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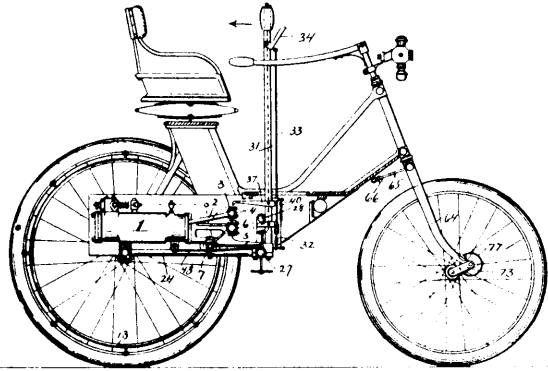
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NOTE.—Patents are granted for 18 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 58,845. Motorcycle. (*Motocycle.*)



58845

Max E. Hertel, Chicago, Illinois, U.S.A., 1st February, 1898; 6 years. (Filed 17th January, 1898.)

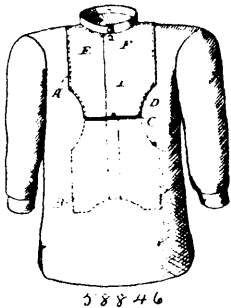
Claim.—1st. In a motorcycle, the combination with a vehicle, and a motor carried thereby, of gearing for transmitting motion from the motor to the driving-wheel, said gearing including a two-part shaft, two cog-wheels, one carried by each part of said shaft, a wrist-pin carried by and connecting the cog-wheels eccentrically, a counter shaft and pinions carried by the counter shaft and gearing with the cog-wheels, substantially as set forth. 2nd. In a motorcycle, the combination with a vehicle and a motor carried thereby, of gearing for transmitting motion from the motor to the driving-wheel, said gearing including separable co-operating members and a shaft carrying one of said members and having a universal joint, a movable box in which said shaft is journaled, and means for moving the box and thereby separating or bringing together the separable, co-operating members of the gearing, substantially as set forth. 3rd. In a motorcycle, the combination with a vehicle and a motor carried thereby, of gearing for transmitting motion from the motor to the driving-wheel, said gearing including two co-operating members having frictional engagement with each other, one of said members consisting of a wheel constructed of two discs one of which has a hub upon which the other fits and is movable endwise,

and a spring for forcing them toward each other, substantially as set forth. 4th. In a motorcycle, the combination with a vehicle and a motor carried thereby, of gearing for transmitting motion from the motor to the driving-wheel, said gearing including a shaft having its axis disposed eccentrically with relation to the driving-wheel, a friction-wheel slidably mounted thereon, means holding the wheel against rotary motion relatively to the shaft, and a circular member carried by the driving-wheel with which the friction-wheel has frictional engagement whereby the friction-wheel may slide upon its shaft to accommodate itself to variations in the position of the circular member, substantially as set forth. 5th. In a motorcycle, the combination with a vehicle, a motor carried thereby, and gearing for transmitting motion from the motor to the driving-wheel, said gearing including a member carried by the driving-wheel, and a member adapted to co-operate therewith, the latter member being movable into and out of engagement with the former, of a brake-shoe, means connecting it with the movable member aforesaid, and means for operating them, substantially as set forth. 6th. In a motorcycle, the combination with a vehicle, a motor carried thereby, gearing for transmitting motion from the motor to the driving-wheel, said gearing including a circular member carried by the driving-wheel and a friction-wheel adapted to co-operate therewith, of a brake-shoe, means connecting it with the friction-wheel, and means for moving the brake-shoe and friction-wheel, substantially as set forth. 7th. In a motorcycle, the combination with a vehicle, and a motor carried thereby, of gearing for transmitting motion from the motor to the driving-wheel, said gearing including a friction ring carried by each of the driving-wheels, a movable friction-wheel arranged in operative relation to each of said rings, a single hand lever, and means connecting it with both of the friction-wheels, whereby they may be moved into and out of engagement with the friction rings, substantially as set forth. 8th. In a motorcycle, the combination with a vehicle, and a motor carried thereby, of gearing for transmitting motion from the motor to the driving-wheels, said gearing including a friction ring carried by each of the driving-wheels, and a movable friction-wheel arranged in operative relation to each of the friction rings, a brake-shoe arranged in operative relation to each of the driving-wheels, a single hand lever and means connecting it with both of the friction-wheels and both of the brake-shoes, substantially as set forth. 9th. In a motorcycle, the combination with a vehicle, a motor carried thereby, and gearing for transmitting motion from the motor to the driving-wheel, of a governor, and hand mechanism for operating the valve of the motor, the valve gearing having a part common to and connected with both the governor and the hand mechanism aforesaid, substantially as set forth. 10th. In a motorcycle the combination with a vehicle, a motor carried thereby, and gearing for transmitting motion from the motor to the driving-wheel, of mechanism for throwing the motor into and out of gear with the driving-wheel, mechanism for starting the motor, and a single hand lever common to both of said mechanisms, substantially as set forth. 11th. In a motorcycle, the combination with a vehicle, a motor carried thereby and gearing for transmitting motion from the motor to the driving-wheel, of mechanism for throwing the motor into and out of gear with the driving-wheel, mechanism for starting the motor, brake mechanism, and a single hand lever common to all of these mechanisms, substantially as set forth. 12th. In a motorcycle, the combination with a vehicle, a motor carried thereby, and gearing for transmitting motion from the motor to the driving-wheel, of mechanism for throwing the motor into and out of gear with the driving-wheel, mechanism for starting the motor, a single hand lever common to both these mechanisms, a valve for controlling the supply of fuel to the motor, and hand mechanism associated with the hand lever aforesaid for operating the valve, substantially as set forth. 13th. In a motorcycle, the combination with a vehicle, a motor carried

thereby, and gearing for transmitting motion from the motor to the driving-wheel, of a hollow hand lever for operating said gearing, valve gearing and hand mechanism carried by the hand lever aforesaid for operating the valve gearing, substantially as set forth. 14th. In a motorcycle, the combination with a vehicle, a motor carried thereby and gearing for transmitting motion from the motor to the driving-wheel, of a hand lever, a dog carried thereby and adapted to be engaged with a part of the gearing for starting the motor, and a second dog carried thereby and adapted to be engaged with the gearing for throwing the motor into and out of gear with the driving wheel, substantially as set forth. 15th. In a motorcycle, the combination with a vehicle, a motor carried thereby, and gearing for transmitting motion from the motor to the driving wheel, of a hollow hand lever, a rod arranged within the hollow hand lever and connected with the valve gear, and a sleeve connected to the rod and mounted upon the hand lever so that by moving the sleeve the rod is moved and the valve thereby operated, substantially as set forth. 16th. In a motorcycle, the combination with a vehicle, a motor carried thereby, and gearing for transmitting motion from the motor to the driving wheel, of a hollow hand lever, a rod arranged within the hand lever and movable endwise, a cap, means connecting the rod and cap so that the cap is capable of rotary but incapable of endwise movement relatively to the rod, said cap and hand lever having screw engagement with each other, substantially as set forth. 17th. In a motorcycle, the combination with a vehicle, a motor carried thereby, a gearing for transmitting motion from the motor to the driving wheel, of a hollow hand lever, a rod arranged within the hollow hand lever and having connection with the valve-gear, a cap connected with the rod so that when the cap is moved the rod is moved and the valve operated, and an indicator carried by the cap for indicating the position of the valve, substantially as set forth. 18th. In a motorcycle, the combination with a vehicle having two steering wheels, a motor carried by the vehicle, and gearing for transmitting motion from the motor to the driving wheel, of arms projecting from the forks of the steering wheels, a rigid connection between said arms, a second connection between said arms including a spring, and means connecting the ends of the spring with opposite sides of the frame, substantially as set forth. 19th. The combination with a wheel, of a fork, a pair of links each pivoted at its forward end to one of the prongs of the fork, an axle extending through the hub of the wheel and rigidly connected to both of the links at their rear ends, and a pair of springs each of which is connected at one end to one of the prongs of the fork, whence it proceeds forward, downward and rearward and has its other end connected to one of the links, substantially as set forth.

No. 58,846. Reversible Dickey.

(*Faux devant de chemises.*)



Emanuel Stern, Baltimore, Maryland, U.S.A., 1st February, 1898; 6 years. (Filed 11th January, 1898.)

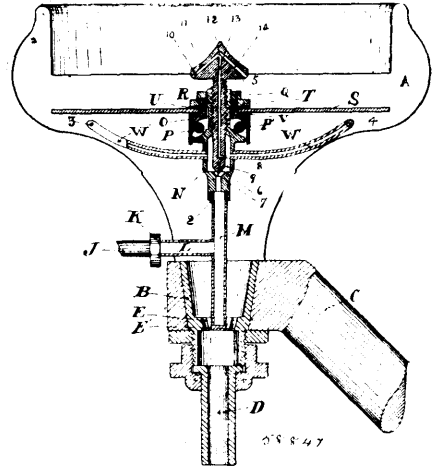
Claim.—A reversible dickey having four fronts or bosoms, comprising two or more substantially rectangular plies of fabric united by suitable stitching and finished on the outer faces of the outer plies, said plies being cut away centrally at each end to form neck-openings, and also cut away centrally at each side to divide the dickey into two substantially shield-shape portions, each portion being provided with a suitable fastening adjacent to the neck-opening, substantially as described.

No. 58,847. Spittoon. (*Crachoir.*)

Theodore Nelson Clark, Toronto, Ontario, Canada, 1st February, 1898; 6 years. (Filed 3rd January, 1898.)

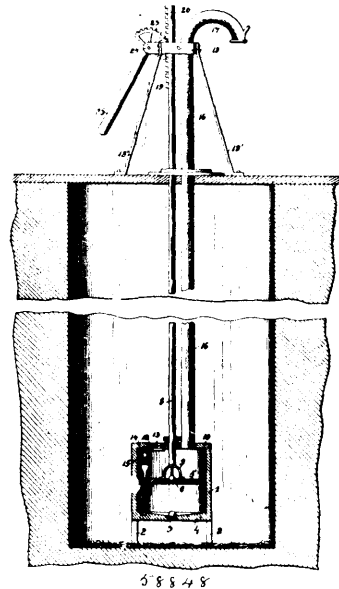
Claim.—1st. In a spittoon, a rotary disc mounted therein, and means for rotating the said disc by directing streams of water against the surface thereof. 2nd. In a spittoon, a rotary disc, combined with radial arms for ejecting water against the surface of said disc to rotate the same, as set forth. 3rd. In a spittoon, a rotary disc mounted on a vertical hollow supply pipe, suitable bearings between the moving parts and arms leading from the said supply pipe, whereby the water may be directed against the said disc, as set forth. 4th. In a spittoon, the vertically arranged supply pipe,

the valve chamber with radially extending arms therefrom, means for adjusting said valve, combined with a rotary disc mounted on



suitable bearings directly above the said arms, as set forth. 5th. In a spittoon, the combination with the body and supply pipe, the valve chamber secured to the upper end of the said supply pipe, radial arms extending therefrom and having apertures near the end of the said arms, the valve mounted in said chamber and having an adjustable thumb screw, the disc mounted about the said chamber and having suitable bearings between the same, as set forth. 6th. In a spittoon, the standard, the body portion mounted thereon, supply pipe mounted in said standard, exit ducts leading from the said chamber through the standard, combined with the valve chamber mounted on the upper end of the said pipe M, radial arms leading from the said valve chamber, the rotary disc mounted about said valve chamber and provided with suitable bearings, the valve stem mounted centrally in said valve chamber, and means for regulating the said valve, as shown and described. 7th. In a spittoon, the combination with the supply pipe, the valve chamber, the radially arranged pipes leading from said chamber, the rotary disc mounted about the said valve chamber and having suitable bearing connection therewith, the valve stem mounted in said chamber and provided with a duct in said stem opening into the said chamber, and radial ducts opening downward at the outer end of the adjusting part of the valve stem, which ducts communicate with the duct in the stem of the valve, as shown and described.

No. 58,848. Pump. (*Pompe.*)

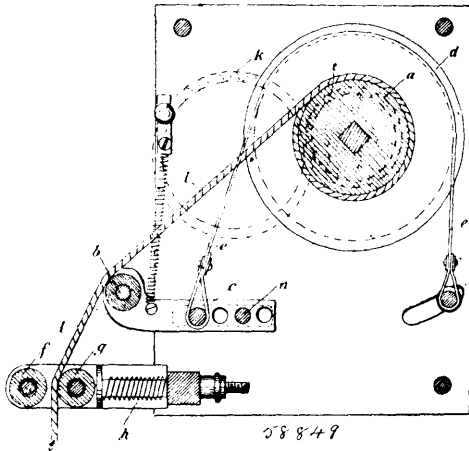


Jeremiah Lockwood, Sullivan, Indiana, U.S.A., 1st February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—A pump, comprising the discharge pipe 16, the cylinder 1 connected to the lower end thereof and provided with the inlet

vale 3 and the outlet valve 12, the piston 5 provided with the valve 6, and the piston rod 8 having its upper end terminating in the rack-bar 19, in combination with the bracket 18, the segmental gear-wheel 23 journaled in said bracket and in operative connection with said rack, and provided with the handle 25 and the friction sleeve 21 eccentrically mounted in said bracket to form an adjustable bearing for the rack-bar, whereby the wear on the gear and rack may be taken up, as and for the purpose set forth.

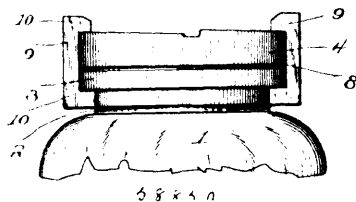
No. 58,849. Brake. (Frein.)



Richard Petrick, Rixdorf, and Carl Wohlfahrt, Berlin, both of Germany, 1st February, 1898; 6 years. (Filed 15th January, 1898.)

Claim.—1st. A rope brake, having a guide-roller *b* carried by two levers *c*, over which the rope runs from the drum *a* in such a manner that the roller is pressed downward by the action of the suspended load and thereby tightens the brake-band *l*, constructed and arranged substantially as hereinbefore described. 2nd. A brake, such as claimed in claim 1, in which the rope *l* runs off the roller *b* at an angle and only assumes a vertical position after passing over a second roller *g*, held in position by yielding supports, which, upon an increase of the load, alters its position so that the angle formed by the rope in passing over the roller *b* is diminished, constructed and arranged, substantially as hereinbefore described.

No. 58,850. Closure for Jars. (Fermeture de jarres.)



William Blair McCrosky, Eureka Springs, Arkansas, U.S.A., 1st February, 1898; 6 years. (Filed 17th January, 1898.)

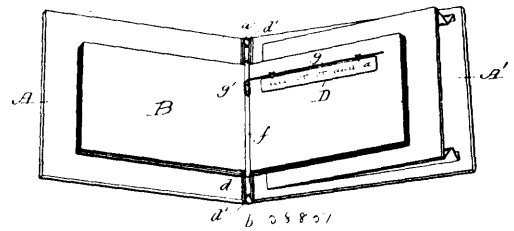
Claim.—In a closure for jars, the combination with the neck, of a flange extending therefrom adjoining its upper end and having a downwardly bevelled upper edge, the neck being undercut above the flange, a cap or cover having a depending flange adapted to bear upon a gasket on the flange of the neck, said cap or cover having inclined flanges on its top at the outer edge thereof, said flanges being bevelled inward, together with solid locking-bars having inwardly projecting end portions to engage the inclined flanges of the top and external flange of the neck, the projecting portion which engages the top being bevelled or undercut, substantially as shown and for the purpose set forth.

No. 58,851. Writing-Book Cover. (Couvert de livres.)

Clarence James Ainsworth, West Gardner, Massachusetts, U.S.A., 1st February, 1898; 6 years. (Filed 11th October, 1897.)

Claim.—1st. The book-cover *A*, in combination with the writing-book and copy-holder device *C*, the latter consisting of the back-strip *d* attached to the flexible back between the leaves of said book-cover, and having the curved and preferably eye-shaped ends *d*¹, *d*², with the end *d*² terminating in a pointed or hook-end *d*³; the swinging arm *f* pivoted at *e* to one end of said back-strip *d*, and adapted at its opposite end to be attached to the hooked end *d*³; the slide *g*¹ fitted on arm *f*, and the arm *g* pivoted at one end to

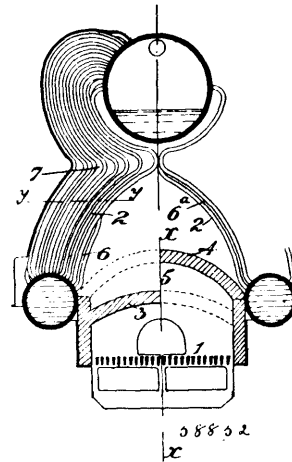
said slide *g*¹, substantially as and for the purpose set forth. 2nd. In a writing-book cover, the combination of the book-cover *A*, with



the back-strip *d* having the eye-shaped loops *d*¹, *d*² formed on the ends thereof, means for fastening said back-piece to the book-cover, and swinging arm *f* pivoted at one end to one end of the back-strip, and adapted to be detachably fastened at the other end, substantially as and for the purpose set forth. 3rd. In a writing-book cover, the combination of the back-strip *d*, attached to said book-cover, with the arm *f* pivoted to said back-strip *d* and the arm *g* adjustably pivoted to said arm *f*, so as to slide and swing thereon substantially as and for the purpose set forth.

No. 58,852. Water Tube Steam Boiler. (Chaudière à vapeur.)

(Chaudière à vapeur.)

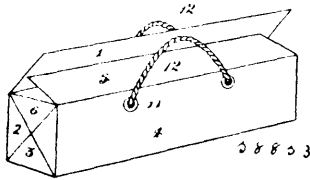


John Isaac Thornycroft, Chiswick, Middlesex, England, 1st February, 1898; 6 years. (Filed 9th November, 1897.)

Claim. 1st. In a water tube boiler of the kind hereinbefore referred to, the arrangement in combination, of water tubes and a furnace or furnaces so constructed that the gases from the fuel on various parts of the firegrate are compelled to all so pass through an opening or openings, or passage or passages, of comparatively limited cross sectional area that the said gases will become more or less intimately mixed and averaged in combustible quality before coming into contact with the tubes, or the main portions thereof, in which circulates the water to be heated and converted into steam, as set forth. 2nd. In a water tube boiler of the kind hereinbefore referred to, the combination with the furnace, or each furnace, and the water tubes above the same, of an interposed furnace roof formed at or near about the middle portion of its length, with one or more openings or passages of comparatively limited cross sectional area through which all the gases from the fuel on various parts of the fire-grate are compelled to pass before coming into contact with the tubes or the portions thereof above said roof, substantially as herein described for the purpose specified. 3rd. A water tube boiler, in which there are provided between the fire-grate and the water tubes above it two or more partitions of suitable refractory material, so arranged that an opening or openings, or passage or passages of comparatively limited cross sectional area is, or are, formed between them, through which all the gases from the fuel on the grate have to pass on their way to the tubes to be heated, substantially as described. 4th. A water tube boiler, having a furnace provided with close roof walls or partitions arranged at different levels over the forward and rearward portions respectively of the fire-grate, so as to form between their adjacent ends an opening or passage through which all the flame and hot gases from the fuel on various parts of the fire-grate have to pass before coming in contact with the water tubes above said roof walls or partitions, substantially as described. 5th. A water tube boiler of the kind referred to in the preceding claims, in which portions of the boiler tubes, or some of them, extend down below the partitions, or one of them, so that the fire gases will come in contact with some portions of the tube heating surface before passing through the opening or openings

between the partitions, substantially as described. 6th. A water tube boiler having its furnace, or each furnace, provided with partitions arranged between the fire-grate and the main portions of the water tubes, portions of some of said water tubes being exposed to the flame and hot gases below one or each of said partitions, substantially as herein described for the purpose specified. 7th. A water tube boiler of the kind referred to in claims 1, 2 and 3, in which one or more of the partitions is or are formed wholly or partly of tubes substantially as described. 8th. A water tube boiler, having a furnace provided with close walls or partitions arranged above the fire-grate so as to form between their adjacent ends one or more openings or passages of comparatively small cross sectional area through which all the flame and hot gases from the fuel on the various parts of the fire-grate have to pass, one or each of said partitions comprising in its construction portions of water tubes forming part of the heating surface of the boiler, substantially as herein described. 9th. In a water tube boiler, the combination of a furnace, groups of water tubes arranged at the respective sides of the furnace chamber, some of the tubes in each group being arranged to form the side walls of a flue in which other tubes of the group are placed, and close walls or partitions arranged between the furnace grate and the said groups of water tubes so as to form between their adjacent ends one or more openings or passages through which all the gases coming from the fuel on various parts of the grate are compelled to pass before coming in contact with the inner or side walls of tubes next the furnace, the tubes forming said inner walls having their lower ends bent to form gas inlet passages to said flues of varying size, the passages towards which the gases are carried by their inertia being made smaller than the remainder, substantially as herein described for the purpose specified. 10th. In a water tube boiler, the combination with a steam drum and main water vessel, groups of tubes connecting the same, and fire-boxes arranged at opposite sides of said main water vessel and groups of tubes, of supplementary water vessels arranged at the outer sides of said fire-boxes and supplementary groups of tubes connecting said supplementary water vessels to said steam drum, some of the tubes in each supplementary group of tubes being arranged close together for a portion of their length to form inner and outer longitudinal close walls of a flue that is located at the outer side of the corresponding fire-box and within which the other tubes of the group are placed, the lower portions of the tubes forming the inner wall and upper portions of the tubes forming the outer wall being bent to form inlets and outlets respectively for hot gases to and from said end or outer flues, substantially as herein described.

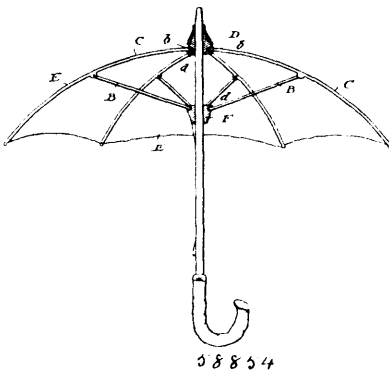
No. 58,853. Collapsible Box. (Boite pliante.)



E. F. Taylor, Sheffield, England, 1st February, 1898; 6 years. (Filed 13th January, 1898.)

Claim.—A collapsible receptacle or box, made from paper, cardboard, or a combination of paper and fabric, in the manner as hereinbefore described and set forth.

No. 58,854. Umbrella. (Parapline.)



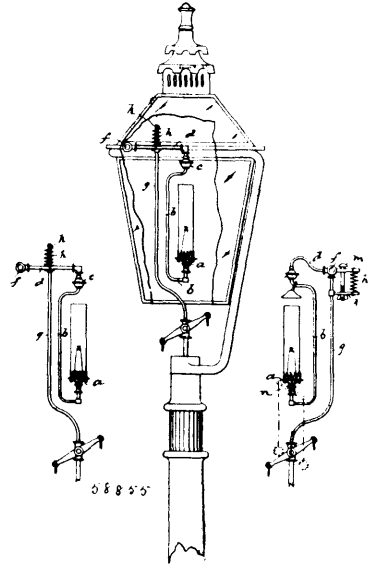
Frederick Schaefer, Williamsport, Pennsylvania, U.S.A., 1st February, 1898; 6 years. (Filed 4th October, 1897.)

Claim.—As an improvement in parasols or umbrellas, the combination of the stick, the top notch, consisting of a body portion D,

having an annular groove *d*, terminating at its inner end in an enlarged annular socket *d'* and having a bottom plate slotted radially, the ribs having T-heads adapted to loosely play in the socket *d'*, the said bottom plate being made thin and flexible, whereby the parts intermediate the radial slots can be bent up between the shanks of the ribs, or down, to admit of the ready withdrawal of any one of such ribs as specified.

No. 58,855. Support for Incandescent Gas Burners.

(Support pour brûleurs à gaz incandescent.)

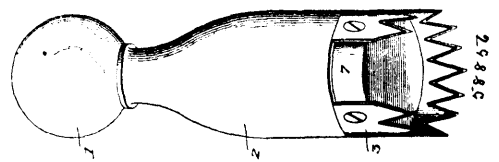


William Richard Clay and Ben Walmsley, both of Bottom, Lancaster, England, 1st February, 1898; 6 years. (Filed 9th September, 1897.)

Claim.—1st. In supports for incandescent-gas burners a vertically disposed member of the supply pipe, a ball-and-socket joint on said member, a horizontal member pivotally connected to the main member or pipe, a spring for supporting the horizontal and vertical members and the burner, substantially as specified. 2nd. In supports for incandescent-gas burners, vertical and horizontal members of the supply-pipe, pivotal joints for securing these together and to the main supply-pipe, a yielding support for maintaining these in position and said burner, substantially as herein set forth. 3rd. In supports for incandescent-gas burners, a vertically disposed member of the supply pipe, a pivotal joint on said member, horizontal member of said pipe, a pivotal joint on same, and a spring or yielding support secured to act between the two said pivotal joints, substantially as specified. 4th. In supports for incandescent-gas burners vertically and horizontally disposed members of the supply pipe, pivotal joints on same, a spring for supporting same from beneath and the burners secured to said parts, substantially as set forth. 5th. In supports for incandescent-gas burners, vertically and horizontally disposed members of the supply pipe, pivotal joints on same, a coiled resilient pipe for supporting said members and the burners they carry, said coiled pipe being arranged to supply gas to the bye-pass parts of the burners, substantially as specified.

No. 58,856. Can-Opener.

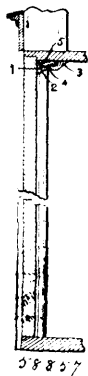
(Machine à ouvrir les boîtes métalliques.)



George Molitor, Independence, Kansas, U.S.A., 1st February, 1898; 6 years. (Filed 4th October, 1897.)

Claim.—A can-opener, comprising a handle and shank, the latter of which is provided with an annular groove, of a band secured in said groove and extending nearly but not entirely around the shank, substantially as set forth.

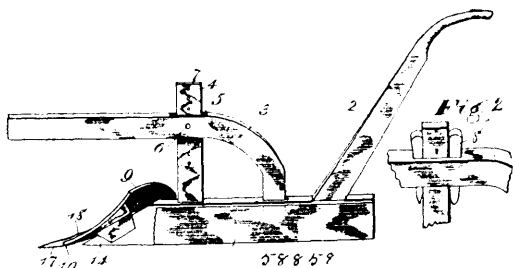
No. 58,857. Weather-Strip. (*Bourrelet de porte.*)



William Joseph Devers, Scranton, Pennsylvania, U.S.A., 1st February, 1898; 6 years. (Filed 17th January, 1898.)

Claim. 1st. In a weather-strip of the character set forth, the combination of the grooved moulding forming one portion of the weather-strip and the complimentary portion consisting of a moulding having a curved edge and a movable tongue having a longitudinal cavity therein, said cavity adapted to loosely receive said curved edge, and said tongue adapted to be received in the groove of said first-named strip as the door and casing upon which they are mounted are brought together, as set forth. 2nd. As a new article of manufacture, a weather-strip consisting of a grooved moulding 1, having a side 2^l extending therefrom, by means of which it may be secured upon a door-casing, the complimentary portion of the weather-strip consisting of the moulding 3 provided with a curved edge 4 and a tongue 5, having a body portion 6, said body portion being provided with a longitudinal cavity 6^l, the curved edge 6^l of said moulding 3 adapted to be loosely received in the groove 6^l of said tongue 5 when said moulding 3 and tongue 5 are mounted upon a door, and said tongue brought into mesh or engagement with the groove of said moulding 1, as set forth, to form a tight closure therebetween.

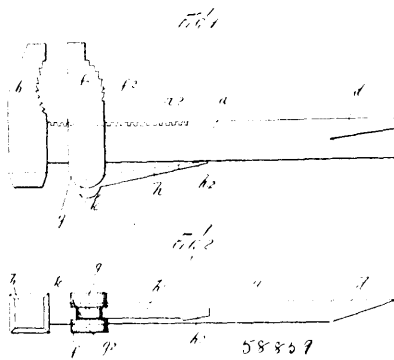
No. 58,858. Plough. (*Charrue.*)



Jessie Baker, El Paso, Texas, U.S.A., 1st February, 1898; 6 years. (Filed 17th January, 1898.)

Claim. 1st. As an improvement in ploughs, the combination with the mould-board of a clamp having a dovetail seat, an adjusting wedge mounted between the mould-board and said clamp, and securing bolts for holding the parts in an adjusted position, substantially as described, and for the purpose set forth. 2nd. As an improvement in ploughs, the herein described adjustable clamp, consisting of the tapered body 10 having the integrally formed inwardly inclined flange 13, and the adjusting wedge provided with slotted apertures designed to move into an adjusted position, substantially as set forth. 3rd. As an improvement in ploughs, the combination with the base having a tapered nose, of an operating handle, a draught beam, a supporting standard for said beam, means for adjusting said standard with respect to the beam, a clamp having a tapered seat designed to receive said nose, an adjusting wedge having a corrugated face, designed to receive the corrugations upon said clamp, a mould-board and locking bolts for binding the clamp and wedge into operative combination, substantially as specified and for the purpose set forth. 4th. As an improvement in ploughs, the combination with the mould-board, of a share having a shoulder 19 and tapered flange 18, the latter designed to overlap the lower end of said mould-board, a clamp having a tapered seat designed to receive the nose of the base and an adjusting wedge interposed between said clamp and mould-board, and adjustable held in position, substantially as described, and for the purpose set forth.

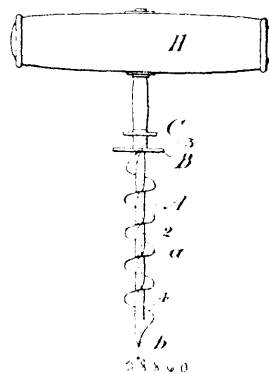
No. 58,859. Wrench. (*Cle à écrou.*)



Henry Alexander Burton and Lucius Vastine Kennerly, both of Atlanta, Georgia, U.S.A., 1st February, 1898; 6 years. (Filed 14th October, 1897.)

Claim.—1st. In a wrench, a sliding jaw provided with a plane and a surface adapted to engage a circular object, a co-operating jaw adapted to co-operate with both surfaces of said sliding jaw, and a shank whereby said sliding jaw may be removed and replaced, substantially as shown and described. 2nd. In a wrench, a sliding jaw provided with a plane end, a surface adapted to engage a circular object, a co-operating jaw adapted to co-operate with both surfaces of said sliding jaw, and a shank having a beveled surface substantially as shown and described. 3rd. In a wrench, a sliding lower jaw having a plane surface, and a surface adapted to engage with circular objects, a co-operating jaw, and a shank, and means whereby said jaw may be brought into such contact with shank as to preserve the relative position of the various parts, substantially as shown and described. 4th. In a wrench, a sliding lower jaw having a plane surface and a surface adapted to engage with circular objects, a co-operating jaw, and a shank, a cam pivoted between lugs formed on said sliding jaw, and a lever arm whereby said cam is operated to bring the various parts into such binding relations as well preserve the relative position of the same, substantially as shown and described. 5th. In a wrench, a shank provided with abrasions, and a beveled slotted end, and a rigid bar, a sliding jaw adapted to co-operate with the abraded portion of said shank, lugs thereon, a cam pivoted between said lugs and a lever arm acting upon said cam, the lower extremity of said arm forming a screw-driver, the lower jaw being provided with a plane surface, and a surface adapted to engage a circular object, and said upper jaw being provided with a surface adapted to co-operate with both of said surfaces on said sliding jaw, substantially as shown and described.

No. 58,860. Cork Screw. (*Tire-bouchon.*)

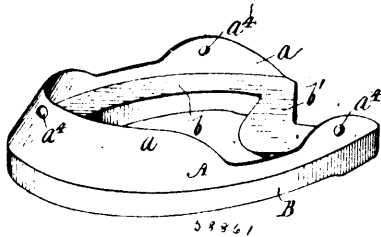


Robert Alexander Klock, Aylmer, Quebec, Canada, 1st February, 1898; 6 years. (Filed 15th January, 1898.)

Claim. 1st. A cork screw, having in its straight or spiral stem a tubular passage extending from a place a little above the upper end of the screw thread, said tubular passage having a lateral aperture above said upper end of said screw thread and another with rounded lips at its lower end, substantially as set forth. 2nd. In a cork screw, the combination of a stem having a screw thread upon it, a flange or shoulder at the upper end of the thread, a point at the lower end, a tubular passage extending from above said flange or shoulder to a place a little above the lower end or point, a lateral aperture from said tubular passage above said flange or shoulder, and a lateral aperture at the lower end of said tubular passage

with rounded lips, substantially as set forth. 3rd. In a cork screw, the combination of a screw formed with or without a straight central stem, a straight stem or neck at the upper end and forming an upward continuation of said stem, a point at the lower end of said screw, a flange or shoulder at the upper end of said screw and the lower end of the neck, a tubular passage extending from a place a little distance from the lower end or point through to the upper end of the stem or neck, a handle secured to the upper end of the neck, a removable cover for the upper aperture in the upper end, and lateral apertures from said tubular passage at its lower end and above said flange or shoulder, substantially as set forth.

No. 58,861. Horse Shoe. (Fer à cheval.)

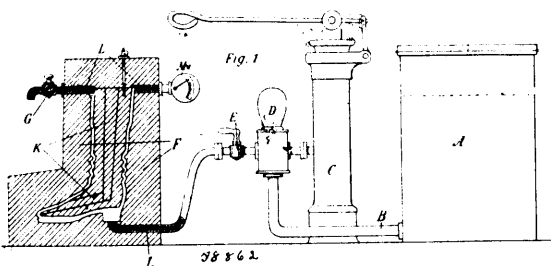


Dabney B. Stephens, Duluth, Minnesota, U.S.A., 1st February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. A metal rim rubber horse shoe, comprising in its construction a base portion constructed of a single piece of solid rubber made in the shape of a horse shoe and vulcanized to a metallic rim, said rim comprising in its construction an upwardly and inwardly inclined wall, and an inwardly extending horizontal flange, the latter provided with spaced apertures and downwardly extending projections, substantially as described. 2nd. A metal rim rubber horse shoe, comprising in its construction a base portion constructed of a single piece of solid rubber made in the shape of a horse shoe and vulcanized to a metallic rim, said rim comprising in its construction an upwardly and inwardly inclined wall and an inwardly extending horizontal flange, the latter provided with spaced projections, downwardly extending projections, and metallic toe and heel calks secured in position on the rubber base, substantially as described. 3rd. A metal rim rubber horse shoe, comprising in its construction a base portion constructed of a single piece of solid rubber made in the shape of a horse shoe and having its heel connected by a web of rubber and vulcanized to a metallic rim, the said rim comprising in its construction an upwardly and inwardly inclined wall and an inwardly extending horizontal flange, the latter provided with spaced apertures and downwardly extending projections, substantially as described. 4th. A metal rim rubber horse shoe, comprising in its construction a base portion constructed of a single piece of solid rubber made in the shape of a horse shoe and having its heel connected by a web of rubber and vulcanized to a metallic rim, the said rim comprising in its construction an upwardly and inwardly inclined wall and an inwardly extending horizontal flange, the latter provided with spaced apertures, downwardly extending projections and metallic toe and heel calks secured in position on the rubber base, substantially as described. 5th. A metal rim rubber horse shoe, comprising in its construction a base portion constructed of a single piece of solid rubber made in the shape of a horse shoe and vulcanized to a metallic rim, said rim comprising in its construction an upwardly and inwardly inclined wall provided with attaching holes and an upwardly extending horizontal flange, the latter provided with spaced apertures, downwardly extending projections, and apertures to receive nails which may be driven through the rubber base, substantially as described.

No. 58,862. Boot or Shoe of Papier-Maché.

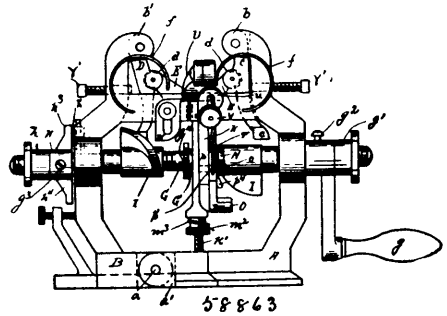
(Chaussure en papier-maché.)



