mounted therein, said brush being journalled within bearings, which latter are mounted to slide vertically in the sides of the casing, a caster for each bearing, and suitable mechanism for operating the brush and carrier. 3rd. In a sweeper, a cylinder brush mounted on bearings, a casing for said brush, said bearings engaging between flanges attached vertically to the sides of the casing, a caster attached to each bearing with detachable plates interposed between the top of said caster and the bottom of the bearing-blocks, trucks on which said casing is mounted, and suitable mechanism for rotating said brush. 4th. In a sweeper, the combination of a casing a cylinder brush mounted on bearings therein, the latter being mounted to slide vertically in the sides of the casing, a caster for each bearing, an elastic packing interposed between the top of each bearing and the casing, and a suitable mechanism for rotating the brush. 5th. In a sweeper, the combination of a casing, a cylinder brush mounted on bearings therein, the latter being mounted to slide vertically in the sides of the casing, a caster attached to each bearing, an elastic packing interposed between the top of each bearing and the casing, and means for adjusting each bearing block on its caster, for the purposes set forth. 6th. In a sweeper, the combination of a forward truck, a deposit box mounted thereupon, an inclined casing connected therewith, an endless carrier and a cylinder brush within said casing, a rear truck, bars K connecting the lower end of the casing and the rear truck, stop flanges T upon the casing for the bars K, and suitable mechanism mounted upon said rear truck and attached to said casing for elevating and lowering the same, and suitable mechanism for operating said brush and said carrier, all substantially as described.

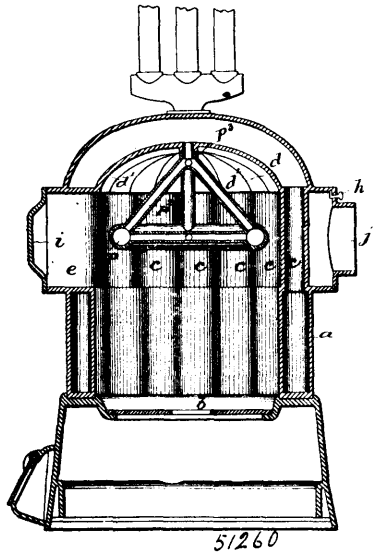
No. 51,259. Buckle. (*Boucle.*)



Elodie Meunier dit Lagassée, Montreal, Quebec, Canada, 7th February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—1st. In a double grip or buckle having two opposite sliding sections, a cover or clamp I secured to one of the sliding sections and held down by means of an L projection or hook engaging with a similar one on the other section, substantially as described and for the purposes set forth. 2nd. In a double grip or buckle, the combination of two opposite sliding sections having two cross-bars each equally spaced, and one section sliding in the sides of the other with a cover or clamp I, secured to one of the sliding sections and held down by means of an L projection or hook engaging with a similar one on the other section, substantially as described and for the purposes set forth.

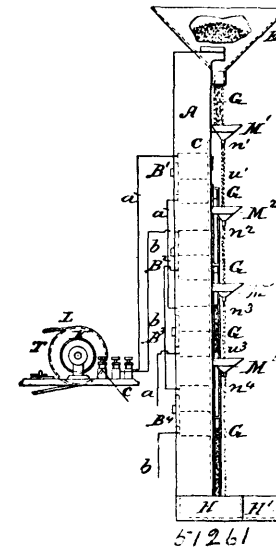
No. 51,260. Boiler. (*Chaudières.*)



John Albert Fish, Melrose, Massachusetts, U.S.A., 7th February, 1896; 6 years. (Filed 16th January, 1896.)

Claim.—1st. An apparatus of the character specified, comprising a double-walled water chamber surrounding a fire-box, a plurality of vertical tubes extending upwardly from said chamber and partially surrounding the upper portion of the fire-box, two of said tubes being separated by a space which is wider than the spaces between the other tubes and constitutes a fuel-receiving opening at one side of the fire-box, a casing surrounding said tubes and provided with a door for said fuel opening, said casing being separated from the tube by a flue-space, inter tube passages through which the products of combustion pass from the fire-box to said flue-space, an outlet communicating with said flue for the escape of the products of combustion, and inter-tube webs or partitions interposed between said outlet and the fire-box and co-operating with said inter-tube passages in preventing the products of combustion from passing directly from the fire-box to the outlet. 2nd. An apparatus of the character specified, comprising a double-walled water chamber surrounding a fire-box, a plurality of vertical tubes extending upwardly from said chamber and partially surrounding the upper portion of the fire-box, two of said tubes being separated by a space which is wider than the spaces between the other tubes and constitutes a fuel-receiving opening at one side of the fire-box, a casing surrounding said tubes and separated therefrom by a flue-space which receives the products of combustion through inter-tube spaces, an outlet communicating with said flue, inter-tube webs or partitions interposed between said outlet and the fire-box, a casing surrounding the fuel opening and separating it from said flue-space, and a door fitted to said casing. 3rd. An apparatus of the character specified, comprising a double-walled water chamber surrounding a fire-box, a plurality of vertical tubes extending upwardly from said chamber and connected in a series by webs or partitions, said tubes and partitions partially surrounding the upper portion of the fire-box, the end tubes of the series being separated to form an opening, tubes within said opening separated from each other by a central fuel-supply opening and from the end tubes of the series by side openings a dome surmounting said tubes, and a casing surrounding the tubes and provided at one side with a door coinciding with the said central opening and at the opposite side with an outlet, the said casing and connected tubes forming a flue which communicates with the fire-box through said side openings and with the chimney through said outlet. 4th. An apparatus of the character specified, comprising a double-walled water chamber surrounding a fire-box, a series of vertical tubes extending upwardly from said chamber and connected by webs or partitions extending across the spaces between the tubes, said tubes being interrupted by an opening at one side of the fire-box, a hollow dome above the said tubes, said dome having a series of heat-absorbing ribs or projections on its under side, and a casing co-operating with the tubes and partitions in forming a flue which conducts the products of combustion along the outer sides of said tubes.

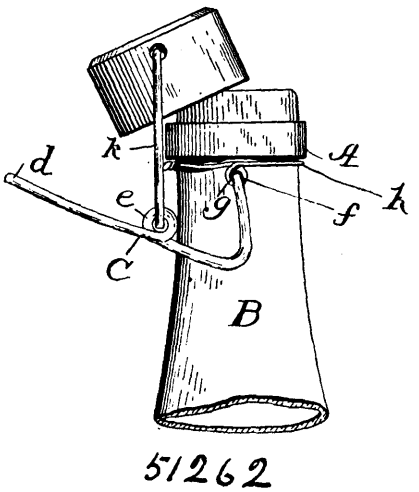
No. 51,261. Magnetic Separator. (*Séparateur magnétique.*)



Henry Arden, Chicago, Illinois, U.S.A., 7th February, 1896; 6 years. (Filed 15th January, 1896.)

Claim.—1st. In a magnetic separator, the electro magnets B^1, B^2 whose poles form a magnetic field within which a stream of sand falls, troughs D^1, D^2 without the line of fall of said sand, conductors *c*, *a* and *c*, *b* over which electricity passes when circuits are closed, and the commutator T, substantially as described. 2nd. In a magnetic separator, the electro magnets B^1, B^2 whose poles form a magnetic fluid within which a stream of sand falls, troughs D^1, D^2 without the line of fall of the sand, conductors *c*, *a* and *c*, *b* over which electricity passes when circuits are closed, commutator T together with one or more hoppers M^1, M^2, substantially as described. 3rd. In a magnetic separator, the electro magnets B^1, B^2 in different horizontal planes whose poles form a magnetic field within which a stream of sand falls, troughs D^1, D^2 without the line of fall of the sand, conductors *c*, *a* and *c*, *b* over which electricity passes when circuits are closed, and commutator T, in combination with a supplemental magnet in the same horizontal plane as the lower magnet magnetized when said lower magnet is demagnetized, substantially as described. 4th. In a magnetic separator the magnets B^1, B^2, B^3, B^4 whose poles form a magnetic field within which a stream of sand falls, in combination with troughs D^1, D^2, D^3, D^4 without the line of fall of the sand, conductors *c*, *a* and *c*, *b*, over which electricity passes when the respective circuits are closed, and the commutator T, substantially as described. 5th. In a magnetic separator any number of electro magnets B^1, B^2 whose poles form a magnetic field within which a stream of black sand falls, having troughs D^1, D^2 without the line of fall of the sand in combination with the stream G, conductors over which electricity passes through the magnets when the circuits are closed, and one or more commutators or switches actuated by power or hand for shifting the current from one magnet to another or from one series of magnets to another, substantially as described. 6th. In a magnetic separator, the combination of any number of electro magnets B^1, B^2 whose poles form a magnetic field, within which a stream of black sand G falls, the troughs D^1, D^2 without the line of fall of the sand, conductors over which electricity passes to the magnets when the circuits are closed, the commutator or switch T, and the hoppers M^1, M^2, substantially as described. 7th. In a magnetic separator, the combination of the hopper M^1, outlet n^1 through which may fall a stream of sand G, and magnet B^1, with trough D^1, said magnet being alternately magnetized and demagnetized by a current of electricity being passed through and shut off from sand, substantially as described.

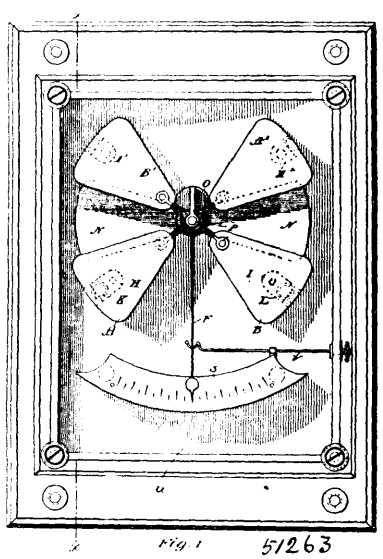
No. 51,262. Bottle Stopper. (*Bouchon de bouteilles.*)



Jesse Rosenfeld and Samuel W. Macky, both of Baltimore, Maryland, U.S.A., 7th February, 1896; 6 years. (Filed 11th January, 1896.

Claim.—In combination with a bottle cap, the arms K connected therewith, the bail having eyes pivoted to the lower ends of the arms K which extend below the pivotal points of the bail and the angular spring extension between the eyes and the pivotal points of the bail, said angular spring extensions being arranged so that its arms will be compressed toward each other when the cap is in closing position.

No. 51,263. Method of Detecting Grounds etc. in Electric Circuits. (*Méthode de découvrir les faux circuits électriques.*)

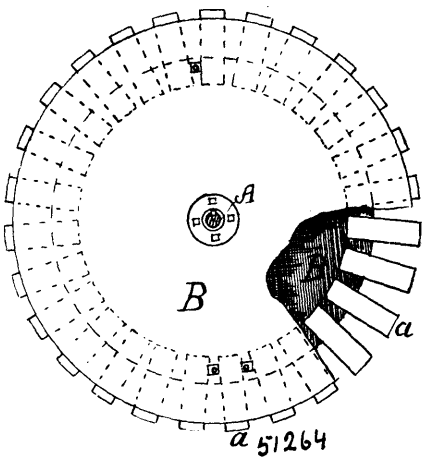


John Forrest Kelly, Pittsfield, Massachusetts, U.S.A., 7th February, 1896; 6 years. (Filed 13th January, 1896.)

Claim.—1st. In a ground detector two wings or sets of wings, each having the potential of one of the branches of the circuit, in combination with a needle whose potential is maintained at zero, lying within the influence of said wings, substantially as described. 2nd. In an electrical circuit a ground detector consisting of two wings or sets of wings electrically insulated from each other, connected to the opposite sides of the circuit, in combination with a pivoted needle electrically connected to the earth, having two vanes, one within the influence of each of the respective fields of said wings. 3rd. In a ground detector two sets of wings electrically insulated from each other, and consisting of several parts, each set electrically connected to one of the branches of the circuit, in combination with a needle having two vanes, each having several parts, alternating with the part of said wings and lying within their fields and electrically connected to the earth, substantially as described. 4th. The method of detecting grounds or similar abnormal conditions of the line which consists in subjecting a pivoted needle of zero potential to the influence of two fields corresponding in potential respectively to the potential of the two mains, substantially as described. 5th. The method of detecting grounds or leaks upon an electric circuit which consists in maintaining a conducting needle at zero potential, and subjecting separate parts of such needle to the influence of two fields, each maintained at the potential of one of the respective branches of the circuit, substantially as described.

No. 51,264. Stone Molding Tool.

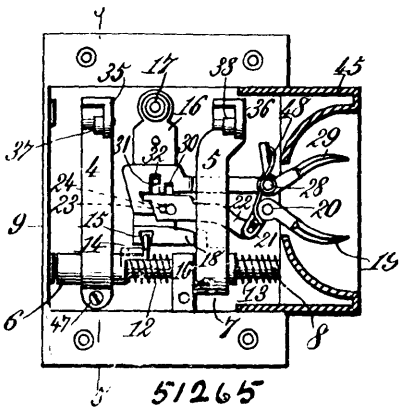
(*Outil pour pierre moulée.*)



James Peckover, Philadelphia, Pennsylvania, U.S.A., 7th February, (1896; 6 years. (Filed 9th January, 1896,)

Claim.—The combination of a stone moulding tool, of opposite bars or plates, a series of sets of thin metal blades, or teeth, arranged between said bars or plates so as to provide spaces between the successive sets of thin metal blades, packing strips between the adjoining thin metal blades of each set forming spaces between the outer ends of said adjoining thin metal blades, whereby free access of abraiding material to every part of the surface is provided, and means provided for rigidly clamping the bars or plates together with the sets of thin metal blades and packing strips between them, whereby the said thin metal blades and packing strips can have no independent movement, all substantially as specified.

No. 51,265. Window Sash Lock. (*Arrête-croisée.*)



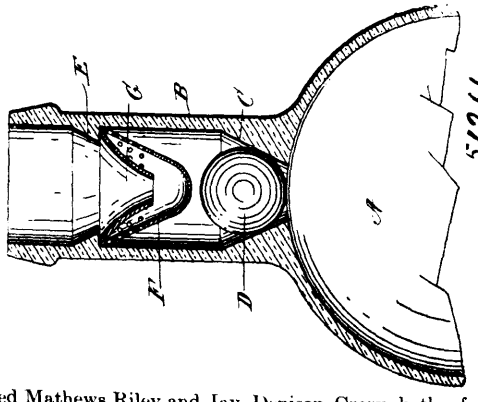
Philip Stover Riddelle, Woodstock, Virginia, U.S.A., 7th February, 1896; 6 years. (Filed 14th January, 1896.)

Claim.—1st. In a sash-lock, the combination of a pivoted, swinging, locking-arm shiftable back and forth to locking and unlocking position and also adapted to swing laterally to accommodate shrinking or swelling of the sash-frame, said arm having a bearing to rest against the edge of the sash-frame, and a latterally projecting stud in front of said bearing to spring into engagement with recesses in the sash-frame, and devices for shifting the locking-arm to locking and unlocking position, substantially as described. 2nd. In a sash-lock, the combination of a locking-arm shiftable back and forth to locking and unlocking position, and also movable laterally to accommodate shrinking or swelling of the sash-frame, said arm having a

bearing to constantly rest against the edge of the sash-frame, and a laterally projecting stud located in front of said bearing to spring into engagement with recesses in the sash-frame, a pivoted swinging lever engaging a part of the locking-arm, a pivoted finger-piece, and a link connected at one end with the finger-piece, and at the other end with the said lever for swinging the same to retract the locking-arm from engagement with the sash-frame, substantially as described. 3rd. In a sash-lock, the combination of a locking-arm, having means to engage a sash-frame and movable back and forth to locking and unlocking position, a movable lever engaging a part of the locking-arm, and two finger-pieces, one of which has a link connection with the lever and the other one of which is provided with means for engaging and locking the link, so that the lever which retracts the locking-arm cannot be shifted unless both finger-pieces are simultaneously operated, substantially as described. 4th. In a sash-lock, the combination of a laterally-swinging locking-arm, movable also back and forth to locking and unlocking position, and having means to engage a sash-frame, a pivoted swinging lever engaging a part of the said locking-arm, and a finger-piece connected with the said lever for swinging the latter to retract the locking-arm from engagement with the sash, substantially as described. 5th. In a sash-lock, the combination of two locking-arms, having means to engage two sash-frames and independently movable back and forth to locking and unlocking position, and also movable laterally to accommodate shrinking or swelling of the sash, a pivoted swinging lever acting upon both locking-arms to shift the latter from locking to unlocking position and a finger-piece having a link connection with the said lever, substantially as described. 6th. In a sash-lock the combination of two locking-arms movable back and forth to locking and unlocking position and having means to engage two sash-frames, a pivoted swinging lever acting upon both locking-arms to shift them to unlocking position, a finger-piece having a link connection with the said lever, and a locking-lever having means to engage the link of the finger-lever and also engage the pivoted swinging lever, whereby the two locking-arms cannot be retracted unless the finger piece and the locking-lever are both actuated, substantially as described. 7th. In a sash-lock, the combination with a lock-case having a supporting-rod, of two swinging locking-arms pivotally mounted on the supporting-rod and movable longitudinally thereof, a pivoted swinging lever acting to move both locking-arms on the supporting-rod, and a finger-piece having a link connection with said lever, substantially as described. 8th. The combination with a lock-case having a supporting-rod, of two locking-arms pivotally mounted on the supporting-rod and movable longitudinally thereof, a pivoted swinging lever acting to shift both locking-arms on the supporting rod, a pivoted finger-piece having a link connection with said lever, and a locking-lever naving a finger-piece and provided with means for engaging the link of the finger-piece and also engaging the said pivoted swinging lever whereby the two locking-arms cannot be retracted unless both finger-pieces are actuated, substantially as described. 9th. The combination with a lock-case having a supporting-rod, of a locking-arm pivotally mounted on the supporting-rod, movable longitudinally thereof, and provided with a lug, a pivoted swinging lever engaging the said lug, and a pivoted finger-piece having a link connection with said lever for swinging the latter to move the locking-arm longitudinally of the supporting-rod, substantially as described. 10th. The combination with a lock-case having a supporting-rod, of two locking-arms movable longitudinally of the supporting rod, a pivoted swinging lever acting to shift both locking arms in one direction on the supporting rod, springs for shifting the locking-arms in the opposite direction on the supporting-rod, and a finger-piece having a link connection with the said lever, substantially as described.

No. 51,266. Non-Fillable Bottle.

(*Appareil pour empêcher le remplissage des bouteilles.*)



Alfred Mathews Riley and Jay Denison Crory, both of Washington, Columbia, U.S.A., 7th February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. The combination with a bottle or other vessel provided with a neck, and a valve seat formed therein at the lower end thereof, of a valve adapted to be seated thereon, a hollow conical attachment within said neck, the base of which is directed upward and is open, and the apex of which is closed and directed downward and cones within a short distance of the valve, and a hollow cone within said conical attachment, the base of which is open and directed upward, and the apex of which is directed downward, and the walls of said conical attachment being perforated adjacent to the base thereof, substantially as shown and described. 2nd. The combination with a bottle or other vessel, provided with a neck having a valve seat therein, at the lower end thereof, of a ball valve adapted to be seated thereon, a hollow, conical attachment within said neck, the base of which is open and directed upward, and the apex of which is closed and directed downward, and the side walls thereof being also perforated and a hollow cone within said hollow attachment, the base of which is directed upward, and the apex of which is open and directed downward, substantially as shown and described. 3rd. The combination with a bottle or other vessel, provided with a neck having a valve seat therein at the lower end thereof, of a ball valve adapted to be seated thereon, a hollow, conical attachment within said neck, the base of which is open and directed upward, and the apex of which is closed and directed downward, and the side walls thereof being also perforated, and a hollow cone within said attachment, the base of which is directed upward, and the apex of which is open and directed downward, said neck being also provided with an annular shovlder above said hollow, conical attachment, and said hollow cone, substantially as shown and described.

No. 51,267. Syringe. (*Seringue.*)

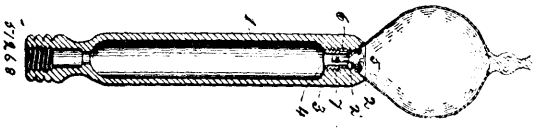
Charles Ver Treese Pollock, Greenwich. Connecticut, U.S.A., 11th February, 1896; 18 years. (Filed 18th November, 1895.)

Claim.—1st. In a syringe, the combination with a syringe body having a fluid passage and a discharge opening therefor, of a diffusing plug adapted to fit into the mouth of said discharge opening, and means, located within the syringe, for holding said diffusing plug within said discharge opening and concentric with and in close proximity to the sides thereof, whereby, when water is passed through the syringe, there is produced a thin continuous and hollow film of water, substantially as described. 2nd. In a syringe, the combination with a syringe body having a fluid passage and a discharge opening therefor, of a tapering diffusing plug adapted to fit into the mouth of said discharge opening, and means located within the syringe, for holding said diffusing plug within said discharge opening and concentric with and in close proximity to the sides thereof, whereby, when water is passed through the syringe, there is produced a thin continuous and hollow film of water, substantially as described. 3rd. In a syringe, the combination with a syringe body having a fluid passage with a discharge opening therefor, of a diffusing plug adapted to fit into the mouth of said discharge opening, and an elastic holder, located within the syringe and connected to said plug, and arranged to pull the diffusing plug inward and against the sides of the discharge opening, whereby, when water is passed through the syringe, there is produced a thin continuous and hollow film of water, substantially as described. 4th. In a syringe, the combination, with a syringe body having a fluid passage with a discharge opening therefor, of a diffusing plug adapted to fit into the mouth of said discharge opening, a spring located within the syringe and connected to said plug, and arranged to pull the diffusing plug inward and against the sides of the discharge opening, whereby when water is passing through the syringe, there is produced a thin, continuous, and hollow film of water, and means for regulating the tension of said spring, substantially as described. 5th. In a syringe, the combination, with a syringe body having a fluid passage with a discharge opening therefor, of a diffusing plug adapted to fit into the mouth of said discharge opening, and having a hooked extension on its inner end, a bar 6 within the syringe, having a head bearing against a limiting shoulder of the syringe body, and having a plurality of hooks 9, and an elastic band 10 connecting said diffusing plug and bar 6 and arranged to draw the diffusing plug inward and against the sides of the discharge opening, substantially as described. 6th. In a syringe, the combination with a syringe body having a fluid passage with a discharge opening therefor, said discharge opening being contracted at the base and flaring outwardly, of a tapering diffusing plug adapted to fit into the mouth of said discharge opening and having a taper greater than the taper of the sides of the discharge opening, and a holder for said diffusing plug, located within the syringe and holding the plug loosely, whereby, when water passes through said discharge opening, the plug is caused to centre itself therein, substantially as described.

No. 51,268. Syringe. (*Seringue.*)

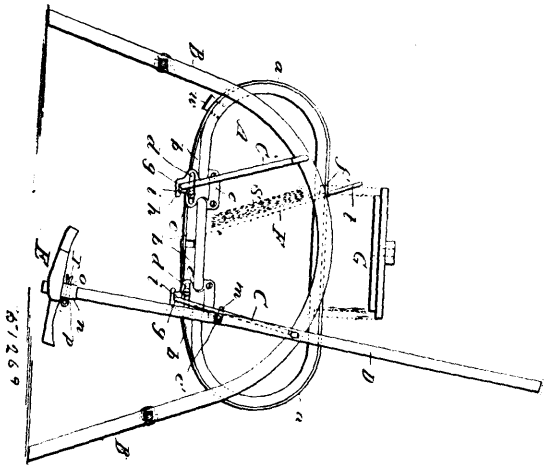
Charles Ver Treese Pollock, Greenwick, Connecticut, U.S.A., 11th February, 1896; 18 years. (Filed 18th November, 1895.)

Claim.—1st. In a syringe, the combination, with a syringe body having a fluid passage and a discharge opening therefor, of a diffus-



ing plug screwing into the end of the syringe and adapted to fit closely to the sides of said discharge opening, whereby when water is passing through the syringe, there is produced a thin, continuous, and hollow film of water, substantialy as described. 2nd. In a syringe, the combination, with a syringe body having a fluid passage, of a plug or sleeve screwing into the end of the syringe, and a diffusing plug carried thereby and lying within a suitable discharge opening for the syringe, said diffusing plug being arranged to fit closely to the sides of the discharge opening, whereby, when water is passing through the syringe, there is produced a thin, continuous, and hollow film of water, substantially as described. 3rd. In a syringe, the combination, with a syringe body having a fluid passage, of a plug or sleeve screwing into the end of the syringe, and a diffusing plug carried thereby and loosely secured thereto and lying within a suitable discharge opening for the syringe, said diffusing plug being arranged to fit closely to the sides of the discharge opening, whereby, when water is passing through the syringe, there is produced a thin, continuous, and hollow film of water, substantially as described. 4th, In a syringe, the combination, with a syringe body having a fluid passage, of a plug or sleeve screwing into the end of the syringe, and a conical diffusing plug carried thereby and loosely secured thereto and lying within a suitable discharge opening for the syringe, the sides of said discharge opening flaring outwardly and having less taper than the sides of the diffusing plug, and said diffusing plug being arranged to fit closely to the sides of discharge opening, whereby, when water is passing through the syringe, the diffusing plug is caused to centre itself in the discharge opening and there is produced a thin, continuous, and hollow film of water, substantially as described. 5th. In a syringe, the combination, with a syringe body having a fluid passage, and a discharge opening therefor, of a diffusing plug adapted to fit therein and carrying a screw-threaded piece screwing into the end of the same and arranged to hold said plug in close proximity to the sides of the discharge opening, whereby, when water is passed through the syringe, there is produced a thin, continuous, and hollow film of water, substantially as described. 6th. In a syringe, the combination, with a syringe body having a fluid passage, and a discharge opening therefor, of a screw-threaded hollow plug or sleeve screwing into the discharge opening and carrying a tapering diffusing plug adapted to lie within the discharge opening and to fit closely to the sides thereof, whereby, when water is passed through the syringe, there is produced a thin, continuous, and hollow film of water, substantially as described. 7th. In a syringe, the combination, with a syringe body having a fluid passage, and a discharge opening therefor, terminating in an outwardly flaring outer portion, of a screw-threaded hollow plug or sleeve screwing into the discharge opening and carrying a tapering diffusing plug loosely connected thereto and adapted to lie within the discharge opening and to fit closely to the sides thereof, said diffusing plug having a greater taper than the sides of the discharge opening, whereby, when water is passed through the syringe, the plug is caused to centre itself in the discharge-opening and there is produced a thin, continuous, and hollow film of water, substantially as described.

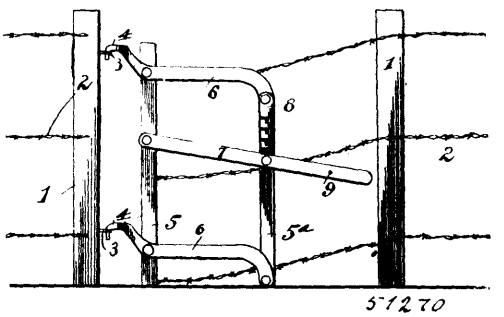
No. 51,269. Churn. (*Baratte.*)



William Hicks Curtice, Lousville, Kentucky, U.S.A., 11th February, 1896; 6 years. (Filed 14th Jan., 1896.)

Claim.—1st. In a churn, the combination with a churn body, of hoops around the body and secured together at the ends, wedges inserted betwen the body and the hoops and adapted to be forced apart to tighten the hoops, brackets secured to the churn body, screws passed through the brackets into the wedges whereby to hold them in place, substantially as set forth. 2nd. In a churn, the combination with a frame, a churn body and hangers hinged to the frame and supporting the churn to swing back and forth, of brackets having bearings therein to receive the hangers, keys in said brackets to retain the hangers in the bearings, hoops around the body, said hoops having their ends secured together, wedges interposed between the body and hoops, and screws passed through elongated slots in the brackets into the wedges whereby to hold said wedges in position when adjusted, substantially as set forth.

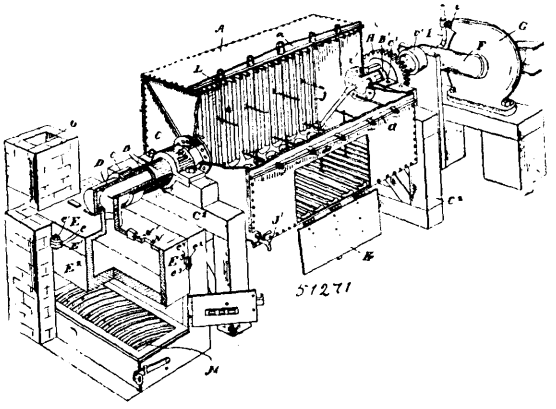
No. 51,270. Gate. (*Barrière.*)



George C. Barrett, Cavour, South Dakota, U.S.A., 11th February, 1896; 6 years. (Filed 15th Jan., 1896.)

Claim.—1st. A gate for wire fences, consisting of a series of wires secured to a frame carrying a set of arms with hooked extremities, an operating lever pivoted to the frame, and means for retaining said lever in elevation, substantially as described. 2nd. A gate for wire fences, formed of a series of wires secured to a frame consisting of arms with the free ends formed into hooks, connecting pieces between the arms and an operating lever attached to the connecting pieces, substantially as described and for the purpose set forth. 3rd. A gate for wire fences, formed of a series of wires secured to a frame consisting of sigmoidal arms having hooked ends, connecting pieces pivoted to the arms, an operating lever arranged on the connecting pieces between said arms, and means for holding the lever elevated, substantially as described. 4th. A gate for wire fences, formed of a series of wires secured to a frame consisting of curved arms having hooked extensions, connecting pieces between the arms, wires attached to one of said connecting pieces in combination with an operating lever pivoted to the connecting pieces, substantially as described.

No. 51,271. Wool Dryer. (*Séchoir à laine.*)

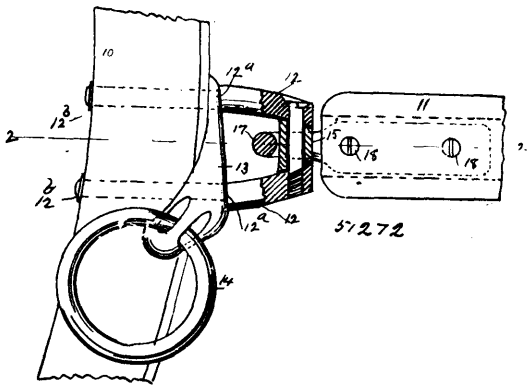


Michael Harding, Simcoe, Ontario, Canada, 11th February, 1896; 6 years. (Filed 16th January, 1896.)

Claim.—1st. In a machine for drying and purifying wool, the combination with the casing suitably supported, of a steam pipe leading into the casing and pipes forming a continuation thereof and designed to partially line the casing and a faucet at the opposite end of the steam pipe extending outside the casing, as and for the purpose specified. 2nd. In a machine for drying and purifying wool, the combination with the casing suitably supported, of a steam pipe leading into the casing and pipes forming a continuation thereof and designed to partially line the casing, a faucet at the opposite end of the steam pipes extending outside the casing and a series of agitating arms extending radially into the casing from the sides, as and for the purpose specified. 3rd. The combination with the casing, hollow

journals for supporting the casing at each end, means for rotating the casing, steam pipe lining for the casing the supply pipe of which extends through the hollow journal at one end, as and for the purpose specified. 4th. The combination with the casing hollow journals for supporting the casing at each end, means for rotating the casing steam pipe lining for the casing the supply pipe of which extends through the hollow journal at one end union couplings at the end of one journal, a gas chamber, heating means for same and an elbow connecting the top of the gas chamber with the union coupling on the end of the hollow journal, as and for the purpose specified. 5th. The combination with the casing, hollow journal for supporting the casing at each end, means for rotating the casing steam pipe lining for the casing, the supply pipe of which extends through the hollow journal at one end, union couplings at the end of one journal, a gas chamber with ports heating means for same, an elbow connecting the top of the gas chamber with the union coupling on the end of the hollow journal, a hollow journal at the opposite end provided with union coupling connecting it to one end of a pipe and an exhaust fan connected to the opposite end of such pipe, as and for the purpose specified. 6th. The combination with the rotatable casing, the steam pipe lining extending throughout three sides thereof and the supply pipe for such steam lining at one end, of a door situated at the unlined side of the casing, as and for the purpose specified. 7th. The combination, with the casing suitably supported and provided with drying means, of a gas chamber connected thereto and port holes in such gas chamber provided with suitable closing plugs, as and for the purpose specified. 8th. In a machine of the class described, a gas chamber comprised of an upper portion and a lower portion connected together by suitable joints, the bottom of the lower portion being of great thickness, as and for the purpose specified. 9th. In a machine of the class described, a gas chamber comprised of an upper portion and a lower portion connected together by suitable joints, the bottom of the lower portion being of great thickness and a suitable end plate secured on the end of the upper and lower portions by means of the staples extending through the slots in the end and wedges extending through the staples at the end, as and for the purpose specified.

No. 51,272. Hame Staple. (*Boucle d'attelles.*)



Riley Stoner, Grand Junction, Colorado, U.S.A., 11th February, 1896; 6 years. (Filed 17th January, 1896.)

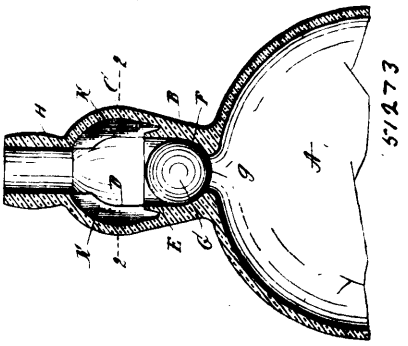
Claim.—1st. A staple for hames, comprising two independent limbs converged on inner faces at the same ends, a sleeve block sloped on the ends to fit between the converged faces of the limbs and the sleeve being perforated, and a clamping bolt engaging said perforations, substantially as described. 2nd. A staple for hames, comprising two independent limbs sloped towards each other on inner faces at the same end of each limb, an intervening sleeve block inclined on its ends to mate the inclined faces of the limbs, and a clamping screw bolt passing through one limb, then through the sleeve block, and having a threaded engagement with the threaded perforation of the other limb, substantially as described. 3rd. The combination with a hame staple limbs shouldered intermediately of their ends passing through the perforations of a bracket plate, and secured at ends in the hame staple opposite ends of the limbs having converged inner faces, a sleeve block having sloped ends that fit between the inclined faces of the limbs, which ends are oppositely perforated and one perforation screw threaded, and a clamping bolt adapted to engage the limbs and sleeve and bind them together so as to prevent the rotation of said sleeve, substantially as described.

No. 51,273. Non-Fillable Bottle.

(*Appareil pour empêcher le remplissage des bouteilles.*)

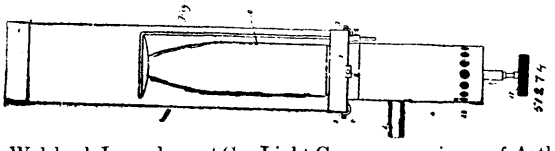
Joseph Spinney L'Hommedieu, Great Neck, Long Island, U.S.A., 11th February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. A bottle or other vessel provided with a neck, having an enlargement at the central portion thereof by means of which an enlarged central chamber is formed therein, said neck being also provided with a tube which projects upwardly into said chamber, and the lower end of which is contracted to form a valve seat, a valve adapted to be seated thereon and to close the port or opening into the bottle, said enlarged portion of the neck being provided



with side ribs which extend upwardly from said tube and are contracted at their upper ends to form a cage for said valve, substantially as shown and described. 2nd. A bottle or other vessel provided with a neck, having an enlargement at the central portion thereof, by means of which an enlarged central chamber is formed therein, said neck being also provided with a tube which projects upwardly into said chamber, and the lower end of which is contracted to form a valve seat, a valve adapted to be seated thereon, and to close the port or opening into the bottle, said tube being provided with two caps or covers one of which is arranged above the other, and said caps or covers being provided with slots or openings which are formed in the opposite sides thereof and in such manner that they will not register, substantially as shown and described.

No. 51,274. Apparatus for Producing Incandescent Light. (*Appareil pour la production de lumière à incandescence.*)

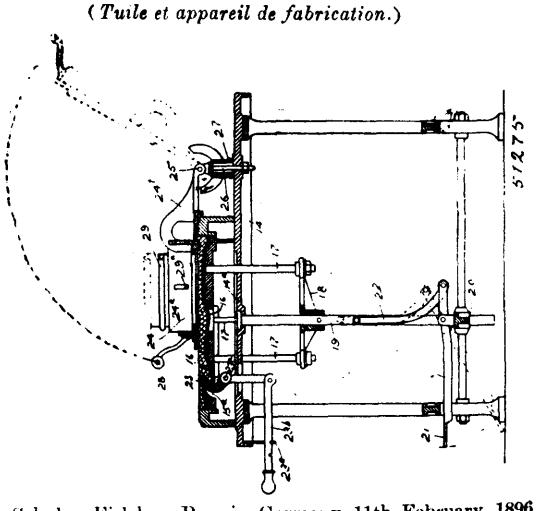


The Welsbach Incandescent Gas Light Company, assignee of Arthur Otis Granger, both of Montreal, Quebec, Canada, assignee of Charles E. White, Kansas City, Missouri, U.S.A., 11th February, 1896; 6 years. (Filed 25th October, 1895.)

Claim.—1st. The combination with the burner tip of a device for generating gas or vapour from hydro-carbon oil, and burning the same in the form of a non-luminous heating flame, of a mantle of refractory material capable of incandescence and an intermediate connecting thimble extending inside the mantle and having a corrugated surface for the passage of air, substantially as desribed. 2nd. The combination with the burner tip of a device for generating gas or vapour from hydro-carbon oil, and burning the same in the form of a non-luminous heating flame, of a mantle of refractory material capable of incandescence, and an intermediate removable connecting thimble extending inside the mantle and having a corrugated surface for the passage of air, and also having projecting therefrom supporting arms for the chimney, all substantially as described.

No. 51,275. Tile and Machine for Making.

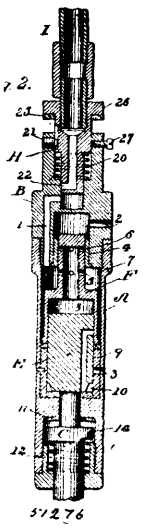
(*Tuile et appareil de fabrication.*)



Gustav Schulze, Eisleben, Prussia, Germany, 11th February, 1896 6 years. (Filed 10th January, 1896.)

Claim.—1st. A tile made in the form of a square plate having its side corners cut away, a hanging nose projecting downwardly from the underside of its upper corner and a retaining nose extending downward from and under its underside at the lower cornor thereof, substantially as described. 2nd. A tile made in the form of a square plate having its side corners cut away and mortar grooves formed in the edge thereof, two upper lap edges having an inner channel, a raised bead and an outer mortar groove, and two lower lap edges, each having a bead to fit the said channels of the upper lap edges, a retaining nose extending downwardly from the underside and lower corner of the tile and recesses adjoining the upper ends of the side corners to receive said retaining nose, substantially as described. 3rd. A tile machine comprising a table, a forming chest, a forming shell fitted therein to conform to the underside of the tile, a depression having a slot at the lower corner of said chest and shell, and a push jaw supported upon the table to fit and work in the said slot of forming chest and forming shell to form the retaining nose of the tile, substantially as set forth. 4th. A tile machine comprising a table, a forming chest, a forming shell fitted therein and resting upon lever operated push rods to lift the same, and a cover plate hinged upon a swivel plate supported upon the table and adapted to be operated, substantially as described. 5th. A tile machine comprising a table, a forming chest, a cover having a base and three triangularly arranged side plates hinged and pivotally supported upon the table and the push plates secured to the base and vertical triangularly arranged sides of said plates, substantially as described.

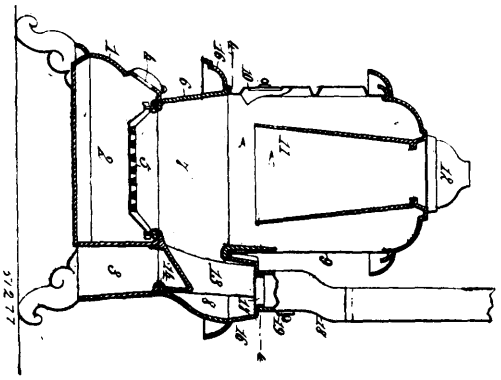
No. 51,276. Pneumatic Tool. (*Outil pneumatique.*)



James Wolstencroft, assignee of William H. Soley, both of Frankford, Pennsylvania, U. S. A., 11th February, 1896; 6 years. (Filed 27th November, 1895.)

Claim.—1st. The combination with a pneumatic tool, of a throttle valve, fixed to a supply pipe, and movable longitudinally to the body of the tool, and controlling the flow of the motive fluid, and means for automatically moving the valve to a retractive closed position. 2nd. In a pneumatic tool, the combination of a cylinder adapted to be grasped by the one hand of the operator, a throttle valve movable lengthwise of the cylinder, and having a port opening laterally toward a seat, the latter having an induction passage with which the port coincides, and a supply pipe extending in the longitudinal axis of the tool, to which the said valve is fixed and grasped by the other hand of the operator, substantially as set forth. 3rd. The combination with a pneumatic tool comprising a tool holding device and suitable means for vibrating the tool by the flow of compressed fluid, of a fluid supply pipe extending in the londitudinal axis of the tool, connected thereto and relatively movable in the direction in which the tool is fed to the work, said pipe forming a hand hold, and a throttle valve mechanically connected to said movable pipe, controlling the flow of the motive fluid. 4th. In a pneumatic tool, the combinatien of a cylinder adapted to be grasped by the one hand of the operator, a throttle valve comprising a plug attached to the supply pipe movable lengthwise of the cylinder and adapted to be grasped by the other hand of the operator, and suitable ports controlled by said valve for admitting or shutting off pressure supply to the operating parts of the tool, substantially as described. 5th. The combination with a pneumatic tool of a throttle valve comprising a plug movable longitudinally in the axis of the tool, a supply pipe forming a rigid continuation of said plug in said axis and serving as a hand hold, the opening of said pipe continuing through said plug to a point near its inner extremity, then opening laterally toward the cylindrical seat in which the plug slides, and a controlled passage in said cylindrical seat, substantially as described. 6th. The combination with a pneumatic tool, of a throttle valve comprising a plug movable longitudinally in the axis of the tool, a supply pipe forming a rigid continuation of said plug in said axis and serving as a hand hold, the opening of said pipe continuing through said plug to a point near its inner extremity, then opening laterally toward the cylindrical seat in which the plug slides, and a controlled passage in said cylindrical seat, and a spring for retracting the said valve to its normal position.

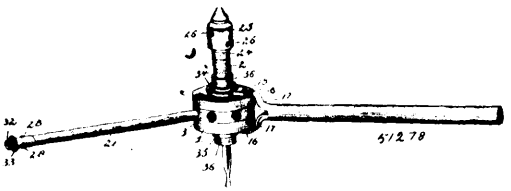
No. 51,277. Stove. (*Poêle.*)



The Gem City Stove Manufacturing Company, assignee of Folkert Kaempen, jr., both of Quincy, Illinois, U.S.A., 11th February, 1896; 6 years. (Filed 18th December, 1895.)

Claim.—In a heating stove, the combination with a base, of a double fire pot comprising a fuel chamber and an auxiliary combustion chamber arranged one in front of the other and communicating with each other, hot air ducts arranged in said auxiliary combustion chamber and communicating at their opposite ends with the atmosphere outside the stove, a smoke exit for said auxiliary combustion chamber, and a stove drum or casing arranged over the fuel chamber, whereby the smoke and gases generated in the fuel chamber pass into the auxiliary combustion chamber and are there consumed and heat the air in its passage through the hot air ducts, substantially as described.

No. 51,278. Drill. (*Foret.*)

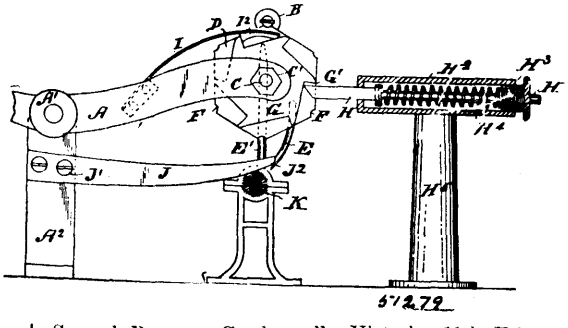


Charles Alexander Williams, New Whatcom, Washington, U.S.A., 11th February, 1896; 6 years. (Filed 28th November, 1895.)

Claim.—1st. In a ratchet drill, the combination with a bit-socket, of a sectional shell loosely mounted for rotation upon the socket, a handle attached to the shell sections, a core interposed between the shell sections and loosely mounted upon the bit-socket, gears loosely mounted upon the bit-socket, one of the gears being fixed to the contiguous shell section, a pinion carried by the core and meshing at opposite sides with said gears, clutch devices for communicating motion from the gears to the bit-socket, and means for imparting retary motion to the core, substantially as specified. 2nd. In a ratchet drill, the combination with a bit-socket, of shell sections loosely mounted upon the socket, a handle attached to said shell sections, a disc-shaped core interposed between the shell sections and loosely mounted upon the bit-socket, said core having peripheral rabbeted seats for the reception of the contiguous edges of the shell sections, gears loosely mounted upon the bit-socket, connections between one of the gears and the contiguous shell section, a pinion carried by the core and meshing at opposite sides with the gears, clutches for communicating motion from the gears to the bit-socket and arranged in reversed positions, and means for imparting rotary motion to the core, substantially as specified. 3rd. In a ratchet drill, the combination with a bit-socket of a shell loosely mounted thereon, a handle attached to the shell, a core loosely mounted upon the bit-socket and carrying a pinion, gears mounted concentric with the bit-socket and meshing with said pinion, one of the gears being fixed to the shell, clutches for communicating motion from either gear to the bit-socket, and means for imparting rotary motion to the core, substantially as specified. 4th. In a ratchet drill, the combination with a bit-socket, of shell sections fitted loosely thereon, collars removably fitted upon the bit-socket contiguous to the outer sides of the shell sections to hold the latter in operative position, a rotary core interposed between the shell

sections and loosely mounted upon the bit-socket, gears concentric with the bit-socket and arranged within the shell sections, a pinion carried by the core to communicate motion from one gear to the other, clutches carried by the gears to engage the bit-socket, and a handle bifurcated at one end and having its arms detachably secured to the shell sections, substantially as specified. 5th. In a ratchet drill, the combination with a bit-socket, a shell and a core mounted concentric with the bit-socket and capable of independent rotary movement, and connections between said shell, core and bit-socket whereby rotary motion in opposite directions of the shell and core is communicated to the bit-socket to impart rotary motion in a uniform direction thereto, of a hollow handle attached to the shell, an operating rod or lever adapted to be engaged with peripheral sockets in the core, said hollow handle being provided with bayonet slots and the operating rod or lever with studs to engage said slots when the rod is arranged in the hollow handle, and a spring for imparting an outward longitudinal impulse to the operating rod or lever, substantially as specified. 6th. In a ratchet drill, the combination with a bit-socket, a shell and a core mounted concentric with the bit-socket and capable of independent rotary movement, connections between said shell, core and bit-socket whereby rotary motion in opposite directions of the shell and core is communicated to the bit-socket to impart rotary motion in a uniform direction thereto, and feeding devices having a feed screw engaging a threaded bore of the bit-socket and provided with a centering head having diametrical sockets, of a hollow handle provided near its outer end with bayonet slots, an operating rod or lever adapted to engage peripheral sockets in the core and provided with radial studs to engage said bayonet slots when the operating rod or lever is fitted in the hollow handle, a spring for imparting a longitudinal outward movement to the rod or lever and hold its studs in engagement with the bayonet slots, said operating rod or lever being tubular, and an adjusting pin adapted to engage the diametrical sockets in the centering head and provided with a threaded shoulder to engage a threaded portion of the bore of the operating rod or lever, substantially as specified.

No. 51,279. Machinery for Manufacturing Mouth-pieces for Cigarettes, etc. (*Machine pour la fabrication de porte-cigarettes, etc.*)



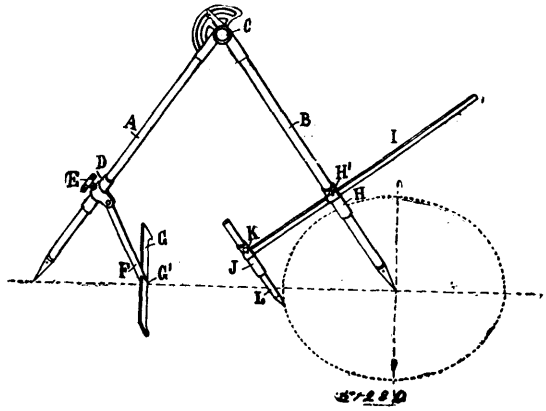
Joseph Samuel Beeman, Camberwell, Victoria, 11th February, 1896; 6 years. (Filed 28th November, 1895.)

Claim.—1st. In machinery for manufacturing mouth-pieces for cigarettes and the like A brush as K or N for the purpose of removing any adhesive matter from the operating surface of a heated presser, said brush being operated by synchronous movement of the mouth-piece making machinery substantially as and for the purposes set forth. 2nd. In machiney for manufacturing mouth-pieces for cigarettes and the like, the combination with a brush as K or N, having a rotary or other suitable movement of an intermittently progressing heated presser as D, substantially as and for the purposes set forth.. 3rd. In machinery for manufacturing mouth-pieces for cigarettes and the like, the combination of a brush as K or a scraper as L, with a heated presser as D^3, which continually revolves when in action and substantially as illustrated on Fig. 5 of the accompanying drawings. 4th. In machinery for manufacturing mouth-pieces for cigarettes and the like, the combination of a non-rotating heated presser as M, with a brush as K or N, substantially as set forth.

No. 51,280. Ellipsograph. (*Ellipsographe.*)

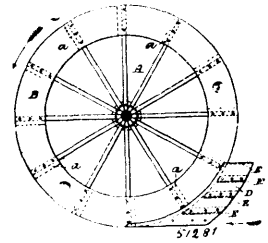
John A. Caldwell, Vancouver, British Columbia, Canada, 11th February, 1896; 6 years. (Filed 26th November, 1895.)

Claim.—1st. An ellipsograph, comprising a compass, a sleeve fitted to slide loosely on one of the legs of the compass, and a rod held adjustable in the said sleeve and standing at right angles to the leg, the said rod carrying a pencil or pen-holder, substantially as shown and described. 2nd. An ellipsograph, comprising a compass, a device for adjusting to and holding the compass in a vertical position, a sleeve fitted to slide loosely on one of the legs of the compass, and a rod held adjustable in the said sleeve and adapted to be fastened thereto, the said rod standing at right angles to the leg carrying the said sleeve, the said rod also carrying a pencil or pen-holder, substantially as shown and described. 3rd. An ellipsograph, comprising a vertically-disposed compass, a sleeve fitted to slide loosely on one of the legs of the compass, a rod held adjustable in the said sleeve, and standing at right angles to the leg carrying the



sleeve, and a holder held adjustable on the said rod and adapted to carry a pen or pencil, substantially as shown and described. 4th. An ellipsograph, comprising a sleeve fitted to slide loosely on one of the legs of a compass, a rod held adjustable in the said sleeve and standing at right angles to the leg carrying the sleeve, and a holder held on the said rod and adapted to carry a pen or pencil, the said holder standing at right angles to the rod, substantially as shown and described. 5th. An ellipsograph, comprising a sleeve fitted to slide loosely on one of the legs of a compass, a rod held adjustable in the said sleeve and standing at right angles to the leg carrying the sleeve, a holder held on the said rod, a second rod held adjustable in the said holder, and a pen support pivoted on the said second rod, substantially as shown and described. 6th. An ellipsograph, comprising a sleeve fitted to slide loosely on one of the legs of the compass, a rod held adjustable in the said sleeve and standing at right angles to the leg carrying the sleeve, a holder held on the said rod, a second rod held adjustable in the said holder, a pen support pivoted on the second rod and a pin held adjustable on the pivoted support, substantially as shown and described.

No. 51,281. Paddle Wheel. (*Roue à palettes.*)



John Lefeaux, Swansea, South Wales, 11th February, 1896; 6 years. (Filed 26th November, 1895.)

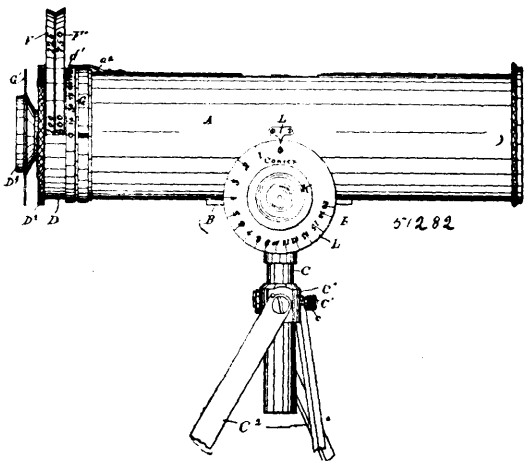
Claim.—1st. The combination with a paddle wheel of a stern casing provided with horizontal division plates, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with a paddle wheel of one or two annular dises or rings whereby it is partially closed at one or both sides and optionally of a stern casing provided with horizontal division plates, substantially as and for the purpose hereinbefore set forth.

No. 51,282. Refracto meter. (*Refractomètre.*)

Henry Laurence De Zeng jr., Geneva, New York, U.S.A., 12th February, 1896; 6 years. (Filed 25th November, 1895.)

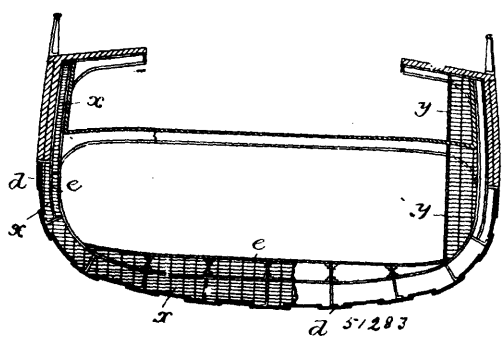
Claim.—1st. In a refractometer, the combination with the telescoping tubes and the objective and lens carried thereby and relatively adjustable, each of the tubes having a scale thereon, of the double index secured to one tube and cooperating with its scale and also cooperating with the scale on the other tube, substantially as described. 2nd. In a refractometer, the combination with the telescoping tubes and the objective and lens carried thereby, a scale on one of the tubes, and an index on the other, of the arbor for moving the tubes relative to each other, and an index and scale arranged between the arbor and the stationary tube, substantially as described. 3rd. In a refractometer, the combination with the telescoping tubes and the objective and lens carried thereby, of the rotatable sleeve, a movable lens-carrier thereon having a series of cylindrical lenses arranged to be brought one at a time in line with the objective and lens with their axes transversely thereof, substantially as described. 4th. In a refractometer, the combination with the telescoping tubes and the objective and lens carried thereby, and scales and indices for indicating their relative adjustment, of the rotatable sleeve, the two lens-carriers thereon, each having a series of cylindrical lenses and movable to bring the axes of said lenses

transversely of the axis of the objective, substantially as described. 5th. In a refractometer, the combination with the telescoping tubes



and the objective and lens carried thereby, of the reversible eye-shade having at one end the disc and at the other the sleeve extending around one of the tubes and adjustable thereon independently of the lens, substantially as described. 6th. In a refractometer, the combination with the telescoping tubes and the lens and objective carried thereby, of the rotatable sleeve, the two lens-carriers pivoted thereon, each having a series of cylindrical lenses and an aperture therein, and an index and scale for indicating the rotary adjustment of the sleeve, substantially as described. 7th. In a refractometer, the combination with the telescoping tubes, the lenses carried thereby, and means for adjusting the tubes relative to each other, of an indicator embodying a scale and index and denoting the position of the instrument relative to a fined object, and adjustable relative to the frame, a second indicator embodying a scale and index and denoting the relative adjustments of the lenses in one direction and cooperating with one member of the former indicator, and a third indicator embodying a scale and index and denoting the relative adjustment of the lenses in the other direction, said last-mentioned index and scale being relatively adjustable irrespective of the relation of the lenses, substantially as described. 8th. In a refractometer, the combination with the stationary tube having the scale and the lens therein, of the movable tube having the scale thereon, the lens therein, the rack and pinion, the scale disc adjustably connected to the pinion and its index, and the double index cooperating with the scales on the stationary and movable tubes, substantially as described. 9th. In a refractometer, the combination with the stationary and movable tubes, the lenses carried thereby, and means for adjusting the tubes relatively to each other, of the rotary sleeve having the scale and index, the lens-carrier, a series of cylindrical lenses thereon, an indicator embodying a scale and index adjustable relative to the frame, a second indicator embodying a scale and index denoting the relative adjustment of the lenses in one direction, and cooperating with one member of the former indicator, and a third indicator embodying a scale and index denoting the relative adjustments of the lenses in the other direction, said last-mentioned index and scale being relatively adjustable irrespective of the relation of the lenses, substantially as described.

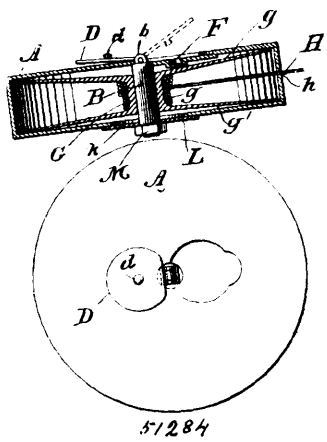
No. 51,283. Means for Protecting Filling and Packing Vessels, Etc. (*Moyen de protéger le remplissage et étoupage pour vaisseaux, etc.*)



Mark Worsnop Marsden, Philadelphia, Pennsylvania, U.S.A., 12th February, 1896; 6 years. (Filed 25th November, 1895.)

Claim.—As a protective filling or packing for vessels or other structures, corn-stalk pith prepared, arranged and adapted for use in its different applications, substantially as set forth.

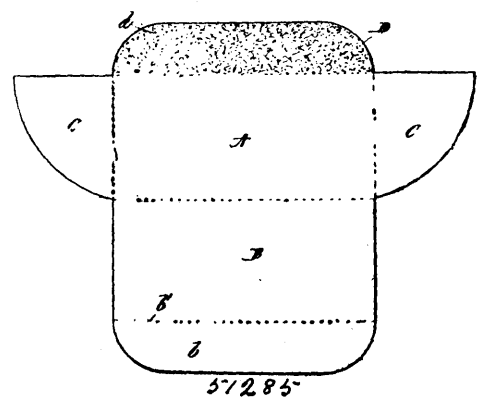
No. 51,284. Chalk Line. (*Cordeau.*)



Gustof Erik Johnson, New York, State of New York, U.S.A., 12th February, 1896; 6 years. (Filed 23rd November, 1895.)

Claim.—1st. A chalk line comprising a circular casing within which is mounted a shaft which is revoluble therein, a reel mounted on said shaft and adapted to revolve therewith, a line or cord mounted on said reel and projecting through a hole or opening in the perimeter of the casing, and means for revolving said wheel and said shaft, substantially as shown and described. 2nd. A chalk line reel comprising a circular casing within which is mounted a shaft which is revoluble therein, a reel mounted on said shaft and adapted to revolve therewith, a line or cord mounted on said reel and projecting through a hole or opening in the perimeter of the casing and means for revolving said wheel and said shaft, the said casing being provided with an opening in one side thereof, through which the chalk may be inserted thereinto, and said opening being adapted to be closed, substantially as shown and described. 3rd. A chalk line reel comprising a circular casing within which is mounted a shaft which is revoluble therein a reel mounted on said shaft and adapted to revolve therewith, a line or cord mounted on said reel and projecting through a hole or opening into the perimeter of the casing and means for revolving said wheel and shaft, the said casing being provided with an opening in one side thereof, through which the chalk may be inserted thereinto, and said opening being adapted to be closed by a plate mounted on said shaft, substantially as shown and described.

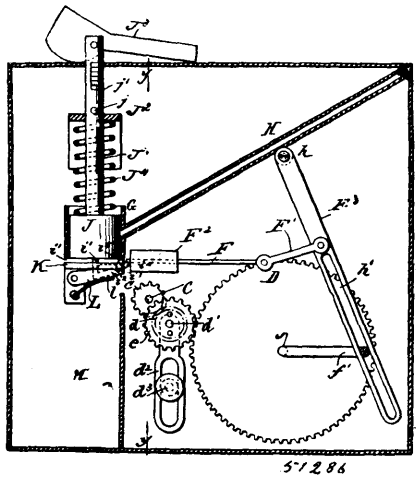
No. 51,285. Envelope. (*Enveloppe.*)



William Daniel Thomas, Brooklyn, New York, U.S.A., 12th February, 1896; 6 years. (Filed 15th November, 1895.)

Claim.—1st. An envelope, composed of a blank, comprising a body portion, a folding side, folding end pieces, and a flap, the said folding side being provided with a folding extension, and said folding end pieces, and said extension, being gummed to their outer surfaces, and said flap being gummed on its inner surfaces, substantially as shown and described. 2nd. An envelope composed of a blank, comprising a body portion A, folding end pieces as C, a folding side B, and a flap D, said side being provided with a folding extension, and said ends and said extension being gummed on their outer surfaces, the said flap being gummed on its inner surface, whereby the folding side may be sealed to the inner surfaces of the body portion, substantially as shown and described.

No. 51,286. Coin Controlled Gas Vending Machine. (*Appareil de vente de gaz actionnée par une pièce de monnaie.*)



5/1286

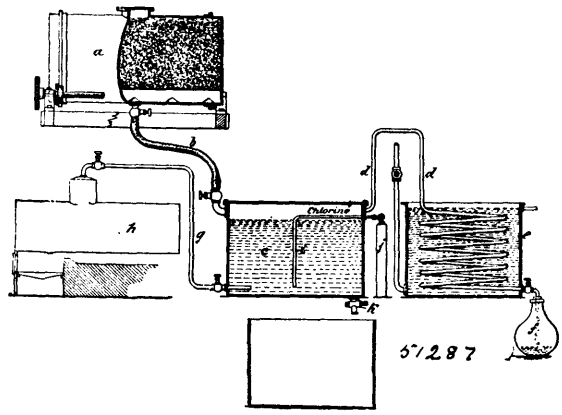
Wesley Webber, New York, State of New York, U.S.A., 12th February, 1896; 6 years. (Filed 15th November, 1895.)

Claim.—1st. In a coin-controlled gas vending machine, a main gear wheel driven by the power of the meter, a coin-receiving table, a pusher operated by the main gear wheel for pushing the coins off from said table, and a coin-controlled locking device arranged for detaining the pusher and cutting off the gas, substantially as described. 2nd. In a coin-controlled gas vending machine, a main gear wheel driven by the power of a meter, combined with a pusher operated thereby, and a coin-controlled locking device for locking the coin pusher from movement when the coin's value in gas has been delivered, substantially as described. 3rd. In a coin-controlled gas vending machine, a primary coin receptacle, a table to support the coin beneath the said receptacle and spaced therefrom, a locking pawl adapted to reach into said space, a pusher arranged to pass through said space, and means for operating said pusher by the power of the meter, substantially as described. 4th. In a coin-controlled gas vending machine, a primary coin receptacle, a table or support for the coin beneath the said receptacle and spaced therefrom, and a pusher for dislodging said coin operated by the power of the meter, substantially as described. 5th. In a coin-controlled gas vending machine, a primary coin receptacle, a table beneath the said receptacle and spaced therefrom, a locking pawl reaching into said space, a plunger placed in said receptacle, and a pusher for dislodging the coin from said table operated by the power of the meter, substantially as described. 6th. In a coin-controlled gas vending machine, a primary coin receptacle, a table beneath said receptacle and spaced therefrom, a locking pawl reaching into said space, a plunged placed in said receptacle, a device for limiting the downward movement of said plunger, and a pusher for dislodging coin from said table operated by the power of the meter, substantially as described. 7th. In a coin-controlled gas vending machine, a primary coin receptacle, a table beneath said receptacle and spaced therefrom, a locking pawl reaching into said space, a plunger placed in said receptacle, a spring for depressing said plunger, a lever for lifting the same and a pusher for dislodging coins from said table operated by the power of the meter, substantially as described. 8th. In a coin-controlled gas vending machine, a main gear wheel operated by the power of the meter, a coin pusher operated by said main gear-wheel, and a locking device for said pusher, and a cock or valve fitted in the service pipe arranged to be closed by said locking device, substantially as described. 9th. In a coin-controlled gas-vending machine, a main gear wheel operated by the power of the meter, a crank connected to said gear wheel, a lever connected to said crank, a pusher connected to said lever, a coin receiving table and a locking device arranged to be acted upon by a coin and to intercept and lock the said pusher, substantially as described. 10th. In a coin-controlled gas vending machine, a main gear-wheel D, operated by the power of the meter and provided with an arm P, in combination with a table for the coin and a pawl L, arranged to reach above said table and to intercept the arm P, substantially as described. 11th. In a coin-controlled gas vending machine, the combination with the main gear D, and gear c, attached to a shaft which reaches into and is operated by the meter, of an adjustable plate formed or provided with a gudgeon, a pinion journalled thereon and interchangeable gear-wheels adapted to be attached to and revolved by said pinion, substantially as described.

No. 51,287. Process of and Apparatus for Extracting Gold from Ore. (*Procédé et appareil pour l'extraction de l'or des minerais.*)

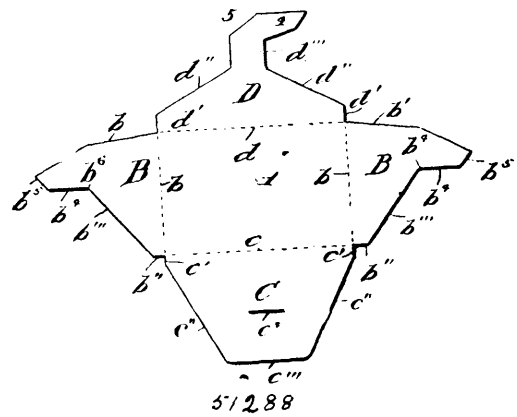
Bertrand Chase Hinman, New York, State of New York, U.S.A., 12th February, 1896; 6 years. (Filed 13th September, 1895.)

Claim.—1st. The process of extracting gold from ore which consists in dissolving the gold by bromine, separating the free bromine



from the solution, recovering the bromine and then precipitating the gold, substantially as specified. 2nd. The process of extracting gold from ore which consists in dissolving the gold by bromine, distilling the free bromine, condensing the bromine vapours and precipitating the gold, substantially as specified. 3rd. The process of extracting gold from ore which consists in dissolving the gold by bromine, distilling the free bromine by steam, condensing the bromine vapours and precipitating the gold, substantially as specified. 4th. The process of extracting gold from ore which consists in dissolving the gold by bromine, forcing steam into the solution beneath the surface thereof, to vaporize the bromine and charge the steam with such vapours, driving the charged steam into a condenser to liquify both the steam and bromine, and precipitating the gold, substantially as specified. 5th. The process of extracting gold from ore which consists in dissolving the gold by bromine, driving the free bromine in the form of vapours out of the body of the solution by the action of compressed air and into an alkaline solution to form a salt, regenerating the bromine from such salt, and precipitating the gold, substantially as specified. 6th. The process of extracting gold from ore which consists in dissolving the gold by bromine, adding an oxidizing agent, to liberate the bromine from the combinations formed during the treatment of the ore, separating the liberated bromine, recovering the same, and precipitating the gold, substantially as specified. 7th. In the process of extracting gold from ore, a leaching solution charged with one or more of the halogens, substantially as specified. 8th. An apparatus for extracting gold from ore which consists of a vaporizing tank, a vapour outlet pipe and a condenser or regenerating tank, substantially as specified. 9th. The process of extracting gold from ore, substantially as herein described.

No. 51,288. Envelope. (*Enveloppe.*)



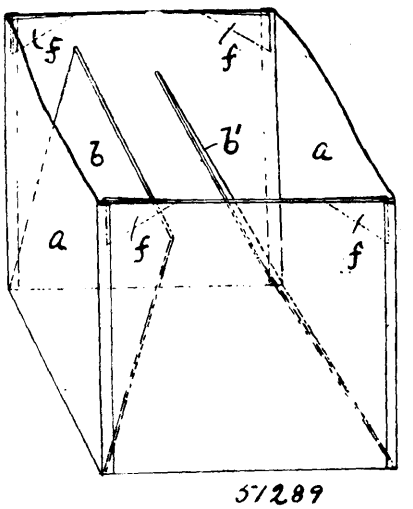
5/1288

John Morrison McLeod, Goderich, Ontario, Canada, 12th February, 1896; 6 years. (Filed 23rd November, 1895.)