Anna Johanna Grete, Hamburg, Germany, 1st February, 1898; 6 years. (Filed 13th January, 1898.)

Claim.—An improved foot-covering characterized by its manufacture from wood or paper pulp by forcing the said material under high pressure, into a mould of the required shape, constructed and arranged substantially as hereinbefore described.

No. 58,863. Saw Setting Machine. (Fer à contourner.)

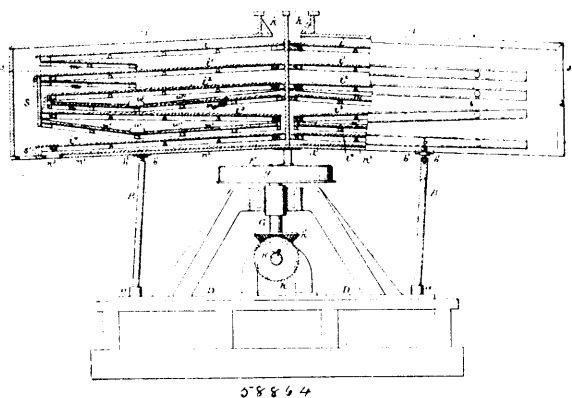


John Frederick Bredin, Maskegon, Michigan, U.S.A., 1st February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. In a saw-tooth-setting machine, the combination of the two-part main frame, means for moving the parts thereof toward each other, the depending punch-carrying arms pivoted to said frames, the lower ends of the arms having a cam form, and the cam mechanism which operates in conjunction with said cam ends of the arms, substantially as described. 2nd. In a saw-setting machine, the combination of the main frame, consisting of two interhinged parts, the swinging arms pivoted within the bifurcated ends of said parts, the punch devices pivoted to the said arms and adapted to slide horizontally in the frame, the cam-shaft that operates to oscillate the arms, and to move the parts of the main frame toward each other, the feed devices for the saw, substantially as described. 3rd. The combination with the main frame, of the punch-carrying arms pivoted within the bifurcated upper ends of said frame, the punches pivoted to said arms, means for retracting the arms and punches, and means for alternately moving the arms and punches forward, substantially as and for the purpose specified. 4th. In a saw-setting machine, the combination of the main frame, consisting essentially of two interhinged parts, each having a horizontal platen or bar, the intermediately-disposed saw-support located between these bars and vertically adjustable, the punching mechanism for the saw-teeth, and the feed mechanism, substantially as described. 5th. The combination of the main frame, the swinging punch-carrying arms, pivoted within the bifurcated upper ends of said frame, the drive-shaft supported in the main frame, internal threaded cams on said shaft, and the connecting-bar having threaded ends adapted to engage with said cams whereby they are adjusted towards and from each other, substantially as described.

No. 58,864. Gyrating Sieve or Bolting Machine.

(Tamis giratoire ou blutoir.)

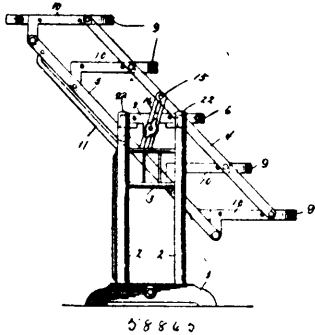


Augustus Wolf, Chambersburg, Pennsylvania, U.S.A., 1st February, 1898; 6 years. (Filed 7th January, 1898.)

Claim.—1st. A gyrating sieve or bolting machine having a driving device consisting of discs with crank pins engaging with bearings on the sieve box, an endless belt running from one driving disc to the other, and a counter shaft and bevel gears providing a driving connection between the shafts of said discs. 2nd. A gyrating sieve or bolting machine having sieve casings in the form of drawers removable sideways from each side of said sieve casing, and discharging into a central delivery passage. 3rd. The combination of the sieve box and the rotating discs having crank pins with universally pivoted connections whereby the movement of said crank pins is transmitted to the sieve box. 4th. A gyrating sieve or bolting machine, having a crank pin connection comprising the pin with enlarged head and a bearing box for said enlarged head formed partly in a frame which

carries the sieve box, and partly in a detachable cap, both parts of the box being lined with antifriction metal. 5th. The combination of the crank pin having an enlarged head with the divided bearing box therefor having a portion extending above the top of the enlarged head of the crank pin so as to provide a chamber for the reception of lubricant.

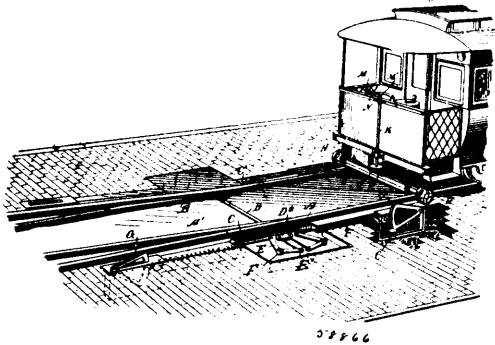
No. 58,865. Shelving and Table. (*Rayon et table.*)



Frederick Yunc, Bryan, Ohio, U.S.A., 2nd February, 1898; 6 years. (Filed 20th January, 1898.)

Claim.—1st. The combination with a supporting frame, side bars, and shelves pivoted to said side bars, of a fixed intermediate shelf, to which said side bars are pivoted intermediate their length, means for connecting said shelf to the supporting frame, sockets fixed to the under side of said shelf, apertured plugs in said sockets projecting beyond the outer edges of the same, a transverse shaft passing through said plugs and sockets, links pivoted to the side bars and engaged by said shaft and means on said shaft for clamping said links in any adjustable position against said plugs, substantially as set forth. 2nd. The combination with a supporting frame, side bars and shelves pivoted to said side bars, of a fixed intermediate shelf, to which said side bars are pivoted intermediate their length, means for connecting said shelf to the supporting frame, sockets fixed to the underside of said shelf and having annular shoulders at their inner ends, removable apertured plugs in said sockets limited in their movement thereinto by said annular shoulders and projecting beyond the outer edge of said sockets, a transverse shaft passing through said plugs and sockets, links pivoted to the side bars and engaged by said shaft, and means on said shaft for clamping said links in any adjusted position against said plugs, substantially as set forth. 3rd. The combination with a supporting frame embodying vertical uprights, side bars, and shelves pivoted to said side bars, of a fixed intermediate shelf to which said side bars are pivoted, a transverse shaft passing beneath the fixed shelf, and connected thereto by suitable means and projecting between the vertical uprights of the supporting frame, links pivoted to the side bars, and engaged by said shaft, means on said shaft for clamping said links in any adjusted position, and bracket attached to the fixed shelf and carrying sockets at their outer ends adapted to engage with the upper ends of said uprights, substantially as set forth.

No. 58,866. Switch. (*Aiguille.*)

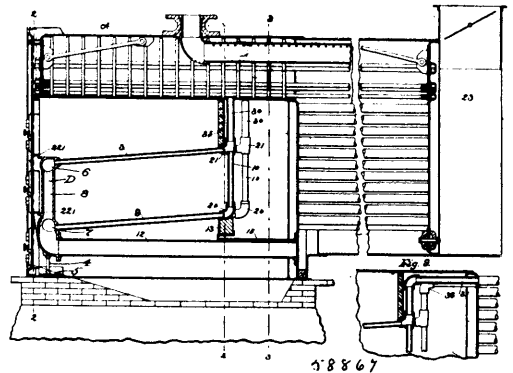


George Bansall, Lilly, Pennsylvania, U.S.A., 2nd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. The combination with the switch-points of a switch, a pair of bell-crank levers connected therewith, a pair of segments connected with said lever and arranged to present an inclined face, and suitable means carried by the car for engaging the segments to

shift the switch-points, substantially as shown and described. 2nd. The combination with the switch-points of a switch, a tie-rod connecting them, a bell-crank lever connected therewith, a segment connected with said lever and arranged to present an inclined surface to the track rails, and suitable means carried by the car to engage said inclined surface in order to shift the switch-points, substantially as shown and described. 3rd. The combination of the switch-points of a switch, a tie-rod connecting them, a casing located alongside of the switch, a bell-crank lever pivoted in said casing and connected with the tie-rod, a segment also pivoted in said casing connected with the bell-crank lever and arranged to present an inclined surface to the top of the casing, and suitable means carried by the car for engaging said segments to shift the switch-points, substantially as shown and described. 4th. The combination of the switch-points, means in connection therewith by which they are moved, means carried by the car for engaging them to shift the rails, substantially as shown and described. 5th. The combination of the switch-points of a switch, means in connection therewith for shifting them, said means being located on each side of the track and having pivoted segments connected therewith, a pair of wheels carried by the car for engaging said segments, and means in connection with the segments for shifting them, substantially as shown and described. 6th. The combination of the switch-points of a switch, means in connection therewith for shifting them, said means being located on each side of the track-rails and having segments adapted to be engaged by means carried on the car whereby the switch-points are shifted, said means consisting of a pair of wheels mounted on a shaft which is carried by a bracket, said shaft having means in connection with it for shifting it laterally in the bracket consisting of a pulley carried on the shaft or rod provided with the operating handle at one end and a rope or cord connected with the shaft near each end thereof, and having its middle portion passed around the pulley, substantially as shown and described.

No. 58,867. Boiler Furnace. (*Fournaise de chaudière.*)



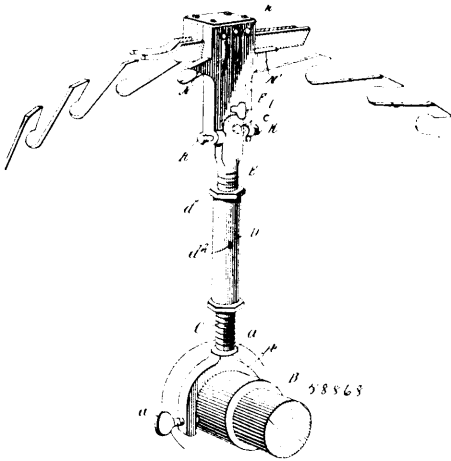
Edward B. Parkhurst, Woburn, Massachusetts, U.S.A., 2nd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. A boiler furnace having an upper water grate composed of a series of tubes connected at their rear ends with the water space of the boiler by independent connections for the respective tubes, a water box or manifold with which the front ends of said grate tubes are connected, a lower water grate composed of a series of tubes connected at their front ends with a water box or manifold, a series of vertical connections whereby the rear ends of the said lower grate tubes are connected with the water space of the boiler, and supply pipes connecting said water box or manifold with the water space of the boiler, said upper series of tubes being of smaller diameter than the lower series, and with wider spaces between their peripheries than the lower series, substantially as set forth. 2nd. A boiler furnace having an upper water grate composed of a series of tubes connected at their rear ends with the water space of the boiler by independent connections for the respective tubes, a water box or manifold with which the front ends of said grate tubes are connected, a lower water grate composed of a series of tubes connected at their front ends with the said manifold, a series of vertical connections whereby the rear ends of the said lower grate tubes are connected with the boiler connections of the upper grate tubes, and supply pipes connecting said water box or manifold with the water space of the boiler, said upper series of tubes being of smaller diameter than the lower series, and with wider space between their peripheries than the lower series, substantially as set forth. 3rd. A boiler furnace having upper and lower water grates and suitable connections therefor with the water space of the boiler, and having a movable closure device located at the rear of the lower water grate tubes for closing the space between the rear ends of said lower water grate tubes and the adjacent surface of the furnace chamber, whereby the draft of the lower grate is prevented from passing below and behind said grate and is caused to pass upwardly through the same, said closure device being made movable in order to permit of cleaning behind the same, substantially as set forth.

4th. A boiler furnace having an upper and a lower series of tubular water grates, the upper series being of smaller diameter than the lower series, and with wider space between their peripheries than the lower series, substantially as set forth. 5th. A boiler furnace having an upper and a lower series of tubular water grates, the intervals between the axes of the upper grate tubes being the same as the intervals between the axes of the lower grate tubes, and the diameter of the upper grates being less than the diameter of the lower grate tubes, substantially as set forth. 6th. A boiler furnace having an upper water grate composed of a series of tubes connected at their rear ends with the water space of the boiler by independent connections for the respective tubes, a water box or manifold with which the front ends of said grate tubes are connected, a lower water grate composed of a series of tubes connected at their front ends with the said manifold, a series of upright connections whereby the rear ends of the said lower grate tubes are connected with the boiler connections of the upper grate tubes, and supply pipes connecting said water box or manifold with the water space of the boiler, the intervals between the axes of the upper grate being the same as the intervals between the axes of the lower grate tubes, and the diameter of the upper grate tubes being less than the diameter of the lower grate tubes, substantially as set forth.

No. 58,868. Saw Shaping and Sharpening Device.

(*Machinè à affûter les scies.*)



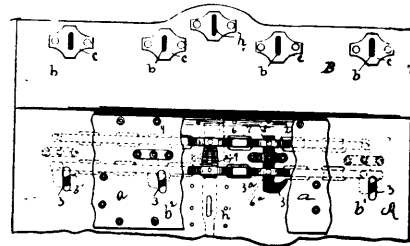
W. Asher Wilcox, Rich Hill, Missouri, U.S.A., 2nd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. In a device for shaping, sharpening, rounding and side filing saws, a head portion having a file way or ways, and means for supporting said head portion upon the saw, substantially as shown and described. 2nd. In a device for shaping, sharpening, rounding and side filing saws, a head portion having file ways, and the guide or gauge projections or shoulders, and means for supporting said head portion, substantially as shown and described. 3rd. In a device for shaping, sharpening, rounding and side filing saws, a head portion having inclined file ways, and means for supporting said head portion upon the saw, substantially as shown and described. 4th. In a device for shaping, sharpening, rounding and side filing saws, a head portion having inclined file ways, and the guide or gauge extensions or shoulders, and means for supporting said head portion, substantially as shown and described. 5th. In a device for shaping, sharpening, rounding and side filing saws, a head portion comprising the side and central blocks, said central block being adjustable, and the file ways formed between said side and central blocks, and means for supporting the head portion upon the saw, substantially as shown and described. 6th. In a saw shaping, sharpening, rounding and side filing device, a head portion comprising the side and central pieces, said central pieces being wedge shape and adjustable, the inclined file ways between the side and central pieces, the guide or gauge extendings or shoulders, and means for supporting said head portion upon the saw, substantially as shown and described. 7th. In a saw shaping, sharpening, rounding and side filing device, a head portion comprising the side blocks having inclined recessed in their inner faces, the central block having the wedge shaped lower end, said block being adjustably arranged between the side blocks, and means for supporting said head portion upon the saw, substantially as shown and described. 8th. In a saw shaping, sharpening, rounding and side filing device, a head portion comprising the side and central blocks, one of the side blocks having the guide and gauge shoulders or extensions, means for supporting said head portions and the clamping screws for binding the said head portion and saw, substantially as shown and described. 9th. In a device of the kind described, the head portion constructed as described, a supporting rod pivotally connected with said head portion, and the adjusting screws carried by the head portion and

adapted to bear upon the supporting rod, substantially as shown and described. 10th. In a device of the kind described, the combination with the head portion, of the supporting rod, the adjustable connection between said head portion and rod, and the adjustable sleeve portion to which said rod is attached, substantially as shown and described. 11th. In a device of the kind described, the combination with the yoke, of the rods secured thereto, the tubular member attached to the rod, a second rod carried by said tubular member, and the head portion pivotally attached to the second rod, the adjusting means, and the clamping screws carried by the said head portion, substantially as shown and described. 12th. The combination with the head portion, comprising the side and central blocks providing the inclined file ways, the clamping screws, the adjusting screws, the supporting rod and adjustable connection, and the yoke adapted to be clamped to the mandril collar, all arranged, substantially as shown and described.

No. 58,869. Mail Bag Fastener.

(*Fermeture de sacs à lettres.*)

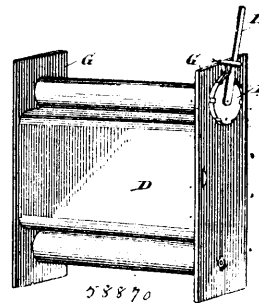


58869

William W. Henry and Adelbert E. Darrow, both of Little Valley, New York, U.S.A., 2nd February, 1898; 6 years. (Filed 18th October, 1897.)

Claim.—1st. In a mail-bag fastener, the combination with a series of pivoted hooks, of a plurality of flexible non-extensible connections, said connections attached to each of said hooks on opposite sides of their pivotal points, substantially as and for the purposes specified. 2nd. In a mail-bag fastener, the combination with a pivoted hasp, of a series of pivoted hooks, and a plurality of flexible non-extensible connections which connect the hasp and each of the hooks of said series on opposite sides of their pivotal points, substantially as and for the purposes specified. 3rd. In a mail-bag fastener, the combination of a series of pivoted hooks, and a plurality of non-extensible chain connections therefor, said connections having plate-links with which each hook of the series is connected on opposite sides of the pivotal point of the hook, substantially as and for the purposes specified. 4th. In a mail-bag fastener, the combination of a series of pivoted hooks, and a plurality of non-extensible chain connections therefor, each of said chain connections consisting of plate and rod links, the shanks of each hook of the series being connected with a plate-link of each of the chain connections on opposite sides of the pivotal point of the hook, substantially as and for the purposes specified.

No. 58,870. Station Indicator. (*Indicateur de station.*)



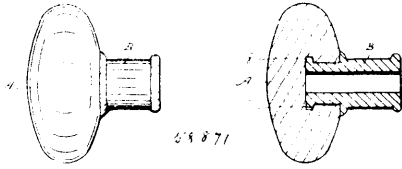
58870

Orie W. Allen, Butte, Montana, U.S.A., 2nd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. In a station indicator, the combination with the supporting frame of the winding rolls and ribbon, the operating lever and pawl, the toothed disc, and the reversible stop device, substantially as shown and described. 2nd. In a station indicator, the combination with the supporting frame of the winding rolls and ribbon, the operating lever and disc, the pawls carried by the lever, the reversible stop carried by the lever and the set screw for attaching said stop to the lever, substantially as shown and described. 3rd. In a station indicator, the combination with the supporting

frame of the winding rolls and ribbon, the operating lever and pawls, the drive chain or belt and the adjustable tightening device, substantially as shown and described. 4th. In a station indicator, the combination with the idler sprocket of the plate to which the sprocket is attached, said plate having a longitudinal slot, a plate having a binding screw adapted to pass through the longitudinal slot, the opposing faces of said plates being serrated, and the winged neck for securing the plates together, substantially as shown and described.

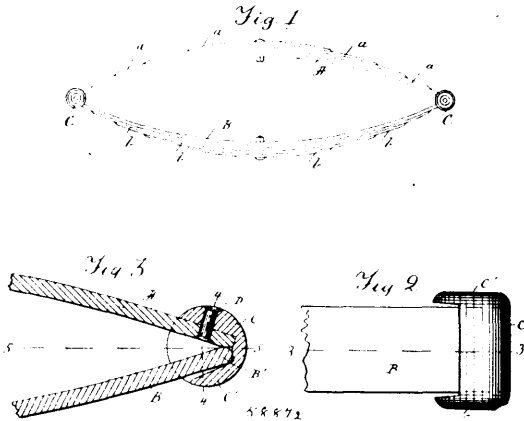
No. 58,871. Door Knob. (Boulon de porte.)



John Tollhurst, Burlington, Ontario, Canada, 2nd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—A door knob of the character described, consisting of a knob having a socket with lower side recesses and horizontal openings in the side thereof to admit a shank having end side lips to conform with said openings of socket and engage with the shoulders formed by said recesses, as described.

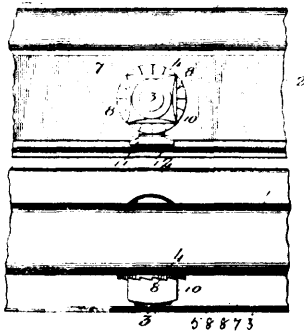
No. 58,872. Carriage Spring. (Ressort de voiture.)



Samuel R. Bailey, Amesbury, Massachusetts, U.S.A., 2nd February, 1898; 6 years. (Filed 20th January, 1898.)

Claim.—The herein described carriage spring, consisting of two members, to the ends of which are secured socket pieces having closed ends, and the ends of one of the other member of which are freely disposed in said socket pieces and confined against lateral displacement by the closed ends thereof, substantially as described.

No. 58,873. Nut Lock. (Arr'te-écrou.)

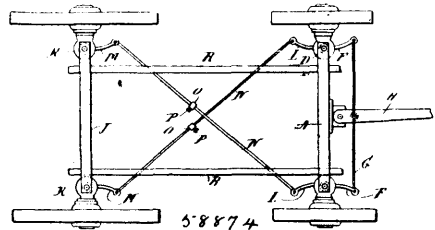


John H. Eckart, Joplin, Missouri, U.S.A., 2nd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. A nut lock, comprising an ordinary bolt, a fixed washer, ratchet teeth formed on one side of said washer, and a nut having ratchet teeth formed on the same and adapted to co-operate

with the ratchet teeth on the washer, substantially as described. 2nd. A nut lock, comprising an ordinary bolt, a circular washer having a rear smooth surface, ratchet teeth formed on the opposite surface of the same, a foot portion formed integral with said washer, a groove formed between the washer and foot portion, whereby the metal is reduced, and a nut having a ratchet formed on its engaging surface and adapted to co-operate with the ratchet teeth formed on the washer, substantially as described. 3rd. A nut lock, comprising an ordinary rail and fish plate, a bolt passing through the same, a circular washer having a central opening for receiving the bolt, radially arranged ratchet teeth formed on the outer surface of said washer, a foot portion formed integral with the washer and having a straight lower surface which comes in contact with the base of the rail, a groove formed in the metal between the washer and foot portion whereby the metal is reduced, and a nut having radially arranged ratchet teeth formed on one of its faces which co-operate with the ratchet teeth formed on the washer, substantially as described. 4th. In a nut lock, comprising a suitable washer, ratchet teeth formed on one surface thereof, lugs formed integral with said washer, grooves in the metal between said washer and lugs whereby the metal is reduced, and pins projecting from one side of the lugs, substantially as described.

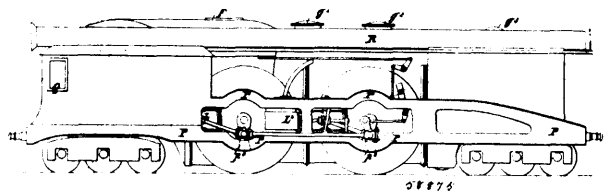
No. 58,874. Waggon-Gear. (Train de wagon.)



Charles E. Bostwick, West Stockbridge, Massachusetts, U.S.A., 2nd February, 1898; 6 years. (Filed 12th January, 1898.)

Claim.—A waggon-gear constructed and arranged substantially as herein shown and described, with the front and rear axles transversely recessed at each end and having top and bottom extensions, front and rear spindles provided with enlarged heads pivoted in said recesses, forward and rearward extending arms integral with the forward spindles, and forward extending arms integral with the rear spindles, diagonal rods crossing each other pivotally connected at their ends with the forward arms of the rear spindles and with the rear arms of the forward spindles, and adjustable shoes or stops fitted on said diagonal rods and provided with means for holding them in place, as set forth.

No. 58,875. Locomotive. (Locomotive.)

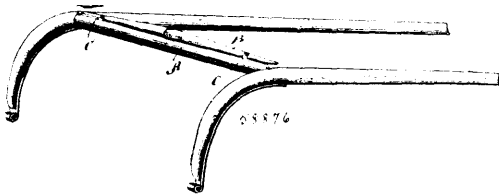


Emanuel J. B. Fouré and Henri N. Thuile, both of Alexandria, Egypt, 2nd February, 1898; 6 years. (Filed 12th January, 1898.)

Claim. 1st. A construction of locomotive, more particularly for expresses, characterized by the combination of a steam locomotive and a self-generating electrical locomotive, both arranged on a single framework, the steam locomotive being designed for constant working, the electrical locomotive being destined to work at times and intermittently, thus serving to assist the steam locomotive in ascending inclines or when starting, the said compound engine being in addition combined with an arrangement ensuring the warming and ventilation of the train, as above described and set forth. 2nd. A construction of locomotive formed by the combination of a steam locomotive and an electrical locomotive, both mounted on a single framework formed of sole-bars P connected and braced together by tie-pieces p^1 , p^2 , said framework being supported centrally by the steam-operated driving-axes, each of these being maintained by four supports, and said single framework being supported at one end by a bogie actuated by electrically driven axes, and at its other end towards the fire-grate by a bogie having trailing wheels H, H, as above described and set forth with reference to the annexed drawings. 3rd. In a steam locomotive, a boiler consisting essentially of three superposed chambers A, B, G, the lower chambers A, B being entirely tubular, the upper chamber

G having no tubular inset and provided with domes for drawing off steam, each tubular chamber being furnished with a smoke-box and a chimney, independent of those of the other chamber, as above described and set forth with regard to the accompanying drawing. 4th. A locomotive formed by the combination of a steam locomotive and an electrical locomotive, the former comprising a boiler formed by three superposed chambers, the two lower chambers being tubular, this boiler having a fire-grate D furnished with a water-tube I and a screen holding water *i* for the purpose of equally diffusing the heated gases between the two lower chambers, as described and set forth with regard to the annexed drawings. 5th. In combination with a steam locomotive, a system of warming and ventilating formed essentially of a series of several concentric and double-walled tubes or envelopes *r, r* constituting a tube opening forward of the vehicle, the air rushing into the space R, R, and the envelopes *r, r* being able to be heated by steam so that the ventilator can work as a warming-stove, as described and set forth with regard to the annexed drawings.

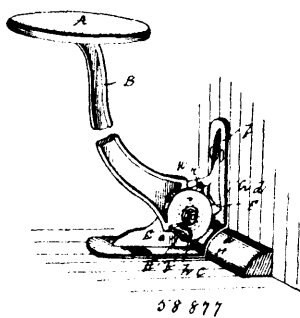
No. 58,876. Whiffletree. (Palonnier.)



Fred F. Olds, Onondaga, Michigan, U.S.A., 2nd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. A whiffletree provided with a spring arm secured to the edge thereof and normally lying at an angle thereto and adapted to be passed, with the end of the whiffletree, through the opening in the end of the trace lug, substantially as described. 2nd. A whiffletree, provided with an attachment consisting of a spring, normally lying at an angle with the tree and provided with ears on its inner end, whereby it may be screwed or riveted to the whiffletree, the attachment being adapted to be passed, with the end of the whiffletree, through the opening in the end of the trace lug, substantially as described. 3rd. The whiffletree attachment herein described, consisting of a spring provided with attaching ears at one end, bent to closely engage the edge of the whiffletree and provided with bolt or rivet holes, a rounded portion near the opposite end to receive the pull of the trace lug, and an angular arm to prevent the trace lug slipping off the end thereof, substantially as described.

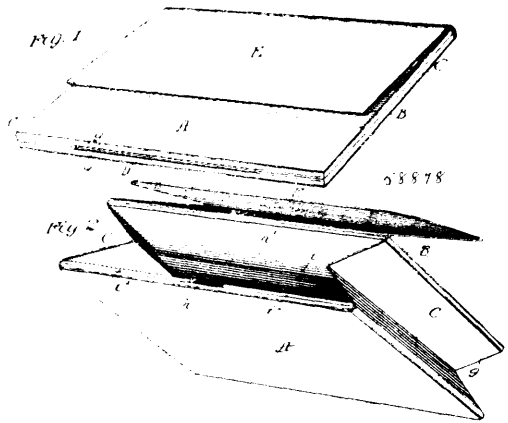
No. 58,877. Counter Stool. (Siège de magasin.)



Aaron A. Lind, Canton, Ohio, U.S.A., 2nd February, 1898; 6 years. (Filed 18th January, 1898.)

Claim.—1st. The combination of the pivoted leg having attached to its upper or free end the seat A, and provided at its bottom or lower end with the thimble or bearing *a*, the base C, provided with the attaching flanges *b*, and the concave portion *c*, and the bearing D, the clamp-bolt *d*, located in the bearing D, the flange *e*, formed upon the base *c*, and the flange *f* formed upon the bottom or lower end of the leg B, the spring E, connected at one end to the pin *g*¹, and at its other end to the rib *g*, the stop F, and the flanges H, and H¹, substantially as and for the purpose specified. 2nd. The combination of the pivoted leg B, having attached to its upper or free end the seat A, and provided at its bottom or lower end with the thimble or bearing *a*, an actuating spring, and a base supporting the leg and a clamping bolt to connect the base and leg together and means for limiting the outward movement of the leg, substantially as and for the purpose specified.

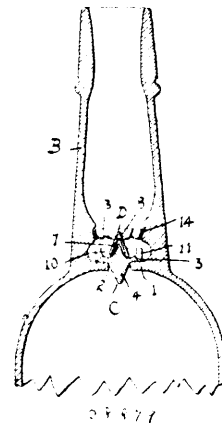
No. 58,878. Paper Box. (Boîte en papier.)



William A. Cooke, Brooklyn, New York, U.S.A., 2nd February, 1898; 6 years. (Filed 18th January, 1898.)

Claim. 1st. In paper boxes, a box having the ends and bottom creased to adapt them to form gusset folds, a stiff lining at the back and front and detached extension linings adapted to be folded so that the box can be collapsed, and when the box is set up extended to form the bottom and end linings, substantially as specified. 2nd. A box having the ends and bottom creased to adapt them to form gusset folds, a stiff lining at the back and front, and detached extension linings having their exterior surfaces coated with soluble adhesive substance, adapted, when the box is set up to be extended and adhesively secured to the bottom and ends and thereby form a solid box, substantially as specified. 3rd. The combination in a paper box of creased ends and bottom, front and back linings of stiff material, and detached extension end and bottom linings connected respectively with the front and back linings, and having their exterior surfaces coated with an adhesive substance, whereby when the box is folded the extension linings are folded against the front and back respectively, but when the box is set up the said extension linings are turned out against the ends and bottom of the box and adhesively secured thereto, thereby forming a solid box, substantially as specified.

No. 58,879. Non-Refillable Bottle. (Bouteilles non ré-emplissable.)

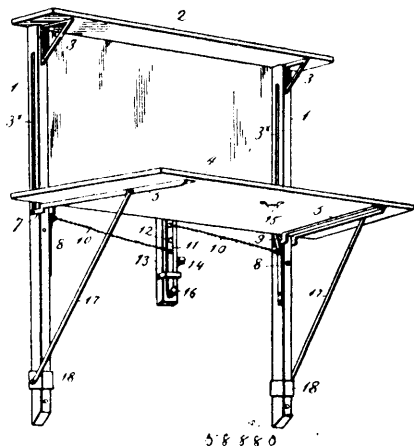


William S. Bechtold, Newark, New Jersey, U.S.A., 2nd February, 1898; 6 years. (Filed 18th January, 1898.)

Claim.—1st. The combination with a bottle, of a valve seat, a valve adapted to rest on said seat and formed of two parts, of which the lower constitutes means for closing off the ingress of liquid and is provided with a circular cavity on its upper face, while the upper part is connected by a post and socket connection with the lower part and is made substantially conical and tapering to a point, thus forming a guard for said lower part, and a keeper for holding the valve in the bottle, substantially as described. 2nd. The valve herein described, consisting of a valve disc provided with a circular cavity on its upper face, a post projecting from the upper face, and a separable conical guard surrounding said post. 3rd. The valve herein described, consisting of a valve disc provided with a circular cavity on its upper face and with peripheral notches, a post projecting from the upper face, and a separable conical guard surrounding

said post. 4th. The combination with a bottle, of a valve seat, a valve adapted to rest on said seat and composed of two separable parts, and an annular dished keeper provided with radial slits extending through its side and into its bottom, substantially as described. 5th. The combination with a bottle, of a valve seat, a valve adapted to rest on said seat and composed of two separable parts, and an annular dished keeper provided with radial slits extending through its side and into its bottom and with downwardly projecting prongs adapted to guide the upper, separable part of the valve, substantially as described. 6th. The combination with a bottle having its neck contracted to form a valve seat and a diverging portion forming a shoulder, of a valve adapted to rest on said seat and having a central enlargement projecting downwardly and adapted to engage with said shoulder, said guard resting on said valve and said valve having a central, conical cavity in its upper end, substantially as described.

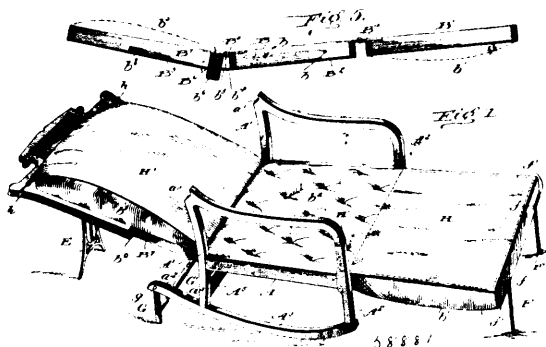
No. 58,880. Shelf, Table and Desk Combined.
(*Rayon, table et pupitre combinés.*)



George A. Ank, Mt. Carroll, Illinois, U.S.A., 2nd February, 1898; 6 years. (Filed 19th January, 1898.)

Claim. 1st. The combination of the slotted uprights, the leaf provided with brackets having a member movable in the slots of the uprights, and catches adapted to engage a rear portion of the brackets to sustain the leaf in a horizontal position, substantially as and for the purposes described. 2nd. The combination of the slotted uprights, the leaf provided with brackets having a member movable in the slots of said uprights, catches, to engage a portion of said brackets, and a lever joined to said catches by suitable connections, and adapted to be moved so as to withdraw the catches from engagement with the brackets to permit the leaf to be folded, substantially as and for the purpose described. 3rd. The combination of the slotted uprights, the leaf having brackets with a member at the rear moving in the slots of said uprights, means for supporting the leaf in a horizontal position and a pawl or catch for securing the leaf in a vertical position when folded, substantially as and for the purposes described. 4th. The combination of the slotted uprights, the leaf provided with brackets having rearwardly extending ears to lie on opposite sides of the uprights, and a member supported by the ears of each bracket and passing through the slots of the uprights, substantially as and for the purposes described.

No. 58,881. Chair. (*Chaise.*)

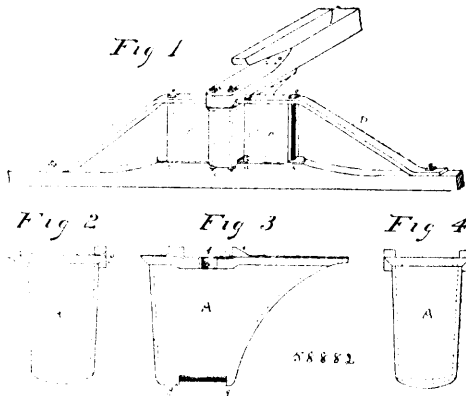


John Khuentner, Phillipsburg, New Jersey, U.S.A., 2nd February, 1898; 6 years. (Filed 20th January, 1898.)

Claim. 1st. A convertible chair comprising a mattress frame formed in three pivoted sections, consisting of a head or back,

middle, and seat or foot section, the seat or foot section being separated a distance from the middle section by the attachment of the sections at points removed from the pintle to embrace the front cross bar of the chair, exterior and finishing side frames provided with arms and cross bars attached to the middle section, and an exterior edging or finishing applied to the sides and end of the back section, substantially as specified. 2nd. In a convertible chair, a base portion, oppositely located rockers provided with grooves upon their upper surfaces and with slotted ends, and concealed stops connected together by a cross piece and adapted to be held in the slotted ends of the rockers so as to lie within said grooves when the rocker is in use, substantially as specified. 3rd. In a convertible chair, pivoted stops provided upon oppositely located rockers, and a detachable cross rod extending from one stop to the other and secured against rotation on said stops by engagement with a projection from said stops, substantially as specified. 4th. In a convertible chair, a base portion provided with rockers, concealed stops pivoted in grooves formed in said rockers, inwardly projecting lugs upon said stops, and a cross rod extending between said stops and held against rotation by said lugs, substantially as specified. 5th. In a convertible chair, a base portion provided with rockers, concealed stops pivoted in grooves formed in said rockers, angular lugs provided on said stops, a cross rod seated upon said lugs and extending between the stops, and securing means passed through the apertures in said lugs and into said cross bar, substantially as specified. 6th. In a convertible chair, a base portion provided with a rear cross bar, a concave socket plate supported thereon an adjustable back section carried by said base, a guide plate upon said section, an inclination adjusting bar passed through said guide plate and provided at its lower end with a projection to seat in said socket plate, and at its upper end with an operating handle, and a set screw located in said guide plate to hold said bar at its adjusted position, substantially as specified. 7th. In a convertible chair, a base portion provided with upwardly extending side frames comprising arms having seats at their rear upper ends, a pivoted back section provided with side frames having shoulders to engage said seats, a cross bar located upon the base below the pivotal point of the back, a reciprocating bar supported in a guide plate at the lower end of the back and engaging a socket carried by said cross bar, and means for securing said reciprocating bar against movement in said guide plate, substantially as specified.

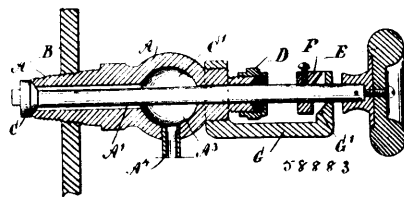
No. 58,882. Bob Sleigh. (*Traineau-jumeau.*)



George Wesley, Crawford, Westfield, New Brunswick, 2nd February, 1898; 6 years. (Filed 20th January, 1898.)

Claim. A sled knee consisting of casting A, having lips on the bottom which embrace the runner and having a groove for the reeve on the top and side lugs with grooves therein in combination with the pins and blocks arranged as above set out to allow the swaying, sliding or oscillating of the knee, all substantially as and for the purposes above set forth.

No. 58,883. Gauge Cock. (*Robinet-jauge.*)

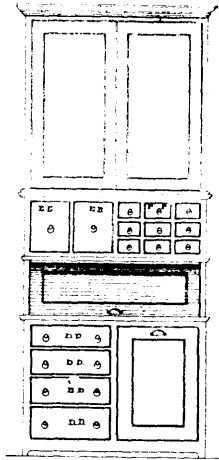


George Johnson, Allenport, Pennsylvania, U.S.A., 2nd February, 1898; 6 years. (Filed 21st January, 1898.)

Claim. 1st. A gauge cock, comprising a casing adapted to be secured to a boiler, and formed at its inner end with a valve seat, a

valve adapted to be seated on the said seat by pressure from within the boiler, the stem of the valve extending through a stuffing box in the casing, a cam on the said stem, and a bracket carried by the said casing, and having a cam surface adapted to be engaged by the said cam, to impart a sliding motion to the said valve stem, substantially as shown and described. 2nd. A gauge cock, comprising a casing adapted to be screwed to a boiler, and formed with a bore terminating at its inner end in a chamber having an outlet, a valve seat on the inner end of the said casing, a valve adapted to be seated on the said seat, a valve stem carrying the said valve, and extending loosely through the said bore and the said chamber, and through a stuffing box on the outer end of the said casing, a handle on the said stem, a cam secured on the said stem, and a bracket screwed on the said casing, and formed with a cam surface adapted to be engaged by the said cam, to slide the said valve stem in the said casing, substantially as shown and described.

No. 58,884. Baking Cabinet. (Cabinet de cuisine.)

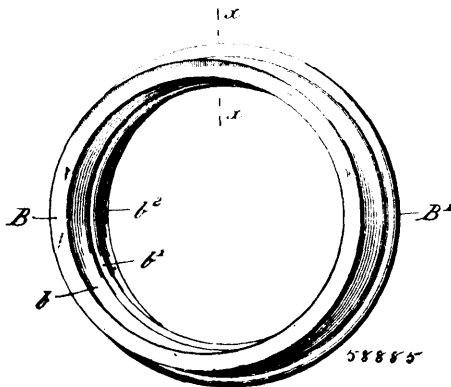


58884

John W. Dobson, Toronto, Ontario, Canada, 2nd February, 1898; 6 years. (Filed 19th January, 1898.)

Claim.—1st. A flour receptacle moving outward upon a roller and tilting forward, substantially as described. 2nd. A flour receptacle mounted upon a roller and adapted to be moved outward thereon and a projection upon the bottom of the receptacle which comes in contact with the roller, substantially as described. 3rd. A flour receptacle mounted upon two rollers and a strip upon the bottom of the flour receptacle which comes in contact with the outer roller, substantially as described. 4th. A baking cabinet composed of a flour receptacle C, a bake board A, and the arrangement of drawers D D, E E, F F, substantially as described.

No. 58,885. Car Wheel. (Roue de chars.)



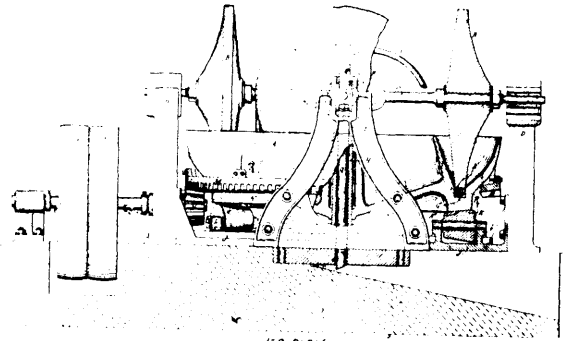
58885

James Wheeler Fuller, Catasauqua, Pennsylvania, U.S.A., 3rd February, 1898; 6 years. (Filed 20th January, 1898.)

Claim. 1st. A car wheel provided with a steel tire and flange, the inner edge of which from the outer side is inclined to a convex-concave offset and therefrom inclined to the inner side, substantially as and for the purposes described. 2nd. A car wheel provided with a steel tire and flange, the inner edge of which from the outer

side is inclined to a convex-concave offset and therefrom inclined to the inner side and said tire fused, welded or otherwise secured to a metal or other body, substantially as and for the purposes described. 3rd. A car wheel provided with a steel tire and flange, the inner edge of said tire from the outer side inclined to a convex-concave offset and therefrom oppositely inclined to the inner side, said tire fused or welded to a cast-iron body having a recess complementary to said tire offset and inclined walls or edges complementary to those of said tire, substantially as and for the purposes described.

No. 58,886. Ore Reducing Machine. (Machine à réduire le minéral.)

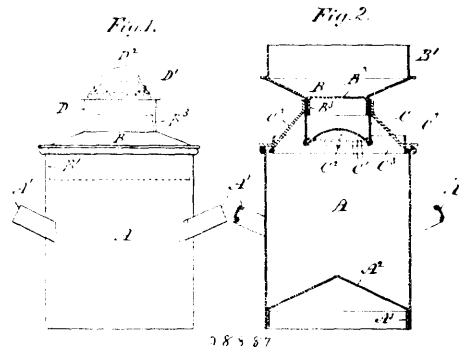


58886

Thomas R. Jordan, New York, State of New York, U.S.A., 3rd February, 1898; 6 years. (Filed 29th November, 1897.)

Claim.—1st. In a crushing or reducing machine having a revolving chamber and two or more runners revolving over a crushing path therein, radial arms or spindles mounted in toggle bearings near the centre of the machine and in fixed guide blocks outside the crushing chamber for the purpose of admitting a vertical or riding motion to the said runners over the said crushing path and to retain the said spindles or runners in a fixed position radially. 2nd. In a crushing or reducing machine having a revolving crushing chamber and two or more runners revolving over a crushing path therein, a circulating channel in the said crushing path to contain mercury, as and for the purpose described. 3rd. In a crushing or reducing machine having a revolving crushing chamber and two or more runners revolving over a crushing path therein, pipes forming a syphon with adjustable inlet and outlet to carry away the water and crushed material from the said crushing chamber, substantially as and for the purpose described. 4th. The general arrangement and combination of parts constituting the improved reducing machine substantially as herein described with reference to the annexed drawings.

No. 58,887. Milk Strainer and Cooler. (Garde-lait et couloir.)

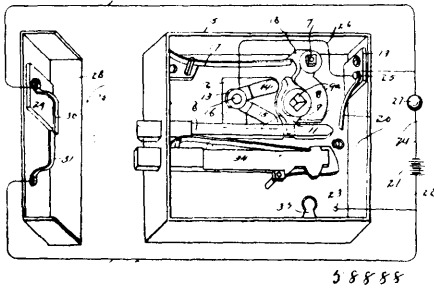


58887

John B. Genin and Frank Wilson, both of Montreal, Quebec, Canada, 3rd February, 1898; 6 years. (Filed 7th January, 1898.)

Claim.—1st. The combination with the can A, of the perforated cooling vessel or receptacle C, provided with legs C², and having a ring C³, connecting said legs and fitting around the inside of the can the invertible cover portion B, having a sieve B², and the removable portion D, of the cover provided with perforations D¹, as set forth. 2nd. In combination with the can A, the detachable cooler C, having legs C², and ring C³, and the invertible cover-section B provided with a straining cloth or sieve B², and having a removable perforated top D, as set forth.

No. 58,888. Electrical Alarm for Door Locks.
(*Avertisseur électrique pour serrures de portes*)



Paul V. Vandeveldt, Corona, New York, U.S.A., 3rd February, 1898; 6 years. (Filed 13th September, 1897.)

Claim.—1st. An electrical alarm for doors, comprising a lock or latch casing, a longitudinally-movable latch bolt mounted therein, an insulated spring connected with said casing adjacent to the rear end of the latch-bolt, and adapted to be struck thereby, and an electric alarm in circuit with said spring and said casing being also provided with a tumbler by means of which the said latch bolt is operated said tumbler being provided with arms which operate in opposite direction, and an insulated fork mounted in said casing, the sides of which are adapted to make contact with the arms of said tumbler, said fork being also in said circuit, and a latch casing which is adapted to be secured to the frame of the door, and which is provided with spring arms, and which are also in circuit with said alarm, and which are normally in connection and adapted to be separated by the latch-bolt when the door is closed, substantially as shown and described. 2nd. An electrical alarm for doors, comprising a lock or latch casing, a longitudinally movable latch bolt mounted therein, an insulated spring connected with said casing adjacent to the rear end of the latch bolt, and adapted to be struck thereby, and an electric alarm in circuit with said spring and said casing being also provided with a tumbler by means of which the latch bolt is operated, said tumbler being provided with arms which project in opposite direction, and an insulated fork mounted in said casing, the sides of which are adapted to make contact with the arms of said tumbler, said fork being also in said circuit, and a latch casing which is adapted to be secured to the frame of the door, and which is provided with spring arms, and which are also in circuit with said alarm, and which are normally in connection and adapted to be separated by the latch-bolt when the door is closed, substantially as shown and described. 3rd. An electrical alarm for doors, comprising a lock or latch casing, a longitudinally movable latch bolt mounted therein, an insulated spring connected with said casing, adjacent to the rear end of the latch bolt, and adapted to be struck thereby, and an electric alarm in circuit with said spring and said casing being also provided with a tumbler by means of which the latch bolt is operated, said tumbler being also provided with arms which operate in opposite direction, and an insulated fork mounted in said casing, the sides of which are adapted to make contact with the arms of said tumbler, said fork being also in said circuit, and a dog which is adapted to be operated by said tumbler, and which is also adapted to close the circuit and operate the alarm, substantially as shown and described.

No. 58,889. Paint. (*Peinture.*)

Henri L. Bates, Portsmouth, New Hampshire, U.S.A., 3rd February, 1898; 6 years. (Filed 27th September, 1897.)

Claim.—The herein described composition for an elastic paint for house and decorative purposes, which consists in a mixture of acetic acid, powdered borax, carbonate of soda, glue, wax, paraffin-wax, citromella, fine salt, powdered alum, white-grape juice and nitre, in the proportions substantially as specified.

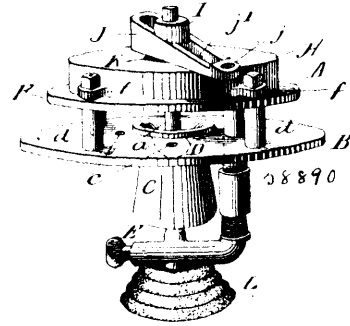
No. 58,890. Hydro-Carbon Burner.

(*Foyer à hydro-carbures.*)

Elijah F. Darby, Cincinnati, Ohio, U.S.A., 3rd February, 1898; 6 years. (Filed 9th September, 1897.)

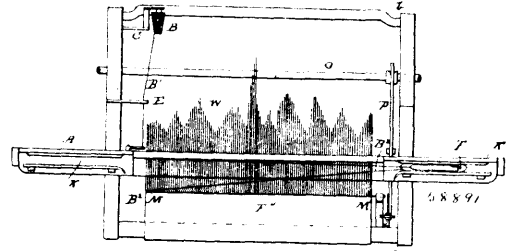
Claim.—1st. A retort for hydro-carbon burners comprising a pipe-coil removably secured within a substantially closed compartment, in combination with a spreader having an adjusting device comprising a wedge-shaped slide adapted by its movement to regulate the position of the spreader, substantially as set forth. 2nd. A retort for hydro-carbon burners, comprising the combination of a pipe-coil, a plate below said coil and upon which it rests, a cap-plate or cover fitting over said coil and secured to the supporting-plate, and a spreader having an adjusting device comprising a wedge-shaped slide adapted by its movement to regulate the position of the spreader, substantially as set forth. 3rd. In a hydro-carbon burner, the combination of a pipe-coil, a plate below said coil and upon which it rests, a cap or cover fitting over said coil, a disc B secured to the plate at a short distance below the same and provided with a mixing funnel, a burner below said funnel, and a spreader having an adjusting device comprising a wedge-shaped slide adapted by its

movement to regulate the position of the spreader, substantially as set forth. 4th. In a hydro-carbon burner, the combination of a



pipe-coil, a plate below said coil and upon which it rests, a cap or cover fitting over said coil, a disc secured to the plate at a short distance below the same and provided with a mixing funnel, a burner below said funnel, a spreader above the mouth of the funnel and provided with a stem extending up through the retort, a collar on the stem, and a wedge-shaped slide mounted for movement above the retort and adapted for engagement with said collar, said slide, acting by its movement, to regulate the position of the spreader, substantially as set forth. 5th. In a hydro-carbon burner, the combination of a retort, a mixing funnel, a burner, a spreader or deflector provided with a stem passing up through the retort, a collar adjustably secured on the stem and provided with an inclined under surface, and a wedge-shaped slide mounted for movement over the retort and provided with a longitudinal slot for the passage of the stem of the spreader or deflector, said slide, acting by its movement, to regulate the position of the spreader or deflector, substantially as set forth.

No. 58,891. Fabric Weaving Method and Apparatus.
(*Méthode et appareil de tisser.*)



Edward Smith, 42 Well Street, Bradford, York, England, 3rd February, 1898; 6 years. (Filed 27th August, 1897.)

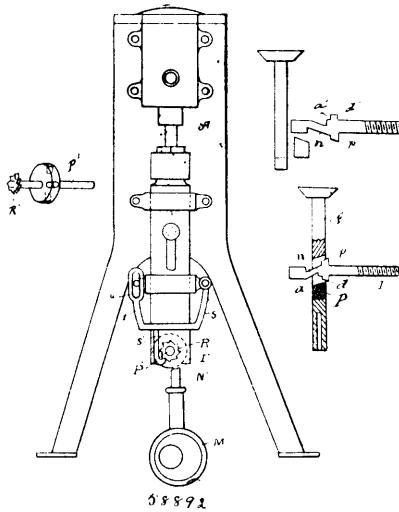
Claim.—1st. The weaving of fabrics in a manner that a thread is thrown across the open shed by a shuttle or weft-carrier and laid in two directions so as to form a double thread, retaining the double thread in the unaltered open shed until the shuttle or weft-carrier is returned, then operating the healds for changing the shed and binding the weft threads which are beat up by the reed at every pick of the shuttle or weft-carrier. 2nd. A loom, with which is combined a tube L containing a cop of thread, around which the weft delivered by the shuttle or weft-carrier F is looped for the purpose of securing the said weft and weaving it into the selvage of the fabric, all arranged and operated substantially in the manner and for the purpose as hereinbefore described. 3rd. The combination of the finger J and intermediary connections with the projection N on rotating shaft, all arranged and operated substantially in the manner and for the purpose as hereinbefore set forth.

No. 58,892. Gas Engine. (*Machine à gaz.*)

George W. Starr and John H. Cogswell, both of Havana, Illinois, U.S.A., 3rd February, 1898; 6 years. (Filed 2nd December, 1897.)

Claim.—1st. A device for controlling the feed of gas to the cylinder of an explosive-engine, consisting of a vertically-movable valve-stem having an elongated slot, a hardened-steel block having a bevelled surface seated in said slot, combined with the horizontally-movable shaft passing through said slot, the under side of the said shaft having a bevelled surface a portion of its length which is adapted to be held in a plane parallel to the bevelled surface of the said steel block, the outer end of the shaft being screw-threaded and carrying adjusting-nuts, and an operating lever held between said nuts, and means for operating the said lever, substantially as shown

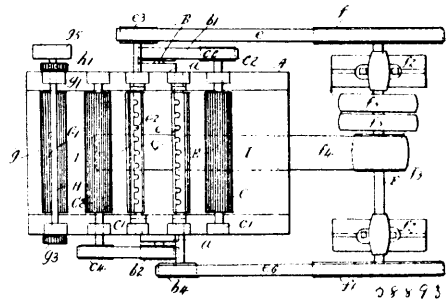
and described. 2nd. A device for regulating the supply of gas to a cylinder of an explosive-gas-engine, consisting of the valve-stem F¹,



slotted longitudinally, the steel-bevelled block held therein, combined with the shaft I having the under side of its head bevelled and an integral stop p thereon, the outer end of the said shaft being screw-threaded, the adjusting-nuts R having hubs mounted on the screw-threaded portion of the shaft, and the pivoted lever S having a slot near its upper end through which the said shaft passes, and the spring interposed between the upper end of the said lever, and the casing carrying the valve-rod, the lower end of the lever S being connected with a collar which is moved backward and forward by a governor, substantially as shown and described. 3rd. In combination with the feed valve-stem as described, carrying the reversible bevelled steel block in a slot therein, the reversible shaft I, having a series of steps on its upper side, and a bevelled surface with an integral lug or step on its lower face, and means for reciprocating the said shaft, substantially as shown and described. 4th. A regulating device for an exhaust-valve in an explosive-engine, consisting of the exhaust valve stem B¹, the reciprocating casing carrying the same, and spring interposed between the upper end of the casing and a jam-nut on the piston-rod, an alternating wheel mounted at the lower end of the said casing, and means for reciprocating the latter and for revolving the alternating wheel. 5th. A regulating device for the exhaust-valve of a gas engine, consisting of the reciprocating casing C¹, nut J¹, the crank and pitman for operating the same, combined with the stem B¹ mounted in said casing, a portion of the length of said stem being screw-threaded, jam-nuts working on said threads, the spring interposed between the jam-nuts and the nut J¹, and the alternating wheel journaled at the lower end of the casing, and a ratchet wheel and a swinging pawl designed to rotate the ratchet-wheel, which causes the alternating wheel to make partial revolutions, substantially as described. 6th. In combination the casing, the stem carrying thereby, the shaft journaled in the said casing, the alternating wheel mounted on said shaft, the friction-spring z, the ratchet-wheel R¹, and the swinging pawl mounted as described and designed to engage with the teeth of the ratchet wheel as the casing carrying the ratchet-wheel is lowered, but to swing laterally as the ratchet wheel rises, substantially as described. 7th. In a mixer or vapourizer for explosive engines, the valve-chamber and valve therein, the stem to said valve, which is hollowed out at its lower end, combined with a gasoline feed-pipe, over which the hollow end of the said stem telescopes and regulates the supply of gasoline, as set forth. 8th. In a mixer or vapourizer for explosive gas-engines, the valve-chamber, valve and seat therefor, the stem of said valve hollowed out at its lower end, the guides in which said stem work, combined with the feed-pipe telescoping within the hollow end of said stem, the jam-nuts on the stem and coiled spring interposed between the same and the lower end of said guide, substantially as set forth. 9th. In a mixer for explosive gas-engines, the combination with the valve-chamber, the suction-valve and the stem thereto, the guides, cylinder for said stem, formed of a part of the casing of the valve-chamber, of the feed-pipe telescoping within the hollow end of said stem, the jam-nuts and spring bearing between the same and the lower end of the guide cylinder, of the sliding regulating-governor actuated stem working through an elongated aperture in the valve-stem, whereby the throw of the suction-valve may be regulated, substantially as described. 10th. In a mixing apparatus for explosive gas-engines, the combination with the valve-chamber, the guide cylinder integral therewith, the valve-stem working in said guide-cylinder, of the shell bolted to the lower end of the valve-chamber, the valve-regulating and governor-actuated stem supported in said shell, of the member H, the feed-

pipe carried thereby, which telescopes within the hollowed lower end of the valve stem, of the apertured air chamber surrounding a portion of said shell and communicating the interior of the latter with the valve-chamber, substantially as set forth. 11th. In a vapourizing apparatus for explosive gas-engines, the combination with the valve-chamber, the valve and stem carried therein, the shell J secured to the valve chamber, the member L, the air chamber K having screw-threaded connections with the lower end of said shell J and the member L, the feed pipe c seated in a duct in the said chamber, a space intervening between the outer wall of the feed-tube and the inner walls of the hollow screw threaded portions of the said shell and member L, of the gasoline supply reservoir and supply pipe leading from said reservoir to a valve-regulated duct, which leads to the feed-tube, substantially as shown and described. 12th. In a vapourizing apparatus for explosive gas-engines, the combination with the valve-chamber, shell, air-chamber, valve stem and feed-pipe as described, of the member L, the supply pipe leading thereto, the valve M with its tapering end designed to regulate the flow of gasoline through a constructed passageway in said member L, the indicating-wheel carrying pointer mounted on stem of valve M, the dial and pipe A² for carrying away the surplus gasoline, substantially as shown and described. 13th. In combination with the mixer as described, the gasoline regulating valve, the reservoir, the pipe connecting same, with passageway in which the said valve works, the supply tube T with lateral apertures near its upper end, the pipe N and V, all arranged substantially as shown.

No. 58,893. Splint Making Machine. (Coupé-éclats)



John T. Whitten, Passaic, New Jersey, U.S.A., 3rd February, 1898; 6 years. (Filed 26th November, 1897.)

Claim. 1st. In a splint machine, the combination with a knife, of a pair of arms carrying the knife, a pair of levers to which said arms are pivoted, said levers being fulcrumed on a fixed frame, an eccentric for oscillating said lever and an eccentric oscillating the arms, substantially as described. 2nd. In a splint machine, a combination with a knife, means for forming the knife down and mechanism for moving the knife rearward, of a bed having an opening or plate movable in said opening and provided with a slot into which the knife can project, and connections between the knife-moving mechanism, and the plate whereby the slot is kept below the knife, substantially as described. 3rd. In a splint machine, a combination, with a moulding machine consisting of a frame supporting a pair of front and a pair of rear feed rollers, a bed having an opening between said front and rear feed rollers, a pair of cutter-heads arranged one above and one below said opening, knives secured to said cutter-heads, and a reciprocating knife, a pair of arms carrying the knife, a pair of levers to which the arms are pivoted, said levers being fulcrumed on a fixed frame, and eccentric for oscillating said levers, and an eccentric for oscillating the arms, substantially as and for the purpose specified.

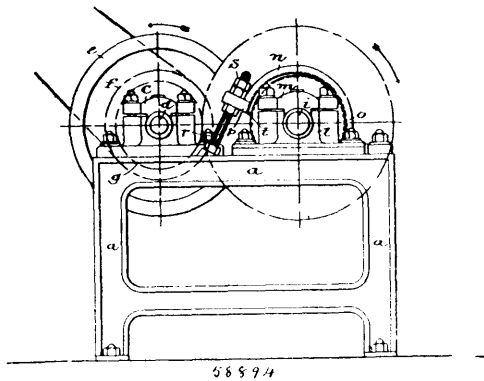
No. 58,894. Means of Making Beads, Balls, etc.

(Moyen de faire des boules, etc.)

Charles T. Mitchell, Waterloo House, Rowheath Road, King's Norton, Worcester, England, 3rd February, 1898; 6 years. (Filed 17th April, 1897.)

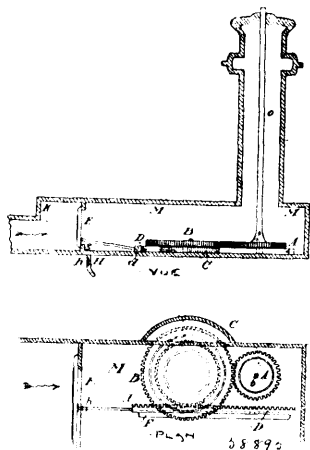
Claim. 1st. The machinery or apparatus for the manufacture of beads, balls, and the like, by simultaneously forming and cutting off two or more from a heated bar or rod, by means of a continuously revolving drum or disc having the desired number of parallel grooves round its periphery, the parts between the grooves being brought to a cutting edge, a segment of a cylinder correspondingly grooved internally being adjustably fixed round the grooved drum, the segment being adjusted so that the cutting edges between the grooves at one end are close to the cutting edges between the grooves round the drum, whilst at the other end of the segment the cutting edges between its grooves are removed sufficiently from the cutting edges between the grooves round the drum, so that a heated bar of properly determined diameter being inserted, parallel with the axis of the drum, at such open part between the grooves on the drum and the grooves in the segment, is rolled forward and compressed at one operation into a number of balls equal to the number of parallel

grooves, which balls are finally separated by the cutting edges between the grooves at the other end of the segment, where they are



delivered from the machine, substantially as described and illustrated. 2nd. In the machine for the manufacture of beads, balls and the like, as described, the combination of the frame *a*, bearings *k*, *l*, shaft *i*, and means for causing the revolution of the said shaft, drum *m* grooved externally with a number of parallel grooves, and adjustable fixed segment *n* similarly grooved internally, and arranged so that the space between the grooves in the segment *n* and the grooves round the drum *m*, is wider at the end *p* of the segment *n* than at the end *o*, substantially as described and illustrated. 3rd. The combination with the internally grooved segment *n*, of the screwed bolts *r* and nuts *s* by which the relative positions of the grooves round the drum *m* and the grooves in the segment *n* can be exactly adjusted and fixed, substantially as described and illustrated.

No. 58,895. Hydrant. (Borne-fontaine.)



Henry Filteau, Montréal, Québec, Canada, 3 février 1898; 6 ans. (Déposé le 8 mai 1897.)

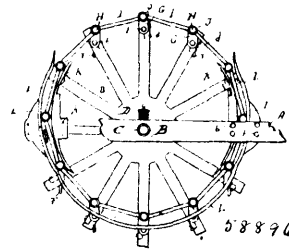
Résumé. - 1 Un mécanisme spécial comprenant un clapet E, en combinaison avec une bielle *d g*, une crémaillère D, un pignon *c*, une roue B et un pignon A, commandés par un arbre O, l'extrémité *d* de la crémaillère pouvant, suivant sa position, découvrir ou fermer un orifice *b*. 2 En combinaison avec le corps d'une borne-fontaine un arbre ayant un pignon engageant directement ou par le moyen d'une seconde roue dentée portant un second pignon, une crémaillère commandant une soupape par l'intermédiaire d'une bielle *d g*. Le tout pour les fins indiquées.

No. 58,896. Paddle Wheel. (Roue à aubes.)

Mary A. Davis, Spokane, Washington, U.S.A., 3rd February, 1898; 6 years. (Filed 3rd January, 1898.)

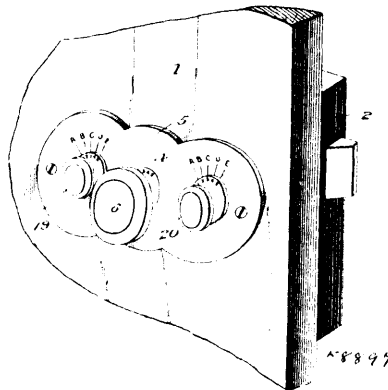
Claim. - 1st. In a feathering paddle-wheel, the combination with spiders having bearings near the ends of their radial arms, crank-shafts journaled therein, with paddles and cranks secured thereto, links connecting the wrists of all the cranks and anti-friction rollers thereon, of cams mounted near the front and rear of the wheel and adapted to receive said rollers, the cams being practically arcs of a

circle, the centre of which is the length of each crank above the centre of the wheel. 2nd. In a feathering paddle-wheel, the com-



ination of the paddle shafts E E, provided with cranks G G, their wrists H H, anti-friction rollers J J, and connecting links I I, a boss *i* on one link engaging an eye in the other, substantially as and for the purpose set forth.

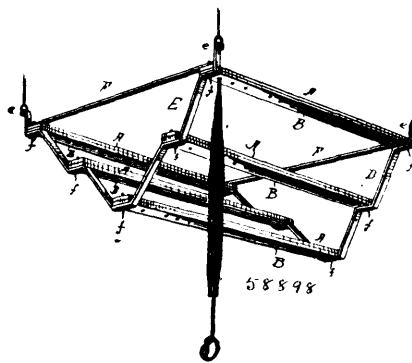
No. 58,897. Lock. (Serrure.)



Elijah D. Irwin and Laura B. Irwin, both of Furches, North Carolina, U.S.A., 3rd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim. - A combination lock, comprising the lock-case 2, the reversible bolt 12, the spindle 3 mounted in said case and having a rotary and an end motion, and provided with the transverse locking bar 9, a dial-collar 4 adjustably secured on said spindle, in combination with the fixed escutcheon dial plate 5, the rotating tumbler spindles 17 and 18, provided with dial knobs 19 and 20, and the rotary tumblers 21-22 adjustably secured on said spindles 17 and 18 by the set screws 24, and provided with the radial notches 23, substantially as shown and described.

No. 58,898. Display Rack. (Râtelier-montre.)

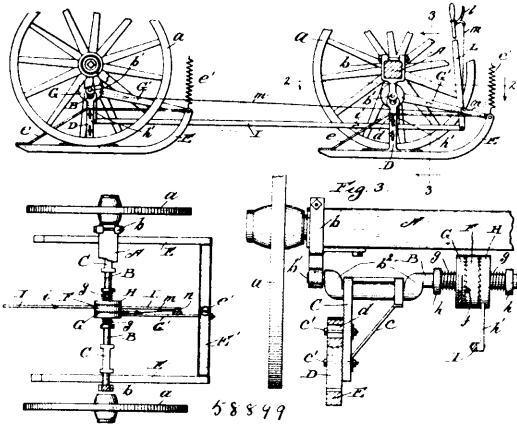


Ulysses G. Rockwell, Groton, New York, U.S.A., 3rd February, 1898; 6 years. (Filed 17th January, 1898.)

Claim. - 1st. A holding-bar for umbrellas and other articles, consisting of two longitudinal sections connected together, one of said sections having a plurality of mortised and circular seats, and circular rubber discs loosely held therein to turn freely with the umbrella or other article suspended therefrom, said sections and discs having holes on a line with each other, substantially as and for the purpose set forth. 2nd. A display rack for umbrellas, con-

sisting of a plurality of holding-bars, comprising two longitudinal sections to form said bar, mortised seats formed in one of said sections, rubber discs held therein, holes through the sections and discs, V shaped metal frames having a plurality of seats for the ends of the holding-bars, and suitable braces for holding the frames rigid, substantially as and for the purpose described.

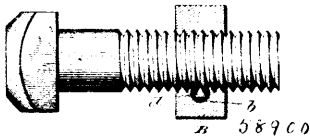
No. 58,899. Vehicle. (Vehicule.)



Axel E. Johnson, Chicago, Illinois, U.S.A., 3rd February, 1898; 6 years. (Filed 24th January, 1898.)

Claim.—1st. The combination, with the axle of a vehicle, of a crank-shaft rotably secured parallel therewith, a pair of sleigh-runners pivotally secured on the cranks of said shaft, the ratchet-wheel F fixed on the shaft and having the openings *f* in its periphery, the spring-actuated ratchet-wheel G located on one side of the wheel F, and having the arm or bar G' fixed at its front end and provided with the spring-actuated bolt *g*² to engage the openings *f* in the ratchet-wheel F, the movable ratchet-wheel H, on the other side of the ratchet-wheel F, and having the arm *h*¹, the operating-lever L, suitably fulcrumed and connected to the arm *h*¹ of the ratchet-wheel H, a bell-crank lever *l* fulcrumed on the operating lever, and the cord or wire *u* connecting one end of the bell-crank lever and the spring-bolt *g*², substantially as described.

No. 58,900. Nut-Lock. (Arrête-crou.)



William E. Waldron, Washington, Pennsylvania, U.S.A., 3rd February, 1898; (Filed 24th January, 1898.)

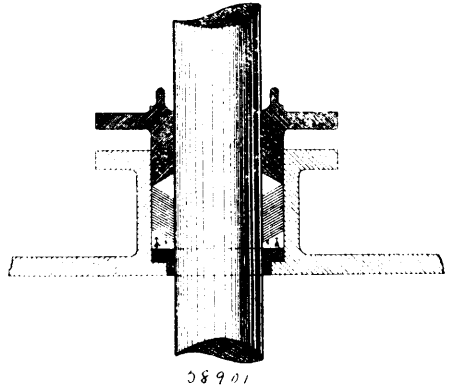
Claim.—1st. In a nut-lock, a nut provided with an aperture closed at one end and threaded at the other, a longitudinally tapered locking-dog positioned in the aperture, and a spring also located in the aperture to effect a movement of the locking-dog towards the open end of the aperture, together with a screw for moving the locking-dog towards the spring, substantially as shown. 2nd. In a nut-lock, the combination with a bolt of a nut provided with a recess, a locking-dog or bolt which is tapered longitudinally and provided with angular sides which are adapted to engage with the thread of the bolt, a spring for effecting a movement of the locking-dog in one direction, and a closure for the aperture, as a screw, for moving the locking-dog in an opposite direction from which it is moved by the spring. 3rd. In a nut-lock, a nut provided with an aperture *b*, closed at one end and threaded at the other, a spring *c* located at one end of the aperture, a screw having a reduced end *c*¹, and a locking-dog or bolt positioned in the aperture between the spring and screw, said locking-dog being tapered longitudinally and provided with converging sides with roughened faces, said sides being of the same angle as the angle of the threads of the bolt, substantially as shown and for the purpose set forth.

No. 58,901. Mechanical Packing. (Garniture mécanique.)

Carl Lutze, Berlin, Germany, 3rd February, 1898; 6 years. (Filed 24th January, 1898.)

Claim.—1st. An improved packing for flanges of steam, gas or water apparatus, stuffing boxes, and pistons, consisting of layers of metal paper lying over one another, or of thin galvanically or mechanically produced metal foils in connection with elastic soft and oil conducting interposed layers of paper, paste board, fabric, can-

vas, or similar appropriate materials. 2nd. The application of the packing as in claim 1 to stuffing boxes, whereby the same is arranged



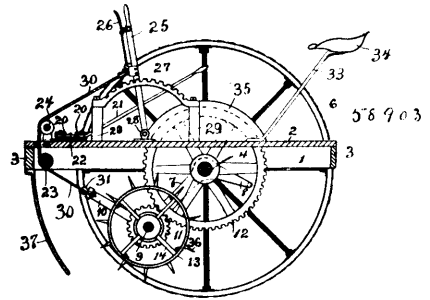
in layers lying loosely on one another at an angle to the direction of steam pressure for the purpose of obtaining a tightening of the packing operating automatically in proportion to the steam pressure.

No. 58,902. Medicinal Compound. (Composé médical.)

Alphonse Brochu, Sherbrooke, Quebec, Canada, 3rd February, 1898; 6 years. (Filed 6th December, 1897.)

Résumé.—Un liniment composé d'huile de canelle, de térré-benthine, de camphre et d'alun dans les proportions ci-dessus décrites et pour les fins indiquées.

No. 58,903. Rotary Harrow. (Herse rotative.)

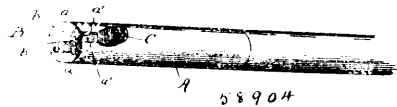


Leonard Spangler, Lafayette, Indiana, U.S.A., 3rd February, 1898; 6 years. (Filed 25th January, 1898.)