Claim.—1st. An envelope having its lower flap extending nearly up into the crease of the upper flap and provided with a transverse slit and its upper flap provided with a hooked bar or tongue adapted to be inserted in said slit and its base or angles with the edges of said flap coinciding with the ends of said slit when folded, substantially as set forth. 2nd. An envelope having its lower flap extending nearly up into the crease of the upper flap and provided with a transverse slit, its upper flap provided with a hooked bar or tongue adapted to be inserted in said slit and its base or angles with the edges of said flap coinciding with the said slit when folded and ends having sloping lower edges overlapping the edges of the lower flap

and provided with ends overlapping each other and the lower edges of which lie close above the said slit and their angles with the sloping sides close to the ends of said slit, substantially as set forth. 3rd. An envelope having its lower flap extending nearly up into the crease of the upper flap and provided with a transverse slit, its upper flap provided with a hooked bar or tongue adapted to be inserted in said slit and its base or angles with the edges of said flap coinciding with the ends of said slit when folded and ends having sloping lower edges overlapping the edges of the lower flap the slit in the lower flap and provided with registering slits and ends overlapping each other, substantially as set forth. 4th. An envelope blank formed of a front or face A, ends B having edges b^1, b^{11}, b^{111}, b^4, b^5, a lower flap having edges c^1, c^{11}, c^{111}, and slit c^4, and an upper flap D having cemented edges d^1, d^{11}, and a hooked bar or tongue d^{111} gummed or cemented on the outer face, substantially as set forth.

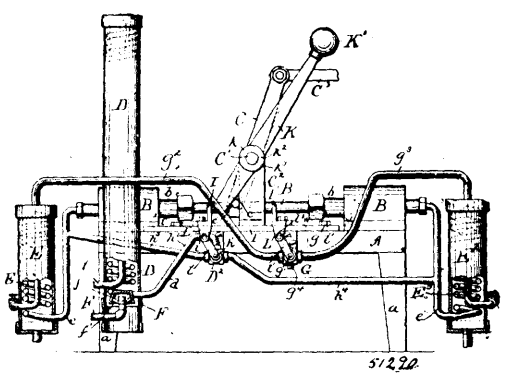
No. 51,289. Folding Box, Etc. (*Boîte pliante, etc.*)



Edgar Dredge, London, England, 12th February, 1896; 6 years. (Filed 16th August, 1895.)

Claim.—In a folding box, case, basket or the like, the combination of a rigid bottom with folding flexible ends, and folding rigid sides, or conversely flexible sides and rigid ends, with folding stretchers to fit inside said flexible ends, said ends and sides being hinged to said bottom, and constructed to fold inwards thereon, also with a hinged or loose cover, as herein described and set forth.

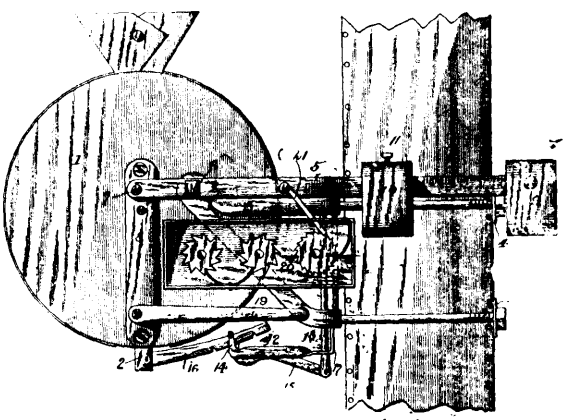
No. 51,290. Engine. (*Machine à vapeur.*)



George Henry Chappell, New York, State of New York, U.S.A., 12th February, 1896; 6 years. (Filed 8th March, 1894.)

Claim.—1st. The process of operating an engine, consisting in directing the pressure of a suitable fluid contained in a reservoir, alternately upon opposite sides of the piston of the engine, and exhausting the fluid from opposite sides of the piston into suitable independent reservoirs, the reservoirs being for a time placed in communication with the high pressure reservoir, substantially as specified. 2nd. The process of operating an engine, consisting in directing the pressure of a suitable fluid contained in a reservoir alternately upon opposite sides of the piston of the engine, throwing the chambers at opposite sides of the piston momentarily into communication, and finally exhausting the fluid from opposite sides of the piston into suitable independent reservoirs, the reservoirs being for a time placed in communication with the high pressure reservoir, substantially as described. 3rd. In an engine, the combination of a cylinder, independent reservoirs communicating with the chambers at opposite ends of the cylinder and constituting the exhaust reservoirs for the cylinder, and a high pressure reservoir for supplying the motive fluid alternately to opposite sides of the piston, substantially as specified. 4th. In an engine, the combination of a cylinder, independent reservoirs communicating with the chambers at opposite ends of the cylinder and constituting the exhaust reservoirs for the cylinder, a high pressure reservoir for supplying the motive fluid alternately to opposite sides of the piston, and means for cooling one of the exhaust reservoirs while the motive fluid is being supplied to the side of the piston opposite to that with which said exhaust reservoir is in communication, substantially as specified. 5th. In an engine, the combination of a cylinder, independent reservoirs communicating with the chambers at opposite ends of the cylinder and constituting the exhaust reservoirs of the cylinder, a high pressure reservoir for supplying the motive fluid alternately to opposite sides of the piston, and means for throwing the chambers at the opposite ends of the cylinder into communication, and subsequently shifting the flow of water or cooling means and the flow of the motive fluid, substantially as specified. 6th. In an engine, the combination with a cylinder, and a piston, of reservoirs, communicating with the chambers at opposite ends of the cylinder, and means for cooling a reservoir or reservoirs communicating with one end of the cylinder and simultaneously heating a reservoir or reservoirs communicating with the opposite end of the cylinder, substantially as specified. 7th. The combination of a cylinder, a piston for the cylinder, hermetically sealed reservoirs communicating with the cylinder for containing motive fluid, and a reservoir for holding the high pressure motive fluid also in communication with these reservoirs and forming one of them, substantially as specified. 8th. The combination of a cylinder, a piston for the cylinder, hermetically sealed reservoirs communicating with the cylinder for containing motive fluid, a reservoir for holding the high pressure motive fluid also in communication with these reservoirs and forming one of them, and means for reducing the pressure upon one side of the piston, substantially as specified. 9th. The combination of a cylinder, a piston for the cylinder, hermetically sealed reservoirs communicating with the cylinder for holding the motive fluid, a reservoir for generating a high pressure, means for directing the motive fluid from this reservoir to one side of the piston, and means for cooling the fluid exhausting from the opposite side of the piston, substantially as specified. 10th. A cylinder for an engine, comprising a head for the same cast in one piece with the cylinder, substantially as specified. 11th. A cylinder for an engine, comprising a head and a stuffing box for the same cast in one piece with the cylinder, substantially as specified. 12th. A heater for an engine having in combination an inner and outer vessel insulated from each other and adapted to contain the motive fluid for the engine both within and without the inner vessel, the inner vessel being a conductor for an electric current, substantially as specified. 13th A heater for an engine having in combination inner and outer vessels insulated from each other and adapted to contain the motive fluid for the engine both within and without the inner vessel, and a conductor extending through the inner vessel, said inner vessel being also a conductor for an electric current, substantially as specified.

No. 51,291. Grain Measurer etc. (*Mesure à grain etc.*)

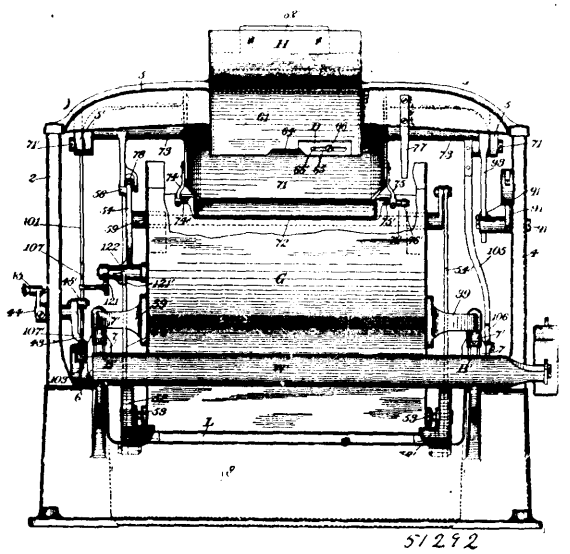


Gottlieb Karl Holbine, Eustis, Nebraska, U.S.A., 12th February, 1896; 6 years. (Filed 22nd November, 1895.)

Claim.—1st. The combination with a hopper, of a partition pivoted therein, scale beams pivoted to said hopper, supporting brackets pivoted to said scale beams, rods pivoted to the supporting brackets and to the hopper to prevent said hopper rotating, a notched bar secured to the lower end of the partition, a pivoted dog to engage the notches in said bar, a link connecting the said dog to the scale beams, and a registering device actuated by the movement of

the hopper, substantially as set forth. 2nd. The combination with a hopper, scale beams pivoted thereto, brackets pivoted to the scale beams, rods pivoted to the brackets and to the hopper, to prevent the rotation of the hopper, a notched bar secured to the lower end of the hopper, a slotted bar secured to the brackets and provided with an upturned slotted end, through which the notched bar moves and by which it is guided, a dog pivoted between the sides of the notched bar, a link pivoted to the dog and to the scale beams, a registering device actuated by the scale beams and clips for securing the brackets to the elevator frame, substantially as set forth.

No. 5 ,292. Weighing Machine. (*Balance à bascule.*)

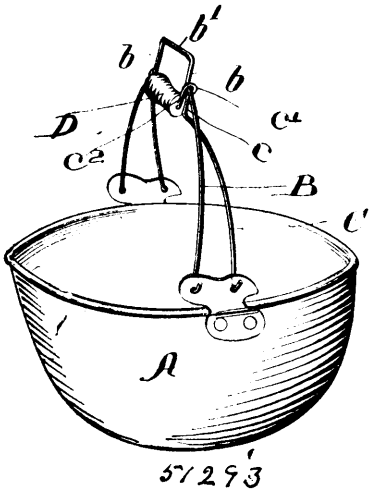


Francis Henry Richards, Hartford, Connecticut, U.S.A., 12th February, 1896; 6 years. (Filed 20th November, 1895.)

Claim.—1st. In a weighing-machine, the combination with a valve and with a bucket-closer, of reciprocally-effective valve-opening-movement and closer-opening-movement limiters, and a valve-opening actuator, operable on the return stroke of the valve-movement limitter, and having an ineffective period synchronous with the effective period of said limiter, substantially as specified. 2nd. In a weighing-machine, the combination with a valve and with a bucket-closer, of reciprocally-effective valve-opening-movement and closer-opening-movement limiters, and a valve-opening actuator held ineffective by the valve-opening-movement limiter during the effective action of said limiter, and operable on the return stroke of said limiter. 3rd. In a weighing-machine, the combination with a valve having its closing movement during the period in which the closer-opening-movement limiter is in its operative position, and with a bucket-closer, of reciprocally-effective valve and closer-opening-movement limiters, a valve-opening actuator operable on the return stroke of the valve-opening-movement limiter, and a valve-movement stop in position for reciprocally limiting the closing-movement of the valve and the valve-opening-movement of the valve-actuator, substantially as specified. 4th. In a weighing-machine, the combination with a valve and with a shiftable bucket-discharge member having a bucket-discharge movement, of a limiter for the bucket discharge movement of said bucket-discharge member, a valve-opening movement limiter reciprocally effective with said bucket-discharge movement limiter, and a valve-opening actuator operable on the return stroke of the valve-opening movement limiter, and having an ineffective period synchronous with the effective period of said limiter, substantially as specified 5th. In a weighing-machine, the combination with a valve and with a bucket having a closer, of means for actuating the valve independently of the operation of the closer, and a valve-stopping thrust-member operative with the closer and independently of the operation of the valve, and having an upward thrust-movement from the closer on the opening of the closer, and in position for intercepting the opening movement of the valve by said thrust-movement, substantially as specified. 6th. In a weighing-machine, embodying a bucket and bucket-counterpoising mechanism, and also embodying a bucket-poising mechanism supporting said bucket, the combination with supplemental balancing means normally carried by the bucket-counterpoising mechanism, of shifting means in position for automatically shifting said supplemental balancing means from off said bucket-counterpoising mechanism and on to the bucket-poising mechanism at a predetermined point in the movement of the bucket, substantially as specified. 7th. In a weighing-machine, the combination with a bucket mechanism having two members, one of which is shiftable relatively to the other for discharging the load, of a valve for controlling the supply of material to the bucket, and an actuator operative with the valve and in position for releasing the shiftable member on to closing movement of the valve and by the power of the valve mechanism, substantially as specified. 8th. In a weighing-machine, the combination with a pair of beam supports, of a beam mechanism pivotally mounted on said supports, and having a pair of bucket-supports thereon, a bucket mechanism pivotally mounted on said bucket-supports, and a yielding connection between one of said mechanisms and its pivotal supports, substantially as specified. 9th. In a weighing-machine, the combination with a supply-chute, of a valve for controlling a stream of material flowing from said chute, a valve-closing cam operative with the valve, and having a stream-reducing cam-face of decreasing efficiency, and a valve-closing actuator in position for exerting a continued pressure on said cam in a direction for closing the valve, substantially as specified. 10th. In a weighing-machine, the combination with a supply-chute, of a valve for controlling a stream of material therefrom, a valve-closing cam operative in unison with the valve, and having a stream-reducing cam-face of reducing efficiency combined with a cam-face of relatively-greater efficiency. and a valve-closing actuator in position for exerting a continued pressure on said cam in a direction for closing the valve, substantially as specified. 11th. In a weighing-machine having poising a counterpoising mechanism, the combination with bucket mechanism supported by and forming part of, said poising mechanism, said bucket mechanism consisting of two members, one of which is shiftable relatively to the other for discharging the load, a poise-weight normally exerting its force on the poising mechanism, a load-discharger for releasing the shiftable member of the bucket mechanism, and a shifter for simultaneously shifting the poise-weight out of operative relation with said poising mechanism and for throwing the load-discharger out of action, substantially as specified. 12th. In a weighing-machine, the combination with a supply-chute, of a supply-valve therefor comprising a main-valve and a supplemental-valve supported by the main-valve and movable relatively thereto, and having the discharge-edges of said main and supplemental valves facing in the same direction, substantially as specified. 13th. In a weighing-machine, the combination with a supply-chute having a drip-opening formed in a wall thereof, of a stream-supporting valve therefor, means for holding the valve against closing movement on the cut-off of the main-stream, whereby when said valve is so held, a drip-stream will be permitted to flow out through said drip-opening, over an inclined bed of material supported on the valve and over the discharge edge of the said valve, substantially as specified, 14th. In a weighing-machine, the combination with a bucket having a discharge-opening, and with a side wall adjacent to said opening, of a closer for the bucket, means for normally closing the closer, and a regulator-blade for the closer, for retaining hold of a portion of the material discharged by the bucket, whereby said material is carried upwardly against said side wall, and the duration of resistance of the discharged material to the closing movement of the closer is prolonged, substantially as specified. 15th. In a weighing-machine, the combination with a supply-chute having an inclined stream-supporting wall adapted to direct the stream of material at an inclination to, and toward the rear, and away from, the front of the valve, and having also a mass-confining wall, the lower edge of which is located above the lower edge of the inclined wall, of a stream-supporting valve in position for controlling the supply-stream from said chute, substantially as specified. 16th. In a weighing-machine, the combination with two pairs of beam-supports of a pair of oppositely-disposed beams, each embodying a pair of beam-arms pivotally mounted on the corresponding pair of said beam-supports, and a combined connecting-shaft and counterpoise joining said beam-arms, said beam-arms each having a bucket-support intermediate of the beam-supports a connecting-link pivotally secured to oppositely-disposed beam-arms for maintaining the movements of the beam-arms in unison, and a bucket pivotally mounted on said bucket-support, substantially as specified. 17th. In a weighing machine embodying a tripping-stop for releasing the closer latch on the descent of the scale-beam to a predetermined point, the combination with a bucket and with a closer therefor, of a rocker pivotally supported on the bucket, and above the closer, a connecting rod pivoted to the closer and also pivoted to the rocker, and having said pivots nearly in line with, and the latter of said pivots above the rocker-pivot when the closer is closed, and a closer-latch releasable by the tripping-stop and operative for engaging the rocker to hold the closer closed, substantially as specified. 18th. In a weighing machine, the combination with a bucket mechanism having two members, one of which is shiftable relatively to the other for discharging the load, of a valve for controlling the supply stream, an actuator normally operative with the valve for releasing said shiftable member, and means for throwing said actuator out of operative relation with said shiftable member, substantially as specified. 19th. In a weighing machine, the combination with a bucket mechanism having two members, one of which is shiftable relatively to the other for discharging the bucket-load, of a latch normally holding said shiftable member against movement, a valve for controlling the supply of material to the bucket, and an actuator operative with the valve and in position for releasing said latch and thereby the shiftable member of the bucket mechanism, and by the power of the valve mechanism, substantially as specified. 20th. In a weighing machine, the combination with a bucket mechanism having two members, one of which is shiftable relatively to the other for discharging the bucket-load, of a latch normally holding said shiftable member against movement, a valve for controlling the supply of material to the bucket, an actu-

ator normally operative with the valve for releasing said latch and thereby the shiftable member of the bucket mechanism, and means for throwing said actuator out of operative relation with said latch, substantially as specified.

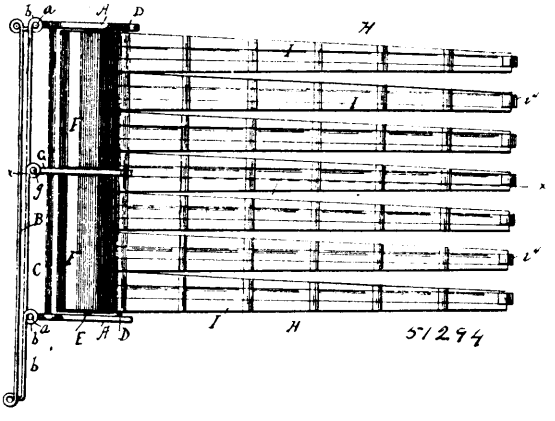
No. 51,293. Saucepan. (*Casserole.*)



Ludovic Johnson Painter, Chicago, Illinois, U.S.A., 12th February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—1st. The combination with a saucepan or similar article, of two bails pivoted to the sauce pan at points slightly apart, one of said bails being provided with one or more loops extending therefrom toward the other bail, and the second bail being provided with one or more guiding portions adapted to work in said loop and extending from said second bail toward the first to meet said loop at a point intermediate between the handle portions of the two bails, substantially as described. 2nd. The combination with a saucepan A, of the two bails B, C, pivoted to the saucepan at points slightly apart, one of said bails having the central portion c^3, and the loops at opposite ends thereof extending toward the second bail and the second bail having the central portion b^1, and the guiding portions b, at opposite ends thereof extending toward the said loops, substantially as described.

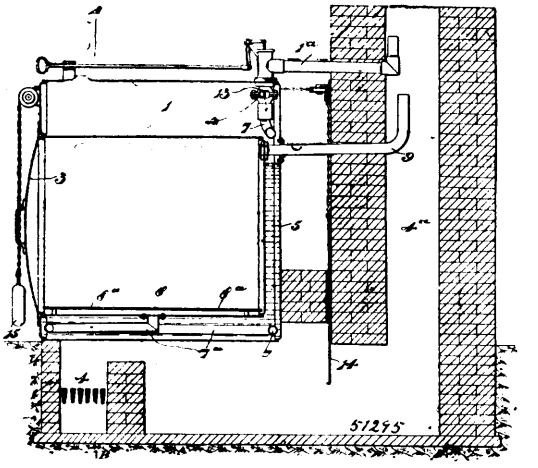
No. 51,294. Fire Extinguisher. (*Extincteur d'incendie.*)



Thomas Lacey, Fort Benton, Montana, U.S.A., 12th February, 1896; 6 years. (Filed 20th November, 1895.)

Claim.—1st. A fire extinguisher consisting of a pair of metallic packing rollers mounted for rotation upon a common shaft and having between the same a guide and slicing bar for the purpose described, and having attached thereto, and travelling thereafter, a flexible metallic sheating made up of a series of flat linked chains, each link thereof having a spike or projection upon its under side, substantially as and for the purpose described. 2nd. The combination of a frame having two side bars provided with forwardly projecting hooks for attachment of a draft bar, two packing rollers mounted for rotation upon a shaft in said frame, a guide and slicing bar mounted in said frame between said rollers and having a forwardly projecting hook thereon, a series of flat chains attached to the rear of said frame, and made up of flat metallic links gradually tapering towards their rear ends, and each link provided with a projection of spike, substantially as and for the purpose described. 3rd. The combination of a frame having two side bars provided with forwardly projecting hooks, two packing rollers mounted for rotation upon a shaft in said frame, a guide and slicing bar mounted in said frame between said rollers and having a forwardly projecting hook thereon, a detachable and reversible draft bar connecting with the hooks on said side bars and said guide bar, and a metallic sheathing attached to the rear of said frame, made up of a series of flat chains composed of flat metallic links gradually tapering in width, toward their rear ends and each link being provided with a projection or spike upon its under surface, substantially as and for the purposes described. 4th. A chain for the purpose described, made up of flat links provided at their respective ends with a yoked portion and with a tongue, and provided with spikes or projections on their under surfaces, the tongue of each link fitting the yoke of the next succeeding link, and secured thereto by pins, substantially as described.

No. 51,295. Disinfector. (*Désinfecteur.*)

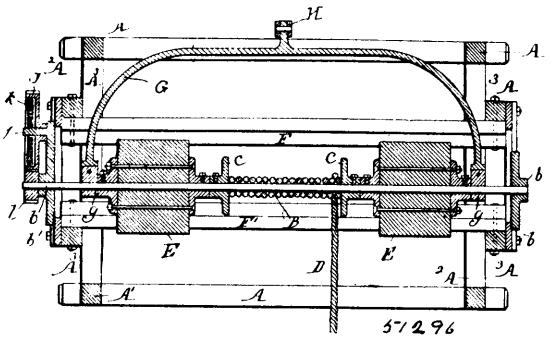


John Clough Thresh, Chelmsford, England, 12th February, 1896; 6 years. (Filed 20th November, 18.5.)

Claim.—1st. A disinfector comprising a boiler to contain a solution having a higher boiling point than water, a disinfecting chamber arranged within said boiler so as to be mainly surrounded by said solution, and a steam-way connecting the steam space of said boiler with the interior of said disinfecting chamber and arranged to pass through said solution whereby steam flowing through said steam-way will acquire or retain heat in its passage through said solution to the said disinfecting chamber, and will be delivered into the disinfecting chamber uncondensed, substantially as described for the purpose specified. 2nd. A disinfector comprising a boiler to contain a solution having a higher boiling point than water, a disinfecting chamber arranged within said boiler so as to be mainly surrounded by said solution, and a steam-way connecting the steam-space of said boiler with the interior of said disinfecting chamber and arranged to pass through the liquid space at the lower part of the boiler located immediately over the boiler furnace, whereby steam passing through said steam-way will be maintained at a sufficient temperature to prevent its condensation, substantially as herein described. 3rd. A disinfector comprising a boiler to contain a solution having a higher boiling point than water, a disinfecting chamber arranged within said boiler so as to be mainly surrounded by said solution, and open to the external atmosphere, and steam and hot air pipes connected with said disinfecting chamber and with each other and through which steam and hot air can be successively admitted to said chamber, substantially as herein described for the purpose specified. 4th. A disinfector comprising a boiler open to the atmosphere and serving to contain a solution having a higher boiling point than water, a disinfecting chamber arranged within said boiler so as to be mainly surrounded by said solution and at all times open to the external atmosphere, and an air heating coil arranged within the liquid space between the bottoms of the said boiler and chamber and provided with a valve whereby said disinfecting chamber can be placed in communication with the external atmosphere and be supplied with heated air, substantially as herein described for the purpose specified. 5th. A disinfector comprising a boiler provided with a passage whereby it can be placed in direct communication with the external atmosphere, a disinfecting chamber located within said boiler and always in communication with the atmosphere, a pipe connecting the steam space of the boiler with said disinfector and passing through the liquid space of the boiler, and a valve controlling the passages leading respectively from the boiler to the atmosphere direct and from the boiler to the disinfecting chamber, said valve in one position closing the communication between the boiler and the disinfecting chamber and placing the boiler in direct communication with the atmosphere, and in another position closing the direct communication between the boiler and

the atmosphere, and opening that between the boiler and the disinfecting chamber, whereby said boiler is at all times open to the external atmosphere, substantially as herein described for the purpose specified. 6th. A disinfector comprising a boiler to contain a solution having a higher boiling point than water, a disinfecting chamber located within said boiler so as to be partially immersed in the solution therein and provided with a door or doors, a baffle and perforated false bottom in the lower part of said chamber, an automatic apparatus for supplying water as required to the boiler, a steam pipe and coil (or coils) connecting the steam space of said boiler with said chamber and arranged to pass through the solution in the boiler, a second steam pipe for connecting the boiler with the external atmosphere direct, a valve adapted to control the adjacent ends of said steam pipes, and an air admission pipe with controlling valve whereby air can be conducted through and heated by the solution on its way to the disinfecting chamber, as set forth. 7th. A disinfector comprising the boiler 1, with pipe 10^a, the disinfecting chamber 2 located within said boiler and provided with a pipe 9, the steam pipe 7, and coil 7^a, extending from the steam space of said boiler through the liquid space thereof to the disinfector, a valve 13 arranged to simultaneously control the adjacent ends of said pipes 10^a and 7, and a hot air supply pipe 10 provided with a valve and connected with said pipe and coil 7, 7^a, substantially as herein described.

No. 51,296. Fire Escape. (*Appareil de sauvetage.*)



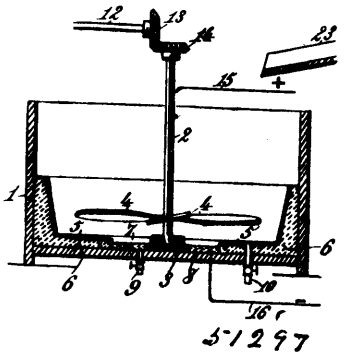
Jacob J. Haller, Westfield, and Charles Promenschenkel, Dunkerk, both of New York, U.S.A., 12th February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. In a fire escape, the combination with a supporting frame, of a main or lower brake arranged in said frame, an auxiliary brake arranged above the main brake, a rotary drum arranged between said main and auxiliary brakes, and an axle carrying said drum and capable of moving toward and from said brakes, the latter being fixed relatively to the drum whereby the drum bears normally against the lower brake and is restrained by the upper brake when abnormally withdrawn from the lower brake, substantially as set forth. 2nd. In a fire escape, the combination with a supporting frame, of a drum journalled in said frame and movable at right angles to its axis, a brake whereby the rotation of the drum is retarded, and a lifting device whereby the drum is released from said brake, substantially as set forth. 3rd. In a fire escape, the combination with the supporting frame, of a vertically movable drum, brakes arranged above and below said drum, a lifting yoke or frame connected with said drum and a releasing rope connected with said yoke or frame, substantially as set forth. 4th. In a fire escape, the combination with a supporting frame, and a vertically movable drum-shaft, of a friction wheel mounted on said shaft, brakes arranged above and below said friction wheel, a yoke for lifting the drum shaft, a lifting lever connected with said yoke and a releasing rope connected with said lever, substantially as set forth.

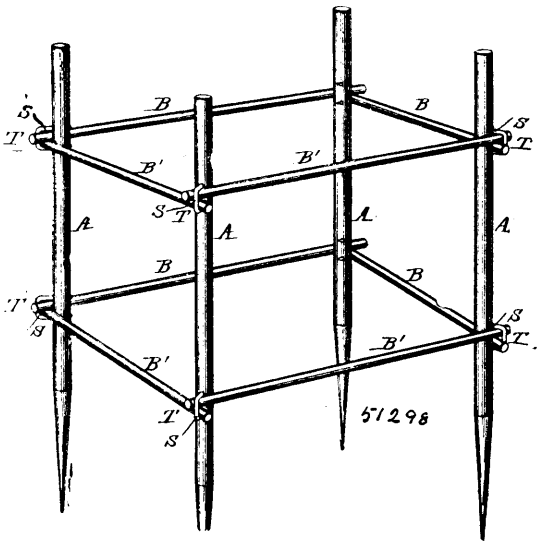
No. 51,297. Process of and Apparatus for Extracting Gold, etc., from Ore. (*Procédé et appareil pour extraire l'or etc. des minerais.*)

Louis J. Pelatdn, Paris, France, and Fabrizio Clerici, Milan, Italy, 12th February, 1896; 6 years. (Filed 11th January, 1895.)

Claim.—1st. The process described for the solution and recovery of gold and silver from their ores, consisting in dissolving the metals by a weak solution, intensifying the solvent power of the solution by an electric current, and increasing the electric conductivity of said solution by adding a soluble salt of an electro-positive metal, such as salt of sodium, substantially as described. 2nd. The process described for the solution and recovery of gold and silver from their ores, consisting in dissolving the metals by a weak solution, intensifying the solvent power of the solution by an electric current and increasing the electric conductivity of said solution by adding a soluble salt of an electro-positive metal, such as sodium chlorid, substantially as described. 3rd. The process described for the solution and recovery of gold and silver from their ores, consisting in dissolving the metals by a weak solution, intensifying the solvent power of the solution by an electric current, and increasing the electric conductivity of said solution by adding a soluble salt of an electro-positive metal, such as a salt of sodium and effecting the electro amalgamation of the precious metals dissolved in the metal of the cathode, substantially as described. 4th. The process described for the solution and recovery of gold and silver from their ores by a single, continuous treatment in one and the same pan, said process consisting in dissolving the metals by a solution, intensifying the solvent power of the solution by an electric current, and increasing the electric conductivity of said solution by adding a soluble salt of an electro-positive metal, such as sodium chlorid, or other soluble salt of an electro-positive metal producing an electro-amalgamation of the precious metals in the metal of the cathode, and recovering the same by any known method, substantially as described. 5th. In the art of extracting gold and silver from their ores, the apparatus described which consists of a pan, or vessel, and an anode and a cathode therein, the latter consisting of mercury and amalgamated plates, and the former comprising an agitator and shaft supported on a central, insulating bearing surrounded by the mercury, substantially as described. 6th. The apparatus described, consisting of a pan, or vessel, having a bottom lined with sheet-lead, and an agitator carried by a central shaft stepped on a central bearing, the agitator and shaft constituting the anode and the lead, the cathode of an electrolytic cell, substantially as described. 7th. The process described for the extraction and separation of precious metals from their ores, the same consisting in treating said ores with a solution, intensifying the solvent action by an electric current, increasing the conductivity of said solution by the addition of a soluble agent, and collecting said metals by electro-deposition and electro-amalgamation on or in the metal of the cathode, substantially as described. 8th. The process described, the same consisisting in treating the ores of gold and silver with a solution of chlorine bromine, or potassium cyanide, increasing the conductivity of said solution by adding a soluble salt of sodium and collecting the metals from said solution by electro-deposition upon a cathode of amalgamated plates and mercury, substantially as described. 9th. The process described which consists in dissolving the ores of gold and silver in a chlorine, bromine or cyanide solution, intensifying the solvent power of the solution by the passage of a continuous electric current and by agitation, and separating the precious metals from the solution by electro-amalgamation in a cathode of mercury covering the bottom of the tank, substantially as described.



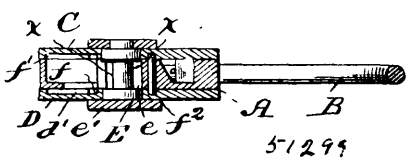
No. 51,298. Tie Joint. (*Lien de joint.*)



William Livingston, Flushing, New York, U.S.A., 12th February, 1896; 6 years. (Filed 5th December, 1894.)

Claim.—1st. A tie-joint for frames consisting of an upright provided with a staple projecting radially or diagonally therefrom, and horizontal members having their adjoining ends passed through the staples from opposite sides of the upright, and crossing each other between the staples and uprights and bearing against tangental parts of the uprights and the keeper side of the staple, thereby forming angles between which the staples and uprights are held, substantially as specified. 2nd. A tie-joint for frames consisting of an upright provided with a staple projecting radially or diagonally therefrom, and horizontal pieces having their adjoining ends, which are provided with recesses, passed through the staples at right angles to each other from opposite sides of the upright, and with the recesses embracing the upright, thereby forming angles between which the staples and uprights are held, substantially as specified. 3rd. A structure composed of corner uprights provided with radially or diagonally projecting staples and horizontal members having adjoining ends passed through the staples in the uprights from opposite sides of the upright and bearing against tangental points of the uprights and the keeper sides of the staples, whereby the staples and uprights of each corner of the structure are held between the horizontal members and the several uprights are bound together by the horizontal members, substantially as specified.

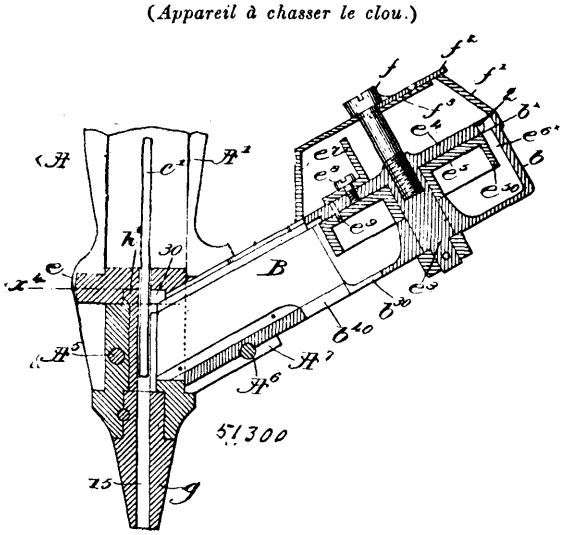
No. 51,299. Permutation Lock. (*Serrure à combinaison.*)



Jerome Watson Packard and Albert M. Ellis, both of Boston, Massachusetts, U.S.A., 12th February, 1896; 6 years. (Filed 15th January, 1896.)

Claim.—1st. A permutation lock comprising the frame, the retaining device movably supported therein, the spiddle and the rotable and laterally movable disc for locking said retaining device against movement except when set at a predetermined position, substantially as described. 2nd. A permutation lock comprising the frame, the retaining device movably carried thereby, the discs rotably and laterally movable upon said spindle, means for holding them against movement except when at a predetermined position, and means for preventing the lateral movement of one disc independent of the other, substantially as described. 3rd. A permutation lock comprising the frame, the retaining device, the spindle, having flattened sides, and the disc rotably mounted upon the spindle, said flattened sides permitting lateral movement of the disc upon the frame to release the retaining device, substantially as described. 4th. A permutation lock comprising the frame, the retaining device, the spindle, the discs rotably and laterally movable of the frame, and the connection between the disc and the frame comprising an annular groove, and a pin or projection from the adjacent member entering said groove, substantially as described.

No. 51,300. Machine for Driving Nails.
(*Appareil à chasser le clou.*)

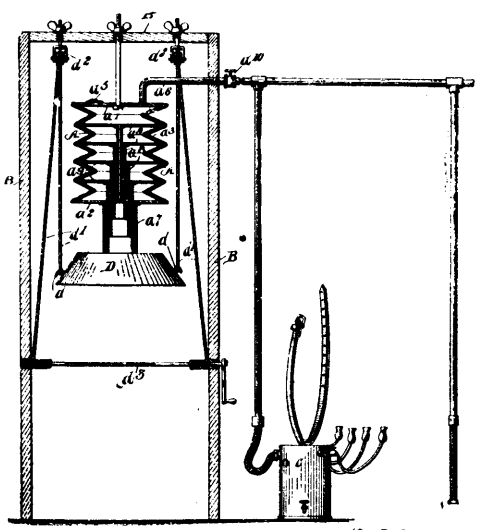


Frank Forrester Stanley, (Trustee), Swampscott, Massachusetts, assignee of Frank Chase, Waterville, Maine, both of the U.S.A., 13th February, 1896; 6 years. (Filed 2nd December, 1895.)

Claim.—1st. In a machine for driving nails, the following instrumentalities, viz. :—a raceway, a nose, a nail passage leading thereto, a carrier located at the end of said raceway and having a slot to receive a nail, said carrier being adapted in its movements to take a nail from the raceway to said nail passage, combined with a driver-bar having a driver, and a device to act on the nail in the carrier and positively move the nail out of the carrier and into said nail passage below said carrier, substantially as described. 2nd. In a nail driving machine the following instrumentalities, viz. :—a raceway to receive and guide loose nails, a driver-bar having a driver, a carrier located at the end of said raceway, and having a slot to receive a nail from the raceway, a device to act on the nail in the carrier and positively move it out of and below the carrier, and means under the control of the driver to prevent a nail being taken from the end of the raceway until after the nail previously taken from the raceway has been driven, substantially as described. 3rd. In a nail-driving mechanism, the following instrumentalities, viz. :—a frame piece having a nose and an auxiliary nail-passage, a raceway having a curb, a movable feed-table therein constituting the bottom of a hopper adapted to contain loose nails, a revoluble carrier having a central passage to act as a driver guide, and having at one side a slot to receive a nail from the raceway, a driver bar, devices to actuate the carrier and take a nail from the raceway to the said auxiliary nail-passage, and means to positively move the nail through the carrier and into said nail-passage, substantially as described. 4th. In a nail-driving mechanism, a raceway having at its receiving end a curb in the plane of the raceway, combined with a concentric circularly movable deed table, the periphery of which constitutes one side of a curved passageway to receive the bodies of and load nails to the upper end of the slot in the said raceway, the curb constituting the other side of the passage way, substantially as described. 5th. The raceway, and its curb provided with an interior shoulder upon which may rest the heads of nails the bodies thereof depending below the shoulder, combined with a feed-table, and a shod or web thereon to overlap the heads of the nails properly supported on their way to said raceway, said shed or web serving to protect the heads of the nails going to the raceway from the action of loose nails lying on the said feed-table, substantially as described. 6th. A raceway and a nail-receiving passage-way leading to the entrance thereof, a hopper provided with an inclined oscillating bottom, having at its upper end a recess to permit nails to pass into the nail-receiving passage-way, and an agitator below the centre of oscillation of and on the hopper bottom, whereby the movement of the agitator throws the nails upward along the inclined hopper bottom and into the recess, substantially as described. 7th. The raceway, and a movable carrier co-operating therewith, having a slot to receive a nail from said raceway, combined with a longitudinally movable wedge-like device having a shoulder, said device entering the slot in the carrier behind the nail and pushing the same laterally from the slot, the shoulder thereafter acting upon the head of the nail to force it down away from the carrier, substantially as described. 8th. An inclined raceway having an attached curb in the same plane thereof, a movable table surrounded by said curb and constituting the inclined bottom of the hopper, to receive nails in bulk, the periphery of said table also forming one side of a passageway leading to the upper end of the raceway, the curb forming th · other fixed side thereof, and an agitator, combined with means to move said feed table and agitator, for the purposes set forth. 9th. The raceway having a concave end to form a bearing for one side of the carrier, and having one of its end walls cut away to form an outwardly inclined cam face, combined with a movable slotted carrier mounted at and to move across the end of said raceway, and with means to move said carrier, said concave bearing and cam face preventing the injurious catching of nails, substantially as described. 10th. A raceway having an attached curb, a cap co-operating with said curb, combined with a movable feed table provided with a projecting shed or web cut away for a portion of its length to enable the heads of nails to pass below said shed or web as the bodies of said nails lie in the slot communicating with the upper end of the raceway, said shed or web acting as a protector for the heads of nails properly suspended and on their way to the raceway, and to keep said heads from being acted upon by the loose nails placed in bulk upon the top of said feed table, the latter constituting the bottom of the hopper, substantially as described. 11th. In a nail presenting and driving mechanism, the following instrumentalities, viz. : a hopper to receive nails in bulk, an inclined movable nail-supporting plate therein having a nail passage communicating with a slot to receive nails to be conducted to a driver, said plate having projections to arrange the nails in said slot, to operate, substantially as described. 12th. In a nail presenting mechanism, the following instrumentalities, viz. : a raceway, a connected curb, forming a continuation of the sides of the raceway, a plate therein occupying an inclined position and sustaining the nails in bulk, and a shed or lip at the periphery of the said plate, it acting as a cover for a passage-way which leads nails to said raceway, the curb forming the outer side thereof, combined with an agitator to cause the nails to be moved into position to enter said passageway, substantially as described. 13th. In a nail presenting mechanism, a raceway having at its receiving end, a curb to constitute one side of a curved passageway to receive the bodies or and load nails to the upper end of the raceway, combined with a food table having the greater portion of its periphory concentric with the curb to constitute the other side of the passageway, a part of the periphery being of greater radius at the entrance to the passageway to increase the width of the latter, substantially as described. 14th. In a nail presenting mechanism, a raceway having at its receiving end a curb to constitute one side of a curved passageway to receive the bodies of and lead nails to the

upper end of the raceway, combined with a feed table having the greater portion of its periphery concentric with the curb to constitute the other side of the passageway, a part of the periphery being of greater radius at the entrance to the passageway to increase the width of the latter, and an opening in the curb through which nails having improperly shaped heads, or headless nails, may be discharged after passing through the widened portion of the passageway, substantially as described. 15th. In a nail presenting mechanism, a raceway having a curb at its upper end, a vibratable food table therein having its periphery shaped to form with the curb a curved passageway to lead nails to the entrance to the raceway, and an opening in the curb adjacent the entrance to the raceway, to permit the exit from the passageway of nails improperly presented to said raceway, substantially as described. 16th. The raceway, and its curb, combined with a feed table having its periphery flattened for a portion of its length, and a shed or web on the feed table to overlap the heads of nails properly supported between the curb and periphery of the feed table on their way to the raceway, said shed or web being cut away above the flattened portion of the periphery of the feed-table, substantially as described. 17th. In a nail presenting mechanism, a raceway having a curb at its upper end, a vibratable feed-table therein having its periphery shaped to form with the curb a curved passageway to lead nails to the raceway, the periphery being flattened for a portion of its length to widen the passageway at the nail receiving point, the curb having openings therein below the widened part of the passageway and below the upper end of the raceway, through which nails improperly presented to the raceway or these having improperly shaped heads may be discharged, substantially as described.

No. 51,301. Method of and Apparatus for Automatically Maintaining and Regulating the Vacuum in Cow-Milking Machines. (*Méthode et appareil pour maintenir et régler automatiquement le vacuum dans les machines à traire les vaches.*)

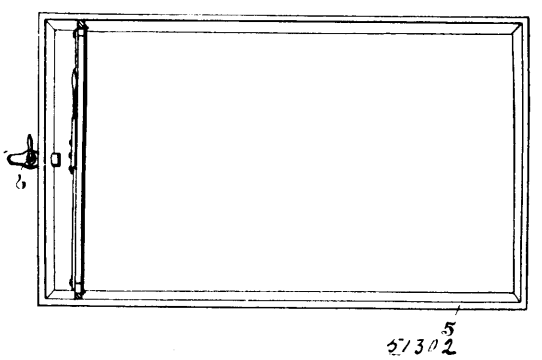


51301

Jerry Edward Harvey and Joseph Hepenstall Hoover, both of Hubbard, Iowa, S.N.A., 13th February, 1896; 18 years. (Filed 9th September, 1895.)

Claim.—1st. The method hereinbefore described of regulating the air tension or vacuum in a milking machine, which consists in maintaining during the milking operation, a constant, practically uniform suction in the milk receiver and its connections, such suction being practically maintained notwithstanding the varying air displacement caused by the inflow of milk, substantially as specified. 2nd. The method hereinbefore described of regulating the air tension or vacuum in a milking machine, which consists in varying or adjusting the suction, or air tension, in instant and constant correspondence to the inflow of milk into the receiver, whereby the air tension is kept practically uniform irrespective of such quantity of milk, as specified. 3rd. An appaaatus for regulating the air tension or vacuum in a milking machine, which consists of an air-exhaust chamber having a movable portion and means for automatically expanding said chamber as the air tension varies in the milk receiver tubes and air chamber with the inflow of milk, and a suitable tubular connection between such chamber and the receiver or teat cups, substantially as shown and described. 4th. An apparatus for regulating the air tension or vacuum in a milking machine, which consists of an air-exhaust chamber proper, a pendent weight attached to a movable side or member of such chamber, and a suitable tubular means for connecting such air chamber with the milk receiver or teat cups, substantially as shown and described. 5th. An apparatus for regulating the air tension or vacuum in a milking machine, which consists of an expansible air-exhaust chamber proper, having an air escape valve, a pendent weight attached to the lower or movable side or member of such chamber, a milk receiver, a tubular connection between the latter and the air chamber, and means for raising the aforesaid weight and collapsing the air chamber, which means relax and pay out automatically when tension is released, thus allowing the weight to descend and apply a constant and uniform pull on the movable side of the air chamber, whereby it is caused to instantly automatically adjust itself to the change of air tension produced by inflow of milk into the milk receiver, as specified. 6th. An apparatus for regulating the air tension or vacuum in a milking machine, which consists of an expansible air-exhaust chamber, having an automatic air-escape, valve, and its lower side or member being movable, a weight pendent from such member, a milk receiver, and a tubular connection between the latter and the air chamber and ropes and a winding device for raising the aforesaid weight and movable member of the air-chamber, as shown and described. 7th. An apparatus for regulating the air tension or vacuum in a milking machine, composed of an expansible air-exhaust chamber which is suspended at its upper side from a fixed support and has a flexible, collapsible body, a means for holding the latter expanded laterally, at one or more points, a weight connected with its lower end, for applying a constant stretch or tension to said air chamber, and a tube for connecting the latter with the milk receiver and teat cups as shown and described. 8th. An apparatus for regulating the air tension or vacuum in a milking machine, composed of an air chamber having an air escape valve, rigid heads and a flexible collapsible tubular body which connects the latter, and forms an air tight enclosure, a series of rigid perforated diaphragms arranged within the air chamber parallel to the said heads, a series of telescoping guides connected with the diaphragms, a weight attached to the lower head, a tube for connecting the air chamber with a milk receiver and teat cups, and means for raising said weight and collapsing the air chamber as specified.

No. 51,302. Curd Dam. (*Barrage pour lait caillé.*)



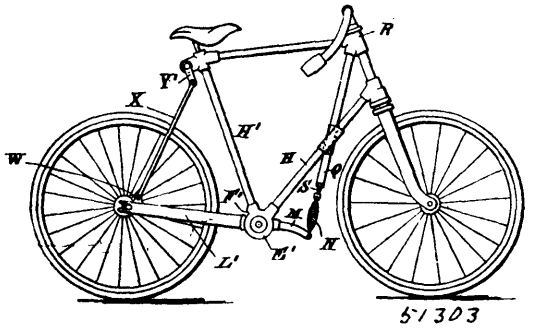
51302

Robert Wherry, Knowlton, and Alexander Wink Grant, Montreal, both in Quebec, Canada, 13th February, 1896; 6 years. (Filed 3rd January, 1896.)

Claim.—1st. The combination with a vat for use in cheese making, or the like, of a movable straining dam for the purpose set forth. 2nd. The combination with a vat for use in cheese making, or the like, of an adjustable movable straining dam for the purpose set forth. 3rd. The combination with a vat for use in cheese making or the like, of a straining dam extending transversely from side to side of such vat, for the purpose set forth. 4th. The combination with a vat for use in cheese making, or the like, of a straining dam extending transverselp of such vat and provided with extensible sides or ends, for the purpose set forth. 5th. The combination with a vat for use in cheese making, or the like, of a straining dam extending transversely of such vat, and provided with extensible and adjustable sides or ends, for the purpose set forth. 6th. The combination with a vat for use in cheese making or the like, a curd straining dam consisting of an open frame extending transversely from side to side of such vat and provided with a perforated sheet extending across the face thereof, for the purpose set forth. 7th. A straining dam consisting of an open frame provided with a perforated sheet extending across the face thereof and extensible sides or ends, for the purpose as set forth. 8th. A curd straining dam consisting of an open frame provided with a perforated sheet extending across the face thereof and extensible and adjustable sides or endsfor the purpose set forth. 9th. A curd straining dam consisting of a frame formed of upper and lower longitudinals, transverse connecting bars, a perforated sheet extending over the face of said frame, end pieces formed with guiding bars adapted to slide in openings in said transverse connecting bars, guarding sections and flexible strips carried by said end pieces, and means for adjusting such end pieces, for the purpose set forth. 10th. A curd straining dam consisting of a frame formed of upper and lower longitudinals, transverse connecting bars, a perforated sheet extending over the face of said frame, end pieces

formed with guiding bars adapted to slide in openings in said transverse connecting bars guarding sections and flexible strips carried by said end pieces, and means consisting of a lever fulcrumed to said frame and having link connections with such end pieces, for the purpose set forth.

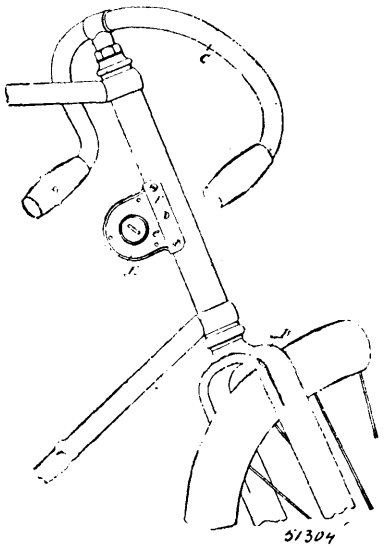
No. 51,303. Frame for Cycles. (*Cadre pour cyclettes.*)



Edward Goodman Sheward, Upper Norwood, England, 13th February, 1896; 6 years. (Filed 7th Jan., 1896.)

Claim.—1st. In a cycle frame the barrel C, with flange D, lock nut D^1, said barrel C, containing at either end, the ball bearing discs B, of the axle A, in combination with loose rings G, G^1, loose collar I, for articulating the lower main tubes H, and centre stays H^1, H^1, also back forks L, L^1, as shown and set forth. 2nd. In a cycle frame, the combination of barrel C, lock nut D^1, and discs B, B, loose rings G, G^1, loose collar I, with the stays H, H^1, the projecting lug M, of barrel C, lugs T, T^1, on ring plates E, E^1, as shown and set forth. 3rd. In a cycle frame, the combination of barrel C, lock nut D^1, and discs B, B, loose collar I, ring plates E, E^1, the jointed rods X, X, connecting back fork L, L^1, with short levers Y, Y, having motion from saddle pillar H^1, clipping device, as shown and specified. 4th. In a cycle frame, the combination of barrel C, carrying collar I, ring plates E, E^1, either or each having lugs M, M, T, T^1, for tension springs N, connecting said lugs to post Q, and to back fork respectively or collectively as shown and set forth. 5th. In a cycle frame, the barrel C, ring plates E, E^1, the combination of coiled springs such as shown at figures 7 and 8, for partially or wholly surrounding the barrel C, and having their ends affixed to frame, substantially as shown.

No. 51,304. Bicycle Lock. (*Serrure de bicycles.*)

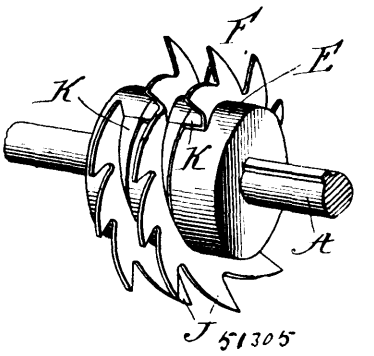


Benjamin F. Smith, Bay City, Michigan, U.S.A., 13th February, 1896; 6 years. (Filed 26th December, 1895.)

Claim.—1st. A bicycle lock having a concave face-plate provided with adjusting strips adapted to be filed away, whereby the lock may be made to fit any sized frame, substantially as described. 2nd. In a bicycle locking device, the combination of the head and steering post with a lock adapted to lock the steering post when the front wheel is out of line with the rear wheel, said lock provided with means operated by a thumb piece for shooting the bolt of the lock, and key or combination operated mechanism for returning the bolt and unlocking the steering post, substantially as described.

No. 51,305. Fodder Sherdder.

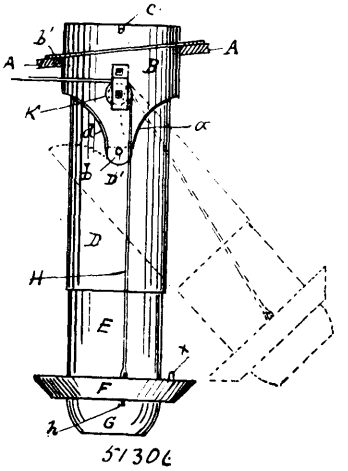
(*Machine pour couper le fourrage.*)



George W. Packer, Rock Falls, Illinois, U.S.A., 13th February, 1896; 6 years. (Filed 22nd November, 1895.)

Claim.—1st. In a fodder shredding machine, the combination of a series of circular rotating blades, each of which is provided with peripheral projections, the engaging ends of which are bent laterally successively in different degrees to form a spiral of engaging points, suitable collars interposed between said blades, and suitable means for clamping said parts together, substantially as shown and described. 2nd. In a fodder shredding cylinder, the combination of clamping collars E, having their clamping faces perpendicular to the axis of said cylinder, the interposed blades F bent laterally near their peripheries, and outside of said collars to form spirally arranged engaging peripheral points, and suitable means of clamping said collars on said blades, substantially as shown and for the purpose specified.

No. 51,306. Smoke Jack. (*Cheminée de locomotive.*)



Howard Bruyn Waverley and John Holmguist, Cedar Rapids, both in Iowa, U.S.A., 13th February, 1896; 6 years. (Filed 21st January, 1896.)

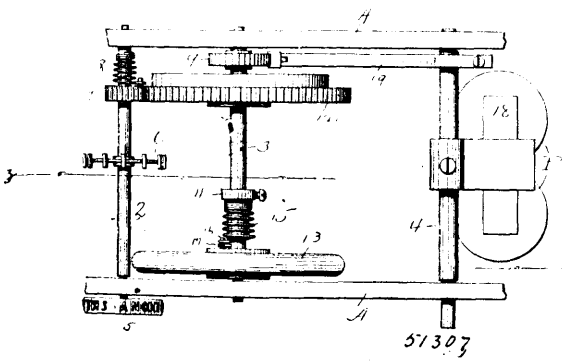
Claim.—In a smoke jack, the combination with a thimble, fixedly secured on a suitable support, and having downwardly extending arms at opposite sides, a pipe of a diameter less than the interior diameter of the thimble, passing through the thimble, and fixedly supported therein, to form a passage between the same and thimble, a swinging pipe section of a less diameter than that of the first mentioned pipe, a shaft passing through the thimble arms and the upper end of the swinging section, a telescopic pipe section, having a curved contracted mouth and drip flange, and means for adjusting the telescopic section, substantially as described.

No. 51,307. Spring Winding Means for Printing Machines, etc. (*Ressort pour télégraphe imprimant, etc.*)

John Burry, Long Island City, New York, 13th February, 1896; 6 years. (Filed 16th May, 1895.)

Claim.—1st. In a printing-telegraph or other machine, the combination with the escapement, of an automatically wound main-spring,

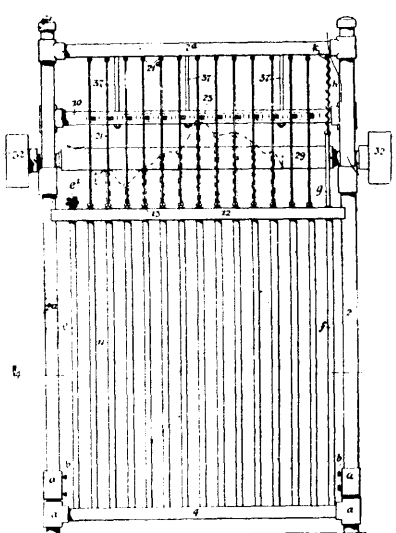
and means, having a resilient member, connecting said spring and escapement, substantially as described. 2nd. In a printing-tele-



graph or other machine, the combination with the escapement, of an automatically wound main-spring, and gearing containing a spring connecting the main-spring and escapement and operating the escapement wheel, substantially as described. 3rd. In a printing-telegraph or other machine, the combination with the escapement, of an automatically wound main-spring, a main gear to which it is connected, a second gear in mesh with the main gear and loose on its shaft, and a spring connecting it with said shaft, substantially as described. 4th. In a printing-telegraph or other machine, the combination with the escapement, of an automatically wound main-spring, loose in its box, and gearing between spring and said escapement, substantially as described. 5th. In a printing-telegraph or other machine, the combination with the escapement, of an automatically wound main-spring, loose in its box, a gear to which the box is connected, and gearing containing a second spring connecting said gear and said escapement, substantially as described. 6th. In a printing-telegraph or other machine, the combination with the escapement, of an automaticallly wound main-spring loose in its box, a main gear to which the box is connected, a second gear in mesh with said gear and loose upon its shaft, and a spring connecting said second gear and shaft, substantially as described. 7th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, an intermittently acting automatic spring-winding mechanism therefor, and a momentum-device for continuing the spring-winding, substantially as described. 8th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, an intermittently acting automatic spring-winding mechanism, a momentum-device for continuing the spring-winding, and a spring connecting said device with said mechanism, substantially as described. 9th. In a printing-telegraph or other machine, the combination with the escapement, of a main spring, a shaft to which it is fast, means acting intermittently on said shaft to wind said spring, and a momentum-device connected to said shaft for continuing the motion thereof to further wind said spring, substantially as described. 10th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, a shaft to which it is fast, means acting intermittently on said shaft to wind said spring, a momentum-device loose on said shaft, and a spring connecting said shaft to said device, substantially as described. 11th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, a shaft to which it is fast, means acting intermittently on said shaft to wind said spring, a momentum-device loose on said shaft, a spring connecting said shaft and said device, and means for preventing forward motion of said device relatively to the shaft and unwinding of the spring beyond certain limits, substantially as described. 12th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, means for automatically winding it at intervals, connections having a resilient member between said spring and escapement, and a momentum-device for continuing the spring winding, substantially as described. 13th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, means for automatically winding it at intervals, gearing containing a spring connecting said main-spring with and operating the escapement wheel, and a momentum device for operating the escapement wheel, and a momentum device for continuing the spring winding, substantially as described. 14th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, means for automatically winding it at intervals, a main gear connected to said spring, a second gear driven by said main gear and loose on its shaft, a spring connecting it with its shaft, and a momentum-device for continuing the spring-winding, substantially as described. 15th. In a printing-telegraph or other instrument, the combination with the escapement, of a main-spring, means for automatically winding it at intervals, gearing frictionally connected with said spring and connecting it with said escapement, and a momentum-device for continuing the spring-winding, substantially as described. 16th. In a printing-telegraph or other instrument, the combination with the escapement, of a main-spring, means for automatically winding it at intervals, a main gear frictionally connected to said spring, connections containing a spring between said gear and said escapement, and a momentum-device for continuing the main-spring-winding, substantially as described. 17th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, means for automatically winding it at intervals, a main gear frictionally connected to said spring, a second gear driven by said main gear and loose on its shaft, a spring connecting said second gear and its shaft, and a momentum-device for continuing the winding of the main-spring, substantially as described. 18th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, a shaft to which it is fast, means automatically turning said shaft at intervals to wind said spring, a momentum-device loose on said shaft, a spring connecting therewith for continuing the winding of said spring, and gearing containing a spring connecting said main-spring and escapement, substantially as described. 19th. In a printing-telegraph or other instrument, the combination with the escapement, of a main-spring, a shaft to which it is fast, means automatically turning said shaft at intervals to wind said spring, a momentum-device loose on said shaft, a spring connecting it therewith for continuing the winding of said main-spring, means for limiting the forward motion of said device and unwinding of said connecting spring, and gearing containing a spring connecting said main-spring and escapement, substantially as described. 20th. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, a shaft to which it is fast, means automatically turning said shaft at intervals to wind said spring, a momentum-device loose on said shaft, a spring connecting it therewith for continuing the winding of said spring, and gearing frictionally connected with said main-spring and connecting it with said escapement, substantially as described. 21st. In a printing-telegraph or other machine, the combination with the escapement, of a main-spring, a shaft to which it is fast, means automatically turning said shaft at intervals to wind said spring, a momentum-device loose on said shaft, a spring connecting it therewith for continuing the winding of said spring, means for limiting the forward motion of said device and unwinding of said connecting spring, and gearing frictionally connected with said main-spring and connecting it with said escapement, substantially as described. 22nd. In a printing-telegraph or other machine, the combination with the type-controlling escapement, of a main-spring, a shaft to which it is fast, means automatically turning said shaft at intervals to wind said spring, a momentum-device loose on said shaf, a spring connecting it therewith for continuing the winding of said spring, and gearing having a spring and frictionally connected with said main-spring, and connecting the main-spring with said escapement, substantially as described.

No. 51,308. Leather Measuring Machine.

(*Machine à mesurer le cuir.*)

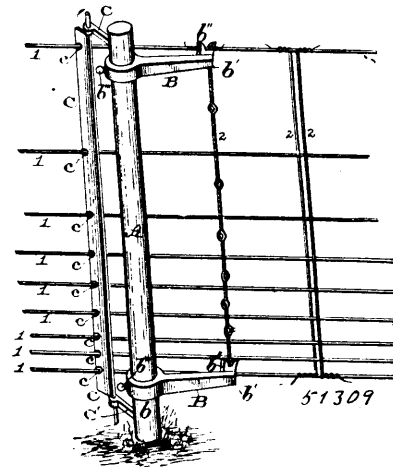


Oliver Bresse and Edward Elliott, assignees of Jules Ernest Fortin, all of Quebec City, Quebec, Canada, 13th February, 1896; 6 years. (Filed 31st July, 1895.)

Claim.—1st. In a leather measuring machine, the combination of a frame, a series of feelers or contracts for traversing the leather, an indicator and a receiver or accumulator in the form of a single body of a mobile or variable nature intermediate of the feelers and the indicator and adapted to receive from the several feelers various impressions or transfers of their individual actions and to transmit to the indicator at a single point, the total sum or aggregate of the several impressions received, for the purpose set forth. 2nd. A leather measuring machine having means for taking a surface measurement

of the leather, an indicator and an intermediate body of water for receiving impressions at a number of points and transmitting the sum of the measurement taken to such indicator at a single point for the purpose set forth. 3rd. In a leather measuring machine, the combination of a frame having a series of water carrying parts united by a common water carrying part, a series of feelers or contacts for traversing the leather, an indicator and a body of water intermediate of the feeders and indicator and contained in such water carrying parts adapted to be acted upon by the feeders and in turn to act upon the indicator, for the purpose set forth. 4th. In a leather measuring machine, the combination of a frame, a portion of which is tubular to contain water, a series of feelers or contacts for traversing the leather, an indicator and a body of water intermediate of the feelers and indicator adapted to be acted upon by the feelers at a number of different points and in turn to act upon the indicator at a single point with means for regulating the normal level of the water, for the purpose set forth. 5th. In a leather measuring machine, the combination of a frame having water carrying parts, a feed roll, a series of feelers or contacts in the form of rotary discs out of contact with the feed roll, for traversing the leather to secure a measurement thereof, means for preventing any action of the feelers when not in contact with the leather, an indicator and an intermediate body of water for transmitting the measurement taken by the feelers to the indicator, for the purpose set forth. 6th. In a leather measuring machine, the combination of a frame having water-carrying parts, a feed roll, a series of feelers or contacts in the form of rotary discs out of contact with the feed roll, for traversing the leather to secure a measurement thereof, means for preventing action of the feelers when not in contact with the leather, an indicator and an intermediate body of water for transmitting the measurement taken by the feelers to the indicator, with means for regulating the normal level of the water for the purpose set forth. 7th. In a leather measuring machine, the combination of a frame having water-carrying sections formed in part of vertical tubes in communication with each other at their lower ends a body of water contained therein, a floating indicator in one of the tubes, a supporting table and a series of feelers or contacts for traversing the leather to secure a measurement thereof, and connected to weights movable in said tubes to alter the level of the water in the indicator containing tube, for the purpose set forth. 8th. In a leather measuring machine, the combination of a frame having water-carrying sections formed in part of vertical tubes in communication with each other at their lower ends, a body of water contained therein, a floating indicator in one of the tubes, a supporting table and a series of feelers or contacts for traversing the leather to secure a measurement thereof and connected to weights movable in said tubes to alter the working level of the water in the indicator containing tube and additional tubes containing part of said body of water and movable devices for regulating the normal level of such water, for the purpose set forth. 9th. In a leather measuring machine, the combination of a frame having water carrying sections formed in part of vertical tubes in communication with each other at their lower ends, a body of water contained therein, a floating indicator in one of the tubes, a supporting table and feed rool, a series of feelers or contacts in the form of rotatable discs for traversing the leather to secure a measurement thereof, each disc mounted on a separate spindle and having a weight connected with such spindle by a flexible connection and such weights movable in said tubes to alter the working level of the water in the indicator containing tube, for the purpose set forth. 10th. In a leather measuring machine, the combination of a frame having water carrying sections formed in part of vertical tubes in communication with each other at their lower ends, a body of water contained therein, a floating indicator in one of the tubes, a supporting table and feed roll, a series of feelers or contacts in the form of rotatable discs for traversing the leather to secure a measurement thereof, each disc mounted on a separate spindle and having a weight connected with such spindle by a flexible connection, and such weights movable in said tubes to alter the working level of the water in the indicator containing tube and additional tubes containing part of said body of water and movable devices for regulating the normal level of such water for the purpose set fort. 11th. In a leather measuring machine, the combination of a frame formed in a part of hollow tubular lengths adapted to contain water, with suitable inlet and outlet means for taking a surface measurement of the leather, an indicator and a body of water contained within such frame for receiving a number of varying impressions at different points and transmitting the sum of the measurement taken to such indicator at a single point for the purpose set forth. 12th. In a leather measuring machine, the combination of a frame formed in part of hollow horizontal and vertical tubular lengths adapted to contain water with suitable inlet and outlet, means for taking a surface measurement of the leather, an indicator, and a body of water contained within such frame for transmitting the measurement taken to such indicator, with regulating devices in the form of vertically movable weights or rods in the vertical lengths, for the purpose set forth. 13th. In a leather measuring machine, the combination of a frame having water carrying sections formed in part of vertical tubes in communication with each other at their lower ends, a body of water contained therein, a floating indicator in one of the tubes, a supporting table and means for traversing the leather to secure a measurement thereof and acting upon the water in said tubes, a graduated series of additional tubes containing a portion of said body of water and valves for controlling the water in such additional tubes, for the purpose set forth. 14th. In a leather measuring machine, the combination of a frame adapted to carry a body of water and such water carried thereby, an indicator, a supporting table and feed roll, a series of feelers or contacts in the form of discs, out of contact with such feed roll, for traversing the leather to secure a measurement thereof, each disc mounted on a separate spindle and having a weight connected with such spindle by a flexible connection, and an adjustable frame or support for each spindle with means for adjusting same, for the purpose set forth. 15th. A leather measuring machine having a supporting table, a feed roll and adjustable feelers or contact discs, out of contact with such feed roll, for traversing the leather for the purpose set forth.

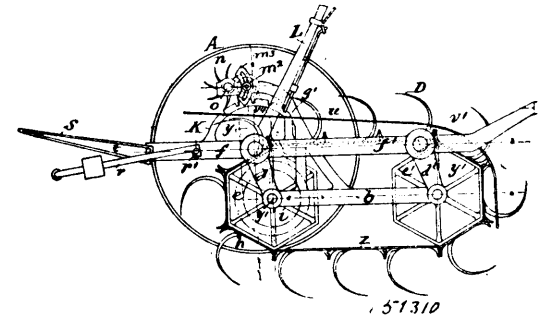
No. 51,309. Machine for Applying Stay Wire to Wire Fences. (*Machine à clôture de fil de fer.*)



Ambrose Burnside Bowen and George Harrison Miller, both of Norwalk, Ohio, U.S.A., 13th February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—1st. A hand machine for applying stay wires to wire fences, consisting of a standard having arms with bifurcated ends adjustably secured thereto, and having an oscillating spacer provided with a series of wire-holding notches hinged to the standard, substantially as described. 2nd. A hand machine for applying stay wires to wire fences, consisting of a standard, having horizontal arms with bent and bifurcated ends, removably secured thereto, and having a notched spacer hinged to the standard, substantially as described. 3rd. In a machine of the class described, in combination, a standard A, horizontal arms B B, each provided with a bend b^1, forked end b^{11}, and thumb-screw b^{111}, and a notched space C, having hinges C^1, C^1, the parts being combined, substantially as described. 4th. A hand machine for applying stay wires to wire fences, consisting of a standard, and adjustable arms having bifurcated ends, combined with a spacer provided with wire holding means, substantially as shown and described.

No. 51,310. Extirpator. (*Extirpateur.*)



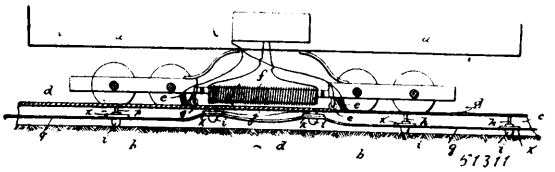
Adolf Merrel and Arthur Duffek, both of Praque, Bohemia, Austria, 13th February, 1896; 6 years. (Filed 21st September, 1895.)

Claim.—1st. In an extirpator, the combination of two drums journalled in a parallelogram upon a frame *a*, the drums carrying endless chains, each chain-link being adapted to each side of the drums and provided with tines, with a proper gearing between the axle of the drum *e*, and the driving axle of the extirpator, so that the tines can be lowered or raised, shaking cribbles *u*, rotating tines *n*, and the rear cribbles *t*, substantially as set forth. 2nd. In an extirpator, the combination of tines D, upon endless chains com

posed of elastic tined links *z*, the hinges F, of which are provided with outward projections E, which stem one against the other under each hinge F, when the chains are strained, substantially as and for the purpose set forth. 3rd. In an extripator, the combination of shaking cribbles *u* between the tined chains at the upper part thereof, said cribbles being carried by arms, the prolongations of which are operated to shake the cribbles, substantially as and for the purpose set forth. 4th. In combination, the endless chains carrying tines, the screen or cribble between the chains and the rotating tines *n*, substantially as described.

No. 51,311. Electric Railway System.

(*Système de chemin de fer électrique.*)



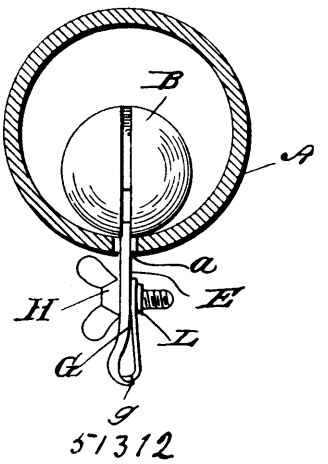
James Michael Faulkner, Philadelphia, Pennsylvania, U.S.A., 13th February, 1896; 6 years. (Filed 11th May, 1895.)

Claim.—1st. In an underground electric railroad system, an exposed sectional conductor, in combination with a flexible carrier arranged loosely and longitudinally in a conduit, one of said elements having contact points and the other depressions containing mercury arranged so that the contact points can enter the same, substantially as described. 2nd. An electric railroad system comprising a conduit having exposed conductor sections having depending contact points, a flexible carrier beneath said conductor having depressions therein containing mercury so that the joints enter the mercury when the carrier is moved up, substantially as described. 3rd. An electric railway system comprising a conductor to receive the vehicle trolley and subject to the action of a magnet on the vehicle, a flexible ribbon opposite said conductor and so formed as to be susceptible to the influence of said magnet and drawn thereby toward the conductor, one of said elements, conductor or ribbon having contact points and the other cups containing mercury, substantially as described. 4th. In a closed conduit electric railroad system, the combination of a sectional exposed conductor over the conduit having contact points, a flexible loose ribbon beneath the same having the cups into which said points are located, the upper guiding portions of the cups being insulated, mercury in the bottom of the cups, the ribbon having magnetizable material thereon, substantially as described. 5th. In a closed conduit electric railway system, a series of vertically movable contacts constituting armatures and electrically connected by a flexible connector and each having a body of mercury, and stationary contact points in electrical connection with the exposed conductor and arranged opposite the bodies of mercury, substantially as described. 6th. An exposed conductor having contacts, a conduit, vertically movable contacts therein electrically connected with the live line, and each containing a body of mercury arranged opposite said conductor contacts, substantially as described. 7th. In an electric railway system having a closed conduit, an exposed sectional conductor having rigid depending contacts in the conduit, vertically movable contacts therein, each connected with the live line, and each provided with a pocket containing mercury normally insulated from its respective conductor contact and having an upward guide of insulating material engaging said contact and holding the movable contact in proper position and guiding it in its vertical movements, substantially as described. 8th. In an underground electric railway system, an exposed conductor having rigid contact points in the conduit, vertically movable bodies of magnetizable material in the conduit connected electrically with the live line, each body having a vertical opening, a cup set therein beneath the opposite contact and containing mercury and an upwardly extending insulating guide tube surrounding said contacts, substantially as described. 9th. In an underground electric railway, the combination of a vehicle having a trolley, an exposed sectional conductor therefor having contracts extending into a conduit, the live line having corresponding opposite contacts in the conduit, one contact of each set having a body of mercury into which the opposite contact dips when closing the circuit, and one contact of each set being movably controlled by means moving with the car, substantially as described. 10th. In an underground electric railway, the combination of a vehicle having a current collector, a sectional exposed conductor on which the collector travels and having depending contracts in the conduit, the live line having corresponding opposite movable contacts, means carried by the car controlling said movable contacts, one set of contacts having bodies of mercury in electrical engagement therewith into and out of which the opposite set of contacts is adapted to move, substantially as described.

No. 51,312. Curtain Pole. (*Bâton de rideau.*)

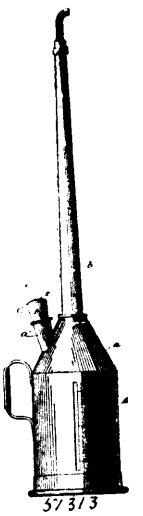
Park Benjamin Harvey and Cassius Frederick Harris, both of New London, Conecticut, U. S. A., 13th February, 1896; 6 years. (Filed 6th December, 1895.)

Claim.—In a curtain suspending device, the combination with a tubular pole having a longitudinal slot formed therein of a



spherical body having a deep annular groove or recess, dividing the body into two equal parts, which are united by a central portion or shank, a plate suspended from said shank and having a longitudinal slot formed therein, a plate having an enlarged circular end in which is formed a bayonet slot, and a longitudinal slot formed near the centre thereof, the extremity of the plate being bent into a hook a jaw provided with inwardly directed teeth and having an opening in the opposite side thereof, a set screw passing through the slot in the plate, and an opening in said jaw to force the same together, and a burr or nut upon the end of said screw, whereby when the jaw is in a clamping position, the jaw is parallel to the shank of the plate, and the spherical body will not become detached from the clamp, substantially as described.

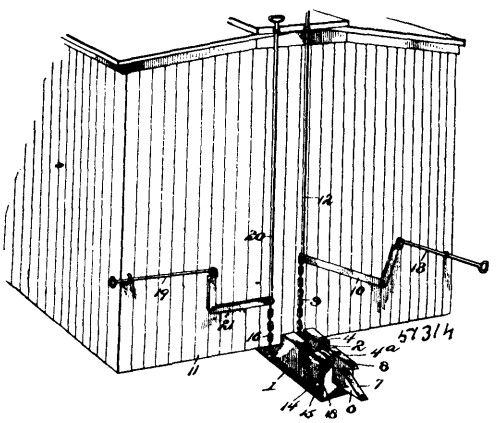
No. 51,313. Oil Can. (*Bidon à huile.*)



Steward Dunlap Ashley, Pennsylvania, U. S. A., 13th February, 1896; 6 years. (Filed 21st January, 1896.)

Claim.—1st. The combination with an oil can, of a vent consisting of a hollow casing fitted to the upper portion of the can, said casing being provided with a plurality of capillary tubes extending from its lower part into the can and with a plurality of capillary tubes extending from its top into the chamber of the casing or vent, substantially as described. 2nd. The combination with an oil can, of a vent consisting of a casing fitted to the upper portion of the oil can, said casing being provided with openings in its lower end, communicating with the interior of the can and with a plurality of capillary tubes extending from the upper end of the casing into the chamber of said casing, substantially as described.

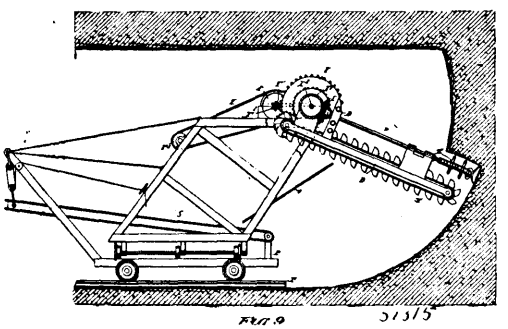
No. 51,314. Car Coupler. (*Attelage de chars.*)



John H. Senger, Cero Gordon, Illinois, U.S.A., 13th February, 1896; 6 years. (Filed 21st January, 1896.)

Claim.—1st. In a car coupling, the combination of a draw-head provided with a transverse link-receiving opening, and a link guide and carrier fulcrumed on the draw-head in advance of the opening, and having an inclined edge to receive and guide a link, and provided at the inner extremity thereof with an arm adapted to be engaged by the link, substantially as and for the purpose described. 2nd. In a car coupling, the combination of a draw-head having a transverse link receiving opening, a link gude and carrier fulcrumed on the draw-head, and consisting of a substantially triangular portion having a rounded base, and an arm projecting from the base and adapted to be engaged by a link, and operating mechanism having a chain arranged on the rounded portion or base of the link and carrier, substantially as described. 3rd. In a car coupling, the combination of a draw-head provided with a transverse link receiving opening and having at opposite sides curved grooves 18, a link, a transverse pin passing through the draw-head, a pair of blocks located at opposite sides of the draw-head and mounted on the ends of said pin and adapted to be swung upward beneath the link, projections arranged at the inner faces of the blocks and extending into the grooves 18, and limiting the swing of the blocks, whereby the latter are caused to fall automatically, and means for swinging the blocks upward, substantially as described.

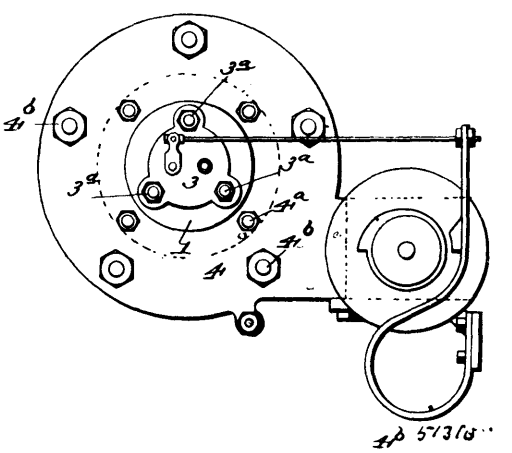
No. 51,315. Excavator. (*Excavateur.*)



Alexander McDonald, Cambridge, Massachusetts, U.S.A., 13th February, 1896; 6 years. (Filed 20th January, 1896.)

Claim.—1st. An excavator provided with one or more revoluble picks on parallel shafts mounted on a supporting frame for cutting and loosening the material, and an endless carrier into which the material as it is loosened by the pick falls by its own gravity to be carried off and discharged, substantially as shown and described. 2nd. An excavator having in combination with a swinging supporting frame, a set of revoluble picks comprising two shafts, the said shafts being arranged in a plane parallel to a chord of an arc of the circle in which the shaft swings, and geared together to rotate in unison, and picks secured to said shafts, substantially as shown and described. 3rd. An excavator provided with a set of revolube picks comprising two shafts gear together and mounted on a swinging frame to rotate in unison in opposite directions, and picks secured to the said shafts, the picks on one shaft being arranged alternately and at angles with the picks on the other shaft, substantially as shown and described. 4th. An excavator, comprising a vertically movable slide frame, a frame mounted on said slide frame, to swing above and below its pivotal point, revoluble picks mounted to turn on the said frame, and an endless carrier mounted on the said frame under the said picks, to intercept and receive the material loosened by the said picks, substantially as shown and described. 5th. An excavator, comprising a carriage having vertical guideways, a slide held adjustable in the said guideways, a frame hinged on the said slide, picks mounted to turn on the said frame, and an endless carrier mounted on the said frame underneath the said picks, to intercept and receive the material loosened by the said picks, substantially as shown and described. 6th. An excavator, comprising a carriage having vertical guideways, a slide adjustable in said guideways, a frame mounted to swing on the slide, revoluble picks mounted to turn on the said frame, an endless carrier mounted on the said frame under the said picks to intercept and receive the material loosened by the said picks, and means, substantially as described, for imparting an up and down swinging motion to the said frame, as set forth. 7th. An excavator, comprising a vertically adjustable slide frame, a frame mounted to swing on said slide frame, revoluble under cutting picks mounted to turn on the said frame, an endless carrier mounted on the said frame under the said picks, to intercept and receive the material loosened by the said picks, and means, substantially as described, for imparting a simultaneous rotary motion to the said picks, and a travelling motion to the said carrier, as set forth. 8th. An excavator, comprising a carriage having vertical guideways, a slide held adjustable in the said guideways, a frame hinged on the said slide, revoluble picks mounted on the said frame, an endless carrier mounted on the said frame underneath the said picks, to intercept and receive the material loosened by the said picks, and means, substantially as described, for raising or lowering the said slide in its bearings, as set forth. 9th. An excavator, comprising two carriages, one of which is mounted to travel transversely in the other, a frame hinged on the transverse moving carriage, two sets of revoluble picks mounted on the said frame and projecting obliquely beyond the side of the frame, and an endless carrier for each set of revoluble picks, substantially as shown and described. 10th. An excavator, comprising two carriages, one of which is mounted to travel transversely in the other, a frame hinged on the transverse moving carriage, two sets of revoluble picks mounted on the said frame and projecting obliquely bevond the sides of the frame, an endless carrier for each set of revoluble picks, and means for imparting a simultaneous motion to the frame, picks and carriers, as set forth.

No. 51,316. Gas Engine. (*Machine à gaz.*)

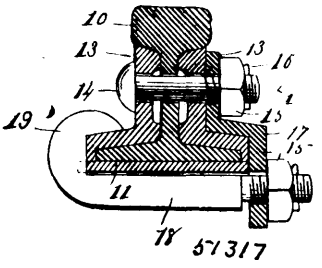


The Buckeye Manufacturing Company, Assignee of John W. Lambert, both of Anderson, Indiana, U.S.A., 13th February, 1896; 6 years. (Filed 29th November, 1895.)

Claim.—1st. In a gas engine, the combination of the cylinder provided with a water jacket, a sparker carrying plate bolted over the end of the cylinder, and a head encircling the end of the cylinder and bolted and packed against the cylinder and the adjacent end of the water jacket, substantially as described. 2nd. The combination, in a gas engine, of a cylinder carrying a water jacket, said jacket terminating short of the rear end of the cylinder, the projecting end of the cylinder being flanged annularly, a plate bolted over the projecting end of the cylinder and carrying the igniter, and a hollow head encircling the projecting end of the cylinder and bolted to said annular flange and against the end of the water jacket, as and for the purpose set forth. 3rd. In a gas engine, the combination of a cylinder having formed integral with it a water jacket, said jacket terminating short of the rear end of the cylinder the projecting end of the cylinder being contracted and provided with an annular flange near its end, an igniter carrying plate bolted over the end of the cylinder, and a hollow head fitting over the end of the cylinder and packed against said annular flange and the adjacent end of the water jacket, as and for the purpose set forth. 4th. In a gas engine, the combination of a cylinder surrounded by a water jacket, this water jacket being open at its rear end, a hollow head encircling the rear end of the cylinder and packed against the same

and the water jacket and being removable of independently said rear end of the cylinder and jacket, substantially as described.

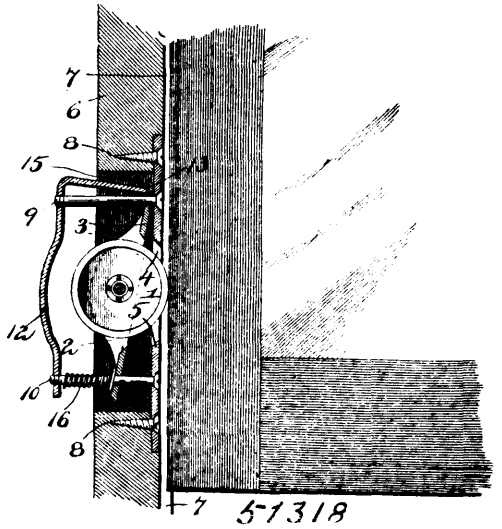
No. 51,317. Rail Joint. (*Joint de rail.*)



Martin Hubbell, Mount Kisco, New York, U.S.A., 13th February, 1896; 6 years. (Filed 20th January, 1896.)

Claim.—1st. In a rail joint the combination with track rails, and a base plate notched on the edges and supporting said rails at a joint, of two fish plates, clamping plates adapted to impinge the side of one of the fish plates and loosely pass through the notches of the base plate, bolts passing through aligned holes in the rail webs, fish plates and clamping plates, and binding said parts together, and hook headed bolts that bind the base plate on the train, substantially as described. 2nd. In a rail joint, the combination with a pair of rails elongated plates bearing on the rail webs, angularly bent clamping plates, perforated near their upper and lower ends, and bolts arranged to bind the clamping plates, elongated plates and rail webs together, of a base plate whereon the rail ends are seated, and hook headed screw bolts hooking with their heads over the rails and base plate, passing through perforations near the lower part of the clamping plates, and adapted to bind the clamping plates, rails and base plate together, substantially as described. 3rd. In a rail joint, the combination with a pair of rail angle plates, transverse bolts binding the angle plates on the rail webs and against the edges of the rail bases, and clamping plate also engaged at their upper ends by said bolts of a base plate whereon the rail ends are seated, and hook headed bolts adapted to bind the clamping plates, angle plates, rails and base plate together, substantially as described. 4th. A railroad rail joint having elongated side bearing plates at adjacent ends, transverse bolts passing through said plates and the rail webs, and angularly bent depending clamping plates bound at their upper ends on the elongated plates, the base plate having upturned flanges at its edges engaging the side edges of the rail bases, and hook headed screw bolts arranged to bind the lower ends of the clamping plates on the elongated plates, and hold the rail bases on the flanged base plate, substantially as described.

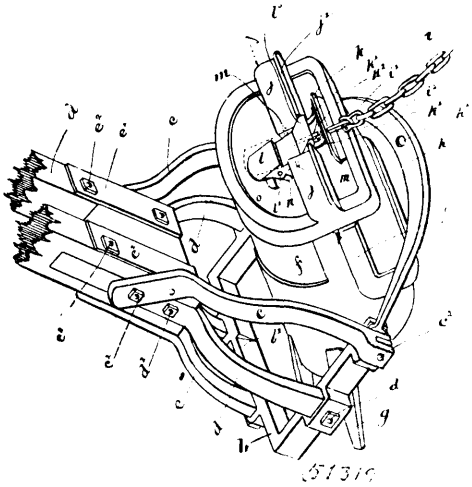
No. 51,318. Sash Holder. (*Arrête-croisée.*)



Willard L. Bellinger, St. Johnsville, New York, U.S.A., 13th February, 1896; 6 years. (Filed 18th January, 1896.)

Claim.—1st. The combination with a window frame, of a face plate secured thereto in the path of the sash, a slot therethrough to receive a friction roller, a back plate or strap bent over its upper end and secured at its upper and lower ends respectively by a threaded bolt passed through said face-plate, a hanger loosely threaded over said bolts and carrying a friction roller pivoted therein to project through said slot, said hanger bearing at its upper end against the bent over upper end of said back plate, and a tension spring encircling the lower bolt between the back plate and hanger, substantially as described. 2nd. The combination with a window frame, of a face plate secured thereto in the path of the sash, a slot therethrough to receive a friction roller, a back plate or strap bent over at its upper end and secured at its upper and lower ends respectively by a threaded bolt passed through said face plate, a hanger loosely threaded over said bolts and carrying a friction roller pivoted therein to project through said slot said hanger bearing at its upper end against the bent over upper end of said back plate and provided at its lower end with an outwardly projecting thumb-post, and a tension spring encircling the lower bolt between the back plate and hanger, substantially as described.

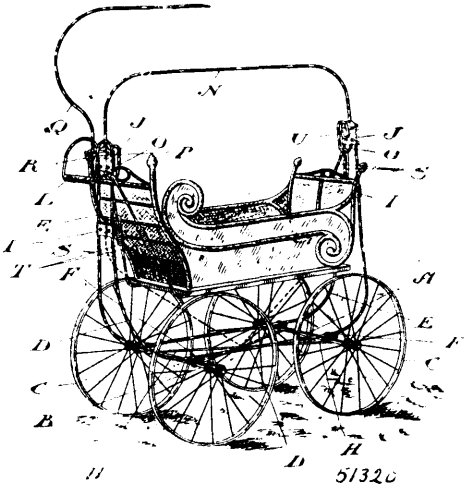
No. 51,319. Dredge Bucket. (*Godet pour cure-môle.*)



William John Moore, New Westminster, British Columbia, Canada, 13th February, 1896; 6 years. (Filed 17th January, 1896.

Claim.—1st. A placer mining dredge bucket with fixed sides and back revolving on axle pins held by frame, substantially as and for the purpose above set forth. 2nd. In a placer mining dredge bucket, the frame *b* secured by the braces *c*, *c*, *d*, *d*, and *e*, *e*, to the arm *a*, the bucket *f* with rest plate f^1, and back rests *j*, *j*, axle pins C^2, C^2, the teeth *g*, *g*, *g*, the bale *h*, chain *i*, shackle i^2, rod i^2, with pin i^3, latch rest *n*, latch *l*, working on the centres *m*, *m*, stop plate O, spring plate *k*, springs k^1, k^1, and forked springs k^2, substantially as and for the purpose above set forth.

No. 51,320. Carriage for Children. (*Voiture d'enfant.*)

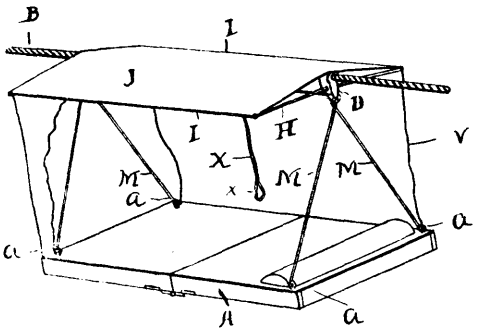


Daniel Sharp Kendall, Woodstock, Ontario, Canada, 13th February, 1896; 6 years. (Filed 11th January, 1896.)

Claim.—1st. In a child's carriage, a frame composed of two substantially U-shaped metal rods having their vertical portions at each end held by a coupling, and their central horizontal portions securely attached to the front and rear axles of the vehicle, substantially as and for the purpose specified. 2nd. In a child's carriage, a frame composed of two substantially U-shaped metal rods having their vertical portions at each end held by a coupling, and their central horizontal portions securely attached to the front and rear axles of the vehicle, the rods being brought closer together at the couplings than on the axles, substantially as and for the purpose specified. 3rd. In a child's carriage, a frame composed of two substantially U-

shaped metal rods having their vertical portions at each end held by a coupling, and their central horizontal portions securely attached to the front and rear axles of the vehicle, the rear ends of the rods after passing through the coupling being suitably bent to receive a handle, substantially as and for the purpose specified. 4th. In a child's carriage, a frame composed of two substantially U-shaped metal rods D, E, having their central horizontal portions securely attached to the axles A and B and their vertical portions at each end held by two suitable couplings, such as I and J, substantially as and for the purpose specified. 5th. In a child's carriage, a frame composed of two substantially U-shaped metal rods D, E, having their central horizontal portions securely attached to the axles A and B, and their vertical portions at each end held by two suitable couplings such as I and J, these couplings each being provided with a central groove adapted to hold a brace rod, substantially as and for the purpose specified. 6th. In a child's carriage, a frame composed of two substantially U-shaped metal rods D and E, having their central horizontal portions securly attached to the axles A and B, and their vertical portions at each end held by suitable couplings, such as J, in combination with a brace rod N, extending from coupling to coupling and securely held therein, substantially as and for the purpose specified. 7th. In a child's carriage, a frame composed of two substantially U-shaped metal rods D and E, having their central horizontal portions securely attached to the axles A and B, and their vertical portions at each end held by suitable couplings, such as J, in combination with a brace rod N, extending from coupling to coupling and securely held therein, a hook N being formed on each end of the brace, substantially as and for the purpose specified. 8th. In a child's carriage, the combination of two couplings connected to the frame of the carriage, a brace rod extending from coupling to coupling and securely held thereby and double hooks formed on the ends of the brace rod, substantially as and for the purpose specified. 9th. In a child's carriage, one or more V-shaped hangers S, having their ends attached to the body of the vehicle and coil springs T, formed in each side of the V, substantially as and for the purpose specified. 10th. In a child's carriage, the combination of the axles A and B, the rods D and E secured to the axles, the diagonal braces H, the coupling plates I and J, centrally grooved to receive a brace rod, the brace rod N connecting either of the coupling plates I and J at opposite ends of the carriage and held in the central grooves therein, hooks O on the ends of the brace rods, and the hangers S, having coil springs formed therein and attached to the body of the vehicle, substantially as and for the purpose specified. 11th. In a child's carriage, the combination of the axles A and B, the rods D and E connected thereto, the coupling plates I and J, and the handle L, connected to the ends K, of the rods D and E, which are turned downward and laterally and then inwardly after passing the coupling plates J at the rear end of the vehicle, substantially as and for the purpose specified.

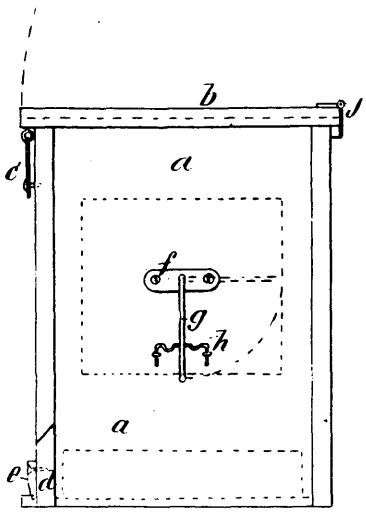
No. 51,321. Hammock. (*Hamac.*)



George B. French, Fremont, Nebraska, U.S.A., 14th February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. In a hammock, the combination of a suspending cable, movable claasps fitted on said suspending cable, transverse rods carried by said clasps, and longitudinal rods or cords attached to the transverse rods and arranged parallel to and on opposite sides of the suspending cable, whereby a frame for supporting an awning or covering is provided, as and for the purposes described. 2nd. In a hammock, the combination with a suspension cable B, of the clasps fitted thereon and each provided with the pendent hook D^1, and the apertures *f*, *g*, the transverse rods fitted in said apertures *g* and carrying an awning, the longitudinal wire or cord W attached to the hooks below the suspension cable, the slide fitted on said wire or cord W, and provided with the pendent cord which is adapted to sustain a book or other article, and a hammock frame suspended from the hooks D^1 whereby the clasps are made to sustain the hammock frame, an awning frame, and a book-holding device, as set forth. 3rd. In a hammock, the combination of a suspending cable, the movable clasps fitted on said cable, the transverse rods at right angles to the suspending cable, and the side cords or rods attached to the ends of the transverse rods, and curtains attached to and depending from the awning and the side rods or cords, substantially as and for the purpose described. 4th. In a hammock, the combination of a suspending cable the clasps fitted thereon and provided with the depending hooks, a hammock-frame provided with the eyes at its corners, the depending wires or cables attached to the clasp-hooks and the eyes of the hammock-frame, and the auxiliary wire or rod attached to the clasp-hooks and extending parallel to the suspending cable, below the same, for the purpose described, substantially as set forth. 5th. In a hammock, the combination with a suspending cable, of the clasps fitted on said cable and provided with the perforations, the auxiliary wire or cord secured to the perforations of the clasps, and extending below and parallel to the suspending cable, a hammock frame, and depending wire or cable attached to the hammock frame and the clasps, substantially as described. 6th. The combination, with a suspending cable, the clasps thereon, and hammock frame connected by pendent cords with said clasps, of the tiltable awning frame having the transverse bars provided with clasps for holding the same on the pendent cords, the side cords or bars connected to the transverse bars, and the awning attached to the side cords and the tranverse bars, substantially as and for the purposes described.

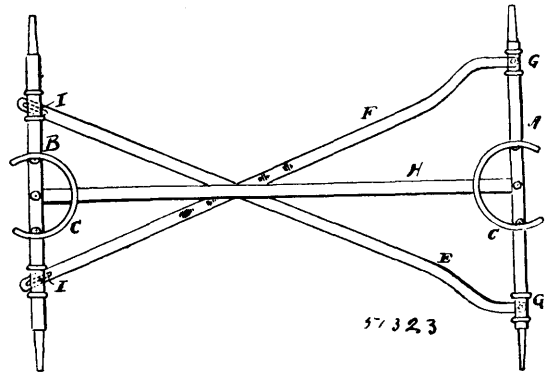
No. 51,322. Ash Sifter. (*Crible à cendres.*)



Johnson Clench, St. Catharines, Ontario, Canada, 14th February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—An ash sifter comprising a box A, having a suitable lid or cover B, an ash door D inclosing a revolving sifting box K, constructed so as to hold an ordinary ash pan, a wire screen or sieve L to hold said ash pan in place while sifting box *k* is inverted and operated, and also to keep the coal or cinders in the ash pan so that they may be removed, all formed, arranged and combined as and for the purpose hereinbefore set forth.

No. 51,323. Running Gear for Vehicles.
(*Train de voiture.*)

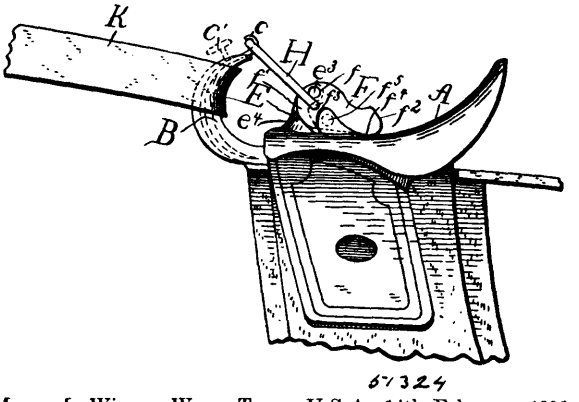


Aaron Kerry, Marysville, Michigan, U.S.A., 14th February, 1896, 6 years. (Filed 31st December, 1895.)

Claim.—1st. In a vehicle with stiff cross reaches E, F, connecting the front and rear axles, and provided with a slot in one through

which the other passes, such slot having length to allow them to turn and slide freely, while the slides are bent together to bind spring-like on the inclosed reach. 2nd. In a vehicle with two stiff cross-reaches E, F, connecting the rear and front axles, set wide apart on the rear than on the front axle and bent near their near ends to avoid contact with the front wheels, and provided with slots in the front ends to permit adjustability in turning without to much flexibility, and provided with a slot in one through which the other passes, and by which it is held by a spring action while free to move and slide therein, in combination with a central reach without slot connecting the axle at different level, and provided with bearings to support a fifth wheel on each axle, substantially as and for the purpose set forth.

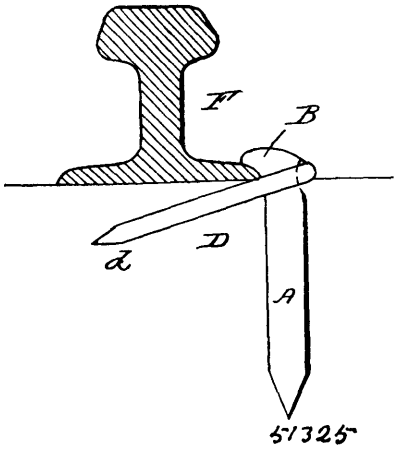
No. 51,324. Check Rein Holder. (*Porte-fausses rênes.*)



Myron L. Winans, Waco, Texas, U.S.A., 14th February, 1896; 6 years. (Filed 26th December, 1895.)

Claim.—1st. In a check-rein holder for harness saddles, the combination with a grooved hook and a bent resilient plate fitting in said groove, and provided with a smaller hook at the upper end thereof, of a link pivoted to the saddle and engaging said smaller hook, and adapted to pass over the check-rein, and means for detaching said link from said plate, substantially. 3rd. In a check-rein holder for harness saddles, the combination with a grooved hook and a bent resilient plate fitting in said groove, and provided with a smaller hook at the upper end thereof, of a link engaging said smaller hook and adapted to pass over the check rein, and a bell-crank lever pivoted to the saddle and adapted to lock said link when moved in one direction and to release said lever when moved in the opposite direction, substantially as described.

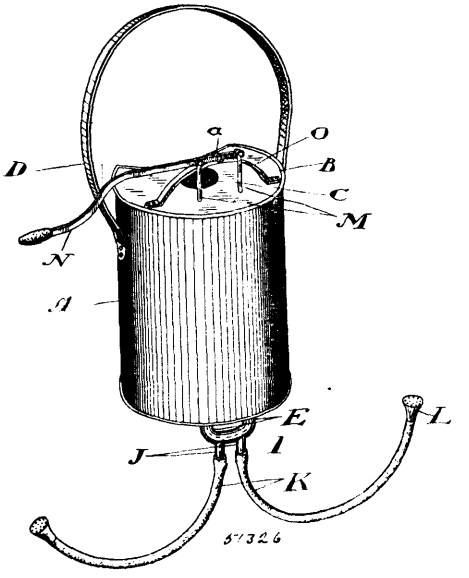
No. 51,325. Railway Spike. (*Chevillette de chemin de fer.*)



Charles Platz, New York, State of New York, U.S.A., 14th February, 1896; 6 years. (Filed 21st December, 1895.)

Claim.—1st. A railway spike, provided with the usual head, and a groove formed in the back and sides thereof below the head, the sides of the groove being inclined forwardly and downwardly and a yoke, adapted to fit within said groove and to be driven into a tie, substantially as shown and described. 2nd. A railway spike, provided with the usual head, and a groove formed in the back and sides thereof below the head, the sides of the groove being inclined forwardly and downwardly and a yoke adapted to fit within said groove, and to be driven into a tie, said spike being provided at its upper end with a longitudinal groove or slot in the back thereof, which extends through the back of the head and back of said groove downwardly, substantially as shown and described. 3rd. A railway spike, adapted to be held in position in a tie by means of a yoke which fits within a groove formed in the back and sides thereof, substantially as shown and described. 4th. A railway spike provided with a head as B, and a groove as C, formed in the back and sides thereof below the head, said groove being adapted to receive a yoke as D, substantially as shown and described. 5th. A railway spike provided with the usual head as B, and a groove as C, formed in the back and sides thereof below the head, and also with a vertical groove or slot as E, said groove V, being adapted to receive a yoke which is adapted to be driven into a tie, substantially as shown and described.

No. 51,326. Portable Sprayer. (*Jet d'eau portatif.*)

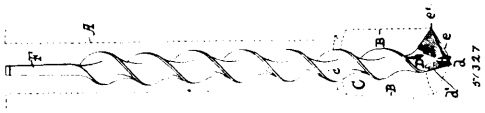


James Henry Werry, Blyth, Ontario, Canada, 14th February, 1896; 6 years. (Filed 2nd December, 1895.)

Claim.—1st. A portable sprayer comprising a vessel adapted to contain liquid, in combination with two single acting pumps located at the bottom of the vessel, a chamber into which the said pumps discharges, one or more outlets in the said chamber, and a hand lever arranged to reciprocate the pistons of the said pumps, substantially as and for the purpose specified. 2nd. A portable sprayer comprising a vessel adapted to contain liquid, in combination with two single acting pumps located at the bottom of the vessel, a chamber into which the said pumps discharge, one or more outlets in the said chamber and a hand lever arranged to reciprocate the pistons of the said pumps so as to raise the piston of one pump while the piston of the other is being depressed and vice versa, substantially as and for the purpose specified. 3rd. A portable sprayer comprising a crescent-shaped vessel, adapted to contain liquid, in combination with two single acting pumps located at the bottom of the vessel, a chamber into which the said pumps discharge, one or more outlets in the said chamber and a hand lever arranged to reciprocate the pistons of the said pumps so as to raise the piston of one pump while the piston of the other is being depressed, and vice versa, substantially as and for the purpose specified. 4th. A portable sprayer comprising a vessel adapted to contain liquid, in combination with two single acting pumps located at the bottom of the vessel, a chamber into which the said pumps discharge, one or more outlets in the said chamber, one or more spray tubes with spray nozzles connected thereto, and a hand lever arranged to reciprocate the pistons of the said pumps so as to raise the piston of one pump while the piston of the other is being depressed, and vice versa, substantially as and for the purpose specified. 5th. In a portable sprayer, the combination of the vessel A, the pumps E, comprising the pistons F, downwardly opening piston valves G, downwardly opening valves H, the chamber I, one or more outlet pipes J, and the piston rods M, pivoted on the hand lever N, which is fulcrummed at a point between the piston rods M to a suitable support, substantially as and for the purpose specified. 6th. In a portable sprayer, the combination of the vessel A, the pumps E, comprising the pistons F, downwardly opening piston valves G, and downwardly opening valves H, the chamber I, one or more outlet pipes J, and the piston rods M, pivoted on the hand lever N, which is fulcrummed at a point between the piston rods M to a suitable support, or bracket O on the lid B, substantially as and for the purpose specified. 7th. In a portable sprayer, the combination of the crescent shaped vessel A, strap D fast to lugs on the side of the said vessel, the pumps E, comprising the pistons F,

downwardly opening piston valves G, and downwardly opening valves H, the chamber I, one or more outlet pipes J, the piston rods M pivoted on the hand lever N, which is fulcrummed at a point between the piston rods M, to a suitable support, or bracket O on the lid B, substantially as and for the purpose specified. 8th. In a portable sprayer, the combination of the vessel A, the pumps E, comprising the pistons F, downwardly opening piston valves G, and downwardly opening valves H, the chamber I, one or more outlet pipes J, one or more spray pipes provided with spray nozzles, and the piston rods M, pivoted on the hand lever N, which is fulcrummed at a point between the piston rods M, to a suitable support, substantially as and for the purpose specified.

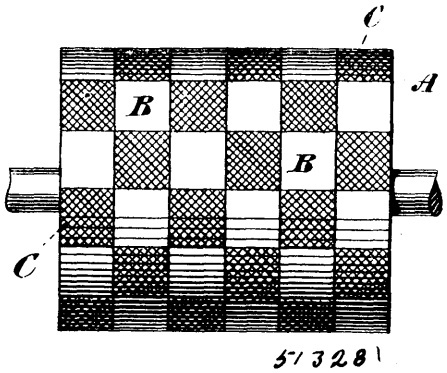
No. 51,327. Boring Tool. (*Foret.*)



Hiram Grant Fowler and William Hugh Hill, both of Blue Rapids, Kansas, U. S. A., 14th February, 1896; 6 years. (Filed 29th November, 1895.)

Claim.—1st. An auger, comprising a shank provided with a cutter a point eccentrically placed upon said cutter, and a lip upon said cutter, said lip being provided with a cutting edge and extending at an angle to the vertical plane of the cutter, which plane includes the cutting edge, substantially as described. 2nd. An auger, comprising a shank provided witn a cutter, a point eccentrically placed upon said cutter, and a lip upon said cutter, said lip being provided with a cutting edge and extending at an angle to the vertical plane of the cutter, which plane includes the cutting edge, said cutting edge also projecting beyond the side of the shank, substantially as described. 3rd. An auger comprising a shank having a cutter tapering in an oblique straight line at one side to a point eccentrically placed upon said cutter, a cutting edge along said tapering portion and a cutting edge E, also upon said cutter, substantially as described. 4th. An auger made of a single piece of material comprising a twisted shank having a cutter tapering at one side to a grooved point eccentrically placed upon said cutter, and a pointed cutting edge projecting beyond the side of the shank and extending at an angle to the vertical plane of the cutter, substantially as described. 5th. An auger comprising a worm-shank having a cutter, a grooved point eccentrically placed upon said cutter, and a lip upon said cutter, said lip being provided with a cutting edge and extending at angle to the vertical plane of the cutter which plane includes the cutting edge, said cutting edge also projecting beyond the side of the shank, substantially as described. 6th. An auger made of a single piece of material comprising a twisted shank having a cutter tapering at one side to a grooved point eccentrically placed upon said cutter, a lip upon said cutter, said lip being provided with a cutting edge and extending at an angle to the vertical plane of the cutter, which plane includes the cutting edge, said cutting edge projecting beyond the side of the shank, substantially as described.

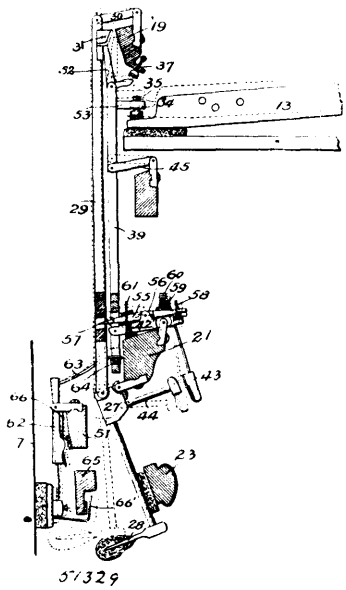
No. 51,328. Mould for Paper Machinery and Method of Producing the same. (*Moule pour machines à papier.*)



Samuel Crump, Spokane, Washington, U.S.A., 14th February, 1896; 6 years. (Filed 22nd November, 1895.)

Claim.—1st. The method hereinbefore described of forming a pattern on the wire of a mould, which consists in applying to the wire a design in material which will resist electrical deposition, forming metallic surfaces between the outlines of said design, and permanently depositing metal by electrical action upon said metallic surfaces to form the pattern. 2nd. The method hereinbefore described of forming a pattern on the wire of a mould, which consists in applying to the reverse face of the wire a protecting surface, which will resist electrical deposition, applying to the obverse face of the wire, the design in material which will resist electrical deposition, applying metallic surfaces between the outlines of said design, and permanently depositing metal by electrical action upon said metallic surfaces to form the pattern. 3rd. The method hereinbefore described of forming a pattern on wire which consists in applying the design upon the wire in material which will resist electrical deposition, forming metallic surfaces between the outlines of said design, and depositing metal by electrical action upon said metallic surfaces to form a permanent pattern. 4th. The method hereinbefore described of forming a pattern on the wire of a mould, which consists in applying to the reverse side of the wire a protecting surface of wax or other resisting material pressed into the meshes of the wire, applying to the obverse face of the wire the design in material which will also resist electrical deposition and enter the meshes of the wire to meet and combine with the said protecting surface, applying metallic surfaces between the outlines of said design, and permanently depositing metal by electric action upon said metallic surfaces to form the pattern. 5th. The method hereinbefore described of forming a pattern on the wire of the mould, which consists in applying the design upon the wire in material which will resist electrical deposition, and in depositing metal by electric action between the outlines of said design to form the permanent pattern. 6th. As a new article of manufacture a mould for use in the manufacture of decorated paper, said mould having by electrical deposition a permanent hard metal pattern or design formed in and filling the meshes of the same, substantially as and for the purposes set forth.

No. 51,329. Vertical Grand Piano. (*Piano.*)

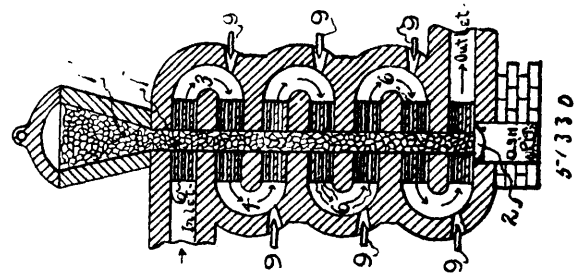


Fridolin Schimmel and Searick F. Nelson, both of Faribault, Minnesota, U.S.A., 14th February, 1896; 6 years. (Filed 27th November, 1894.)

Claim.—1st. The combination, in a piano action, of a pivoted depending hammer, an upright sticker connected therewith, a back-check to engage a catcher on said hammer, a second sticker connected with said back-check to operate the same, a key-connection upon said second sticker, an escaping-jack pivotally arranged on said second sticker, and a butt or stop for said jack upon the first sticker, substantially as described. 2nd. The combination, with a depending hammer and back-check, of a piano action, of the hammer and back-check stickers, joints for supporting the same, a butt upon the hammer sticker, a bell-crank escaping jack pivoted upon the back-check sticker and adapted to engage said butt, a fixed but adjustable stop to be engaged by said jack, and adjustable means upon the back-check-sticker whereby the same may be connected with the piano key, substantially as described. 3rd. The combination, in a piano action, of a pivoted depending hammer, the upright hammer-sticker connected therewith, a pivoted back-check lever carrying a back-check to limit backward movement of the hammer, back-check sticker, means for connecting said sticker with the piano key, an escaping-jack in connection with said sticker, and a repeating device carried upon said back-check lever and adapted to engage the said hammer-sticker, as and for the purpose specified. 4th. The combination, in an upright piano action, of a pivoted depending hammer the hammer-sticker connected therewith, a pivoted back-check-lever carrying a back-check, the sticker connected with said back-check-lever, means for connecting said stickers with the piano key, an escaping mechanism provided in connection with the hammer sticker, and a spring repeating-lever pivoted upon the back-check-lever and

adapted to engage said hammer-sticker, substantially as and for the purpose specified. 5th. The combination, with the pivoted depending hammer, of the pivoted back-check-lever provided with a back-check to engage the hammer, the hammer and back-check stickers, respectively, connected with the hammer and the back-check-lever, the repeating lever pivoted on the back-check-lever and having an end adapted to engage the hammer-sticker, and a spring acting upon the opposite end of said repeating lever, substantially as described. 6th. The combination, in an upright or vertical action, of suitable supports, a depending hammer pivoted upon one of said supports, a hammer-sticker pivotally connected with the butt of the hammer, means for holding the upper end of said sticker in place, a jack-butt provided upon the upper end of said sticker, a back-check-lever, a back-check carried thereby to engage a catcher projecting from the hammer-butt, the second sticker pivoted to said back-check-lever, means for holding the upper end of said sticker in place, an escaping-jack carried upon the upper end of said second sticker and adapted to engage the butt upon the hammer sticker, an adjustable stop for the escaping-jack, an adjustable key-connection provided upon the second sticker, a repeating lever pivoted and carried upon the back-check-lever and adapted to engage the hammer-sticker, and a counterbalancing spring acting upon the other end of said repeating lever, substantially as described. 7th. The combination, in an upright or vertical piano action, of suitable supports, a depending hammer pivoted upon one of said supports, a hammer-sticker pivotally connected with the butt of said hammer, means for holding the upper end of said sticker in place, a jack-butt provided upon the upper end of said sticker, a back-check-lever, a back-check carried thereby to engage a catcher projecting from the hammer-butt, the second sticker pivoted to said back-check-lever, means for holding the upper end of said sticker in place, an escaping-jack carried upon the upper end of said second sticker and adapted to engage the butt upon said hammer-sticker, and adjustable stop for the escaping-jack, an adjustable key-connection provided upon the second sticker, a repeating lever pivoted and carried upon the back-check-lever and adapted to engage the hammer sticker, a counterbalancing spring acting upon the other end of the repeating lever, and means for limiting the throw or movement of said repeating-lever with respect to the back-check-lever and for adjusting the same, substantially as described. 8th. The combination, in a piano action, of a depending pivoted hammer, the pivoted back-check-lever having a back-check to engage a catcher upon said hammer, the hammer-sticker, the back-check-lever-sticker, and escaping jack interposed between the upper ends of said stickers, a repeating device provided in connection with said hammer-sticker, a damper, a pivoted damper-lever, and a damper lifter provided in connection with said lever-sticker, substantially as described. 9th. The combination, in a piano action, of suitable supports, with a pivoted hammer, an upright sticker pivotally connected therewith to operate the same, a second upright sticker, a back-check adapted to be actuated by said second sticker and to engage the hammer, the key, and operating means interposed between the key and said sticker, substantially as described. 10th. The combination, in a piano action, of suitable supports, and a depending pivoted hammer, a back-check to act upon said hammer, upright stickers having their lower ends pivoted upon said hammer and said back-check respectively to actuate the same, an escaping jack interposed between said stickers, and a key to operate said stickers, substantially as described. 11th. The combination in a piano action, of suitable supports, with a hammer pivoted thereon, a back-check also pivoted thereon, and adapted to engage the hammer, upright stickers having their lower ends pivotally connected with said hammer and said back-check respectively, an escaping jack carried by the back-check sticker, and through the medium of which the hammer, sticker and the hammer are actuated, and a key for actuating said stickers, substantially as described. 12th. The combination in a piano action, of suitable supports with a hammer pivoted thereon, a back-check also pivoted thereon and adapted to engage the hammer, upright stickers having their lower ends pivotally connected with said hammer and said back check respectively, an escaping jack carried by the back check sticker, and through the medium of which the hammer sticker and hammer are actuated, and a key operatively connected with the back-check sticker, substantially as described. 13th. The combination in a piano action, of suitable supports, with a hammer pivoted thereon, a back-check also pivoted thereon and adapted to engage the hammer, upright stickers having their lower ends pivotally connected with said hammer and said back-check respectively, an escaping jack carried by the back-check stickers and through the medium of which the hammer sticker and the hammer are actuated, a key by which the said stickers are operated, and a damper device adapted to be operated by the back-check sticker, substantially as described. 14th. The combination in a piano action, of suitable supports, with a hammer pivoted thereon, a back-check also pivoted thereon and adapted to engage the hammer, upright stickers having their lower ends pivotally connected with said hammer and said back-check respectively, an escaping jack carried by said back-check sticker and through the medium of which the hammer sticker and the hammer are actuated, a repeating device interposed between said back-check and the hammer sticker to partially control the action of said sticker and the hammer, and a key whereby the stickers are operated, substantially as described. 15th. A piano having a vertical frame and strings, and distinguished by an action having two upright stickers, one connected with the hammer, and the other with the back-check of the action, substantially as described. 16th. A piano distinguished by a vertical frame and strings, the upper part of the piano being of the form, substantially as shown and described.

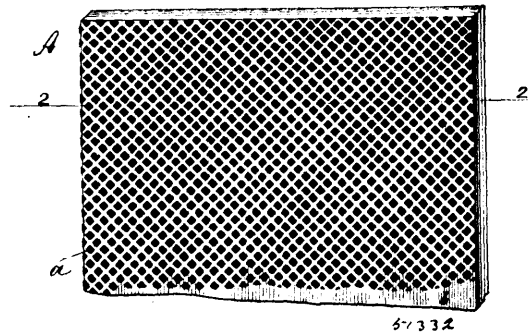
No. 51,330. Furnace for the Smokeless Combustion of Fuel. (*Fournaise.*)



Meylert Melville Armstrong, Philadelphia, Pennsylvania, U.S.A., 14th February, 1896; 6 years. (Filed 3rd July, 1894.)

Claim.—1st. A new and improved method and process of utilizing solid fuel consisting in progressively passing such fuels through a retort, chamber or vessel, and repeatedly passing across and through such fuel, currents of aeriform fluid with products of previous combustion, so that the fuel which had been previously but partially consumed with the first passage of air through it, is further consumed by a second and further passage of the products of previous combustion, and so on, until exhausted and the entire combustible portion converted into gas susceptible of smokeless combustion, substantially as set forth. 2nd. In a furnace for the smokeless combustion of fuel, the combination of a retort with cover therefor and perforations formed in the walls of such retort, a grate, chambers formed on opposite sides of said retort, an outlet formed in one or more of said chambers, so that air or heated air and steam mixed with products of combustion, may pass transversely through the perforations of the retort and the ignited fuel column, and an outlet for the gas generated, substantially as and for the purpose specified.

No. 51,331. Fermentation of Worts which have been Rendered Antiseptic. (*Fermentation de moût.*)



Jean Effont, Brussels, Belgium, 14th February, 1896; 6 years. (Filed 2nd July, 1895.)

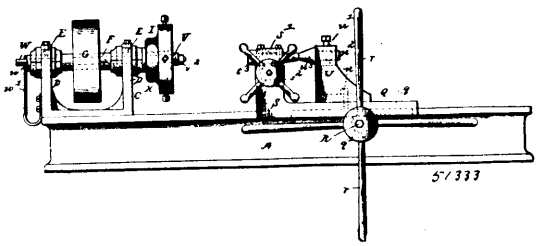
Claim.—1st. An improved process for the fermentation of worts which have been rendered antiseptic, consisting in working these worts by the action of yeast, which is unaffected as regards its fermenting power by the degree to which the wort is rendered antiseptic, substantially as described. 2nd. An improved process for the fermentation of worts, which have been rendered antiseptic, consisting in the preliminary preparation of the yeast by a methodical cultivation thereof in worts successively and progressively reinforced by additions of antiseptics for the purpose of enabling it to endure without inconvenience large proportions of antiseptics, substantially as described. 3rd. An improved process for the fermentation of worts, which have been rendered antiseptic, consisting in the employment in such worts of yeast which has been subjected to a preliminary preparation by a methodical cultivation thereof in wort which has been treated with the addition of antiseptics to at least double the quantity of antiseptic added to the worts to be fermented, substantially as and for the purpose set forth.

No. 51,332. Means for Producing Photographs Resembling Engravings. (*Moyen de produire des photographies ressemblant à des gravures.*)

Herman Eliaschav Mendelssohn, New York, State of New York, U.S.A., 14th February, 1896; 6 years. (Filed 5th December, 1895.)

Claim.—1st. A reticulated gelatin film composed of lines, dots or stipples of insoluble gelatin and secured to a negative, substantially as specified. 2nd. A compound negative comprising an original negative and secured thereon a plurality of opaque gelatinous films having different patterns printed upon them and located adjacent to each other, substantially as described. 3rd. As a novel article of manufacture, a sheet of transfer paper having secured thereon a discontinuously opaque gelatinous film, the interstices or translucent portions forming the positive of the lines, dots or stipples, which produce the effect of an engraving, substantially as described. 4th. A compound negative consisting of an original negative and intimately connected therewith, a gelatinous coating marked with lines dots or stipples for producing the effect of an engraving, substantially as described.

No. 51,333. Turning Lathe. (*Tour.*)



Ralph R. Spears, Wheeling, West Virginia, U.S.A., 14th February 1896; 6 years. (Filed 2nd December, 1895.)

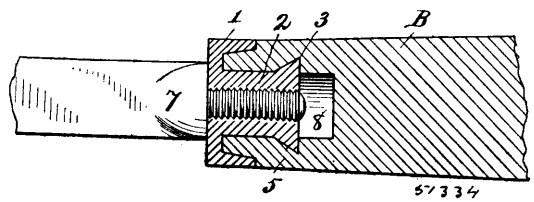
Claim.—1st. In a turning lathe for axle boxes, the combination of the live spindle mounted fixedly at one end, a cutter head mounted on one end of said spindle and having a central opening, a self-adjusting spring-projected work guide arranged to move within the central opening of the cutter head and adapted to be normally projected out of said central opening beyond the cutter head, and a sliding feed carriage adapted to be moved to and from the cutter head, substantially as set forth. 2nd. In a turning lathe for axle boxes, the combination with the lathe bed, of a hollow spindle mounted at one end of the bed, a rotary cutter head mounted on the inner end of said spindle and having a central opening, a cylindrical guide bush adapted to be fitted in the inner end of the hollow spindle in a line with the central opening of the cutter head, a work vise adapted to be moved to and from the cutter head, and a form mandrel of an exterior shape corresponding to the interior shape of an axle box and provided at one end with a guide tongue adapted to work in said guide bush, substantially as set forth. 3rd. In a turning lathe of the class described, the combination of the lathe bed having a head stock at one end, a live spindle journaled on the head stock, a rotary cutter head mounted on the inner end of the live spindle, a sliding feed carriage mounted on the lathe bed, and provided at one end with an upwardly extended vise-block, simultaneously adjustable vise jaws mounted on said block, a post block adjustably secured directly on top of the carriage at one side of the vise-block thereof, a conical work holding centre post having a shank removably mounted in the upper end of said post block, and a rack and pinion device for moving the feed carriage in either direction, substantially as set forth. 4th. In a lathe of the class described, the combination of the lathe bed having a bearing head block at one end, a hollow live spindle journaled on said head block and threaded at its inner end, an interiorly threaded rotary cutter head removably mounted on the threaded end of the spindle and having a series of radial slots, cutter bits loosely arranged in said slots, a separate and independent retaining band or ring encircling the cutter head, adjusting screws mounted in said ring or band and working against the outer end of the cutter bits to adjust the same, binding screws working in the cutter head and against one side of the cutter bit to hold the same stationary in an adjusted position, and the sliding feed carriage, substantially as set forth. 5th. In a lathe for turning axle boxes, the combination of the lathe bed, a hollow live spindle journalled in bearings at one end of the lathe bed, a rotary cutter head mounted on the inner end of the hollow spindle, a stationary mandrel arranged within said hollow spindle and projecting beyond collar mounted on the inner end of the mandrel and working in the central opening of the cutter head, the sliding feed carriage, and the work holding centre post mounted on said feed carriage, substantially as set forth.

No. 51,334. Ferrule and Bushing.

(*Virole et douille combinées.*)

Charles H. Adams, Grand Haven, Michigan, U.S.A., 14th February, 1896; 6 years. (Filed 29th November, 1895.)

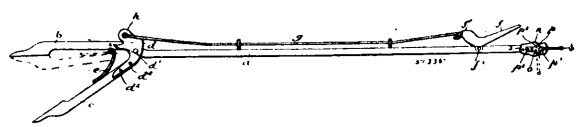
Claim.—A combined ferrule and bushing consisting of a ferrule adapted to engage a piece of wood externally and a bushing formed integral therewith and adapted to engage the wood internally, said bushing consisting of arms which are provided with outwardly turned locking lugs, said locking lugs being adapted to be compressed inward to permit insertion of the bushing in the piece of wood and



then pressed outward and driven into the wood thereby locking the ferrule and bushing against turning or removal.

No. 51,335. Picking Rod and Gas Lighting Device

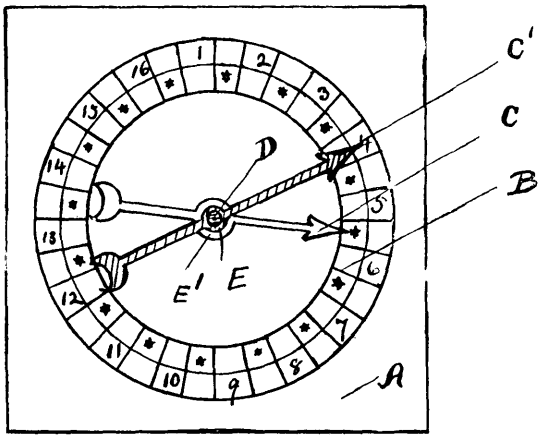
(*Allumoir pour le gaz.*)



Charles Alexander Gregory, Montreal, Quebec, Canada, 14th February, 1896; 6 years. (Filed 2nd July, 1895.)

Claim.—1st. A picking rod or lifter comprising a main rod terminating at its rear end in a handle portion and at its forward end in a gripping finger, a short movable gripping finger extending substantially parallel with the first named finger, an extension from the rear end of such movable finger extending transversely of the main rod and pivotally connected therewith, and means connected with the end of such extension for actuating the movable finger from the rear handle end of the rod. 2nd. A picking rod or lifter comprising a main rod terminating at its rear end in a handle portion and at its forward end in a gripping finger, a short movable gripping finger extending substantially parallel with the first named finger, an extension from the rear end of such movable finger in the form of a metal shoe forked at one end to transversely straddle and be pivotally connected with the main rod and rigidly connected with the movable finger and united at its opposite free end, with means connected with the end of such extension for actuating the movable finger from the rear handle end of the rod. 3rd. A picking rod or lifter comprising a main rod terminating at its rear end in a handle portion and at its forward end in a gripping finger, a short movable gripping finger extending substantially parallel with the first named finger, an extension from the rear end of such movable finger in the form of a metal shoe formed of a single piece of metal bent midway of its length to present a forked end adapted to transversely straddle and be pivotally connected with the main rod and rigidly connected with the movable finger, and means connected with the midway bent portion of the extension for actuating the movable finger from the rear handle end of the rod. 4th. A picking rod or lifter comprising a main rod terminating at its rear end in a handle portion and at its forward end in a gripping finger, a short movable gripping finger extending substantially parallel with the first named finger, an extension from the rear end of such movable finger extending transversely of the main rod and pivotally connected therewith, and a bell-crank lever and rod connection for operating such short movable finger from the rear handle end of the rod. 5th. A picking rod or lifter comprising a main rod terminating at its rear end in a handle portion and at its forward end in a gripping finger, a short movable gripping finger extending substantially parallel with the first named finger, an extension from the rear end of such movable finger extending transversely of the main rod and pivotally connected therewith, a spring for keeping such movable finger normally out of contact with the main rod, and a bell-crank lever and rod connection for operating such short movable finger from the rear handle end of the rod, for the purpose set forth. 6th. In combination with the hand rod, a slotted mounting thereon, and a match holder adapted to receive a match or taper and hold same longitudinally of the handle and to allow such match or taper to be set at an angle to such handle without drawing it from the holder, for the purpose set forth. 7th. In combination with the hand rod, a slotted mounting thereon, and a spring clip attached at one end to the side of such slotted mounting and formed with two or more channels or recesse at different angles to each other, for the purpose set forth. 8th. In combination with the hand rod, a slotted mounting thereon, and a spring clip attached at one end to the side of such slotted mounting and formed with two n atch receiving channels, one running lengthwise of the handle and the other transversely thereof, and the edges of such spring clip being turned back, for the purpose set forth. 9th. A gas lighter comprising a handle carrying a match box, a slotted mounting on such handle and having one of its sides roughened, and a spring clip attached at one end to the side of such slotted mounting and formed with two match receiving channels, one running lengthwise of the handle and the other transversely thereof, and the edges of such spring clip being turned back, for the purpose set forth.

No. 51,336. Game Apparatus. (*Appareil de jeu.*)



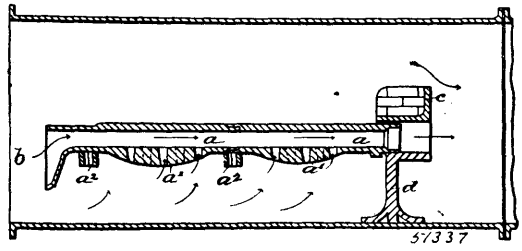
51336

Frederick Reesor James, Toronto, Ontario, Canada, 14th February, 1896; 6 years. (Filed 9th September, 1895.)

Claim.—1st. In a game apparatus of the class described, a game board marked or lettered in circles, and provided with a pivot in combination with one or more pointers each poised separately, in combination with a number of cards or tickets numbered or marked, substantially as described. 2nd. In a game apparatus of the class described, a game board marked or lettered in circles, and provided with a pivot in combination with one or more pointers, each poised separately in combination with a number of cards or tickets numbered or marked and in combination with counters, substantially as described.

No. 51,337. Furnace Fire Bar.

(*Barre de grille de fournaise.*)



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Andrew Pillatt, Nottingham, England, 14th February, 1896; 6 years. (Filed 27th November, 1895.)

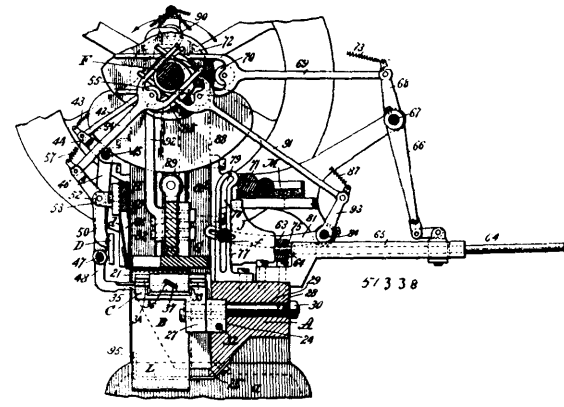
Claim.—1st. A hollow furnace bar having a passage extending from end to end, and a series of air inlets or apertures on each side thereof communicating with said passage, substantially as described. 2nd. A hollow furnace bar having a passage extending from end to end thereof, and a series of air inlets arranged centrally along the underside of its web or rib, substantially as described. 3rd. A hollow furnace bar having a passage extending from end to end thereof, a series of air inlets or apertures arranged on each side of its web or rib, and an enlarged depending mouth at its front end, substantially as described. 4th. The combination in a furnace, of a hollow fire bar having a passage from end to end, a series of lateral openings communicating with said passage, and a fire-bridge having an opening in alignment with said bar through which the hot air from said passage travels to the back of the bridge and mingles with the furnace gases and so effects enhanced combustion, substantially as described.

No. 51,338. Paper Box Machine.

(*Machine pour boîtes en papier.*)

Leroy Brown, William Perkins Birnie, Alfred Birnie and Donald Birnie, all of Springfield, assignees of Chauncey Wolcott Gay, West Springfield, all in Massachusetts, U.S.A., 14th February, 1896; 6 years. (Filed 6th November, 1895.)

Claim.—1st. In a paper box machine, the combination with a stationary perpendicular front-faced rest against which to set the box-blank, having a flat top, and perpendicular lateral sides, of a deflector for the end flap, having its location normally above and in front of the said rest and adapted to move above and rearwardly across the top of said rest, and then to retreat, and the paired deflectors for the stay-sections adapted to have approaching move-



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ments across and above the lateral upper corners of the said rest and to then recede, and means for imparting the reciprocatory movements to the said deflectors, substantially as described. 2nd. In a paper box machine, a rest having a flat top, perpendicular front surface and perpendicular lateral sides, a bar above and having its rear vertical face slightly in advance of the plane of the front face of said rest, in combination with gummers having a reciprocatory movement forward and rearwardly above said rests to any away from said bar, substantially as described. 3rd. In a paper box machine, a rest having a level top, a perpendicular front surface and perpendicular lateral sides, a bar above and having its rear vertical face slightly in advance of the plane of the front face of said rest and having an aperture therethrough, and the end flap deflector mounted to move above and rearwardly across the rest and through the said aperture and to then retreat, and means for actuating it, substantially as described. 4th. In a paper box machine, a rest for the paper box-blank having a level top, a perpendicular front surface face and perpendicular lateral sides, of a fixed bar above and having its rear vertical face slightly in advance of the plans of the front face of said rest, and having one or more gauges rearwardly extended from its vertical rear face, substantially as described. 5th. In a paper box machine, the combination with the rests, of the bar above and forward of the plans of the front face of the rest and end-flap deflector, lateral stay-wing deflectors, horizontally reciprocatory gummers, and the follower to descend against, and rise from, the top of the rest, and means for imparting the motions to said respective movable devices, substantially as described. 6th. In a paper box machine, the combination with the pair of rests and the supports for the stay-wing deflectors supported thereon, and which with said rests are adjustable, substantially as described, of the stay-wing deflector slides, horizontal reciprocatory gummers, which are adjustably mounted, the end, flap deflector and the follower to descend against and rise from the top of said rests and means for imparting the motions to said deflector slides, the gummers, the end-flap deflector and said follower, substantially as described. 7th. In a paper box machine, the combination with bed or table having groove-way in its front face, of the blocks or rests, B, B, having at their rears the projecting members, 27, to fit in said groove-way, and means for holding them in confinement in said groove-way, substantially as described. 8th. In a paper box machine, the combination with the bed or table having a groove-way therein, of the blocks or rests B, B, having supporting and slide engagement sin said groove-way, of the right-and-left-hand screw which screw engages said rests, and means whereby to rotate it, substantially as described. 9th. In a paper box machine, the combination with a bed or table, of blocks or rests, B, B, having a movable supporting engagement at the front of the table and supporting in-turning devices for the stay-sections which have their position outside of, and at a short distance from, the lateral vertical sides of said rests, and means for causing the approaching movements of said devices above, and across, the upper corners of the rests, substantially as described. 10th. In a paper box machine, the rests, B, B, and the stay-section in-turning devices, located outside of the lateral vertical sides of said rests, and having supports therefor which are sustained by, and movable as one with said rests, but which have their positions alongside of, and separated from, the said vertical lateral sides of the rests, substantially as described. 11th. In a paper box machine, the combination with the bed having the groove-way and the rests, B, B, which have support and slide engagements in said groove-way and which carry the supports, C^2, C^2, at, and separated from the vertical lateral sides thereof, of the stay-section in-turning slides which normally have positions outwardly beyond the space separating their supports from the sides of the rests, means for imparting the reciprocatory movements of the slides across said space, and the right-and-left-hand screw engaging the pair of rests, with means for effecting its rotation, substantially as described. 12th. In a paper box machine, in combina

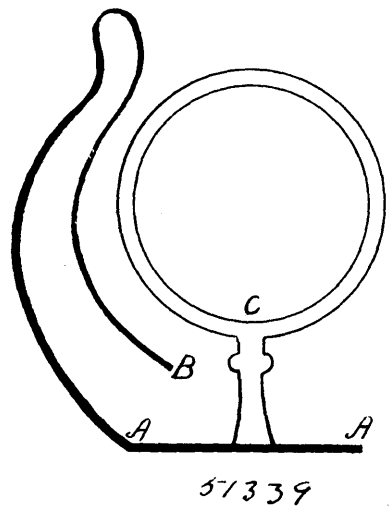
tion, the rest B, having supported in fixed relation to its lateral side the support-block 26, which is provided with the transverse-way 33, and therebelow the way 34, at right angles thereto, the slide constituting the deflector for the stay-section, movable in the transverse-way 33, a bar movable in the way 34, and having a cam and stud engagement with said slide, and means for imparting a reciprocatory movement to the bar, substantially as described. 13th. In a paper box machine, the combination with the bed having the groove-way in its front face and having the horizontal longitudinal slots extending through it from its grooved front to its rear side, of the blocks, or rests B, having at their rears the projecting members 27, to fit in said groove-way, the bolts engaging said rests and passed therefrom through said slots of the bed and provided with confining nuts, substantially as described. 14th. In a paper box machine, the combination with the rests B, substantially as described, and the apertured bar H, standing above, and just forward of, the rests, of the end-flap in-turning device which consists of the lever pivotally mounted and having at its extremity a part to move through the aperture of the bar and adapted to impinge against the end flap of the properly presented box-blank, together with the cam, a thrust-rod operated by the cam, and connected to said lever, and the retracting spring 57, substantially as described. 15th. In a paper box machine, the combination with the table having the separate and adjustable rests B, B, which have level tops perpendicular front faces in a coinciding plane, and perpendicular lateral sides, of a stop L, having a vertical face which is in a plane coincident with the perpendicular front faces of said rests, substantially as described. 16th. In a paper box machine, the combination with the rests B, B, and bar above, and in front thereof, of gummers J, J, and a reciprocatory carrier, mounted for a forward and rearward movement over said rests to, and against, and then away from, the rear face of said bar, the guiding shaft 64, for said gummer-carrier and the support and guide-ways therefor, the rock-shaft 67, having the lever arm 66, connected to said shaft 64, and having the arm 68, a cam, and a thrust-rod operated thereby and connected to said arm 68, substantially as described: 17th. In a paper box machine, the combination with rests and supports C^2, adjustable in unison, the stay-section in-turning devices mounted on said supports C^2, of the bar H, above and in advance of the rests B, and the gummers adjustably mounted on a horizontally reciprocatory support, substantially as described. 18th. In a paper box machine, the combination with the reciprocatory gummers J, J, and the gum-box-roll located adjacent the receded position of the gummers, the members 77, having the slots 78 therein, comprising the deflected terminals 79, the gum-supplying roller *f*, having the journal constrained to move in said slotted member 77, the rock-shaft 84, with its slotted arms 81, which engage the journals of the roller *f*, and the lever-arm 93, the cam and thrust-rod 91, and spring 87, all arranged for operation, substantially as described. 19th. In a paper box machine, the combination with the bar H, of an envelope which is in the form of a flexible tube adapted to the cross-sectional contour of the bar which may be shipped around on the bar and provided with one or more rearwardly projecting gauges, 60, 60, substantially as described. 20th. In a paper box machine, the combination with the bar H, of an envelope which is in the form of a flexible tube adapted to the cross-sectional contour of the bar, and which may be slipped around on the bar and which is provided with the extra thickening layer 82, which has its upper edge at some distance below the top edge of said bar, substantially as and for the purpose set forth. 21st. In a paper box machine, the combination with the rests B, B adjustably mounted, and each having in fixed relation to its lateral side, and separated therefrom, a support which is provided with a slide-way for the stay-wing deflector which has a position, normally, outside of the space that separates the rests from said support, slide-bars movably guided in said supports and having cam-actuating engagement with the said deflector slides, a rod with which said slide-bars have sliding engagements and means for imparting a bodily reciprocatory movement to said rod in a direction at right angles to its length, substantially as and for the purpose set forth. 22nd. In a paper box machine, the combination with the slide C, C, movable in supporting ways therefor and reciprocatory bars 35, 35, having studs engaging in cam slots of said slides, of the rod extending crosswise of, and having sliding engagements with both of said bars and means for imparting a bodily reciprocatory movement to said rod in a direction transversely of its length, substantially as described. 23rd. In a paper box machine, the combination with the bed of table and the rests B, B, movably mounted on the bed, having the supports C^2, C^2, supported thereby in separation from their lateral sides, which supports have the slides C, C, adapted for movement in ways thereof across the adjacent edge of the rests B, B, the bars 35, 35, having studs engaging in cam slots of said slides, the rod extending crosswise of, and having sliding engagements with both of said bars, means for imparting a bodily reciprocatory movement to said rod in a direction transversely of its length, and the right-and-left-hand screw engaging both of the said rests B, B, substantially as and for the purpose set forth.