Claim. In a rotary harrow, the combination of the platform, having the boxes 5, the axle 4 mounted therein, the ground-wheels loosely mounted upon the end of said axle respectively, the driving-gears 12 rigidly mounted upon said axle, the swinging-hangers loosely mounted upon said axle, said hangers having their arms 8 adapted to limit their rearward movement, the shaft 9 mounted in said hangers, the gears 11 rigidly mounted upon said shaft and adapted to be driven by the gears 12, the toothed cylinder 13 mounted upon said shaft, means for raising and lowering said cylinder, the clutches 15 loosely keyed upon the axle 4 and adapted to be thrown into engagement with the ground-wheels and also to be shifted therefrom and thrown into engagement with the boxes 5, and means for shifting said clutches, substantially as shown and described.

No. 68,904. Envelope Opener.

(Appareil pour ouvrir les enveloppes.)

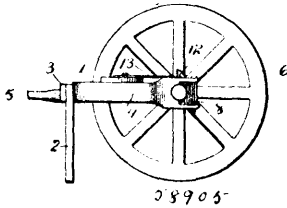


Benjamin Lantz, Taylorville, Illinois, U.S.A., 2nd February, 1898; 6 years. (Filed 23rd December, 1897.)

Claim. 1st. As an article of manufacture, an envelope opener consisting of a body portion having a bifurcated end, a blade secured to an end of one of the side portions so as to be substantially on a plane with the end of the opposite side portion. 2nd. An envelope opener comprising a tubular body portion one end thereof being slit, a segmental blade secured to one end of one of the side portions of

said tubular body so as to project partially over the slit, substantially as shown. 3rd. An envelope-opener comprising a tube having slots in the side walls of one end of the tube, a blade secured to one end of one of the side portions of the tube, and a bar of rubber carried by the slots so that the end portions thereof will project beyond the sides of the tube, as shown. 4th. An envelope-opener, comprising a tubular body portion having a bifurcated end, a blade secured to one of the end portions of the tube, so that the cutting edge will be nearer one of the side walls of the slot on one side of the blade than it is on the side wall opposite the cutting-point, and a bar or block engaged by the side walls of the slot so as to be movable to and from the blade, substantially as and for the purpose set forth.

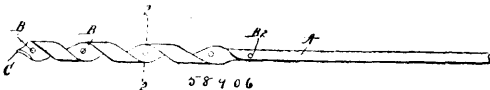
No. 58,905. Measuring Instrument. (Instrument à mesurer.)



Lewis E. Howland, Chicago, Illinois, U.S.A., 3rd February, 1898; 6 years. (Filed 24th December, 1897.)

Claim.—The herein described land measuring instrument, consisting of a frame made up of a pair of uprights constituting legs, and a pair of beams extending outwardly therefrom formed with handles upon the rear ends and with recesses at their forward ends, with inwardly extending V-shaped teeth or projections leading from the upper and lower sides of said recesses, a measuring wheel mounted upon a suitable shaft which is adapted to fit within the said recesses, a lug upon the hub of said wheel, a spring secured to the upper surface of one of said beams whose free end is adapted to engage said lug, removable blocks having V-shaped notches in their upper and lower ends adapted to fit within said recesses, and pins for holding said blocks in place, the forward ends of said beams and the rear ends of said blocks both being cut away, forming bearings for the shaft upon which said measuring wheel is mounted, substantially as and for the purpose described.

No 58,906. Auger. (Tarière)



Sinclair Smith, New York, State of New York, U.S.A., 3rd February, 1898; 6 year. (Filed 27th December, 1897.)

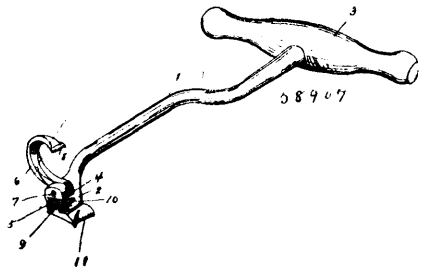
Claim.—1st. A bit or auger for use in wiring buildings, comprising a shank and head, the head being of greater diameter than the shank throughout its length, and being provided with two spiral grooves which extend throughout its length, from smaller diameter of the shank adjacent to the head to the cutting point and a plurality of transverse perforations or openings formed in the head, by which said grooves are connected, substantially as shown and described. 2nd. A bit or auger for use in wiring buildings, comprising a shank and head, the head being of greater diameter than the shank throughout its length, and being provided with the spiral grooves which extend throughout its length, from the smaller diameter of the shank adjacent to the head to the cutting point, and a plurality of transverse perforations or openings formed in the head by which said grooves are connected, said shank being also provided adjacent to the head with a transverse perforation or opening, substantially as shown and described. 3rd. A bit or auger for use in wiring buildings, comprising a shank or head, the head being of greater diameter than the shank throughout its length, and being provided with two spiral grooves which extend throughout its length from the smaller diameter of the shank adjacent to the head to the point, said head being also provided with a transverse perforation by which said grooves are connected adjacent to the cutting end of said head and said shank being also provided with a perforation adjacent to said head, substantially as shown and described.

No. 58,907. Dental Instrument. (Instrument dentaire.)

John W. Hard, Tacoma, Washington, U.S.A., 3rd February, 1898; 6 years. (Filed 3rd January, 1898.)

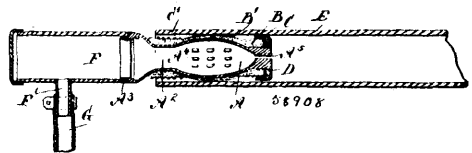
Claim.—1st. A dental instrument comprising a stem, a head carried thereby, a swinging gripping member pivotally secured to

the head and having its axis extending longitudinally of the stem, and a stationary gripping member constituting a fulcrum which is



pivoted to the head with its axis extending transversely of the stem, substantially as described. 2nd. A dental instrument comprising a stem, a recessed head carried thereby, the recesses of said head being at right angles to each other, a swinging gripping member pivoted in one of said recesses, and a stationary gripping member pivoted in the other recess upon which the head and swinging member having a rocking movement, substantially as described.

No. 58,908. Pipe Attachment. (Attache de tuyaux.)



Clarence Benjamin Breneman, Marion, Iowa, U.S.A., 3rd February, 1898; 6 years. (Filed 24th January, 1898.)

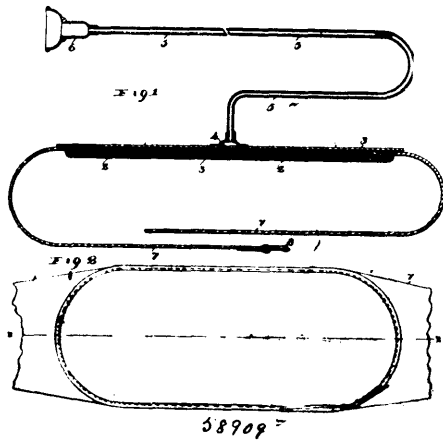
Claim.—1st. A device of the class described, comprising a hollow core provided with a forward contracted end and connected with a fluid-pressure supply, and formed in its walls with apertures and at said contracted end with an outlet-opening less in area than the apertures, and a bulb of a flexible material and secured at its ends to the exterior of the said core, the said bulb being adapted to be inflated by the fluid passing through the said apertures, substantially as shown and described. 2nd. A device of the class described, comprising a hollow core connected with a fluid-pressure supply, and formed in its wall with apertures and at its forward end with an outlet, and a bulb of a flexible material and secured at its end to the exterior of the said core, the said bulb being adapted to be inflated by the fluid passing through the said apertures, and an annular flange formed on the said bulb and extending forwardly, to be pressed in contact with the pipe by the pressure within the latter, substantially as shown and described. 3rd. A device of the class described, provided with an inflatable bulb formed with an external annular flange, adapted to engage the inner surface of the pipe and adapted to be pressed in contact therewith by the pressure inside the said pipe, substantially as shown and described. 4th. A device of the class described, comprising the core having a forward contracted end and the bulb on the exterior thereof the said core having communication with said bulb and an outlet-opening in said end, as shown and described. 5th. A device of the class described, comprising the core, and the bulb surrounding the walls of the same and provided with an annular flange, said core having openings leading into said bulb and an outlet at its forward end, substantially as shown and described.

No. 58,909. Surgical Pad. (Coussin chirurgical.)

Henry W. Meinhardt, St. Louis, Missouri, U.S.A., 3rd February, 1898; 6 years. (Filed 3rd January, 1898.)

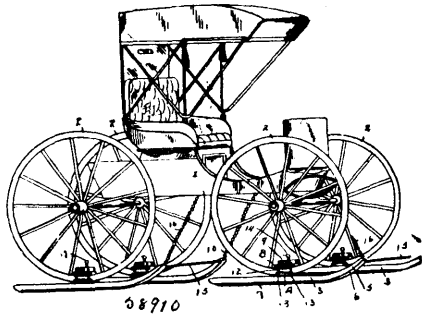
Claim.—A pad locally applied to the body, comprising an outer layer of leather or similar material, an under layer of silk or the like secured by the outer layer along the edges thereof by stitching or otherwise, a filling of absorbent cotton or wool in a finely divided state for retaining the warm air forced into the pad from the lungs, a flexible tube leading from a central opening of the outer layer and of sufficient length to reach to the mouth of the wearer, a mouth-piece at the free end of said tube, means forming a part of said tube for stiffening the walls of the tube at a point adjacent to its juncture

with the pad, against the collapse of said walls when under extraneous pressure, and suitable straps secured adjacent to the



edges of the pad for securing the latter about the body of the wearer, substantially as set forth.

No. 58,910. Runner for Vehicles. (Patin pour vehicules.)



David E. Owen, Garbo, Ohio, U.S.A., 3rd February, 1898; 6 years. (Filed 25th January, 1898.)

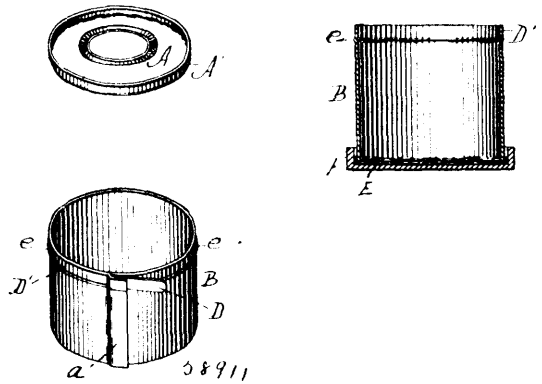
Claim.—1st. A sleigh runner, having an upturned forward end with a longitudinal groove upon the under side of said end, and a longitudinal ridge upon the under side of the flat portion of said runner. 2nd. The combination with a wheeled vehicle, especially with the wheels thereof, of a runner having loops or staples upon its upper side between which the wheel fits, and a clamping device engaging the inner surface of the wheel rim and connected to said runner through said loops or staples. 3rd. The combination with a wheeled vehicle, and especially with the wheels thereof, of a runner having loops or staples upon its upper side, and a clamp for securing the runner to said wheel made up of a base plate engaging the inner surface of the wheel rim, a clamping plate upon the upper surface of said base plate, and thumb-screw passing through said clamping plate and engaging the top surface of said base plate, and loops fitting over the outer ends of said clamping plate and provided with hooks upon their lower ends which engage the staples on said runner, substantially as and for the purpose described. 4th. The combination with a wheeled vehicle, and especially with the wheels thereof, of a runner having loops or staples upon its upper side and a clamp for securing the runner to said wheel, made up of a base plate engaging the inner surface of the wheel rim, a clamping plate upon the upper surface of said base plate having grooves upon its upper surface, a thumb-screw passing through said clamping plate and engaging the top surface of said base plate, and loops fitting within said grooves and provided with hooks upon their lower ends which engage the staples on said runner, substantially as and for the purpose described.

No. 58,911. Manufacture of Metallic Cans. (Fabrication de boîtes métalliques.)

Fred Alber Blizard, Boston, Massachusetts, U.S.A., 3rd February, 1898; 6 years. (Filed 24th January, 1898.)

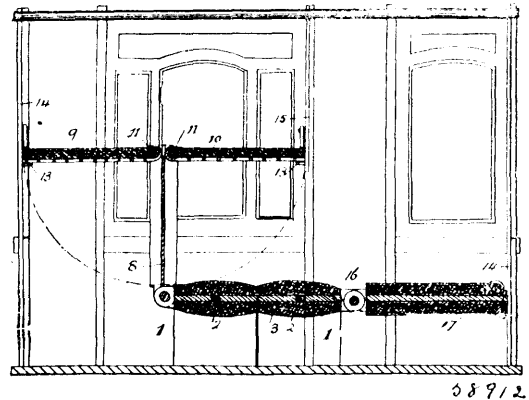
Claim.—1st. In the manufacture of metallic cans, the method of uniting the body with the top or bottom thereof, consisting of dipping one edge or end of the body into a vessel containing dilute muriatic acid, pressing the body at said end over the bottom or top, and setting the parts thus united within a saucer or vessel supported in a solder-pot and containing liquid solder which has

entered said saucer or vessel through a passage or passages below the top thereof, whereby the solder entering the saucer or vessel



and there applied to the joint of the can is soldered from below the surface, substantially as described. 2nd. The herein-described improved metallic can, comprising the bottom, the sides B formed near their upper edge with the bead *c* which constitutes the lower boundary of the opener or strip *D*¹, and the top A formed up at its upper edge into the flange *A*¹, the upper edges of said flange and sides being flush, and the flange and sides being united by the layer of solder *b*, whereby the removal of the strip or opener by an ordinary instrument tears the solder and strengthens the strip, substantially as set forth. 3rd. In a metallic can, the bottom *C*, the top *A* provided with the upwardly extending flange *A*¹, the sides *B* formed with the bead *c*, and united at their upper edge with said flange by the layer of solder *b*, the vertical edges of said sides being formed into the seam *a*, and the separate tongue *D* soldered on both sides of its inner end to and between the layers of the said seam, substantially as described.

No. 58,912. Convertible Chair or Seats. (Chaise ou siège convertible.)

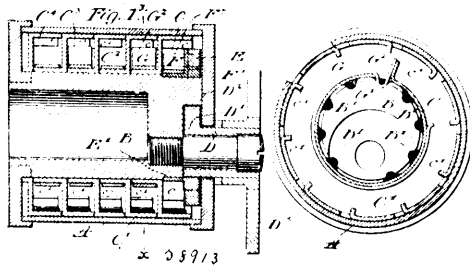


James Madison Osgood, Boston, Massachusetts, U.S.A., 3rd February, 1898; 6 years. (Filed 21st January, 1898.)

Claim. 1st. A chair or seat, comprising a reversible seat portion and an adjustable back pivotally connected to one edge of said reversible seat portion, substantially as specified. 2nd. A chair or seat, comprising a frame, a seat portion adapted to swing on its centre in said frame, a back frame having pivotal connection with said seat, and means for clamping said back frame as adjusted, substantially as specified. 3rd. A chair or seat, comprising a rotary seat portion, a back frame having pivotal connection therewith, means for locking said back frame as adjusted in relation to the seat, and back portions pivotally connected to the upper portion of the back frame, substantially as specified. 4th. A chair or seat, comprising a seat frame, a seat portion upholstered on both its sides and mounted to rotate in said seat frame, a back frame pivotally connected to the seat portion, the said back frame being recessed at its opposite sides, an upholstered back section in each of said recesses and pivotally connected with the upper portion of the back frame, whereby they may be swung into and out of the recesses to form backs or a berth, and means for supporting the same when extended horizontally to form a berth, substantially as described. 5th. A chair or seat, comprising a seat frame, seat portions arranged at right angles one to the other, link connections between the angled portion of said seat portions and the frame, and an adjustable back for said seat portion, substantially as specified. 6th. A car seat, comprising two sections, each adapted for independent rotary motion, a back frame pivotally connected to

each section, and independent locking-seams for each back frame, substantially as specified.

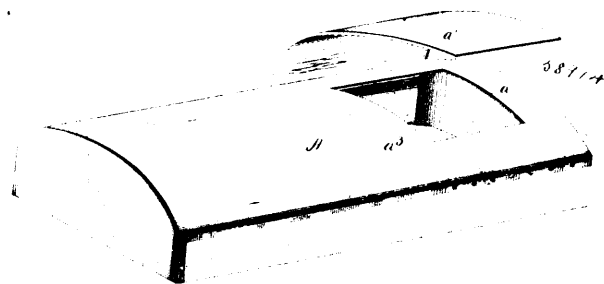
No. 58,913. Cyclometer. (*Cyclomètre.*)



William Clifford Homan, Meriden, Connecticut, U.S.A., 3rd February, 1898; 6 years. (Filed 21st October, 1897.)

Claim.—1st. In a cyclometer or registering mechanism, the combination of a shaft containing longitudinal grooves, numeral rings revolvably mounted thereon, a radially movable tooth carried by each of said numeral rings, and each projecting through an opening in the hubs of said rings and guided by the said grooved shaft to engage the next higher numeral rings at the proper interval in its rotation to operate the same for the purpose specified. 2nd. In a registering mechanism, a supporting shaft, longitudinal grooves therein, a numeral ring revolvably mounted thereon, an opening in the hub of said ring, a spring, an inwardly-directed bend forming a tooth, said tooth passing through said opening, and bearing against the edges of said hub adjacent said opening to prevent slipping, the inner end of said tooth or bend resting against said grooved shaft. 3rd. In a registering mechanism, a supporting shaft, a longitudinal groove therein, a numeral ring revolvably mounted thereon, an opening in the hub of said ring, a spring, an inwardly-directed bend forming a tooth, said tooth passing through said opening and bearing against the edges of said hub adjacent said opening to prevent slipping, the inner end of said tooth or bend resting against said grooved shaft, and an outwardly-directed shoulder on said spring adjacent to the said bend and opening. 4th. In a registering mechanism, a supporting shaft, longitudinal grooves therein, a series of numeral rings revolvably carried by said shaft, an opening in the hub of each ring, a spring clamping said hub, an inwardly-directed bend forming a tooth, said tooth passing through said hub opening, and an outwardly directed shoulder on said spring adjacent said opening, lugs on each numeral ring, one of said lugs receiving impulse by the spring shoulder of the preceding numeral ring at a suitable interval in the rotation of said preceding numeral ring. 5th. In a registering mechanism, a numeral ring, an opening in the hub of said numeral ring, a spring clamping said hub, a bend in said spring forming an inwardly-directed tooth passing through said hub opening for the purpose described.

No. 58,914. Sleeping Bag. (*Sac à coucher.*)

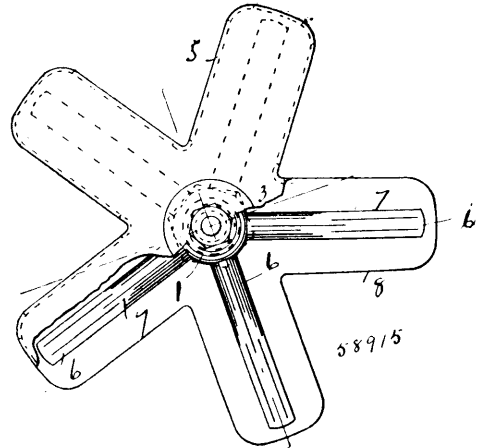


Adelard Lapierre, Montreal, Quebec, Canada, 3rd February, 1898; 6 years. (Filed 20th November, 1897.)

Claim.—1st. A sleeping bag, comprising a compartment, an opening to said compartment, and a flap for said opening, substantially as described. 2nd. A sleeping bag, comprising a compartment, an opening at the top of said compartment, a flap secured to the outer surface of said bag, at one side thereof, and extending over the top of the bag to the opposite side thereof, and means for removably securing the free end of said flap to said bag, substantially as described. 3rd. A sleeping bag, comprising a compartment, an opening for said compartment at the top, a flap for said opening, and means for removably securing the free end of said flap to the side of said bag and over the opening in the top, substantially as described. 4th. A sleeping bag, comprising a compartment, an opening for said compartment, a flap for said opening, and means secured to the lower face of said flap, for securing the free end thereof to the bag, substantially as described.

No. 58,915. Sand Valve for Filters.

(*Soupe à sable pour filtres.*)

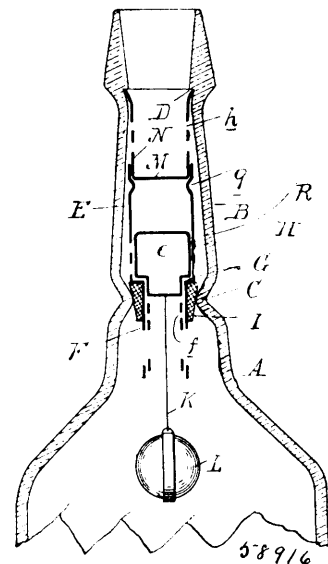


William Wallace Wilson, Holyoke, Mass., U.S.A., 3rd February, 1898; 6 years. (Filed 25th October, 1897.)

Claim.—1st. A sand valve for filters, consisting of a hollow head provided with a plurality of laterally extending arms or branches each of which contains a narrow opening to permit the passage of water while preventing the passage of particles of filtering material, for the purpose hereinbefore set forth. 2nd. A sand valve for filters, comprising a globular head provided with a plurality of radiating tubes, each of which tubes is provided with one or more longitudinal slits adapted to permit the passage of water while preventing the passage of particles of filtering material, for the purpose hereinbefore set forth. 3rd. A sand valve for filters, composed of the head 1 having the nipple 2 and radiating tubes 6, said tubes being provided with the slits 7, for the purpose hereinbefore set forth. 4th. The combination with the valve composed of the head 1 and slitted tubes 6, of the guard composed of the base 8 and cover 5, for the purpose hereinbefore set forth.

No. 58,916. Non-Refillable Bottle.

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

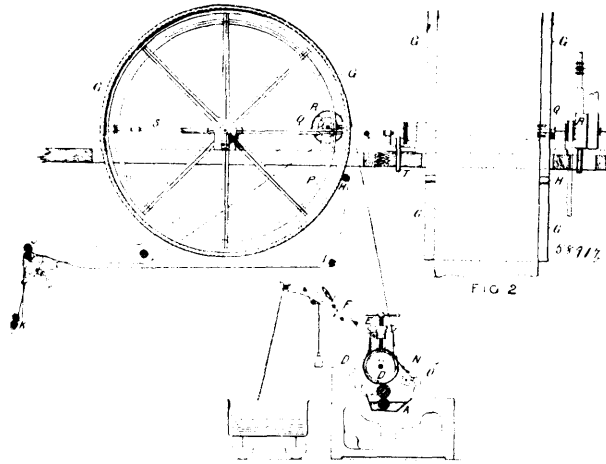


Clement A. Dumba, Detroit, Michigan, U.S.A., 3rd February, 1898; 6 years. (Filed 21st August, 1897.)

Claim.—1st. In a non-refillable bottle, the combination with a bottle neck, of a valve mechanism for permitting the outflow and prohibiting the inlet of liquid, and comprising a ported casing, such as *d*, and provisions whereby the valve may have an extended reciprocating movement while acting to close the ports *f* therein, and a counteracting weight, such as *L*, substantially as described and shown. 2nd. In a non-refillable bottle a buoyant elongated piston valve, such as *J*, an elongated seat over which the valve has to move to be opened, and a counter-acting weight *L* suspended by a flexible cord *k* within the bottle, substantially as described and shown. 3rd. In a non-refillable bottle, the combination with a cylindrical casing

within the neck of the bottle provided with an annular valve seat G at its inner end, of a buoyant piston valve such as *d* slidingly secured in said cylindrical casing and having outlet ports *f* adapted to be disclosed by the outward movement of said piston, a head on said piston adapted to seat on said annular seat, and a weight L within the bottle suspended from said valve for holding it in its closed position, substantially as described and shown. 4th. In a non-refillable bottle, the combination with a cylindrical casing within the neck of the bottle, of a piston valve, such as *J*, slidingly secured in said cylindrical casing, having outlet ports *f* adapted to be disclosed by the outward movement of the valve, a float secured to said valve and a weight L within the bottle suspended from said valve, substantially as shown and described. 5th. In a non-refillable bottle, the combination with the valve casing adapted to be placed in the neck of a bottle, of a shouldered recess D at the top of the neck and the contracted portion C near the bottom, the neck being shaped to form the annular chamber E between the shoulder and contracted portion around the casing.

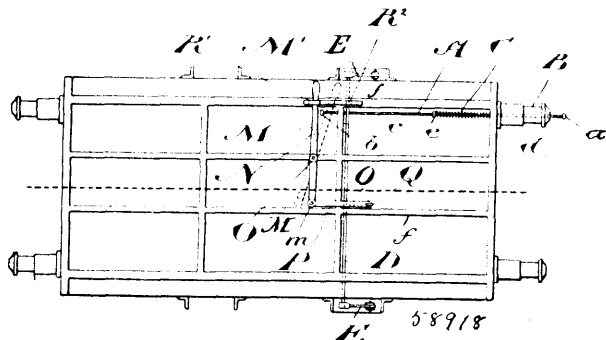
No. 58,917. Method of and Means for Applying Colour Size, etc. (*Methode et moyen d'appliquer de la colle des couleurs, etc.*)



James Allan Sackville and John Henry Swallow, both of Pendlebury, Lancaster, England, 3rd February, 1898; 6 years. (Filed 25th October, 1897.)

Claim.—1st. For applying size, colour or fluid matter to textile materials and the like, the herein described mode of treatment, consisting in passing the fabric around a rubber or like covered bowl, applying the colour by an engraved roller working in contact therewith, pressing the size, colour or fluid into the fabric by a thin plate, and passing such newly coated fabric direct on to and around a large drying cylinder in the manner, substantially as hereinbefore set forth. 2nd. In a machine for coating fabrics with size, colour or other fluid matter, the use of an india-rubber or like covered bowl D, engraved roller C, furnishing roller B, with or without plate or blade N in combination with the large drying cylinder G and auxiliary carrying rollers, etc., as hereinbefore set forth. 3rd. In machines of the kind described, the use of a plate or spreader resting upon the periphery of a bowl around which freshly coated fabric passes, and acting on such fabric in the manner, substantially as set forth.

No. 58,918. Apparatus for Locking Railway Waggon Doors. (*Appareil pour fermer à clef les portes de wagon de chemin de fer.*)

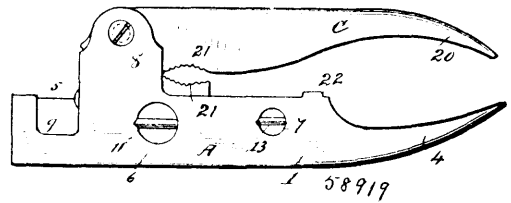


Lincoln Gordon Lucknow, Oudh, British India, 3rd February, 1898; 6 years. (Filed 20th January, 1898.)

Claim.—1st. In apparatus for automatically locking railway waggon doors, the combination with locking mechanism of an inter-

locking stop rod extending under the body of the car and through one of the buffers so that when held pressed home by contact with the buffer of another waggon, the stop rod locks the said mechanism, substantially as and for the purpose specified. 2nd. In apparatus for automatically locking railway waggon doors, the combination with locking mechanism of a lever adapted when moved horizontally to operate the locking mechanism, and an interlocking stop rod extending under the body of the car and through one of the buffers so that when held pressed home by contact with the buffer of another waggon the stop rod locks the said lever, substantially as and for the purpose specified. 3rd. In apparatus for automatically locking railway waggon doors, the combination with locking mechanism of a lever adapted when moved horizontally to operate the locking mechanism, and an interlocking stop rod extending under the body of the car and through one of the buffers so that when held pressed home by contact with the buffer of another waggon the stop rod locks the said lever, and a spring tending to retain the stop rod in its locking position, substantially as and for the purpose specified.

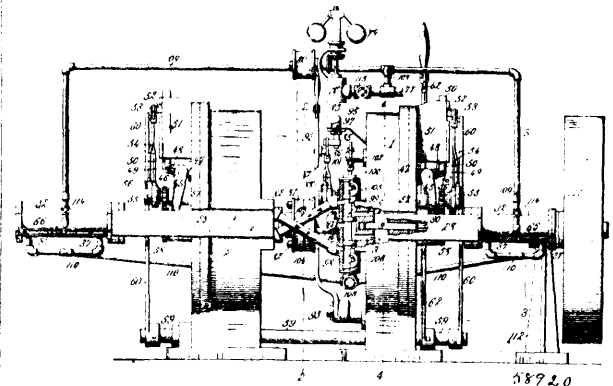
No. 58,919. Belt Cutter and Punches. (*Coupe-courroie et emporte-pièce.*)



Harvey Hubbell, Bridgeport, Connecticut, U.S.A., 3rd February, 1898; 6 years. (Filed 27th December, 1897.)

Claim.—1st. In a device of the character described, the combination with a body having a longitudinal recess, a transverse recess and a transverse opening, of a slide lying in the longitudinal recess and having a cutter adapted to move across the transverse recess, an elongated opening with which the opening in the body registers and a punch extending forward in the elongated opening and adapted to be moved across the opening in the body and means for actuating the slide to either cut or punch a belt. 2nd. In a device of the character described, the combination with a body having a longitudinal recess, a transverse recess and a transverse opening, of a slide lying in the transverse recess and having a cutter and a punch substantially as described for the purpose set forth, and rack teeth, and an operating lever having a head with teeth engaging the rack teeth, said slide and operating lever having corresponding recesses 21 for closing link fasteners. 3rd. In a device of the character described, the combination with a body and an operating lever, of a slide having a cutter, an elongated opening and an opening *a* connecting therewith substantially as described, and a punch extending forward in the elongated opening and having at its base a neck and an enlargement, the edges of which lie at right angles to the sides thereof and which closely fit in opening *a*.

No. 58,920. Engine or Motor. (*Machine ou moteur.*)



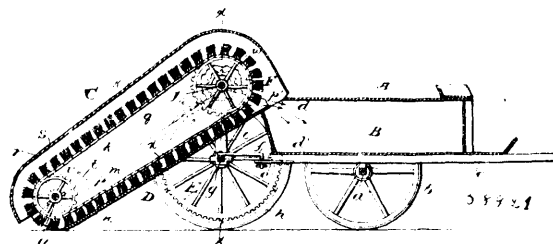
William Bergen Brown, Baltimore, Maryland, U.S.A., 3rd February, 1898; 6 years. (Filed 24th January, 1898.)

Claim.—1st. In an engine, the combination with a cylinder, and a rotary piston body concentric with the cylinder and provided with a radial piston blade, of a gate housing or chamber communicating with the cylinder, a sliding gate or abutment mounted in said housing to reciprocate across the periphery of the rotary piston body and parallel with the engine shaft, the said gate having in one edge a spring pressed packing strip to contact with the periphery of the rotary piston body, a spring arranged in a countersunk recess of the cylinder periphery to press the sliding gate toward the rotary piston

body, an auxiliary double acting engine provided with inlet and exhaust ports and having its piston in operative connection with the sliding gate, and a valve for the auxiliary engine actuated from the shaft of the rotary engine and provided with means for cutting off the exhaust of working fluid before the piston reaches the limit of its stroke, whereby the said piston of the auxiliary engine is cushioned in both directions of its movement, substantially as described. 2nd. In an engine, the combination with the cylinder having a rotary piston body provided with a radial piston blade, and the sliding gate or abutment, of an auxiliary double-acting engine having its piston in operative connection with said sliding gate, a valve chest having a central inlet port and end exhaust ports and communicating with the end portions of the auxiliary engine cylinder through inlet ports and exhaust ports, a valve comprising a stem having fixed heads or pistons thereon and a loose longitudinally sliding cut-off sleeve intermediate said piston valve heads, and mechanism for actuating said valve of the auxiliary engine from the shaft of the rotary engine, to drive the double acting gate operating piston by fluid pressure in both directions of its movement and control the exhaust of working fluid to cushion said piston at the end of its stroke in each direction, substantially as described. 3rd. In an engine, the combination with a cylinder, a rotary piston body having a radial piston blade, and a sliding gate or abutment, of an auxiliary double acting engine having its piston in operative connection with said sliding gate, a valve chest having a central inlet port and end exhaust ports, and communicating with the cylinder of the auxiliary engine through inlet ports and exhaust ports, a valve comprising a stem having fixed heads or pistons thereon and a loose longitudinally sliding cut-off sleeve intermediate said piston valve heads, mechanism for actuating said valve of the auxiliary engine from the shaft of the rotary engine, to drive the double acting gate operating piston in both directions of its movement by fluid pressure and control the exhaust of working fluid, to cushion said piston at the end of its stroke in each direction, a supplementary valve chest having an inlet port and communicating through ports with the end portions of the auxiliary engine cylinder, and a supplementary valve actuated intermittently from the sliding gate and comprising a stem having fixed piston heads thereon and a loose longitudinally sliding cut-off sleeve intermediate said heads, the said valve being adapted to control an increase of cushioning resistance for the gate operating piston in proportion to increase of pressure on the working face of said piston, substantially as described. 4th. In an engine, the combination of a cylinder, a rotary piston body concentric with the cylinder and provided with two radial piston blades, two sliding gates arranged to reciprocate across the periphery of the rotary piston body parallel with the engine shaft, two auxiliary gate operating engines, each having a double acting piston in operative connection with the sliding gate, valves for the auxiliary engines, valve chests communicating with the auxiliary engine cylinders through inlet and exhaust ports, and each of said valve chests being also provided with an inlet port and exhaust ports, a rock shaft provided with crank-arms, links connecting said crank-arms with the stems of the said valves of the auxiliary engines, an arm projecting from said rock shaft and provided with a wrist pin, a vertically movable slide connected with said wrist pin to actuate the rock shaft, a slotted link connected with said slide, eccentrics connected with the main engine shaft through multiplying gear and pinion, eccentric rod connections from the said eccentrics to the said slotted link, and lever mechanism connected with said slotted link for shifting the eccentrics, substantially as described. 5th. In an engine, the combination of a cylinder, a rotary piston body provided with two radial piston blades, two sliding gates, two auxiliary gate operating engines, each having a double acting piston in operative connection with a sliding gate, valves for the said auxiliary engines, valve chests communicating with the auxiliary engine cylinders through inlet ports and exhaust ports, each of said valve chests being also provided with an inlet port and exhaust ports, means for actuating said valves from the main shaft of the rotary engine at each half revolution of said shaft to drive the gate operating pistons by fluid pressure in both directions of pistons movement and control the exhaust from the auxiliary engine cylinders for cushioning the stroke of the pistons in both directions, supplementary valve chest having central inlet ports and provided with ports communicating with the end portions of the auxiliary engine cylinders, supplementary valves comprising valve stems having fixed piston heads thereon and an intermediate loosely sliding cut-off sleeve to control increase of cushioning pressure in the auxiliary engine cylinders in proportion to increase of pressure on the working faces of the gate operating pistons, collars on said valve stems, tappets on the sliding gates loosely engaging the valve stems between said collars, and buffer springs between the said tappets and collars, substantially as described. 6th. In the engine combination of a high pressure cylinder and a low pressure cylinder, each provided with a rotary piston body having two radial piston blades, sliding gates or abutments adapted and arranged to reciprocate in horizontal planes across the periphery of each rotary piston body and parallel with opposite sides of the main engine shaft, auxiliary engines having double acting pistons in operative connection with said sliding gates, main valves for the auxiliary engines actuated from the main engine shaft at each half revolution of said shaft to drive the gate operating pistons and control the exhaust for cushioning the strokes of said pistons, supplementary valves for the auxiliary engines actuated from the sliding gates to

control an increase of cushioning resistance for the gate operating pistons proportionately to increase the pressure of the working faces of said pistons, two reversing valves for the high pressure cylinder communicating therewith through ports above and below the paths of the sliding gates in said cylinder, two sets of crossed pipes connecting the said reversing valve with the low pressure cylinder above and below the paths of the sliding gates therein, and a main cut-off valve adapted to communicate with the two reversing valves and actuated from the main shaft of the engine at each half revolution of said shaft, substantially as described. 7th. In an engine, the combination of the high pressure cylinder, the low pressure cylinder, each having a rotary piston body provided with two radial piston blades, two sliding gates in each of said cylinders, auxiliary gate operating engines provided with valves that are actuated from the main engine shaft at each half revolution of said shaft to drive the gate operating pistons and effect a cushioning of said pistons at the ends of their strokes in each direction, two reversing valves communicating with the high pressure cylinder through ports at opposite sides of the paths of the sliding gates in said cylinder, crossed pipes connecting the said reversing valves with the low pressure cylinder, a main cut-off valve adapted to communicate with both reversing valves and actuated from the main shaft of the engine at each half revolution of said shaft, and a governor, substantially as described.