No. 51,339. Halter Shank and Line Holder.

(*Porte-courroie de licou*)

Robert C. Stewart, Grey, Ontario, and Peter M. Stewart, Township Number 15, Manitoba, both in Canada, 14th February, 1896; 6 years. (Filed 12th November, 1895.)

Claim.—A halter or line holder to be secured to a harness, formed of spring steel, curved and bent as shown, and having an aperture



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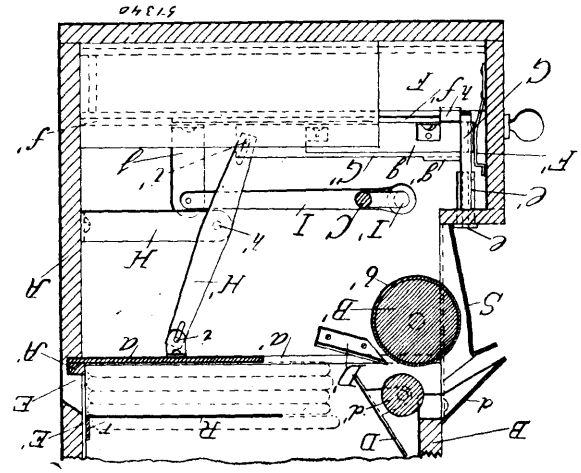
or hole through which the shank of a turret passes to firmly hold the same in place, substantially as and for the purpose hereinbefore set forth.

No. 51,340. Machine for Selling Newspapers.

(*Appareil pour la vente des journaux.*)



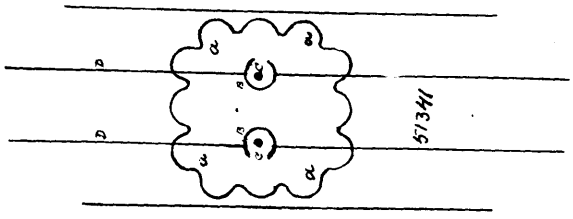
Michael Alexander Kennedy, Montreal, Quebec, Canada, 14th February, 1896; 6 years. (Filed 2nd October, 1895.)

Claim.—1st. In a vending machine, the combination with a delivering roller, and a spring-supported roller above it, of a crank-shaft, a slidable plate provided with a projection for trusting forward a folded paper, and intermediate operating mechanism between the said crank-shaft and the said plate and delivering roller, whereby they are operated simultaneously by the crank-shaft, substantially as set forth. 2nd. In a vending machine, the combination with a delivering roller and means for revolving it, of a spring-supported roller, a guide plate for conducting a folded paper between the rollers, and a flap secured on the opposite side of the rollers from the said guide plate and operating to force downward the paper when being delivered so as to protect it from theft, substantially as set forth. 3rd. In a vending machine, the combination with the slidable plate *f*, and the jaws G, carried by it, of spring for retaining a coin in the slot and supports for holding the coin between the said jaws, an arm slidable between the said jaws and adapted to be pushed back by a coin when inserted between the jaws, a slidable plate *a*, for delivering a paper, a pivoted lever operatively connecting the said plates *f*, and *a*, and operating mechanism for sliding the plate *f*, by hand, substantially as set forth. 4th. In a vending machine, the combination with the slidable plate *f*, and means for operating it, of the jaws secured to the said plate, an arm slidable between the said jaws and provided with a projection depending in front of the said plate

whereby the said arm is drawn forward after the coin drops from between the jaws, substantially as set forth. 5th. In a vending machine, the combination with the slidable plate *f*, and means for operating it, of the slidable arm G[1], provided with a lateral projection 3[1], the slidable plate *a*, for delivering papers, a pivoted lever operatively connecting the arm G with the plate *a*, the jaws J, secured to the plate *f*, the arm K, slidable between the jaws J, and provided with a projection *k*, for engaging the projection 3[1], whereby a paper is delivered when a coin is inserted between the jaws J, and the plate *f*, is slid back, substantially as set forth. 6th. In a vending machine, the combination with a vertical tube for holding change and a grooved back under the tube, of a pusher slidable in the said grooved block and operating to push forward coins from under the tube, the slidable plate *f*, and means for operating it, the jaws J, secured to the said plate, the arm K, slidable between the said jaws, and a shaft provided with an arm at each end, one arm being connected to the said pusher and the other arm being connected to the arm K, substantially as set forth. 7th. In a vending machine, the combination with a vertical tube for holding change, and a vertically-slidable grooved block under the said tube, of a pusher slidable in the said grooved block, means for operating the pusher, and a pivoted lever for raising and lowering the said block, thereby regulating the amount of change pushed forward at each stroke of the pusher, substantially as set forth.

No. 51,341. Bird Bread Holder.

(*Porte-pain pour les oiseaux.*)

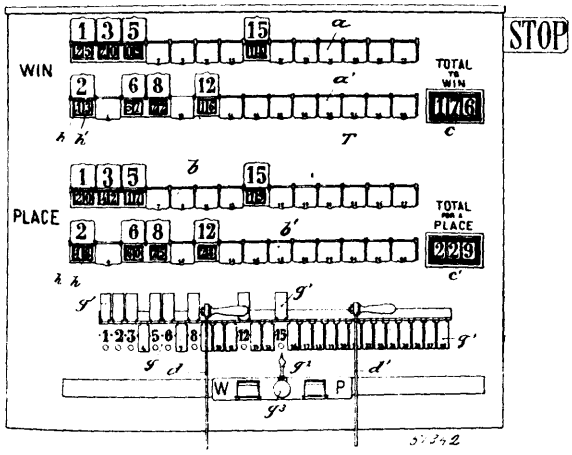


Bartholomew Cottam, London, Ontario, Canada, 14th February, 1896; 6 years. (Filed 20th September, 1895.)

Claim.—1st. The clips B, B cut of, and projecting from the tray A, substantially as and for the purpose hereinbefore set forth. 2nd. The beads C, C, near the centre of the clips B, B, substantially as and for the purpose hereinbefore set forth.

No. 51,342. Apparatus for Printing Tickets, etc.

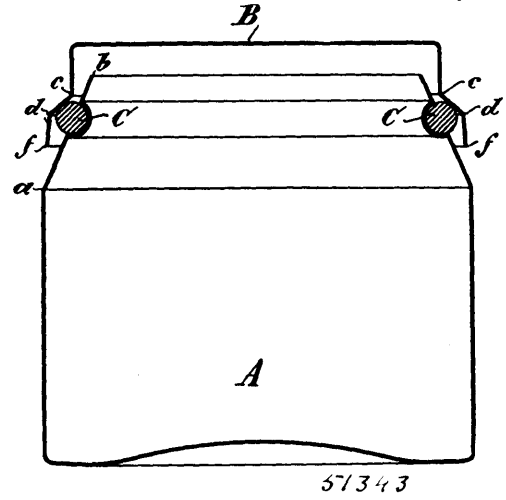
(*Appareil pour imprimer les billets, etc.*)



Léon Pierre Monier and Guillaume Glockler, both of Paris, France, 14th February, 1896; 6 years. (Filed 27th August, 1895.)

Claim.—1st. In an apparatus for printing, delivering, totalizing and checking betting tickets in which the indications "to win" and "for a place," are produced by means of a pair of levers acting on a pointer which indicates the number of the horse whether "to win" or "for a place," in combination with totalizers composed of two or more decagonal drums and with two sets of type wheels, the one printing "to win" and the other "place," said printing mechanism being carried by a frame capable of sliding up and down, and of being moved from one end to the other of the apparatus, as shown and described. 2nd. In the apparatus herein described, the mechanism for feeding the cardboard strips for the printing of tickets, consisting of a feed roller retaining devices, a releasing lever and a friction roller, in combination with the cutter consisting of shears operated by a connecting link, as described. 3rd. In the apparatus described, the mechanism for returning the totalizers to zero, consisting of spring pressed pawls adapted to engage the drum shafts, and suitable racks and gearing, as shown and described. 4th. The apparatus for the production of betting tickets characterized by the arrangement of a pair of levers acting on a pointer which indicates the number of the horse whether "to win" or "for a place," in combination with totalizers composed of two or more decagonal drums, and with two sets of type wheels, the one printing "to win" and the other "place," said printing mechanism being carried by a frame capable of sliding up and down and of being moved from one end to the other of the apparatus, mechanism for feeding the cardboard strips for the printing of tickets consisting of a feed roller retaining devices, a releasing lever and a friction roller, a cutter consisting of shears operated by a connecting link, mechanism for returning the totalizers to zero consisting of spring pressed pawls adapted to engage the drum shafts and suitable racks and gearing, with mechanism for printing the check strip, as shown and described.

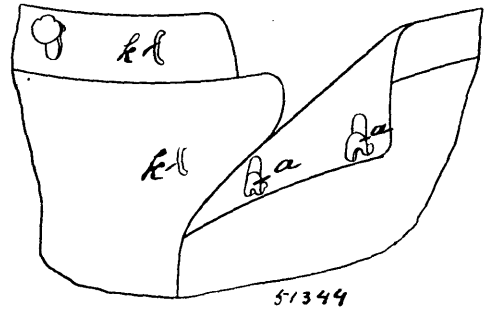
No. 51,343. Jar Closure. (*Fermture de jarre.*)



Franz Guilleaume and Ewald Golestein, both of Bonn, Prussia, Germany, 15th February, 1896; 6 years. (Filed 23rd August, 1895.)

Claim.—A jar closure comprising a packing annulus C, which, during the closing operation serves as a guide to the lid, and a conical portion *c*, *d*, in the rim of said lid for touching the said annulus in tangential direction until through the action of the atmospheric pressure the said annulus is so deformed by the said conical portion *c*, *d*, as to allow the edge *f*, of the lid rim to be tightly pressed upon the conical border of the jar, substantially as described.

No. 51,344. Hook and Eye. (*Crochet et œillet.*)

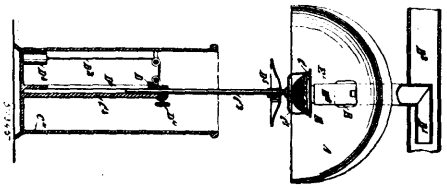


Joseph Frank Schoeppl, Pittsburg, Pennsylvania, U.S.A., 15th February, 1896; 6 years. (Filed 13th June, 1895.)

Claim.—1st. A hook and eye connecting device having a body portion and having separate wings connected to the body portion and projecting from such points of connection at an angle thereto, such wings having shoulders extending from the points or connection on the opposite side of the body portion, substantially as and for the purpose set forth. 2nd. A hook and eye connecting device having a body portion and having separate wings connected to the body portion and projecting from such points of connection, said wings converging towards each other, and said wings have shoulders extending from such points of connection on the opposite side to the

body portion, substantially as and for the purpose set forth. 3rd. In a hook and eye or like connecting device, a body portion having a hook extending from one side thereof, and having wings projecting from the ends thereof, and having a tongue projecting from said body portion between said wings on the side opposite to the hook, substantially as set forth. 4th. A hook and eye connecting device formed of a body portion having a hook member extending from one side thereof, wings projected from the ends and an extension projected from the body centrally between the wings to a point beyond the hook portion, as set forth. 5th. An improved hook and eye connection having a hook member having a flat uncut hook having a shank formed with a forwardly extending clamp member, said clamp member being slitted and formed with a spring tongue, and side or securing wing members connected with the shank or clamp members, all arranged substantially as herein shown and described. 6th. An improved hook portion for hook and eye connections, consisting of a flat hook member having a shank member formed of a forwardly extending clamp portion, slitted and formed with a spring tongue, said clamp portion having lateral downwardly bent members, and wing members formed integral with such bent members, said wings comprising rearwardly extending shoulders and forwardly extending pointed or barbed members, such wings being arranged in a plane back of the clamp member, all arranged substantially as shown and described.

No. 51,345. Device for Heating and Ventilating Rooms and Houses. (*Appareil pour chauffer et ventiler les maisons.*)

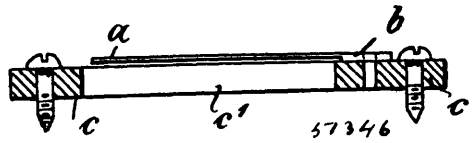


John Cinnamon, New Brighton, New York, U.S.A., 15th February, 1896; 6 years. (Filed 14th December, 1895.)

Claim.—1st. In a heating device, a supporting framework having a grate suspended therein, free of contact with any wall and capable of being lowered or elevated to any height in a room, substantially as shown and described. 2nd. In a heating device, the combination, of a grate with means for elevating and lowering the same, and a receptacle into which it may be lowered and from which it may be elevated, as and for the purpose set forth. 3rd. In a heating device, the combination of a grate, a receptacle in which it may rest or above which it may be suspended, and a reflector to intercept the heat rays radiated from the fire in the grate, substantially as described. 4th. In a heating device, the combination of a grate with means for elevating and lowering the same, a box into which it may be lowered and from which it may be elevated, the said box having a door and a back to stand against the wall, the framework of the structure being practically of metal bars covered with sheet metal, substantially as set forth. 5th. In a heating device, the combination of a grate, a box into which it may be lowered or from which it may be hoisted to any height in a room, a reflector to intercept the radiated heat from the grate, and a hoisting apparatus to lift the grate toward the smoke flue when desired to burn a fire, and to lower it into the said box when the heating process is to cease, substantially as described. 6th. A suspension grate provided with a radiating cover, and means for conducting the waste products of combustion from the grate, substantially as shown and described. 7th. A suspension grate provided with a radiating cover having an outlet for the waste products of combustion, as and for the purpose specified. 8th. A grate, a reflector arranged to intercept the heat rays radiating from the fire in the grate, and a radiating cover for the said grate, interposed between it and the reflector, as and for the purpose specified. 9th. A suspension grate provided with a radiating cover, an opening through which fuel may be introduced, a lid for the said opening, and an outlet for the waste products of combustion, as and for the purpose specified. 10th. In a heating device, a supporting framework having a grate supported therein free from contact with any wall, and capable of being lowered or of being elevated to any height in the room, a reflector located over the grate, and a radiating cover for the grate interposed between it and the reflector, the said radiating cover being provided with an off-take for the waste products of combustion, as and for the purpose set forth. 11th. In a heating device and a supporting framework, a grate carried thereby free from other support and capable of being lowered or of being elevated to any height in the room, a reflector located above the grate, a flue connected with the reflector, an off-take pipe located in the said flue, and a radiating cover resting on the top of the grate, being interposed between the said grate and the reflector, and being also provided with an opening for the escape of the waste products of combustion and capable of registry with the aforesaid off-take pipe, as and for the purpose specified. 12th. In a heating device, a grate, a rod supporting the said grate, and a support in which the rod is adjustably located, as and for the purpose specified. 13th. In a heating device, a support, a rod adjustable in the said support, a locking device for the rod, and a grate carried by the said rod, whereby the grate may be raised or lowered to any height in a room, and a reflector supported above the said grate, substantially as shown and described.

No. 51,346. Reed for Musical Instruments.

(*Anche pour instrument de musique.*)

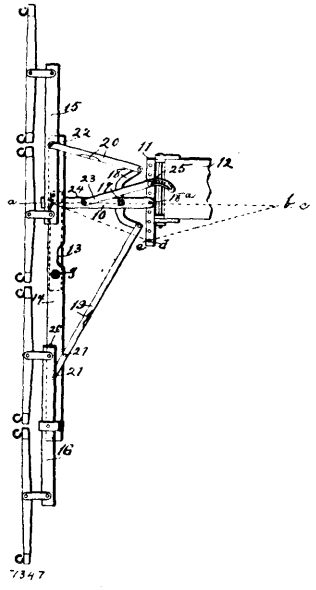


Joseph Wojciechowski, Kowns, Russia, 15th February, 1896; 6 years. (Filed 9th December, 1895.)

Claim.—1st. A reed for musical instruments provided with a tongue united to the frame without fastenings, substantially as described. 2nd. A reed for musical instruments formed by securing the end directly in the frame by moulding, casting or soldering, substantially as described. 3rd. A reed for musical instruments, consisting of a strip of drawn metal coated with copper or the like, punched out in required form and the tongue of the reed freed from its coating and bent to required form, substantially as described. 4th. A reed for musical instruments, consisting of a strip of metal having a flat upper surface and a concaved under surface, the end of the reed being united to the frame without fastenings, substantially as described.

No. 51,347. Draft Equalizer for Ploughs.

(*Régulateur du tirage pour charrues.*)

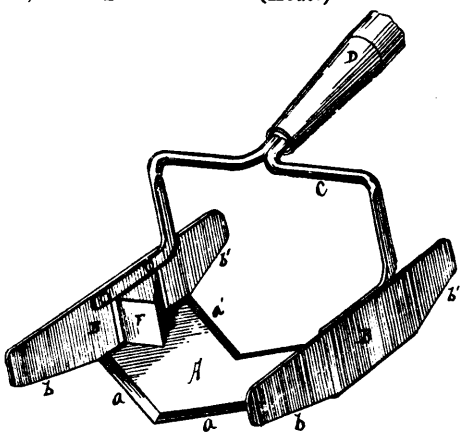


George R. Gamble, assignee of Joseph W. Gamble, both of Des Moines, Iowa, U.S.A., 15th February, 1896; 6 years. (Filed 20th January, 1894.)

Claim.—1st. In an equalizer, the combination of a main tongue adapted for attachment to a plough clevis, an auxiliary tongue located on one side of the main tongue and adapted for attachment to the main tongue at one end and to the plough clevis at the other end, the clevis being inflexible between the points of attachment of the tongues, an evener mounted on said main tongue, an evener bar, draw rods connecting said evener bar to said evener and connections between the evener bar and the forward end of the main tongue. 2nd. In an equalizer, the combination of a main tongue adapted for attachment to a plough clevis, an auxiliary tongue located on the "furrow" side of the main tongue and adapted for attachment to the main tongue at one end and to the plough clevis at the other end, the clevis being inflexible between the points of attachment of the tongues, an evener bar, an evener mounted on the main tongue, draw rods connecting said evener to said evener bar, and flexible connections between the evener bar and the forward end of the main tongue. 3rd. In a plough equalizer, the combination of a main tongue adapted for attachment to a plough clevis, whereby the plough is drawn, an auxiliary tongue forming an auxiliary connection between the main tongue and clevis, whereby the plough is steered, a sliding connection between the auxiliary tongue and the clevis, whereby the plough is allowed to turn readily, and draft mechanism connected to the main tongue, whereby the main tongue draws the plough and the auxiliary tongue resists by compression flexure of the main tongue in one direction relative to the

plough beam. 4th. In an equalizer, the combination of a main tongue, an auxiliary tongue located on the "furrow" side of the main tongue and forming an auxiliary connection between the main tongue and plough clevis, an evener mounted on the main tongue, a brace bar pivotally connected at one end to the forward end of the main tongue, an evener bar pivotally connected to the opposite end of the brace bar, draw rods connecting the "furrow" end of said evener to the "furrow" end of said evener bar, draw rods connecting the opposite end of said evener with the opposite end portion of the evener bar, the latter said draw rods being formed and arranged for manual adjustment with the said evener bar.

No. 51,348. Shuffle Hoe. (*Houe.*)



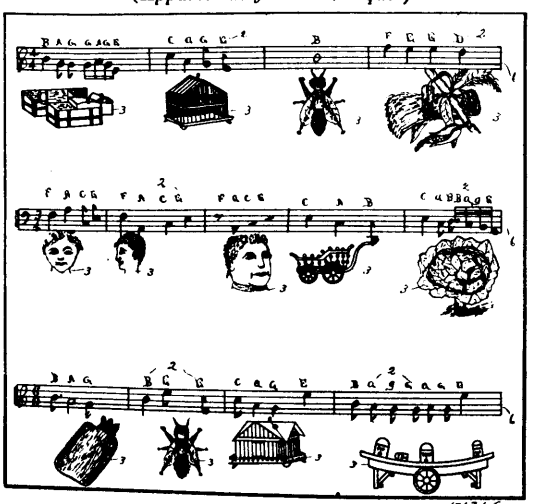
51348

Henry A. Parcells and Thomas Fowles, both of Delta, Colorado, U.S.A., 15th February, 1896; 6 years. (Filed 22nd November, 1895.)

Claim.—1st. A shuffle hoe comprising a cutting blade having side wings extending upward at an angle thereto and projecting beyond the edge of said cutting blade. 2nd. A shuffle hoe consisting of a blade having cutting edges arranged at an angle to the line of operation, and the side wings having their under edges inclined from the cutting blade. 3rd. In a shuffle hoe, the combination of the blade having cutting edges arranged at an angle to the line of operation, of the side wings standing at an angle to said blade and projecting beyond the edges thereof, and means, substantially as set forth, projecting inward from said wings over said blade and between the cutting edges thereof, for the purpose set forth. 4th. In a shuffle hoe, the combination of the cutting blade, the side wings, the shovel attachment and the bail or handle extending therefrom, and the blade or runner extending from said wings below said cutting blade. 5th. A shuffle hoe, comprising a horizontal blade having cutting edges arranged diagonal to the line of operation, and side wings extended beyond the edges of the cutting blade and sharpened to a cutting edge, said cutting blade being dropped below the lower edge of said side wings, substantially as described.

No. 51,349. Musical Game Device.

(*Appareil de jeu de musique.*)

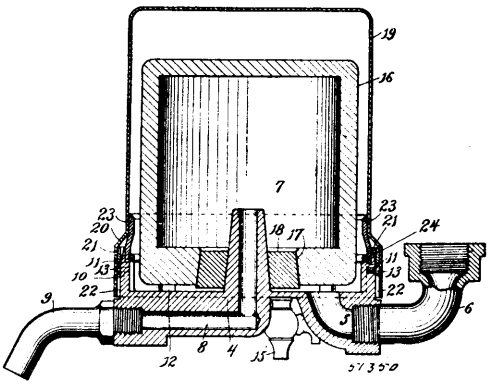


51349

Abbie T. Hays, Henry Muntz and Norman B. Hagin, all of Wichita, Kansas, U.S.A., 15th February, 1896; 6 years. (Filed 3rd December, 1895.)

Claim.—1st. In the herein described musical game apparatus the chart having a music staff with notes printed thereon and pictures representing some object, the spelling of which will indicate the notes by letters on the staff. 2nd. In a musical game, the combination of a chart having a staff with notes printed thereon, the printed letters for indicating what letter each of said notes are, the pictures illustrating some object, the spelling of which will indicate the letters of the notes on the staff, and the cards or slates having the staff, and the illustrations printed thereon, substantially as shown and described.

No. 51,350. Filter. (*Filtre.*)



51350

Emeline Graves, assignee of John Graves, both of Milwaukee, Wisconsin, U.S.A., 15th February, 1896; 6 years. (Filed 26th January, 1895.)

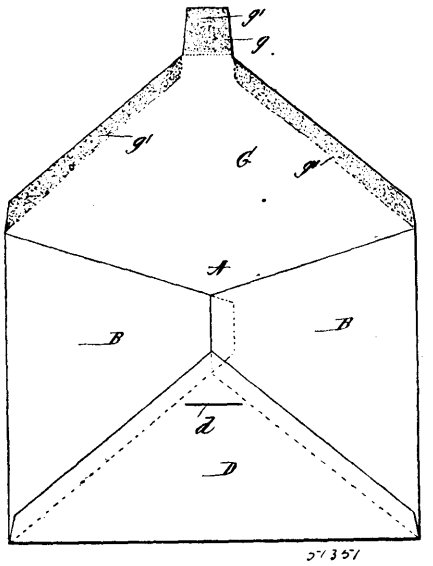
Claim.—1st. In a filter, the combination of a bottom piece having an inlet leading thereto, and an outlet leading therefrom, a filter chamber above the bottom piece, and a cap or cover fitting over the filter chamber, and having its lower end resting upon and freely removable from the bottom piece, the space between the filter chamber and the cap or cover forming an outer chamber to which the inlet pipe leads, and the filter chamber forming an interior chamber having the outlet passage of the bottom in communication therewith, substantially as set forth. 2nd. In a filter, the combination of a bottom piece, formed or provided with an upwardly-extending annular flange, said flange provided at distances apart with outwardly extending studs or pins, inlet and outlet pipes, a filtering device, and a cap or cover having its lower end formed of two thicknesses of metal, the inner layer or thickness of metal having recesses formed therein to receive the studs or pins, and thereby lock the cap or cover in place, substantially as set forth. 3rd. In a filter, the combination of a bottom piece formed or provided with an upwardly-extending annular flange, said flange provided at distances apart with outwardly extending studs or pins, inlet and outlet pipes, a cap or cover having its lower end fitting around the annular flange, and a band secured to and against the inner side of the lower end of the cap or cover, said band provided with inverted L-shaped slots to receive the studs or pins, substantially as set forth. 4th. In a filter, the combination of a bottom piece provided with an upwardly extending rim or flange, a washer resting upon said rim or flange, a filter supported by the bottom piece, and a cap or cover fitted over the filter, said cap or cover having a lower contracted portion adapted to bear against the upper edge of the washer, as said cup or cover is inserted in place, to form a water-tight joint substantially as set forth. 5th. In a filter, the combination of a bottom piece provided with an upwardly-extending rim or flange formed with a shoulder, and with inner upwardly extending lugs or projections, the upper ends thereof extending above the shoulder, a washer seated on said shoulder back of the upwardly extending ends of the lugs or projections, a band resting on the upper ends of the lugs or projections and bearing against the washer, and a cap or cover having a contracted portion adapted to bear against the upper edge of the washer as said cap or cover is inserted in place, whereby a water-tight joint is formed, substantially as set forth. 6th. In a filter, having a suitable inlet and outlet, the combination of a bottom piece provided with an upwardly extending rim or flange, said rim or flange having studs or pins projecting outwardly therefrom, a filtering device supported on the bottom piece, a washer resting on the flange or rim, a cap or cover having a contracted portion adapted to bear against the upper edge of the washer, as said cap or cover is inserted in place, whereby a water-tight joint is formed, and a band secured to the inner side of the cap or cover, and lying adjacent to the rim or flange, when the cap or cover is inserted in place, said band provided with angular slots adapted to receive the pins of the rim or flange, substantially as set forth.

No. 51,351. Envelope. (*Enveloppe.*)

John Joseph Lussier, New York, State of New York, U.S.A., 15th February, 1896; 6 years. (Filed 9th December, 1895.)

Claim.—1st. An envelope composed of a body portion, folding end portions, and a folding side, together with a folding flap, said side

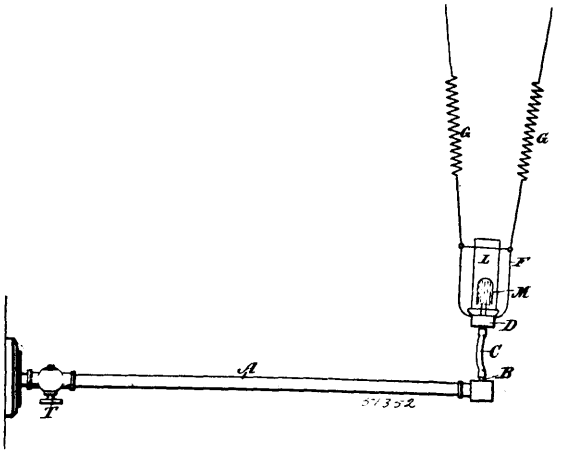
being provided with a slot, and said flap with a tongue, which is gummed on its inner surface, and adapted to be inserted through



said slot, and sealed to the inner surfaces of the ends and of the side, substantially as shown and described. 2nd. An envelope composed of a body portion, folding end portions, and a folding side, together with a folding flap, said side being provided with a slot, and said flap with a tongue, which is gummed on its inner surface, and adapted to be inserted through said slot, and sealed to the inner surfaces of the ends and of the side, and the inner surfaces of said flap and of said side, being also gummed, substantially as shown and described.

No. 51,352. Device for suspending Lamps.

(*Appareil pour suspendre les lampes.*)



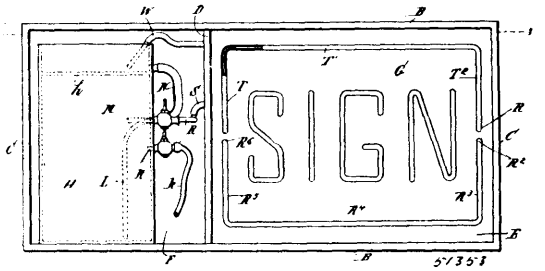
Frank Ernest Nichol, Portobello, Scotland, and Thomas Redman, Bradford, England, 15th February, 1896; 6 years. (Filed 7th December, 1895.)

Claim.—1st. A gas burner fitting combined with a flexible connection tube and suspended by one or more elastic cords or springs connected thereto all arranged substantially in the manner as shown and described and for the purpose as hereinbefore set forth. 2nd. A gas burner fitting combined with a flexible connecting tube and supported by a saddle and springs all arranged substantially in the manner as shown and described and for the purpose as hereinbefore set forth.

No. 51,353. Sign. (*Enseigne.*)

Abraham B. Gehman, New York, State of New York, U.S.A., 15th February, 1896; 6 years. (Filed 6th December, 1895.)

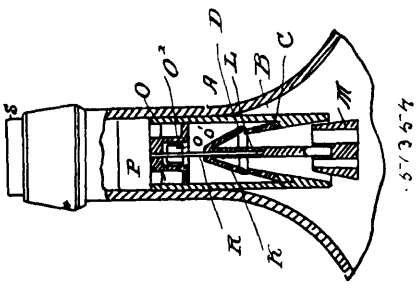
Claim.—1st. The method described, of producing signs, which consists in forcing water and air under pressure through a sign composed of glass tubes, arranged in front of a mirror, substantially as shown and described. 2nd. The method herein described for producing signs, which consists in forcing air and water under pressure, through glass tubes arranged in front of a mirror, and through signs which are also composed of glass tubes and arranged in front of the mirror,



substantially as shown and described. 3rd. In an apparatus for producing signs, the combination of a reservoir or receptacle adapted to receive air and water under pressure, a mirror arranged adjacent thereto, and a sign or signs comprising letters or other characters which are composed of glass tubes, which are placed in communication through which the water and air under pressure are adapted to be passed, substantially as shown and described. 4th. In an apparatus for producing signs, the combination of a reservoir or receptacle adapted to receive air and water under pressure, a mirror arranged adjacent thereto, two tubes which communicate with said reservoir or receptacle and which are also placed in communication outside thereof, and a sign or signs composed of other characters arranged in front of said mirror, said letters or characters being composed of glass tubes, and each of said letters or characters being placed in commuincation at the back of the mirror by means of tubes and said communicating tubes being also placed in communication with the tubes which communicate with the reservoir or reeptacle, substantially as shown and described. 5th. In an apparatus for producing signs, the combination of a reservoir or receptacle adapted to receive air and water under pressure, a mirror arranged adjacent thereto, two tubes which communicate with said reservoir or receptacle and which are also placed in communication outside thereof, and a sign or signs composed of letters or other characters arranged in front of said mirror, and said letters or characters being composed of glass tubes, and each of said letters or characters being placed in communication at the back of the mirror by means of tubes and said communicating tubes being also placed in communication with the tubes which communicate with the reservoir or receptacle, and said letters or characters being also in communication with the tube which communicates with a receptacle at the top of the air and water reservoir or receptacle, substantially as shown and described. 6th. In an apparatus for producing signs, the combination of a reservoir or receptacle adapted to receive air and water under pressure, a mirror arranged adjacent thereto, two tubes which communicate with said reservoir or receptacle and which are also placed in communication outside thereof, and a sign or signs composed of letters or other characters arranged in front of said mirror, said letters or characters being composed of glass tubes, and each of said letters or characters being placed in communication at the back of the mirror by means of tubes and said communicating tubes being also placed in communication with the tubes which communicate with the air and water reservoir or receptacle, and said letters or characters being also in communication with a tube which communicates with a receptacle at the top of the air and water reservoir or receptacle, and means for filling the water and air reservoir or receptacle with water and air under pressure, substantially as shown and described.

No. 51,354. Non-Refillable Bottle.

(*Appareil pour empêcher le remplissage des bouteilles.*)



Charles Paul Landquiste, Frithiof Karlson and Frederick Joseph O'Brien, all of Brooklyn, New York, U.S.A., 15th February, 1896; 6 years. (Filed 21st December, 1895.)

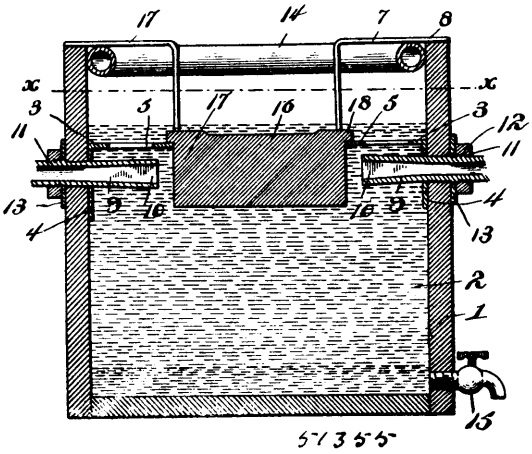
Claim.—1st. The combination, with the neck of a bottle of a tubular plug secured therein, provided in its lower end with an upwardly directed conical device or attachment the apex of which is cut away and within which is secured a plate provided with side ports and a central bore, a conical valve the apex of which is directed upward and the base downward and adapted to inclose the upper

end of the conical device and a plate secured therein, said conical valve being provided with a central tube which extends through the central bore in the said plate, the lower end of which is provided with a weight, substantially as shown and described. 2nd. The combination, with the neck of a bottle, of a tubular plug secured therein, provided in its lower end with an upward directly conical device or attachment the apex of which is cut away and within which is secured a plate provided with side ports and a central bore, a conical valve the apex of which is directed upward and the base downward and adapted to inclose the upper end of the conical device, and the plate secured therein, and said conical valve being provided with a central tube which extends downward through the central bore in the said plate, the lower end of which is provided with a weight provided with vertical ports or passages and the outer walls of which are adapted to fit within the lower end of the tubular plug, substantially as shown and described. 3rd. The combination, with the neck of a bottle of a tubular plug secured therein, provided in in its lower end with an upwardly directed conical device or attachment, the apex of which is cut away and within which is secured a plate provided with side ports in the central bore, a conical valve the apex of which is directed upward and the base downward and adapted to close the upper end of the conical device and the plates secured therein, said conical valve being provided with a central tube which extends downward through the central bore in the said plate, the lower end of which is provided with a weight provided with vertical ports or passages and the outer walls of which are adapted to fit within the lower end of the tubular plug, and a plate provided with ports secured to the upper end of said plug and having a central rod connected therewith which extends downward and into the central tube of the conical valve, substantially as shown and described. 4th. The combination, with the neck of a bottle, of a tubular plug secured therein, provided with an upwardly directed conical device or attachment in its lower end and the apex of which is cut away and provided with a plate secured therein having side ports or openings, and a valve connected with the top of said plate adapted to close said ports or openings and held in position by elastic pins connected with said plate, substantially as shown and described. 5th. The combination with the neck of a bottle, of a tubular plug secured therein, provided with an upwardly directed conical device or attachment in its lower end, the apex of which is cut away and provided with a plate secured therein, having side ports or openings, and a valve connected with the top of said plate adapted to close the side ports or openings and held in position by elastic pins connected with said plate, and a conical valve mounted on the top of said conical device or attachment the base of which is adapted to inclose said top, and said plate and provided with a tubular rod which extends downward through a central bore in said plate and has a weight secured to its lower end, substantially as shown and described. 6th. The combination with the neck of a bottle, of a tubular plug secured therein, provided with an upwardly directed conical device or attachment, in its lower end, the apex of which is cut away and provided with a plate secured therein having side ports or openings and provided with a valve adapted to close said ports or openings and held in position by elastic pins connected with said plate, a conical valve mounted on the top of said conical device the base of which is adapted to inclose said top and said plate, and said valve being provided with a central tube secured therein which extends downwardly through the central bore in said plate and has a weight secured to its lower end and an end plate secured to the top of said tubular plug provided with ports, and also provided with a rod which extends into the central tube connected with the conical valve. 7th. The combination with the neck of a bottle, having a tubular plug secured in the neck thereof, the lower portion of which is of a frustroe-conical form, a valve to close the ports or openings therein, a plate secured in the upper portion of said attachment, within which are formed openings, a tubular extension provided with said ports out of line with the ports in said plate, said extension having a rim or flange at the bottom thereof, and a rod carried by said plate passing through said extension and attached to said valve, and means for unseating said valve, substantially as shown and described.

No. 51,355. Method of and Apparatus for Hardening Cast Steel. (*Méthode et appareil pour durcir le fer.*)

Warren T. Reaser, Lincoln, Nebraska, U.S.A., 17th February, 1896; 6 years. (Filed 6th December, 1895.)

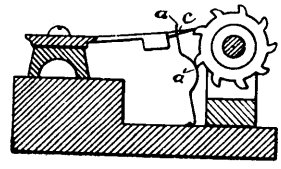
Claim.—1st. An improvement in the method of hardening cast steel, which consists in applying prussiate of potash to certain parts of the casting to be hardened, heating the entire casting with the prussiate of potash thereon, plunging the entire heated casting into a single bath of oil, and finally forcing a stream of cold water through the oil and against the prussiate of potash coated surfaces of the casting, substantially as set forth. 2nd. In an apparatus for hardening cast steel, the combination of a tank adapted to contain a bath of oil, supporting plates arranged within the tank at opposite inner sides thereof, and cold water jet nipples adjustably fitted in opposite sides of the tank and projecting inwardly directly under said supporting plates, said nipples being provided with inner contracted discharge mouths, substantially as set forth. 3rd. In an apparatus for hardening cast steel, the combination of a tank adapted to contain a bath of oil, horizontal supporting plates arranged within the tank at diametrically opposite sides thereof and provided with segmentally curved edges, and a pair of upwardly extending



L-shaped securing arms adapted to be fastened to the upper edges of the tank, and opposite inwardly disposed jet nipples fitted to opposite sides of the tank and arranged directly under said supporting plates, substantially as set forth.

No. 51,356. Damper for Musical Instruments.

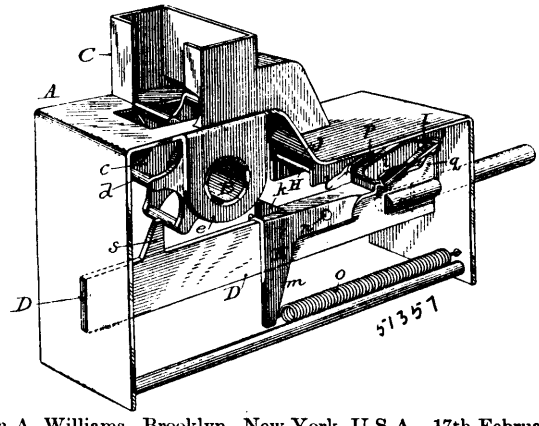
(*Etouffoir pour instruments de musique.*)



Dr. Adolf Richter, Rudolstadt, Schwarzburg, Rudolsladt, Germany, 17th February, 1896; 6 years. (Filed 6th December, 1895.)

Claim.—1st. In mechanical musical instruments, a damper device, consisting of a slot or notch arranged in the tongue and a damper to contact with one end of said slot or notch, substantially as described. 2nd. The combination of a slot or lateral notch *b* in the metallic tongue, and a spring damper *a*, and means for operating the said damper, substantially as described. 3rd. The combination of a slot or lateral notch *b* in the metallic tongue, and a spring damper having a bend a^1, and a disc or pin barrel to contact with the tongue and with the bend of the damper in the manner and for the purpose substantially as described. 4th. The combination of a a tongue, having slot or lateral notch *b*, a spring damper having in its upper part a bend a^1, and having its upper end lying within the said slot or notch, but normally out of contact with the same, and means for actuating the said damper against the end *c* of the said slot immediately after the tongue has been struck, substantially as described.

No. 51,357. Vending Machine. (*Machine de vente.*)



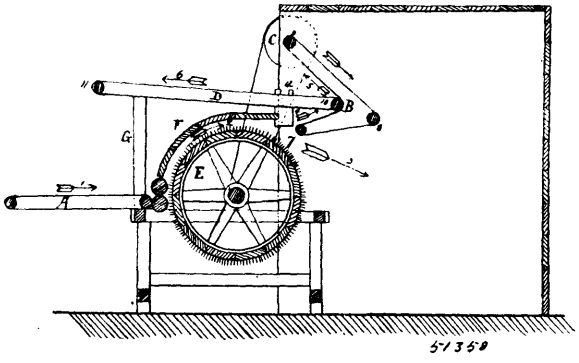
John A. Williams, Brooklyn, New York, U.S.A., 17th February, 1896; 6 years. (Filed 3rd December 1895.)

Claim.—1st. In combination with frame A provided with a coin slot, the spring arm G having its down-turned end cut away on the arc of a circle and arranged behind the slot, and a supporting plate

H arranged behind the down-turned end of the spring arm. 2nd. The frame A for a vending machine, comprising the long sheet having the openings *a* and F, and openings for the support of an actuating slide, and provided also with the perforated lateral wings *e*, *e*. 3rd. In combination with an ejector having a series of bars *d* separated from each other as described, and means for rotating said ejector, of a package support provided with an opening through which the ejector works. 4th. In a vending machine, the combination with a package support; of an ejector provided with arms which are normally free from the weight of the articles to be delivered, and means normally independent of the ejector for rotating the latter intermittently to deliver the lowermost package to the purchaser, whereby when the ejector is rotated the arms thereof shall ride beneath and raise the pile of packages up off the lowermost package. 5th. In a vending machine, the combination with a rotary ejector and means for operating the same, of a pawl for giving to said ejector a sudden impulse or final movement. 6th. In a vending machine, the combination with a rotary ejector and means for operating the same, of a pawl provided with a beleved spur, and adapted to enter a corresponding socket or opening, whereby the ejector is given a final impulse and then locked in position. 7th. In a vending machine, the combination with the shaft B provided with openings *i* and bars *j*, the ejector mounted thereon and provided with a spurred spring pawl *f*, and means for rotating the ejector. 8th. In a vending machine, the combination with an ejector, of an actuating slide, and a coin-holder carried by the slide to engage the ejector. 9th. In a vending machine, the combination with an ejector, of an actuating slide, a coin-holder carried by the slide to engage the ejector, and a spring common to the slide and the coin-holder. 10th. In a vending machine, the combination with an ejector, of an actuating slide, a coin-holder carried by the slide to engage the ejector, and a stud to engage and hold the coin against the lever. 11th. In a vending machine, the combination with an ejector, of an actuating slide, a coin-holding lever pivoted to the slide, and a stud to engage and hold the coin against the lever while the lever is carried from beneath the coin. 12th. In a vending machine, the combination with an ejector, of a reciprocating slide, a lever pivoted to the slide and provided at one end with the coin-holding arms *l*, *l* and at the opposite end with the lugs *k* and *m*, a fixed stud *p* to engage the coin on the arms *l*, *l*, and a spring secured to the lug *m*.

No. 51,358. Waste Picker.

(*Appareil à démêler les déchets de coton.*)



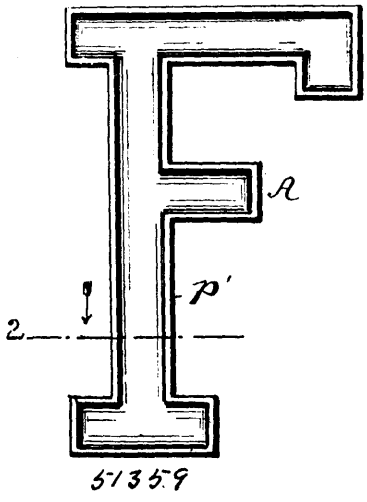
Edward R. Coverdill, Clifton Heights, Pennsylvania, U.S.A., 17th February, 1896; 6 years. (Filed 12th December, 1895.)

Claim.—In a picker for opening hard twisted waste, cloth-clippings, or rags, the combination of a picker cylinder, a feed apron therefor, and two supplemental aprons B and D, located above the picker cylinder, so that apron B will catch unbroken lumps of fibrous material thrown upon it by the cylinder; and deliver them to the apron D, and said apron D deliver them in turn to the picker feed apron, to feed them again into the picker, as shown and described.

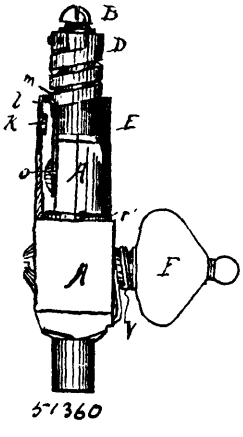
No. 51,359. Sign Letter. (*Lettres pour enseignes.*)

Frederick Henry Colburn, Chicago, Illinois, U.S.A., 17th February, 1896; 6 years. (Filed 10th December, 1895.)

Claim.—1st. As a new article of manufacture, an applique sign character formed convex on its front or obverse side, and there provided with a marginal forward-projecting flange having an attaching edge, substantially as described. 2nd. As a new article of manufacture, an applique sign character of thin sheet material, formed convex on its front or obverse side and there provided with a marginal forward-projecting flange having an attaching edge, substantially as described. 3rd. As a new article of manufacture, an applique sign character of thin and transparent sheet material, formed convex on its front or obverse side and there provided with a marginal forward-projecting flange having an attaching edge, and coated on its rear side with a colouring substance, substantially as described. 4th. As a new article of manufacture, an applique sign character of thin and transparent celluloid, formed convex on its front or obverse side and there provided with a marginal forward-projecting flange having an attaching edge, and coated on its rear side with a colouring substance substantially as described.



No. 51,360. Safety Gas Burner. (*Bec de gaz de sûreté*)

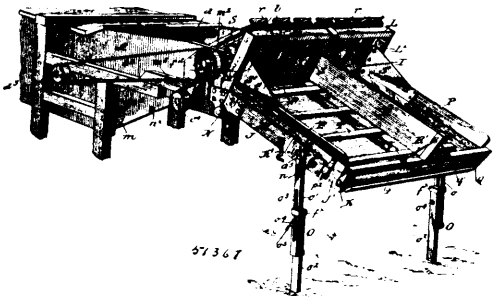


Benjamin Smith, Utica, New York, U.S.A., 17th February, 1896; 6 years. (Filed 9th December, 1895.)

Claim.—1st. A gas-burner-body provided with two passageways starting with the opening for the key, one passing obliquely upward, opening outward on the side of the burner, the other extending upward to an opening, extending thence downward and again upward terminating at the burner's tip, a valve pivoted to the body of the burner provided with a notch at its upper end and a cavity at its base to form a continuation of one of the said passageways, in combination with a thermostatic coil, fixed to the burner, provided at its free end with a tongue to engage the notch of said valve, as and for the purpose set forth. 2nd. The combination, with the body of the burner, passageways as described extending from the opening for the key the valve pivoted to the burner, provided with a cavity to connect with one of the passageways and the thermostatic coil connected to said valve as described, of the key of the burner provided with a spring, abutting by its free end against a shoulder in the body of the burner, whereby the said key is controlled, as and for the purpose specified. 3rd. In combination, the body of the burner arranged with passageways starting at the key, branching upward and opening outward, one of said passageways starting again and continuing thence through said burner, a thermostatic coil fixed to said burner, a lever valve, arranged to connect with said coil, provided at its base with a notch or cavity to form a continuation of the main passageway, and the key of the burner provided with a spring, a conical portion, and a groove formed partly around said conical portion, substantially as set forth.

No. 50,361. Band Cutter and Feeder.

(*Coupe-hart et alimentateur.*)



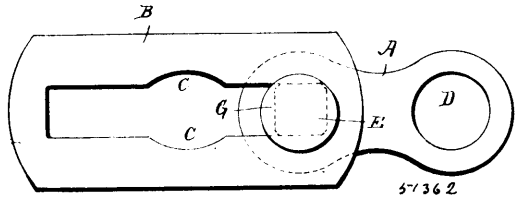
George David Lamm and William Sicard, both of Ackley, Iowa, U.S.A., 17th February, 1896 ; 6 years. (Filed 25th March, 1895.)

Claim.—1st. In a band cutting and feeding mechanism substantially as described, the combination with the conveyer frame having a hinged bail like member at its front end adapted to be folded under such end, of a division board having a hook member at its upper end adapted to slip over a cross bar of the conveyer frame, and having its front end supported on the bail member, and means for securing it detachably to such bail member, all substantially as hereinbefore shown and described. 2nd. In a band cutting and feeding mechanism substantially as described, the combination with the conveyer formed of a main portion hinged to fold under the mouth or feed end of the thrasher frame, and a bail member hinged at the outer end of such main portion and a transverse frame member at the inner end, of a division board having detachable connections with the said transverse member at its upper end, and supported on and detachably connected with the bail member at its lower, as and for the purpose described. 3rd. In a band cutter and feeder, the combination of the band cutter shaft, the knives or blades, and a yielding shield, consisting of bent plates rigidly secured to a cross beam of the frame near one and passing under said shaft and between the said blades, rods secured to one end of said plates and passing loosely through the other one, tubes inclosing part of the length of said rods and coiled springs surrounding the uninclosed parts of said rods, substantially as described. 4th. In a band cutter and feeder, the combination with the frame, including a transverse support or bar, the conveyer, and a revolving cutter shaft having radially arranged blades, of spring metal angle plates, secured at their upper ends to the said cross bar, their front or vertical member extending down between the cutter blades in front of the cutter shaft, their horizontal portion being extended rearward under said shaft, and beyond the cutters, said plates being of a width to snugly fit between such blades, and means for imparting a downward pressure to the horizontal members of said plates, whereby the pressure members will serve to compactly press the grain against the discharge end of the said conveyor, all substantially as shown and described. 5th. In a band cutting and feeding mechanism substantially as described, the combination with the cross bar L, the frame portion A^1, and the rotary shaft H, journaled in rear of the bar L, said shaft having a series of spaced radial blades, of the plates p, secured to the rear of the bar L, and extended down in front of the shaft H, said plates having horizontal portions p, extended under and to the rear of such shaft, and spring actuated devices for normally holding the portions p^1, pressed downward, all substantially as and for the purposes shown and described. 6th. As an improvement in a band cutter and feeder mechanism for threshing machines, the combination with the main frame having guide notches in its front extension, of a conveyor frame hinged to the front end to fold thereunder, said conveyor frame having lateral headed studs, and eyes or staples, the detachable legs having notched ends adapted to engage the lateral studs when the frame is extended said studs adapted to engage the notches in the main frame, and hook members hinged to the main frame and adapted to engage the eyes in the sides of the conveyor frame, all arranged substantially in the manner shown and for the purposes described. 7th. As an improvement in band cutters and feeders, the combination with the main frame, and the auxiliary side boards n^2 having recesses n^x, of the conveyor frame hinged to the front end to fold thereunder and having lateral headed studs and eyes or staples, and the hook members hinged to the main frame adapted to engage the eyes or staples when the conveyor is folded between the boards n^2, all arranged substantially in the manner shown and described.

No. 51,362. Drive Chain. (*Chaîne sans fin.*)

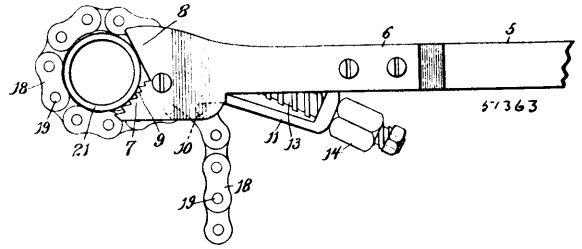
Ellory A. Baldwin, Upton, Massachusetts, U.S.A., 17th February, 1896 ; 6 years. (Filed 31st July, 1895.)

Claim.—1st. In a linked driving chain for cycles or other purposes, the combination of a central wide link having a cylindrical pin hole at each end, two side narrow links having slots therethrough and a central circular recess, with connecting pins having cylindrical bodies and recessed necks at each end eccentrically placed as to the axis of the pin, and leaving a head at each end of the pin, substantially as described. 2nd. In a linked driving chain



for cycles or other purposes, connecting pins between links having a recessed neck at each end under a head, the neck being formed as a square eccentrically disposed as to the axis of the pin, substantially as described. 3rd. In a linked driving chain for cycles or other purposes connecting pins between links, having a recessed neck at each end under a head, the neck being formed of two sections of equal radius eccentric to the axis of the pin connected by two flat faces on opposite sides of the pin, substantially as described.

No .51,363. Chain Pipe Wrench. (*Clé à écrou.*)



John Hoitt Newell, Hurley, Wisconsin, U.S.A., 17th February, 1896 ; 6 years. (Filed 21st December, 1895.)

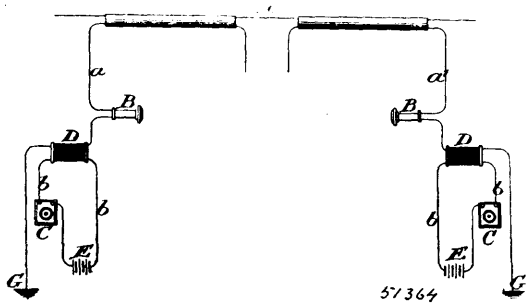
Claim.—1st. In a chain pipe wrench, the combination, of a hand-lever provided at its end with jaws adapted to engage the pipe, said jaws formed or provided with projecting hooks, a non-rotary take-up, a rotary nut fitted to the screw end of said take-up, and a chain having one end secured to the take-up and its free end adapted to engage the hooks, substantially as set forth. 2nd. In a chain pipe wrench, the combination, of a hand-lever provided at its end with jaws adapted to engage the pipe, said jaws formed or provided with projecting hooks, a non-rotary take-up formed at one end with a headed portion having a recess therein, the inner end of said recess being reduced, a rotary nut fitted to the screw end of the take-up, and a chain consisting of a series of edge-opposing links, and connecting pintles, the innermost link or links at one end fitting the contracted portion of the recess of the headed portion of the take-up, and the parallel links connected to said first-mentioned link or links fitting the widened portion of the recess, said respective links held in the recess by rivets, and the free end of the chain adapted to engage the hooks, substantially as set forth. 3rd. In a chain pipe wrench, the combination, of a hand-lever formed or provided at one end with a foot portion comprising parallel side pieces with a space there between, said side pieces provided with projecting hooks, a boxing, a non-rotary take-up passing through the boxing and entering the space between the side pieces, a rotary nut fitted to the screw end of said take-up, and a chain having one end secured to the take-up and its free end adapted to engage the hooks, substantially as set fort. 4th. In a chain pipe wrench, the combination, of a hand lever formed or provided at one end with a foot portion comprising parallel side pieces with a space therebetween, said side pieces having edge-projecting hooks, and end heel projections, the space between said heel projections being greater than the space between the hooks, a non-rotary take up, a rotary nut fitted to the screw end of said take-up, and a chain having one end secured to the take-up, and its opposite end provided with projecting pintles adapted to engage the hooks, substantially as set forth.

No. 51,364. Art of and Apparatus for Transmitting Speech. (*Art et appareil pour transmettre la parole.*)

Alexander Wilford Hall, P.H.D. and L.L.D., Assignee of John Absterdam, both of New York, State of New York, U.S.A., 17th February, 1896 ; 6 years. (Filed 10th May, 1895.)

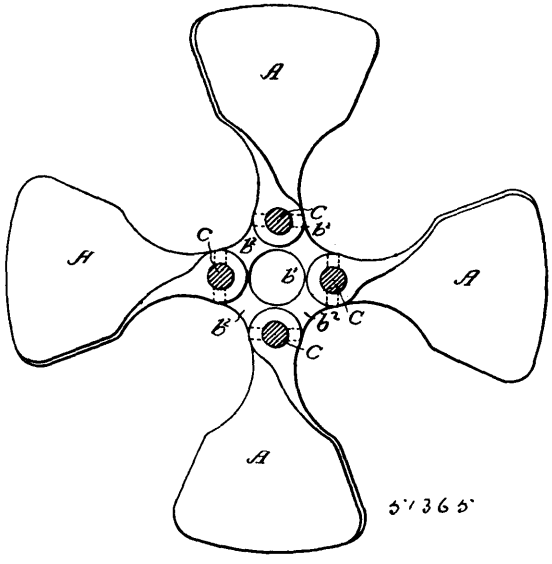
Claim.—1st. The herein improved art of transmitting articulate speech electrically over a line circuit substantially as set forth permanently open or incapable of use for telegraphic service and without ground connections as described. 2nd. A line for electric telephone transmission formed in two or more open circuit sections extended adjacent to one another at their ends, but at all times disconnected from one another and from ground during telephone transmission and in such electric relation as described, as to be incapable of use for telegraphic service or for sending magneto calls from one section to the other. 3rd. In an electric telephone system, a continuous single main line wire including the secondary wires of

induction coils and having each open circuit terminal extended adjacent to a ground wire terminating with an open end as described,



the primary of the induction coil being in local circuit with a microphone and battery as set forth.

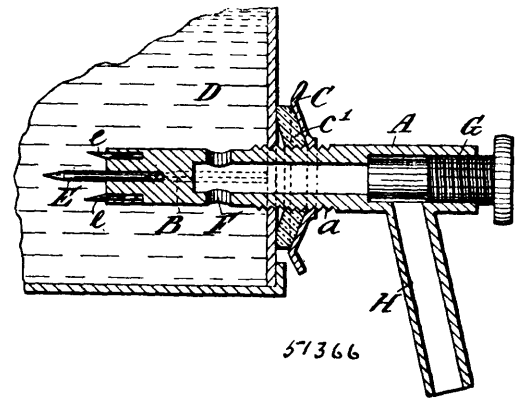
No. 51,365. Propeller. (*Propulseur.*)



Orestes Pagau, Josiah R. Bougler and Horace Evans, all of Philadelphia, Pennsylvania, U.S.A., 17th February, 1896; 6 years. (Filed 18th December, 1895.)

Claim.—1st. The combination in a propeller, of the hollow hub open at the rear, blades projecting from said hub and passage in the hub between the blades, said passages communicating with the opening at the rear, substantially as described. 2nd. The combination in a propeller, of the independent blades, means for adjusting the blades, with a hollow hub having passages between the blades communicating with the central opening, substantially as set forth. 3rd. The combination of the blades having base sections, hub sections B^1, and B^2, and bolts passing through the base sections of the blades and through the hub section, the structure forming a passage at the centre of the propeller for the free escape of water, substantially as described. 4th. The combination in a propeller, of the skeleton hub open at the rear, blades projecting from said hub, openings in the hub between the blades, said openings communicating with the open centre, with a propeller shaft stopping short of the centre of the blades so as to allow for the free passage of water to the centre through the openings between the blades, substantially as described. 5th. The combination of the independent blades, each having a perforated base section, hub sections B^1, and B^2, the hub section B^1, formed to receive the propeller shaft, the section B^2, having a central opening for the escape of water, with bolts passing through the said sections and through the base of each blade, substantially as described. 6th. The combination of the sections B^1, and B^2 of the hub, the shaft secured to one section, curved sockets on the sections, blades having bases adapted to said sockets, openings in each base, bolts adapted to the openings and to the hub sections and set screws for locking the blades, substantially as described. 7th. The combination in a propeller, of the hub, the adjustable blades, each blade having an opening in its base, a shoulder a^2 on the blade, a confining bolt C^2, having a collar c bearing against the shoulder, whereby the blade is secured to the hub, substantially as described.

No. 51,366. Tap. (*Robinet.*)

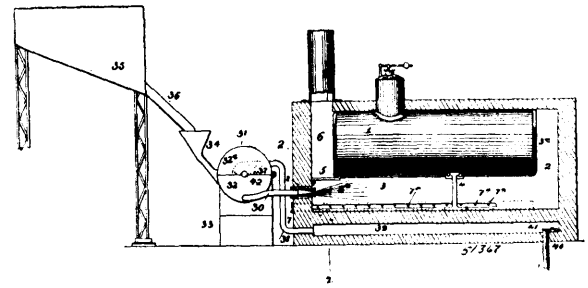


Herbert Credgington, No. 7 Pall Mall Bendigo, assignee of George Barnes, No. 187 Abert Road, Albert Park near Melbourne, both in the Colony of Victoria, 17th February, 1896; 6 years. (Filed 22nd August, 1895.)

Claim.—The herein described tap to enable kerosene or other liquid to be readily withdrawn from kerosene tins or other similar receptacles, consisting of a tap having either a pointed end or else cutters on its forward end and having one or more projecting wings or stops (such as B) near said forward end, together with a disc (such as C), working upon a screw-threaded part of its casing in conjunction with a rubber or other washer (such as c^1), substantially as and for the purposes specified and as illustrated in the accompanying drawings.

No. 51,367. Means for Burning Fuel.

(*Moyen de brûler le combustible.*)



Lester and William M. Enst, all of New York, State of New York, U.S.A., 17th February, 1896;6 years. (Filed 14th December, 1896.)

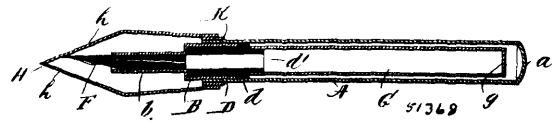
Claim.—1st. The combination of a pulverizer and a pipe leading thereto from an air heating chamber, means to deliver fuel to said pulverizer to cause said fuel to be pulverized by the mechanism being arranged to mix said fuel with air while pulverizing it and to force said mixture from said pulverizer, and means for delivering said mixture of hot air and pulverized fuel together to a combustion chamber, substantially as set forth. 2nd. The combination of a casing, an inlet at one end for conducting air into said casing, a pipe or hopper leading into said casing at the same end as said inlet to deliver fuel thereto, mechanism within said casing arranged to pulverize fuel while at the same time mixing it with the air entering said casing, the said devices which pulverize the fuel, being arranged to create a current of air to force the fuel from the entering end of the casing out through the opposite end thereof, and means for conducting the mixture of air and fuel from said casing to a combustion chamber, substantially as set forth. 3rd. The combination of a boiler and a setting therefor, having a combustion chamber for said boiler and a hot air chamber within said setting beneath said combustion chamber, and an inlet for air into said hot air chamber, whereby air will be heated by radiation from said setting, with a combined pulverizer and blower having one end connected with said hot air chamber by a suitable pipe the opposite end being connected by a suile pipe with said combustion chamber, said pulverizer and blower containing blades or bats which are arranged to pulverize fuel and mix it with hot air from said hot air chamber, the said blades which pulverize the fuel being arranged to create a current of air within said pulverizer to force the said mixture of fuel and hot air into said combustion chamber, substantially as set forth. 4th. The combination of a boiler and a setting therefor, having a combustion chamber, a hot air chamber within said setting and means to permit entrance of air into said hot air chamber, and to prevent its exit through said entrance, with means for pulverizing and blowing fuel into said combustion chamber, and a pipe leading from said hot air chamber to

conduct hot air to the means for blowing the fuel into said combustion chamber, substantially herein as set forth. 5th. The combination of a boiler and a combustion chamber therefor, with a nozzle opening into said chamber, said nozzle having means for contracting and enlarging its outlet in equal degrees from a normally central line through said nozzle, means for holding the delivery end of the nozzle in any position to which it may be adjusted, means for supplying pulverizing fuel to said nozzle and for forcing it from said nozzle into said combustion chamber, substantially as herein specifid 6th. A nozzle consisting of a hollow casing having outwardly diverging walls and means for contracting and expanding the delivery end of said nozzle equally on a line passing centrally through said nozzle, whereby a sheet or film of fuel can be forced through said nozzle on a horizontal plane so as to spread out laterally after leaving the nozzle, substantially as specified. 7th. A nozzle consisting of a hollow casing having outwardly diverging side walls and two plates within said casing having correspondingly diverging edges, and means for moving the outer edges of said plates toward and from each other, so that fuel passing from the nozzle can be delivered in a sheet or film which spreads out laterally as it issues from the nozzle, substantially as described. 8th. A nozzle consisting of a hollow casing having oppositely disposed shoulders 9^b, and two plates respectively abutting against said shoulders to afford a smooth surface within said casing, and means for moving the outer ends of said plates toward and from each other at the delivery end end of the nozzle, substantially as herein specified. 9th. A nozzle consisting of two plates, side walls or webs adapted to be brought together on their edges to form a space within said nozzle, rear walls carried by said plates adapted to close the back of said nozzle, said walls forming an inlet opening, and two plates carried within said first-mentioned plates and means for moving said plates equally toward and from each other at their outer ends, substantially as set forth. 10th. A nozzle consisting of two plates and means for holding them at a distance apart to form a space between them, two plates pivotally carried within the space formed by said first mentioned plates, rock shafts journalled on the first mentioned plates, and having cranks and links connected with the movable plates for operating the latter, and means for rocking said shafts to move the inner plates toward and from each other, substantially as described. 11th. A nozzle consisting of two plates and means for holding them at a distance apart to form a space between them, two plates pivotally carried within the space formed by said first mentioned plates, rock shafts journalled on the first mentioned plates, and having cranks and links connected with the movable plates for operating the latter, said rock shafts having crank arms 24, and means connected with said crank arms for moving them conjointly so as to move the outer ends of said movable plates toward and from each other equally and simultaneously to contract and increase the distance between the outer ends of said movable plates equally, substantially as described. 12th. A nozzle consisting of two plates 9, webs 10 carried by said plates and adapted to register on their edges, whereby a space is formed between said plates and webs, means for clamping said plates together, walls at one end of said plates forming an inlet opening, two plates 14 within said nozzle and respectively pivotally connected at their inner ends with said plates 9 and means for rocking said plates 14 on their pivots to move their outer ends toward and from each other, substantially as described. 13th. A nozzle consisting of a hollow casing and plates 14 therein, said plates having pivots at their inner ends so arranged that said plates when turned on their pivots will always present a smooth inner surface within the nozzle casing while their outer ends move toward and from each other, substantially as described. 14th. A pulverizer consisting of a casing, a shaft therein, and blades or bats carried by said shaft and placed at angles laterally to the axis of said shaft, the angles of said blades or bats gradually increasing from one end of the shaft toward the other, and other blades or bats carried by said shaft and placed at reverse angles to said first-mentioned blades or bats, substantially as described. 15th. A pulverizer consisting of a casing and a shaft therein, and blades or bats carried by said shaft, and placed at gradually increasing angles relatively to the axis of said shaft, the angles of said blades or bats increasing from the inlet end of said casing to its outlet combined with a series of annular ribs within the casing, the inner surfaces of said ribs lying outside of the outer edges of the blades to form a space between the ribs and blades for the passage of material, said ribs acting to retard the flow of the material, substantially as described. 16th. A pulverizer consisting of a casing having a rotative shaft and two sets of blades or bats carried thereby, one set of blades or bats being placed at angles to the longitudinal axis of said shaft, the angles of divergence of said blades or bats gradually increasing from one end of the shaft to the other, the other set of blades or bats being placed at angles to the longitudinal axis of said shaft and on the opposite side thereof, the angles of divergence of said blades or bats gradually increasing from one end of the shaft to the other, substantially as set forth.

No. 51,368. Fountain Shading Pen. (*Plume-fontaine.*)

Frank Alfred Price, Newark, New Jersey, U.S.A., 17th February, 1896; 6 years. (Filed 21st December, 1895.)

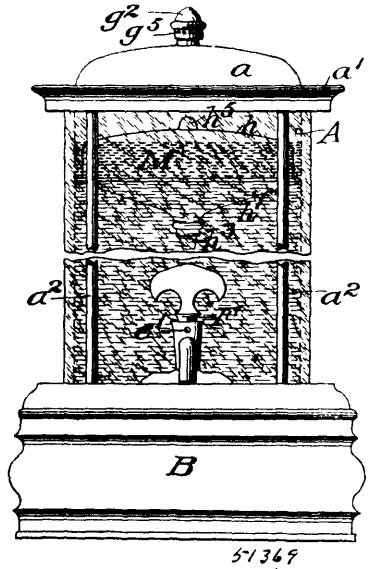
Claim.—1st. The combination with a fountain pen of a shading pen detachably secured thereto and adapted to operate in connection therewith, substantially as shown and described. 2nd. The combination with a tubular holder, which is closed at one end of a tubular head within the other end, a tubular reservoir connected



therewith, and within the tubular holder, said tubular head being provided with an extension adapted to receive a writing pen, and a shading pen adapted to be connected with said holder, and to operate in connection with said writing pen, substantially as shown and described. 3rd. The combination with a tubular holder, which is closed at one end, of a tubular head within the other end, a tubular reservoir connected therewith, and within the tubular holder, said tubular head being provided with an extension adapted to receive a writing pen, and a shading pen adapted to be connected with said holder, and to operate in connection with said writing pen, said shading pen being composed of a band or ring adapted to be mounted on the end of the holder, and of two spring plates which project therefrom, one of which comes in contact with the point of the writing pen, said plates being brought together to form a shading pen, substantially as shown and described.

No. 51,369. Liquid Dispensing Apparatus.

(*Appareil pour la distribution des liquides.*)

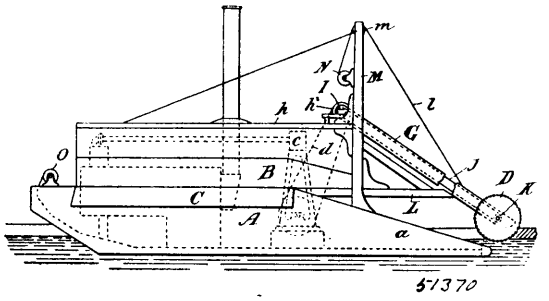


William Miles Fowler, Stamford, Connecticut, U.S.A., 17th February, 1896.; 6 years. (Filed 19th December, 1895.)

Claim.—1st. The combination, with a reservoir and a float within the reservoir, of a liquid seal in position to surround the float within the reservoir forming an air-tight closure between the liquid beneath the float and the air above the float. 2nd. The combination, with a reservoir and means for drawing liquid from the bottom of the reservoir, of a float free to move up and down within the reservoir, a liquid seal adapted to form an air-tight closure between the float and the wall of the reservoir and a chamber for receiving the sealing liquid when the latter is withdrawn from its position around the float. 3rd. The combination, with a reservoir and an air vent at the top of the reservoir and a discharge device at the bottom of the reservoir, of a float free to move up and down within the reservoir, the said float being provided with an air vent closing device at its top and a discharge closing device at its bottom for automatically limiting the inflow and outflow of the liquid into and from the reservoir. 4th. The combination, with the reservoir, a receiver at the bottom of the reservoir and means for introducing liquid into and drawing it from the reservoir, of a float within the reservoir provided with a device for closing communication between the reservoir and the receiver. 5th. The combination, with a reservoir, a receiver at the bottom of the reservoir and means for introducing liquid into and drawing it from the reservoir, of a float adapted to close communication between the reservoir and the receiver and a screw engaged with the float for holding it snugly to its seat to close said communication. 6th. The combination, with a reservoir, a receiver in communication with the bottom of the reservoir and a filling and discharge conduit in communication with the receiver, of a float located within the reservoir and provided with a device for closing communication between the reservoir and the receiver. 7th. The combination, with the reservoir and means for drawing liquid there-

from at pleasure, of a spring actuated valve at the top of the reservoir and a float within the reservoir provided with means for closing the spring actuated valve and the discharge.

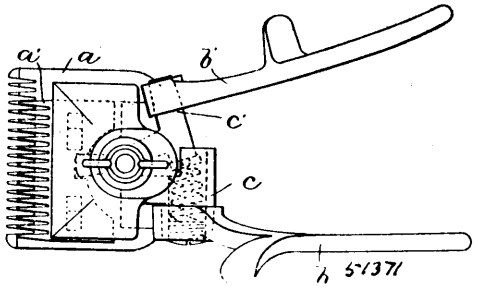
No. 51,370. Device for Cutting Channels in the Ice.
(*Appareil pour couper un chenal à travers la glace.*)



Joseph Oliver Benjamin Latour, Ottawa, Ontario, Canada, 17th February, 1896; 6 years. (Filed 17th December, 1895.)

Claim.—1st. A device for cutting a channel in the ice, consisting of a vessel having its bow projecting under the ice so as to break the ice by lifting it, a gang of circular saws cutting the ice into strips immediately in front of the projecting bow, guides on the deck of the said vessel guiding the ice to the sides and chutes to carry the pieces of ice onto the firm ice clear of the channel cut by the said saws, substantially as set forth. 2nd. A device for breaking up the ice for the passage of a vessel, consisting of a vessel having a wedge-shaped bow, projecting under the ice, the upper portion of the said wedge-shaped bow forming an inclined plane up which the ice is forced as the vessel is forced ahead and lifted and broken, substantially as set forth. 3rd. In a device for cutting a channel in the ice, the combination with a scow having its bow wedge-shaped and projecting under the ice, of a gang of circular saws P, carried on a shaft E, the said shaft E, being journalled in arms pivoted on a shaft F, F, a shaft H, to which the said arms are pivoted, means for driving the said shaft H, pulleys I, and K, and belts J, connecting the said shaft E, and H, substantially as set forth. 4th. In a device for cutting a channel in the ice, the combination with the circular saws D, and the shaft E, and the shaft H, of the pulleys I and K, and belts J, connecting the said shafts and the water-tight casing G, and stuffing boxes *k*, substantially as set forth. 5th. In a device cutting a channel in the ice, the combination with a vessel having a device for cutting the ice into strips, and a projecting bow reaching under the ice of the V-shaped guide B, and the chutes C, substantially as set forth. 6th. In a device for cutting a channel in the ice, the combination with the circular saws D, arms F, and casings G, of the brackets L, to which the said arms are secured, and the chains *l* attached to the said arms and casings, pulleys *m* journalled in the frame M, and winches N, substantially as set forth.

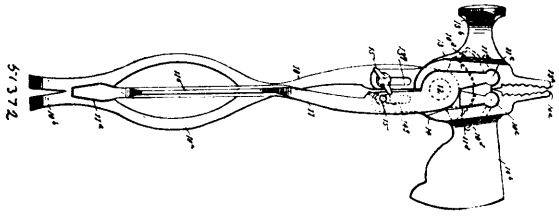
No. 51,371. Hair Clipper. (*Tondeuse humaine.*)



George Franklin Stevens, and Fred Eugene Stevens, Haverhill, Massachusetts, both in the U.S.A., 17th February, 1896; 6 years. (Filed 17th December, 1895.)

Claim.—1st. In a hair clipper, the combination with two toothed plates or blades one movable upon the other and having journals the axes of which are substantially parallel with the front edges of said toothed plates, of handles connected with said journals, and means for holding the handles in varying positions ranging from a substantially straight line with the plane of the blades to an approximately right-angular position relatively thereto. 2nd. In a hair clipper, the combination with two toothed plates or blades one movable upon the other, and a cylindrical stud or bearing connected with each of said blades and having its axis substantially parallel with the front edge or line of the teeth, of handles having sockets fitting said studs and adapted to stand thereon at different inclinations relatively to the blades, and means for holding the handles in their adjusted positions. 3rd. In a hair clipper, the combination with two toothed plates or blades one moveable upon the other, and handles for operating said blades, of means for frictionally holding the handles in varying positions relatively to the blades ranging from a substantially straight line with the plane of the blade to an approximately right-angular position relatively thereto, said means including hinge members on the blades the axes of which are substantially parallel with said toothed plates, and hinge members on the handles engaged with the members on the blades.

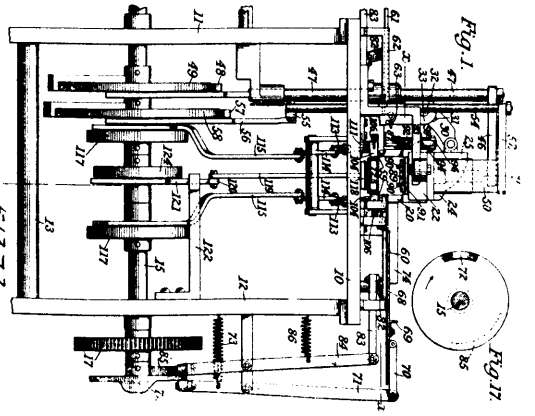
No. 51,372. Combination Tool. (*Outil à combinaison.*)



Henry C. Caldwell, Lancaster, New York, U.S.A., 17th February 1896; 6 years. (Filed 18th December, 1895.)

Claim.—1st. In a tool, the combination of handles pivoted together and provided with extensions beyond the pivot, said extensions having enlarged cylindrical ends and each provided with a guard flange on its outer side, jaws provided with recesses to receive the guard flanges, cylindrical concavities in the upper part of the recesses in which concavities the enlarged cylindrical ends of the handles loosely fit, and slots in their lower ends, and screws passing through the slots of the jaws into the handles, substantially as described. 2nd. In a tool, the combination of handles pivoted together and provided with extensions beyond the pivot, said extensions having enlarged cylindrical ends and each provided with a slot and guard flanges projecting from its inner side, jaws recessed and provided with cylindrical concavities in which the enlarged cylindrical ends of the handles loosely fit, and with slots in their lower ends, and screws passing through the slots of the jaws into the handles, substantially as described. 3rd. In a tool, the combination of handles pivoted together and provided with extensions beyond the the pivot, said extensions having enlarged cylindrical ends and each provided with a slot and a flange projecting from each side, jaws recessed and provided with cylindrical concavities in which the enlarged cylindrical ends of the handles loosely fit and with slots in their lower ends, and screws passing through the slots of the jaws into the handles, substantially as described. 4th. A combination tool, comprising handles pivoted together and provided with extensions beyond the pivot, said extensions having enlarged cylindrical ends and each provided with a slot and a flange projecting from each side, a hammer pole recessed and provided with a cylindrical concavity in the upper part of the recess, a jaw projecting from its upper face, and a slot in its lower end, a hatchet blade recessed and provided with a cylindrical concavity in the upper part of the recess, a jaw projecting from its upper face and a slot in its lower end, and screws passing through the slots of the jaws into the handles, substantially as described. 5th. A combination tool, comprising handles pivoted together near one end, the end of one handle being formed into a screwdriver bit and the other into a claw, the handle with a claw being enlarged near its end and formed with a recess to receive the screwdriver bit, and a hammer poll and hatchet blade, each provided with a jaw on its upper surface and having a knuckle joint connection with one handle on one side of the pivot and a screw and slot connection with the other handle on the opposite side of the pivot, substantially as described.

No. 51,373. Packaging Machine.
(*Machine pour empaqueter.*)

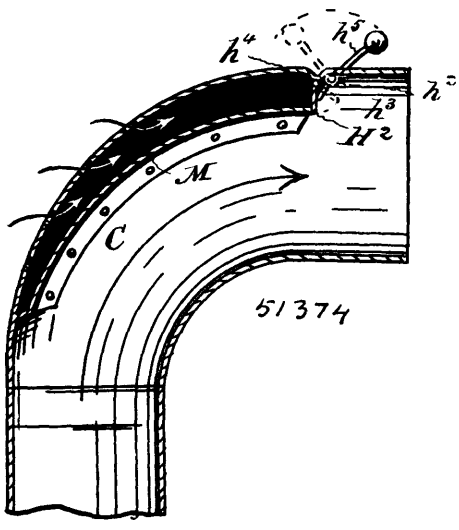


William Henry Butler, assignee of John Saman Voitek, both New York, U.S.A., 17th February, 1896; 6 years. (Filed 14th December, 1895.)

Claim.—1st. The combination of a tube having an opening in its side through which the material to be operated upon may be introduced, guards at the ends of said opening above the top of the tube, a cover for said opening hinged at one side thereof, to swing between said guards, whereby a hopper is formed to receive the loose material when the cover is turned back, a cam and intermediate means for operating said cover to compact the material within the tube, and means to expel the compacted material from said tube, substantially as shown and described. 2nd. The combination of a tube having an opening in its side through which the material to be operated upon may be introduced, means operating through said opening to compact the material placed within the tube, means to force the material from beneath said compacting device and from said tube, an open box to receive the partly compacted material from said tube, means to lay a wrapper across said box between it and the tube and a plunger and means to operate the same to finally compress the material in said box, substantially as shown and described. 3rd. The combination of a feed-tube, a plunger working transversely through said tube, an open box to receive the material from said tube, independent guard plates adjacent to the plunger on opposite ends thereof and parallel therewith and means to move said guard plates in the advance of the plunger, substantially as shown and described. 4th. The combination of a feed-tube, a plunger working transversely through said tube, an open box to receive the material from said tube, yielding doors hinged at opposite sides of the opening in the tube toward which the plunger moves, independent guard plates adjacent to the plunger on opposite ends thereof and parallel therewith, and means to move said guard plates in advance of the plunger, substantially as shown and described. 5th. The combination of an open box adapted to receive the material to be wrapped and a wrapper therefor, leaves hinged in proximity to the sides of said box, means to move said leaves to fold the sides of the wrapper down upon the cake, wings hinged to the ends of said leaves, arms supported above said box and means to depress said arms to push said wings down to fold down the projecting ends of the wrapper while the leaves are in position over the cake, substantially as shown and described. 6th. The combination of an open box adapted to receive the material to be wrapped and a wrapper therefor, arms pivoted in proximity to the corners of said box, wings pivoted upon the ends of said arms, springs pressing said wings toward the box and means to operate said arms to cause the wings to fold in the projecting ends of the wrapper. 7th. The combination of an open box, a plunger, means to operate the same to compress the material in the box, a reciprocating carriage having fingers to grasp a wrapper and lay it across the box, a slide having a lip against which a wrapper may be placed, and means to move said slide for the purpose of placing the wrapper in position to be grasped by said carriage substantially as shown and described.

No. 51,374. Pipe or Flue for Utilizing Waste Heat.

(*Tuyau de poêle ou carneau pour utiliser la chaleur.*)

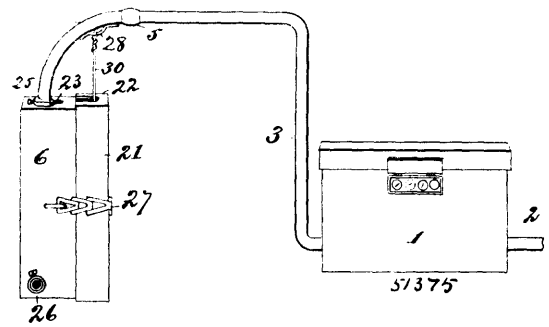


John R. Tercy and William Ewing Cowle, both of Carlisle, Indianna, U.S.A., 17th February, 1896; 6 years. (Filed 11th January, 1896.)

Claim.—1st. A pipe or flue for stoves, having two compartments, one of which, at its lower end or end next to the stove, has communication with the atmosphere outside of the pipe, and the other end of which compartment has communication with the other compartment of the pipe, substantially as described and for the purposes as specified. 2nd. The combination, with a stove pipe, of a partition arranged inside of the pipe so as to divi dethe interior space into two compartments of different area, the minor one of which will be tapering in the direction toward the stove and will be provided with openings through its outer wall, and said minor chamber having communication with the other chamber, and a damper to close said opening, substantially as shown and for the purposes set forth. 3rd. The combination, with a stove pipe elbow having a chamber with lower openings affording communication with the air of the room, and an upper opening through which air admitted into the chamber will be discharged into the horizontal member of the pipe so as to remove the soot, substantially as described, of a damper hinged so as to drop down and cover the opening between the chamber and the interior of the pipe, a horizontal rod hinged to the pipe and having an arm to bear against the damper and close it but said rod being secured independently of the damper whereby in certain adjustments of the rod, the damper will be free to open and close, and said rod having an arm situated outside of the pipe and weighted in the manner as described, whereby the rod can be controlled, substantially as described and specified.

No. 51,375. Automatic Cut-off for Gas Systems.

(*Détente automatique pour système de gaz.*)



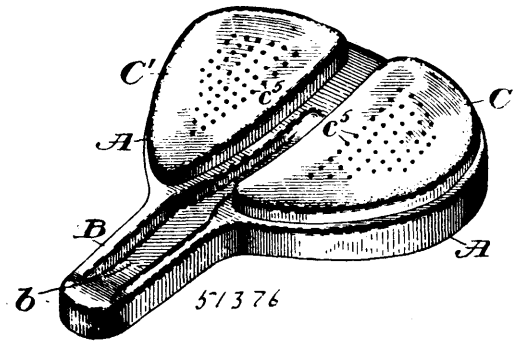
Francis L. Cook and Edmund A. Belden, Assignees of James F. Cranston, all of Springfield, Massachusetts, U.S.A., 17th February, 1896; 6 years. (Filed 2nd January, 1896.)

Claim.—1st. The combination with the gas pipe, the valve or cut-off and the segmental arm connected to the same, of the adjacently located cylinder, the rod arranged for reciprocation within and extending beyond the ends thereof, the spring for actuating the rod and the rack bar carried by the rod and engaging the teeth of the segment and the fusible cord connected with the upper end of the rod and to the pipe there-above, substantially as specified. 2nd. The combination with the pipe, the rotary cut-off and the toothed segmental arm connected therewith, of bracket-plates extending from the pipe above and below said cut-off, a cylinder arranged in said bracket-plates, a rod mounted for reciprocation within and extending beyond the ends of said cylinder, a spring for normally drawing the rod in one direction and fusible cord connected with the upper end, of the rod and with the pipe and serving to draw the rod in a direction against the tendency of the said spring, and a rack bar carried by the rod and having its teeth engaging with those of the segment, substantially as specified. 3rd. In a device of the class described, the combination with the cut-off mechanism and the pipe there-above, of a fusible cord consisting of an inner core of fibrous material knotted at intervals and an external covering of metal adapted to fuse at a low degree of heat, substantially as specified. 4th. In a device of the class described, a combination with a gas pipe having an intermediate valve case and rotary valve arranged therein, a toothed segmental arm connected to the stem of the rotary valve, perforated plates arranged above and below the valve case upon the pipe and having openings, a cylinder arranged in the openings and extending above and below said plates, a rod mounted for reciprocation within the cylinder and extending beyond the ends thereof, collars arranged on the rod above and below the cylinder, and extending toward the pipe beyond the vertical plane of said cylinder, a toothed rack bar connecting the collars and engaging the teeth of the segment and a fusible cord connected to the upper end of the rod and adapted to be connected to a fixed point above the same for suspending said rod, a head arranged upon the rod within the cylinder and a coil spring interposed between the head and upper end of the cylinder. 5th. The combination, with the pipe 4, having an eye 28, the pipe 9, the intermediate valve case 7, the rotary valve therein and segmental arm 8 of the casing 6 having the openings 23, 22 and 26, the plates 10 extending from the pipes 4 and 9 within the casing 6, the cylinder arranged within the casing, the rod arranged for reciprocation within the cylinder, the spring for depressing the rod, the collars 17 connected to the rod, the toothed rack bar 18 connecting the collars, and the fusible cord 30, substantially as specified.

No. 51,376 Bicycle Saddle. (*Selle de bicycle.*)

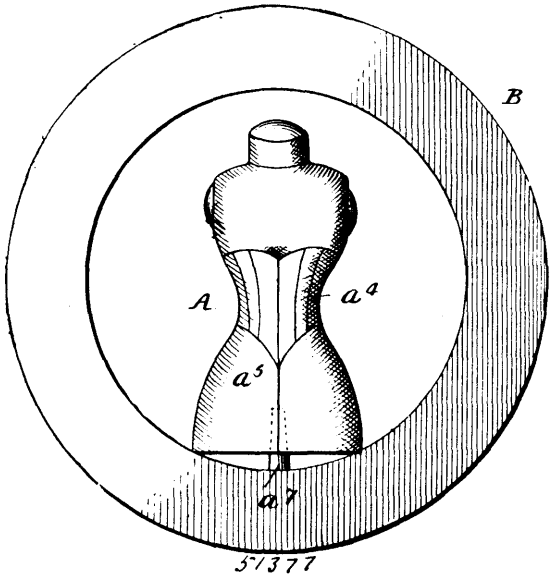
Henry Andrew Christy, Chicago, Illinois, U.S.A., 18th February, 1896; 6 years. (Filed 10th December, 1895.)

Claim.—1st. A bicycle saddle having a solid top formed with recesses in its upper surface at either side of the seat portion thereof,



such recesses having numerous perforations therein, and said top also having a shortened up or truncated horn projecting but slightly forwardly therefrom and provided with a centrally arranged longitudinal recess or depression, said seat recesses being adapted to receive and hold removable pads, substantially as described. 2nd. A pad for bicycle saddles and similar purposes, composed of resilient material having numerous apertures in the body thereof, for the circulation of air, and adapted to fit a correspondingly shaped recess in the saddle seat, substantially as described. 3rd. A pad for bicycles and similar saddles, composed of resilient material having numerous apertures extending through the body portion thereof, and also a series of recesses extending only partially through the same adjacent to and surrounding said apertures, together with a covering therefor, substantially as described. 4th. In a bicycle saddle, a solid saddle top formed with recesses in its upper surface at either side of the seat portion thereof, such recesses having numerous perforations therein, and said top being also provided with a shortened up or truncated horn having a centrally arranged longitudinal recess in its upper surface, in combination with pads composed of resilient material fitting snugly in said recesses and having numerous apertures in the bodies thereof for the circulation of air, substantially as described.

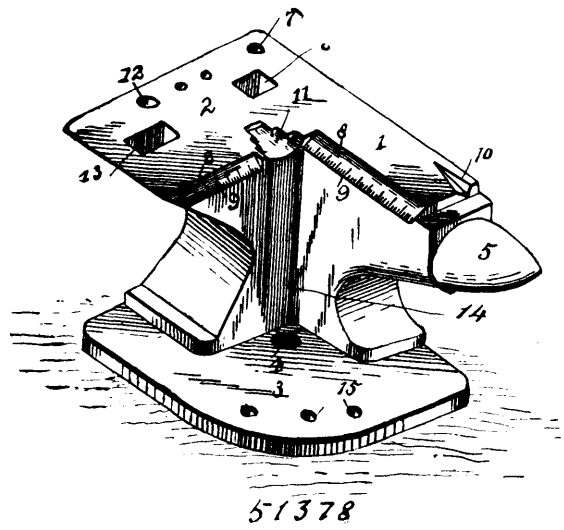
No. 51,377. Display Device for Corsets.
(*Appareil d'étalage pour corsets.*)



Thomas F. Somers, New York, State of New York, U.S.A., 18th February, 1896; 6 years. (Filed 23rd December, 1895.)

Claim.—1st. A display device for corsets, the same consisting of a display form A, corresponding in its general proportions and outlines to the figure of the upper portion of the body of a woman, and a frame B, with means for supporting the form detachably within the frame, substantially as set forth. 2nd. The combination of a frame B, and means for supporting the same, of a display frame A, having the general form and proportions of the upper portion of the body of a woman, a socket at the lower end of the form, and a pin a^7, supported by the frame and adapted to the said socket, substantially as set forth.

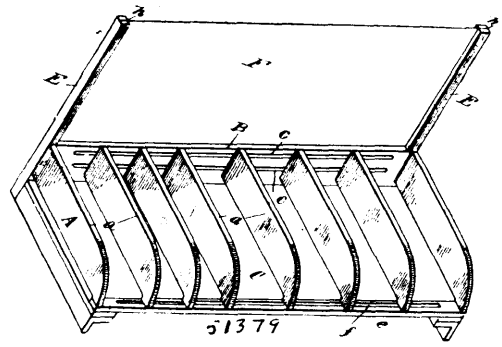
No. 51,378. Anvil. (*Enclume.*)



Malree W. McInturff, Prosperity, Missouri, U.S.A., 18th February, 1896; 6 years. (Filed 23rd December, 1895.)

Claim.—An anvil comprising two wings, one of the wings having a nipple drawing depression near one end, a bevel drill drawing surface near the inside edge, a horn and a beak-iron provided with a socket and round hole, and the other wing having a series of band-forming curved recesses near the inner edge, a series of bolt forming holes near the outer edge and a calk-turning slot near its outer end, substantially as described and for the purpose set forth.

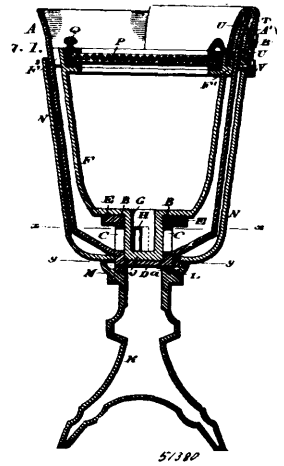
No. 51,379. Stamp Holder and Ink Pad.
(*Porte-étampe et buvard.*)



John H. Kleine, Dubuque, Iowa, U.S.A., 18th February, 1896; 6 years. (Filed 26th December, 1895.)

Claim.—1st. A stamp holder consisting of a frame, one or more partitions adjustably attached to said frame, means for adjusting and rigidly holding said partitions after adjusted, and an index of the stamps of said holder removably secured to said frame, substantially as described. 2nd. A stamp holder consisting of a frame, one or more partitions secured to said frame, and an ink-pad forming a floor on which the said stamps rest, while in the holder, substantially as described. 3rd. A holder for stamps consisting of a frame, one or more partitions secured to said frame, means for adjusting said partitions to accommodate stamps of different widths and an ink-pad forming a floor on which the said stamps rest, and which is adapted to be inserted and withdrawn from said frame for the purposes shown. 4th. A stamp holder consisting of a frame, one or more partitions attached to said frame, one or more ink-pads the upper one of which forms a floor on which the stamps rest and which pads are removably secured in said frame, and an index of the stamps of said holder removably secured to said frame for the purposes shown. 5th. A frame consisting of the stationary slotted back, the stationary end pieces, the adjustable partitions, and the removable pad which is inserted in the frame under the stamps so as to form a support therefor, combined with the grooved uprights secured to the corners of the frame, and the removable index which is inserted between the uprights, substantially as set forth.

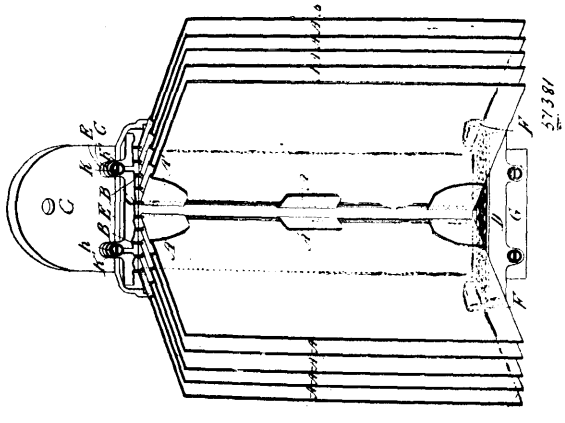
No. 51,380. Communion Cup. (*Coupe de communion.*)



Paul Gerhardt Klingler, Calasanqua, Henry W. Elson, Philadelphia, and The Firm of H. J. Klingler & Company, Butler, all of Pennsylvania, U.S.A., 18th February, 1896; 6 years. (Filed 27th December, 1895.)

Claim.—1st. A communion cup adapted to be rotated, and having means for holding cleansing material on the mouth of the same, substantially as described. 2nd. A self-cleansing attachment for a communion cup, consisting of a holder for cleansing material, and means for attaching said holder to the cup, permitting the rotation of the same, substantially as described. 3rd. A cap having means for securing it to a communion cup, and adapted to contain cleansing material on the rim of the cup, permitting the rotation of the latter, substantially as described. 4th. A communion cup adapted to be rotated on its bearings, and provided with a stationary reservoir, which may be placed in communication with said cup, substantially as described. 5th. A communion cup made rotative, and having a stationary reservoir, a holder for cleansing material on the mouth of the cup, and means for retaining said holder in stationary position, substantially as described. 6th. A communion cup having a segmental cap adapted to cover portion of the mouth of the cup, and provided with cleansing material adapted to contact with said mouth, the cup being rotatable, substantially as described. 7th. A communion cup having a self-cleansing device supported on the mouth thereof, a reservoir in said cup communicating therewith, and a rim between said cup and reservoir provided with a discharge opening, substantially as described. 8th. A communion cup made rotatable, and having a stationary reservoir within the same, and a casing on the exterior, whereby when the casing is held, the cup may be rotated by the stem thereof, substantially as described. 9th. A rotatable communion cup with a socket, a stationary reservoir with a sleeve seated in said socket, and ports in said socket and sleeve, substantially as described. 10th. A communion cup rotatably mounted and provided with means for controlling the rotation of the cup, and stopping the same at intervals, substantially as described.

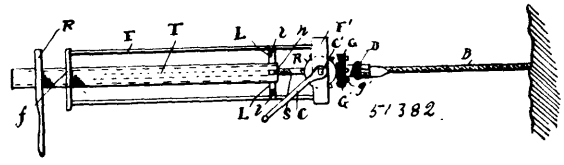
No. 51,381. Telephone Index. (*Index de téléphone.*)



Charles Alvin Orth, Trenton, New Jersey, U.S.A., and the Times Printing Company, Hamilton, Ontario, Canada, 18th February, 1896; 6 years. (Filed 24th December, 1895).

Claim.—1st. In a telephone index, the leaves A hinged and having vertical play upon their axes, in combination with diagonal series of grooves adapted to lock said leaves by means of their own gravity, substantially as shown and described. 2nd. In a telephone index, the leaves A hinged and having vertical play upon their axes combined with a right hand diagonal series of grooves, and a left hand diagonal series of grooves, adapted to lock said leaves by means of the gravity of said leaves, either to the right or left, substantially as shown and described. 3rd. In a telephone index, the leaf A, provided with clips A^1, and axial rod B, in combination with bed plate F., retaining plate D provided with diagonal series of grooves D^1, bed plate E, and retaining plate C, provided with slots I, and screws K, substantially as shown and described.

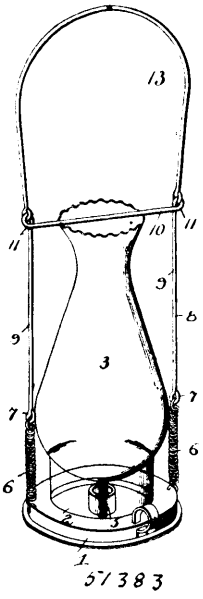
No. 51,382. Drill. (*Forêt.*)



Richard Huffman and Edwin Johnson Baldwin, both of Cardiff, Tennessee, U.S.A., 18th February, 1896; 6 years. (Filed 23rd December, 1895.)

Claim.—1st. In a drill, the combination with a frame having a head and foot connected by side bars, said foot having a square central aperture, a square tube sliding through said aperture, guide lugs near its forward end sliding on said side bars, a rest at its rear end, a nut in its front end, and a set screw holding the nut removably in place, of a shaft journalled through said head and having a threaded rear end passing through the nut into said tube, a bit chuck carried by its forward end, and means for rotating the shaft in either direction, as and for the purpose set forth. 2nd. In a drill, the combination with a frame having a head, a tube sliding longitudinally within the frame, a nut in its forward end, and a support for the rear end thereof, of a shaft journalled through said head and having a threaded rear end passing through the nut into said tube, a bit-chuck carried by its front end, a wheel fast on the shaft and having milled edges, lugs projecting from the front face of this wheel, a handle removably engaging any of said lugs, and means for turning said wheel forward mechanically, as and for the purpose set forth. 3rd. In a drill, the combination with a nut, means for supporting it, a screw taking therethrough, a bit carried by the screw, and a wheel also carried by the screw and having grooves in its face, of a power wheel at right angles to the grooved wheel, a crank therefor, and spring-actuated teeth in its edge adapted to engage said grooves on the forward turning of the crank only, as and for the purpose set forth. 4th. In a drill, the combination with a nut, means for supporting it, a screw taking therethrough, a bit carried by the screw, and a wheel having a milled edge also carried by the screw and provided in its rear face with radial ratchet-grooves, and on its front face with lugs, of a power wheel having a squared shaft, a crank handle adapted to fit said squared shaft or the lugs in the grooved wheel, and spring-actuated teeth in the power wheel adapted to engage said grooves only on the forward turning of the crank, as and for the purpose set forth. 5th. In a drill, the combination with a nut, means for supporting it, a frame, a screw journalled in the frame and taking through the nut, a bit carried by the screw, and a wheel also carried by the screw and having radial grooves in its face, of a shaft journalled in said frame at right angles to the screw and having a crank handle, a power wheel fast on the shaft, and spring-actuated teeth in the periphery of this wheel having flat front faces adapted to engage said grooves on the forward turning of the crank and beveled rear faces adapted to slide over the groves on the reverse movement, as and for the purpose set forth. 6th. In a drill, the combination with a frame, a tube sliding therein and having a nut in its front end, means for supporting the tube, a shaft journalled in the frame and having a threaded rear end taking the nut and passing into the tube, a bit carried by the front end of the shaft, and a wheel fast thereon having a milled edge and provided with radial grooves in its rear face, and lugs projected from its front face, of a shaft journalled in the frame at right angles to the screw and having a squared outer end, a crank handle fitting such end or the lugs, a power wheel fast on this shaft, and spring-actuated teeth in the periphery of this wheel having their outer ends provided with one flat and one beveled face adapted to turn the grooved wheel on the forward movement only of said crank, as and for the purpose set forth. 7th. In a device of the character set forth, the combination with a shaft carrying a wheel with radial grooves in one of its faces, of a power shaft at right angles to the first, a power wheel thereon having radial cavities, springs in the latter, a tire surrounding the wheel and having openings concentric with but smaller than the cavities, and teeth passing through said openings and having enlarged heads at their inner ends, as and for the purpose set forth.

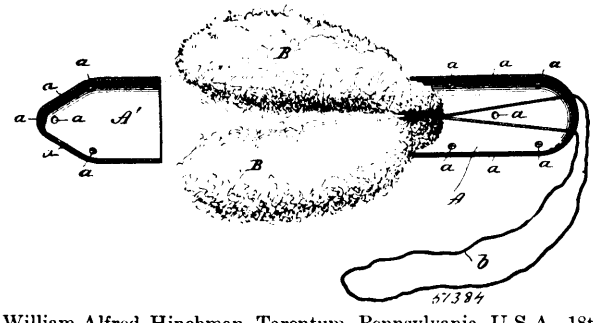
No. 51,383. Lantern. (*Lanterne.*)



William G. Holden, Cheston L. Heath and Henry E. Luter, all of Corpus Christe, Texas, U.S.A., 18th February 1896; 6 years. (Filed 9th December, 1895.)

Claim.—1st. In a lantern, a holder base, a chimney fitted on the base, a spring retracted fastening-bail pivotally connected with the base so as to be capable of being swung at either side of the chimney, said fastening bail being provided with an upper transverse fastening bar adapted to extend transversely across and bind directly on the top edges of the chimney, and a handle bail connected with the fastening bail and providing positive means for the disengagement of the fastening bar from the top of the chimney, substantially as set forth. 2nd. In a lantern, the holder base, a chimney arranged on the base, an inverted U-shaped fastening bail having a pivotal connection with the base so as to be capable of being swung at either side of the chimney, said U-shaped bail having an upper transverse fastening bar extending transversely across and binding directly on the top edges of the chimney, springs connected with the fastening bail to normally hold the fastening bar thereof on the chimney, and a handle connected with the fastening bail above the spring to provide positive means for disengaging the fastening bar from the top of the chimney by an upward pull on the handle bail, substantially as set forth. 3rd. In a lantern, a holder base, a chimney fitted on said base, an inverted U-shaped fastening bail consisting of a single length of wire bent to form opposite parallel side wires and an upper transverse fastening bar adapted to extend transversely across and bind directly on the top edges of the chimney said fastening bar forming with said side wires end hinge eyes, coil springs connected at one end to the holder base and at their other ends to the lower ends of said side wires, and a handle bail pivotally connected to the end hinge eyes at the point of junction between the side wires and the fastening bar, substantially as set forth.

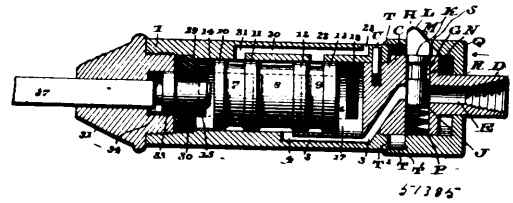
No. 51,384. Capsule. (*Capsule.*)



William Alfred Hinchman, Tarentum, Pennsylvania, U.S.A., 18th February, 1896; 6 years. (Filed 26th December, 1895.).

Claim.—1st. The improved capsule for use in the treatment of vaginal and uterine diseases, consisting of a soluble body portion and cap of carbolized gelatine, both provided with perforations, substantially as shown and for the purpose set forth. 2nd. The improved soluble carbolized gelatine capsule having perforated body and cap adapted to receive a packing, in combination with a packing and a looped string or cord which is passed through separate perforations in the end of the body portion of the capsule and attached to the packing to provide a looped withdrawal string, substantially as set forth.

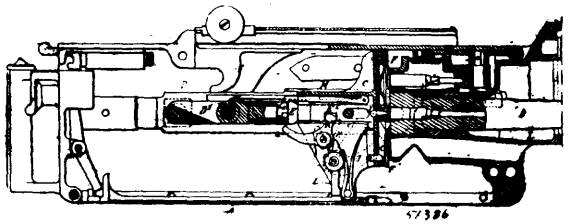
No. 51,385. Pneumatic Tool. (*Outil pneumatique.*)



Julius Keller, Philadelphia, Pennsylvania, U.S.A., 18th February, 1896; 6 years. (Filed 27th December, 1895.)

Claim.—1st. In a pneumatic tool, a cylinder, a portless, valveless hammer therein, the latter being provided with a groove intermediate its ends, an inlet passage in communication with said groove passages alternately in communication with the latter and the ends of the cylinder, and adapted to serve alternately as inlet and exhaust conduits for the motive fluid, and means for conducting the exhaust to the exterior of the cylinder, substantially as described. 2nd. In a pneumatic tool, a cylinder, a portless, valveless hammer therein, the latter being provided with a centrally located groove, an inlet passage always in communication with said central groove, passages alternately in communication with the latter and the ends of the cylinder, and adapted to serve alternately as inlet and exhaust passages for the motive fluid, and means for conducting the exhaust to the exterior of the cylinder, substantially as described. 3rd. In a pneumatic tool, a cylinder, a hammer therein having the annular grooves 7, 8 and 9, and the enlarged portions 10, 11, 12 and 13, the passage 3, and the inlet port 4 always in communication with said central groove 8, passages in communication with the latter, and the ends of said cylinder adapted to serve alternately as inlet and exhaust conduits, exhaust ports adapted to register with said grooves 7 and 9, and an exhaust passage common to both of said exhaust ports, substantially as described. 4th. In a pneumatic tool, a cylinder, a hammer therein having a centrally located annular groove, always in communication with the inlet passage for the motive fluid, passages having each an end in communication with the ends of the cylinder, the other ends of said passages being alternately in communication with said groove, and serving alternately as inlet and exhaust conduits for the motive fluid, means for conducting said exhaust to the exterior of the cylinder, and means for throttling said inlet passages, substantially as described. 5th. In a pneumatic tool, a cylinder, a hammer therein having a central annular groove, passages in said cylinder which communicate with said groove and the ends of said cylinder, and serve alternately as inlet and exhaust conduits for the motive fluid, an inlet passage for the motive fluid also communicating with said groove, and a suitable exhaust passage leading to the exterior of the cylinder, substantially as described. 6th. In a pneumatic tool, a cylinder, a non-rotating hammer therein having the annular groove 7, 8, and 9, the inlet port 4, suitable passages leading therefrom to each end of the cylinder, which serve alternately as inlet and exhaust conduits for the motive fluid, exhaust ports 21 and 22, and a passage leading therefrom to the exterior of the cylinder, substantially as described. 7th. A pneumatic tool having a throttle valve therein, a throttle collar disconnected from said valve, and adapted to operate the latter, in combination with means for automatically moving said valve and collar in unison, substantially as described. 8th. In a pneumatic tool, a plug, a passage therein, an extension on said plug, a throttle valve for said passage, a collar mounted on said extension, and disconnected from said valve, a spring intermediate said valve and plug, and means for moving said collar and plug in unison, substantially as described. 9th. In a pneumatic tool, a plug, a passage therein, for the admission of the motive fluid, a throttle valve located in said passage, a spring for actuating said valve, a throttle collar, a beveled portion common to said valve and collar, and means for limiting the movement of the latter, substantially as described. 10th. In a pneumatic tool, a plug, a hollow extension thereon, an element movable on said extension, means for limiting the movement of said element, a throttle valve, and a spring or other device for actuating the latter, substantially as described. 11th. In a pneumatic tool, a throttle collar, and a throttle valve therefor, disconnected from said collar, the latter and said valve having beveled edges in juxtaposition, in combination with means for holding said valve normally in the desired position, substantially as described. 12th. In a pneumatic tool, a throttle valve, a throttle collar disconnected therefrom, and adapted to actuate the same, in combination with a spring bearing on a suitable portion of said valve, substantially as described. 13th. In a pneumatic tool, a throttle valve, a throttle collar therefor, each having a beveled edge in juxtaposition, means for limiting the movement of said throttle collar, in combination with means for holding said collar in position, substantially as described. 14th. In a pneumatic tool, a throttle collar and a valve, each having a beveled edge in juxtaposition with each other, and means for actuating said valve, substantially as described.

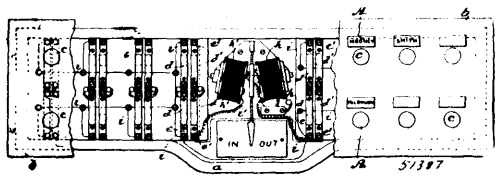
No. 51,386. Automatic Gun. (*Fusil automatique.*)



Henry Steven Maxim, London, England, 18th February, 1896; 6 years. (Filed 26th December, 1895.)

Claim.—1st. In an automatic gun, the means substantially as described whereby the cartridge carrier is operated in such a manner that it acts first to draw a cartridge from the belt, secondly to lower the cartridge into position for loading, thirdly to thrust it into the barrel, fourthly to rise and seize a new cartridge and fifthly to close firmly against the base of the cartridge in the cartridge chamber after the carrier has fully completed its upward movement. 2nd. In an automatic gun, the combination with the lock, and with the means for actuating the lock, of a cartridge carrier arranged to slide transversely on the lock, devices for controlling the movements of the cartridge carrier, means secured to the connecting rod for operating the said devices, and means whereby the upward movement of the cartridge carrier is completed before the termination of the forward movement of the lock, for the purpose specified. 3rd. In an automatic gun, the combination with the lock, and with the crank shaft crank and connecting rod for actuating the lock, of a cartridge carrier arranged to slide transversely on the lock, levers, means for controlling the movements of the cartridge carrier, arms secured to the connecting rod for operating the said levers whereby the upward movement of the cartridge carrier is completed before the termination of the forward movement of the lock, and means whereby the cartridge carrier is firmly supported in its raised position, for the purpose specified. 4th. In an automatic gun, the combination with the lock, and with the crank shaft crank and connecting rod for actuating the lock, of a cartridge carrier arranged to slide transversely on the lock, levers for controlling the movements of the cartridge carrier, arms secured to the connecting rod for operating the said levers, and inclined faces g^1 formed on the levers G, which faces bear against the ends of the arms that operate the levers and serve to support the cartridge carrier in its raised position without moving said carrier during the final stage of the forward movement of the lock, substantially as described. 5th. In an automatic gun, the combination with the lock, and the crank shaft and crank, of a connecting rod coupling the crank to the lock, the length of the said connecting rod being adjustable, for the purpose specified. 6th. In an automatic gun, the combination with the lock, the crank and the crank shaft, of a connecting rod coupling the crank to the lock, said connecting rod being made in two parts one furnished with a stem e^2, and the other made tubular to embrace the said stem and be locked thereon by means of lugs e, e^1 formed on the tubular part and stem respectively, substantially as described. 7th. In an automatic gun, the combination with the lock, the crank and the crank shaft, of a connecting rod coupling the crank to the lock, said connecting rod being made in two parts one furnished with a stem e^2, and the other made tubular to embrace the said stem and be locked thereon by means of lugs e, e^1, formed on the tubular part and stem respectively, a nut e^4 for adjusting the length of the connecting rod, substantially as desribed. 8th. In an automatic gun, the combination with the lock, the crank and the crank shaft, of a connecting rod coupling the crank to the lock, said connecting rod being made in two parts one furnished with a stem e^2 and the other made tubular to embrace the said stem and be locked thereon by means of lugs e, e^1 formed on the tubular part and stem respectively, a nut e^4 for adjusting the length of the connecting rod, and a washer e^5 between the nut and a shoulder e^6 of the connecting rod to receive the thrust, substantially as described. 9th. In an automatic gun, the combination with the lock, crank and crank shaft, of a connecting rod coupling the crank to the lock the length of which rod is adjustable by means of a nut, a cartridge carrier arranged to slide up and down on the lock and controllable by levers pivoted to the sides of the lock, arms secured to the connecting rod for operating said levers, means for stopping the lifting movement of the carrier before the termination of the forward movement of the lock, and means for firmly supporting the carrier in its raised position, substantially as described. 10th. The means for increasing the recoil energy of an automatic gun, consisting in forming the barrel with a shoulder and a series of radial apertures near its muzzle, surrounding the aforesaid shoulder with a gas chamber through the fore end of which the muzzle of the barrel normally projects, and providing the said gas chamber with an internal cavity into which the gases of discharge enter through the radial apertures in the barrel, and from which they escape into the atmosphere by forcing back the barrel, substantially as described. 11th. In an automatic gun a barrel provided with a series of radial apertures which extend from the bottom of the grooves to the exterior of the barrel, substantially as described and for the purposes specified. 12th. In an automatic gun, the means for enabling a quantity of water to escape into the muzzle device at each recoil movement of the gun-barrel, substantially as described and for the purpose specified. 13th. In an automatic gun, the construction of the gun-barrel with an external groove or passage near the muzzle, the said groove or passage being so arranged that when the barrel is in its fired position the fore end of the groove or passage opens into a cavity in the gas-chamber of the muzzle device, and when the barrel is in its recoiled position, the rear end of the said groove or passage opens into the water jacket, substantially as described. 14th. The construction of the enlarged portion B^1, of the gun barrel with tapered external passages, substantially as described. 15th. The conically-shaped enlarged portion B^1, of the gun-barrel, substantially as described. 16th. The construction of the enlarged portion B^1, of the gun-barrel with a longitudinal conduit B^7, substantially as described. 17th. In an automatic gun, the means for reducing the speed of firing, consisting of a spring catch with which a projection on the crank-arm engages at each discharge and remains in engagement therewith until released by the movement of the barrel in regaining its firing position, substantially as described. 18th. In an automatic gun, the devices for controlling the speed of firing the gun, consisting of a pivoted catch carried by the side plate or frame of the gun, a projection on the crank-arm adapted to engage with the said catch at each forward stroke of the crank-arm, and means for temporarily restraining the catch from releasing the crank-arm, substantially as described. 19th. In an automatic gun, the combination with a projection such as O^1 on the crank-arm, of a pivoted catch n, having a spring controlled and weighted pendent arm, substantially as described. 20th. In an automatic gun, the combination with a pivoted catch working in conjunction with a projection on the crank-arm of a dash-pot, substantially as described. 21st. In an automatic gun, the combination with a pivoted catch working in conjunction with a projection on the crank-arm, of an adjustable dash-pot having two internal diameters, substantially as described. 22nd. In an automatic gun, the combination with a pivoted catch working in conjunction with a projection on the crank-arm of a rack such as q, and of an escapement device for controlling the upward movement of the said rack, substantially as described and for the purpose specified.

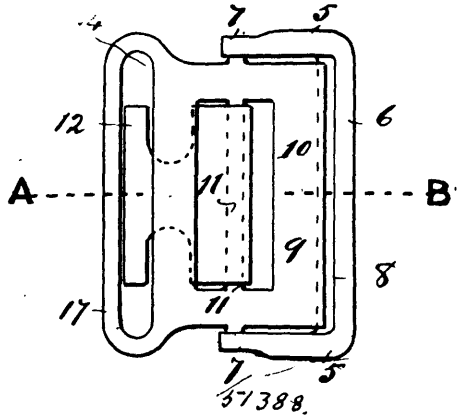
No. 51,387. In and Out Indicator.
(*Indicateur d'entrée et de sortie.*)



John Parker Melbourne, Monton, Lancaster, England, 18th February, 1896; 6 years. (Filed 26th December, 1895.)

Claim.—In combination, a series of pivoted or movable hat pegs, or "in" and "out" indicators each connected electrically to a spring contact maker actuated by a press button on a name plate, so that by pressing any one button and closing the electric circuit controlled thereby an electro magnetic needle or other suitable indicator will be actuated to show whether the owner of the corresponding hat peg or indicator is "in or out," substantially as herein set forth.

No. 51,388. Buckle. (*Boucle.*)

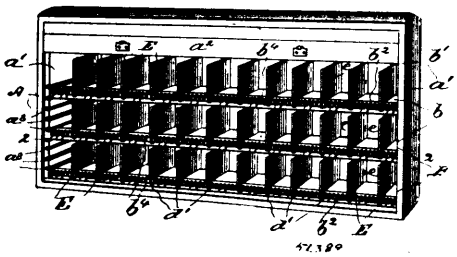


Lewis Herbert Bennet, Kidderminster, Worcester, England, 18th February, 1896; 6 years. (Filed 30th December, 1895.)

Claim.—1st. In a buckle, the combination with the frame 5, of the tongue 9, pivoted at 7, 7 having centre bar 11, and slot hole 14, substantially as set forth and shown, and for the purposes specified. 2nd. The tongue 9, having the centre bar 11, and the upward in-

clined slot hole 14, substantially as shown and for the purposes specified. 3rd. The frame 5, having the bevelled surface 8, under the bar 6, substantially as shown and for the purposes specified.

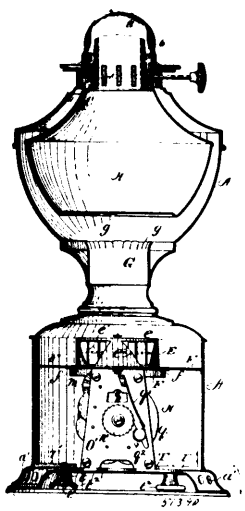
No. 51,389. Fyle. (*Lime.*)



Arthur James Wells, Syracuse, New York, U.S.A., 18th February, 1896; 6 years. (Filed 31st December, 1895.)

Claim—1st. A file comprising a frame A, a support or shelf B detachably supported by the frame and consisting of a bottom piece b, and a rear wall b^1 secured together and arranged at an angle with each other, and provided with engaging shoulders at their outer edges, and a series of partitions D adjustable towards and away from each other, and having diagonally arranged engaging portions d, d^1 detachably engaged with the former shoulders, substantially as and for the purpose described. 2nd. A file comprising a support B, and a series of partitions D engaged with the support and adjustable towards and away from each other, said partitions being provided with detachable plates or shields E, substantially as and for the purpose specified. 3rd. As a new article of manufacture, the herein described partition D, the same consisting of a main body, and a substantially U-shaped plate or shield E having its branches arranged on opposite sides of said main body, substantially as and for the purpose set forth.

No. 51,390. Forced Draft Lamp. (*Lampe.*)



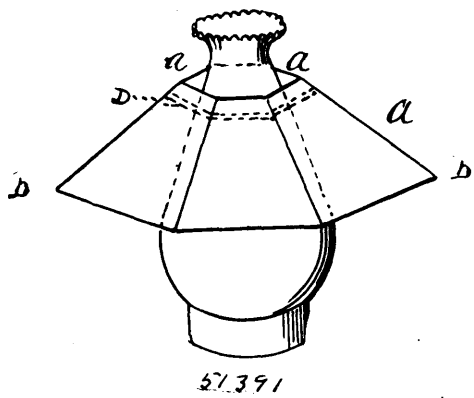
Robert Hitchcock, Watertown, New York, U.S.A., 18th February, 1896; 6 years. (Filed 30th December, 1895.)

Claim.—1st. In a forced draft lamp, and in combination with the burner and with air-forcing mechanism, a dome provided with a wick-slot, and having extensions at the end of said slot into which the latter extends, substantially as described. 2nd. The combination with the shell of a mechanical lamp, the oil-reservoir, and the burner having a screw connection with said reservoir, of a detachable dome provided with internal spring-catches for locking it to the shell, said dome being adjustable axially, and means for disengaging said catches to permit removal of the dome, substantially as described. 3rd. The combination with the shell having an internal annular shoulder or projection near its top, and the burner, of a detachable dome having internal spring-catches with hooked ends for engagement with the shoulder or projection, so that the dome can be adjusted to position with reference to the burner and a push-pin for each catch, extending through the wall of the dome and adapted when pushed in to disengage its catch, substantially as described. 4th. The combination with the burner comprising a shell with open bottom, and a ring reinforcing the lower edge of said shell, and notched at opposite sides, of a flat wick-tube set in said notches, and a wick spindle and wick-wheels inside said shell, substantially as described. 5th. The combination with the shell of a mechanical lamp, of a horizontal diaphragm extending across the shell forming the bottom of an air-chamber, and a blower in said air-chamber, inclosed by a drum having an imperforate top and lateral openings communicating with said chamber, the latter being entirely closed beneath except for an opening within said drum, substantially as described. 6th. The combination with the shell having a contracted portion or neck, of a diaphragm extending across said shelf beneath the neck and forming an air-chamber, a blower and spring-motor mechanism for operating the same, the frame of said mechanism being provided with a top-plate which fits, and closes an opening in said diaphragm, so that the blower is supported in said chamber, and a drum separating said blower from said chamber and provided with openings communicating therewith, substantially as described. 7th. The combination with the shell having a neck, of a diaphragm extending across the shell beneath the neck, and provided with a single opening, a drum covering said opening and provided with air-passages, a blower and its operating mechanism comprising a frame, a main-spring and a train of gears for driving said blower, said frame having a top-plate perforated for the passage of air to said blower and fitting the opening in said diaphgram, substantially as described. 8th. The combination, with the shell and burner of a mechanical lamp, of a blower consisting of blades or vanes whose sides form right lines with the vertical axis of the blower, a drum having a solid top covering said blower and outlet openings through the peripheral band, and operating mechanism for driving said blower, substantially as described. 9th. In a mechanical lamp, a blower having rectangular vanes, combined with an inclosing drum having a continuous imperforate top and a series of openings through its peripheral band, and with driving mechanism for said blower, substantially as described. 10th. In a mechanical lamp, the combination with the shell having a contracted neck, and a diaphragm extending across the shell beneath said neck, forming an air-chamber, of a blower in said chamber, a drum inclosing said blower and having a solid top and openings in the sides, and mechanism for driving said blower, substantially as described. 11th. In a mechanical lamp, the combination with the shell having a contracted neck, and a diaphragm extending across the shell beneath said neck and having a single opening, of a removable clock-work mechanism, comprising side frames and a top-plate the latter fitting the opening in said diaphragm, and a spring and driving gears, a blower above said top-plate driven by said spring and gears and a drum seated upon said top-plate and having outlet openings, substantially as described. 12th. In a mechanical lamp, the combination with a blower having vanes delivering the air laterally, and with driving mechanism therefor an inclosing drum, having a solid top, and a series of openings in its peripheral band, the edges of said openings being inclined to cut off the vanes gradually, substantially as described. 13th. In a mechanical lamp, the combination with the shell having a contracted neck, of a thimble set in said neck and projecting upwardly therefrom, said thimble being provided with a flaring mouth, an air-forcing mechanism in the shell beneath said thimble, substantially as described. 14th. The combination, with the shell having a contracted neck, and the oil reservoir set in the shell above said neck, of a thimble set in said neck, and projecting upwardly therefrom, said thimble terminating in a corrugated edge beneath the reservoir, and air-forcing mechanism in the shell beneath said thimble, substantially as described. 15th. The combination with the shell having a contracted neck, of a thimble set in said neck and having a corrugated upper edge, a diaphragm extending across the shell beneath said thimble, forming an air-chamber, and means for compressing air in said chamber, substantially as described. 16th. In a mechanical lamp, the combination with the blower, its spindle, and its actuating mechanism, of a recessed-plate forming part of the frame-work of said mechanism, and an inclosing drum for said blower having one of the bearings of said spindle and provided with a flange fitting the recess in said plate so that the drum is self-centering, substantially as described. 17th. The combination with the blower and its vertical spindle, and with the frame work carrying the lower bearing for said spindle and having a recessed top plate, of the detachable drum fitting closely in said recess, and having the upper bearing for said spindle, substantially as described. 18th. The combination with the frame-work and with the blower and its vertical spindle, of a step bearing for the lower end of said spindle, comprising a jewel and a support formed by a metal strip, recessed to receive said jewel and bent upon itself to clamp the latter between the two ends of the strip, said strip being pivotally attached to said frame work, substantially as described. 19th. The combination with the frame-work, and with the blower and its vertical spindle, of a swinging arm pivoted to said frame-work, and consisting of a metal strip bent upon itself, and clamping between its two ends a jewel forming the step-bearing for said spindle, and a catch or lock-plate for holding said swinging arm in its normal position, substantially as described. 20th. In an air-blast mechanism for mechanical lamps, the combination with the frame-work comprising upright side-plates in which the arbors of the clock-work train are journalled, of the main-spring, its barrel provided with an internal gear, said barrel being outside one of said plates, and a horizontal arbor for said main-spring extending through both said plates, said spring and barrel being outside the bearings of said arbor, so as to be readily detachable, substantially

as described. 21st. The combination with the upright side-plates, of a main-spring barrel outside one of said plates, an arbor therefor extending through both plates, a ratchet on said arbor outside the other plate, and a pawl for engaging said ratchet, said spring and barrel being outside the bearings of said arbor, so as to be readily detachable, substantially as described. 22nd. The combination with the upright side plates and means for detachably fastening the same together, of a main spring barrel outside one of said plates, an arbor therefor extending through both of said plates and having a squared end, and a ratchet wheel detachably secured to the squared end of said arbor, said spring and barrel being outside the bearings of said arbor, so as to be readily detachable, substantially as described.

No. 51,391. Lamp Shade, Etc.

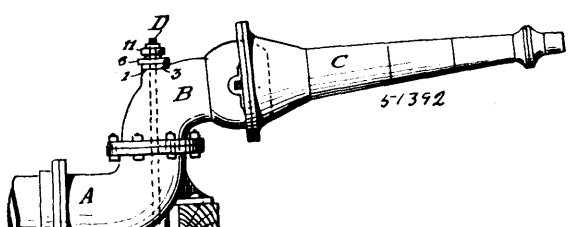
(*Abat-jour pour lampes, etc.*)



George H. Schafer, Fort Madison, Iowa, U.S.A., 18th February, 1896; 6 years. (Filed 30th December, 1896.)

Claim.—1st. A lamp shade support, consisting of a thin plate of metal externally shaped to support a lamp shade, and having an opening through which the chimney passes, said opening bounded by arcs of circles, the inward projections between said arcs being also arcs of circles of approximate circumference to the chimney or lamp on which the support is used, said support being rigid as against lateral extension, substantially as described. 2nd. The lamp shade support consisting of a thin flat metallic plate having a regular polygonal outer boundary and central opening of generally trefoil form, the projections between the arcs of the trefoil being also arcs of a circumference approximating the circumference of the chimney with which the support is used, said support being rigid as to lateral or radial extension, substantially as described. 3rd. The combination with the support consisting of a thin metallic plate with central opening and polygonal outer boundary, of the shade consisting of a hollow truncated pyramid, conforming in section to the supporting plate, substantially as described.

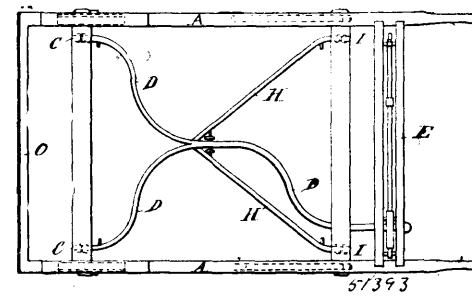
No. 51,392. Hydraulic Giant. (*Cric hydraulique.*)



John Harris Heady, San Francisco, California, U.S.A., 18th February, 1896; 6 years. (Filed 30th December, 1895.)

Claim.—1st. In a hydraulic giant and in combination, a supply pipe, an adjustable elbow bolted thereto, a rod passing through said pipe and elbow, and an anti-frictional bearing surrounding said rod, substantially as described. 2nd. In a hydraulic giant and in combination, a supply pipe, an adjustable elbow bolted thereto, a rod passing through said pipe and elbow, an external grooved seat on the elbow, a grooved bearing plate on said rod adjacent to said seat, all constructed and arranged to or from an external anti-frictional balls in said grooves, and a nut on the rod adapted to bear on said plate, bearing for the elbow while being adjusted on the supply pipe, substantially as described. 3rd. In a hydraulic giant and in combination a water pipe having an upturned end, an elbow bolted thereto, and universally jointed to a nozzle, a vertical rod connecting the water pipe and the elbow, and an external ball-bearing upon said rod and above the elbow, substantially as described.

No. 51,393. Weighing Truck. (*Camion de pesage.*)

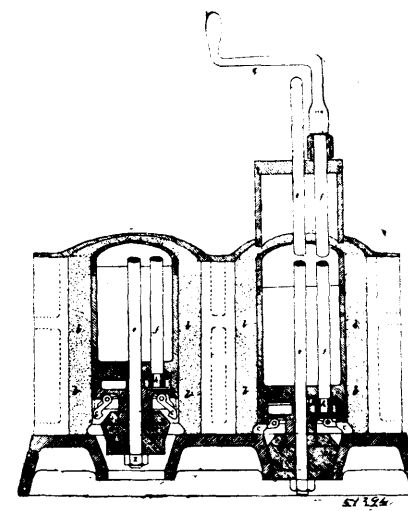


Orlando W. Parsell, Flushing, Michigan, U.S.A., 18th February, 1896; 6 years. (Filed 30th December, 1895.)

Claim.—1st. The weighing truck comprising the lever H, the extended weighing lever D, having slot M, and pin N, the scale-beam E, and the pendent catch G, playing in slot M, as and for the purpose set forth. 2nd. The combination with the lever D, having the slot M, and pin N, pivoted to the truck frame and connected to the platform lugs at the rear of the truck, of the lever H, pivoted to the lever D at its centre, and to the lugs on the front of the platform, the scale-beam E, and the pendent catch, as and for the purpose set forth.

No. 51,394. Iron Pipe Pattern.

(*Patron pour tuyau en fer.*)



James Thomson, Hamilton, and George Thomson, Dundas, both in Ontario, Canada, 18th February, 1896; 6 years. (Filed 31st December, 1895.)

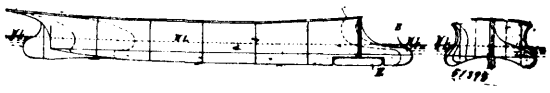
Claim.—1st. A mechanical device to be attached to the lower or bead end of iron pipe patterns consisting of one or more slicks or slickers, connected with the gearing revolving round the axis of the pattern, and so arranged that when the pattern is in position for being rammed, the slicks, project beyond the line of the external surface of the pipe pattern, and can be made to revolve in that position so as to form a mould or matrix for the bead of the pipe, but when the pattern is being withdrawn from the mould the outermost points of the slicks, are within the lines of the external surface of the pattern, all substantially as above set forth. 2nd. A mechanical device to be attached to the foot or lower end of iron pipe patterns to form a mould or matrix for the bead consisting of one, two, or more slicks or slickers *c c*, each so connected by a hinge to the under side of the plate or gearing *d d*, revolving round the axis of a pipe pattern that when the pattern is suspended perpendicularly the slicks of their own weight fall to such a position that their outermost point is within the lines of the external surface of the pattern, but which when the pattern is resting on its end, project beyond the line of the pattern and can be made to revolve in that position by means of a crank *g*, rod *f*, and pinion *h*, acting on the plate or gearing to which the slicks are hinged, such slicks being so shaped at their projecting ends as to excavate in the sand a mould or matrix for a pipe beading, all substantially as above set forth.

No. 51,395. Ship Type. (*Navire.*)

Otto Hartwich, Swinemünde, Prussia, Germany, 20th February, 1896; 18 years. (Filed 9th January, 1896.)

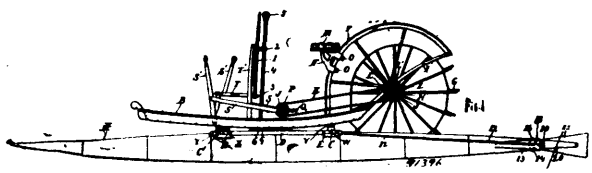
Claim.—1st. A ship's hull having a transversely vaulted concave bottom, with a keel extending longitudinally in said concavity, the

hull when viewed in plan showing an outline which has its greatest width at or near the bow and decreasing in width toward the stern,



the hull being tapered at the stern and rounded at the bow, the hull further when viewed from the end or in cross section, showing an outline which is contracted above the water line, and has rounded portions of greater width approximately level with the keel, substantially as described. 2nd. A ship provided at the bow with a forward projection located under the water line and presenting a horizontal edge to deflect the water upwardly and downwardly, substantially as described. 3rd. A ship provided with an apertured keel, and a rudder set entirely under the water line in the opening of the keel, substantially as described. 4th. A ship having a keel provided with an aperture under the bottom of the hull, and a rudder located in said aperture, substantially as described. 5th. A ship having a concaved bottom, and a rudder set in the cavity of the bottom, substantially as described. 6th. A ship's hull the same being constructed to show when viewed in plan, an outline which terminates in a point at the stern and is rounded at the bow, the greatest width being at or near the bow, the hull when viewed from the end or in cross section, showing an outline which is concaved at the bottom and contracted above the water line, substantially as described.