No. 58,921. Street Sweeper. (Balayeuse de rue.)

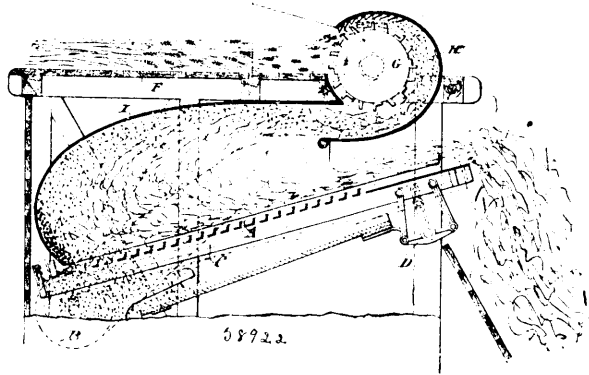


John McKechnie and Edward W. Smith, both of Winnipeg, Manitoba, Canada, 3rd February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim. 1st. The herein described street-sweeping machine, consisting essentially of the axle *g*, travelling and supporting wheels mounted on the said axle, the transverse shaft *j*, journaled in standards or supports rising from the axle, a casing *k* supported on the said shaft and open at its upper and lower ends, a shaft *u* journaled in the lower end of the said casing, sprocket wheels mounted on the shafts *j* and *u*, sprocket chains connecting the said sprocket wheels, transverse brushes connected to the said chains, and gearing forming a driving connection between one of the ground wheels and the shaft *j*, substantially as and for the purpose specified. 2nd. The herein described street-sweeping machine, consisting essentially of the axle *g*, travelling and supporting wheels mounted on the said axle, the transverse shaft *j*, journaled in standards on supports rising from the axle, a casing *k* supported on the said shaft and open at its upper and lower ends, a shaft *u* journaled in the lower end of the said casing, sprocket wheels mounted on the shafts *j* and *u*, sprocket chains connecting the said sprocket wheels, transverse brushes connected to the said chains, and gearing forming a driving connection between one of the ground wheels and the shaft *j*, in combination with a closed cart having an opening in the casing, and a detachable connection between the sweeper and the cart, substantially as and for the purpose specified. 3rd. The herein described street-sweeping machine, consisting essentially of the axle *g*, travelling and supporting wheels mounted on the said axle, the transverse shaft *j*, journaled in standards or supports rising from the axle, the casing *k* supported on the said shaft and open at its upper and lower ends, the casing being divided longitudinally to form a lower part and an upper part having its sides provided with depending portions extending over the ends of the sides of the lower portion, straps connecting the parts of the casing, a shaft *u* journaled in the lower end of the said casing, sprocket wheels mounted on the shafts *j* and *u*, sprocket chains connecting the said sprocket wheels, transverse brushes connected to the said chains, and gearing forming a driving connection between one of the ground wheels and the shaft *j*, substantially as and for the purpose specified. 4th. The herein described street-sweeping machine, consisting essentially of an axle, travelling and supporting wheels mounted on said axle a gear-wheel fixed with respect to one of said travelling and supporting wheels, the transverse shaft *j*, journaled in standards or supports rising from the axle, the lower casing section *m*, having the inclined bottom or floor *n*, bearing at its rear end upon the ground and extending in advance of the axle, and the side walls *p*, extending from a point adjacent to the ground to a point in advance of the axle, the upper casing section *q* having the side walls extending to a point adjacent to the ground and provided at their upper ends with the depending portions *p'*, bearing against the upper ends of the side walls *p*, of section *m*, and the transverse top wall provided with the depending portion at its upper end serving in conjunction with the upper end

of wall *a*, to form a downwardly disposed opening, and also having the depending portion at its lower end serving in conjunction with the lower end of the wall *a*, to form an opening, the straps *t*, connecting the casing-sections *u* and *q*, the shaft *u* journaled in the side walls of the casing adjacent to the lower end thereof, sprocket-wheels mounted on the shafts *j* and *u*, belts taking around said wheels, transverse brushes connected to said belts, and a pinion fixed on the shaft *j*, and meshing with the gear wheel connected to one of the travelling or supporting wheels, all as and for the purpose set forth.

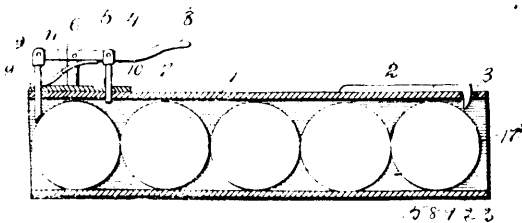
No. 58,922. Threshing Machine. (*Machine à battre.*)



Julius Borsum, Lillehammer, Norway, 3rd February, 1898; 6 years. (Filed 24th January, 1898.)

Claim. 1st. In a threshing machine, the combination with the straw-shakers and the threshing drum of a curved deflecting-plate placed behind and above the straw-shakers. 2nd. In a threshing machine, the combination with the straw-shakers and the threshing drum of a curved plate encircling part of the threshing drum, and forming a mouth for the threshed materials through which the same is thrown out in substantially horizontal direction. 3rd. In a threshing machine, a curved deflecting-plate placed behind and above the straw-shakers, with its lower vertical portion in near proximity to the rear end of the straw-shakers, and its upper substantially horizontal part in near proximity to and above the mouth of the threshing drum. 4th. A threshing machine, having placed between the rear end of the straw-shakers and the mouth of the threshing drum a curved deflecting-plate, substantially as described.

No. 58,923. Coin-Holder. (*Porte-monnaie*)

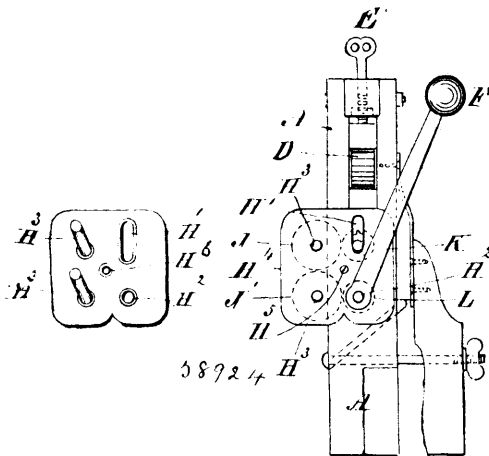


Joseph Green, Wissinoming, Pennsylvania, U.S.A., 5th February, 1898; 6 years. (Filed 5th November, 1897.)

Claim. 1st. The combination with a portable coin-holder, embodying a case for the reception of coins, of oppositely movable stops or plungers arranged near the discharge end of the case, and a lever for moving said stops or plungers simultaneously in opposite directions, substantially as described. 2nd. The combination with a portable coin-holder, consisting of a case adapted to receive coins, of a spring actuated lever mounted on the case, and a pair of stops or plungers connected to said lever on opposite sides of its fulcrum and working through the wall of the case, whereby as one stop is moved out of the path of the foremost coin the other stop will be moved into the path of the next succeeding coin, substantially as described. 3rd. The combination with a coin-holder, of spring clasps secured thereto and arranged near the opposite edges thereof, said clasps being adapted to be engaged with the clothing, substantially as described. 4th. The combination with a coin-holder, and retaining and releasing means for the coins, of attaching means for securing said holder to the clothing, and an ornamental face-plate extending over the front of the holder and concealing the working parts and coin-holding portions thereof, substantially as described. 5th. In a coin-holder, a case provided at or near one end with a laterally disposed mouth or hopper at one side thereof, and made flaring for the insertion of the coins, in combination with means for retaining and releasing said coins, substantially as described. 6th. A coin-holder, comprising a series of flat cases arranged side

by side and secured flatwise against each other, in combination with independent means for each case for holding and releasing the coins, substantially as described.

No. 58,924. Clothes Wringer. (*Tordeuse.*)

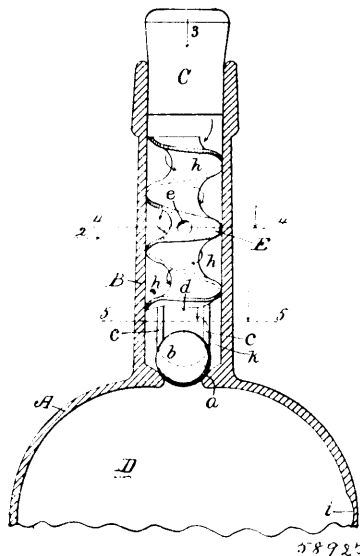


James H. Connor and James L. Connor, both of Ottawa, Ontario, Canada, 5th February, 1898; 6 years. (Filed 27th January, 1898.)

Claim. 1st. The combination with a wringer having rollers provided with journals passing through the ends of the frame, of a casing *H*, provided with slot *H*¹, hole *H*², stub axles *H*³, and cover *H*⁴, cog gear wheels *J*, *J*¹, meshing together and carried by said axles, cog pinions *K* and *L* on said roller journals and respectively meshing with said cog wheels, said cog pinions out of gear with each other, as set forth. 2nd. The combination of the enclosing casing *H*, having slot *H*¹, hole *H*², and stub axles *H*³, gear wheels *J*, *J*¹, on said axles and meshing together, and with pinions *K*, *L* on the roller journals, said pinions out of gear with one another, as set forth. 3rd. A clothes wringer having cog pinions *L*, *L* on the roller journals, connected by gear wheels *J*, *J*, as set forth. 4th. A gear casing for clothes wringers having stub axles *H*³, and cover *H*⁴, and provided with slot *H*¹ and hole *H*² to receive the roller journals, as set forth.

No. 58,925. Non-Refillable Bottle.

(*Bouteille non ré-emplissable.*)

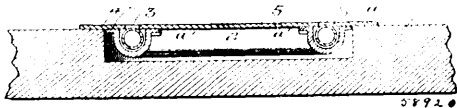


Wesley J. Barrett, Marion, New York, U.S.A., 5th February, 1898; 6 years. (Filed 27th January, 1898.)

Claim. 1st. A bottle having a valve chamber in its neck adjacent to the body of the bottle, and a valve in said chamber to close the passage into the bottle, and a seat for the valve at the base of the neck, and a core rigid in the neck of the bottle above the valve serving to confine the latter, and a passage in the core communicating between the valve chamber and the mouth of the bottle,

substantially as shown and described. 2nd. A bottle, the neck of which contains a valve chamber near the body of the bottle, a valve in said chamber adapted to occupy a seat at the base of the neck to close the passage into the bottle, a core rigid in the neck of the bottle above the valve chamber, having a passage in the form of a reverse spiral communicating between the valve chamber and the mouth of the bottle, substantially as specified. 3rd. A bottle having a valve chamber in the lower part of its neck, a valve seat in said chamber and a valve adapted to occupy said seat to close the passage into the bottle, the neck of the bottle being formed with internal longitudinal knife edge ribs projecting into the valve chamber, and a fixed core in the neck of the bottle above the valve and presenting a pointed end toward the valve, said core having a passage communicating between the chamber and the mouth of the bottle, substantially as described.

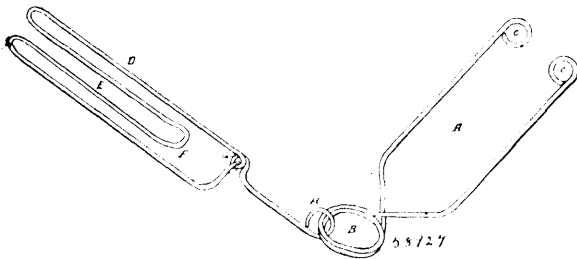
No. 5,926. Spirit Level. (Niveau d'air.)



Adalbert Volswinkler, San Francisco, California, U.S.A., 5th February, 1898; 6 years. (Filed 25th October, 1897.)

Claim.—1st. A spirit-level presenting in its construction a circular tube containing liquid forming a bubble, and marks or degrees extending around the tube, substantially as shown and described. 2nd. In a spirit-level, the combination with a beam having a straight edge, of a circular tube secured thereto and containing liquid forming a bubble, and marks or degrees extending around the tube, substantially as shown and described. 3rd. In a spirit-level, the combination with a beam, of a circular tube containing liquid forming a bubble, an annular plate extending around the tube against which it bears to assist in holding the same in place, the said plate having marks or degrees adjoining the tube, substantially as shown and for the purpose set forth. 4th. In a spirit-level, the combination of a circular casting semi-cylindrical in cross-section, a circular glass tube seated therein, and an annular plate attached to the outer edge of said casting and bearing against the tube, said plate having marks or degrees around its inner edge, as herein shown and described. 5th. In a spirit-level, the combination of a circular casting semi-cylindrical in cross-section and having projecting flanges at its upper edges, a circular glass tube seated within the casting and containing liquid forming a bubble, an annular plate secured to the outer edge of the casting from which it projects outwardly, and a circular plate or disc secured to the inner edge of the casting, the annular plate having marks or degrees around its inner edge, as herein shown and described.

No. 58,927. Implement for Securing Cow's Tails While Being Milked. (Appareil pour tenir la queue des vaches pendant qu'elles se font traire.)



William Henry Chamberlain, Bolton, and Versel Eben Chamberlain, Magog, both in Quebec, Canada, 5th February, 1898; 6 years. (Filed 26th January, 1898.)

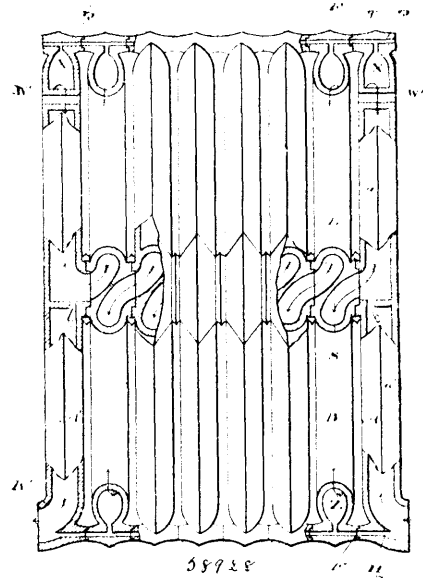
Claim.—The combination of the spring frame A for securing to a cow's leg, with the elongated M-shaped frame I, and its spring tongue E, for holding a cow's tail, substantially as and for the purpose hereinbefore set forth.

No. 58,928. Steam and Hot Water Heating Radiator. (Calorifere.)

John Thomas Jackson, and Fergus James Travers, both of Toronto, Ontario, Canada, 5th February, 1898; 6 years. (Filed 24th January, 1898.)

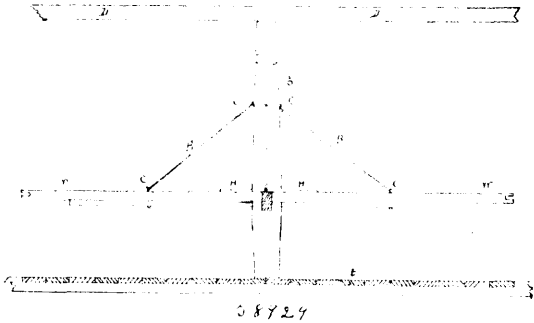
Claim.—1st. A radiator with a small exterior integral tubular passage connected directly with the bottom of the loops thereof by means of a vertical opening therein connecting the interior of the said loops with the said exterior tubular passage by which means condensation of steam or hot water may be released or drained off and the radiator emptied when not in use, substantially as set forth.

2nd. A radiator with an exterior integral tubular passage along the extreme top thereof which said exterior tubular passage is connected



directly with the interest of the loops of the said radiator by means of a vertical opening in the top thereof connecting the interior of the said loops with the said tubular passage by which means the stagnant air can be exhausted from the entire radiator, substantially as set forth. 3rd. A radiator loop having three water-legs in circulation with each other, two of which terminate with right angle bends or elbows cast integral within the centre of the radiator loops, said bends or elbows terminating with the hubs R, substantially as set forth. 4th. A radiator having a top, bottom and central connections held together with a right and left hand nut on the main or feed connection in the centre only and having the centre hubs threaded externally with right and left hand threads, substantially as set forth. 5th. An end loop of a radiator consisting of two chambers a , a^1 , the lower chamber a^1 forming a single water-leg and provided with an inlet opening, the upper chamber a being divided by a vertical partition into two vertical water-legs b^1 , b^{11} , the vertical water-leg b^1 , in communication with the lower chamber a^1 , and the vertical water-leg b^{11} , in communication at the top of the loop with the water-leg b^1 , an outlet port being formed centrally in the radiator loop and at the lower end of the water-leg b^{11} , and a curvilinear horizontal partition having a drainage opening C therein connected to the lower end of the water-leg b^{11} , and outlet port from the lower chamber a^1 , and water-leg b^1 , substantially as set forth. 6th. An end loop of a radiator consisting of two chambers a , a^1 , the lower chamber a^1 , forming a single water-leg and provided with an inlet opening, the upper chamber a being divided by a vertical partition in vertical water-legs b^1 , b^{11} , the vertical water-leg b^1 , in communication with the lower chamber a^1 , and the water-leg b^{11} , in communication at the top of the loop with the water-leg b^1 , an outlet port being formed centrally in the radiator loop and at the lower end of the water-leg b^{11} , and a curvilinear horizontal partition having a drainage opening C therein connected to the lower end of the vertical partition separating the lower end of the water-leg b^{11} , and outlet port from the lower chamber a^1 , and the water-leg b^1 , and an exterior integral passage at the lower end of the said loop communicating therewith by a vertical opening, substantially as set forth. 7th. An end loop of a radiator consisting of two chambers a , a^1 , the lower chamber a^1 , forming a single water-leg, the upper chamber a , divided by a vertical partition into two vertical water-legs b^1 , b^{11} , the vertical water-leg b^1 , being in communication with the lower chamber a^1 , and the water-leg b^{11} , being in communication at the top of the loop with the water-leg b^1 , an outlet port being formed centrally in the radiator loop, and the lower end of the water-leg b^{11} having a curvilinear horizontal partition having a drainage opening C therein connected to the lower end of the vertical partition separating the lower end of the water-leg b^{11} , and outlet port from the lower chamber a^1 , and water-leg b^1 , and having a port at the lower end of the said loop in combination with an intermediate loop comprised of vertical water-legs in circulation with each other, and separated by vertical partitions, an inlet and outlet for the water-legs separated by a curvilinear horizontal partition, drainage openings at the bottom of the said loops in circulation with each other and with the flow and return pipes, and air-vents at the top of the loop in circulation with each other, substantially as set forth.

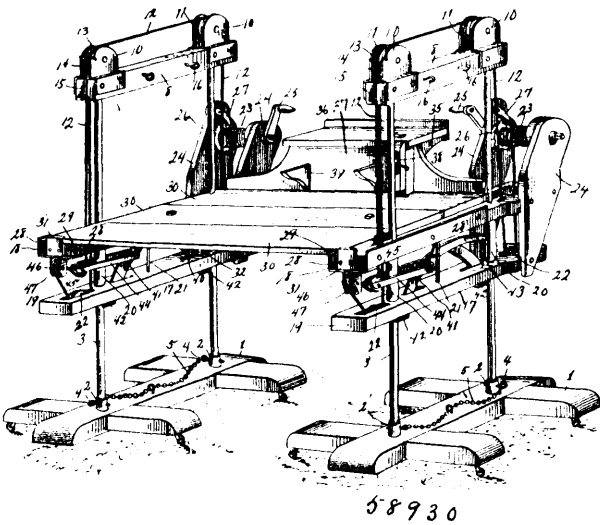
No. 58,929. Horse Power. (Manège.)



James Barnes Abra, Moore, Lambton, Ontario, Canada, 5th February, 1898; 6 years. (Filed 18th January, 1898.)

Claim.—1st. The wheel or rim W W made in sections with hinges H H, and used in connection with horse-powers, substantially as and for the purposes hereinbefore set forth. 2nd. The arms A A capable of being detached from the post S and from the rim or wheel W W used in horse-powers, substantially as and for the purposes hereinbefore set forth. 3rd. The combination of the arms A A with the wheel or rim W W and with the post S, and with the hinges H H substantially as and for the purposes hereinbefore set forth.

No. 58,930. Scaffold. (Echafaud)

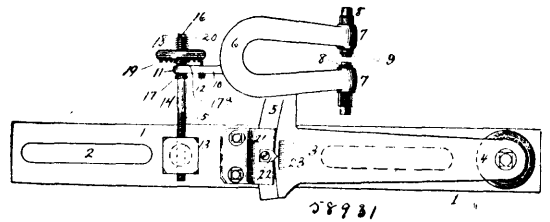


William H. Gray, Falconer, New York, U.S.A., 5th February, 1898; 6 years. (Filed 21st January, 1898.)

Claim.—1st. The combination of a suitable base, uprights mounted thereon and arranged in pairs, cross heads connecting the upper ends of the uprights of each pair, a vertically movable stage bed guided by the uprights, hoisting mechanism suspending the stage bed from the cross-heads, and the automatically operating brake mechanism carried by the stage bed, and arranged to engage the uprights, said brake mechanism being held out of engagement with the uprights, by the tension of the hoisting ropes, substantially as and for the purpose described. 2nd. The combination with a suitable base, and uprights mounted thereon of a movable stage bed, hoisting mechanism carried thereby, and a brake mechanism comprising a pair of brake levers having shoes and pivotally connected to the bed and to each other, a spring for throwing the brake shoes against the uprights, and an arm or lever connected to the brake levers and also having a sliding engagement with the hoisting rope whereby the latter when under tension will hold the brake shoes out of engagement with the uprights, while the braking of the same will allow the brake shoes to act through the assistance of the aforesaid spring, substantially as described. 3rd. The combination with a suitable base and uprights mounted thereon, of a vertically movable stage bed mounted thereon, hoisting mechanism whereby the bed may be raised and lowered, and a safety appliance carried by the bed and comprising a pair of brake levers having pivotal connection with the bed and carrying brake shoes which work against the uprights, a spring connecting one of said levers with the bed, and operating to hold the shoe of said lever against its respective upright, an elbow lever having pivotal connection with both of said brake levers and carrying a pulley at the swinging extremity of one of its arms, and a hoisting rope passing around said pulley and over other pulleys carried by the bed, the arrangement being such that

the tension of the rope holds the brake shoes out of action while upon the parting of the rope, the shoes are thrown into action through the assistance of said spring, substantially as described. 4th. The combination with a suitable base having a socket, of a tubular upright having its lower end seated in said socket and made in two or more sections, and coupling piece having shank or plug portions which enter the open ends of the tubular sections and also having intermediate its ends an annular enlargement or collar which lies between the adjacent ends of the tubular sections, substantially as and for the purpose described. 5th. The combination with a suitable base having sockets of tubular uprights having their lower ends in said sockets, a cross head removably fitted upon and connecting the upper ends of the uprights and carrying at its ends brackets in which the pulleys are mounted, one of said brackets being formed with oppositely disposed notches, and a hoisting rope having attached to its end a V-shaped grapple the terminal portions of which are hooked to engage the aforesaid notches, substantially as described. 6th. The combination with a pair of end supports having vertically movable stage beds mounted thereon, each bed comprising a horizontal cross bar connecting the uprights of such end supports and having plates attached to its opposite side edges and projecting above the upper surface thereof, of a stage comprising one or more boards formed adjacent to their ends with grooves or kerfs in the under surfaces thereof, the said grooves or kerfs being adapted to receive the upper edges of said plates on the bed pieces, substantially as and for the purpose described. 7th. The combination with a stage board provided at one end with sockets, of a detachable work bench mounted on the stage board and projecting outward beyond the same, said bench being provided at its outer side with depending legs fitting in said sockets, and the saw-horses extending from the inner side of the bench and detachably mounted thereon, substantially as described.

No. 58,931. Saw Guide. (Guide-scie.)

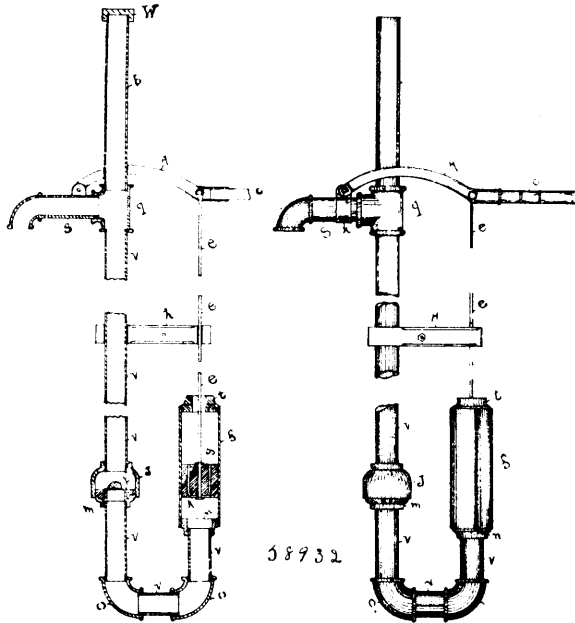


Thomas Allen and I. Halecomb, Neosho, Kentucky, U.S.A., 5th February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. In a saw-guide, the combination with a base provided with slots therein, of an arm pivotally attached to said base, jaws formed upon said arms, guide-blocks on the outer ends of said jaws, a swivel-block attached to said base, an extension formed upon said jaws, an adjusting screw passing through said swivel-block and said extension, means for operating said screw, and means for locking the same, substantially as described. 2nd. In a saw-guide, the combination with a base provided with slots therein, of an arm pivotally attached to said base, jaws formed upon said arms, guide-blocks on the outer ends of said jaws, a swivel-block attached to said base, and extension formed upon said jaws, an adjusting screw passing through said swivel-block and said extension, handle-wheel held upon said screw, lugs upon said handle-wheel, a set-screw extending through the extension of said jaws, a spring normally holding said lugs in engagement with said set-screw, substantially as set forth. 3rd. In a saw-guide, the combination with a base provided with slots therein, of an arm pivotally attached to said base, jaws formed upon said arms, guide-blocks on the outer ends of said jaws, a swivel-block attached to said base, an extension formed upon said jaws, an adjusting-screw passing through said swivel-block and said extension, a handle-wheel held upon said screw, lugs upon said handle-wheel, a set-screw extending through the extension of said jaws, a spring normally holding said lug in engagement with said set-screw, and means for measuring the amount of adjustment, substantially as set forth. 4th. In a saw-guide, the combination with a base-plate provided with slots therein, of an arm pivoted to said base-plate, guide-jaws formed upon said arms, extensions formed at the ends of said guide-jaws, guide-blocks passing through said extensions, washers held upon said guide-blocks, an extension formed upon said jaws provided with an expanded portion having spherical sides and an opening through, a screw passing through the expanded portion of said extension and through said swivel-block, a shoulder and a collar upon said screw adapted to engage the expanded portion of said extension, a hand-wheel having a plurality of lugs thereon slidingly mounted upon said screw to normally hold said lugs in contact with the aforesaid set screw, and means to measure the amount of adjustment of the arm, substantially as described. 5th. In a saw-guide, the combination with a base-plate having slots therein, of an arm pivoted to said base-plate, guide-jaws formed upon said arm, extensions formed at the ends of said guide-jaws, guide-blocks passing through said extensions, washers held upon said guide-blocks, an extension formed upon said jaws provided with an

expanded portion having spherical sides and an opening there-through, a set-screw passing through said extension, a set-screw passing through the expanded portion of said extension and through said swivel-block, a shoulder and collar upon said screw adapted to engage the expanded portion of said extension, a hand-wheel having a plurality of lugs thereon slidably mounted upon said screw, a plate extending over upon the aforesaid arm attached to said base, a pointer extending from said plate, and a scale formed upon said arm, substantially as described.

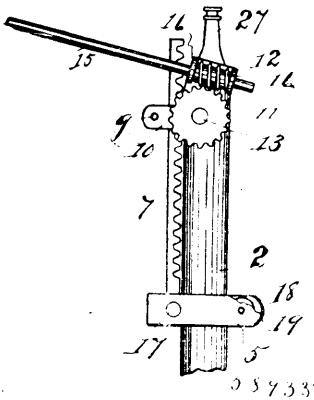
No. 58,932. Pump. (Pompe.)



Roderick John Cameron, Lucknow, Ontario, Canada, 5th February, 1898; 6 years. (Filed 7th January, 1898.)

Claim.—A pump comprising the cylinder F and plunger G, check valve P and extension B, with cap W, and handle A, C, with rod E, all formed and arranged as and for the purpose hereinbefore set out.

No. 58,933. Means for Raising and Lowering the Front Ends of Draw Bars in Road Machines. (Moyen de soulever et baisser les barres d'attelage de machines à routes.)

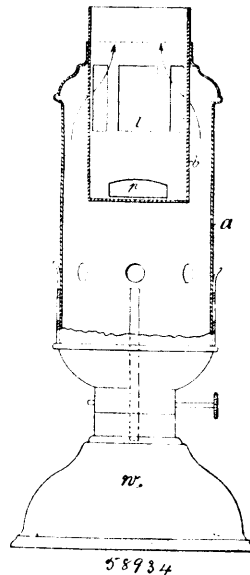


Elia L. Lathrop, Fort Wayne, Indiana, U.S.A., 7th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. In a road-working machine, the described means for raising and lowering the front end of the draw-bars, comprising the vertical hollow standard 2 secured as shown on the bracket 4, having the shaft 13 loosely mounted in the sides thereof and carrying the rigid pinion 8 and the worm-wheel 11 for the purpose specified, the vertically movable rack 7 mounted in said standard, as shown, and connected at its lower end to the forward end of the draw-bars by means of a proper coupler and an operating shaft 15 mounted as described, and having upon its forward extremity the worm 12 adapted to mesh with the said worm wheel 11, thereby actuating the said rack by means of the said pinion 8, all substantially as described. 2nd. In a road-working machine, the combination of the vertical standard 2 rigidly mounted on the bracket 4 and connected

to the main frame as shown, having the lateral perforated lugs 10 for the shaft 9 carrying the idler 14, the shaft 13 rotatably mounted in said standard 4, and provided with rigid pinion 8 and the worm-wheel 11 for the purpose specified, the vertical rack 7 mounted in the said standard as described, and connected at its lower end to the forward end of the draw-bars by means of the bifurcated coupler 20, the said rack being actuated by engagement with the said pinion 8, an operating shaft 15 rotatably mounted and provided at its forward end with the worm 12 meshing with said worm-wheel 11 for actuating the said rack, the coupler 20 having a bifurcated head 5 inclosing the said standard and pivotally connected with the lower end of the said rack, and having a rearwardly extended shank loosely mounted in the forward end of the draw-bars and provided with a retracting spring 22, a washer 23 secured in position by the pin 25, and the bifurcated draw-bars 26, all substantially as and for the purpose specified. 3rd. In a road-working machine, means for raising and lowering the front ends of the draw-bars, comprising a hollow vertical standard, a short horizontal shaft rotatably mounted in said standard carrying a rigid pinion 8 and a rigid worm-wheel 11 for the purpose specified, a vertically movable rack mounted on said standard and having its lower end pivotally connected to the draw-bars, and an operating rod having upon its forward end a worm adapted for an actuating engagement with said worm-wheel.

No. 58,934. Process and Apparatus for Disinfection by means of Formaldehyde. (Procédé et appareil pour désinfecter au moyen de formaldéhyde.)



Albrecht Schmidt, Berlin, Germany, 7th February, 1898; 9 years. (Filed 20th July, 1897.)

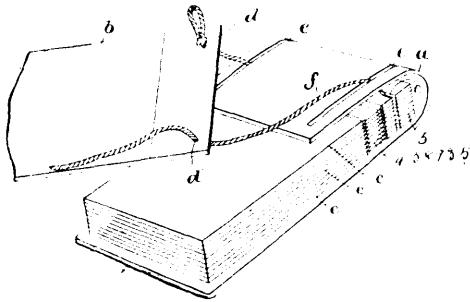
Claim.—1st. A process for disinfecting by means of formaldehyde, or substances capable of evolving formaldehyde, such, for example, as paraformaldehyde, vaporized by a source of heat, so that the mixture of the combustion gases with the formaldehyde vapours generated takes place. 2nd. For carrying into practice the process claimed, an apparatus consisting essentially of two receptacles arranged one within the other, of which the outer is closed at the upper end, whilst the inner receptacle, which is arranged over a source of heat and serves for the reception of the paraformaldehyde, is closed at the bottom and open at the top and provided beneath the cover or stopper of the outer receptacle with openings through which the combustion gases issue in order to mix with the formaldehyde vapours escaping from the inner receptacle. 3rd. The combination consisting of a burner a, a vaporizing cup or tray b, with a raised rim, which is preferably mounted at such distance above the burner and of such form and dimensions that the paraformaldehyde in the cup or tray cannot become red hot and the gas or vapour generated therefrom cannot be ignited by the burner-gases or at the burner-flame, but can mix with these gases above the cup or tray.

No. 58,935. Separable Book. (Livre dévissable.)

Franklin Howard Gilson, Wellesley, Massachusetts, U.S.A., 7th February, 1898; 6 years. Filed 8th November, 1897.)

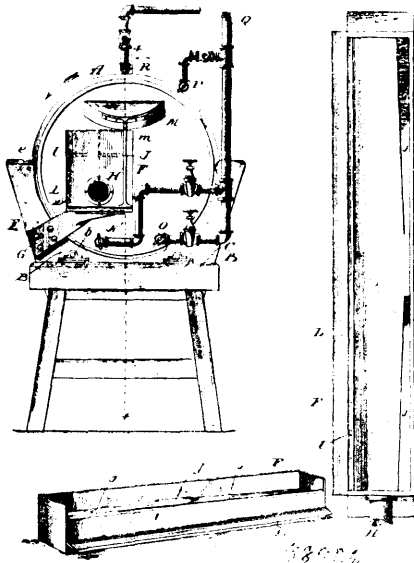
Claim.—1st. A book or album comprising a cover composed of two lids provided with openings near their inner ends and a flexible back-piece having a free edge and provided with longitudinal openings adapted to register with the openings in the lids, a pack of leaves interposed between the lids of the cover, and a binding device adapted to occupy the openings in the lids and back-piece, adjust-

ment of the cover being effected by drawing up the free edge of the back-piece between the lid and the pack of leaves so as to expose



more or less of said back-piece according to the thickness of the pack of leaves. 2nd. A book or album cover comprising a front lid provided with orifices near its inner end, a flexible extension or back formed thereon, and provided with longitudinal slots arranged to register with said orifices, and a back lid having orifices near its inner end arranged to register with the said slots and first-mentioned orifices, said slots and orifices being arranged to receive a cord or lacing, whereby the lids may be connected with each other and with a series of leaves interposed between the lids, the slots permitting said cord to pass through the flexible extension at various points, as set forth. 3rd. A book of the character specified, comprising two separable lids, each having orifices near its inner end, a flexible extension or back formed on one of said lids, and provided with longitudinal slots arranged to register with the orifices in the lids, a series of independent leaves interposed between the lids, and having slots extending inwardly from their edges near their inner ends, the inner ends of said slots coinciding with the orifices in the lids, and a lacing-cord connecting said lids and leaves, the said cord passing through the orifices of the lids, the slots of the back-extension, and the slots of the leaves. 4th. A book of the character specified, comprising an adjustable cover, and a series of leaves interposed between the lids of the cover, each leaf having slots in its top and bottom edges formed with a constricted neck-portion, a wider cord-receiving portion or eye-let, and a widened or flaring entrance, for the purpose set forth.

No. 58,936. Pulp Screen. (Tamis à pulpe)

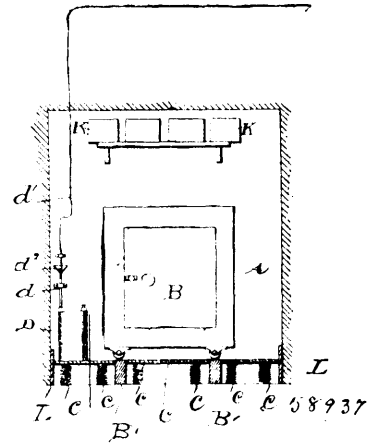


David R. Davis, Eau Claire, Wisconsin, U.S.A., 7th February, 1898; 6 years. (Filed 5th November, 1897.)