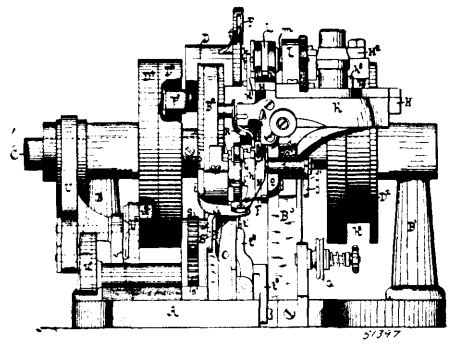
No. 51,396. Marine Velocipede. (*Vélocipède marin.*)



Luther Vanhorne Moulton, Grand Rapids, Michigan, U.S.A., 20th December, 1896; 6 years. (Filed 30th December, 1895.)

Claim.—1st. The combination of two parallel floats, a body between said floats, having propelling mechanism attached, a beam supporting one end of said body and pivoted to said floats, and springs supporting the other end of said body and attached to said floats, substantially as described. 2nd. The combination of two parallel floats, a body between said floats having propelling mechanism attached, a beam supporting the rear end of said body and connecting said floats, and springs connecting said floats to the forward end of said body and supporting the latter, said springs operating to permit independent vertical movement of the forward ends of said floats, substantially as described. 3rd. In combination, parallel floats, a body between the same having propelling mechanism attached, a beam attached to said body and secured to said floats by inner and outer eye-bolts and bolts through the same, and springs attached to said body and secured to said floats by bolts and clips, substantially as described. 4th. The combination of two parallel cylindrical floats having sill attached by angle plates, and a body supported upon a beam connecting said floats and pivoted to said sills, and springs attached to said body and to said sills, substantially as described. 5th. The combination, with a boat having a rear wheel house, and a paddle wheel, mounted on a shaft journalled in said wheel house, a double crank shaft in front of said wheel house, sprocket wheels on the ends of each of said shafts, chains connecting said sprocket wheels, brackets adjustably secured to said wheel house and wholly supported thereby, and a seat pivoted to said brackets, substantially as described. 6th. In a propelling mechanism for boats, the combination of a propelling wheel, a double crank shaft connected to said wheel and provided with pedals, pivoted hand levers, and rods connecting said hand levers to said crank shaft and acting upon said shaft at substantially right angles to the action of said pedals, whereby the dead centers of the cranks and the dead centers of the connecting rods are substantially at right angles with each other, substantially as described. 7th. The combination with a boat having a rear wheel house, and a paddle wheel mounted on a shaft journaled therein, of a crank shaft, provided with pedals and located in front of said wheel house, sprocket wheels on the respective ends of said shafts, chains connecting said sprocket wheels, crank pins in the sprocket wheels on the crank shaft, said pins being located in the plan of the cranks, connecting rods extending diagonally forward and upward from said crank pins, and pivoted levers to which said rods are connected substantially as described. 8th. The combination of two parallel cigar-shaped floats, connected by flexible bearings upon which are supported a body having a paddle wheel at the rear, a wheel house over said wheel, a seat attached to the front of said wheel house, a double crank shaft connected to said wheel by mechanism for transmitting motion, a seat in front of said crank shaft, pivoted levers at each side of said seat, connecting rods pivoted to said levers and crank shaft, a suitable steering post attached to said forward seat, and cords or wires extending from said post to rudders, substantially as described. 9th. The combination of a body supported upon parallel floats, a wheel house at the rear of said body, having a pedale wheel, journaled in adjustable bearings at its front side, a double crank shaft journaled in adjustable bearings on the floor of said body, and provided with sprocket wheels and chains to transmit motion to said paddle wheel, connecting rods pivoted to said sprocket wheels and to levers pivoted to said body, a seat between said connecting rods, having a back supporting an umbrella staff and a rotatable steering post having wires attached, said wires extending to an operating rudders on said floats, substantially as described. 10th. The combination with parallel floats, of rudders pivoted to the same, a body supported between said floats, a post journaled on said body and having a T-head, crosses pivoted on said floats, and cables or wires extending oppositely from said T-head to the respective crosses and rudders on each float, substantially as described. 11th. The combination of two parallel floats having rudders with cylindrical heads, parallel sills on said floats, a body between said floats supported on said sills, a substantially vertical steering post journaled on said body and provided at its lower end with a T-head and at its upper end with a handle, crosses journaled on plates attached to said sills, cables or wires extending oppositely from said T-head to the longitudinal arms of said crosses, and cables or wires extending from the transverse arms of the respective crosses to the sides of the respective rudders and in contact with said floats, substantially as described. 12th. In a marine velocipede, a cylindrical float tapered rearwardly and flattened on four sides, and provided with a transverse diaphragm to form a rectangular chamber at the end of said float, and a rudder having a cylindrical head and pivoted to turn partially within said chamber, substantially as described. 13th. In a marine velocipede, in combination with a substantially cylindrical or cigar-shaped float terminating in a box-shaped end, a rudder having a substantially semi-cylindrical head pivoted within said end and means for turning said rudder upon its pivot, and prolongations of said head forming tapered chambers at each side of said rudders, substantially as described. 14th. In a marine velocipede, a substantially cigar-shaped float terminating at the rear in a substantially square end, having projecting upper and lower sides, a cylindrical rudder head pivoted to said projecting sides, said head prolonged at each side of the rudder to strengthen the same and prolong the lines of the cylinder to a point, and discs to close the ends of said rudder head, substantially as described. 15th. The combination of two substantially cigar-shaped floats, having bull heads near the rear end terminating in box-shaped end rudders having substantially cylindrical heads pivoted in said ends or wires attached to the respective sides of said rudder heads, and extending forward and inward and attached to a T-head on a steering-post having handles, substantially as described. 16th. The combination of two cigar-shaped floats, terminating in box-shaped rear ends, rudders having substantially semi-cylindrical heads pivoted within said ends, and prolonged at each side of said rudders, a body supported by and between said floats, a post journalled upon said body, a T-head at the bottom, and handles at the top of the same, crosses pivoted upon said floats, and cords or wires extending from the respective sides of said rudders to said crosses, and other wires or cords extending from said crosses to said T-head, substantially as described. 17th. The combination with a boat having a stern wheel, and a rudder at each side thereof, of a vertical steering post having a T-head and a handle, crosses pivoted in the plane of said T-head, and cables or wires oppositely extending from said T-head to the longitudinal arms of said crosses, and cables or wires extending from the transverse arms of said crosses to the respective sides of said rudders, substantially as described.

No. 51,397. Sewing Machine. (*Machine à cuodre.*)



Earle Henry Smith, New York, State of New York, U.S.A., 20th February, 1896; 6 years. (Filed 2nd January, 1896.)

Claim.—1st. The combination with the needle, mechanism for operating the same, and a rotary shuttle or loop taker, co-operating with the needle, of rotary motion mechanism imparting a duplex variable motion to said loop-taker in every revolution, comprising a short period and a long period of acceleration, and short and long intervals of slow motion between such accelerations, as set forth. 2nd. The combination with the eccentric on the main shaft, of a pitman fulcrumed to a radius-bar, a second shaft, a crank-arm

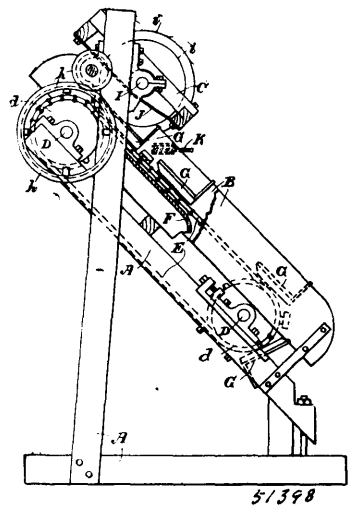
thereon grooved to receive a sliding block worked by the pitman, the said radius-bar being connected to one end of a lever u^1, pivoted to the standard B, and having at the other end a roller-stud entering the cam-groove of a revolving cam, as described. 3rd. In combination, a needle, a rotary shuttle, means of reciprocating the needle, and mechanism constructed and arranged for rotating the shuttle with a variably accelerated motion, such mechanism comprising two speeding devices arranged to co-operate as described, whereby such accelerated motion is augmented when the shuttle is passing through the loop. 4th. The combination with the main shaft rotating uniformly, a needle, a rotating shuttle or loop-taker, and an awl to puncture the work for the needle, of accelerative mechanism constructed and arranged to drive the shuttle through 180 degrees of its circuit within a space of about 70 degrees, more or less, of the main shaft's uniform revolution. 5th. In a wax thread sewing machine, the combination of a circularly curved piercing needle, means for reciprocating the same, a circularly curved awl, a thread carrying loop-taker, means for actuating the awl independent of the means from which the motion of the needle is derived, mechanism for revolving the loop-taker in one and the same direction, and means for drawing the loop therefrom and closing up the same before taking another loop from the needle. 6th. The combination, in a wax thread sewing machine, of a circularly curved needle and awl, a rotary shuttle or loop-taker, means for reciprocating the needle and awl independently, mechanism adapted for rotating the shuttle with a varying speed, and means of advancing or feeding the work. 7th. The combination in a wax thread sewing machine, of a circularly curved needle, a circularly curved awl, a rotary shuttle or loop-taker means for reciprocating the needle and awl independently, mechanism for rotating the shuttle with a varying speed, and means of drawing up and fininshing each stitch before another stitch is begun. 8th. The combination in a wax thread sewing machine, of a rotary shuttle or loop-taker, and means for imparting a variable rotary motion thereto in one and the same direction, of the circularly curved needle, the segmental needle-carrier, the circularly curved awl, the awl-segment, separate lever and cams for working the awl and the needle and a thread-lever for drawing up and finishing the stitch. 9th. The combination in a wax thread sewing machine, of a needle, a rotary shuttle or loop-taker, a puncturing awl, mechanism for separately operating the needle and awl, an independent thread-case in the shuttle, and means of holding the thread-case to prevent the same from revolving with the shuttle. 10th. The combination of a circularly curved needle an awl arranged to enter the work from opposite sides thereof, mechanism for separately operating the needle and the awl, a rotary shuttle or loop-taker, means for imparting a rotary motion to the shuttle, an independent thread-case in the shuttle, a stop on the thread-case, and removable means of holding the thread-case from revolving without interfering with the movements of the needle and awl. 11th. The combination in a wax thread sewing machine, of a rotary shuttle or loop-taker, a puncturing awl moving in line with needle, an independent thread-case in the shuttle, and a leader thereon for delivering the shuttle's thread to the work above and clear of the shuttle's point while holding such thread out of the way of the needle and awl. 12th. The combination of a rotary shuttle, a non-rotating thread-case therein, a puncturing and feeding awl, a reciprocating needle, means for separately operating the needle and awl, mechanism imparting an intermitant accelerative rotary motion to the shuttle, and a thread-lever for delivering the needle thread to the shuttle and drawing back the loop to finish the stitch in advance of the operation of the awl. 13th. The combination of a needle and a needle-carrier operated from the main shaft, a rotary shuttle and shuttle-driver rotating in a vertical plane and co-operating with the needle, a separate shaft variably rotated from the main shaft, a short shaft carrying the shuttle driver, a pinion on this driver shaft, the secend shaft also carrying a pinion, and the latter engaging the pinion on the driver shaft, thus imparting the variable rotary motion to the shuttle the combination being and operating, substantially as set forth.

No. 51,398. Fish Cutting Machine.

(*Machine à couper le poisson.*)

William Munn, San Francisco, California, U.S.A., 20th February, 1896; 6 years. (Filed 3rd. January, 1896.)

Claim.—1st. A fish cutting machine comprising a frame, an endless travelling conveyer mounted in said frame, carriers to receive the fish, secured to the conveyer, a stripper frame near the upper end of the conveyer and lying above the carriers whereby the fish is conveyed under said frame by the carriers, and cutters rotating through said frame and carriers whereby the fish is cut. 2nd. A fish cutting machine, consisting of a suitable frame, an endless travelling conveyer mounted therein, carriers secured to said conveyer and provided with slits to receive the cutters, a stripper frame above the upper end of the conveyer, separated stripper plates secured to said frame and lying above the plane of the carriers, said plates being separated to receive the cutters, and a series of rotating cutters operating through between the stripper plates and the slits of the carriers whereby the fish carried by said carriers is out. 3rd. A fish cutting machine, consisting of a frame, side guide boards carried thereby, an endless travelling conveyer mounted at an inclination and moving between said side boards, slitted carriers secured to said conveyer and adapted to receive the fish, a stripper frame with separated plates lying above the plane of the conveyer at its upper end, and a series of saw operating between said stripper plates and slitted carriers whereby the fish is cut. 4th. A fish



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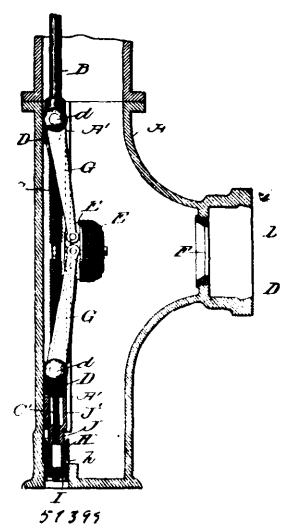
cutting machine, consisting of a frame having inclined side guide boards, shafts with sprockets mounted in said frame, endless side chains or link belts passing over said sprockets, slitted carriers secured to the side chains or link belts and operating between the side guide boards, a stripper frame in the upper portion of the main frame, separated plates secured under said stripper frame and lying above the plane of travel of the carriers, and a series of cutters mounted in the upper portion of the main frame, and adapted to rotate through the stripper plates and the slitted carriers whereby the fish are cut.

No. 51,399. Hydrant. (*Borne-fontaine.*)



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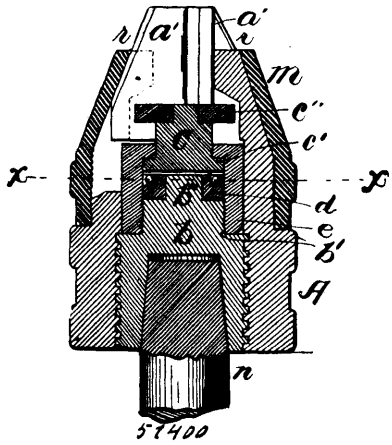
William Wallace Corey, jr. St. Louis, Missouri, U.S.A., 20th February 1896; 6 years. (Filed 3rd January, 1896.)

Claim.—1st. In a hydrant, the combination with a standpipe, of a valve operating rod located therein, blocks arranged on said rod which are adapted to move toward and from each other, links which are pivoted on different horizontal planes on the blocks, and a valve to which the opposite ends as the links are pivoted on different horizontal planes, substantially as described. 2nd. In a hydrant, the combination with a valve operating rod, of blocks, arranged on said rod which blocks are adjustable toward and from each other, links which are pivoted on the blocks on different horizontal planes, and a valve to which the opposite ends of the links are pivoted, the pivotal points of connection of the links to the valve bearing the same relation to each other as the pivotal points of the links to the blocks, whereby when the rod is operated, the valve is caused to travel in a given path, maintaining its proper position by reason of such connections, substantially as described. 3rd. In a hydrant, the combination with a standpipe which is formed with oppositely ex-

tending guidelips at one side, of a right and left treaded rod arranged between the lips, blocks on the threaded portions of the rod, a valve links which are pivoted on the valve and blocks, and bosses or projections on the block-end of the links, which bosses extends behind the lips and guide the blocks in their movement, substantially as described. 4th. In a hydrant, the combination with a stand pipe formed with a guideway to one side, of a threaded rod located in said guideway, blocks which are threaded on said rod, a valve, links pivotally connected to the valve and to the blocks, the pivotal points of connection of the links to the valve and blocks being on different planes, and bosses or projections on the links, which bosses or projections are seated in the guideway, substantially as descaibed. 5th. The combination of the valve operating rod, main valve and connections between the two, which connections include adjustable blocks on the valve operating rod, of a drip-valve mounted upon a threaded extension on the lower end of the valve operating rod, said drip-valve being formed or provided with an upward extension which spaces the drip-valve to its proper position on the rod when the parts are ready for insertion in the standpipe, substantially as described. 6th. The combination with the valve operating rod, main valve, and connections between the two, which connections include adjustable blocks on the valve operating rod, of a drip-valve mounted upon a threaded extension on the lower end of the valve operating rod, said drip-valve being formed or provided with an upward extension which is adapted to abut against the lower block, determining the proper position of the parts when they are ready for insertion in the standpipe, and means for preventing the rotation of the drip-valve when the valve operating rod is in position in the standpipe and being rotated, substantially as described. 7th. In a hydrant, the combination with a standpipe, formed with a guideway to one side, and provided with a drip-valve chamber in its bottom, into which chamber leads an opening from the interior of the standpipe, to the exterior, of a threaded rod located in said guideway, blocks threaded on said rod, the main valve, links pivotally connected to the main valve and to the blocks, the pivotal points of connection of the links to the valve and blocks being on different horizontal planes, whereby the valve, by reason of such connections, is caused to move in a direct line of travel, and an expansible drip-valve mounted on threaded extensions of said rod and located in the drip-valve chamber to control the drip opening, said drip-valve being provided with wings or lateral extensions, which extend into the guideway, to guide the drip-valve in its movement and prevent rotation of the drip-valve, and an upward extension on said drip-valve which is adapted to abut against the lower block to limit the drip-valve in its vertical movement, and also control the rotation of the rod by limiting the downward movement of said block, substantially as described. 8th. In a hydrant, the combination with a stand-pipe which is formed with a long sweep from the main valve opening, of a valve operating rod located to one side of the stand-pipe opposite to the opening to the main, blocks on the rod, links pivoted on different horizontal planes on the blocks respectively, and a valve to which the opposite ends of the links are pivoted on different horizontal planes, whereby the valve is caused to travel in a direct line across the stand-pipe to open or close the communication to the main, substantially as described. 9th. In a hydrant, the combination with a stand-pipe, of a valve operating rod located to one side thereof, said rod being formed with right and left hand screw threads, blocks arranged on the threaded portions, links pivoted on different horizontal planes on the blocks, and a valve, to which the opposite ends of the links are pivoted on different horizontal planes, said valve being adapted to close and opening on the side of the stand-pipe opposite the rod, substantially af described.

No. 51,400. Drill Chuck. (*Mandrin de foret.*)

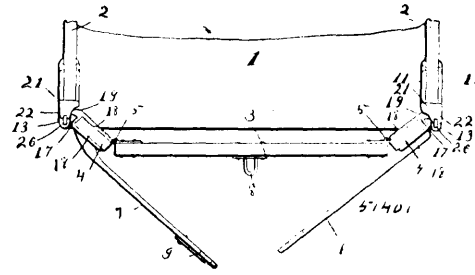


Ross Miller Russell, Binghampton, New York, U. S. A., 20th February, 1896; 6 years. (Filed 4th, January, 1896.)

Claim.— The combination with a case and jaws mounted therein, of a head within the case consisting of sections having an anti-frictional bearing between them, and engaging with the jaws to reciprocate them, substantially as shown and described.

No. 51,401. Locking Device for Wagon Bodies.

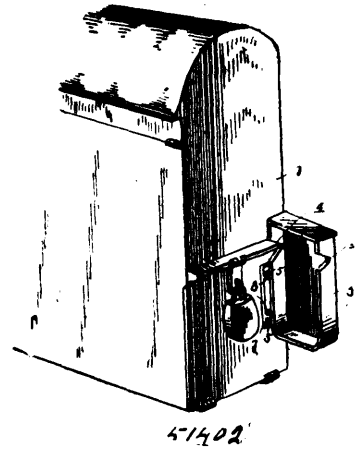
(*Fermeture pour arrière panneau de tombereau.*)



Joseph T. Duncan, Delphos, Kansas, U.S.A., 20th February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. In a fastening device for end-gates, the combination w th a bracket comprising a pair of parallel arms 11, embracing and secured to opposite sides of the sides of the wagon-body, a vertical and inwardly disposed hook portion 13, at its rear end, and a lug 22, overlapping or bringing the cavity at the front and inner side of the hook-portion, of an end-gate, a section 4, hinged thereto, a lever carried by said section, and a bracket comprising the parallel arms 18, embracing the opposite sides and secured firmly to said hinged section, and an outwardly and reawardly projecting hook-portion 19, engaging the first mentioned hook and the cavity and bearing against the bottom of the wagon and the under side of the lug 22, substantially as described. 2nd. In a locking device for end-gates, the combination substantially as hereinbefore described, of brackets secured to the sides of the wagon-body and provided with hooks 26, at their upper ends, and lugs 23 at their lower ends, and a bolt connecting said lug, of an end-gate pivotally supported upon said bolt, and spring-catches 30, carried by said end-gate and engaging the hooks 26, of the brackets.

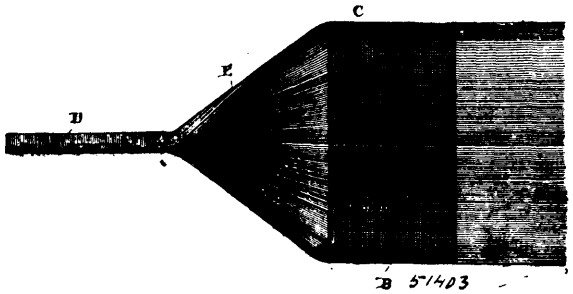
No. 51,402. Cover for Locks. (*Couvercle de serrure.*)



Parazette Hopkins, Williamsport, Pennsylvania, U.S.A., 20th February, 1896; 6 years. (Filed 8th January, 1896.)

Claim.—In a lock protector, the combination with a horizontally swinging casing comprising a rectangular plate and a peripheral flange perpendicular thereto, of a locking hinge comprising vertically aligned perforated lugs attached to and extending laterally from one of the side flanges of said casing, one of said lugs being provided on its inner horizontal face with a small projection, oval or convex in shape, and a plate adapted to be suitably secured to the object whose lock is to be protected, said plate being provided with perforated lugs adapted to align with said casing lugs therebetween and so placed as to allow slight veritcal play thereof between said casing lugs, one of said plate lugs being provided on its outer horizontal face with a concaved depression or socket arranged to receive said convex projection, and a hinge spindle threaded through said two pairs of lugs and suitably secured therein, all said parts being so combined and arranged that the casing may be freely swung open and shut by raising the same slightly from its closed position, and will be securely retained in closed position by the said lug depression receiving the said lug projection which, by reason of their specified forms, tend to wedge the casing tightly closed against the protected object, substantially as described.

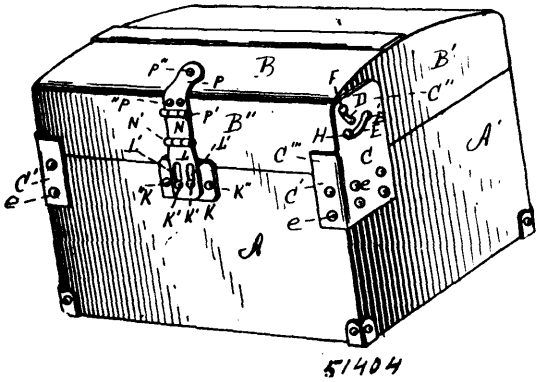
No. 51,403. Insect Destroyer. (*Insecticide.*)



Edward Thomas Burrowes, Portland, Maine, U.S.A., 20th February, 1896; 6 years. (Filed 8th January, 1896.)

Claim.—An insect-destroying brush consisting of a brush head having its outer section formed of a wire netting and constituting the striking portion, its intermediate section formed of continuations of the warp wires of the netting, gathered at their inner ends, extending beyond the woof wires, and secured together, and a handle section, substantially as and for the purposes set forth.

No. 51,404. Trunk. (*Coffre.*)



Perley Edward Rich, Malden, Massachusetts, U.S.A., 20th February 1896; 6 years. (Filed 3rd January, 1896.)

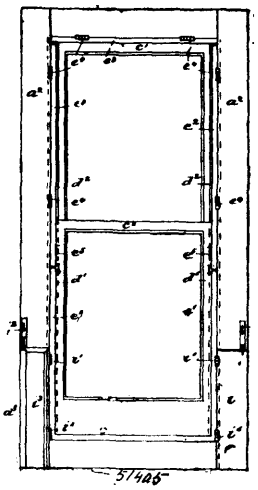
Claim.—1st. In a trunk or the like, the combination with the trunk body and lid, of the plates C secured to the trunk body and provided in their projecting top portions with the relatively-arranged curved or segmental slots D and E, said segmental slots being on arcs of different circles and respectively provided at their end terminals with the recesses or enlargements D^1 and E^1 extending from their respective slots, substantially as set forth, and the pins F and H projecting from the lid into the respective slots and sliding in the same, the relative construction and arrangement being such that the pins respectively crowd or bear against the edge of their respective slots so that they will jump into the end recesses or enlargements of the respective slots when the lid is in vertical raised position, whereby the lid is locked in raised position, substantially as and for the purpose set forth. 2nd. The hereindescribed improvement in trunks, comprising the trunk body A, A^1, and bed B, B^1, B^{11}, the end plates C, C^1, provided with the upward extensions C^{11}, C^{111}, the latter furnished with the curved slots D, E, the plates K riveted to the back of the trunk near its upper edge and provided with the pins K^1, and the hinge consisting of the stationary leaf P secured to the trunk lid, the sliding leaf L slotted at L^1, and engaging with said pins K^1, and the connecting leaf N hinged at its opposite ends to said leaves P and K, substantially as described.

No. 51,405. Window Frame, etc.

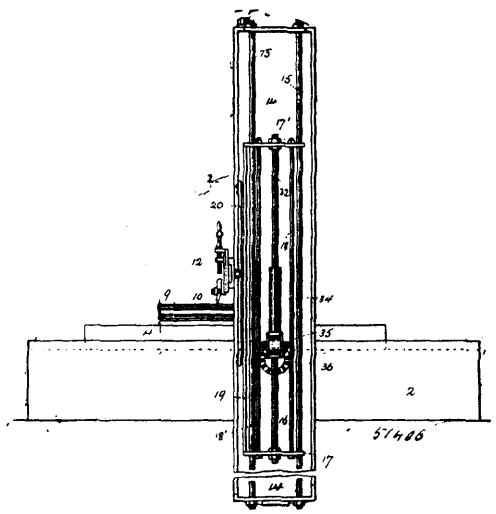
(*Cadre de fenêtre, etc.*)

John William McDougall, Napier, Hawkes Bay, New Zealand, 20th February, 1896; 6 years. (Filed 2nd January, 1896.)

Claim.—1st. The combination with the window frames, of sashes and stiles, provided with suitable rebates to admit of the passage of the window cord, the window cords, counterweights and pulleys therefor, and the beads or stops, which are so arranged as to be movable, substantially as shown and described. 2nd. The combination with the window frames, of the sashes and stiles, one of which is provided with a suitable rebate, cords, counterweights and pulleys therefor, said cords being attached to said sashes at or near the bottom parts thereof, and the beads or stops in two sections, one of said sections being hinged and so formed that it may be readily moved, substantially as shown and described. 3rd. In a window, the sashes c^1, c^2, the stiles b^1, b^1, the rebates c^3, c^4, cords g, g, and suitable pulleys, counterweights and beads or stops therefor, said cords being attached to the sashes at or near the bottom portions thereof, substantially as shown and described. 4th. In a window, the combination with the frame sashes, stiles, beads or stops, cords, counterweights and pulleys, of the pocket doors, at or near the bottom of the sash frame, substantially as shown and described. 5th. In combination with the frame, sashes, stiles, beads or stops, cords, counterweights, and pulleys of a window, the filling pieces b^5, substantially as shown and described. 6th. The combination with the frame, sashes and stiles, of a window, of a hinged bead e^3, beads or stops e^1, e^2, the parts e^1, of which are fixed, and the parts e^2 movable, being provided with suitable hinges or pivots to that end, the parting beads or stops d^1, d^1, d^2, d^2, the parts d^1, d^1 being fixed, and the parts d^2, d^2, movable, being provided with suitable hinges or pivots upon which they may move, and with bolts or other fastening means for retaining them normally in a fixed position, substantially as shown and described. 7th. The combination with the frame, cords, counterweights, pulleys, sashes and stiles of a window of the fixed beads e^1, e^1, d^1, d^1, and the movable beads e^3, e^2, d^2, the fixed beads e^1, e^1, being sufficiently less in height than the sash c^2, than when the latter is in its most elevated position its bottom part will clear the said beads e^1, e^1, so that said sash may be removed from the window without disturbing said beads e^1, e^1, substantially as shown and described. 8th. The combination with the frame, cords, counterweights, pulleys, sashes and stiles of a window, of the fixed beads e^1, e^1, d^1, d^1, and the movable beads e^3, e^2, d^2, the fixed beads e^1, d^1, being sufficiently less in height than the sash c^2, that when said beads are moved the sash c^1 may be removed from the window, substantially as shown and described.



No. 51,406. Stone Planer. (*Machine à raboter la pierre.*)



Michael James Campbell, Boston, Massachusetts, U.S.A., 20th February, 1896; 6 years. (Filed 3rd January, 1896.)

Claim.—1st. The combination with a suitable frame having a movable bed-plate, and a tool carriage above the same, of a tool holder adapted to slide upon the carriage, a curved pattern plate, and mechanism to operate the pattern plate, the chord of said pattern plate always remaining at right angles to the carriage, sub-

stantially as described. 2nd. In combination with a suitable frame, a bed-plate adapted to travel in right lines, and an adjustable tool holder arranged to move transversely of the bed-plate, a lateral frame reciprocating in vertical planes, a pattern plate carried on said frame and located in a plane at right angles to the path of movement of the bed-plate, and means for reciprocating the lateral frame to cause the pattern plate to move the tool holder transversely of the bed-plate, substantially as stated. 3rd. The combination with a bed-plate arranged for right line reciprocations, a carriage adjustably thereabove, and a sliding tool holder mounted on said carriage, of a movable frame, a curved pattern plate having motion of its own and interconnected with the tool holder, said pattern plate tapering towards its extremities and the opposite edges being of different curvature, substantially as explained. 4th. The combination with a bed-plate, mechanism for reciprocating the same, a tool carriage for vertical adjustment thereabove, and a sliding tool holder mounted on the carriage, of a curved pattern plate tapering from the centre towards its ends, a frame for actuating said pattern plate, whereby the tool carriage is caused to move in planes at right angles to the chord of the pattern plate as set forth. 5th. The combination with a bed-plate arranged for right line movements, a carriage adjustable thereabove, and a sliding tool holder mounted on said carriage, of a movable frame, anti-friction rollers at a fixed distance apart for sliding movement on the tool carriage, and a curved moving pattern plate, said plate being of such form, that the distance between any two corresponding points on opposite edges in planes at right angles to the chord of the pattern plate shall be equal and the same with the distance between the anti-friction rolls, substantially as described. 6th. In combination with a suitable frame, a bed-plate adapted to travel in right lines, and an adjustable tool-holder arranged to move transversely of the bed-plate, a carriage supporting the tool-holder, a curved pattern plate in fixed relation to and located in a plane at right angles to the bed-plate, and united with the carriage, and means for reciprocating the pattern plate, whereby the tool-holder describes a path dissimilar from the curve of the pattern plate, as set forth.

No. 51,407. Medicinal Compound.

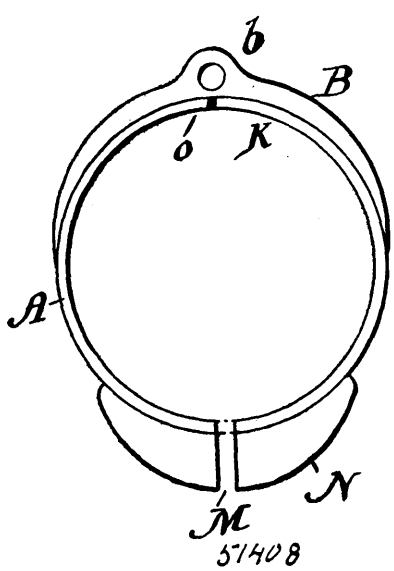
(*Composition médecinale.*)

Giovani Batista Deferari, Toronto, Ontario, Canada, 21st February, 1896; 6 years. (Filed 6th December, 1895.)

Claim.—A medicinal compound comprising peppermint oil, oil of mustard, whites of egges, vinegar, black molasses, salt, worm oil, camphor gum, oil of vitriol, extract of cow manure and turpentine, to be used as a remedy for rheumatism, and for the alleviation of muscular pains, substantially in the proportions, and for the purposes set forth.

No. 51,408. Tire for Vehicles, Etc.

(*Bandage pour voitures, etc.*)

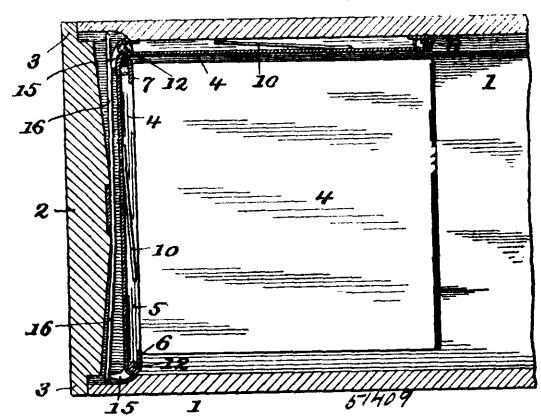


Andrew Graff, Brooklyn, New York, U.S.A., 21st February, 1896; 6 years. (Filed 22nd January, 1896.)

Claim.—1st. In a pneumatic tire for wheels, the tube or tire having a bead upon the tread portion thereof, substantially as herein shown and described. 2nd. In a pneumatic tire for wheels, the leather tube or tire provided with a bead upon the tread thereof, substantially as herein shown and described. 3rd. In a pneumatic tire for wheels, a leather hose pipe or tube, made of light, thin leather, having a tread provided with a bead secured thereto, substantially as herein shown and described. 4th. In a pneumatic tire for bicycle wheels, and wheels for other vehicles, the combination of the light, thin leather tube or tire, and the heavy sole leather tread provided with a bead, upon the central outside wearing portion thereof, substantially as herein shown and described. 5th. In a pneumatic tire for wheels, comprising a tube or tire made of light, welt, belt, harness, tanned calf, cowhide or horse hide leather, and a tread made of oak tanned sole leather, provided with a bead upon the wearing portion thereof, substantially as herein shown and described. 6th. In a pneumatic tire for bicycle wheels, and wheels for other vehicles, the hose pipe tube or tire, made of light, thin, welt, belt, harness, tanned calf, or cowhide leather, and a tread, provided with a bead upon the wearing portion thereof, made of heavy, harness, hemlock, or oak tanned sole leather, substantially as herein shown and described. 7th. In a pneumatic tire for bicycle wheels and wheels for other kinds of vehicles, the hose pipe tube or tire, made of light, thin leather, and the tread made of heavy harness leather, substantially as herein shown and described. 8th. In a pneumatic tire for bicycle and wheels for other kinds of vehicles, the hose pipe tube or tire, made of light, thin leather, and a tread, made of heavy hemlock leather, substantially as herein shown and described. 9th. In a pneumatic tire for bicycle wheels and wheels for other kinds of vehicles, the hose pipe tube or tire, made of light, thin leather, and a tread made of heavy Union sole leather, provided with a bead on the central outside wearing portion thereof, substantially as herein shown and described. 10th. In a pneumatic tire for wheels consisting of the hose pipe tube or tire, the heavy sole leather tread provided with a bead having a cord running through the entire length thereof, substantially as herein shown and described. 11th. In a pneumatic tire for wheels comprising the hose pipe tire or tube, made of light, thin leather, provided with a bead, having a round rubber cord, or strip of rubber, extending through the entire length of the bead, substantially as herein shown and described. 12th. In a pneumatic tire for bicycle wheels and wheels for other kinds of vehicles, consisting of the hose pipe tube or tire, the ends united by means of the bias or angle seam G, provided with the strengthening leather strip K, the triangular piece of leather *d*, and the sharp angled tread D, substantially as herein shown and described. 13th. In a pneumatic tire for wheels, the light, thin leather hose pipe tire, the tread provided with a sharp angled bead D, on the outside thereof, the triangular piece of leather or rubber *d*, placed between the inside of the tread, and the tube or tire, substantially as herein shown and described.

No. 51,409. Photographic Plate Holder.

(*Porte-plaque photographique.*)



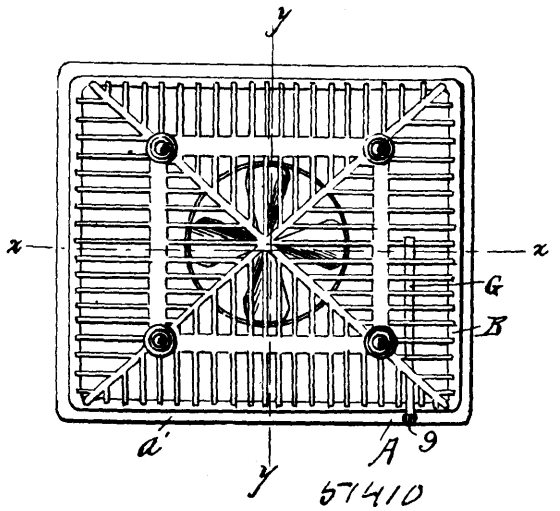
Edward Gardner Cone and Dorr Ralph Close, both of Chicago, Illinois, U.S.A., 21st February, 1896; 6 years. (Filed 23rd January, 1896.)

Claim.—1st. A photographic plate holder for cameras, comprising a suitable supporting base, and a series of plate holders hinged thereto, in positions immediately adjacent to the walls of the camera, so as to normally occupy a longitudinal position in the camera, in contact with and protected from the light, by the walls thereof, each plate holder being adapted to swing back serially into a transverse focal position common to the series of plate holders, substantially as set forth. 2nd. A photographic plate holder, for cameras, comprising a suitable supporting base, and a series of plate holders hinged thereto, in positions immediately adjacent to the walls of the camera, so as to normally occupy a longitudinal position in the camera, in contact with and protected from the light, by the walls thereof, each plate holder being adapted to swing back serially into transverse focal positions common to the series of the plate holders, and means for holding such plates in either position, the same consisting of lateral lugs 15 on the plate holders, and springs 16 on the supporting base, substantially as set forth. 3rd. A photographic plate holder, comprising a supporting base, and a series of plate holders hinged to the outer edges of the same, by means of pivot lugs,

and pivot rods that are fixed to the plate holders, and provided with non circular operating ends, substantially as set forth. 4th. A photographic plate holder for cameras, comprising a suitable supporting base, and a series of plate holders, hinged thereto, in positions immediately adjacent to the walls of the camera, so as to normally occupy a longitudinal position in the camera in contact with, and protected from the light, by the walls thereof, each plate holder being adapted to swing back serially into transverse focal position common to the series of plate holders, such plate holders being provided with marginal side flanges 5, 5, and top and bottom holding flanges 6 and 7, the top of such flanges being arranged on a common plane, so as to present a plane surface, adapted to fit closely against the camera wall when the plate holders are in their non exposed position, substantially as set forth.

No. 51,410. Attachment for Hot Air Register.

(*Attache pour registre à air chaud.*)

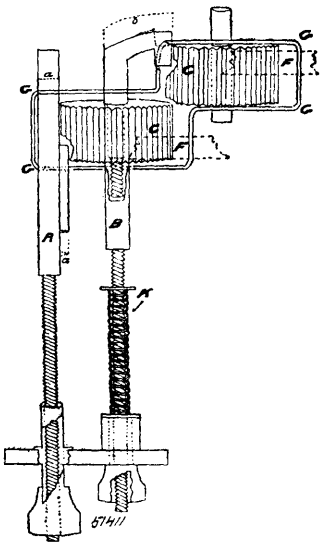


Francis C. Carroll, Peoria, Illinois, U.S.A., 21st February, 1896; 6 years. (Filed 23rd January, 1896.)

Claim.—In a radiator attachment, the combination of a frame A, a frame B provided with open work and mounted on and supported by the first mentioned frame, a supporting bar arranged across the lower frame, a fan shaft projecting upwardly into the chamber formed by the casings, the shaft being sustained by the supporting bar, a fan mounted on and adapted to rotate around the shaft, and means for fastening the attachment to the register, substantially as shown.

No. 51,411. Sash Balance, etc.

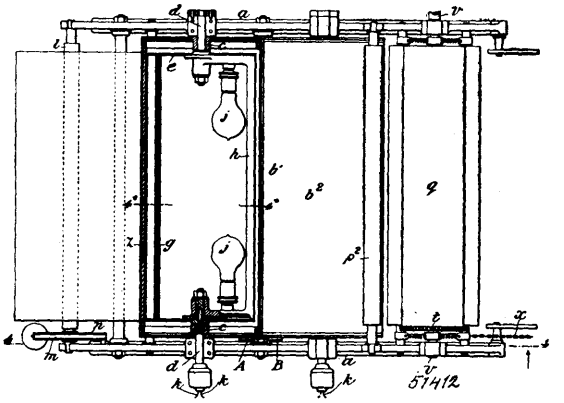
(*Contre-poids de croisée, etc.*)



Alonzo T. Martin, Queenstown, Ontario, Canada, 21st February, 1896; 6 years. (Filed 18st January, 1895.)

Claim.—The combination of the ratchet-wheels C, C, with the rods A and B, and the cams D and E, enclosed in the box G, G, G, G, and working in conjunction with the castings F, F, in the manner and substantially as and for the purpose hereinbefore set forth.

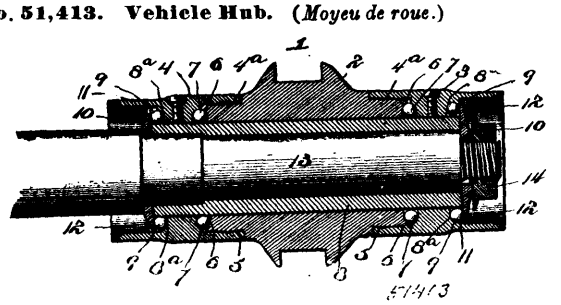
No. 51,412. Production of Prints by Photography and an Apparatus for the Purpose. (*Production de caractères au moyen de la photographie.*)



William Friese-Greene, of 39 King's Road, Chelsea, London, England, 21st February, 1896; 6 years. (Filed 21th January, 1896.)

Claim.—1st. The method or process of producing prints by photography, which consists in causing a band of sensitized material to continuously travel in contact with part of the periphery of a negative-carrying internally-lighted translucent cylinder which rotates at the same surface speed as the band, whereby a succession of impressions of the photographic or other negative or negatives carried by the cylinder is continuously printed upon the band, substantially as set forth. 2nd. In apparatus for producing prints by photography, the combination of a negative-carrying internally-lighted translucent cylinder, a sensitized band holder continuously delivering the band to the said cylinder, guides compelling the band to travel in contact with part of the circumference of the cylinder, and means for imparting continuous forward motion to the band and rotary motion at the same surface speed to the cylinder, substantially as and for the purpose set forth. 3rd. In apparatus for producing prints by photography, the combination of two negative-carrying internally lighted translucent cylinders, a sensitized band holder continuously delivering the band to the said cylinders, guides compelling the band to travel first with one of its faces in contact with part of the circumference of one of the said cylinders and then with its other face in contact with part of the circumference of the other of the said cylinders, and means for imparting continous forward motion to the band and rotary motion at the same surface speed to the cylinders, substantially as and for the purpose set forth. 4th. The combination with the rotating translucent negative-carrying cylinder b^1 of the fixed opaque cylinder e, having an opening f, and lighted internally, substantially as and for the purpose set forth. 5th. The projection A on the cylinder b^1, in combination with the projections B, B on the cylinder b^2, substantially as and for the purpose set forth. 6th. The apparatus constructed and working substantially as hereinbefore described and represented in the accompanying drawings for the purpose set forth.

No. 51,413. Vehicle Hub. (*Moyeu de roue.*)



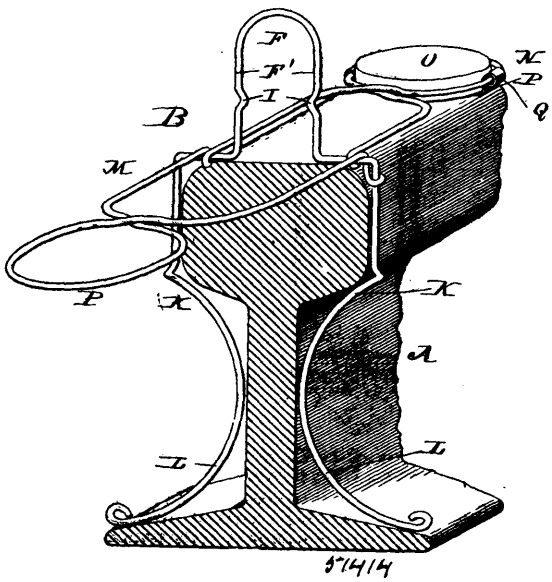
Hiram L. Stuart, Boston, Pennsylvania, U.S.A., 21st February, 1896; 6 years. (Filed 18th January, 1896.)

Claim.—A hub comprising a central section having spoke-sockets and provided at its terminals with bearing recesses, inner balls arranged within said recesses, the outer sections of the hub secured to the inner sections and provided at their outer terminals with bearing recesses, outer balls arranged within the end sections, a continuous axle-box 13 arranged within the hub and extending from one end to the other of the same and receiving said balls on its outer face, and removable end washers interlocked within the outer ends

of the end sections and retaining the outer balls in their recesses and also confining the axle-box in the hub, substantially as described.

No. 51,414. Torpedo-placers.

(*Appareil pour placer les torpilles.*)



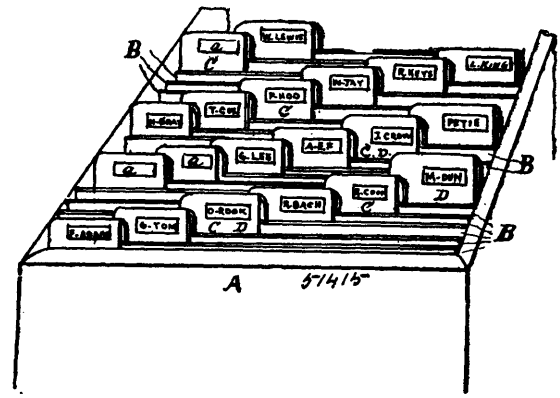
Thomas Regan, New York, State of New York, U.S.A., 21st February, 1896; 6 years. (Filed 22nd January, 1896.)

Claim.—1st. In a torpedo-placer, a torpedo-holder provided with a fastener to secure it to a carrier, fastener-operating cam-jaws to be spread apart by the rail and free the holder, and rail-clamping jaws, substantially as herein described. 2nd. The torpedo-holder provided with rail-clamping jaws, forwardly and rearwardly extending arms to rest upon the rail, and means for fixing the torpedo on one of said arms, substantially as herein described. 3rd. The carrier provided with the clamping-head to be embraced by the clamp on the torpedo-holder, substantially as herein described. 4th. The carrier provided with a clamping-head to be embraced by the catch-clamp on the torpedo-holder, said clamping-head formed with catch-holes, substantially as herein described. 5th. The torpedo-holder provided with a clamp to embrace the clamping-head on the carrier, rail-clamping jaws, and cam-jaws to be spread by the rail and operate the clamp, substantially as described. 6th. The torpedo-holder formed of spring wire bent to form the clamp, the clamp-operating cam-jaws, and the rail-clamping jaws, substantially as shown and described. 7th. The torpedo-holder formed of wire bent to form the clamp, the clamp-operating clamp-jaws, the rail-clamping jaws, and the oppositely extending arms to rest on the head of the rail, substantially as shown and described. 8th. The torpedo-holder formed of wire bent to form the clamp, the clamp-operating cam-jaws, the rail clamping jaws, the oppositely extending head-bearing arms, and a torpedo respectacle on one of said arms, substantially as shown and described. 9th. The torpedo carrier having the vertical bearing, the clamping-head projecting therefrom formed with catch-holes on opposite sides, and a horizontal bearing over the clamping-head, substantially as shown and described. 10th. The torpedo-holder formed of spring wire bent to form the clamp loop, the arms of which are extended to form the rail-clamping jaws, and the cam-jaws to be spread by the rail and spread the clamp loop, substantially as snown and described. 11th. The combination, with the carrier having the clamping-head, of the torpedo-holder having the clamp, the clamp operating cam-jaws, and the rail-clamping jaws, substantially as herein described. 12th. The combination, with the carrier having the clamping-head, of the torpedo-holder having the clamp, the clamp-operating cam-jaws, the rail-clamping jaws, and the head-bearing arms, on one of which the torpedo is fixed, substantially as herein described.

No. 51,415. Indexed File. (*Index serre-papier.*)

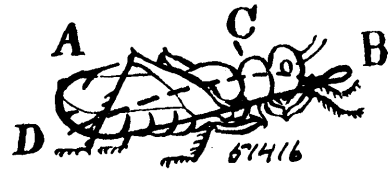
Charles W. Northrop, Newark, New Jersey, U.S.A., 21st February 1896: 6 years. (Filed 8th January, 1896.)

Claim.—The improved index file which consists of a suitable box or case, a series of card boards arranged side by side therein, a receptacle mounted upon each card to receive a name or sign and having an opening in one side thereof to expose said name or sign, a removable name strip in each receptacle, said receptacles being arranged at different points upon the tops of said card boards in alphabetical



order, so as to partially overlap each other but to leave exposed the full name contained therein, as described, and for the purpose set forth.

No. 51,416. Fish Hook. (*Hameçon.*)

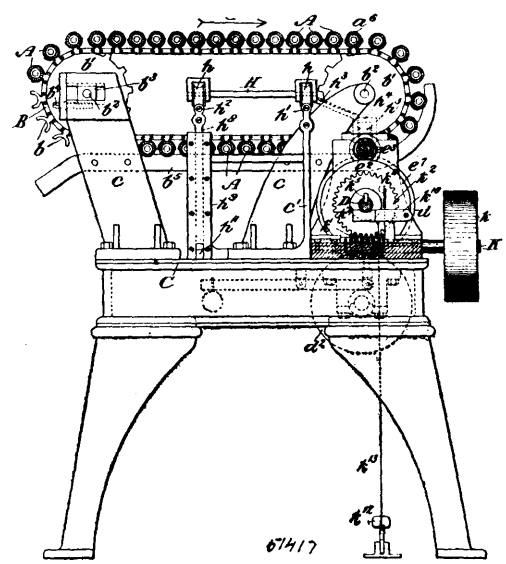


Elliott Hamilton Crane and Charles E. Smith, both of Niles, Michigan, U.S.A., 21st. February, 1896; 6 years. (Filed 2nd January, 1896).

Caim.—1st. An improved bait-holding fish hook, having a barbed hook proper for catching and holding a fish, and a curved spring bait pin rigidly attached to the shank of such barbed hook and extending along the shank beyond the point where it curves into the barbed-hook proper as shown and described, whereby it is adapted to cross the shank and lock with it as specified. 2nd. The improved bait-holding fish hook composed of a barbed hook-proper, and a spring pin formed integrally with the hook shank and extending alongside the same, said pin being curved outward from the shank and its point normally crossing and bearing elastically upon the shank at the point where it merges into the hook-proper, as shown and described.

No. 51,417. Machine for Forming Tubes etc.

(*Methode de fabrication de tubes etc.*)



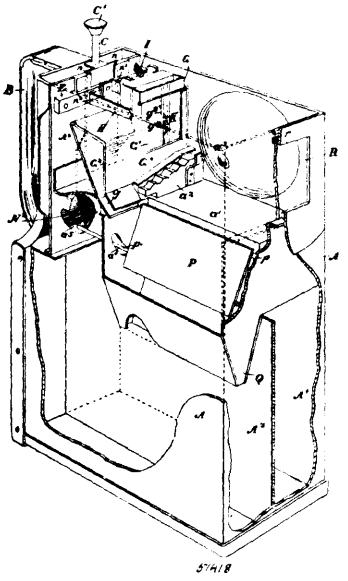
John Clarence Stevens, Hartford, Connecticut, U.S.A., 21st February, 1896; 6 years. (Filed 8th January, 1896.)

Claim.—1st. The combination with a rotating shaft and devices to feed and rotatably support a mandrel, of means to couple the mandrel and the shaft as the mandrel is brought in to position with relation to the shaft. 2nd. The combination with a carrier adapted to receive and rotatably support a mandrel, of a rotating shaft and means to move the shaft longitudinally into engagement with the mandrel as the latter is brought into line therewith. 3rd. The combination with a carrier adapted to receive and rotatably support a mandrel, of a rotating and longitudinally movable shaft, and a cam and intermediate connections whereby said shaft is moved in to engagement with the mandrel as the latter is brought into line therewith. 4th. The combination with a support for a mandrel, of a drum mounted in proximity to said support, movable bearings in which said drum is mounted and which permit it to move toward or from the support, shafts mounted in fixed bearings, one at each end of the drum, and a universal coupling between each end of the drum and the corresponding shaft, whereby the drum may be driven positively and be permitted to move toward or from the support for the mandrel. 5th. The combination with a carrier adapted to receive and support a mandrel and means for imparting a step-by-step movement to said carrier, of rollers adapted to press upon said mandrel as it is brought into proximity thereto, and means to reciprocate said rollers longitudinally with respect to the mandrel. 6th. The combination, with a carrier adapted to receive and support a mandrel, of an overbalanced frame adapted to reciprocate longitudinally with respect to the mandrel and having rollers to bear upon the mandrel, and means to tilt said frame to cause the rollers to press upon the mandrel. 7th. The combination, with a carrier composed of endless chains adapted to receive and transport mandrels, and means to advance said carrier step by step, of a frame having rollers to bear upon the mandrel in proximity thereto, and means to reciprocate said frame longitudinally with respect to the mandrel. 8th. The combination, with a carrier composed of endless chains adapted to receive and transport mandrels, of rails mounted in proximity to said carrier and transverse with respect to the direction of movement thereof, a frame mounted to reciprocate on said rails and having rollers to bear on the mandrel in proximity thereto, and means to reciprocate said frame. 9th. The combination, with a carrier adapted to receive and transport mandrels, of a fixed rail mounted in proximity to said carrier, a second rail parallel with the first and mounted to be movable toward or from said carrier, a frame mounted to reciprocate on said rails and having rollers to bear upon the mandrel in proximity thereto, and means to shift said movable rail to cause said rollers to bear upon the mandrel or to be moved therefrom. 10th. The combination, with means to support a mandrel, of a fixed rail and a movable rail a frame mounted to reciprocate on said rails, and having rollers to bear upon the mandrel, rods supporting said movable rail and a cam-bar and means to shift the same, to cause the cam-bar to shift said movable rail, whereby the rollers are moved toward or from the mandrel. 11th. The combination, with a carrier adapted to receive and transport mandrels, of a fixed rail and a movable rail in proximity to said carrier, an overbalanced frame mounted to reciprocate on said rails, and having rollers to bear upon the mandrel in proximity thereto, and means to shift said movable rail to offset the preponderance of the frame and to cause the same to tilt upon the fixed rail as a fulcrum. 12th. The combination, with a tubular mandrel, a driving spindle therefor at one end, and a centering spindle having a longitudinal bore, and connections from said bore whereby a partial vacuum may be produced in said mandrel.

No. 51,418. Fare Box (*Boîte à billets.*)

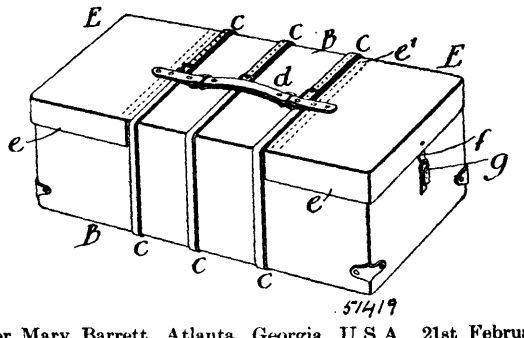
John Maitland Smith, Toronto, Ontario, Canada, 21st February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. In a fare box, the combination with the receiving slot, of a receiving bottomless case, a plunger and means for connecting the plunger to the case for bringing the top of the plunger opposite the receiving slot, as and for the purpose specified. 2nd. In a fare box, the combination with the receiving slot, of a receiving bottomless case, a plunger, an arm connected to the plunger and lug on the side of the case with which such arm is designed to come in contact upon the impression of the plunger, as and for the purpose specified. 3rd. In a fare box, the combination with the receiving slot, of a receiving bottomless case, a plunger, an arm connected to the plunger and a pin at the top of the case designed to limit the upward movement of the plunger by the arm, as and for the purpose specified. 4th. The combination with the receiving slot, the receiving bottomless case pivotally supported, and means for tilting it by the depression of the plunger, a hopper-shaped extension for the case, and a ticket compartment and chute leading from the bottom of the case into such compartment, and a money compartment situated beneath the bottom of the hopper-shaped extension, as and for the purpose specified. 5th. In a fare box, the combination with the receiving slot, of a receiving bottomless case pivotally supported, means for operatively connecting the spring plunger and the case and a spring connected to the frame and case to restore it to its normal position, as and for the purpose specified. 6th. The combination with the receiving slot, the receiving bottomless case pivotally supported and means for tilting it by the depression of the spring plunger, a hopper-shaped extension for the case, a ticket compartment and chute leading from the bottom of the case into such compartment, and a money compartment situated beneath the bottom of the hopper-shaped extension, and an inclined step-block following the incline at the bottom of the case and designed



to extend underneath such case when it is tilted, as and for the purpose specified. 7th. The combination with the receiving slot, the receiving bottomless case pivotally supported and means for tilting it by the depression of the spring plunger, a hopper-shaped extension for the case, a ticket compartment and chute leading from the bottom of the case into such compartment, and a money compartment situated beneath the bottom of the hopper shaped extension and a stop designed to limit the tilting movement of the case as and for the purpose specified. 8th. combination with the receiving slot, the receiving bottomless case, the plunger, the plate supporting the plunger at the top and held in suitable guideway, the bracket forming a guide for the plunger at the bottom and means for operatively connecting the plunger and the case as and for the purpose specified. 9th. The combination with the plunger and the downwardly extending plate N^2 connected thereto and bevelled as shown, of the money compartment A^5, the flap P pivotally supported and the rod P^1 designed to co-act with the bevelled edge of the plate N^2 as and for the purpose specified. 10th. The combination with the plunger and the plate connected thereto supported in suitable guides and having the extension plate $O\,O^1$, of the cace G, the slot at the back of the case, the serrated disc K normally extending through the slot and suitably journalled and means for partially rotating such disc upon each operation of the plunger as and for the purpose specified. 11th. The combination with the case G, the slot on the back of the case, and the front bars next the glass, of the serrated disc designed to extend through the slot in the back of the case and co-act with the bars behind the glass and means for rotating the disc as and for the purpose specified. 12th. The combination with the case G, the slot in the back of the case and the serrated disc suitably journalled, of the plunger the plate $O\,O^1$ connected to the plunger, the ratchet bars M^1 and M^2 and the ratchet pinion J on the end of the serrated dics spindle as and for the purpose specified. 13th. The combination with the case G, the slot in the back of the case and the serrated disc suitably journalled, of the plunger, the plate $O\,O^1$, connected to the plunger, the ratchet bars M^1 and M^2, the ratchet pinion J on the end of the serrated disc spindle and the springs at the back of the ratchet bars as and for the purpose specified.

No 51,419. Travelling Bag. (*Sac de voyage.*)

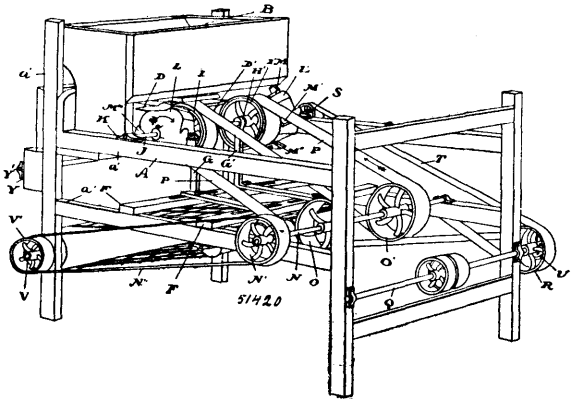


Esther Mary Barrett, Atlanta, Georgia, U.S.A., 21st February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. A telescopic bag comprising a body portion having an undivided interior, and a top slidable on said body and secured by straps thereto, and having an opening in the upper side of each end beyond the straps, a handle connected to said top by flexible strips, and covers for said opening hinged transversely at the inner side thereof by said strips, and having flanged edges and securing means, whereby access to the whole interior of the bag is permitted while said top is in place. 2nd. A telescopic bag comprising an undivided body portion, and a top slidable on said body and secured centrally by straps thereto, and having an opening in the upper side of each end beyond the straps, a cover for each opening hinged transversely at the inner side thereof, and having flanged edges and securing means, and a stiffening piece secured to the underside of the cover and fitting said opening when the cover is lowered, all substantially as and for the purpose set forth. 3rd. A telescopic bag comprising a body portion having an undivided interior, and a top slidable thereon, and secured centrally by straps thereto, and having an opening in the upper side of each end thereof, and a cover for each opening hinged transversely at the inner side thereof by a flexible strip, and having flanged edges, a stiffening piece secured to the underside of each cover and fitting the opening, and a strap on the cover engaging a buckle on the top, all substantially as and for the purpose set forth.

No. 51,420. Machine for Pointing Skewers.

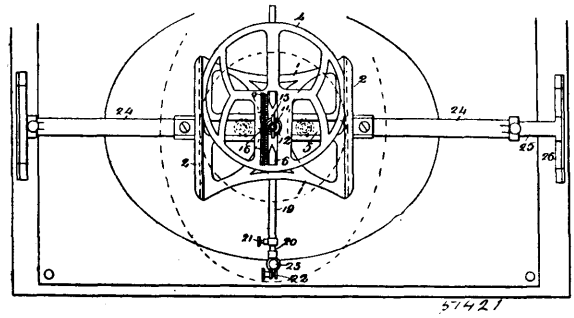
(*Machine pour aiguiser les brochettes des bouchers.*)



Thomas W. Hamlin, Sarawak, Ontario, Canada, 21st February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. In a skewer pointing machine, the combination of the hopper, the skewer supporting tables, a shaft opposed to the said tables journalled in the frame, a pillow block opposed to the interval between the tables, sleeves supported by the pillow blocks encircling the shaft, idlers mounted on the sleeves opposed to the tables, cutter heads mounted on the said shaft on the outer sides of the idlers, a second shaft, pulleys mounted on the second shaft, belts passing around the pulleys and idlers to carry the skewer blanks down the faces of the tables, and means for imparting motion to the machine, substantially as specified. 2nd. In a skewer pointing machine, the combination of the hopper, a skewer supporting tables, a concaved face for each of the tables, a horizontal shaft opposed to the tables journalled in the frame, pillow blocks opposed to the interval between the tables, sleeves supported by the pillow blocks encircling the shaft, idlers mounted on the sleeves opposed to and concentric with the concaved faces of the tables, cutter heads mounted on the said shaft on the outer sides of the said idlers, a second shaft, pulleys mounted on the second shaft, pulleys passing around the said pulleys and idlers, and means for imparting motion to the machine, substantially as specified. 3rd. In a skewer pointing machine, the combination of the hopper, the skewer supporting tables, a shaft opposed to the said tables journalled in the frame, a pillow block opposed to the interval between the tables, sleeves supported by the pillow blocks encircling the shaft, idlers mounted on the sleeves opposed to the tables, a cushioned periphery for each of the idlers, cutter heads mounted on the said shaft on the outer sides of the idlers, a second shaft, pulleys mounted on the second shaft, bolts passing around the pulleys and idlers to carry the skewer blanks down the faces of the tables and means for imparting motion to the machine, substantially as specified. 4th. In a skewer pointing machine, the combination of the hopper, the skewer supporting tables, a concaved face for each of the tables, a horizontal shaft opposed to the tables journalled in the frame, pillow blocks opposed to the interval between the tables, sleeves supported by the pillow blocks encircling the shaft, idlers mounted on the sleeves opposed to and concentric with the concaved faces of the tables, a cushioned periphery for each of the idlers, cutter heads mounted on the said shaft on the outer sides of the said idlers, a second shaft, pulleys mounted on the second shaft, belts passing around the said pulleys and idlers, and means for imparting motion to the machine, substantially as specified. 5th. In a skewar pointing machine, the combination of the cutter heads, the skewer blank course, a hopper, and a feeding apparatus consisting of two slides working alternately against the delivery opening of the hopper to allow of the delivery of one blank only at a time from the hopper to the course, substantially as specified. 6th. In a skewer pointing machine, the combination with the hopper of a feeding apparatus consisting of two slides one located above the other, a shaft journalled in the frame, cams mounted on the shaft, rock shafts operated by the cams arranged to work the slides alternately, to allow of the delivery only of one skewer blank at a time from the hopper, substantially as specified. 7th. In a skewer pointing machine, the combination with the hopper of a feeding apparatus consisting of two slides one located above the other, a shaft journalled in the frame, cams mounted on the shaft, rock shafts operated by the cams, arranged to work the slides alternately, to allow of the delivery only of one skewer blank at a time from the hopper, skewer supporting tables, a horizontal shaft opposed to the tables journalled in the frame, pillow blocks opposite the interval between the tables, sleeves supported by the pillow blocks encircling the shaft, idlers mounted on the sleeves opposed to the faces of the tables, cutter heads mounted on the shaft on the sides of the said idlers, a second shaft, pulleys mounted on the second shaft, bolts passing around the said pulleys and idlers, and means for imparting motion to the machine, substantially as specified. 8th In a skewer pointing machine, the combination with the hopper of a feeding apparatus consisting of two slides, one located above the other, a shaft journalled in the frame, cams mounted on the shaft, rock shafts operated by the cams, arranged to work the slides alternately, to allow of the delivery only of one skewer blank at a time from the hopper, skewer supporting tables, a concaved face for each of the tables, a horizontal shaft opposed to the tables jounalled in the frame, pillow blocks opposite the interval between the tables, sleeves supported by the pillow blocks encircling the shaft, idlers mounted on the sleeves opposed to and concentric with the concaved faces of the tables, cutter heads mounted on the shaft on the sides of the said idlers, a second shaft, pulleys mounted on the second shaft, belts passing around the said pulleys and idlers, and means for imparting motion to the machine, substantially as specified.

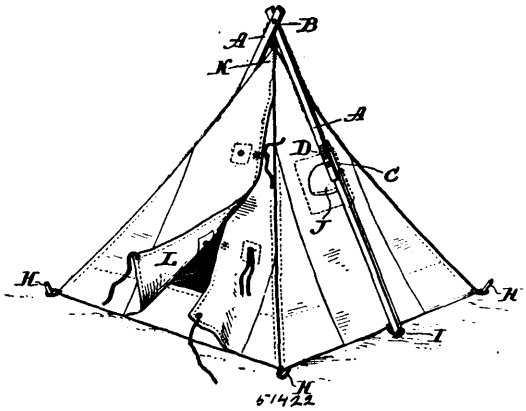
No. 51,421. Ellipsograph. (*Ellipsographe.*)



John Hottinger, St. Louis, Missouri, U.S.A., 1st February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. An ellipsopraph comprising a frame, grooves forming a part of the same, a slot formed in said frame between the grooves, a generating circle mounted on said frame adapted to revolve within the grooves, a radial slot carried by the circle, a marker arm, means for securing the marker arm to the circle in any position along the radial slot, and means for shifting the centre of rotation of the marker arm along the slot of the frame during the revolution of the generating circle, substantially as set forth. 2nd. An ellipsograph comprising a frame, grooves forming part of the same, a slot formed in said frame between the grooves, a generating circle mounted on said frame and adapted to revolve within the grooves, a radial slot carried by the circle, an eccentric scale adjacent to the radial slot, a marker arm carrying an index co-operating with the scale, means for securing the marker arm to the circle in any position along the scale and means for shifting the centre of rotation of the marker arm along the slot of the frame during the revolution of the generating circle, substantially as set forth. 3rd. In an ellipsograph, a suitable slotted frame a generating circle mounted on and adapted to revolve on said frame, a radial slot on said circle adapted to be superposed over the slot of the frame, an arm having a rounded head adapted to fit in the slot of the frame, an angular offset adapted to engage with the slot on the circle, a screw-threaded projection extending from said offset, a suitable index carried by the projection, means for securing the index and the several parts together, and a scale on the circle co-operating with the index, substantially as set forth. 4th. In an ellipsograph, a suitable revolving arm, an offset carried by the upper end of the same, a screw-threaded projection extending from the outer surface of the offset, a suitable depression in said surface, a washer adapted to pass over the projection, a pin or peg on the under surface of the washer adapted to enter the depression in the offset, a notch on said washer serving as an index, and a thumb nut for securing the parts, substantially as set forth.

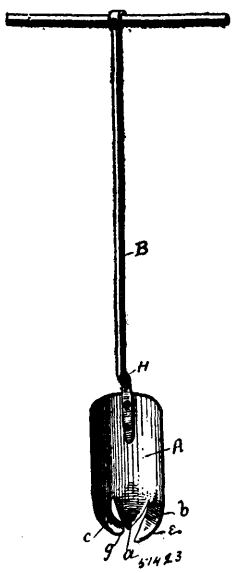
No. 51,422. Tent. (*Tente.*)



Spencer F. B. Biddle, Graham, Montana, U.S.A., 21st February, 1896; 6 years. (Filed 30th December, 1895.

Claim.—1st. The combination with a tent of folding shears consisting of two external poles pivoted together, as a means of supporting the tent from the outside, substantially as described. 2nd. The combination in a tent of a ground-covering joined to the sides of the tent around the entire lower circumference thereof, substantially as described. 3rd. The combination in a tent of a ground-covering joined to the sides of the tent around the entire lower circumference thereof, except such portion of said sides as may be used for a flap or door, substantially as described. 4th. The combination in a tent, provided with ventilation ports or windows, of a ground-covering having upturned edges sewed upon the sides of the tent around their entire lower circumference except such portion of said sides as may be used for a flap or door, substantially as described. 5th. The combination with a tent of folding shears or poles pivoted together, as a means of supporting the tent from the outside, and ropes, loops and pegs as means of guying the same rigidly, substantially as described. 6th. The combination with the herein described tent of folding shears or poles pivoted together as a means of supporting the tent from the outside and ropes, loops and pegs as a means of forming a self-guyed structure, substantially as described. 7th. The combination in a tent having top, bottom and sides joined together forming a dust and moisture-proof bag or sack and for the purpose described.

No. 51,423. Post Auger. (*Tarière.*)

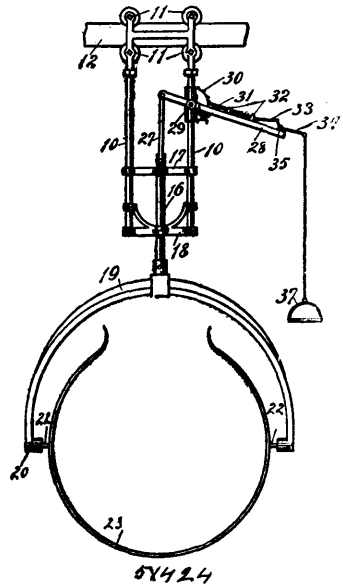


August H. Meier, Marble Rock, and Lucius H. Langworthy, Dubuque, both of Iowa, U.S.A., 21st February, 1896; 6 years. (Filed 20th January 1896.)

Claim.—1st. A post auger consisting of a half cylindrical body, blades integral with said body, one adapted to make an advance cut, a second blade to follow cutting a hole of larger diameter and the third to retain the soil cut by the two advancing blades, and a handle attached to the body to operate the same, for the purposes shown. 2nd. In a post auger, a half cylindrical body three blades integral with said body at its lower end and all curved inwardly toward the inner surface of the body, two of said blades having each a cutting edge and adapted to cut a holes of different size and a handle for operating said tool, all combined and arranged for the purposes shown. 3rd. A post auger consisting of a body A, handle B, and blades *a*, *b* and *c*, all combined to operate substantially as described and shown.

No. 51,424. Carrier for Match Coils.

(*Râtelier pour porter les allumettes au trempage.*)

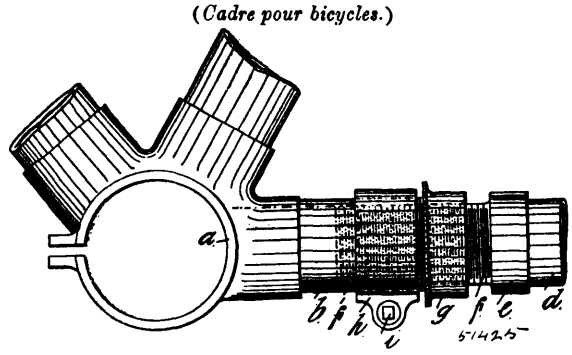


The Continental Match Company, assignee of William F. Hutchinson, both of New York, U.S.A., 21st February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. An apparatus of the kind described, comprising an overhead carriage, a hanger movable up and down on the carriage, and a detachable pivotal connection between the hanger and a coil or package of match splints, substantially as described. 2nd. An apparatus of the kind described, comprising an overhead carriage, a hanger suspended from the carriage so as to be movable up and down, the said hanger having spreading lower ends, and means, as the sockets 20 and the pivot pins 22, for supporting a match coil or package in the hanger, substantially as described. 3rd. An apparatus of the kind described, comprising an overhead carriage, a spring-suspended hanger thereon, and a compressible fastening band pivoted in the hanger and adapted to support a coil of match splints, substantially as described.

No. 51,425. Frame for Safety Bicycles.

(*Cadre pour bicycles.*)



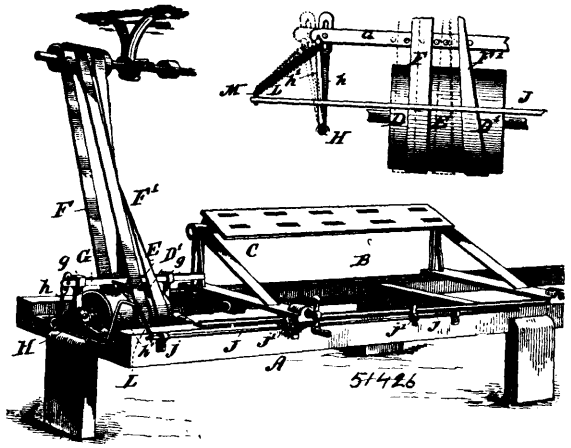
The Trengrove Improved Cycle Frame Company, 133 Lichfield street, assignee of William Henry Trengrove, Victoria street, both of Christchwich, Canterbury, New Zealand, 21st February, 1896; 6 years. (Filed 22nd January, 1896.)

Claim.—1st. In safety bicycles a frame in two parts connected so as to be readily separable and being adjustable to regulate the tension of the driving chain, substantially as and for the purposes herein described. 2nd. A bottom bracket having a tubular projection or socket, the stem of a T-head upon the back forks sliding within such socket and being secured therein by a gland or clip, substantially as and for the purposes herein described. 3rd. In combination, the tubular projection or socket formed upon the bottom

bracket, the T-head upon the back forks, the gland or clip upon the socket and the nut upon the screwed stem of the T-head, substantially as and for the purposes herein described.

No. 51,426. Automatic Belt Shifting Mechanism.

(*Mécanisme automatique pour changer les courroies.*)



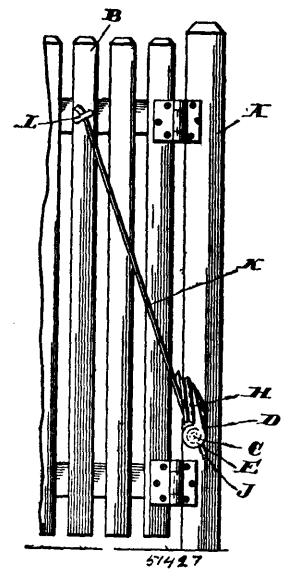
The Cohoke Wooden Ware Manufacturing Company, Assignee of George Andrew Smith, both of Cohoke, Virginia, U.S.A., 21st February, 1896; 6 years. (Filed 12th November 1895.)

Claim.—1st. In a device of the character described, the combination with the pulleys and belts of the shifting bar, the vibrating or rocking member, for operating the same, the operating rod or bar, and an elastic connection between said member and bar, said elastic connection being adapted to receive power or energy through the operating rod and transmit the same to the vibrating member, the force or energy of said connection exceeding the frictional resistance between the belts and pulleys, substantially as shown and described. 2nd. The combination with the pulleys and belts, of a shifting member, adapted to move said belts, the vibrating or rocking member for operating said shifter, the operating rod or bar, and the single elastic or yelding connection between the end of the vibrating member and operating rod, said elastic or yielding member adapted to operate when said operating rod moves in either direction substantially as shown and described. 3rd. A belt shifting member as described, the combination with the drive shaft, the fast and loose pulleys, and the crossed and straight belts, of an operating rod or bar automatically and intermittently reciprocated, a vibrating or rocker member laterally movable shifter member operated by the oscillation of the rocker member and a coil spring connection between such member and the operating rod or bar, substantially as shown and for the purposes described. 4th. The combination in a belt shifting mechanism as described, of the belt shifting member, the operating rod or bar, the spring L, and the adjustable eyes M and N, connecting the said spring L, to the operating rod or bar and rocker member all arranged substantially as shown and described. 5th. The combination with the drive shaft having a pair of loose pulleys and an intermediate fast pulley, a straight and crossed belt held to engage the same, of a reciprocating operating rod or bar, a reciprocating belt shifting member, and oscillating member for moving such shifting member, laterally said oscillating member having a crank arm and a spring connecting the said crank arm, the operating rod or bar having a normal tensil less than the normal frictional resistance of the belts when one of such belts is applied on the fast pulley as set forth. 6th. The combination with a drive shafts, and pulleys thereon, the belts and the operating rod or bar J, actuated from the said drive shaft, of the member G, oppositely projecting belt engaging fingers, the rocking member H, connected with the member G, naving a crank arm h^1 and the shifting bar, all arranged substantially as shown and described.

No. 51,427. Gate Spring. (*Ressort de barrière.*)

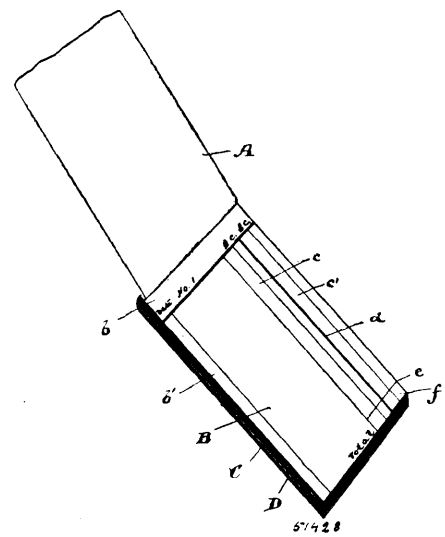
John J. Larimer, Crab Tree, Pennsylvania, U.S.A., 22nd February, 1896; 6 years. (Filed 13th January, 1896.)

Claim.—1st. An improved gate spring comprising the diagonally arranged spring arm K coiled between its ends, a pivoted carrier for the lower end of the said arm which holds said end rigid with the coils, and the loose connection between the free end of the arm and the swinging gate, substantially as shown and described. 2nd. The combination of a gate, a gate post, a head having a pivotal support on the post and adapted to turn at right angles to the base to which it is secured, and a spring secured at one end to the said turning head and at its opposite end to the gate, substantially as shown and described. 3rd. The combination of a gate, a gate post, a head adapted to turn upon a suitable support upon the gate post, a spring coiled about the head and suitably secured thereto, and a connection between the spring and the gate, substantially as shown and described. 4th. The combination of a gate, a gate post, a head supported by the post and adapted to turn thereon, lugs on one side of the head, a spring provided with a coil arranged around the said



lugs with the ends of the springs suitably secured to the head, and a connection between the opposite end of the spring and the gate, substantially as shown and described. 5th. The combination of a gate, a gate post, a pin projected from the post, a head mounted and adapted to turn thereon, a spring provided with a coil which is arranged around the head, a channel upon the inner side of the head through which the end of the spring is adapted to extend so as to be positioned behind the said pin projecting from the post, and a connection between the other end of the spring and the gate, substantially as shown and described.

No. 51,428. Credit Sales Book. (*Livre de crédit.*)

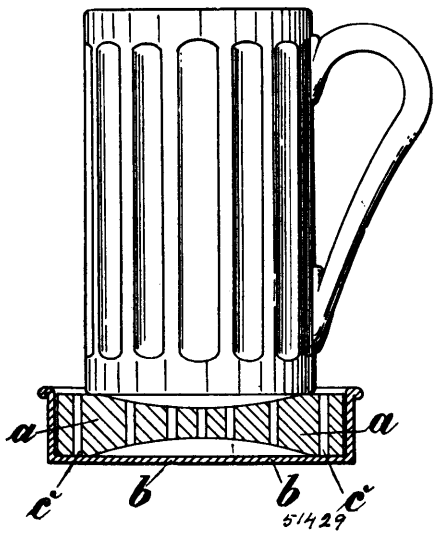


Frederick W. Jeffery, Middland, Ontario, Canada, 22nd February, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. A credit sales book consisting of a sales slip ruled to specify the date of the sale, the various items, the cost of each item, the total amount of the sale, a purchasing coupon divided into a number of spaces numbered to represent a specified amount, a countercheck sheet divided into a number of sections or coupons by lines of perforation, for the purpose set forth. 2nd. A credit sales book, consisting of a series of sales slips, each sales slip ruled to form a date column and item column, and two dollar and cent columns, one of the dollar and cent columns for specifying the cost of each article, and the other for specifying the total amount of the sale, a purchasing coupon divided into a number of sections, each section

bearing a cardinal number, representing an equal amount in currency, and a countercheck coupon sheet subdivided into a number of sections or coupons by lines of perforation, for the purpose set forth. 3rd. A credit sales book consisting of a series of sales slips on which to record the entry of the sale, and a purchasing coupon, divided into a number of sections, each section bearing a cardinal number, representing a specified amount in currency, for the purpose set forth. 4th. A credit sales book, consisting of a series of sales slips on which to record the entry of the sale, a purchasing coupon divided into a number of sections, each section bearing a cardinal number representing a specified amount in currency, and a countercheck coupon sheet subdivided into a number of sections or coupons by lines of perforation, for the purpose set forth.

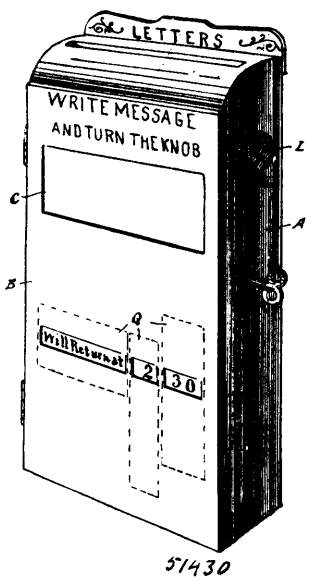
No. 51,429. Saucer. (*Soucoupe.*)



Carl Koster, Lubeck, Germany, 22nd February, 1896; 6 years. (Filed 17th January, 1896.)

Claim.—A saucer for beer or other glasses, consisting of a burnt mixture which contains 95 per cent. clay and 5 per cent. celluloid, substantially as and for the purposes set forth.

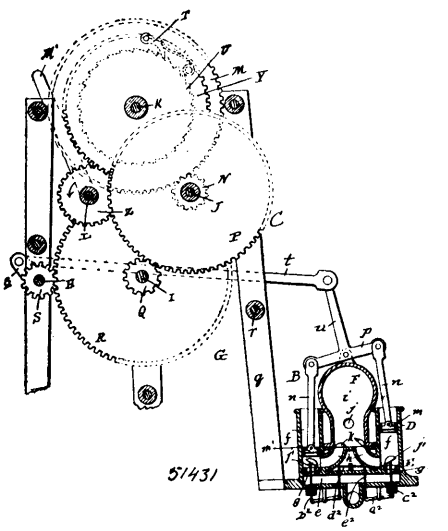
No. 51,430. Letter Box. (*Boîte à lettres.*)



Isaac E. Shaw, Cloverdale California, John D. Sullivan, Charles A. Sullivan and Frank J. Peddie, all of Detroit, Michigan, all in the U.S.A., 22nd February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—1st. In a letter and message receiving device, a fixed box having a door hinged to its front and adapted to be opened or closed, an opening made through said door, a plate fixed inside and sunken below the opening, rollers journalled above and below the opening, one of which carries a roll of paper, said paper passing from the roll over the plate so as to be exposed through the opening, and the second roller adapted to receive the paper after it leaves the plate and opening, a lug fixed to the shaft of the receiving drum upon one side, a shaft projecting through the side of the case carrying a ratchet-wheel, a pawl engaging said ratchet to allow the wheel and shaft to turn in one direction and to prevent its being returned, and a lug projecting from said shaft or wheel and adapted to engage the lug of the drum shaft when the door is closed and to be disengaged therefrom when the door is opened. 2nd. A letter message-box and information device consisting of a fixed box, a hinged door opening outwardly from the front with means for securing it in a closed position, guides and vertically moving tablets having information printed thereon and slidable in said guides upon the door, a drum journalled in elastic standards adapted to receive a roll of paper, an opening in the door, and a table sunken below said opening over which table the paper passes from the containing roll, a second drum upon the opposite side of the opening and table, upon which the paper is rolled after the message has been written, a pawl and ratchet-wheel, the shaft of which extends through the side of the box, with a knob upon the outside whereby it may be rotated, a lug upon the inner end of said shaft, and a corresponding lug upon the drum shaft adapted to engage when the door is closed, and to be disengaged when the door is opened. 3rd. A letter box and message-receiver consisting of a fixed box adapted to receive letters having a hinged door upon the front, an opening through said door with a plate or table beneath, a containing drum upon which a coil of paper is wound, journalled between frictional pressure standards on the door, said paper passing over the plate or table from the containing drum, and a receiving drum journalled in standards upon the opposite side of the message opening, said drum having a plate extending from end to end parallel with the axis a short distance above the periphery of the drum whereby the end of the message paper can be introduced and folded over the edge of the plate so that the coiling of the paper upon said drum will retain it in position and allow it to be easily removed when the paper is uncoiled.

No. 51,431. Pump. (*Pompe.*)

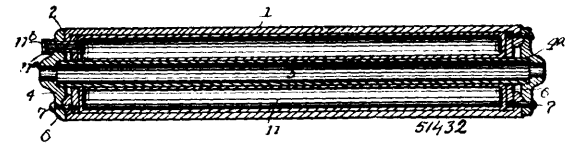


Albert M. Putnam, Woburn, George F. Atwood and George M. French, Melden, all in Massachusetts, U.S.A., 1896; 6 years. (Filed 22nd January, 1896.)

Claim.—The pump described comprising the base or main section E, having the receiving chamber *e*, the piston cylinders *f*, the ports *g* connecting the receiving chamber *e*, and the cylinders *f*, and the passages leading from the piston cylinders above the ports *g*, the section F, in which the discharge chamber is formed, the upwardly opening valves *j*, controlling the ports *g*, the upwardly opening valves *h*, controlling communication between the passages *h* and the discharge chamber, piston arranged in the cylinders *f*, the bar d^2, arranged above the receiving chamber *e* and between the passages *h*, the levers a^2 fulcrumed below the receiving chamber *e*, rods connecting the inner ends of said levers and the bar d^2, rods connected to the outer ends of the levers a^2, and extending through the receiving chamber *e*, and engaging the valves j^1, and a spring interposed between upper wall of the receiving chamber *e* and the rod d^2, and adapted to normally hold the said bar and the rods connected therewith in such a position that they will not interfere with the operation of the valves when the pump is in use, substantially as specified.

No. 51,432. Pneumatic Roller for Typewriters.

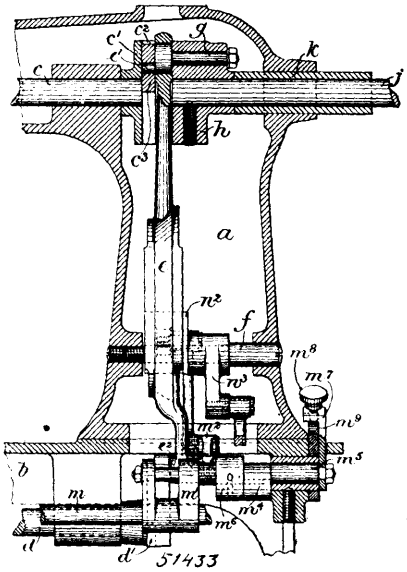
(*Rouleau pneumatique pour clavigraphes.*)



David Orson, Fonda, Nushawaka, Indiana, U.S.A., 22nd February, 1896; 6 years. (Filed 14th June, 1895.)

Claim.—1st. A pneumatic platen consisting of a bed or roller inflated with air under pressure to hold the paper while it receives the impact or impression from the type, of a type writing machine, substantially as described. 2nd. As a new article of manufacture, cylinder cover of soft rubber having contracted end flanges and adapted to fit over or form the working surface of a tpye writer cylinder, substantially as described. 3rd. A platen cylinder for typewiting machines, comprising a central tubular shaft carrying end discs, and a rubber cylinder supported upon said discs, substantially as described. 4th. A platen cylinder for typewriting machines comprising the central shaft, end discs, a cover supported thereon and an inflation cylinder interposed between the said shaft and cover, substantially as described. 5th. A pneumatic cylinder for typewriting machines comprising a central shaft, a double-walled hollow inflation cylinder, and an outer cover cylinder, substantially as described. 6th. A cylinder for typewriting machines comprising a flexible pneumatic cylinder, an inflation tube and check valve, and a supporting shaft, substantially as described. 7th. A cylinder for typewriting machines comprising a central shaft carrying end discs, a rubber cylinder supported upon said discs, an inflation tube and check valve, substantially as described.

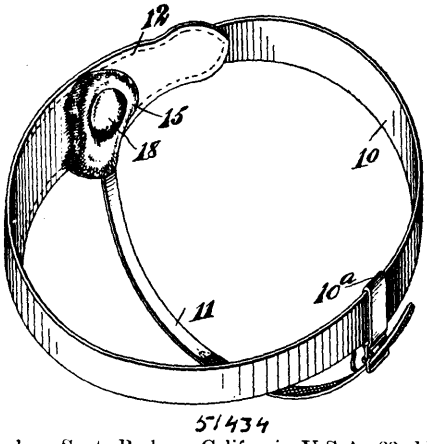
No. 51,433. Sewing Machine. (*Machine à coudre.*)



Daniel Jones, Birmingham, England, 22nd February, 1896; 6 years (Filed 7th January, 1896.)

Claim.—1st. The combination of rod *c*, fulcrum *f*, pins e^1, and *g*, shaft *j*, crank *h*, shaft *c*, crank c^1, shaft *d*, crank d^1, pin c^2, arm n^3, on block n^2, link n^4, arm n^1, rocking-shaft *n*, links m^2, and m^3, projection e^3, on rod *e*, arm m^1, rocking-shaft *m*, radius rod m^6 fulcrum pin on arm m^4, shaft m^5, arm m^7, screw m^8, quadrant m^9 substantially as and for the purpose hereinbefore set forth. 2nd The combination of rod *c*, fulcrum *f*, pins e^1 and 9, shaft *j*, crank *h*, shaft *c*, crank c^1, substantially as hereinbefore described for the purpose or enabling shaft *c* to have a varying angular velocity during one revolution while shaft *j* makes one revolution at a constant angular velocity. 3rd. The combination of rod *e*, rocking shaft *m*, links m^2, and m^3, arm m^1, radius rod m^6, fulcrum pin and arm m^4, shaft m^5, arm m^7, screw m^8, and quadrant m^9, substantially as hereinbefore described for the purpose of causing the vertical movement of rod *e*, to rock-shaft *m* to a variable extent. 4th. The combination of rod *e*, rocking shaft *n*, fulcrum block n^2, arm n^3, link n^4, and arm n^1, substantially as hereinbefore described for the purpose of causing the rocking motion of rod *e*, to be conveyed to the shaft *n*.

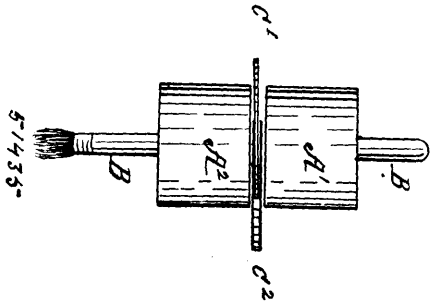
No 51,434. Truss. (*Bandage herniaire.*)



Joseph Fandrey, Santa Barbara, California, U.S.A., 22nd February, 1896; 6 years. (Filed 7th January, 1896.)

Claim.—In a truss, the pad carrier, the pad comprising the indented block 14^a, having a covering 15, and marginal filling or suffing 16, a small rounding pad mounted in the indentation of the first pad and comprising a base block 17 secured to the base block 14^a, a covering or envelope 18, and the filling 19, substantially as described.

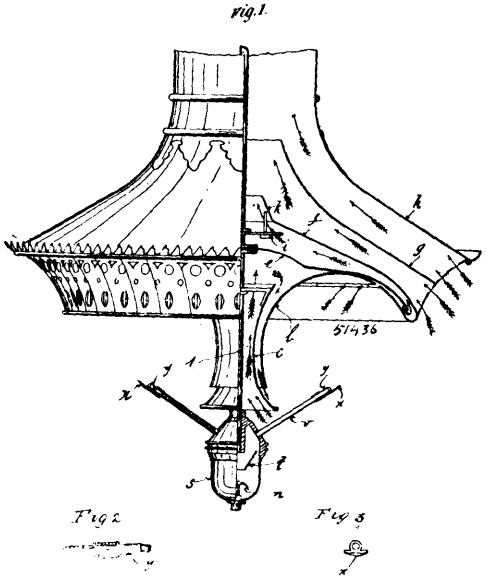
No. 51,435. Top for Mucilage Bottle. (*Bouchon pour Bouteilles de mucilage.*)



Maria Stewart Burrage, Montreal, Quebec, Canada, 22nd February, 1896; 6 years. (Filed 8th August, 1895.)

Claim.—In a machine for extracting mucilage, or paint, from a bottle or case, the severed tubes A^1, and A^2, the solid ring C^1, and split (or grooved), ring C^2, and the metal spring D, substantially as shown and for the purpose set forth.

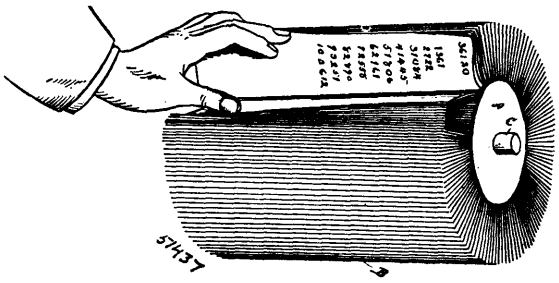
No. 51,436. Gas Lamp. (*Lampe à gaz.*)



Walter John Thomas, Denmark Hill, Surrey, England, 22nd February, 1896; 6 years. (Filed 26th August, 1895.)

Claim.—1st. In gas lamps of the class herein described, a chamber passage or flue surrounding the outside of the dome or reflector and communicating with the inside of the dome or reflector by apertures with a baffling plate or cone d^1, in said chamber, a passage or flue so as to direct the heated air and gases over the outside of the dome or reflector and thereby preventing sudden and unequal cooling, substantially as described and illustrated. 2nd. In receivers for gas lamps in combination, two plates or cones placed one above the other, in a casing for retaining the solid matter, deposited by the gas during its passage to the jets, substantially as described and illustrated. 3rd. In burners fer gas lamps in combination a triangular deflector or deflectors fixed under the jets or burners and having openings for the passage of air to the flames, substantially as described and illustrated.

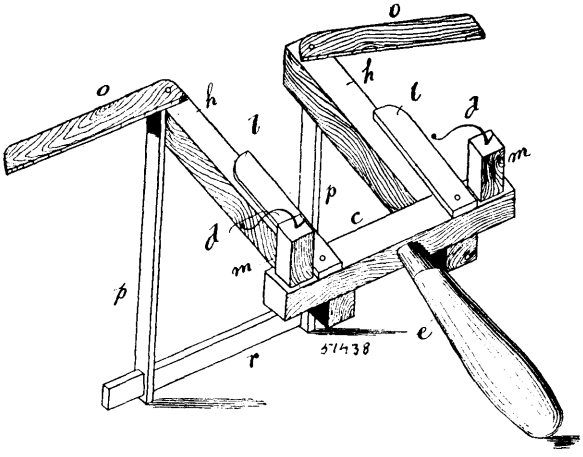
No. 51,437. Book and Binding. (*Livre et reliure.*)



Eugene Gregory, Ann Arbor, Michigan, U.S.A., 22nd February 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. In a book made in endless form, the combination of the sheets of paper comprising the leaves, a flexible, medium to which the leaves are secured and a central holding cylinder around which the medium is bent, substantially as described. 2nd. In a book made in endless form, the combination of the sheets of paper comprising the leaves, strings to which the leaves are stitched, a central cylinder around which the leaves are secured on said strings are bent and secured, substantially as described. 3rd. The combination of a cylindrical endless book, a centrally supported axle, a supporting frame-work having a base, and means adapted to change the incline of the axle, substantially as described. 4th. An endless book having a cylindrical support and leaves secured thereabout, an axle, and an index cylinder secured to said axle, substantially as described,

No. 51,438. Book-holder. (*Porte-livres.*)



William Theodore Joseph Parkes, London, England, 22nd February, 1896; 6 years. (Filed 28th December, 1895.)

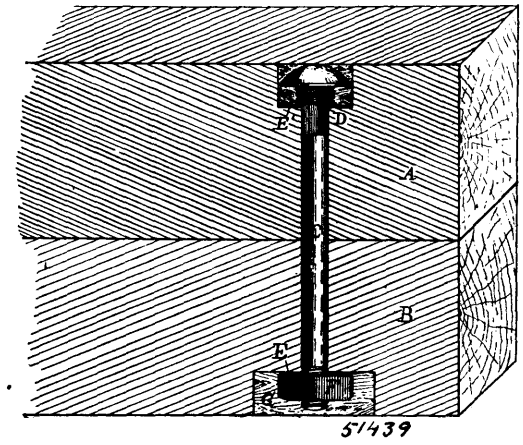
Claim.—1st. An improvement in book holders or desks consisting of an arrangement for gripping each side of each cover of the book. 2nd. An india-rubber band arrangement for securely fixing the cover of the book in the fingers or prongs of the holder. 3rd. A folding frame or back support with a balancing bar whereby resistance to extra weight is secured on either side of my holder whether placed on window-sill, ledge or edge of table.

No. 51,439. Method of Floating Heavy Timber.

(*Méthode de flotter le bois pesant.*)

Alexander McEwen, Calumet, Quebec, Canada, 22nd February, 1896; 6 years. (Filed 11th November, 1895.)

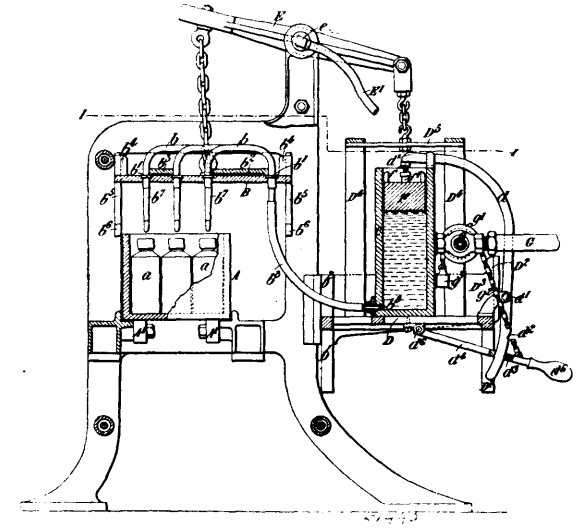
Claim.—An improved method of fastening hard or heavy timber to soft or light timber for the purpose of floating such hard or heavy



timber consisting in a bolt passing through the timbers at or near each end of same and under the head of which bolt a spiral spring is placed, substantially as and for the purpose set forth.

No. 51,440. Apparatus for Filling Bottles, Etc.

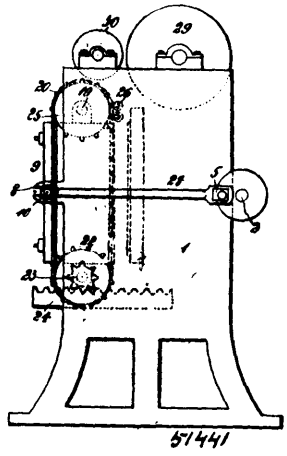
(*Appareil pour remplir les bouteilles, etc.*)



William Alexander Bowie, 14 Tierney Road, Streatham Hill, Surrey, and Ernest James Dodd, 2 Eveline Villas, Leicester Road, New Barnet, Middlesex, both in England, 22nd February, 1896; 6 years. (Filed 13th January, 1896.)

Claim.—1st. Apparatus for bottling liquids substantially as described, consisting in the combination of a movable tube plate carrying the filling or syphon-tubes, a movable platform carrying the liquid-tank, a rocking-beam from the opposite ends of which the aforesaid tube-plate and platform are suspended, flexible or telescopic pipes connecting the filling or syphon-tubes to the liquid-tank, and means for automatically turning off the supply of liquid to the tank when a quantity sufficient to charge the entire series of bottles has entered the said tank. 2nd. In apparatus for bottling liquids a movable tube-plate carrying the filling of syphon-tubes in combination with a liquid tank, these parts being so arranged relatively to each other that when the tube-plate is fully depressed to bring the nozzles of the filling or syphon-tubes into the bottles to be filled the said filling or syphon-tubes are lower than the level of liquid in the tank so that the filling operation is commenced by the action of gravity and is continued by the syphonic action of the syphon-tubes, until the level of the liquid in the tank and the bottles is equalized, substantially as described. 3rd. In apparatus for bottling liquids, the combination with the liquid-tank of means for regulating the quantity of liquid supplied to the liquid-tank, these means consisting of a pivoted bent arm, a pivoted hand-lever adapted to engage with and be supported by the said bent arm when the hand lever is raised, a weighted chain connected to the said hand-lever and passing over a pulley mounted on the plug of the liquid supply cock, and an adjustable stop carried by a float situated within the tank, substantially as described.

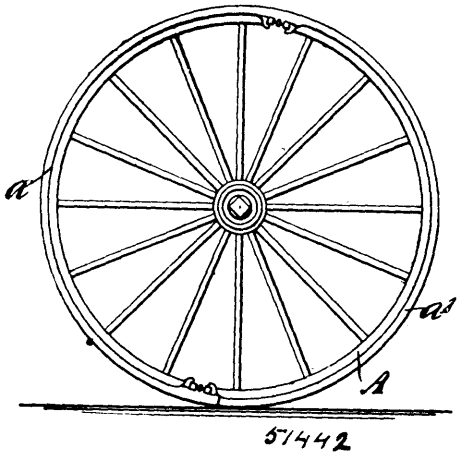
No. 51,441. Match Machine. (*Coupe-éclats.*)



Davenant Rodger, New York, State of New York, U.S.A., 25th February, 1896; 6 years. (Filed 3rd April, 1895.)

Claim.—1st. In a splint cutting machine, the combination with a gang of cutting knives, of means for imprinting or stamping characters upon the splints. 2nd. A splint cutting machine in which is comprised a bed over which veneer is intermittently fed, a gang of cutting knives, a holding and clearing plate bearing characters to be imprinted, and means for inking the characters. 3rd. A splint cutting machine in which is comprised a gang of reciprocating cutting knives, a cutting bed, and means for intermittently feeding veneer over said cutting bed. 4th. A splint cutting machine in which is comprised a gang of cutting knives, and a cutting bed, in combination with rollers adapted to feed the material to be cut, a spring actuated clearer, and means for imprinting characters upon the splints.

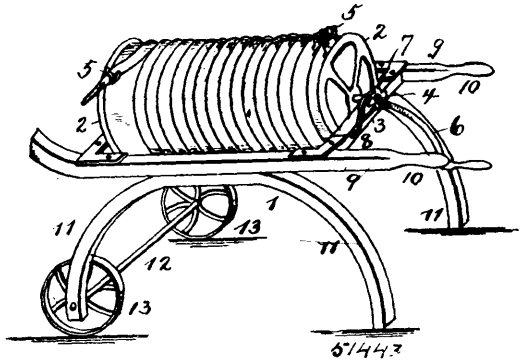
No. 51,442. Auxiliary Tire. (*Bandage auxiliaire.*)



Zebulon Foster, Chicago, Illinois, U.S.A., 25th February, 1896; 6 years. (Filed 23rd January, 1896.)

Claim.—1st. A tire having a protective ring, the same having its contiguous ends enlarged and curved so as to extend inwardly around the sides of the tire and beyond the same, said contiguous ends lying one within the other and having their flat sides making snug contact with each other, each side of each end having an ear extended inwardly and beyond the tire, a threaded bolt, and means for connecting said bolt to the ears to push them apart, substantially as described. 2nd. A tire having a protective rim, the same having its contiguous ends enlarged and curved around the sides of the tire and extended inwardly therefrom, the said ends being arranged one within the other and having their flat sides snugly engaged with each other, each side of each end having an inwardly extended portion to form an ear, the ends of each end being longitudinally aligned with those of the other, a nut engaging each ear, and two threaded bolts, the bolts being respectively engaged with each pair of longitudinally aligned nuts, whereby the ears may be spread, substantially as described.

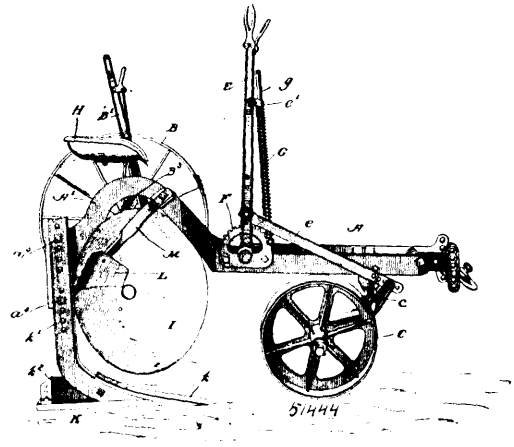
No. 51,443. Hose Reel. (*Dévidoir de boyaux.*)



David C. Lundon, Dubuque, Iowa, U.S.A., 25th February, 1896; 6 years. (Filed 29th January, 1896.)

Claim.—1st. A hose reel comprising a supporting truck, rollers at one end thereof, extended portions adapted in conjunction with said rollers to support the truck upon end in a vertical position, a drum rotatably mounted on the truck and arranged longitudinally of the latter, whereby the drum may occupy a vertical position corresponding to the truck when the latter is standing upon one end, in the manner and for the purpose specified. 2nd. A hose reel comprising a truck, legs carried by the truck, rollers mounted on a shaft journalled in one end of the legs, the side rails extended at one end and curved upwardly to form in conjunction with the rollers a firm bearing for the truck when the latter is in a vertical position, a drum rotatably mounted in bearings on the truck and arranged longitudinally of the latter, and an operating crank for the drum, all as and for the purpose specified.

No. 51,444. Disc Plough. (*Charrue à disque.*)

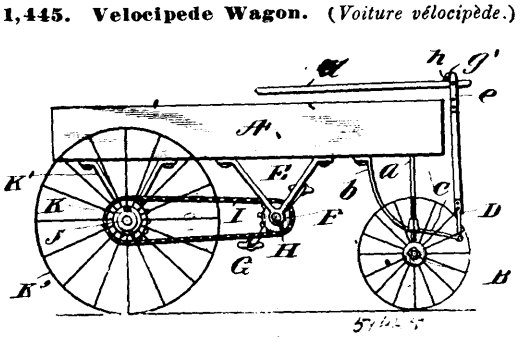


Deere & Company, assignee of Staley Dane Poole, both of Moline, Illinois, U.S.A., 25th February, 1896; 12 years. (Filed 29th January, 1896.)

Claim.—1st. In a disc plough, the combination of the revolving disc adapted to independently cut and turn and furrow, with the sub-soil device arranged to penetrate and loosen up the soil below the depth of cut of the disc, and adapted to draw the disc into the soil and hold it down to its work, substantially as described. 2nd. In a disc plough, the combination of the plough-beam, the rotary disc arranged to revolve diagonally to the line of draft, and to independently cut and turn a furrow, and the wedge-shaped shoe supported below the cutting edge of the disc, and having its toe extended under the disc, so as to loosen up the soil below the depth of cut of the disc and to draw and hold the disc down to its work, substantially as described. 3rd. A sub-soil plough comprising a suitable beam, an independent revolving furrow-cutting and turning disc arranged at an angle to said beam, and a wedge-shaped sub-soil device arranged below the cutting edge of the disc and adapted to draw and hold the disc down to its work, substantially as described. 4th. A combined turn-plough and sub-soiler comprising a suitable beam, a revolving disc journalled in bearings at angle to the line of draft, and adapted to independently cut and turn a furrow, and a wedge-shaped shoe arranged below the plane of the disc and having its toe extended underneath the disc, said shoe being adapted to penetrate and loosen the soil below the depth of cut of the disc and at the same time to draw and hold the disc down to its work, substantially as described. 5th. A combined turn-plough and subsoiler compring a suitable beam,

a revolving disc journalled in bearings at an angle to the line of draft, and a vertically adjustable wedge-shaped shoe arranged below the plane of the disc and having its toe extended underneath the disc beyond its forward cutting edge, said shoe being adapted to penetrate and loosen the soil below the depth of cut of the disc and at the same time to draw and hold the disc down to its work, substantially as described. 6th. A combined turn-plough and subsoiler comprising a suitable beam, a revolving disc carried by said beam so as to revolve at an angle to the line of draft, a standard depending from said beam directly in rear of the revolving disc, and a wedge-shaped shoe at the foot of said standard having its point extended underneath and below the disc beyond its forward cutting edge, said shoe being adapted to hold the disc to its work and to loosen the soil below the depth of cut of the disc, substantially as described 7th. A disc-plough and subsoiler combined, comprising a sulky frame, a revolving disc carried by said frame, and means for raising and lowering the disc so as to gage the depth of penetration thereof, together with a wedge-shaped shoe depending from the plough-beam or frame in the rear of the disc and extending to a point underneath the disc beyond its forward cutting edge, said shoe being adapted to penetrate the earth and loosen up the soil below the depth of cut of the disc, and to draw and hold the disc down to its work, substantially as described. 8th. In combination with the plough frame, or beam, the revolving disc journalled in suitable bearings so as to revolve at an angle to the line of draft, said beam carrying at its rear end a subsoil attachment consisting of a wedge-shaped shoe the toe of which extends underneath and below the cutting edge of the disc, said shoe being provided with a land-side bar which extends rearwardly of the disc, whereby the soil is loosened up below the depth of penetration of the disc and the disc held down to its work while the plough is held parallel to the line of draft, substantially as described. 9th. In combination with the arched plough-beam and the revolving disc carrier thereby underneath the arch, the subsoil device consisting of a wedge-shaped shoe secured to the foot of a vertically adjustable standard arranged in rear of the disc and having a land-side portion to hold the plough in line and an elongated toe or point extending underneath the disc so as to draw the latter down and hold it to its work, substantially as described. 10th. A combined disc-plough and subsoiler comprising a suitable frame, a disc journalled in bearings carried by said frame and arranged to revolve at an angle to the line of draft, a standard secured to the plough-frame directly in the rear of the disc, and a wedge-shaped shoe secured to the foot of said standard and having its point extended forward of the axial line of the disc and below the lower edge thereof, said shoe being provided with a land-side portion extending rearward of the disc, whereby the disc is drawn down and held to its work and also held in the line of draft, while the soil is loosened below the depth of cut of disc, substantially as described. 11th. In a disc-plough the plough-frame or beam proper and the disc-supporting castings secured thereto, consisting of a pair of bowed or arched pieces secured together at both ends, one of said pieces having the arch thereof arranged in a vertical plane parallel with the draft beam proper and the other in a horizontal plane substantially at right angles to the vertical portion, and a revolving disc journalled underneath the upper arch diagonally to the line of draft so that its upper portion may revolve in the clearance provided by the bowed portions of the castings, substantially as described. 12th. In combination with a plough-beam or frame proper, the disc-supporting castings consisting of two arched or bowed portions secured together at their ends and having their united front ends secured to said frame or draft beam proper, the bow of one portion being horizontally arranged and the bow of the other portion vertically arranged substantially as at right angles to the horizontal portion, the latter portion having a lateral perforated plate or flange projecting from its outer convex surface, for the attachment thereto of the wheeled frame or beam, and the vertical portion having at its rear end a recess for the attachment of the upright or standard of a subsoil device, said castings being adapted to afford support for a disc adapted to revolve with its upper portion arranged in the clearance provided by the bows of the castings, substantially as described.

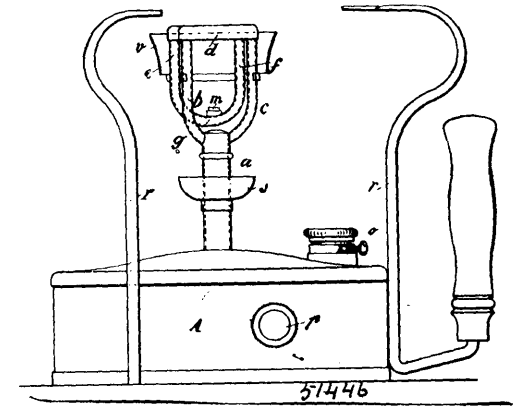
No. 51,445. Velocipede Wagon. (*Voiture vélocipède.*)



James M. Spangler and Jacob M. Schneider, both of Canton, Ohio, U.S.A., 25th February, 1896; 6 years. (Filed 29th January, 1896.)

Claim.—1st. In a velocipede wagon, the combination of the body or box, mounted upon travelling wheels, the axle B, provided with the arm C, the yoke D pivotally attached to said arm, the tongue formed in sections, said sections hinged together, and one of said sections secured to the yoke D, substantially as and for the purpose specified. 2nd. The combination of the body or box A provided with a detachable bottom, said box mounted upon travelling wheels, the axle B provided with the arm C, having pivoted thereto the yoke D, the tongue section *c*, attached to the yoke D, and provided with the flanged plates *e*, the tongue section *d*, provided with the screw-threaded rod *g*, having the thumb-screw g^1, and the bar *h*, substantialiy as and for the purpose specified. 3rd. The combination of the body or box A, provided with a detachable bottom, a crank-shaft located below the body and provided with pedals, and a sprocket-wheel, a drive chain located around the sprocket-wheels H and J, the axle K, having loosely mounted thereon the travelling wheels K^2, said travelling wheels provided with the pawls K^3, and the springs K^4, the toothed discs L, secured to the axle K, the axle B, provided with the arm C, and a jointed tongue or handle secured to the arm C, substantially as and for the purpose specified. 4th. The combination of the body or box A provided with a detachable bottom, a crank-shaft located below the body and provided with pawls, and the sprocket-wheel and drive chain located around the sprocket-wheels H and J, the axle K, having loosely mounted thereon the travelling wheel K^2, said travelling wheels provided with the pawls K^3, and the springs K^4, and the toothed discs L, secured to the axle K, substantially as and for the purpose specified.

No. 51,446. Burners for Gasifying and Burning Fluid Fuels, Specially Paraffine Oils. (*Brûleur pour gazéifier et brûler les fluides combustibles, spécialement l'huile paraffine.*)



Oscar Ehrenfried Wollert, Banergaton, 5 Stockholm, Sweden, 25th February, 1896; 6 years. (Filed 24th January, 1896.)

Claim.—1st. Burner for gasifying and burning fluid fuels, specially paraffine oil, characterized thereby, that the communication between the ascending pipes *b* and *c*, leading from the fuel magazine, and the descending pipe *g*, which is curved or formed in another manner, and on which the burner opening is arranged, consists of a passage *h*, running in zig-zag in spiral or in another manner and crossing the flame, and which above the burner opening *m*, passes from the above mentioned pipes *b* and *c*, situated on the one side of said opening *m* to the inlet ends of the other pipe *g*, which ends are situated on the other side of said opening, all with the view to obtain an effective and uniform gasification. 2nd. Burner for gasifying and burning fluid fuels, specially paraffine oil, provided with a passage *h*, running in zig-zag, in spirals or any other manner and placed across the flame, said passage forming the communication between ascending pipes *b* and *c*, communicating with the fuel magazine, and the branches of another, curved pipe *g* on the curved middle part of which the burner opening is arranged. 3rd. In the arrangement stated in the first claim, the arrangement that the passage *h* is arranged in a plate *d*, with the view that the heating of the passage may be more uniform in consequence of the spreading of the heat in the plate. 4th. In the arrangements stated in the first and third claims, the arrangement of cleaning holes made in the plate in the extensions of the various parts of the passage *h*, said holer having tightening screws, with the view that the passage *h* might be cleaned.

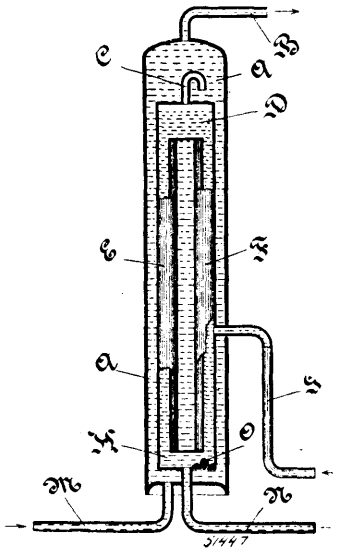
No. 51,447. Water Heater Attachment for Stoves.

(*Attache de calorifère à eau pour poêles, etc.*)

Thomas H. Lennox, Woodstock, Ontario, Canada, 25th February, 1896; 6 years. (Filed 28th January, 1896.)

Claim.—1st. The combination of the inner chamber D, E, H, F, with the cylindrical vessel A, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the tube C, and the valve O, with the inner chamber D, E, H, F, and the cylinder

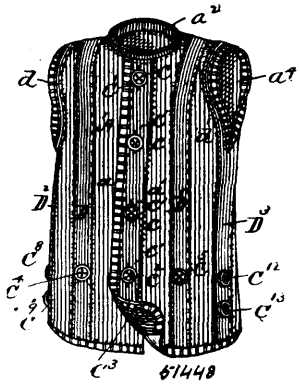
A, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the tubes G and N, and with the inner chamber



D, E, H, F, the tube C, valve O, cylinder A, tube B, and tube M, substantially as and for the purpose hereinbefore set forth.

No. 51,448. Waist for Children.

(*Gilet pour enfants.*)



Thomas Bernard Fitzpatrick, Newton, Massachusetts U.S.A., 25th February, 1896; 6 years. (Filed 21st January, 1896.)

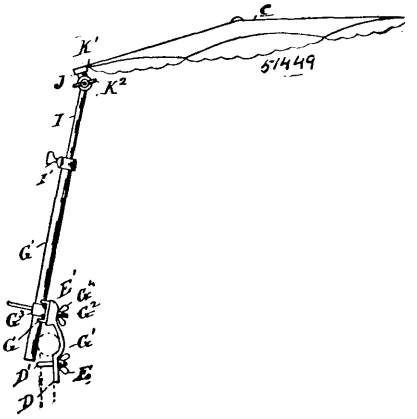
Claim.—1st. A waist of the character specified, having a body portion elastic throughout, elastic strips or sections connected therewith to make a part thereof extending lengthwise the waist, the whole forming a reinforced or strengthened structure elastic or yielding throughout, and buttons or other attaching devices at or near the lower ends of said strips or sections, as and for the purposes set forth. 2nd. In a waist of the character specified, the body portion comprising the back A, and the divided front A^1 both elastic throughout, the elastic strips or sections B, B^1 applied to the edges of the divided front, the elastic strips or sections D, D^1, applied to the said front and back as specified, the elastic strip or section D^4 applied to the back, and the elastic strip or sections D^2, D^3, applied to the sides of the waist, all as and for the purposes set forth.

No. 51,449. Bicycle Canopy.

(*Baldaquin pour bicycles.*)

Denis J. Reaume and John S. Barnes, assignees of Alfred B. Venton, all of Detroit, Michigan, U.S.A., 25th February, 1896; 6 years. (Filed 29th January, 1896.)

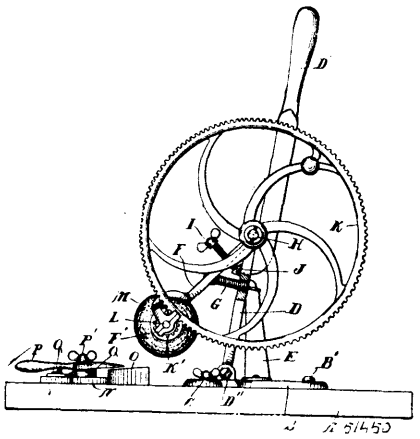
Claim.—1st. In a canopy, the combination with the two oppositely extending supporting ribs, pivotally united at their inner ends and



free to swing vertically upward above the plane of the pivot, side ribs pivotally supported by the supporting ribs and having a horizontal swinging movement, a cover for the canopy and a standard, substantially as described. 2nd. In a canopy, the combination with two ribs L and K^1, extending out in opposite directions, block a on the adjacent ends of the ribs, a horizontal pin pivotally uniting the blocks a series of side ribs L^1, vertical pivots securing the side ribs to the blocks, a cover, and a standard, substantially as described. 3rd. In a canopy, the combination with two ribs L and K^1, extending out in opposite directions, block a on the adjacent ends of the ribs, a horizontal pin pivotally uniting the blocks a series of side ribs L^1 having braces c^1, vertical pivots securing the side ribs and braces to the blocks, a cover and a standard, substantially as described.

No. 51,450. Sickle Grinding Machine.

(*Remouleur des lames.*)

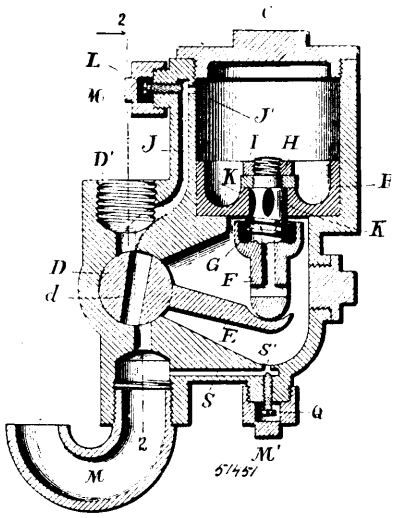


Perry Howard Cazier, Nashville, Horace Palmer and Isaac Sponabel, both of Hastings, all in Michigan, U.S.A., 25th February, 1896; 6 years. (Filed 27th January, 1896.)

Claim.—1st. In a sickle grinding machine, the combination with a base plate of an upright pivoted thereto and provided with an opening a frame pivoted to said upright, a grinding wheel journalled in said frame, a gear sleeved upon the shaft of the grinding wheel and provided with a collar, a driving gear meshing with said gear whereby the grinding wheel is actuated, a tension spring carried by said frame, extended through the opening in the upright and secured to said base plate, means for regulating the tension of said spring and an adjusting screw threaded through the frame and bearing upon the upright, whereby the pressure of the grinding wheel is regulated when in operation and the grinding wheel held out of the way when not in use, substantially as described. 2nd. In a sickle grinding machine, the combination with a suitable support, a grinding mechanism carried thereby of a work supporting plate adjustably secured to said support, means whereby said plate is locked in its adjusted position, said plate being provided with a beveled upper face intersected by a V-shaped notch, and eccentrically pivoted clamping lever operatively secured to said plate, means for locking said lever in its operative position and adjustable guide carried by said plate and means whereby said guide is locked in its operative position, the construction and arrangement being such that the work is firmly held to the grinding wheel and the operator free to rotate said wheel, substantially as described.

No. 51,451. Apparatus for Flushing Water Closets

(*Appareil à lavage des latrines.*)



The Hitchcock Lamp Company, Assignee of John W. Bragger, both of Watertown, New York, U.S.A., 25th February, 1896; 6 years.. (Filed 24th January 1896.)

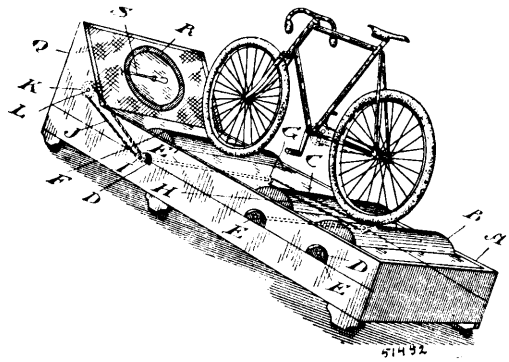
Claim.—1st. A device for flushing closets, consisting of a cylinder having a plunger working therein, a valve regulated aperture in said plunger, combined with a turning-plug which is adapted to cause the said valve to be opened and the plunger raised, when it is partially rotated, substantially as shown and described. 2nd. A device for flushing closets, consisting of a cylinder having a suitable inlet, a plunger designed to work in said cylinder, a valve-stem carrying a valve adapted to be seated over an aperture in said plunger openings in the said stem through which water is allowed to escape when the valve is opened, a spring for holding the valve normally closed, and means for opening the valve, substantially as described. 3rd. In a water closet-flushing device, the combination with a cylinder, a valve regulated inlet thereto, a plunger in said cylinder, a valve stem having a series of recesses about its circumference, a valve seated on the shoulder on said stem, means for holding said valve in place, and a spring seated in a recessed portion of the hub of the stem and adapted to bear against the under side of the plunger, and means for raising the plunger when the turning plug is rotated, substantially as shown and described. 4th. In a water closet-flushing device, the combination with the cylinder and inlet thereto, plunger and piston carrying a valve which is spring actuated, as described, of a turning plug having an aperture designed to register with a supply and outlet channel, when the plug is open, of a lever secured to one end of the turning plug, its other end resting beneath the lower end of the piston stem, whereby, when the plug is rotated, the piston and the plunger are raised, substantially as shown and described. 5th. An automatically operated flushing device for water closets, having in combination with a cylinder A, provided with a screw cap, a plunger B centrally perforated and working in said cylinner, a piston stem working in said aperture, a valve seated on a shoulder of the said stem, a nut for holding the same in place, a recessed portion of the stem carrying a spring designed to bear against the under side of the said plunger, the walls of the recess designed to bear against the plunger, when the piston stem is raised, a turning plug journalled in a casting X having an aperture, the lever E secured at one end of the plug, its other end resting under the valve stem, and the ducts J and S, regulating screws L and Q, and the trap N, all substantially as described. 6th. The regulating screws for controlling the flow through the outlet apertures, combined with the caps which fit over the outer ends of the screws and catch the leakage, substantially as shown. 7th. The plug and the casing in which it is placed, combined with the washer, applied to the larger end of the plug, and the cap which secures the washer in position, substantially as set forth. 8th. The plug and the casing in which it is placed, combined with the washer, the nut, and the capto catch the leakage, substantially as specified.

No. 51,452. Home Trainer for Bicyclists.

(*Appareil pour apprendre à pedaler.*)

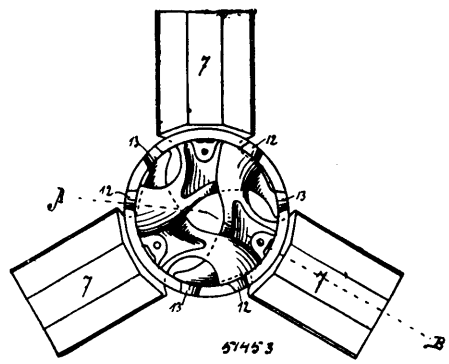
William Frank Mitchell, Guelph, Ontario, Canada, 25th February, 1896; 6 years. (Filed 30th January, 1896.)

Claim.—1st. In a home trainer, two rollers suitably journalled in the frame of the machine and adapted to support and be revolved by the driving wheel of a bicycle, in combination with a suitably journalled roller adapted to support the front wheel and geared to



to one of the first mentioned rollers, substantially as and for the purpose specified. 2nd. In a home trainer, two rollers suitably journalled in the frame of the machine and adapted to support and be revolved by the driving wheel of a bicycle, in combination with a suitably journalled roller adapted to support the front wheel and geared to one of the first mentioned rollers, and a registering device geared to one of the said rollers, substantially as and for the purpose specified. 3rd. In a home trainer, the combination of the rollers B and C having their spindles E suitably journalled in the frame A, the roller F journalled with its spindle E slightly in front of the position assumed by the front axle of a bicycle used on the machine, gearing between the spindle of one of the rear rollers B and C, and the spindle of the roller F, a registering device and gearing between the spindle of one of the rollers B, C and F, and the said registering device, substantially as and for the purpose specified. 4th. In a home trainer, the combination of the frame A, rollers B, C and F, the spindle E of the said rollers, the sprocket-wheels G, the sprocket chain H, the sprocket-wheel I, the sprocket-chain J, the sprocket-wheel K, the spindle L, the worm M, the worm-wheel N, the spindle O suitable journalled, the hand S and the dial R, substantially as and for the purpose specified. 5th. In a home trainer, the combination with means for supporting a bicycle so that the rotation of the driving wheel will produce no forward motion of the cycle, of means for rotating the front wheel so that the cycle may be maintained by the rider in a vertical position without the use of braces in the same manner as in ordinary track or road riding, substantially as and for the purpose specified.

No. 51,453. Tripod. (*Trépied.*)

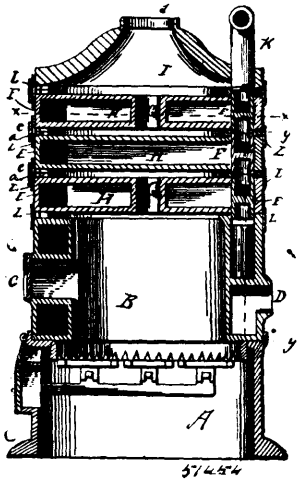


Robert Aucock, Utica, New York, U.S.A., 25th February, 1896; 6 years. (Filed 14th January, 1896.)

Claim.—1st. In a tripod, the combination of a head and three legs each having two pivots engaging the head in three separate vertical planes, each plane substantially coinciding with the axial line of the head. 2nd. In a tripod, the combination of a base ring, three interlocking leg butts passing within the base ring, and each having two pivots engaging in the upper surface of the base ring, substantially as set forth. 3rd. In a tripod, the combination of a base ring, three interlocking leg butts passing within the ring and engaging in bearings in the upper face of the ring, and a surface plate having the complement of the bearing secured on the base ring, substantially as set forth. 4th. In a tripod, the combination of a base ring, three interlocking leg butts passing within the ring and having conical bearings in the ring, substantially as set forth. 5th. In a tripod, the combination of a base ring, three interlocking leg butts passing within the ring each having two conical bearings therein, in a hinging line, passing through or close to the axial line of the head, substantially as set forth. 9th. In a tripod, the combination of a base ring, a leg butt passing within the ring and

having two conical bearings therein in a hinging line passing through or close to the axial line of the head, substantially as set forth. 7th. A head and folding legs each mounted on two pivots, the arms carrying the pivots over-lapping each other, giving a wide hinging base to each leg. 8th. A head and folding legs, each hinged in the head on pivots, the hinging or turning line of which is substantially in the diametral line of the head. 9th. In a tripod, the combination of a head and folding legs, each mounted on pivots in the head, the hinging line between the pivots of each leg intersecting the line between the pivots of each of the other legs.

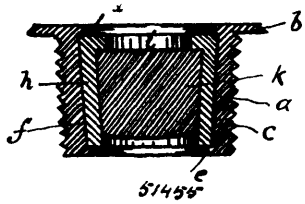
No. 51,454. Sectional Steam Boiler. (*Calorifère à eau.*)



George Fillion, Lake Linnen, Michigan, U.S.A., 25th February, 1896; 6 years. (Filed 29nd January, 1896.)

Claim.—1st. In a hot water boiler, the combination of the hollow sections provided with vertical division plates, with the connecting tubes having diagonal diaphragms, substantially as and for the purpose set forth. 2nd. In a hot water boiler, the combination of the hollow sections having supporting lugs, with the connecting tubes extending through and projecting beyond the sections, substantially the same distance as the lugs, whereby spaces are formed for the hot gases, as and for the purpose described. 3rd. In a hot water boiler, the combination of the hollow sections provided with the lugs and projecting connecting tubes extending through and projecting beyond the sections, with the bands for holding said sections in place, substantially as shown and described. 4th. In a hot water boiler, the combination of the hollow sections provided with the lugs and projecting connecting tubes, with the band for holding the sections in place, and the ash doors in the bands, substantially as and for the purposes set forth. 5th. In a hot water boiler, the combination of the hollow sections provided with vertical division plates and connecting tubes having diagonal diaphragms, and the spacing lugs, and the bands for holding the sections in place, substantially as and for the purpose specified.

No. 51,455. Bung. (*Bondon.*)



Gottlieb Frederick Bokel, South Easton, Pennsylvania, U.S.A., 25th February, 1896; 6 years. (Filed 29th January, 1896.)

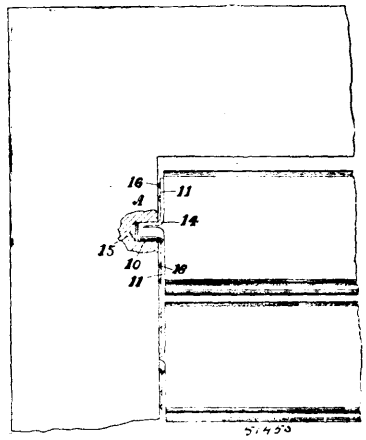
Claim.—The herein described bung, consisting of a metallic shell having an annular recess therein, a flexible bushing provided with an internal top flange, and a plug adapted to fit within the bushing, substantially as and for the purpose set forth.

No. 51,456. Blind Slat Journal.

(*Tourillon pour persiennes.*)

Edwin F. Newell, Middletown, Connecticut, U.S.A., 25th February, 1896; 6 years. (Filed 24th January, 1896.)

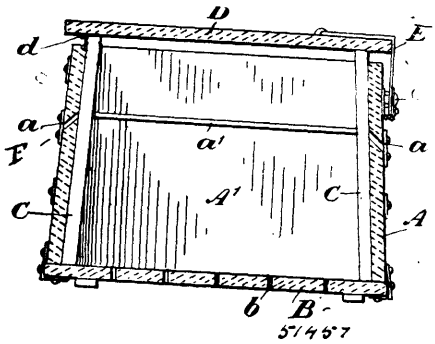
Claim.—1st. The flat-wire journal, its middle portion forming the end of a tenon, and the immediately-adjacent portions bent at right



angles to the middle portion and parallel with each other and concaved on their inner sides, forming a tenon open at its sides throughout its length, and extensions diverging at right angles from the tenon thus formed and adapted for attachment to the end of the blind-slat. 2nd. The flat-wire journal, its middle-portion forming the end of a tenon, and the immediately-adjacent portions bent at right angles to the middle portion and parallel with each other and concaved on their inner sides, forming a tenon open at its sides throughout its length, extensions diverging at right angles from the tenon thus formed, and each of said extensions having a bent projection at its end adapted for attachment to the end of the blind-slat.

No. 51,457. Box for Shipping Animals.

(*Boîte pour expédier les animaux.*)



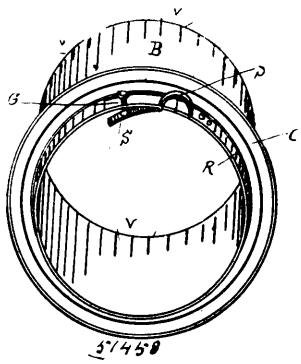
George Bell, Toronto, Ontario, Canada, 25th February, 1896; 6 years. (Filed 30th January, 1896.)

Claim.—1st. A box for shipping animals comprising an enlarged bottom, and sides tapering inwardly from bottom to top, a lid for such box and suitable openings, as and for the purpose specified. 2nd. A box for shipping animals comprising an enlarged bottom, and sides tapering inwardly from bottom to the top, a lid for such box and slots situated towards the tops of the sides and inclined upwardly from the exterior to the interior of box, as and for the purpose specified. 3rd. A box for shipping animals comprising an enlarged bottom, and sides tapering inwardly from bottom to top, a lid for such box, slots situated towards the tops of the sides and inclined upwardly from the exterior to the interior of the box and projecting corner straps extending over the corners of the slots, as and for the purpose specified. 4th. A box for shipping animals comprising an enlarged bottom, and sides tapering inwardly from bottom to top, posts in the corners of the box having their upper ends extending beyond the top of the sides, and a top or lid hinged to two of such posts and designed to rest upon the top of the posts and form an opening underneath the lid all around the top of the sides, as and for the purpose specified. 5th. A box for shipping animals comprising an enlarged bottom, and sides tapering inwardly from bottom to top projections at the top of the box and a lid supported on such projections, so as to form ventilating openings underneath such lid, as and for the purpose specified.

No. 51,458. Flue Thimble. (*Dé pour tuyaux de cheminée.*)

David F. Tyler, Wichita, Kansas, U.S.A., 25th February, 1896; 6 years. (Filed 30th January, 1896.)

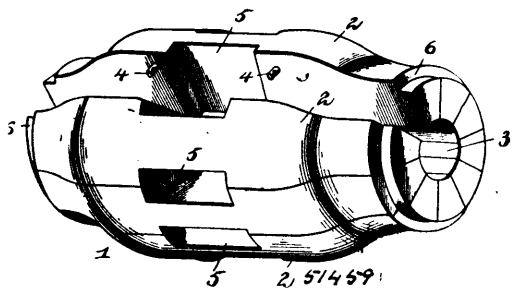
Claim.—A flue thimble having the outer slot F in combination with a plate spring provided with the clamping foot S and held by



its tension within said slot, to grip a stopper or pipe passing thereinto as and for the purpose set forth.