Claim.—1st. An apparatus for screening pulp, comprising a cylindrical screen, a flow-box delivering liquid pulp from end to end of the working surface of the screen, a receptacle below the screen, provided with means for keeping the liquid level thereof below the screen, and means for delivering the unscreened material from the screen. 2nd. The combination of an unsubmerged screen, a flow-box, delivering liquid pulp from end to end of the working surface of the screen, a carrying-off trough, and means for separating pulp-fibres from the screen and driving them into the trough. 3rd. The combination of an unsubmerged screen, a flow-box for delivering liquid pulp to the screen, a carrying-off trough and a water spray-

pipe for separating particles of pulp from the screen and driving them into the carrying-off trough. 4th. The combination of an unsubmerged screen, a flow-box arranged within the screen and delivering liquid pulp from end to end of the working surface thereof, a carrying-off trough arranged above the flow-box, and a spray-pipe outside the screen for forcing particles of pulp from the screen into the carrying-off trough. 5th. The combination of the unsubmerged screen, a flow-box arranged within the screen and delivering liquid pulp from end to end of the working surface thereof, a carrying-off trough arranged above the flow-box, a water supply-pipe within the screen below the flow-box, and a water supply-pipe outside the screen for forcing particles of pulp from the inner surface of the screen into the carrying-off trough.

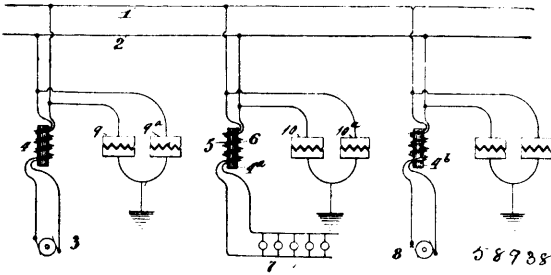
No. 58,937. Burglar Alarm. (Avertisseur d'effraction.)



William Harrison Ward, Mound, Kansas, U.S.A., 7th February, 1898; 6 years. (Filed 6th September, 1897.)

Claim.—1st. In a bank-vault, the combination of a spring-supported and downwardly-yielding false floor, with a battery carried thereon, one of the wires from said battery extending upward, and normally in contact with a second wire extending through the said vault to a distant place, an electro-magnet or armature connected to the other end of said wire, suitable ground connections, a centrally-pivoted armature-lever having a contact-wire at its base, and a battery in circuit therewith, an electric bell or annunciator, and a retracting-spring connected to the upper end of said armature-lever, whereby, when the armature or electro-magnet is de-energized by the depression of the false floor and breaking of the contact of the wires within the vault, the said retracting-spring will operate the armature-lever and force the contact-wire at the base thereof against and in circuit with the said electric bell or annunciator, all substantially as hereinbefore shown and described. 2nd. In a bank-vault, protected at its lower portion by a metal casement or mason-work, the combination of a false or yielding floor normally spring-supported, having openings for the passage of the safe supports or pedestals, with a battery on said floor having suitable ground-connections, and having its upper wire normally in contact with a second wire extending to an electro-magnet or armature, the said electro-magnet, a pivoted bar in contact therewith, a contact-wire at its base, a battery in circuit therewith, an electric bell, a retracting spring, and a metal plate, all arranged, constructed and operating substantially as described. 3rd. In a bank-vault provided with weights, so arranged on its sides and door as to fall by concussion, or shock of explosion or violently opening said door, the combination of said weights, a false or yielding spring-supported floor, a battery located thereupon having suitable ground connection, and also having its wire normally in contact with a second wire extending to an electro-magnet, the said electro-magnet, a pivoted bar in contact therewith when the electro-magnet is energized, a generator with its wire so arranged that when the electro-magnet is de-energized it will connect with an electric bell, and the said electric bell, all constructed, arranged and operating substantially as described. 4th. The combination with a false or yielding floor, supported normally by springs, of the battery D, provided with suitable ground connection, and having its wire *d*, normally in contact with the wire *d'*, extending to an electro-magnet E, the said electro-magnet, the pivoted bar E', the spring *g*, the generator G, with its wire F, and the alarm-bell H, all constructed, arranged and operating substantially as hereinbefore described. 5th. The combination of the false or yielding floor C, the supporting-springs *c*, the battery D, carried upon said floor, and having suitable ground connection or equivalent means to bring it in circuit with the electro-magnet, the wires *d* and *d'*, normally in contact, the electro-magnet E, the bar or lever I, the spring *g'*, the battery or generator G, with its wire F, and the alarm-bell H, all constructed, arranged and operating substantially as hereinbefore described.

No. 58,938 Lightning Arrester. (Paratonnerre.)

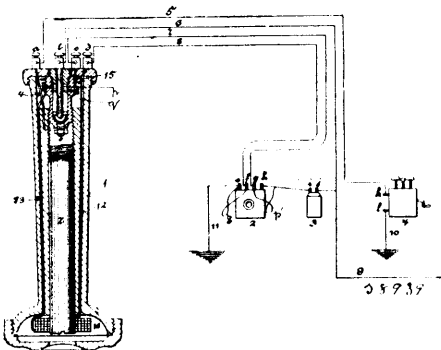


Charles Schenck Bradley, Avon, New York, U.S.A., 7th February, 1898; 6 years. (Filed 8th September, 1897.)

Claim.—1st. A lightning arrester, comprising two conductors in mutual inductive relation having two terminals connected to line and two to a translating device, said conductors being associated to oppose one another in magnetizing effect under the working current passing to the translating device, thereby permitting such current to pass freely, but assisting one another in magnetizing effect when the line is charged by a lightning stroke. 2nd. A lightning arrester, comprising two conductors in mutual inductive relation having two terminals connected to line and two to a translating device, said conductor being associated to oppose one another in magnetizing effect under the working current passing to the translating device, thereby permitting such current to pass freely, but assisting one another in magnetizing effect when the line is charged by a lightning stroke, and a ground connection of high resistance but low impedance at or near the lightning arrester. 3rd. A lightning arrester, comprising two conductors in mutual inductive relation, a translating device between said conductors, the conductors being wound or associated to oppose each other under line current, and a branch connection of high resistance and low impedance to earth from the line side of the conductors. 4th. The combination with a pair of lines connected to one or more translating devices, of a lightning arrester interposed therein, comprising two conductors surrounded by a magnetic core and connected with the lines to neutralize one another in magnetizing effect under working current traversing them in opposition, but impeding the passage of lightning discharges entering from the lines. 5th. As a means for grounding lightning discharges, an inductive device comprising two conductors connected with the outgoing and return wires of a circuit so as to oppose one another in inductive effect under current from the generator but assist one another with grounded currents, and a branch connection to earth including a spark-gap on the line side of the inductive device.

No. 58,939. Telephone and Other Electric Switches.

(*Commulateur électrique pour téléphones et autres.*)



Elias Elkan Ries, New York, State of New York, U.S.A., 7th February, 1898; 6 years. (Filed 8th September, 1897.)

Claim.—1st. The herein described improvements in automatic switching or circuit changing or grouping apparatus for telephonic and other electric circuits, substantially as and for the purpose herein set forth. 2nd. A gravity switch for telephonic and other electrical circuits, the same consisting of a tubular chamber, a centrally disposed metallic pin projecting into said chamber, a movable conductor contained within said chamber and adapted to travel therein in contact with said pin, and a series of annular electrical terminals embedded in or secured to the wall of said chamber and located in the path of said movable conductor, by which a circuit is closed between the terminals and the pin. 3rd. A gravity switch, consisting of a tubular chamber, a metallic pin projecting into said chamber, a series of metallic terminals arranged opposite to, and out of contact with said pin at intervals along the wall of said chamber and a movable conductor adapted to travel

within said chamber between the said pin and terminals and thereby establish a bridging contact between the same, substantially as described. 4th. A gravity switch, consisting of a tubular non-conducting chamber provided with metallic terminals at or near each of its opposite extremities, an adjustable metallic conducting pin projecting into said chamber in proximity to but out of contact with said terminals, and a movable conductor within the chamber, adapted to move along the same under the action of gravity when the switch is shifted, and thereby establish electrical connection alternately between the pin and the terminal or terminals at the end of the chamber where the moving contact may be. 5th. In a telephone or other circuit-changing switch, a non-conducting tube or thimble having an interior centrally-disposed conducting pin and annular terminal contacts surrounding said pin but separated therefrom, and a movable conductor adapted, when acted upon by gravity to travel along said conducting pin and establish electrical connection between it and one or more of the annular terminal contacts, substantially as and for the purpose set forth. 6th. In a telephone or other circuit-changing switch, a non-conducting tube or thimble closed at its lower end by a metallic cup and having its mouth or upper end closed by a removable plug carrying an interiorly-projecting metallic terminal pin extending to a point below the upper edge of the metallic cup, one or more stationary terminal contacts or rings disposed about the upper portion of the terminal pin but insulated therefrom, and a movable conductor within the tube or thimble adapted to bridge the space between the pin and cup in one position of the switch and that between the pin and upper contact or contacts in the other position of the switch, substantially as described. 7th. In a telephone system, the combination with the telephone-receiver of an automatic switch or circuit-changing device comprising a non-conducting tube or thimble having a terminal cup and terminal rings at opposite extremities, a metallic conducting-pin projecting into said thimble in line with the longitudinal axis thereof and arranged to be conducted to the line-wire, and a movable conductor, such as mercury, within the tube or thimble, adapted to establish connection between the pin and cup when the receiver is in its normal or calling position, and to break this connection and to establish contact between the pin and the rings when the receiver is held in position for conversation or listening. 8th. In a telephone system, the combination, with the receiver and its circuit connections, of an automatic gravity-switch consisting of a fixed tube or thimble secured to or forming part of the body of the receiver, in line with its longitudinal axis, and carrying upper and lower stationary terminal contacts, a removable plug for said tube or thimble carrying a single contact-terminal adapted to project into said thimble in operative proximity to the said stationary contact when the tube or thimble is closed by said plug, and a movable conductor within the thimble adapted to make and break electrical connection between the removable terminal and the upper and lower stationary terminals, respectively, in accordance with the manipulation of the receiver in the acts of listening and signaling, or its position while in service. 9th. In combination with a telephone-receiver, an automatic gravity-switch apparatus forming part of the same or independently secured thereto, and comprising a cylindrical chamber of hard rubber or other insulating material containing one or more fixed contact rings or terminals at or near its opposite inner ends, a threaded plug for closing the mouth of the chamber and having a terminal screw and contact-pin, the latter adapted to enter the chamber to a point near its lower end, a movable conductor, such as mercury or its equivalent, confined within the chamber, and circuit connections, substantially as shown, between the said switch-contacts and the receiving, transmitting and signaling apparatus in connection with which said receiver and switch is used, substantially as described. 10th. An automatic gravity-switch device for telephone-receivers, the same consisting of a combined base-piece and thimble of hard rubber or other insulating material, said base-piece being adapted to fit and be secured to the terminal post end of a telephone-receiver, and said thimble projecting rearwardly or outwardly therefrom and containing the switching apparatus, supplemental binding-posts attached to the switch device, and electrical connections between the switch-terminals and the main and supplemental binding-posts attached to the switch device, and electrical connections between the switch-terminals and the main and supplemental binding-posts, substantially as described. 11th. In combination with a telephone-receiver, an automatic switch having a slotted base or support adapted to straddle the binding-posts of the receiver, means, substantially as shown, for securing the base to said receiver, a switching-chamber and a movable conductor within the same adapted to be operated by gravity, supplemental binding-posts on the switch-base or support, and a protective cover or hood for the various binding-posts removably secured to the said switch-base and having an opening for the passage of the conducting-cord, substantially as described. 12th. In combination with a telephone-receiver, an automatic gravity-switch apparatus forming part of the same or independently secured thereto, a series of binding-posts attached to said receiver or switch, or both, and forming the exterior connections for the receiver and switch-terminals, a protective cover or hood for inclosing and covering said binding-posts, means, substantially as shown, for removably securing said hood to the telephone-receiver or switch apparatus, and an opening or sleeve in said hood to permit the passage of the conductor or conducting-cord, substantially as described.

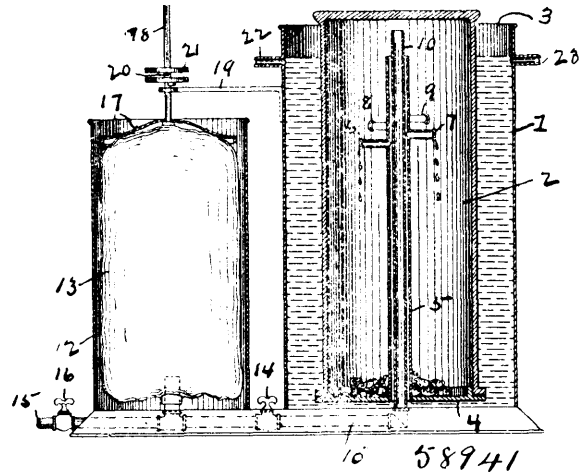
No. 58,940. Process of Annealing Iron Castings.

(*Procédé pour recuire la fonte.*)

The King Annealing Process Company, assignee of Richard King, all of Belleville, Illinois, U.S.A., 8th February, 1898; 6 years. (Filed 29th December, 1897.)

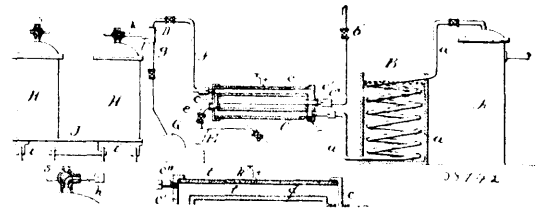
Claim.—1st. The process of annealing iron castings, which consists in imbedding them in a packing containing metallic manganese or an alloy thereof and a refractory material such as sand, mill scale or the like, and subjecting the whole to sufficient heat to anneal the castings. 2nd. The process of annealing iron castings, consisting in packing them with an alloy of iron and manganese and refractory material, and subjecting the whole to sufficient heat to anneal the castings. 3rd. The process of annealing iron castings, consisting in packing them with a metallic manganese substance, and refractory material and a readily combustible substance, and subjecting the whole to sufficient heat to anneal the castings. 4th. The process of annealing iron castings, consisting in packing them with metallic manganese substance, and refractory material, and a readily combustible substance, and a volatile substance, and subjecting the whole to sufficient heat to anneal the castings. 5th. The process of annealing iron castings, consisting in packing them with metallic manganese substance and refractory material, and a readily combustible substance, and an acidiferous substance, and a greasy substance, and subjecting the whole to sufficient heat to anneal the castings. 6th. The process of annealing iron castings, consisting in packing them with metallic manganese substance, and refractory material, and a readily combustible substance, and a volatile substance, and an acidiferous substance, and subjecting the whole to sufficient heat to anneal the castings. 7th. The process of annealing iron castings, consisting in coating the castings with an adhesive substance, then applying thereto a coating of metallic manganese substance, and then inserting said castings in a mass of refractory material, containing a readily combustible substance, and subjecting the whole to sufficient heat to anneal the castings. 8th. The process of annealing iron castings, consisting in coating the castings with an adhesive substance, then applying thereto a coating of metallic manganese substance, then inserting said castings in a mass of refractory material, containing a readily combustible substance, and subjecting the whole to sufficient heat to anneal the castings. 9th. The process of annealing iron castings, consisting in coating the castings with an adhesive substance, and then applying thereto a coating of metallic manganese substance, and then inserting said castings in a mass of refractory material, containing a readily combustible substance, and a volatile substance, and subjecting the whole to sufficient heat to anneal the castings. 10th. The process of annealing iron castings, consisting in coating the castings with an adhesive substance, then applying thereto a coating of metallic manganese substance, then inserting said castings in a mass of refractory material, containing a readily combustible substance, and an acidiferous substance, and subjecting the whole to sufficient heat to anneal the castings. 11th. The process of annealing iron castings, consisting in coating the castings with tallow or beef suet, or analogous substance, then applying thereto a coating of metallic manganese substance, then inserting said castings in a mass of refractory material, containing a readily combustible substance, and subjecting the whole to sufficient heat to anneal the castings. 12th. The process of annealing iron castings, consisting in packing them in a mass of refractory material, containing metallic manganese substance, sawdust, turpentine, vinegar and tallow, or analogous substance, and subjecting the whole to sufficient heat to anneal the castings. 13th. The process of annealing iron castings, consisting in packing them with a metallic manganese substance, and refractory material, and subjecting the whole to sufficient heat to anneal the castings. 14th. The process of manufacturing iron articles, which consists in first casting the article of iron designated as combined carbon iron, then annealing such article in a packing containing manganese in metallic state, and a refractory substance to render it suitable for use, substantially as herein explained.

generating chamber having the sides and bottom wholly closed, of a water receptacle communicating with said chamber by a pipe passing



through the bottom of the chamber to a point near the upper end thereof, and provided with a plurality of outlets located in various horizontal planes. 4th. In a gas generator, the combination with a generating chamber, of an open water receptacle having open communication with said chamber at a point slightly below the normal level of the water in said receptacle, a water holding tank or reservoir containing a vertically movable gas holder water-sealed on its lower end by the water in the reservoir, a pipe leading from said generating chamber to said gas holder, a gas service pipe leading from said holder, the end of such pipe being normally sealed by the water in the receptacle and adapted to be opened by an extreme upward movement of said holder, substantially as described. 5th. In a gas generator, the combination with a generating chamber, of an exterior source of water supply, and a pipe leading from said water supply through the bottom of said chamber to an outlet near the upper end of the water, said pipe being provided near its upper end with a plurality of radially disposed vent tubes of various lengths and located in various horizontal planes, as and for the purpose set forth. 6th. In a gas generating apparatus, the combination with a suitable tank and water-sealed gas receiver vertically movable within said tank, of a gas generating chamber having pipe connection with said receiver, a water reservoir located above said chamber and having pipe connection therewith, and a valve having oscillating stem and governing the passage of water from said reservoir to said chamber, a cam lever projecting from one side of said valve stem and provided with a bent portion and an arm upon said receiver, with aperture loosely embracing said lever and pressing alternately against the opposite sides of such bent portion in the upward and downward movements of the receiver to close and open the said valve. 7th. In a gas generating apparatus, the combination with a gas receiver adapted for vertical movement, of a gas generating chamber having pipe connection with said receiver, a reservoir for water having pipe connection with said chamber, a valve governing the passage of water to said chamber, valves governing the escape of gas from said receiver and said generating chamber, and means for transmitting the movements of said receiver to both of said valves, to open and close the same.

No. 58,942. Process of and Apparatus for Rectifying and Deodorizing Alcoholic Liquids, etc.
(*Procédé et appareil pour raffiner et désinfecter les liquides alcooliques, etc.*)



No. 58,941. Gas Generator. (Générateur à gaz.)

The Morley Acetylene Gas Company, New York, State of New York, assignee of James Henry Morley, Springfield, Massachusetts, both in the U.S.A., 8th February, 1898; 6 years. (Filed 10th January, 1897.)

Claim.—1st. In a gas generator, the combination with a generating chamber for holding calcium carbide, of a constantly open conduit leading from an exterior source of water supply to an outlet in said chamber above the carbide therein, and means for automatically changing the level of the delivering orifice of said conduit and the water level in said conduit relatively to each other, according to the amount of pressure of gas within the chamber. 2nd. In a gas generator, the combination with a generating chamber, of a water reservoir, a conduit leading from said reservoir through the bottom of said chamber and upwardly within the latter above the normal level of the water in said reservoir, and provided with a plurality of outlets at different levels, a vertically movable gas receiver or holder having pipe connection with said generating chamber, and means (as a series of successively acting weights) for automatically increasing and diminishing the back pressure exerted by said holder upon the gas generated in said chamber, and upon the water column in said conduit. 3rd. In a gas generator, the combination with a

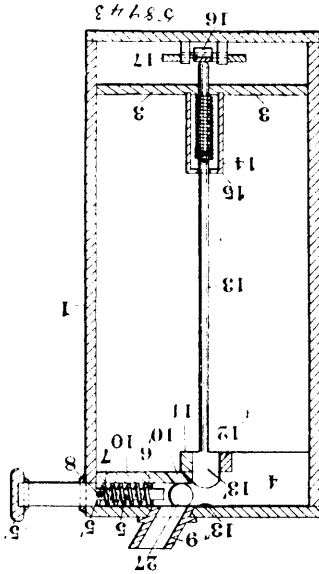
The Electric Rectifying and Refining Company, Camden, New Jersey, assignee of Marshall Pridham, Philadelphia, Pennsylvania, both in the U.S.A., 8th February, 1898; 6 years. (Filed 29th December, 1896.)

Claim.—1st. As an improvement in the art of aging and rectifying alcoholic liquids, etc., the herein described process consisting in first removing the air from said liquids, contained in suitable vessels, and then intimately mixing substantially pure ozone gas with said liquids, substantially as specified. 2nd. As an improvement in the

art of aging and rectifying alcoholic liquids, etc., the herein described process consisting in placing the liquids in a suitable vessel and exhausting the air therefrom, generating substantially pure ozone gas by the action of an electric brush discharge, and then introducing into said liquid substantially pure ozone gas thus generated, substantially as specified. 3rd. As an improvement in apparatus for aging and rectifying alcoholic liquids, the combination with a vessel for holding the liquid, provided with a gauge for indicating the liquid level in the vessel, and a thermometer in said gauge for indicating the temperature of the liquid, of a fluid conveyer located in the said vessel and arranged to be covered by the liquid, a discharge leading from said fluid conveyer, and an inlet thereto adapted to be connected to a supply pipe of a heating or cooling medium, an inlet pipe for the liquid provided with a valve, and adapted to be connected to an ozone supply pipe and the suction pipe of a vacuum apparatus, substantially as described. 4th. As an improvement in apparatus for aging and rectifying alcoholic liquids, the combination of a suitable vessel for holding the liquid provided with a suitable inlet and mounted upon a suitable platform or truck, of an ozone supply pipe, leading from a source of ozone, of an air exhaust pipe leading from an air exhausting device, the said pipes being supported in position to be connected with the inlet of the vessel, said pipes adapted to be alternately connecting the vessel with the air exhaust pipe and the ozone supply pipe, substantially as and for the purposes specified.

No. 58,943. Vending Machine.

(Appareil de vente actionné par une pièce de monnaie.)



Alex. H. Grant and William H. Getzelman, both of Chicago, Illinois, U.S.A., 8th February, 1898; 6 years. (Filed 18th October, 1897.)

Claim.—1st. In a coin-controlled vending machine, the combination of a casing having therein a coin storing compartment, and a package storing compartment having a discharge passage, a guide-way for the coins, leading in through the outer wall of the casing, and thence at an angle to the coin storing compartment, a movable member 13, having a head normally projecting part way across the entrance to said coin storing compartment, a plunger adapted to force a coin through said entrance, so as to press upon said head and move the member 13, and means normally blocking said discharge passage, and actuated by the movement of the member 13, to open said discharge passage while said member is out of its normal position, substantially as described. 2nd. In a coin-controlled vending machine, the combination of a casing having therein a package storing compartment with a discharge passage, a member 18, normally blocking said passage at its discharge end, and having a projection 18' thereon arranged to block said passage a distance back from its discharge end when said end is open, and coin-controlled means for actuating the member 18, substantially as described. 3rd. In a coin-controlled vending machine, the combination of a casing having therein a package storing compartment with a discharge passage, a receptacle 20, pivoted in an opening in the outer wall of said casing, normally closing said opening, and having the open part of said receptacle normally presented to said discharge passage, but facing out of the casing when the receptacle is turned outwardly from its normal position, a stop to limit the outward pivotal movement of said receptacle, and coin controlled mechanism normally blocking said discharge passage, substantially as described. 4th. In a coin controlled vending machine, the combination of a

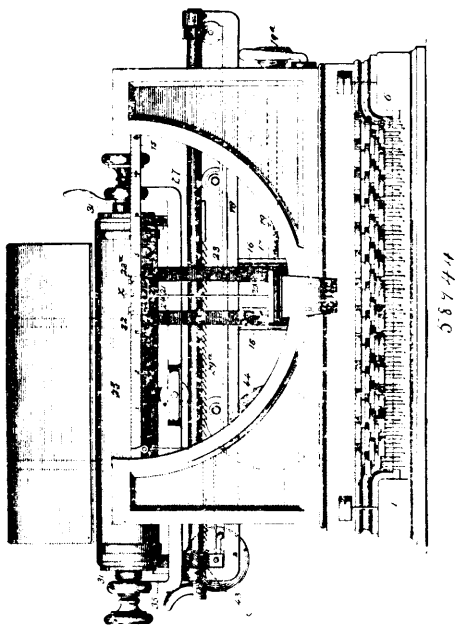
casing having therein a package storing compartment with a discharge passage, removable partitions adapted to be adjusted different distances apart in said compartment, to receive the length of the packages between the same, guides between said partitions adapted to carry the packages sidewise to said discharge passage, and coin-controlled mechanism, normally blocking said discharge passage, substantially as described. 5th. In a coin-controlled vending machine, the combination of a casing having therein a package storing compartment with a discharge passage, a member 18 normally blocking said passage at its discharge end, and having a projection 18' thereon arranged to block said passage a distance back from its discharge end when said end is open, coin-controlled means for actuating the member 18, and a receptacle 20 pivoted in an opening in the outer wall of the casing, near said discharge passage, normally closing said opening, and having the open part of said receptacle normally presented to said discharge passage, but facing out of the casing when the receptacle is turned outwardly from its normal position, and a stop to limit the outward movement of said receptacle, substantially as described. 6th. In a coin-controlled vending machine, the combination of a casing having therein a coin storing compartment, and a package storing compartment having a discharge passage, a guide-way for the coins, leading in through the outer wall of the casing, and thence at an angle, to the coin storing compartment, a movable member 13 having a head normally projecting part way across the entrance to said coin-storing compartment, a plunger adapted to force a coin through said entrance so as to press upon said head and move the member 13, a member 18 normally blocking said passage at its discharge end, and having a projection 18' thereon arranged to block said passage a distance back from its discharge end when said end is open, means between the member 13 and the member 18, whereby the member 13 is actuated to open said discharge end while the member 18 is out of its normal position, a receptacle 20 pivoted in an opening in the outer wall of the casing, near said discharge passage, normally closing said opening, and having the open part of said receptacle normally presented to said discharge passage, but facing out of the casing when the receptacle is turned outwardly from its normal position, and a stop to limit the outward movement of said receptacle, substantially as described. 7th. In a coin-controlled vending machine, the combination of a casing having therein a coin-storing compartment, and a package-storing compartment having a discharge passage, a guide-way for the coins, leading in through the outer wall of the casing, and thence, at an angle, to the coin-storing compartment, a movable member 13 having a head normally projecting part way across the entrance to said coin-storing compartment, a plunger adapted to force a coin through said entrance so as to press upon said head and move the member 13, a member 18 normally blocking said passage at its discharge end, and having a projection 18' thereon arranged to block said passage a distance back from its discharge end when said end is open, means between the member 13 and the member 18, whereby the member 13 is actuated to open said discharge end while the member 18 is out of its normal position, a receptacle 20 pivoted in an opening in the outer wall of the casing, near said discharge passage, normally closing said opening, and having the open part of said receptacle normally presented to said discharge passage, but facing out of the casing when the receptacle is turned outwardly from its normal position, a stop to limit the outward movement of said receptacle, removable partitions adapted to be adjusted different distances apart in said package-storing compartment, to receive the length of the packages between same, and the guides 33 and 23 between said partitions adapted to carry the packages sidewise to said discharge passage, with a space between the guides 22, to permit the operation therein of the projection 18', substantially as described. 8th. In a coin-controlled vending machine, the combination of a casing having therein a coin-storing compartment and a package-storing compartment having a discharge passage, a guide-way for the coins, leading in through the outer wall of the casing, and thence at an angle to the coin-storing compartment, a movable member 13 having a head normally projecting part way across the entrance to said coin-storing compartment, a plunger adapted to force a coin through said entrance, so as to press upon said head and move the member 13, and means normally blocking said discharge passage, and actuated by the movement of the member 13, to open said discharge passage while said member is out of its normal position, said guide-way having a slot in its bottom between the inner end of the plunger and said head, which slot is too small to receive a coin of a size for which the machine is intended, but adapted to pass smaller coins so as to prevent their operation on said head, substantially as described.

No. 58,944. Typewriting Machine. (Clavigraphie).

Ville de Beaumont and Charles H. Poerstel, both of Pittsburg, Pennsylvania, U.S.A., 8th February, 1898; 6 years. (Filed 4th October, 1897.)

Claim.—1st. In a typewriting machine, the combination with the universal fulcrum-bar and the type-bars connected therewith, said bars having each a crank or heel members of the key-levers, and the intermediate connections joining the type-bar and the key-levers, consisting of bell crank-levers and two sets of links, one set connecting one arm of the crank-levers with the key-levers, and the other set connected with the other arm of the crank-lever and the heel of the type-bar, substantially as shown and described. 2nd.

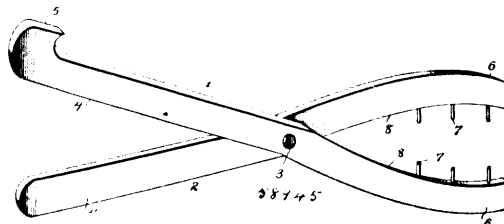
In a type-writing machine, the combination with a series of type-bars, a vertically disposed segmental fulcrum-bar for the type-bars,



forming a rest for such type-bars when at their normal or lowered position, a yielding stop to check the impact force of the type-bars, and the intermediate connections joining the type-bar and key-levers, all being arranged substantially as shown and described. 3rd. In a typewriting machine, the combination with the supporting frame, the segmental fulcrum, the type-bars held thereon, each having a crank-heel and the segmental rest-bar, of the curved guide-bar having projecting fingers, the bell crank bearing shaft, a series of bell cranks held thereon, having their long arms guided in the projecting fingers, links connecting such arms and the type-bar heels, the key-levers and the link-connections joining the levers and the short arm of the bell cranks, all being arranged substantially as shown and described. 4th. In a typewriting machine, the combination with the key-operated printing devices, arranged substantially as described, of a ribbon shifter, normally holding the ribbon at a point below the printing point, and having a universal member adapted to be engaged by any one of the key-levers, and elevated thereby during the operation of printing, whereby to bring the ribbon over the print point, as specified. 5th. In a typewriting machine, as described, a ribbon mechanism, consisting of a shaft, a pair of spools, one fixedly and the other loosely held thereon, a vertically movable shifter member having oppositely disposed guide-loops for the ribbon, a ribbon passed through the guide-loops and having its free ends secured to the fast and loose pulleys, and means for raising the shifter member operated by any one of the key-levers, all being arranged substantially as shown and described. 6th. In a typewriting machine, as described, the combination with the key-levers and the roller, of a ribbon-shifting and feed-mechanism consisting of a rotatable shaft, a pair of spools held thereon, one fixedly and the other loosely, said spools having ratchets, a vertically removable lift-member held centrally of the spools and having oppositely disposed guide-loops, a ribbon passed through such loops and having its ends connected to the spools, a double pawl secured to the lift-member adapted to engage the ratchets on the spools, said lift-member having universal bars adapted to be engaged by the key-levers, substantially as shown and described. 7th. In a typewriting machine, as described, the combination with the supporting bars 29, 29^a and the escapement or stop-dog mechanism, of the roller carriage fulcrumed at the forward end on the rod 29, its rear end having a movable support on the bar 29^a, a key-lever operated means for raising such rear end from the bar 29^a, whereby to disengage the escapement or rack member of the carriage from the lock-dogs, substantially as shown and for the purpose described. 8th. In a typewriting machine as described, the combination with the main frame and the carriage supporting rods 29-29^a, and the stop-dogs or detent mechanism, of the carriage having a roller bearing on the rod 29, and a forked seat bearing on the rod 29^a, said carriage having an extension 27^a, at each end, the rod 32 connecting such ends, the lift-rod 34 engaging such rod 32, and a key-lever for lifting the rod 34, substantially as shown and described. 9th. In a typewriting machine as described, the combination with the escapement or rack-bar of the carriage, of a pivotal lever and key-lever adapted to engage and rock such pivotal lever in one direction, means for moving the lever in an opposite direction, said lever having a fixed plate provided with a dog to engage the carriage rack bar, a supplemental dog having a limited longitudinal movement on the fixed dog and provided with a tooth

to engage the carriage rack-bar, and means for moving such plate to its normal position, substantially as shown and for the purposes described. 10th. In a typewriting machine as described, the combination with the carriage having annular ratchets at each end, lever arms 31, pivoted on the shaft of such carriage, one at each end thereof, said arm having pawls to engage the radial ratchets on the carriage and key-operated mechanism for swinging such arms simultaneously to rotate the carriage, substantially as shown and for the purposes described. 11th. In a typewriting machine as described, the combination with the carriage roll, said roll having an annular ratchet at each end, pivotal arms 31, having pawls engaging such ratchets, the rod 32 joining such arms 31, the rod 34 having a bearing engaging the rod 32, the key operated lever 34^a, the intermediate lever 34^b, all being arranged, substantially as shown and for the purposes described. 12th. In a typewriting machine as described, the combination of the main supporting frame, the vertically swinging type-bars, key operated mechanism therefor, a vertically movable ribbon shifter, key lever means for operating the same, the carriage provided with the escapement or ratchet bar, the detent or dog devices for engaging said ratchet bar, the said devices having connections adapted to be engaged by any one of the operating keys, substantially as shown and for the purposes described.

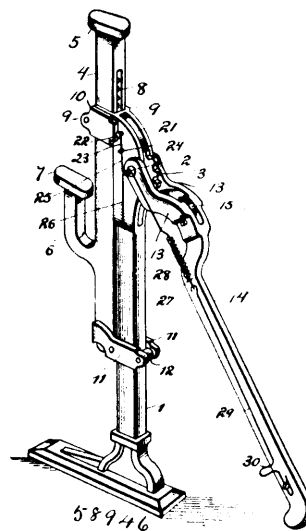
No. 58,945. Fish Grapple. (Grappin à poisson.)



Gustavus B. Snell and Robert J. Mathers, both of Eau Gallie, Florida, U.S.A., 8th February, 1898; 6 years. (Filed 26th November, 1897.)

Claim. The herein described fish grapple, embodying a pair of levers crossed and pivotally connected, said levers being extended on one side of their pivotal connection to form curved jaws having concave surfaces and inwardly projecting tines or barbs arranged at intervals along the adjacent surface of said jaws, and provided with loops on the other side of the pivot that serve as handles.

No. 58,946. Waggon Jack. (Chevre de wagon.)

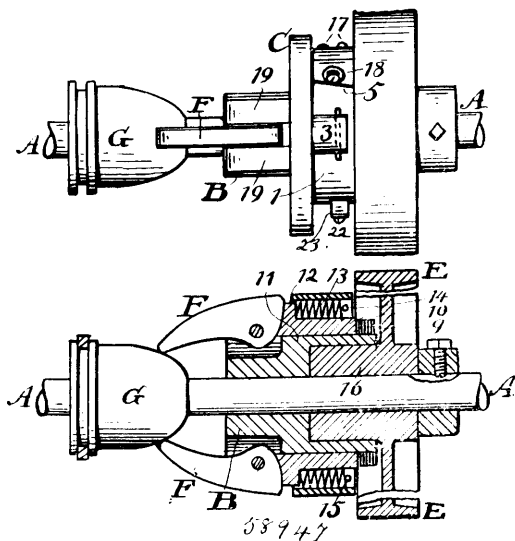


Isom Lafayette Thompson, Dayton, Illinois, U.S.A., and Samuel E. Parr, Ottawa, Ontario, Canada, 8th February, 1898; 6 years. (Filed 26th November, 1897.)

Claim. - 1st. In a device of the character set forth, the combination with an upright or standard, of a vertical reciprocable lifting bar acting in engagement therewith having teeth along one edge thereof, a cog wheel mounted in said upright adapted to engage the teeth on said lifting bar, an operating lever fulcrumed in said upright, a spring-actuated dog thereon which is normally held in

engagement with the teeth of said cog wheel, a dog for preventing the backward movement of said cog wheel, a release rod having a handle or finger piece formed thereon integral with the main portion of said rod, slidingly mounted along one side of said operating lever and attached directly to said pawl, and a second release lever having a handle or finger piece formed integral therewith, the said release lever being slidingly mounted upon the opposite side of said operating lever to that on which the other release lever is mounted and connected directly to the dog for preventing the backward movement of said cog wheel, substantially as and for the purpose described. 2nd. In a device of the character set forth, the combination with an upright or standard, of a vertical reciprocable lifting bar acting in engagement therewith having teeth along one edge thereof, a cog wheel mounted in said upright adapted to engage the teeth on said lifting bar, an operating lever fulcrumed in said upright, a spring-actuated flap thereon which is normally held in engagement with the teeth of said cog wheel, a dog for preventing the backward movement of said cog wheel, a release rod having a handle or finger piece formed thereon integral with the main portion of said rod slidingly mounted along one side of said operating lever and attached directly to said pawl, and a second release lever having a handle or finger piece formed integral therewith, the said release lever being slidingly mounted upon the opposite side of said operating lever to that on which the other release lever is mounted and connected directly to the dog for preventing the backward movement of said cog wheel, substantially as and for the purpose described.

No. 58,947. Clutch. (Embrayage.)

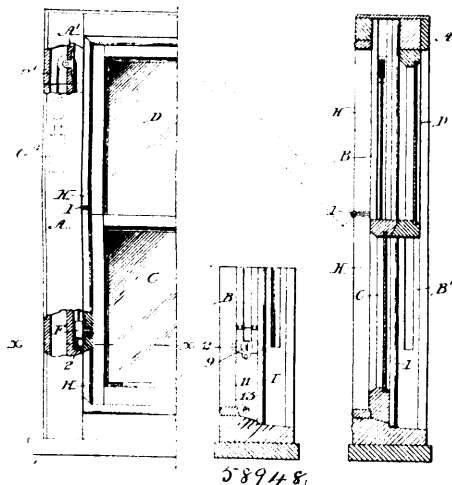


John A. Barnes, Wadsworth, and Jacob S. Coxe, Massillon, both in Ohio, U.S.A., 8th February, 1898; 6 years. (Filed 8th January, 1898.)

Claim.—1st. In a clutch, the combination with a disc, a curved flange projecting therefrom, and a lug at one end of said curved flange, of a clutch-ring having a lug disposed co-incident with the lug on the flange, adjusting screws passing through the lug on the curved flange and adapted to bear against the lug in the clutch-ring, a screw passing loosely through the lug on the clutch-ring and entering a screw-threaded socket in the lug on the curved flange, a bevelled lug projecting from said clutch-ring, and a wedge between the bevelled lug and the end of the said curved flange, substantially as set forth. 2nd. In a clutch, the combination with a disc and a curved flange projecting therefrom, of a clutch-ring having a lug to bear against one end of said curved flange, a bevelled lug projecting from the clutch-ring, a wedge between the bevelled lug and the end of the curved flange, a shank projecting from said wedge and passing through the disc, a lip or lug at the end of said shank, a pocket on the disc, a spring in said pocket bearing at one end against said lip or lug of the wedge shank, and a pin passing through the walls of said pocket, against which the other end of the spring bears, and means for moving said wedge forwardly, substantially as set forth. 3rd. In a clutch, the combination with a disc and a curved flange projecting therefrom, of a clutch-ring adapted at one end to engage said curved flange and having a bevelled lug at its other end, a wedge entering between said bevelled lug at the curved flange, a lip projecting from said wedge, a pocket on the disc, a spring in said pocket having a bearing at one end within the pocket and at the other end against said lip on the wedge, substantially as set forth. 4th. In a clutch, the combination with a disc and two curved flanges projecting from said disc, of a clutch-ring disposed within said curved flanges and made in two sections, a lug at one end of

each section of the clutch ring disposed coincident with one end of said curved flange, a bevelled lug at the other end of each section of the clutch-ring, wedges between said bevelled lugs and the ends of the curved flanges, and two levers pivotally connected with the disc and adapted to operate the respective wedges whereby to contract the clutch-ring and cause it to clutch a hub projecting within it, substantially as set forth.

No. 58,948. Window Structure. (Construction de fenêtre.)



The Philadelphia Safety Window Company, Camden, New Jersey, assignee of Theodore H. Schmitz, Philadelphia, Pennsylvania, both in the U.S.A., 8th February, 1898; 6 years. (Filed 3rd January, 1898.)

Claim.—1st. In a window structure, the combination with the main frame, the sash-hangers, the guides therefor, and the sashes journalled or pivoted to said hangers, of an adjustable parting-strip, an inside bead, a spring hinge therefor, and a lock arranged between the bead and the parting-strip and adapted to lock said bead in closed position, substantially as described. 2nd. In a window structure, the combination with the main frame, the sash-hangers, the guides therefor, and the sashes journalled or pivoted to said hangers, of an adjustable parting-strip, an inside bead, a spring hinge therefor, a laterally projecting keeper on said bead adapted to enter a recess in the window frame, a lock arranged between the bead and the parting strip and adapted to engage said keeper and thereby lock the bead in closed position, substantially as described. 3rd. In a window structure, the combination with the main frame, the sash-hangers, the guides therefor, and the sashes journalled or pivoted to said hangers, of the movable beads, the adjustable parting-strip, and a lock arranged between said strip and bead and adapted to lock them in positions of adjustment, substantially as described. 4th. In a window structure, the combination, with the main frame, the sash-hangers, the guides therefor, and the sashes journalled or pivoted to said hangers, of the movable bead, the adjustable parting-strip, and a lock arranged between said strip and bead and provided with oppositely movable bolts, and with means for simultaneously operating them so as to engage and lock the said strip and bead in positions of adjustment, substantially as described. 5th. The herein-described lock for windows, said lock comprising a casing and a plate encased thereby, two oppositely movable transverse bolts in said plate, lateral studs on said bolts, a partially rotatable head in said plate, and casing provided with diametrically opposite recesses engaged by said studs respectively, and means for turning said head, substantially as described. 6th. In a window structure, the combination of the main frame, provided with the weight-box and the slotted or open pulley stile, the grooved guide-strip having a hinged portion adjacent to the slot or opening in said stile, the sash-hanger, the sash journalled or pivoted thereon, the adjustable parting-strip, and the movable inside bead, substantially as described.

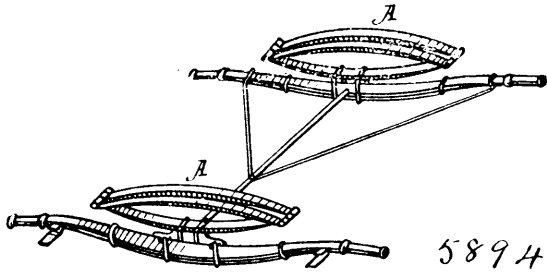
No. 58,949. Waggon Spring. (Resort de wagon.)

Phillip W. Brown, assignee of Laurer M. Fitch, both of Rome, New York, U.S.A., 8th February, 1898; 6 years. (Filed 3rd January, 1898.)

Claim.—1st. The combination with a three-part elliptical spring, having eyes at respective ends of interlocking bushings between the parts, and a bolt, substantially as set forth. 2nd. The combination with a three-part elliptical spring, having eyes at their

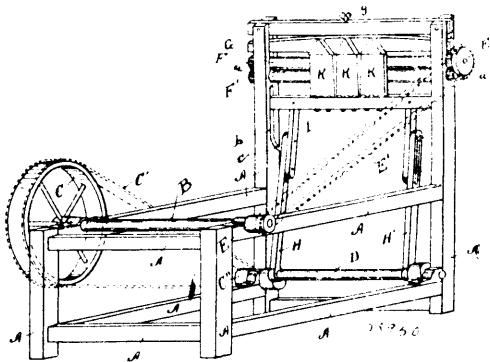
respective ends adapted to register with each other, of the interlocking bushings 2 and 3, 4 and 5, and a bolt, substantially as set

Claim. 1st. In a grain tank, the combination, substantially as set forth, of a foundation, a vertically disposed tank wall resting



forth. 3rd. The combination with an elliptical spring having two upwardly bowing parts, and an intermediate downwardly bowing part, each having eyes at their respective ends, of bushings received in the eyes and interlocking between the intermediate and outside spring parts, and a bolt, substantially as set forth.

No. 58,950. Machine for Stemming Tobacco.
(*Machine pour enlever les tiges des feuilles de tabac.*)

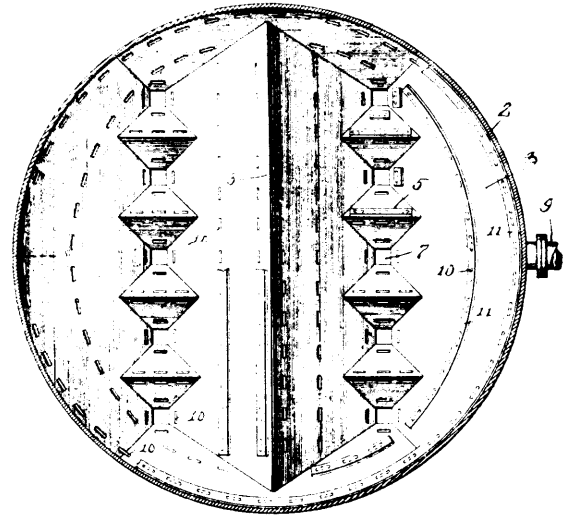


Dell Barker and Henry C. Harrison, both of Madison, Indiana, U.S.A., 8th February, 1898; 6 years. (Filed 3rd January, 1898.)

Claim. 1st. In a tobacco stemming machine, the combination with a pair of rolls and means for revolving them, of a pair of reciprocating, vertically arranged, parallel spaced knives, provided with gauges to prevent severing the stems, knife stocks having guards to prevent the tobacco leaf from being drawn through the rolls, and means for operating said knives, substantially as specified. 2nd. In combination with a pair of revolving rolls, a pair of reciprocating, vertically arranged, parallel spaced knives travelling in front of the rolls, guards attached to the knife stocks for preventing the leaves from being drawn through the rolls, and means for operating the knives, substantially as specified. 3rd. In combination with a pair of revolving rolls, a pair of reciprocating, vertically arranged, parallel spaced knife stocks, knife blades adjustably secured to the inner edges of said knife stocks, guards carried by the knife stocks to prevent the tobacco leaf from passing through the rolls, gauges for the knife blades, and means for operating the rolls and knives, substantially as specified. 4th. In a tobacco stemming machine employing a pair of revolving rolls adapted to grasp the stems of tobacco leaves, a pair of inclined knife stocks with vertically arranged, parallel spaced knife blades attached to their inner edges, and mechanism for reciprocating said knife stocks, substantially as specified. 5th. In a tobacco stemming machine employing a pair of revolving rolls, a pair of reciprocating, vertically arranged, parallel spaced knife stocks, and knife blades attached to the inner edges of said knife stocks and inclined so as to form a V-shaped space between the edges of the knives, substantially as specified. 6th. In a tobacco stemming machine, the combination of a pair of rollers, a pair of travelling cutters set with their faces adjacent to each other with a space between them sufficiently wide to allow the passage of a tobacco stem, means for operating said knives, and a gauge applied to the outside face of each knife, substantially as specified. 7th. In a tobacco stemming machine, the combination of a pair of rollers, a pair of reciprocating, vertically arranged, parallel spaced knife stocks having V-shaped guards at the top of the stocks, knives attached to the inner edges of said stocks, and means for reciprocating said knives, substantially as specified.

No. 58,951. Grain Tank. (*Coffre à grain.*)

The Steel Storage Elevator Construction Company, assignee of Edgar Dwight Johnson, both of Connersville, Indiana, U.S.A., 8th February, 1898; 6 years. (Filed 14th January, 1898.)



thereon and having an air-tight bottom, a hollow ridge diametrically disposed over the bottom of the tank, walls sloping angularly upward from near the base of said ridge into the air-tight conjunction with the peripheral wall of the tank, hollow ridges disposed transversely between said first mentioned ridge and said wall, gated openings at the base of the ridges and angular walls, air-tight communicating chambers formed below the ridges and angular walls and communicating with the interior of the tank through ports in said angular walls and in the walls of the ridges, and a compressed air inlet from the exterior of the tank to said chambers. 2nd. In a grain tank, the combination, substantially as set forth, of a foundation, a vertically disposed tank wall resting thereon, intersecting ridges at the base of the tank having sloping walls converging to gated outlet openings, air chambers below said sloping walls and communicating with the interior of the tank through ports in said sloping walls, hoods projecting outwardly over and above said ports, and a compressed air inlet from the exterior of the tank to said chambers. 3rd. In a grain tank, the combination, substantially as set forth, of a foundation, a vertically disposed tank wall resting thereon, intersecting ridges at the base of the tank having sloping walls converging to gated outlet openings, air chambers below said sloping walls and communicating with the interior of the tank through ports in said sloping walls, and a compressed air inlet from the exterior of the tank to said chambers. 4th. In a grain tank, the combination, substantially as set forth, of a foundation, a vertically disposed tank wall resting thereon, intersecting ridges at the base of the tank having sloping walls converging to gated outlet openings, air chambers below said sloping walls and communicating with the interior of the tank through ports in said sloping walls, strips secured to the upper surfaces of said sloping walls over and above said ports and each comprehending a series of said ports, and a compressed air inlet from the exterior of the tank to said chambers.

No. 58,952. Separator. (*Séparateur.*)

Robert W. Jessup and Fairfax H. Wheelan, both of San Francisco, California, U.S.A., 8th February, 1898; 6 years. (Filed 14th January, 1898.)

Claim. 1st. In a separator for grain and small seeds, the combination of a screen composed of parallel spaced needles having a fixed connection at one end and thence extending separate and independent to the other end, and free at said end, said needles being pliant and springy and adapted to vibrate under the contact of the material and its passage over them, an inclined directing-plate in front of screen to deliver the material to it, and an inclined stop-plate behind the screen to keep apart the separated materials. 2nd. In a separator for grain and small seeds, the combination of a series of screens, each screen being composed of parallel spaced needles of a pliant and springy character, plates to which said needles are fixed at one end, and thence extend separate and independent to the other end, and free at said end, whereby they are adapted to vibrate under the contact and flow of the material, said plates traversing the spaces between the adjacent ends of the screens and forming stops to keep the separated particles apart, and inclined directing-plates in front of the screens to direct the material to them. 3rd. In a separator for grain and small seeds, the combination of a screen composed of parallel, spaced needles having a fixed connection at one end, and thence extending, separate, and independent, to the other end, and free at said end, said needles being pliant and springy, and adapted to vibrate under contact of the material and its passage over them, a second screen independent of but of

similar or like construction to the first, and arranged in front of and adapted to deliver the material to said first screen, and a stop

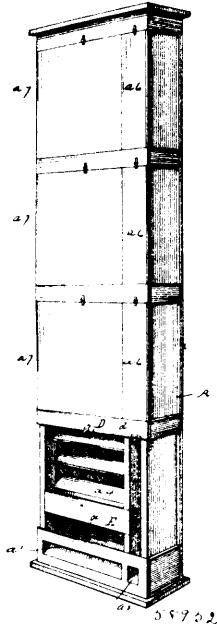
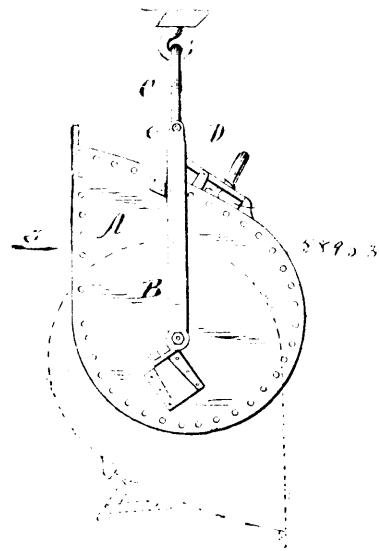


plate behind said screens to keep apart the separated material. 4th. In a separator for grain and small seeds, the combination of a series of screens, each screen being composed of parallel spaced needles of a pliant and springy character, and adapted to vibrate under the contact of the material and its passage over them, a second series of screens independent of but of similar or like construction to the first screens, said second series being arranged in front of and relatively to the first series in such manner that a screen of the first series will direct the material to a screen of the second series, and the latter will in turn direct the material back to a screen of the first series, and a series of stop plates behind said screens to keep apart the separated material. 5th. In a separator for grain and small seeds, the combination of independent, opposing series of screens, each screen being composed of parallel spaced needles of a pliant and springy character, said opposing series being relatively arranged in such manner as to direct the material from a screen of one series to a screen of the other and back again, and plates to which the needles of each screen are fixed at one end, and thence extend separate and independent to the other end, whereby said needles are adapted to vibrate under the contact and flow of the material, said plates traversing the spaces between the adjacent ends of the screens of each series, and forming stops to keep the separated particles apart. 6th. In a separator for grains and small seeds, the combination of the box or casing, having the continuous side passage, the opposing series of screens formed with the pliant and springy, free-ended needles, as described, the stop plates to keep the separated materials apart, said screens and plates being mounted in the box or casing, to leave a channel on each side, and means by which said channels communicate with the side passage of the box or casing. 7th. In a separator for grains and small seeds, the combination of the box or casing, having the continuous side passage, the opposing series of screens formed with the pliant and springy free-ended needles, as described, the stop plates to keep the separated material apart, said screens and plates being mounted in the box or casing, to leave a channel on each side, and the removable chute-boxes by which said channels communicate with the side passage of the box or casing. 8th. In a separator for grains or small seeds, the combination of a screen, composed of a series of parallel spaced needles of a springy and pliant character, said needles being fixed at one end in a common head, and thence extending, free and independent, to the other end, means in front of the screen for directing the material to said screen, a stop plate behind the screen for keeping the separated materials apart, and a hinge connection for said screen whereby it may be swung inwardly, to permit access to the parts in front of it. 9th. In a separator for grains and small seeds, the combination of a series of screens, composed of parallel spaced needles of a springy and pliant character, said needles being fixed, at one end in a common head, and thence extending, free and independent, to the other end, means in front of the screens for directing the material to them, stop plates connected with the screen heads and traversing the spaces between adjacent screens and adapted to keep apart the separated materials, and a hinge connection for the screen heads, whereby the screens may be swung inwardly, to permit access to the parts in front of it. 10th. In a separator for grains and small seeds, the combination of a series of screens, composed of parallel spaced needles of a springy and pliant

character, said needles being fixed at one end, in a common head, and thence extending, free and independent, to the other end, means in front of the screens for directing the material to them, stop plates connected with the screen heads and traversing the spaces between adjacent screens and adapted to keep apart the separated materials, a hinge connection for the screen heads, whereby the screens may be swung inwardly, to permit access to the parts in front of it, and fixed stops against which the stop plates come in contact, to limit the swinging of the screens, and hold them at the proper angle. 11th. In a separator for grains and small seeds, the combination of the double or opposing series of screens, each composed of the pliant and springy needles, as described, said screens being relatively arranged to direct the material back and forth between them, the stop plates of each series, and a hinge connection for each screen, adapting it to be pushed inwardly, to permit access to the opposing screen. 12th. In a separator for grains and small seeds, the combination of the double or opposing series of screens, each composed of the pliant and springy needles, as described, said screens being relatively arranged, to direct the material back and forth between them, the stop plates of each series, a hinge connection for each screen, adapting it to be pushed inwardly, to permit access to the opposing screen, and fixed stops for the stop plates, to hold the screens in proper position. 13th. In a separator for grains and small seeds, a screen composed of parallel spaced needles of a pliant and spongy character, said needles being fixed at one end to a common head, and thence extending, free and independent, to the other end, the end needles of said screen, next to the walls or casing of the separator, being stiffened, and not adapted to vibrate under the contact and flow of the material. 14th. In a separator for grain and small seeds, the combination of a series of alternately disposed opposing inclined screens, relatively arranged to deliver the grain against the screen surfaces alternately, inclined stop plates fixed to the upper end of each screen and extending at an angle therefrom to the foot of the screen above, and means for removably mounting each combined screen and plate, independent of the others, to form continuous screen and separating surfaces.

No. 58,953. Excavating Scoop. (*Appareil à creuser.*)

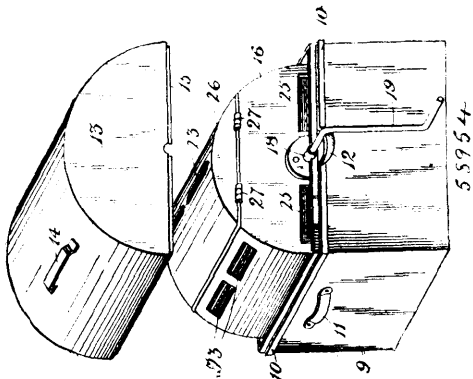


The Calhoun Excavator Company, assignee of Daniel L. Calhoun, both of Chicago, Illinois, U.S.A., 8th February, 1898; 6 years. (Filed 12th January, 1898.)

Claim. 1st. The combination with the scoop and the bars pivoted to its side pieces and provided with suitable means for draft, of a vertically swinging lever pivoted to the side piece of the scoop and adapted to abut against the corresponding pivoted bar or an attachment thereof and a cranked lever supported by the side pieces of the scraper and provided with a foot impinging upon said vertically swinging lever, the movement of the crank lever in one direction being adapted to swing said vertically moving lever out of engagement with said pivoted bar, substantially as and for the purpose set forth. 2nd. The combination with the scoop, of the bars B B, pivoted to the side pieces thereof and provided with means for draft, the levers D D, adapted to abut against said bars and the cranked lever E, provided with foot, E L, impinging upon the levers, D D, and adapted in a certain movement of the crank lever to disengage the levers D D from the bars B B, and permit inversion of the scoop. 3rd. The combination with the scoop, of the bars B B, the locking levers, D D, adapted to abut against said bars, the cranked lever E, provided with foot, E L, impinging upon the levers, D D, and springs S S, adapted to hold the locking levers D D, and cranked levers E E, in their normal position. 4th. The combination with the scoop and the bars pivoted to its side pieces and provided with

suitable means for draft, of a vertically swinging lever adapted to abut against the corresponding pivoted bar or an attachment thereof, and a pivoted lever impinging upon said vertically swinging lever, the movement of the pivoted lever in one direction being adapted to swing said vertically moving lever out of engagement with said pivoted bar, substantially as and for the purpose set forth.

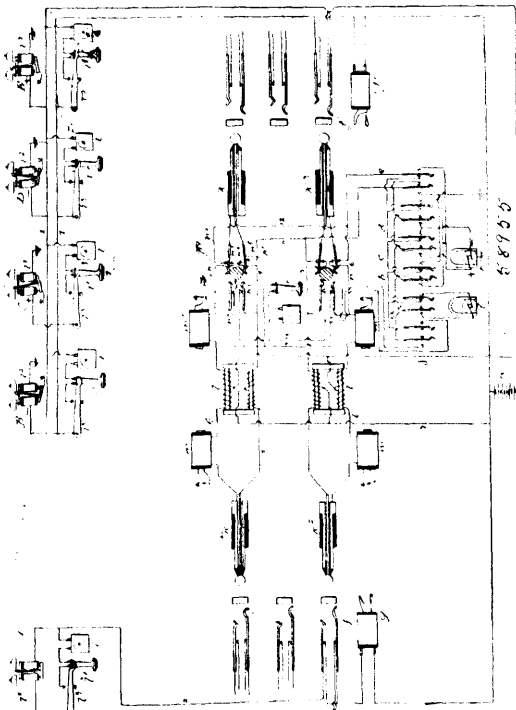
No. 58,954. Washing Machine. (Machine à laver.)



Alexander Chapman and Benoit Rouleau, both of Ottawa, Ontario, Canada, 8th February, 1898; 6 years. (Filed 11th January, 1898.)

Claim.—In a washing machine, consisting of a rectangular boiler having a semi-cylindrical rim, as described, a cylinder journaled therein, having three or more V-shaped perforated projections formed on the interior of the said cylinder, equi-distant from each other and parallel with the axis of the said cylinder, groups of four or more similar but smaller V-shaped perforated projections, and similarly disposed radial V-shaped perforated projections formed on the ends of the said cylinder, slots formed in the cylinder communicating with the chambers formed by said V-shaped projections, a lid forming part of the cylinder, trunnions riveted to the ends, one of which is formed with a cranked handle, all substantially as described and set forth.

No. 58,955. Calling Appliance for Telephone Switchboards. (Signal d'appel pour commutateurs de téléphone.)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Frank Robert McBerty, Downer's Grove, Illinois, U.S.A., 9th February, 1898; 6 years. (Filed 5th November, 1896.)

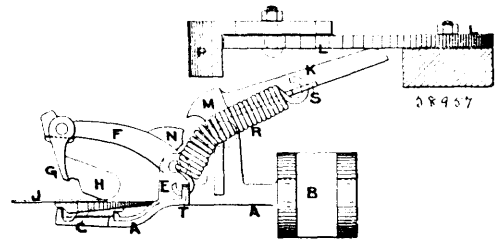
Claim.—1st. The combination with telephone-lines, each provided with signalling appliances, adapted for selective operation, several pairs of plugs for uniting lines, their associated plug-circuits, the operator's telephone, of conductors and a group of keys each determining the transmission in the said conductors of a current adapted to operate a particular signal, and a key in each plug-circuit adapted to take either of two positions, said key being adapted when in one position to break the plug-circuit and to connect the telephone with one plug of the pair and the said conductors with the other plug of the pair, and in its other position to complete the plug-circuit, substantially as described. 2nd. The combination with telephone-lines and a return-circuit therefor, each having oppositely-polarized signal-bells in branches between each line conductor and the return-circuit, of several pairs of connecting-plugs for uniting different telephone-lines, a key in each plug-circuit adapted to assume two positions, in one of which positions it severs the plug-circuit and connects the operator's telephone with one of the plugs and a pair of signalling conductors with the other plug, and a group of keys connected with said signalling-conductors, one adapted to send current of each polarity on each line conductor to operate a corresponding bell, substantially as described.

No. 58,956. Lubricant. (Lubrifiant.)

James William Haley and Isaac Edward Hobart, both of Milford, Maine, U.S.A., 9th February, 1898; 6 years. (Filed 19th July, 1897.)

Claim.—A compound of glass, lead, plumbago and antimony tempered as may be required with brass and aluminum substantially in the proportions and for the purposes set forth.

No. 58,957. Clip for Tentering, Stretching and Drying Machinery. (Agrafe de machine pour étendre et sécher.)



Joseph Horton and William Horton, both of West Vale, York, and Charles Heap and William Tweedale Heap, Calder Shaw, Rochdale, Lancaster, all in England, 9th February, 1898; 6 years. (Filed 28th August, 1897.)

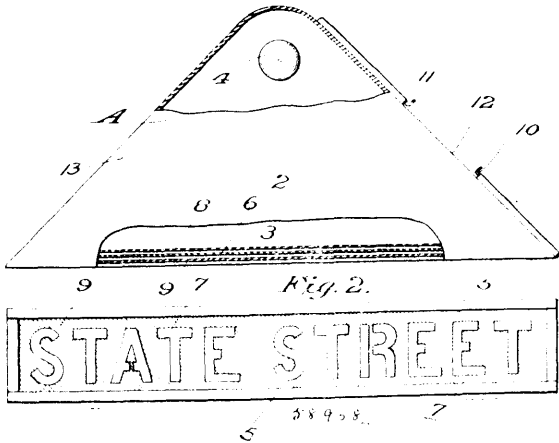
Claim.—1st. Clips for the chains of tentering, stretching and drying machinery constructed with fuller or grip jaw G mounted upon pivoted arm F, plate C having slots D, gauge H, operated, locked and unlocked automatically, in the manner and for the purposes substantially as shown and described. 2nd. Clips for the chains of tentering, stretching and drying machinery with grip jaw G, gauge H, plate C, pivoted arms F, having heel N and pivoted spring locking arm K with heel M, for automatically locking and unlocking the clip in the manner and for the purposes substantially as shown and described. 3rd. In clips for the chains of tentering, stretching and drying machinery, the combination with a grip jaw G, upon pivoted arms F, gauge H and spring locking arm K, of semicircular plate L and plate P, or their equivalents, for automatically opening, closing, locking, and unlocking the said clip, in the manner and for the purposes substantially as shown and described.

No. 58,958. Illuminating Sign. (Enseigne illuminée.)

Benjamin McKenzie and Jehiel W. Jagger, assignees of John Haley Colwell, all of St. Paul, Minnesota, U.S.A., 9th February, 1898; 6 years. (Filed 21st October, 1897.)

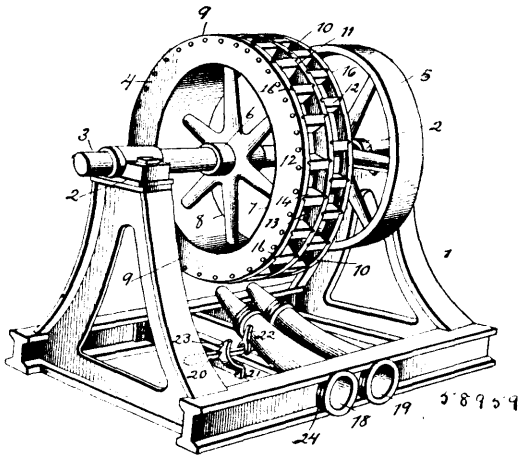
Claim.—1st. In a device of the class described, the combination of the triangular case, the diverging walls having a deflecting surface, the lamp arranged in one apex, the opaque perforate slide in the opposite side and the interposed translucent slide. 2nd. In combination with the triangular case having inner reflecting walls, the lamp arranged in one apex, the opening in the wall adjacent thereto, through which the lamp may be inserted and removed, and

the door for closing said opening, the opaque slide arranged in the front of the case, the translucent slide in the rear thereof, the open-



in the wall of the case adjacent said slides, and the door for closing said opening.

No. 58,959. Water Wheel. (Roue d'eau.)



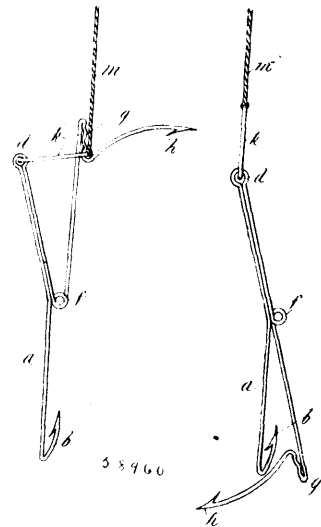
William H. W. Hamilton and Amos M. Dykes, both of White Hill Arizona, U.S.A., 9th February, 1898; 6 years. (Filed 25th October, 1897.)

Claim.—1st. In a device of the character described, the combination with a water wheel provided with two series of alternately arranged peripheral buckets, and a pair of discharge nozzles designed to direct columns of water into said series of buckets, substantially as specified. 2nd. In a device of the character described, the combination with a water wheel provided with two peripheral series of alternately arranged buckets, and a pair of adjustable discharge nozzles designed to direct columns of water into said buckets, substantially as specified. 3rd. In a water wheel, the combination with a plurality of periphery flanges provided with radial grooves upon their contiguous faces, of buckets provided with oppositely disposed retaining flanges designed to be inserted in said grooves, substantially as specified. 4th. In a device of the character described, the combination with a pair of parallel flanges provided with radial grooves in their contiguous faces, of buckets provided with oppositely disposed retaining flanges designed to be inserted in said grooves, and bolts passing through the flanges and buckets and designed to secure the latter, substantially as specified. 5th. In a device of the character described, the combination with a suitable support, of a nozzle swivelled therein, and means for adjusting said nozzle, substantially as specified. 6th. The combination with a suitable support and swivelled nozzle, of a nozzle adjusting lever, and means for securing said lever in its adjusted position, substantially as specified. 7th. The combination with a suitable frame, of a swivel bearing therein, a nozzle carried by said bearing, a pivoted nozzle adjusting lever, provided with a yoke designed to receive the nozzle, and a segmental toothed rack designed to secure the lever in its adjusted position, substantially as specified.

No. 58,960. Fish Hook. (Hameçon.)

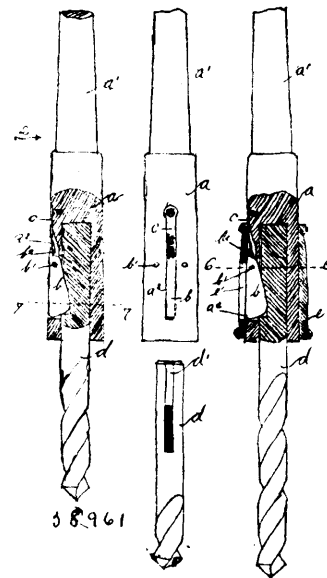
Charles August Bracklo and Enrico D'Ambrosio, both of New York State of New York, U.S.A., 9th February, 1898, 6 years. (Filed 22nd November, 1897.)

Claim. 1st. In a fish hook, the combination of a main shank provided with a barb, a spring actuated auxilliary barb provided with



a latch, and a link connecting said main shank with the latch on said auxilliary barb, substantially as shown and described. 2nd. In a fish hook, the combination of a main shank provided with a barb, an auxilliary spring actuated barb, and a link connecting a loop in said main shank with a latch on said auxilliary barb, said latch being provided with a ratchet whereby the tension on said spring may be regulated, substantially as shown and described.

No. 58,961. Tool Chuck. (Mandrin pour outils.)

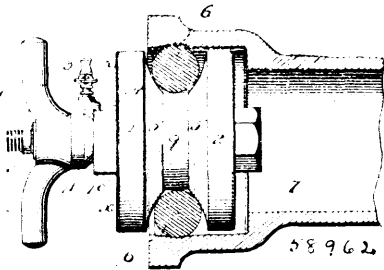


James A. Craig, assignee of Irving Barker, both of Springfield, Illinois, U.S.A., 9th February, 1898; 6 years. (Filed 20th December, 1897.)

Claim. 1st. The combination of a chuck having a socket for the reception of a tool, a slot formed in said chuck, a key or spline pivoted in said chuck, and a rotatable sleeve surrounding said chuck which is provided with a slot adapted to register with the slot in the chuck, jointly with a tool having a longitudinal keyway or slot with which the key is adapted to be engaged, substantially as described. 2nd. The combination of a tool having a keyway formed in the shank thereof, jointly with a tool-chuck provided with a socket for the reception of the shank of the tool, said chuck having a slot a^2 communicating with the socket, a key or spline provided within said slot, a rotatable sleeve surrounding said chuck and provided with a slot adapted to register with the key, and a spring e engaging said key and tending to thrust the same within the socket and j to engagement with the keyway upon the shank of the tool, sub-

stantially as described. 3rd. The combination of a chuck having a socket for the reception of a tool, a slot being formed in said chuck, a key provided in said slot, and a sleeve surrounding said chuck, the bore of the sleeve being substantially smooth and tapering from the mouth of the socket, the portion of the chuck surrounded by the sleeve being correspondingly tapered, jointly with a tool having a keyway or slot with which the key is adapted to engage, substantially as described.

No. 58,962. Testing Plug. (Chaville pour éprouver.)



Michael J. Drummond, assignee of John Phillips Mern, both of New York, State of New York, U.S.A., 9th February, 1898; 6 years. (Filed 3rd January, 1897.)