No. 51,459. Sectional Vehicle Hub.

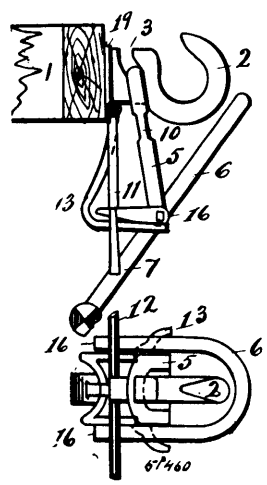
(*Moyeu sectionnel de voiture.*)



Robert F. A. MacKinnon, Centralea, Wisconsin, U.S.A., 25th February, 1896; 6 years. (Filed 27th January, 1896.)

Claim.—A hub, comprising an annular series of longitudinal sections, sector-shaped in cross section, extending the entire length of the hub, and constituting the same entirely and forming a longitudinal bore or opening for the reception of an axle box and designed to be connected by the ordinary end bands, said sections being provided at opposite sides of their centers with similar substantially rectangular recesses constituting one-half of a spoke socket and registering with each other when the sections are assembled to form the spoke sockets and adapted to receive the inner ends of wooden spokes of the ordinary construction, and the transverse dowel pins located at opposite sides of the spoke sockets and locking the sections against longitudinal movement on each other, substantially as described.

No. 51,460. Car Coupling. (*Attelage de chars.*)

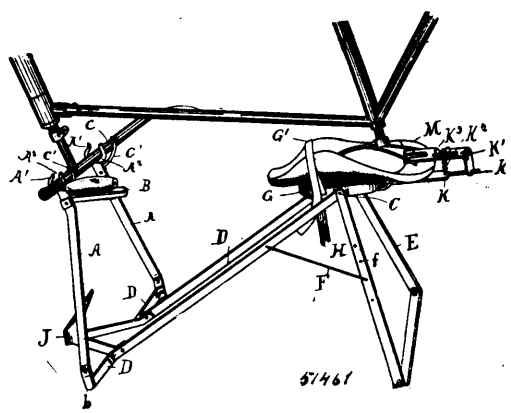


William Silver Tamworth, New South Wales, Australia, 25th February, 1896; 6 years. (Filed 30th January, 1896.)

Claim.—1st. A car coupling consisting of two links pivotally joined to one another, whereof one is counterbalanced by a weight as shown, and the outer end of the other pivotally held in a clutch jaw formed at the end of the drawbar, in combination with mechanism whereby the last-mentioned link is movable in such a way as to throw the counterbalanced link into position to couple, substantially as described with reference to sheet 1 of the accompanying drawings. 2nd. A car coupling wherein a coupling link is acted upon conjointly by manual gear and a counterweight to cause it to enter its drawhook, substantially as described. 3rd. The combination with a pair of drawbars, in the end of one of which a clutch jaw 3 is formed, of links 5 and 6, and counterweight 7, and mechanism such as 11, 12 and 13, acting on the link 5 to couple the link 6 to the drawhook 15, substantially as described with reference to the accompanying drawings. 4th. The combination of the parts marked 3, 5, 6, 7, 8, 9, 10 and 13, drawhooks, and mechanism for moving the part 13, substantially as described with reference to sheet 1 of the accompanying drawings. 5th. A car coupling consisting of two links pivotally joined to one another, whereof one is counterbalanced by a weight as shown, and formed with heel pieces on the counterbalanced end, with which pieces a lifting fork engages to extend the coupling and lift it bodily about the outer end of the other link, which is held pivotally in a clutch jaw formed in the end of the drawbar of the car, substantially as described with reference to sheet 2 of the accompanying drawings. 6th. The combination with a pair of drawbars in the end of one of which a clutch jaw 3 is formed of links 5 and 6, the latter having a counterweight 7, and heel pieces 16, and mechanism consisting of a hand lever and a lifting lever acting on the heels 16 to extend the links and couple the link 6 to the drawhook 15 substantially as described with reference to the accompanying drawings. 7th. The combination of the parts mrrked 3, 5, 6, 7, 8, 9, 10, 13 and 16, drawhooks and mechanism for moving the part 13, substantially the same as described with reference to sheet 2 of the accompanying drawings.

No. 51,461. Bicycle-Stand Holder.

(*Porte-support de bicycle.*)

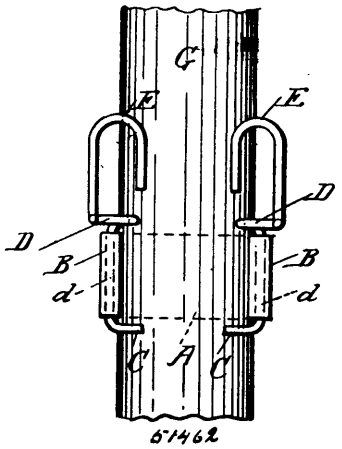


Harry Codrington Phillips, Rochester, New York, U.S.A., 25th February, 1896; 6 years. (Filed 27th January, 1896.)

Claim.—1st. In a bicycle-holder, the combination with the base frame adapted to rest upon the floor and a saddle-support thereon, of the movable member pivoted below its upper end to the frame and having devices at its upper end for engaging the handle-bar of a bicycle, the upper end of said movable member being adjustable toward and from the saddle-support, substantially as described. 2nd. In a bicycle-holder, the combination with the collapsible base-frame, adapted to rest upon the floor and composed of the two parts pivoted together, and the saddle-support thereon, of the movable member pivoted to the base frame below its upper end and having devices, as hooks, at its upper free end for engaging the handle-bar of a bicycle, substantially as described. 3rd. In a bicycle-holder, the combination with the base-frame adapted to rest upon the floor and composed of the two parts adjustably connected, and the saddle-support thereon, of the movable member pivoted to said frame below its upper end, and having clamping devices for positively engaging and clamping the handle-bar of a bicycle, substantially as described. 4th. In a bicycle-holder, the combination with the base-frame composed of the parts D and E pivoted together, the detachable connection between them, and the bracket J, of the pivoted member A A, the forked bracket B, and the securing devices arranged on the upper end of the pivoted member and on the base frame for positively engaging separated parts of a bicycle-frame and preventing the movement of the movable member, substantially as described. 5th. In a bicycle-holder, the combination with the base-frame composed of the parts D and E pivoted together, a locking device for securing them, the pivoted saddle-support, the forked bracket thereon, and the bracket J, of the pivoted member A A, the forked bracket B, and clamping devices on the end of the pivoted member, substantially as described. 6th. In a bicycle-holder, the combination with the base-frame, a saddle-support thereon, and a saddle-attaching device, of the movable member pivoted to the base-frame below its upper end and having the relatively adjustable prongs at its upper end adapted to clamp

the handle-bar of a bicycle whereby the bicycle may be held and locked by its weight to the stand, substantially as described. 7th. In a bicycle-holder, and as a means for clamping the handle-bar thereto, the combination of an arm or support, the stationary curved fingers, the movable co-operating curved fingers, the guide pins C^1, and the movable blocks C, substantially as described. 8th. In a bicycle-holder, the combination with the frame, a saddle-support thereon, and the pivoted member having handle attaching devices, of the saddle-clamp on the saddle-support having the downwardly extending hook for engaging the underside of the saddle, and adjustable vertically and also longitudinally of the support to secure the saddle thereto, substantially as described. 9th. In a bicycle-holder, the combination with the frame, and a saddle-support, of the bracket secured to the support, the vertically and longitudinally adjustable clamp arm on the bracket and the clamping bolt, substantially as described. 10th. In a bicycle-holder, the combination of the base-frame, and the movable member pivoted below its upper end to the frame, of a pivoted saddle-support, and devices thereon for engaging a bicycle saddle, and clamping devices, as hooks, for engaging a bicycle-handle-bar, said support and clamping devices being arranged upon the frame and movable member and relatively adjustable toward and from each other by the movement of the member on its pivot, substantially as described.

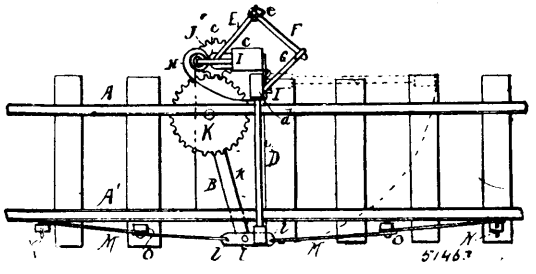
No. 51,462. Clip. (*Tenailles.*)



William Chivers, Bristol, England, 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—A clip comprising a back portion provided with an eye at each end, and a front portion consisting of two arms pivoted in the said eyes and provided with projections for engaging with the article to be supported, and projections operating to bear against the support when the first said projections are pressed toward each other, substantially as set forth.

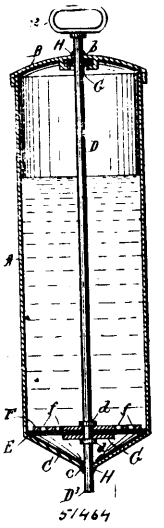
No. 51,463. Railroad Cattle Guard.
(*Garde-bétail de chemin de fer.*)



Edwin G. Emmert, Sherdahl, Kansas, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—The combination of a post C, a gate D hinged thereto and extending across the track, a shaft E supported in bearings on the post which carries a pinion J and has a crank-arm extending behind said post, an arm G secured to the gate stile, a link F, connecting arm G with the crank-arm, a spur-wheel K intermeshing with the pinion J and having an arm which passes under and completely across the track, tread-levers N connected to said arm, and a retracting spring secured to the gate, all substantially as shown and described.

No. 51,464. Fire Extinguisher. (*Extincteur d'incendie.*)



Walter Robert Johnston, New York, State of New York, U.S.A., 26th February, 1896; 6 years. (Filed 17th January, 1896.)

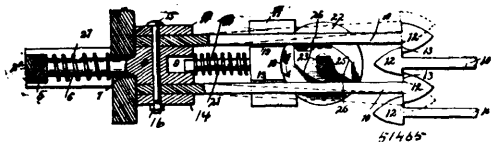
Claim.—1st. In a fire extinguisher, the combination of a cylindrical casing, provided with a closed end piece at one end, and a conical cap or cover at the other, the apex of which is directed outwardly, a rod which passes centrally through said casing and through said end piece and said cap or cover, and projects at each end, one end of said rod being provided with a handle, and the other end being adapted to project through the conical cap or cover, said end piece adjacent to the handle end of the rod being provided with a packing, through which said rod passes, and each end of said rod being secured in place by means of solder, said rod being also provided at the end adjacent to the conical cap or cover with a disc, which is secured thereto, and of less diameter than the casing, and with a washer or valve which is also secured thereto adjacent to the outer side of said disc, and which is adapted to snugly fit within the inner side of the casing, substantially as described. 2nd. In a fire extinguisher, the combination of a cylindrical casing, provided with a closed end piece at one end, and a conical cap or cover at the other, the apex of which is directed outwardly, a rod which passes centrally through said casing and through said end piece and said cap or cover, and projects at each end, one end of said rod being provided with a handle, and the other end being adapted to project through the conical cap or cover, said end piece adjacent to the handle end of the rod, being provided with a packing through which said rod passes, and being secured in place by means of solder said rod being also provided at the end adjacent to the conical cap or cover with a disc which is secured thereto, and of less diameter than the casing and with a washer or valve, which is also secured thereto, adjacent to the outer side of said disc, and which is adapted to snugly fit within the inner side of the casing, said disc being also perforated, and said disc and said washer being held together by means of a plate secured to said rod, substantially as described. 3rd. In a fire extinguisher, the combination of a cylindrical casing, one end of which is provided with a conical cap or cover, the apex of which is provided with a closed end piece, of a rod which passes centrally through said end piece and through said conical cap or cover, and is provided with a handle adjacent to said end piece, and which is held in place by soft solder, or similar material at each end, said rod being provided with a disc adjacent to the conical cap or cover, which is of less diameter than the casing and with a flexible washer or valve being adapted to closely fit within the casing, substantially as described. 4th. In a fire extinguisher, the combination of a cylindrical casing, one end of which is provided with a conical cap or cover, the apex of which is directed outwardly, and the other end of which is provided with a closed end piece, of a rod which passes centrally through said end piece and through said conical cap or cover, and is provided with a handle adjacent to said end piece, and which is held in place by soft solder or similar material at each end, said rod being provided with a disc adjacent to the central cap or cover, which is of less diameter than the casing, and with a flexible washer or valve secured thereto on the outer side thereof, said washer or valve being adapted to closely fit within the casing and said disc being also perforated, substantially as described.

No. 51,465. Car Coupler. (*Attelage de chars.*)

Isaac Fetters, Attica, Kansas, U.S.A., 26th February, 1896; 6 years. (Filed 31st January, 1896.)

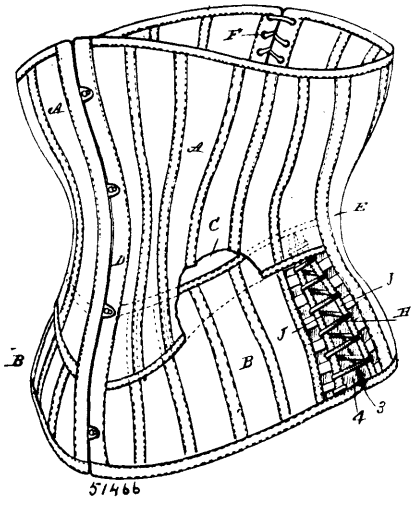
Claim.—1st. A car coupler, comprising parallel side-bars rigidly connected to a portion depending from a car, and slotted at their front ends, a cross-bar connecting the same, a block, spring-arms

bolted thereto and terminating at their front ends in arrow-heads, a spring-actuated follower projecting through longitudinal slots in



said spring-arms, a rock-shaft projecting through the slots of the side-bars, a disc mounted thereon and engaging said follower and projecting through the slots of said arms, wedge-blocks having cam or eccentrically curved surfaces, and crank-handles mounted upon said rock-shaft, substantially as set forth. 2nd. A car-coupler, comprising a pair of slotted side-bars, a bar connecting their rear ends, a depending portion of a car connecting said bars at a suitable point, a block arranged at the front side of said depending portion, having a recess or cavity in its front side, spring-arms bolted at their rear ends upon said block and terminating at their front ends in arrow heads and provided with longitudinal slots, a follower projecting through the slots of said arms having a concaved front face and a rearwardly projecting stem, which enters the cavity or recess of said block, an expansion-spring interposed between said block and said follower, a rock-shaft projecting through the slotted side-bars, provided with wedge-blocks and with a disc which engages the concaved side of said follower and projects through the slots of said arms, and crank-arms carried by said rock-shaft, substantially as set forth. 3rd. A car-coupler, comprising parallel side-bars which are secured rigidly to a depending portion of a car and project both rearwardly and forwardly therefrom, and are provided with longitudinal slots and at their front ends, a cross-bar connecting said parallel side, bars at their rear ends, a block arranged at the front side of said depending portion of the car and provided with a stem which projects rearwardly through an opening in said depending portion, and with a cross-head at the rear end of the said stem, which engages the slots at the rear ends of the side bars, a spring encircling said stem and bearing at its opposite ends against said cross-head and said depending portion of the car, a pair of spring arms resting upon the upper and lower sides of said block and terminating at their front ends in arrow-heads, plates upon said arms, a bolt extending through said plates, said arms and said blocks, a nut engaging the the threaded end of said bolt, a rock-shaft projecting through the front slot of said side-bars, a disc mounted rigidly thereon and projecting through longitudinal slots in said spring-arms, wedge-blocks carried by said disc and said shaft, a follower also projecting through the slots of said spring arms, and provided with shoulders which rest against the opposing faces of said spring-arms, and with a rearwardly projecting stems which enters a cavity in the block carrying the spring-arms, and a spring spirally encircling said stem and bearing at its opposite ends against said block and the follower, substantially as set forth.

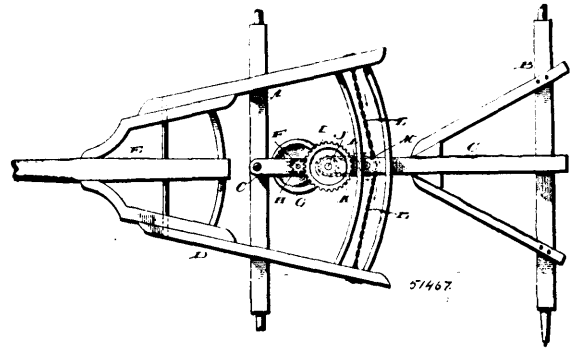
No. 51,466. Corset. (*Corset.*)



The Michigan Corset Company, Jackson, Michigan, assignee of Fred C. Wright, Springfield, Massachusetts, both in the U.S.A., 26th February, 1896; 6 years. (Filed 31st January, 1895.)

Claim.—1st. A corset consisting of the two lower front sections, the two upper front sections having the lower ends thereof overlapping the upper ends of said lower sections and having the lacing devices described at each hip portion of the corset, substantially as described. 2nd. A corset having the lacing strips J, J, at each hip portion thereof combined with the elastic lacing H, engaging said lacing strips and the underlying portion 4, of the corset having a fullness which permits the action of said elastic lacing, substantially as described.

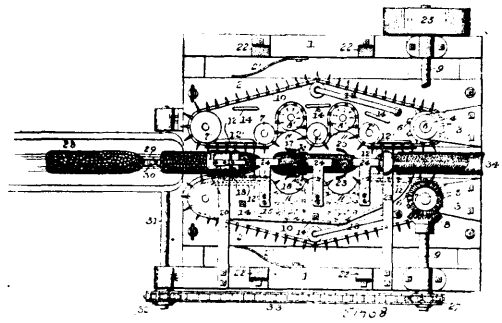
No. 51,467. Wagon and Tongue Stadier.
(*Support pour armon de wagon.*)



Edward Brinck, Hicksville, Ohio, U.S.A., 26th February, 1896; 6 years. (Filed 31st January, 1896.)

Claim.—1st. In combination, with the pivoted tongue of a vehicle, a wheel, suitably supported, and connections between the wheel and the tongue, whereby the swinging of the tongue in either direction may revolve the wheel. 2nd. In combination, with the front axle of a vehicle, the tongue attached thereto, the reach pivoted to the axle, the wheel supported by the reach, the chain connected at its ends to the tongue, the wheels on the reach over which the chain passes in opposite directions and gearing between the chain and the wheel.

No. 51,468. Machine for Cutting Corn.
(*Machine pour couper le blé d'inde.*)



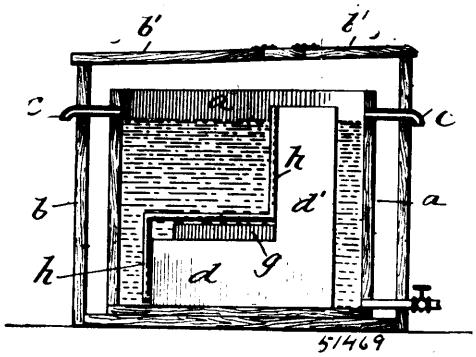
Samuel Elsworth Morral and William Wayne Morral, both of Morral, Ohio, U.S.A., 26th February, 1896; 6 years. (Filed 31st January, 1896.)

Claim.—1st. In a machine for cutting corn from the cob, the combination of a series of cutters arranged in line, and an endless belt having teeth adapted to penetrate the ears for feeding the ears through the series of cutters, substantially as set forth. 2nd. In a machine for cutting corn from the cob, the combination of two feeding belts each having teeth adapted to penetrate the ears for feeding the same, substantially as and a series of cutters and scrapers arranged between the belts, set forth. 3rd. In a machine for cutting corn from the cob, the combination of two feeding belts and a series of cutters and scrapers arranged between them, substantially as described. 4th. An ear feeding device for machines for cutting corn from the cob comprising an endless belt adapted to engage and feed the ears in a straight path, and means for guiding the belt out of the line of said path to afford space for cutters, substantially as set forth. 5th. An ear feeding device for machines for cutting corn from the cob, comprising an endless belt adapted to engage and feed the ears, pulleys 7^1 for guiding the belt in a straight path, and a pulley 8^1 for guiding the belt out of the line of said straight path to afford space for cutters, substantially as described. 6th. In an ear feeding device for machines for cutting corn from the cob, the combination of the plate or frame 2, shaft 5 having gear 7 and sprocket wheel 6 thereon, the endless belt 10 passing around said sprocket wheel and adapted to engage and feed the ears, pulleys 7^1 for guiding the belt in a straight path, and the deflecting pulley 8^1 for guiding the belt out of the line of said path, substantially as shown and described.

No. 51,469. Water Heater for Troughs.
(*Calorifère à eau pour auges.*)

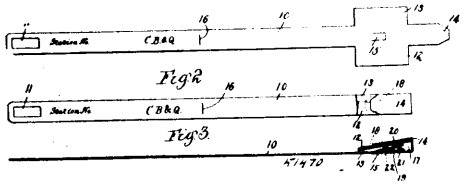
Robert M. Oliver and Carter B. Keene, both of Freedom, Maine, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—1st. A water heater for troughs, consisting of a horizontal combustion chamber, a vertical flue connected to the combustion



chamber, and an independent air tube extending down into the combustion chamber, in combination with a heating device in said combustion chamber, substantially as described. 2nd. A water heater for troughs, consisting of a horizontal combustion chamber and a vertical flue connected thereto, a pan on top of said combustion chamber, and an air tube extending down into the combustion chamber, substantially as described. 3rd. A water heater for troughs, consisting of a horizontal combustion chamber and a vertical heating flue connected thereto, and a pan on top of said combustion chamber, and a guard extending over said pan, substantially as described. 4th. In a water heater, the combination of a horizontal combustion chamber, a vertical flue connected to said combustion chamber, a pan on said combustion chamber, and an air tube extending from the combustion chamber up and over the pan, forming a guard therefor, and thence extending up to near the top of the flue, substantially as described. 5th. In a water heater, the combination of a horizontal combustion chamber adapted to receive a lamp, a vertical flue connected to one end of the combustion chamber, and a deflecting plate secured to the under side of the top of the combustion chamber, and curving down toward either side of the frame, substantially as described. 6th. A water heater for troughs, consisting of a horizontal combustion chamber, a vertical heating flue connected thereto, a pan on top of the combustion chamber, a deflector plate secured centrally to the underside of the top of the combustion chamber directly beneath the pan and curving downwardly towards the sides of the chamber, and an air tube tube connected to the combustion chamber, in combination with a heating device directly beneath said deflector in the combustion chamber, substantially as described and for the purpose set forth.

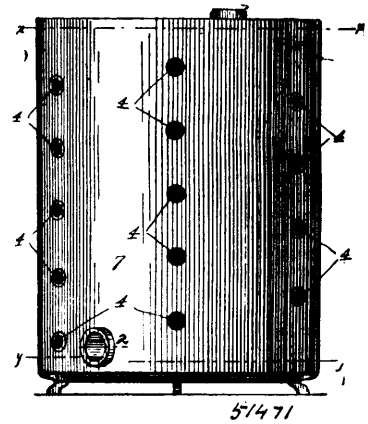
No. 51,470. Car Seal. (*Sceau pour chars.*)



Louis J. Genett, Marquette, Michigan, U.S.A., 26th February, 1896; 6 years. (Filed 1st February, 1896.)

Claim.—1st. A car seal comprising a strip of material adapted to be formed into a casing or chamber at one end thereof and provided with a perforation at the opposite end thereof, a hook arranged to be received in said casing or chamber, means for preventing the withdrawal of said hook, said hook adapted to receive the perforation in the end of said strip, as and for the purpose set forth. 2nd. A car seal, comprising a strip of suitable material having a perforation in one end thereof, and having side flanges and an end flap in the opposite end thereof, adapted to be bent to form a chamber, said chamber adapted to receive the other end of said strip, and means for locking said perforated end within said chamber or casing as and for the purpose set forth. 3rd. A car seal comprising a strip of suitable material, having a perforation at one end thereof, and having side flanges and an end flap and a lip at the opposite end thereof, said side flanges and end flap adapted to be bent or folded upon each other to form a casing or chamber inclosing said lip, a clamping hook adapted to be received in said chamber and to be held against withdrawal therefrom by said lip, said clamp adapted to receive and hold against withdrawal the perforated end of said strip, as and for the purpose set forth. 4th. A car seal comprising a strip of suitable material, provided with a perforation in one end thereof and having side flanges and an end flap, and having a lip or tongue in the opposite end thereof, said side flanges and end flap adapted to be folded upon each other to form a chamber, a clamping hook adapted to be received in said chamber and to be held against withdrawal therefrom by said lip or tongue, said clamping hook comprising an upturned lip and a co-operating narrowed projection, said narrowed projection arranged to be passed through the perforation in the end of said strip to hold the same against withdrawal, as and for the purpose set forth. 5th. A car-seal, comprising a strip of suitable material, having means for securing together against detachment the ends thereof, and provided with a transverse slit, intermediate the ends thereof, as and for the purpose set forth. 6th. A car seal, comprising a strip of suitable material, means for locking undetachably the ends thereof together, said strip having stamped or placed thereon, the station number and provided with a transverse slit intermediate the ends thereof, as and for the purpose set forth.

No. 51,471. Radiator. (*Calorifère.*)



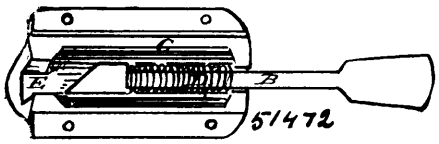
Josiah B. Fox, Slatington, Pennsylvania, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—1st. In a device of the character set forth, the combination of a cylindrical drum having an inlet opening at the bottom for admitting the products of combustion, and an outlet opening at the top for discharging the same, and a series of deflecting pipes passing transversely through said drum, arranged in pairs, the members of each pair being parallel horizontal planes and set at an angle to the base of said drum and oppositely inclined to the adjacent one, substantially as and for the purpose described. 2nd. In a device of the character set forth, the combination of a cylindrical drum having an inlet opening at the bottom for admitting the products of combustion and an outlet opening at the top for discharging the same, a series of deflecting pipes passing transversely through said drum, arranged in pairs, the members of each pair being in parallel horizontal planes and set an angle to the base of said drum and inclined oppositely to those of the adjoining pair, and a series of vertical pipes set in the space between the outer ends of the adjacent lateral deflecting pipes. 3rd. In a device of the character set forth, the combination of a drum having an inlet opening at the bottom for the entrance of the products of combustion, and an outlet opening at the top for the discharge of the same, vertical partitions in said drum dividing the same ot into compartments through each of which the products of combustion are forced to pass, and a series of deflecting pipes passing transversely through said drum, arranged in pairs, the members of each pair being in parallel horizontal planes and set an angle to the base of said drum and at an inclination opposite to those of the adjoining pairs, substantially as and for the purpose described. 4th. In a device of the character set forth, the combination of a drum having an inlet opening at the bottom for the entrance of the products of combustion, and a discharge opening at the top, a series of vertical partitions dividing said drum off into a series of compartments leading one within the other, whereby the products of combustion are forced to pass through the drum a number of times equal to the number of said compartments, a series of deflecting pipes passing transversely through said drum arranged in pairs, the members of each pair being in parallel horizontal planes and set at an angle to the base of the drum, and a protecting casing for said drum, surrounding the same, open at the top and bottom and having the lower ends of each of said deflecting pipes projecting through the same, substantially as and for the purpose described. 5th. In a device of the character set forth, the combination with the drum, of vertical pipes extended therethrough and open at both ends and independent deflector pipes supported in the walls of said drum and arranged in oppositely disposed inclined planes with their ends open, substantially as described.

No. 51,472. Sash Lock, etc. (*Arrête-croisée.*)

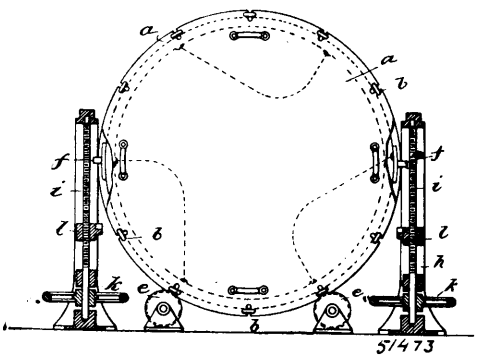
Walter Bernhart, Cornwall, Ontario, Canada, 26th February, 1896 6 years. (Filed 31st January, 1896.)

Claim.—1st. In a sash lock and holder, a notched bar in combination with a reversible spring bolt, as described and shown for the



purpose set forth. 2nd. In a sash lock and holder a bevelled headed bolt, with a spring, and a case combined with a notched bar, as shown and described for the purpose set forth.

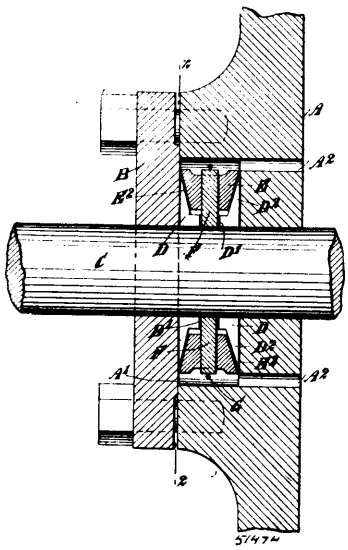
No. 51,473. Apparatus for Use in Making Cheese. (*Appareil en usage pour la fabrication du fromage.*)



Jan Helder, Dokkum, Netherlands, 26th February, 1896; 12 years. (Filed 4th February, 1896.)

Claim.—1st. In an apparatus for use in making cheese, the combination with a drum adapted to be tightly closed, and with means for rotating it around a horizontal axis, of means for turning said drum also around another horizontal axis forming angles of ninety degrees with said former axis, substantially as and for the purpose hereinbefore set forth. 2nd. In an apparatus for use in making cheese, the combination with a drum adapted to be tightly closed, and to be rotated round a horizontal axis by means of rolls or their equivalents, of frames having means adapted to raise said drum from said rolls, to support it in its raised position, and to allow turning of the said drum around another horizontal axis forming angles of 90 degrees with said former axis, substantially as and for the purpose hereinbefore set forth. 3rd. In an apparatus for use in making cheese, the combination with a drum adapted to be tightly closed, and to be rotated around a horizontal axis by means of rolls or their equivalents, of frames having vertical threaded spindles carrying slides forming bearings adapted to support said drum by means of pivots secured to the said drum, means for turning said spindles, substantially as and for the purpose hereinbefore set forth. 4th. In an apparatus for use in making cheese, the combination with a drum adapted to be tightly closed, and to be rotated around one or the other of two horizontal axes forming angles of ninety degrees, of a sieve adapted to be placed upon the bottom of said drum, and to cover the whole surface of the latter, said sieve having handles extending up to the cover of the said drum, substantially as and for the purpose hereinbefore set forth. 5th. In an apparatus for use in making cheese, the combination with a drum adapted to be tightly closed, and to be rotated around one or the other of two horizontal axes forming angles of ninety degrees, of set of knives adapted to be attached to and to be removed from the mantle of said drum, substantially as and for the purpose hereinbefore set forth. 6th. In an apparatus for use in making cheese, the combination with a drum adapted to be tightly closed, and to be rotated around one or the other of two horizontal axes forming angles of ninety degrees, of sets of knives adapted to be attached to and to be removed from the mantle of said drum, said sets consisting of curved parallel knives arranged so as to extend in the circumference of said mantle, substantially as and for the purpose hereinbefore set forth. 7th. In an apparatus for use in making cheese, the combination with a drum adapted to be tightly closed, and to be rotated around one or the other of two horizontal axes forming angles of ninety degrees, of sets of knives adapted to be attached to and to be removed from the mantle of said drum, said sets consisting each of curved parallel wires connected by plates, and adapted to be arranged so as to extend in the circumference of said mantle, means for detachably attaching said plates to the said mantle, substantially as and for the purpose hereinbefore set forth. 8th. In an apparatus for use in making cheese, the combination with a drum having a double bottom, a double mantle, and a cover adapted to be tightly closed, and with means for rotating said drum around one or the other of two horizontal axes forming angles of ninety degrees with each other, of a wide-meshed sieve consisting of strained wires, and having handles extending up to said cover, and of sets of parallel curved knives connected, and adapted to be arranged, so as to extend in the circumference of said mantle, said sieve having an extent equal to the inner of said bottom, said knives consisting also of wire, substantially as and for the purpose hereinbefore set forth.

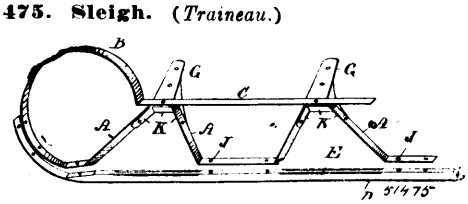
No. 51,474. Metallic Packing. (*Garniture métallique.*)



Edward Eathrop, Raysford, Lusignehanna, Pennsylvania, U.S.A., 26th February, 1896; 18 years. (Filed 1st February, 1896.)

Claim.—1st. A metallic packing, comprising a ring provided with an annular groove having outwardly bevelled sides, and a second ring having inwardly bevelled sides and fitting in the groove of the said first named ring, substantially as shown and described. 2nd. A metallic packing, comprising a ring provided with an annular groove having outwardly bevelled sides, a second ring having inwardly bevelled sides and fitting in the groove of the said first named ring, and blocks fitted to slide in one of the rings, to pass through registering openings in the ends of the other ring sections, substantially as shown and described. 3rd. A metallic packing, comprising a ring formed in sections, each section being provided with a groove in its periphery, the said groove having beveled sides and recesses in the ends, and a second ring likewise formed in sections, each section having its sides beveled to fit the grooves of the other ring sections and blocks fitted to slide in the second named ring, to pass through the recesses in the first named ring, substantially as shown and described. 4th. A metallic packing, comprising a head formed with a chamber in communication with a pressure supply, two sectional packing rings held in the said chamber and one fitting upon the other and blocks fitted to slide in the said rings, to break the joint of the inner ring, substantially as shown and described.

No. 51,475. Sleigh. (*Traineau.*)



Charles W. Schultz, Detroit, Michigan, U.S.A., 26th Februa 1896; 6 years. (Filed 3rd February, 1896.)

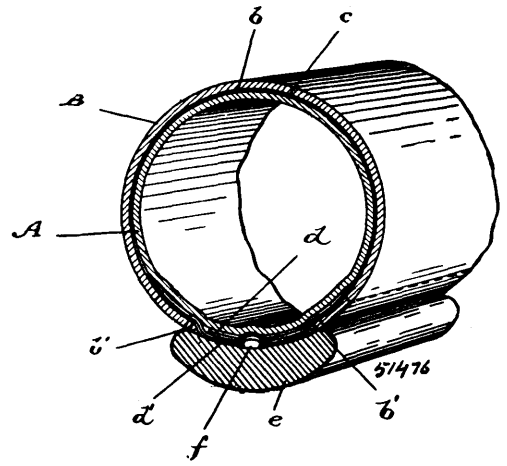
Claim.—1st. A sleigh having runners or shoes detachable from the knees and front nose or curvet, said knees and curved nose form continuously and integral with the rave, and the knees reenforced by brackets, as set forth. 2nd. A bob sleigh having detachable runners and the rave curved nose and knee formed of a continuous bar of steel, a braclet bolted to opposite knees and a bearing supported by said bracket and rave, as set forth. 3rd. A sleigh having a detachable runner connected to the knees and curved nose, as set forth. 3rd. A sleigh having a detachable runner connected to the knees and curved nose, as set forth. 4th. In a bob-sleigh, the spindle 4, having 5, and clip plate 6, arm 7, and clip plate 8, in combination with a divided bearing 9, having lugs 10, as set forth.

No. 51,476. Tire. (*Bandage.*)

Conard Henry Hoff, Milton, Ontario, Canada, 26th February 1896; 6 years. (Filed 1st February, 1896.)

Claim.—1st. A pneumatic tire consisting of an air tube, and outer covering enclosing the air tube, a textile fabric strip secured to the

outer covering, and adapted to be cemented to the rim, substantially as specified. 2nd. A pneumatic tire consisting of an air tube, an

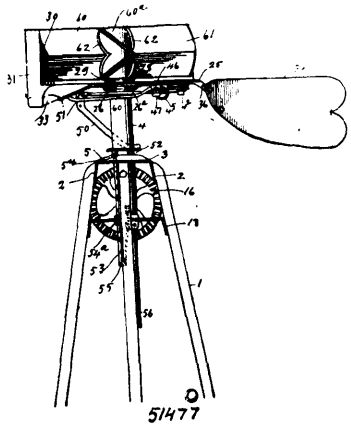


outer covering inclosing the air tube, composed of a yieldingly resilient bend, a textile fabric strip projecting from one of the opposite meeting edges of the band, adapted to be cemented to the rim, and means for temporarily locking together the opposite meeting edges, substantially as specified. 3rd. A pneumatic tire consisting of an air tube, an outer covering enclosing the air tube, composed of a yieldingly resilient band, a textile fabric lapel extending from each of the opposite meeting edges of the said band, and a temporary fastener to lock together the said lapels to close the outer covering, substantially as specified. 4th. A pneumatic tire consisting of an air tube, an outer covering enclosing the aia tube, composed of a yieldingly, resilient band, a textile fabric strip projecting from one of the opposite meeting edges of the band, adapted to be cemented to the rim, and a fastener for temporarily locking together the opposite meeting edges, consisting of a spring stud and an embracing bottom, substantially as specified. 5th A pneumatic tire consisting of an air tube, an outer covering enclosing the air tube, composed of a yieldingly resilient band, a textile fabric lapel extending from each of the opposite meeting edges of the said band, and a fastener for temporarily locking together the opposite meeting edges, consising of a spring stud and an embracing button, substantilly as specified. 6th. A pneumatic tire consisting of an air tube, an outer covering enclosing the air tube, composed of a yieldingly, resilient bend, a textile fabric strip projecting from one of a the opposite meeting edges of the band, adapted to be cemented to the rim, a fastener for temporarily securing together the opposite meeting edges, consisting of a hook secured to one of the meeting edges, and an eye secured to the other, substantially as specified. 7th. A pneumatic tire consisting of an air tube, an outer covering inclosing the air tube, composed of a yieldingly resilient band, a textile fabric lapel extending from each of the opposite meeting edges of the said band, a fastener for temporarily securing together the opposite meeting edges, consisting of a hook secured to one of the meeting edges, and an eye secured to the other, substantially as specified. 8th. A pneumatic tire consisting of an air tube, an outer covering inclosing the air tube, composed of a yieldingly resilient band, a textile fabric strip projecting from one of the opposite meeting edges of the band, adapted to be cemented to the rim, a fastener for temporarily securing together the opposite meeting edges, consisting of a continuous wire, secured to one of the opposite meeting edges, and a series of hooks secured to the other of the opposite meeting edges, adapted to embrace the said wire, substantially as specified. 9th. A pneumatic tire consisting of an air tube, an outer covering inclosing the air tube, a continuous wire located in each edge of the outer covering, a securing band in juxta position to the meeting edges, and a series of hooks alternately arranged on the securing band, adapted to embrace the wired edges, substantially as specified.

No. 51,477. Windmill. (*Moulin à vent.*)

Frederick A. Mathews and George Stevenson, both of La Harpe, Kansas, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—1st. In a windmill, the combination with a frame, of a barrel extending vertically and rigidly and immovably mounted thereon, a shaft projected through the barrel and axially coincident therewith, the lower end of the barrel being closed, and in which end the corresponding end of the shaft is journalled a block arranged in the upper end of the barrel and projecting above the same and in which the shaft has a bearing, said block having a flange at its upper end a platform revolubly mounted upon the block and held in place by the flange on the block and provided at its edge with a vertical flange extending around a portion thereof, a vane fixed to the platform, and capable of keeping the same in the proper relative position to the wind, a horizontal wind-wheel mounted on the shaft and directly above the platform, and means at the lower end of the shaft



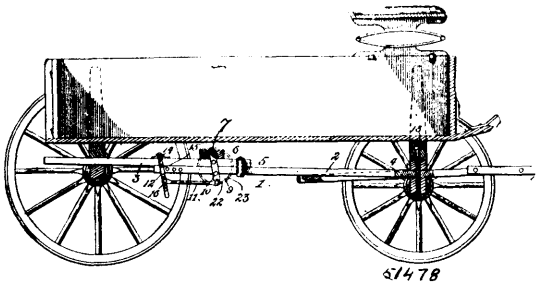
converting the rotary movements, substantially as described. 2nd. In a windmill, the combination with a frame, of a barrel extending vertically thereon, a shaft projected through the barrel and axially coincident therewith, the lower end of the shaft having a bearing in the corresponding end of the barrel of the block in the upper end of the barrel and in which the shaft is journalled, a collar revolubly embracing the block and resting upon the upper end of the barrel, a platform fixed to the collar, the latter having formed in its upper end a rabbet groove, a collar fixed to the upper end of the block and seated within said rabbet groove, whereby said collar is held on the block, and whereby the collar is placed partially below the surface of the platform, wind-wheel mechanism on the platform and connected to the shaft, substantially as described. 3rd. In a windmill, the combination with a frame, a barrel extending vertically thereon, a platform mounted revolubly upon the barrel, a shast extending through the barrel, a wind-wheel on the shaft, a wing arising vertically from one side of the platform, a vane rigid on the platform and extending radially therefrom, a movably vane pivoted to the platform, a spring operating with the movable vane and for keeping the same away from the rigid vane, a pitman connected to the movable vane, a bent lever connected to the pitman and having one end extended alongside of the barrel, a collar movable vertically on the barrel and capable of engaging the bent lever, and means for giving the collar a vertical movement, substantially as described. 4th. In a windmill, the combination with a frame, of a barrel extending vertically thereon, a platform revolubly mounted on the barrel, a wing arising from one side of the platform, a shaft projected through the barrel and revolubly mounted therein, a wind-wheel fixed to the shaft, and located directly above the platform, a rigid vane on the platform and projecting radially therefrom, a movable vane, a pulley-wheel to which said movable vane is fixed, a spindle on the platform, by means of which the pulleye-wheel is revolubly mounted, a retractile spring connected to the pulley-wheel and operating to keep the movable vane away from the rigid vane, a pitman eccentrically connected to the pulley-wheel, a lever to which the remaining end of the pitman is connected, one end of the lever being extended alongside of the barrel, a collar movable vertically on the barrel and capable of engaging said end of the lever, a rod movable vertically in the frame and affixed to the collar, a pulley mounted on the barrel, and a cord connected to the rod and operated over the pulley, substantially as described. 5th. In a windmill, the combination with a horizontal wind-wheel, of a platform revolubly mounted beneath the same, a wing arising from one side of the platform, a rigid vane fixed to the platform and projected radially therefrom, a movable vane, a disc to which the movable vane is fixed, said disc having in its periphery and elongated notch, a pulley-wheel fixed to the disc and concentric therewith, a spindle fixed to the platform and by which the disc and pulley-wheel are revolubly mounted, a stud fixed to the platform and arranged in the notch of the disc, whereby the movements of the movable vane are limited, a retractile spring connected to the pulley and operating to hold the movable vane away from the rigid vane, a pitman eccentrically connected to the pulley, a bent lever to which the pitman is connected at its remaining end, one end of the lever being elongated and extended downwardly, a collar movable vertically on the frame of the windmill and capable of engaging the extended end of the lever, and means for moving the collar vertically, substantially as described.

No. 51,478. Wagon Brake. (*Frein de wagon.*)

Deloss Rhoades, Randolph, New York, U.S.A., 26th February, 1896; 6 years. (Filed 31st January, 1896.)

Claim.—1st. In an automatic brake, the combination of a brake-wheel adapted to engage a vehicle-wheel, a clutch concealed within the brake-wheel and protected by the same and capable of locking the brake-wheel against rearward rotation to enable the same to

operate as a brake shoe and adapted to permit a free forward rotation of the brake-wheel, to permit the vehicle to be backed, and



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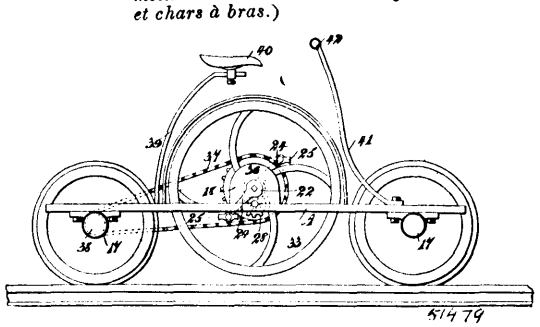
means for throwing the brake-wheels into and out of engagement with the vehicle-wheel, substantially as described. 2nd. In an automatic brake, the combination of a brake-wheel provided with a rim and having an annular series of ratchet-teeth, and a fixed disc fitting within the rim and provided with a pivoted pawl engaging the ratchet-teeth and locking the brake-wheel against rearward rotation and permitting a free forward rotation to enable a vehicle to be backed, substantially as described. 3rd. In an automatic brake, the combination of a running gear having a reach composed of two sections arranged to slide on each other, a transverse rock-shaft carried by the rear section and located in advance of the hind wheel and provided at its ends with crank arms, brake-wheels journalled on the crank arms and arranged to engage the hind wheels, clutches connecting the brake-wheels with the rock-shaft, and connections between the rock-shaft and the reach sections, whereby when the rear reach section crowds forward the brake-wheels will be thrown against the vehicle wheels, substantially as described. 4th. In an automatic brake, the combination of a running gear provided with a reach composed of two sections slidingly connected, a transverse rock-shaft journalled in suitable bearings and carried by the rear section of the reach and provided with depending arms, wheel engaging devices located at the ends of the rock-shaft for engaging the hind wheels of the running gear, a lever frame pivoted to the rear reach section and provided with opposite sides depending therefrom, a pivot connecting the lever frame with the front reach section, and link bars connecting the sides of the lever frame with the depending arm of the rock-shaft, substantially as described. 5th. In an automatic brake, the combination of a running gear provided with a reach composed of two sections slidingly connected, a transverse bar mounted on the rear section of the reach, a rock-shaft journalled on the transverse bar and provided at its terminals with crank arms and having depending arms at opposite sides of the reach sections, brake-wheels journalled on the crank arms and connected with the rock-shaft by clutches, a rectangular lever frame pivoted to the upper reach section and depending therefrom, a pivot connecting the sides of the lever frame to the front reach section, link bars connecting the depending arms of the rock-shaft with the lever frame, a body mounted on the running gear and fixed to the rear bolster, and a roller mounted on the front bolster and supporting frame, substantially as described. 6th. In a brake, the combination of a brake-wheel provided at its periphery with flanges, and having in the space between the flanges recesses or serrations, and a band arranged on the brake-wheel in the space between the flanges and engaged by the said recesses or serrations, whereby the band is prevented from slipping, substantially as described.

No. 51,479. Mechanism for Propelling Railway Velocipedes and Hand Cars. (*Mécanisme pour mettre en mouvement les vélocipèdes de chemin de fer et chars à bras.*)

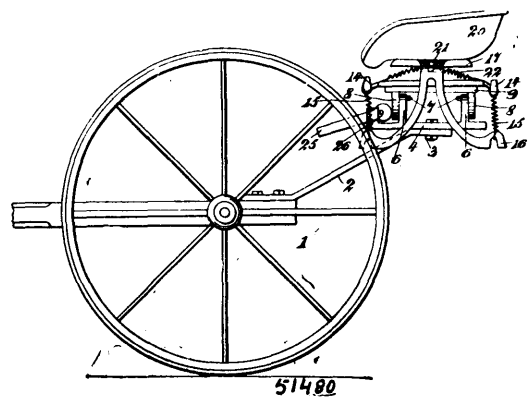


514 79

James Joseph Thompson, Jacksonville, Florida, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—1st. In a mechanism for propelling velocipedes, hand cars and like vehicles, a driving shaft, cranks attached to the said driving shaft, ball bearings journaling the cranks a fly wheel mounted to turn on the crank shaft, ball bearings interposed between the crnk shaft and hub of the fly wheel, said bearings being disposed within the said hub in a manner to support its centre and ends, and a driving connection between the said crank shaft and an axle of the car, as and for the purpose specified. 2nd. In a mechanism for propelling velocipedes, hand cars and similar vehicles, a driving shaft, a frame through which the said shaft passes, cranks secured to the ends of the shaft, ball bearings in the said frame, journaling the hubs of the said cranks, a fly wheel mounted upon the crank shaft, ball bearings carried by the said shaft and engaging with the hub of the fly wheel, a gear connection, substantially as described, between the drive shaft and the fly wheel, and a driving connection between the said crank shaft and an axle of the car, as and for the purpose set forth. 3rd. In a vehicle, the combination with a frame, and driving mechanism, substantially as described, of a journal box comprising a straight upper portion adapted to be secured to the frame, and a cylindrical body portion having an interior chamber and an opening outward from said chamber and through which the wheel axle passes roller bearing surrounding the axle in the chamber, a track wheel having rigid connection with the axle, and a cap having an exteriorly threaded hollow shank engaging in a tapped opening leading into the chamber, the said hollow shank receiving the end of the axle, as and for the purpose specified. 4th. In a mechanism for propelling velocipede and hand cars and like vehicles, a frame, a driving shaft passed through the frame, having its ends squared, cranks secured to the squared ends of the said shaft, ball bearings located within the said frame and engaging with the periphery of the hubs of the cranks, caps entered into the frame securing the ball bearings in position, a fly wheel loosely mounted upon the crank shaft, being seated on ball bearings carried by the crank shaft, a gear connection between the crank shaft and the hub of the fly wheel, and a driving connection between the said crank shaft and an axle of the car as and for the purpose specified.

No. 51,480. Tilting Spring Seat. (*Siège à bascule.*)



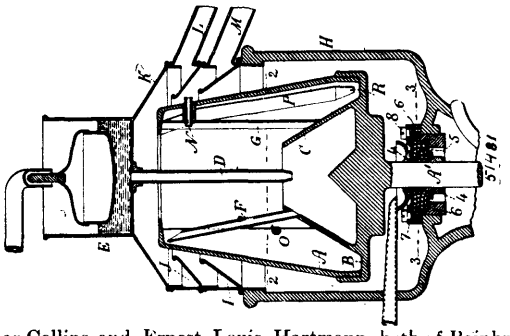
514 80

Charles F. Davy, Starkville, New York, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—1st. The combination of an upper spring frame section, a lower spring frame section, springs secured at their upper ends to the lower section and at their lower ends to the upper section and serving as supports for the upper section, and side springs extending diagonally from the central portion of one section to the ends of the other section, substantially as set forth. 2nd. The combination of an upper spring frame section having depending arms, a lower spring frame section having arms, springs secured at their upper ends to the lower section and at their lower ends to the upper section, and serving as supports for the same, and side springs extending diagonally from the central portion of one section to the ends of the other section, substantially as set forth. 3rd. The combination of a lower spring frame section having oppositely diverging arms at opposite ends, an upper spring frame section also having oppositely diverging arms at opposite ends, said sections being arranged at right angles to each other, and the arms of the upper section being arranged to depend below the arms of the lower section, springs uniting said arms of the respective sections, and side springs each connected at one end at or near the centre of one section, and having its opposite end extending diagonally to one arm of the other section, substantially as set forth. 4th. The combination of a lower tilting frame section, an upper tilting frame section, said sections being pivoted together and arranged to tilt laterally, and means for locking said sections together, substantially as set forth. 5th. The combination of a lower tilting frame section, an upper tilting frame section, the said sections being pivoted together and adapted to tilt laterally, a bracket on one section, and a locking device on the other section to engage said bracket and hold the sections locked together, substantially as set forth. 6th. The combination of a lower tilting frame section having upwardly extending lugs, an upper tilting frame section having depending lugs pivoted to the lugs of the lower section, and a locking device on one section to engage one lug on the other section to lock the sections together, substantially as set forth.

No. 51,481. Centrifugal Separator for Cream, Etc.

(Séparateur centrifuge pour la crème, etc.)



Thomas Collins and Ernest Louis Hartmann, both of Bainbridge, New York, U.S.A., 26th February, 1896; 6 years. (Filed 4th February, 1896.)

Claim.—1st. The combination in a centrifugal separator, of a main bowl contracted at its upper end, a receiving cup within the bottom of such separator bowl and a pipe passing from the cup to the interior of the separator bowl near its upper end, a cream discharge and a skim milk pipe passing from the interior of the bowl near its larger diameter to the top surface of the bowl where the skim milk is delivered, substantially as set forth. 2nd. The combination in a cream separator, of a centrifugal bowl, a cream trough having edges parallel with the axis of rotation, and a discharge pipe from such cream trough, substantially as set forth. 3rd. The combination in a cream separator, of a centrifugal bowl, a cream trough having edges parallel with the axis of rotation, and a discharge pipe from such cream trough, there being an adjustable screw-threaded tube within the discharge pipe, substantially as set forth. 4th. The combination, with the centrifugal separating bowl, of a receiving cup within and at the bottom of the same, a pipe passing upwardly from the receiving cup and opening within the separator bowl, a skim milk pipe passing from the larger diameter of the separator bowl to the place of delivery, a cream discharge trough with its edges parallel to the axis of rotation, a lateral discharge pipe from the same and pans for receiving the skim milk and cream respectively, substantially as set forth. 5th. The combination, with the separator and its shaft, of a bushing having an oil cup, a ring block of woolen fibre surrounding the bushing, and a cup supported by the case that surrounds the separator and receives the ring block, and a clamping ring and screws for holding the fibrous ring block in position, substantially as set forth.

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

4254. SALYER REED EARLE, 2nd term of No. 35,929, from the 2nd day of February, 1896. Combined Air Injector and Exhauster, 1st February, 1896.

4255. DAVID ERSKINE GELLATTY, 2nd term of No. 35,949, from the 4th day of February, 1896. Egg Beater, 3rd February, 1896.

4256. W. W. CHOWN & CO., (assignee), 3rd term of No. 23,526, from the 2nd day of March, 1896. Milk Can, 4th February, 1896.

4257. HOWARD MATRAVERS ASHLEY, 2nd term of No. 36,049, from the 26th day of February, 1896. Apparatus for the Manufacture of Glass Bottles and Similar Hollow Glass Articles, 6th February, 1896.

4258. GEORGE B. CHAPMAN, 2nd term of No. 35,964, from the 7th February, 1896. Devices for Watering Stock, 7th February, 1896.

4259. THE MASSEY MANUFACTURING CO'Y, (assignee), 3rd term of No. 23,412, from the 13th day of February, 1896. Mechanism for Supporting the Reel of a Harvesting Machine, 7th February, 1896.

4260. GEORGE HENRY WILLIAMSON, 3rd term of No. 24,002, from 7th May, 1896. Metallic boxes or Cases for Storing Articles of Food, Tobacco, Snuff, Paint, etc., 7th February, 1896.

4261. DON JOSE HERSEY and HENRY B. SPITZ, 2nd term of No. 35,979, from the 10th February, 1896. Pipe Wrench, 8th February, 1896.

4262. WILLIAM LOWRY DORAN, 2nd term of No. 36,095, from the 10th day of March, 1896. Suspenders, 8th February, 1896.

4263. GEORGE ADOLPHUS CLINE and WILLIAM TRIMBLE, 2nd term of No. 36,046, from the 25th day of February, 1896. Ballot Box, 10th February, 1896.

4264. HARVEY BATES, jr., 2nd term of No. 36,146, from the 16th day of March, 1896. Corn Product for Brewers' Use and Process of Making same, 11th February, 1896.

4265. BENJAMIN BEAR, 2nd term of No. 35,989, from the 14th day of February, 1896. Bridge, 11th February, 1896.

4266. JOSE BERRE KING, 2nd term of No. 36,077, from the 6th day of March, 1896. Material for treatment of Walls and the like, 11th February, 1896.

4267. THE MINER CARRIAGE MANUFACTURING COMPANY (Ltd.), (assignee), 2nd term of No. 36,791, from the 12th day of June, 1896. Vehicle Spring, 12th February, 1896.

4268. STEPHEN HENDERSON CAMPBELL, 2nd term of No. 38,032, from the 2nd day of January, 1897. Vehicle, 12th February, 1896.

4269. HALSEY HEALY MONROE, 3rd term of No. 23,429, from the 16th day of February, 1896. Rotary Harrow, 12th February, 1896.

4270. ULDARIQUE GIBEAULT, 2nd term of No. 36,032, from the 23rd day of February, 1896. Hay Press, 13th February, 1896.

4271. CARTER AND COMPANY, (assignee), 3rd term of No. 23,476, from the 23rd day of February, 1896. Sale Book, 20th February, 1896.

4272. FRANCIS AUGUSTINE WALSH, 2nd term of No. 36,051, from the 26th day of February, 1896. Machine for Soldering and Seaming the Side Edges of Sheet Metal Vessels, 21st February 1896.

4273. HAMILTON YOUNG CASTNER, 2nd term of No. 36,178 from the 18th day of March, 1896. Manufacture of Sodium and Potassium, 22nd February, 1896.

4274. JAMES H. HULL, 2nd term of No. 36,189, from the 19th day of March, 1896. Weather Strip, 24th February, 1896.

4275. HENRY DEXTER THATCHER, 2nd term of No. 36,653, from the 20th day of May, 1896. Baking powder, 24th February, 1896.

4276. ELIZABETH R. MULLIGAN, (Executrix), 3rd term of No. 23,629, from the 24th March, 1896. Plate Printing Presses and Inking Appliances therefor, 24th February, 1896.

4277. JOSEPH BURNS, 2nd term of No. 36,116, from the 12th day of March, 1896. Hydrocarbon, 27th February, 1896.

4278. FREDERICK CRAMPTON, 2nd term of No. 36,980, from the 15th day of July, 1896. Method and Machine for Making Garment Stays, 28th February, 1896.

4279. THE VACUUM BRAKE COMPANY, (assignee), 2nd term of No. 37,265 from the 1st day of September, 1896. Automatic Vacuum Brake Apparatus, 19th February, 1896.

TRADE-MARKS

Registered during the month of February, 1896, at the Department of Agriculture--Copyright and Trade-Mark Branch.

5530. WILLIAM ATKINS, London, Ont. Cigars, 1st February, 1896.

5531. THE DANVILLE ASBESTOS AND SLATE COMPANY, L'd., Danville, Que. A material for making wall plaster, 3rd February, 1896.

5532. LIGGETT AND MYERS TOBACCO COMPANY, St. Louis, Missouri, U. S.A. Cigarettes, 3rd February, 1896.

5533. E. A. SMITH, St. John, N. B. Flour, 3rd February, 1896.

5534. JEAN-BAPTISTE JOURDAIN, St. Jean-Baptiste de Rouville, Que. Un remède contre les maux de Reins, Vessie, Pierre, Gravelle et Diabète, 4 février, 1896.

5535. H. C. FORTIER, C. J. PETER AND W. H. BEST, Toronto, Ont., trading as the TORONTO BISCUIT AND CONFECTIONERY COMPANY. Soda Biscuits, 4th February, 1896.

5536. WILLIAM JOSEPH PENDRAY, Victoria, B.C. Soap, 6th February, 1896.

5537. HORACE R. RIDOUT AND EDWARD H. SEALE, Montreal, Que. Belt Dressing, 6th February, 1896.

5538. BROWN AND WIGLE, Kingsville, Ont. Blankets, 6th February, 1896.

5539. STANDARD ROPE AND TWINE COMPANY, New York, N.Y., U.S.A. Rope and Twine, 7th February, 1896.

5540. KURTZ AND COMPANY, Victoria, B.C. Cigars, 8th February, 1896.

5541. MELDRUM AND McALLISTER, Peterborough, Ont. Flour, Oatmeal and Rolled Oats, 13th February, 1896.

5542. THE HIGHLAND FOUNDRY COMPANY, Boston, Mass., U.S.A. Stoves, Furnaces and Ranges, 14th February, 1896.

5543. ARTHUR E. CURREN, Halifax, N.S. Corn Meal, 17th February, 1896.

5544. ROBERT JESSUP, Callender, District of Parry Sound, Ont. Medicine, 20th February, 1896.

5545. } JOSEPH E. SEAGRAM, Waterloo, Ont. Whisky, 20th February, 1896.
5546. }

5547. ARTHUR AND COMPANY, L'd., Glasgow, Scotland. Silk Piece Goods, 21st February, 1896.

5548. BRENER BROS., London, Ont. Cigars, Cigarettes and Tobaccos, 21st February, 1896.

5549. ALFRED HARRY MORRELL, 21 Chesterfield Grove, Dulwich, Surrey, England. General Trade Mark, 22nd February, 1896.

5550. CUSTOM TAILORS UNION, with headquarters for Canada in Toronto, Ont. JAMES SIM, Agent. Clothing, 24th February, 1896.

5551. MONTREAL ROLLING MILLS COMPANY, Montreal, Que. White Lead, 24th February, 1896.

5552. JOHN FORSYTH, Berlin, Ont. Catarrh Medicine, 25th February, 1896.

5553. HOWARD PERCIVAL ECKARDT and RICHARD PHILP, Toronto, Ont., trading as H. P. ECKARDT & CO. Tea, 26th February, 1896.

5554. WILLIAM FREDERICK DOLL, Winnipeg, Man. General Trade Mark, 27th February, 1896.

5555. GEORGE FREDERICK GALT, Winnipeg, Man. Tea, 27th February, 1896.

5556. THOMAS S. WHITMAN, Halifax, N.S. Artificially dried fish, 27th February, 1896.

5557. THE DOMINION BAG COMPANY, L'd., Montreal, Que. Jute, Cotton and other Bags, 29th February, 1896.

COPYRIGHTS

Entered during the month of February, 1896, at the Department of Agriculture—Copyright and Trade-Mark Branch.

8353. BEAUTIFUL CANADA, OR SCENES FROM OUR HOME LAND. (Part I.) William A. Hart, Toronto, Ontario, 1st February, 1896.

8354. THE CANADIAN MAGAZINE, FEBRUARY, 1896. The Ontario Publishing Company (Ltd.), Toronto, Ont., 3rd February, 1896.

8355. HINTS ON TEACHING ARITHMETIC. By H. S. MacLean, The Copp, Clark Company (Ltd.), Toronto, Ont., 3rd February, 1896.

8356. CIRCULAR OF STOCK OF THE YORK COUNTY LOAN AND SAVINGS COMPANY. Joseph Phillips, Toronto, Ont., 3rd February, 1896.

8357. LUEURS D'AURORE. (Ebauches de Poésie, 1886-1892.) Par Amédée Denault, Montréal, Qué., 4 février 1896.

8358. REMARKABLE NARRATIVES, OR RECORDS OF POWERFUL REVIVALS. By Rev. A. Sims, Kingston, Ont., 4th February, 1896.

8359. SLEEP LADY FAIR. (Serenade.) Words by Edward Oxenford. Music by Chas. A. E. Harriss. Whaley, Royce & Co., Toronto, Ont., 7th February, 1896.

8360. JARVIS' NAUTICAL CHART FOR DETERMINING DISTANCES. Frederick Arnold Jarvis, Guelph, Ont., 7th February, 1896.

8361. CONSIDER THE LILIES. (Sacred Song.) Music by Chas. A. E. Harriss. Whaley, Royce & Co., Toronto, Ont., 8th February, 1896.

8362. VIEW ON THE GATINEAU AT WRIGHT'S ISLAND. (Photo A.) Wm. J. Topley, Ottawa, Ont., 10th February, 1896.

8363. VIEW ON THE GATINEAU AT WRIGHT'S ISLAND. (Photo B.) Wm. J. Topley, Ottawa, Ont., 10th February, 1896.

8364. MASSEY MAGAZINE. February, 1896. The Massey Press, Toronto, Ont., 10th February, 1896.

8365. THE SAILOR. (Nautical Song.) Words and Music by E. Alfred. Alfred E. Welch, London, Ont., 11th February, 1896.

8366. OH TELL ME BELOVED, WHY? Words by C. A. Gifford. Music by Charles E. Brooke. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 14th February, 1896.

8367. JOLLITY MARCH. By W. O. Stevens, Toronto, Ont., 14th February, 1896.

8368. THE PERRY-DICK SYSTEM FOR TABULATING AND RETAINING INFORMATION AS TO THE CAPITAL, CREDIT, &c., OF MERCHANTS, PROFESSIONAL MEN, AGENTS, CLERKS, MECHANICS AND LABOURERS IN EVERY VILLAGE, TOWN OR CITY IN THE DOMINION OF CANADA. George Burdett Perry and Thomas Fraser Dick, Hamilton, Ont., 15th February, 1896.

8369. ENGLAND'S FREE TRADE. (Its effect on Colonial Interests and English Agriculture. How it may affect her Factories.) By John Mothersill, Township of East Whitby, County of Ontario, Ont., 17th February, 1896.

8370. SPECIAL CHATTEL MORTGAGE. (Form.) Henry Thomas Flynn, Toronto, Ont., 18th February, 1896.

8371. IN THE WOODS AND ON THE WATERS. (Book.) By John A. Murdoch. Walpole Murdoch, Pilot Mound, Man., 18th February, 1896.

8372. GUARANTEED SYSTEM OF LIFE INSURANCE. (Pamphlet.) John Granby, Chatham, Ont., 20th February, 1896.

8373. LA SCIENCE DE LA RÉCLAME. Par W. A. Grenier, Montréal, Qué., 20 février 1896.

8374. COMMENTARIES ON THE CONSTITUTION OF THE UNITED STATES, HISTORICAL AND JURIDICAL, WITH OBSERVATIONS UPON THE ORDINARY PROVISIONS OF STATE CONSTITUTIONS, AND A COMPARISON WITH THE CONSTITUTIONS OF OTHER COUNTRIES. By Roger Foster, New York, N.Y., U.S.A., 22nd February, 1896.

8375. THE PERVERSION OF DR. NEWMAN TO THE CHURCH OF ROME. (In the light of his own explanations, common sense and the Word of God.—Third Edition.) By Rev. Charles Chiniquy, D. D., Montréal, Qué., 24 février 1896.

8376. AVE MARIA. (O God of mercy.) For Tenor or Soprano. Composed by E. Marie Thoss. Whaley, Royce & Co., Toronto, Ont., 25th February, 1896.

8377. SEXTON'S OMNIMETRE. (Chart.) Thaddeus Norris, Washington, D.C., U.S.A., 26th February, 1896.

8378. AUTORISATION POUR OUVRAGES ADDITIONNELS. Pour l'usage des Architectes et Constructeurs. (Formule.) Joseph Alcide Chaussé, Montréal, Qué., 27 février 1896.

8379. DRIFT IN THE BREAKERS, OR THE PRESENT DANGERS TO RELIGION. By the Author of "Mind in Matter." William Drysdale & Co., Montreal, Que., 27th February, 1896.

8380. SAINTE MAISON DE LA SAINTE-VIERGE. Transportée miraculeusement de Nazareth à Lorette, et Son Fac-simile dans la Chapelle Ancienne de Notre Dame de Bonsecours. Par un Prêtre du Diocèse de Montréal. Cadieux et Derome, Montréal, Qué., 28 février, 1896.

8381. L'OUEST CANADIEN. Sa Découverte par le Sieur de Vérendrye. Son Exploitation par les Compagnies de Traiteurs jusqu'à l'année 1822. Par l'Abbé G. Dugas. Cadieux et Derome, Montréal, Qué., 28 février 1896.

8382. SCIENCE OF OPTICS; Or, OPTICIAN'S MANUAL. Book which is now being preliminarily published in separate Articles in The Druggist, Toronto, Ont. (Temporary Copyright.) Lionel Laurance, Toronto, Ont., 28th February, 1896.

8383. ENGLISH CASES. Review which is now being preliminarily published in separate Articles in "The Canada Law Journal," Toronto, Ont. (Temporary Copyright.) Arthur Henry O'Brien, Toronto, Ont. 28th February, 1896.

8384. FASCINATION MARCH. (Two-Step.) By Catharine Gledhill. Whaley Royce & Co., Toronto, Ont., 29th February, 1896.

8385. INSPIRATION MARCH. (Two-Step.) By Lou G. Lee. Whaley, Royce & Co., Toronto, Ont., 29th February, 1896.

8386. BELL TELEPHONE COMPANY OF CANADA, LIMITED, LONDON EXCHANGE, SUBSCRIBERS' DIRECTORY, ONTARIO DEPARTMENT, FEBRUARY, 1896. The Bell Telephone Company of Canada (Ltd.), Montreal, Que., 29th February, 1896.

8387. DISEASES OF THE NERVOUS SYSTEM AND HOW TO CURE THEM. The Wells & Richardson Co., Montreal, Que., 29th February, 1896.

8388. POLITICAL APPOINTMENTS, PARLIAMENTS AND THE JUDICIAL BENCH IN THE DOMINION OF Canada, 1867 TO 1895. Edited by N. Omer Côté, Ottawa, Ont., 29th February, 1896.