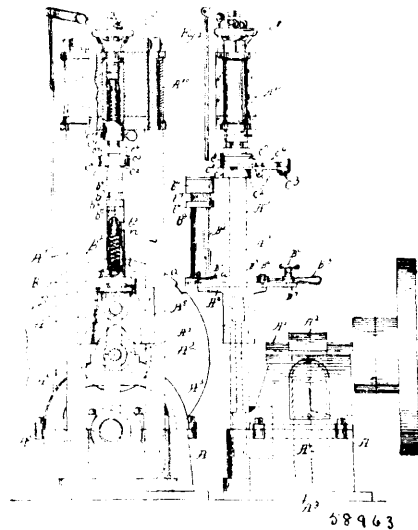
Claim. 1st. In a testing plug, the combination of relatively movable parts, the inner part having a passage extending inward towards the centre from its outer edge, thence deflected outwardly towards the other part, a vent pipe passing loosely through the outer part and across the space between the two parts and communicating with the inner end of the said passage, and having a cut-off valve, a compressible packing placed between the parts, and a short pipe centrally disposed and provided with means for drawing the parts together to expand the said packing and serving as a means for charging the part to be tested, substantially as described. 2nd. In a testing plug, the combination of relatively movable parts having an outwardly-flaring seat formed between them, a compressible packing fitted in the said seat, a short pipe provided with means for drawing the movable parts together and serving as a means for charging the part to be tested, and a vent pipe operating loosely through an opening in the outer part, extending across the space between the two parts, and communicating at its inner end with a passage formed in the inner part, and which passage extends through the edge portion of the part in which it is formed, substantially as and for the purpose set forth. 3rd. In a testing plug, comprising relatively movable parts having a seat or channel formed between them, a groove provided in the inner face of one of the said parts, a flange formed on the inner face of the other part and movable within the said groove, a compressible packing fitted in the said seat, and means for drawing the parts of the plug together, substantially in the manner and for the purpose set forth. 4th. In a testing plug, composed of relatively movable parts having the outer portions of their inner or opposing faces oppositely flaring, forming a seat, a groove in the inner face of one part, a flange projecting from the inner face of the other part and operating in the said groove, and providing an inner wall to the said seat, a compressible packing located in the aforesaid seat, a pipe rigidly connected with the inner part of the plug and passing loosely through the other part, a nut mounted upon the said pipe for drawing the parts together, a passage extending inward from the edge of the inner part, and a valve-controlled pipe passing loosely through the other part and forming a continuation of the said passage, substantially as set forth.

No. 58,963. Machine for Attaching Heels to Boots and Shoes. (Appareil pour assujettir les talons aux chaussures.)

Walter M. Tomlinson, Sherbrooke, Quebec, Canada, assignee of Harry Boardman, Boston Mass., U.S.A., 9th February, 1898; 6 years. (Filed 26th January, 1898.)

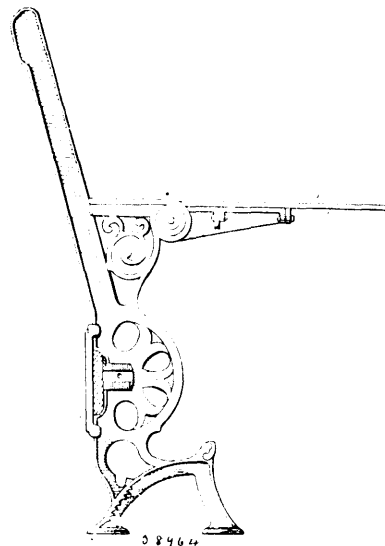
Claim. 1st. In a machine for attaching heels to boots and shoes, the combination with the post, fastening-carrier, and usual connections of a driver-plate between the post and fastening carrier, and means to instantly throw said plate and post into or out of rigid engagement, said means comprising a latch and a projection carried respectively by said parts and arranged to interlock, substantially as described. 2nd. In a machine for attaching heels to boots and shoes, a post, a spring therein, a screw to support and adjust said spring, and a fastening carrier having an attached rod inserted in said post and supported by said spring, combined with a driver plate, a series of drivers carried thereby and entering said fastening-carrier, and a catch to connect said post and driver plate, substantially as described. 3rd. In a machine for attaching heels to boots and shoes, a hollow post threaded internally, a screw inserted in said hollow post, a spring supported by said screw, a block resting on said spring, and a rod sustained by said block and having attached to it a fastening-carrier, combined with a driver plate surrounding

said rod at the top of said post, and containing a series of drivers, said driver-plate and rod being removable secured together by



means of a recess formed in one, a projection on the other to enter said recess, and a catch to engage, and hold said projection in said recess, substantially as described. 4th. In a machine for attaching heels to boots and shoes, the head *c'*, its attached plate having an arm, and a pair of heel-holding jaws pivoted on said arm, combined with a spring to close said jaws, and a toggle-joint having a pin to co-operate with said arms to insure equal movement of said arms in opening and closing, substantially as described. 5th. In a machine for uniting heels to boots and shoes, a post, a spring therein, a fastening-carrier having an attached rod entering said post and sustained by said spring, a driver-plate resting with its flat side on the top of said post, a catch to confine said driver-plate to said post, a series of drivers, and a head *c'*, combined with a heel-holder composed of two pivoted arms, a connected spring, and devices connected to said arms to insure equal movement of said jaws in closing and opening, to adapt themselves to heels of different sizes, substantially as described.

No. 58,964. Chair. (Chaise.)



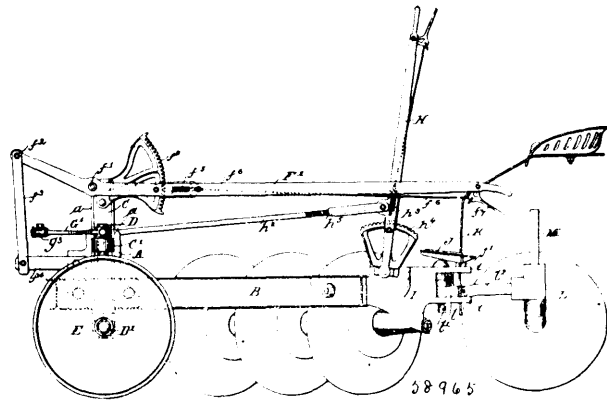
The Grand Rapids School Furniture Company, assignee of Allen Dawson Linn, Robert Winfred Irvin and Alton Amos Lytle, all of Grand Rapids, Michigan, U.S.A., 9th February, 1898; 6 years. (Filed 25th January, 1898.)

Claim. 1st. In combination, a standard having a front flange and an extending web, seat-backs fitted to the angle formed at the juncture of said flange and web and locking lugs engaging a slot in

the standard and overlapping each other, substantially as described. 2nd. In combination with a standard having a recess in its rear and adapted to receive the foot-board, a holding device for closing the open side of said recess, and a wedge piece located between the foot-board and the standard, substantially as described. 3rd. In combination with the standard having a recess in its rear adapted to receive the foot-board, flanges upon said standard above and below the recess, said flanges having reduced portions, and a holding bar for closing the open side of the recess having flanges adapted to grip the edges of the flanges upon the standard, substantially as described. 4th. In combination, a seat arm having a flat face, a tablet arm pivoted thereto having an annular flange with its edges resting against said flat face, a pawl pivoted to said flat face to one side of and below the pivot of the tablet arm, a projection extending inwardly from said flange adapted to be engaged by the end of said pawl to support said tablet arm in a horizontal position, a second projection on the flange for releasing the pawl, and a lug on the tablet arm adapted to return the pawl to normal position, substantially as described.

No. 58,965. Rotary Disc Plough.

(Charrue à disque rotatoire.)

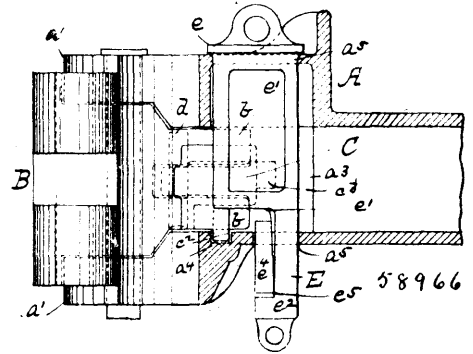


Walter Chamberlain Peacock, assignee of James Barncotte Gard, both of Melbourne, Victoria, Australia, 9th February, 1898: 6 years. (Filed 25th January, 1898.)

Claim.—1st. The herein described contrivances for steering rotary disc ploughs and adjusting the depth of their cut consisting of the various parts constructed, arranged and operating substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawings. 2nd. In a rotary disc plough, a land wheel such as E, pivotally mounted, that is so that it can be steered, upon a block such as C, arranged to slide vertically in guides in a bracket such as A, secured to the main frame, in combination with a hand lever such as F, pivotally connected to said vertically sliding block, and provided with a catch or pawl engaging with the teeth of a fixed quadrant, the whole being constructed and arranged substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings. 3rd. In a rotary disc plough, a front furrow-wheel pivotally mounted, that is so that it can be steered, upon a block such as C, arranged to slide vertically in guides in a bracket such as A, secured to the main frame, in combination with a hand lever such as F, pivotally connected to said vertically sliding block, and provided with a catch or pawl engaging with the teeth of a fixed quadrant, the whole being constructed and arranged substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings. 4th. In a rotary disc plough, a land-wheel and a front furrow-wheel, each pivotally mounted, so that both wheels can be steered simultaneously, upon a block adjustable vertically in guides in a bracket secured to the main frame, and having projecting arms, such as G, G', upon the vertical portions of the bent spindles of said land and front furrow-wheels connected together by a rod, such as H, in combination with a steering lever, such as H, fulcrumed upon the main frame or other rigid support, and fitted with a catch engaging the teeth of a quadrant rack, substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings. 5th. In a rotary disc plough, a land-wheel pivotally mounted, that is so that it can be steered, upon a block, such as C, arranged to slide vertically in guides in a bracket, such as A, secured to the main frame and connected to a hand lever, such as F, which is fulcrumed upon a link projecting upwardly from said main frame or other rigid support, and is provided with a hand-operated retaining catch or pawl engaging with teeth of a fixed quadrant, in combination with a steering lever, such as H, fulcrumed upon the main frame or other rigid support, fitted with a catch or pawl engaging the teeth of a quadrant rack and connected by a rod, such as H², to an arm projecting from the spindle of said land-wheel, substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings. 6th. In a rotary disc

plough, a front furrow-wheel pivotally mounted, that is so that it can be steered, upon a block such as C, arranged to slide vertically in guides in a bracket, such as A, secured to the main frame and connected to a hand lever, such as F, which is fulcrumed upon a link projecting upwardly from said main frame or other rigid support, and is provided with a hand-operated retaining catch or pawl engaging with teeth of a fixed quadrant, in combination with a steering lever, such as H, fulcrumed upon the main frame or other rigid support, fitted with a catch or pawl engaging the teeth of a quadrant rack and connected by a rod, such as H², to an arm projecting from the spindle of said front furrow-wheel, substantially as and for the purposes herein described and explained. 7th. In a rotary disc plough, the bifurcated ended seat-support in combination with the bent spindle of the back furrow-wheel, said bifurcated end fitting over said spindle behind an eye in the forward end thereof, substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings. 8th. In a rotary disc plough, an extensible tie-bar, such as G, connecting steering arms on the spindles of the pivotally mounted land and front furrow-wheels respectively, substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings. 9th. In a rotary disc plough, an extensible tie-bar, such as G, connecting steering arms on the spindles of pivotally mounted land and front furrow-wheels respectively, such tie-bar having a universal joint, such as G², at each end, substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings. 10th. In a rotary disc plough, the combination, with a rotary disc, of a rake, such as O, mounted so that it will act upon the soil turned over by said disc, substantially as and for the purposes herein described and explained, and as illustrated in the accompanying drawings.

No. 58,966. Car Coupling. (Attelage de chars.)

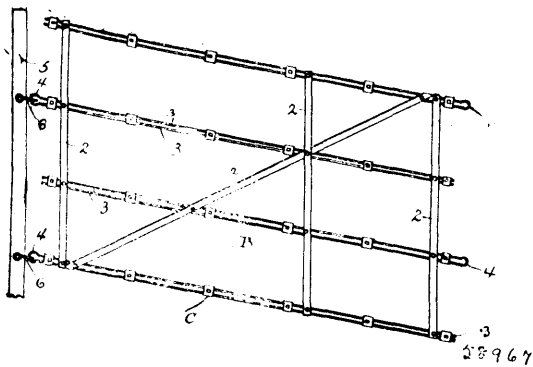


Frank A. Fox, New York, State of New York, assignee of Masen Bassett Giberson, Muncie, Indiana, both in the U.S.A., 9th February, 1898: 6 years. (Filed 24th January, 1898.)

Claim. 1st. A car coupling device, comprising a coupler-head carrying an angular knuckle, a locking block pivotally connected with the tail of the knuckle and adapted to bear against a lifting pin when the mechanism is in normal coupling position, and a lifting pin carrying devices for engaging said locking block when the pin is elevated and drawing said block inwardly, whereby the knuckle is simultaneously unlocked and opened, substantially as set forth. 2nd. A car coupling device, comprising a coupler-head carrying an angular knuckle, a locking block pivotally connected with the tail of the knuckle and adapted to bear against a lifting pin when the mechanism is in normal coupling position, said locking block being provided with a lug or projection, and a lifting pin having an inclined shoulder or way adapted to engage said lug when the pin is elevated, whereby the locking block is drawn inwardly and the knuckle is simultaneously unlocked and opened, substantially as set forth. 3rd. A car coupling device, comprising a coupler-head carrying an angular knuckle, a locking block pivotally connected with the tail of the knuckle and adapted to bear against a lifting pin when the mechanism is in normal coupling position, said locking block being provided with shoulders adapted to bear against the inner face or edge of the tail of the knuckle when in such normal position to relieve the pivotal connection of the locking block with the knuckle from strain, and a lifting pin adapted to engage said locking block when the pin is elevated to draw the block inwardly, substantially as and for the purpose set forth. 4th. A car coupling device, comprising a coupler-head carrying an angular knuckle, a locking block pivotally connected with the tail of the knuckle and having a guide pin or projection received by a groove or recess in the coupler head, and means for drawing said block inwardly to cause the simultaneous unlocking and opening of the knuckle, substantially as set forth. 5th. A car coupling device, comprising a coupler-head carrying an angular knuckle, a locking block pivotally connected with the tail of the knuckle and projecting inwardly with relation to a lifting pin, and a vertically mounted lifting pin having an enlarged upper portion adapted to project with relation to the locking block when the mechanism is in normal coupling position, and a

reduced or smaller lower portion adapted to permit the release of said block when the pin is elevated, substantially as set forth. 6th. A car coupling device, comprising a coupler-head carrying an angular knuckle, a locking block pivotally connected with the tail of the knuckle and projecting inwardly with relation to a lifting pin, and a vertically mounted lifting pin having an upper portion adapted to project into engagement with the locking block when the mechanism is in normal coupling position and a lower portion adapted to be passed by said block when the latter is drawn inwardly, said pin carrying devices for engaging said locking block as the pin is elevated to draw the block inwardly and cause the simultaneous unlocking and opening of the knuckle, substantially as and for the purpose set forth. 7th. A car coupling device, comprising a coupler-head carrying an angular knuckle, a locking block pivotally connected with the tail of the knuckle and adapted to bear against a lifting pin when the mechanism is in normal coupling position, said locking block being provided with a lug or projection, and a lifting pin having an upper portion adapted to project into engagement with the locking block when in such normal position and a lower portion adapted to be passed by the block when the latter is drawn inwardly, said pin being provided with an inclined shoulder or way adapted to engage said lug when the pin is elevated, whereby the locking block is drawn inwardly and the knuckle is simultaneously unlocked and opened, substantially as set forth. 8th. In an improved car coupling device comprising a coupler-head carrying an angular knuckle, a horizontally-arranged locking block pivotally connected with the tail of the knuckle and extending therefrom in a relatively transverse plane, and vertically-operating devices for locking said block and for drawing the same in its transverse plane of movement to swing the knuckle open, substantially as and for the purpose set forth. 9th. A car coupling device, comprising a coupler-head carrying an angular knuckle, devices for locking and unlocking said knuckle, and a locking block intermediately arranged in a horizontal and relatively transverse plane between the tail of the knuckle and said locking and unlocking devices and pivotally connected with the tail of the knuckle, said locking block being adapted to move transversely by operation of the locking and unlocking devices, substantially as and for the purpose set forth. 10th. In a car coupling device, comprising a coupler-head carrying an angular knuckle, the combination with said knuckle of a locking block pivotally connected with the tail of the knuckle and extending therefrom in a horizontal and relatively transverse plane, and means for operating said block to swing the knuckle open, substantially as and for the purpose set forth. 11th. In a car coupling device, comprising a coupler-head carrying an angular knuckle to the tail of which is pivotally connected a locking block having a projection or lug, a vertically-operating lifting pin having an inclined shoulder or way for engaging said lug, said shoulder or way terminating at its bottom in a seat or stop-shoulder for engagement with the lug to limit the vertical movement of the pin, substantially as and for the purpose set forth.

No. 58,967. Harrow. (Herse.)



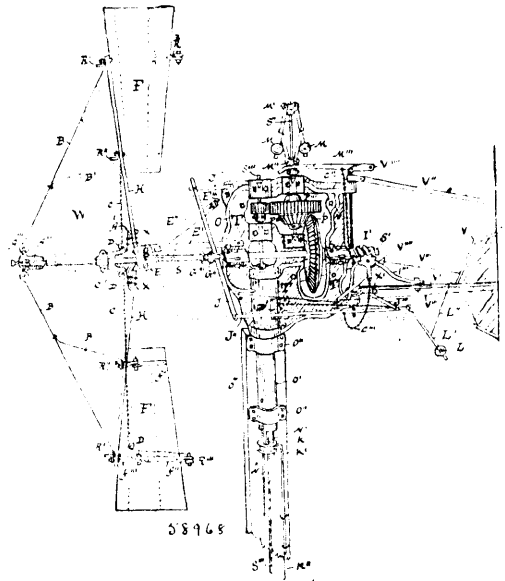
Seymour Johnson and Albert M. Smith, both of Austin, Minnesota, U.S.A., 9th February, 1898; 6 years. (Filed 21st January, 1898.)

Claim.—In a harrow, the combination with a harrow beam composed of parallel bars of the tooth holder provided with a longitudinal opening to receive the beam, and a central vertical opening to receive the harrow tooth, and the pivotal connection between said holder and beam consisting of a boss or projection upon one engaging a socket in the other, said tooth when inserted in place between the parallel bars holding the same forced outward against the sides of the holder, and preventing slipping by reason of the pivotal connection, said bars being adapted to be sprung together when the tooth is removed to disengage the holder and beam.

No. 58,968. Windmill. (Moulin à vent.)

Franklin W. Lake, assignee of William E. Wood, both of Storrington, Ontario, Canada, 9th February, 1898; 6 years. (Filed 20th January 1898.)

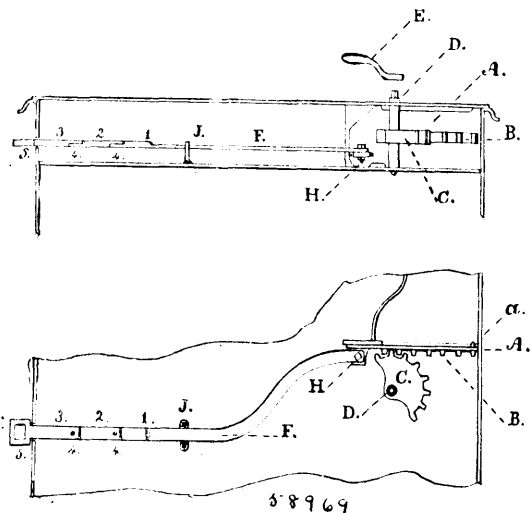
Claim. 1st. The placing of twisted sails F F on the rims R¹ R¹¹ of wind wheel W so they can turn back with the pressure of the



wind, or otherwise bringing one edge of the long way of the sail to the wind, when at rest, and the rim R¹¹ or chain connection at the back edge of sails F F causing a simultaneous movement of the same, substantially as and for the purpose hereinbefore set forth. 2nd. The regulating system that when the mill runs too fast, weights M M swinging out by the motion bring an attachment I¹ that is laying quiet in contact with one that is revolving I¹, thereby taking the mill out of sail until the undesirable velocity cease, then letting the mill in sail again, substantially as set forth. 3rd. The bearing E on wind wheel shaft S¹, held out from the frame O, by the strong bars E¹ E¹¹, bearing weight of wind wheel W, and the casing of shaft S¹ over grooves Z Z to work in said bearing E, substantially as and for the purpose hereinbefore set forth. 4th. The combination of windmill gearing that admits of a bevel pinion gear P¹¹ being secured to a horizontal spur gear P¹¹¹ on a short vertical shaft S¹¹, substantially as and for the purpose hereinbefore set forth.

No. 58,969. Damper for Stoves and Ranges.

(Registre pour poêles etc.)

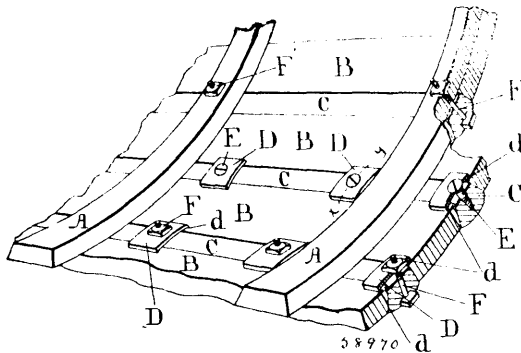


The William Buck Stove Company, assignee of Judson Wilfred Buck, both of Brantford, Ontario, Canada, 9th February, 1898; 6 years. (Filed 19th January, 1898.)

Claim. 1st. The combination of the vertical adjustable damper A, having obstruction a, and the rack B, on opposite sides, and the partial pinion C, on shaft D, and lever E, substantially as and for the purpose set forth. 2nd. The vertical adjustable damper A, having obstruction a, and lug H, and hinged stem F, attached to damper A, at lug H, passing over top of oven guided by rest J, said stem F being formed in three parts 1, 2 and 3, and hinged together by screws 4, 4, so that parts 3, or 2, can be folded under top of stove

or range, as and for the purpose set forth. 3rd. The combination of the vertical adjustable damper A, having obstruction a, and rack B, partial pinion C, on shaft D, and lever EE, with the hinged stem F, attached to damper A, at lug H, and passing over top of oven guided by rest J, said stem F being formed in three parts 1, 2, and 3, and hinged together by screws 4, 4, so that parts 3 or 2, can be folded under top of stove or range as hereinbefore set forth.

No. 58,970. Art of and Means for Making Seams of Vessels Fluid Tight. (*Art et moyen de rendre des joints de vaisseaux à l'épreuve de l'eau.*)



John E. Liddly, Clayton, New York, U.S.A., 10th February, 1898 6 years. (Filed 27th September, 1897.)

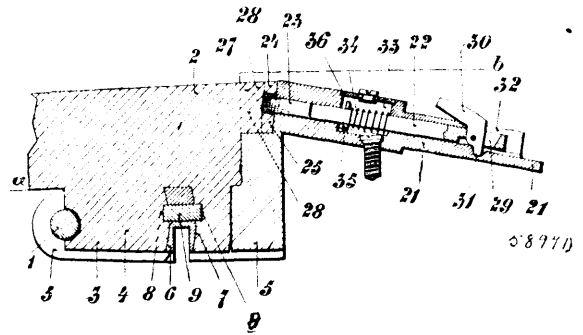
Claim. - 1st. The art of making the seams of vessels fluid tight, which consists in first attaching a series of longitudinal strakes or staves to transverse ribs or frames, and then routing out a longitudinal space between said strakes or staves, which shall be of uniform shape transversely of its course and have uniformly bevelled sides with their greatest distance apart on the edges furthest from said ribs, and then inserting in such space a strip having correspondingly bevelled sides, and fastening said strip in place with screws or bolts passed through ribs, clips or cleats, which span said space from strake to strake. 2nd. The art of making seams of vessels fluid tight, which consists in first attaching a series of longitudinal strakes or staves to transverse ribs or frames, then routing out a longitudinal space between said strakes or staves, which shall be of uniform shape transversely of its course and have uniformly bevelled sides with their greatest distance apart on the edges furthest from said ribs, and then inserting in such space a strip having correspondingly bevelled sides, and fastening said strip in place with screws or bolts passed through resilient clips or cleats, which span said space from strake to strake. 3rd. A fluid-tight joint for vessels, comprising strakes or staves, arranged on transverse frames or ribs, and having separated parallel edges chamfered on a bevel opening outwardly from said ribs, calking strips having corresponding reversely bevelled edges adapted to closely fit, and substantially fill, the opening between such parallel edges, and means for adjustably fastening said strips to said ribs. 4th. A fluid-tight joint for vessels, comprising strakes or staves, arranged on transverse frames or ribs, and having separated parallel edges chamfered on a bevel opening outwardly from said ribs, calking strips having corresponding reversely bevelled edges adapted to closely fit and substantially fill, the opening between such parallel edges, and clips or cleats, adapted to span said opening, and means for fastening said clips or cleats to said strips. 5th. A fluid-tight joint for vessels, comprising strakes or staves, arranged on transverse frames or ribs, and having separated parallel edges chamfered on a bevel opening outwardly from said ribs, calking strips having corresponding reversely bevelled edges adapted to closely fit, and substantially fill, the opening between such parallel edges, and clips or cleats, of resilient material adapted to span said opening, and means for fastening said clips or cleats to said strips.

No. 58,971. Gun and Rifle. (*Fusil et carabine.*)

Valerian Solodovnikoff, St. Petersburg, Russia, 10th February, 1898; 6 years. (Filed 16th July, 1897.)

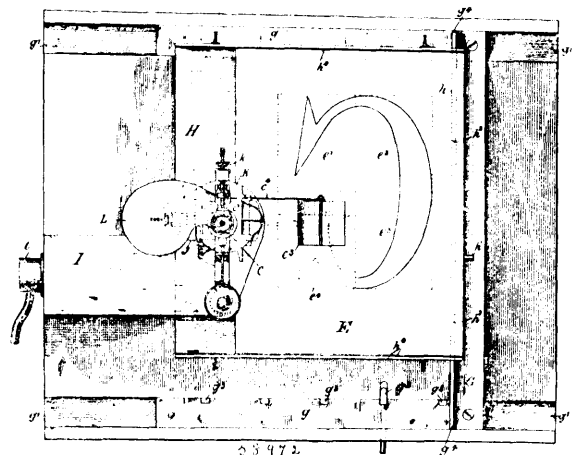
Claim. - 1st. A double locking device for drop-down guns or rifles, embracing in its construction a bolt, adjustable in a transverse direction relatively to the barrel, and a second bolt arranged in the longitudinal direction of the barrel, substantially as specified. 2nd. A double locking device for drop-down guns or rifles, embracing in its construction two locking bolts, one of which is arranged longitudinally and the other transversely, relatively to the barrel, in such a manner that the front bolt locks automatically and is opened by pressure against it, and the second locking bolt arranged at the rear of the barrel and closed or opened by actuating a double-armed lever, hinged to the locking bolt, substantially as specified. 3rd. A locking device for drop down guns or rifles, embracing in its construction a lock-case having a transverse slotted bridge, a barrel pivotally connected to the lock-case having a transverse slot corresponding with the bridge, a spring-actuated locking bolt contained within the barrel, adapted to engage the slot of the bridge, substantially as specified. 4th. A locking device for

drop-down guns or rifles, embracing in its construction a lock-case, having a transverse slotted bridge, a barrel pivotally connected



to the lock-case having a transverse slot corresponding to the bridge, a recess in the lock-case and gun-barrel, a spring-actuated locking bolt within the recess, having an angular enlargement to engage the slotted part of the transverse bridge, substantially as specified. 5th. A locking device for drop-down guns or rifles, embracing in its construction a spring-actuated locking bolt arranged lengthwise in the gun, cam-faced projections arranged one above the other at the rear face of the barrel, between which is engaged the prismatic face of the locking bolt, and a double-armed lever pivoted within a slot at the rear end of the locking bolt, and engaging with its shorter end a recess in the wall of the lock-case, substantially as specified. 6th. A double locking device for drop-down guns or rifles, embracing in its construction a spring-actuated locking bolt arranged lengthwise in the gun, cam-faced projections arranged one above the other at the rear face of the barrel, between which is engaged the prismatic face of the locking bolt, a double-armed lever pivoted within a slot at the rear end of the locking bolt, and engaging with its shorter end a recess in the wall of the lock-case, in combination with a lock-case having a transverse slotted bridge, a barrel pivotally connected to the lock-case, having a transverse slot corresponding to the bridge, a recess in the lock-case and gun-barrel, a spring-actuated locking bolt within the recess, having an angular enlargement to engage the slotted part of the transverse bridge, substantially as specified.

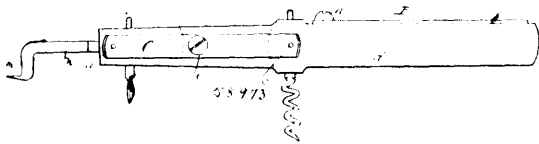
No. 58,972. Apparatus for Facilitating the Delineation of the Outlines of Type Faces, etc. (*Appareil pour faciliter les desseins des figures, etc.*)



Frank Harrison Pierpont, Hartford, Connecticut, U.S.A., but at present of Kaut Strasse, Berlin, W., Germany, 10th February, 1898; 6 years. (Filed 15th November, 1897.)

Claim. - 1st. The combination with a microscope and camera lucida, of adjustable mechanism for co-ordinately dividing the field of the former and the surface upon which the latter projects the image which it receives, for the purpose of eliminating spherical aberration from the projected image. 2nd. The combination with a microscope and camera lucida, of a pair of slides forming practically the microscope stage, and a pair of tables standing under the mirror of the camera lucida, the said slides capable of movement independently of each other in parallel planes, and the said slides likewise capable of movement independently of each other in parallel planes, for the purpose of dividing up the microscope field and the paper or its equivalent.

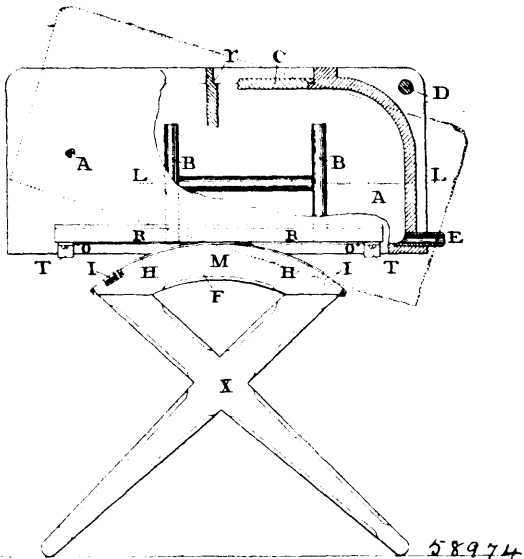
No. 58,973. Combination Tool. (Outil à combinaison.)



Andrew Altman, Elizabeth, New Jersey, U.S.A., 10th February, 1898; 6 years. (Filed 27th August, 1897.)

Claim.—1st. In a combination tool, the combination of a holder provided with a receptacle in one end, and adapted to receive tools therein, and inclining pockets having a rectangular cross section formed in the other end thereof, tools provided with shanks adapted to engage snugly within said pockets, and having notches formed in the edges thereof, a double spring catch secured to said holder and adapted to engage the notches in said tool shanks, and a pivoted cover adapted to enclose the tool receptacle, substantially as described. 2nd. In a combination tool, the combination with a holder having a tool receptacle formed in one end thereof and an inclining pocket having a rectangular cross section within the extreme opposite end, and lying in axial line with said handle, two inclined pockets, rectangular in cross section, arranged to extend through said holder at right angles, to the end pocket one of which intersects said end pocket, a tool having a notched shank formed in one end of said shank, and a lug upon its extreme outer end, a second tool provided to fit the intersecting pocket and having a hole through its shank adapted to receive said lug, a double spring catch secured at its middle point to said holder, lock pins secured to the free ends of said spring catch adapted to engage with said notches, and a cover pivoted upon said holder and adapted to enclose said tool receptacle, substantially as described.

No. 58,974. Churning Apparatus. (Baratte.)



Richard Ernest West, Stratford, Ontario, Canada, 10th February, 1898; 6 years. (Filed 13th September, 1897.)

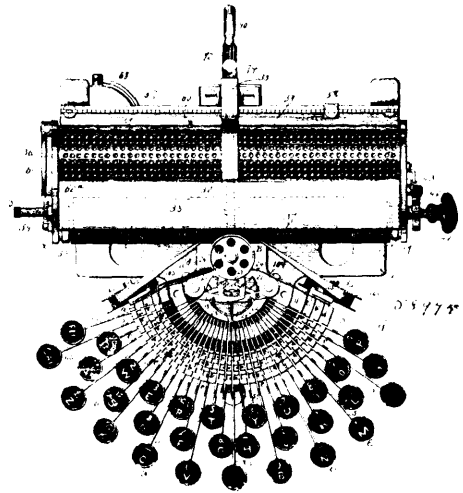
Claim.—1st. The vessel A, with a set of diaphragmatic blades substantially as and for the purposes hereinbefore set forth. 2nd. The combination of the frame R R T, and the inverted rockers F F, substantially as and for the purposes hereinbefore set forth. 3rd. The flexible straps H H H H with the adjusting screws I I I I which retain the frame on the inverted rockers. 4th. The combination of the blades B B B B with the vessel A and the frame R R T, flexible straps and adjusting screws and in combination with the inverted rockers (when in use) co-operate to impart an oscillating motion to the vessel A, all substantially as and for the purposes hereinbefore set forth.

No. 58,975. Type-Writing Machine. (Clavigraphie.)

Richard William Uhlrig, New York, State of New York, U.S.A., 10th February, 1898; 6 years. (Filed 6th March, 1897.)

Claim.—1st. In a type-writing machine, the combination with a type-carrier, and key-levers, of gearing connected with the type-carrier, two operating levers in constant connection with said gearing and co-operating with the key-levers and a flier co-operating with the type-carrier and key-levers, whereby both of said operating levers and flier will be actuated when a key lever is depressed and lock the type-carrier by the wedging action of the gearing, substantially as set forth. 2nd. In a type-writing machine, the combina-

tion with a type-carrier, and two groups of key-levers, of two levers co-operating with the respective groups of key-levers, and gearing



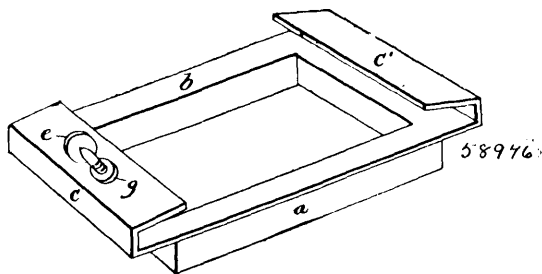
between said co-operating levers and the type-carrier, said gearing being connected constantly with said levers and with the type-carrier, whereby when a key-lever of either group is operated, both of the co-operating levers and gearing connecting them with the type-carrier will be actuated, and a flier actuated by said gearing and adapted to be stopped by engagement with a key-lever when the latter has been operated, substantially as set forth. 3rd. In a type-writing machine, the combination with a type-carrier and a series of key-levers, of a gearing connected with said type-carrier, and levers in constant connection with said gearing, said levers co-operating with the key-levers in such manner that when one is moved forwardly, the other will be moved over key-levers, substantially as set forth. 4th. In a type-writing machine, the combination with a type-carrier, a pinion adapted to transmit motion thereto, key levers and a flier actuated when said pinion is moved, to strike a key-lever, of two sets of actuating devices between said key-levers and pinion, both sets of actuating devices being in constant connection with said pinion and co-operating with the flier to hold the type-carrier fixed when set to writing position, substantially as set forth. 5th. In a type-writing machine, the combination with a type-carrier and gearing connected therewith, of two levers in constant connection with said gearing so that any movement of one lever will result in corresponding movement in the opposite direction of the other lever and transmit motion to the type-carrier, and a series of key-levers having cam ends to co-operate respectively with said first-mentioned levers, and move the same different distances, in accordance with key-levers operated, substantially as set forth. 6th. In a type-writing machine, the combination with a type-carrier and a pinion adapted to transmit motion thereto, of type-levers having cam ends, pivoted levers to be engaged by the cam ends of the key-levers, rack-bars carried by said pivoted levers and meshing with said pinion, and a single spring bearing at its ends against the rack-bars and between its ends against said pivoted levers, substantially as set forth. 7th. In a type-writing machine, the combination with a type-carrier having an elongated pinion, of a combined pinion and toothed segment, the latter to mesh with the elongated pinion, of key-levers having cam ends, pivoted levers to be engaged by said cam ends of the key-levers, and rack-bars carried by said pivoted levers and meshing with the pinion to which the toothed segment is secured, substantially as set forth. 8th. In a type-writing machine, the combination with a type-carrier having an elongated pinion, of a combined toothed segment and pinion, the former meshing with said elongated pinion, key-levers, rack-bars meshing with the pinion which carries the toothed segment, connections between said rack-bars and key-levers, and a flier mounted independently of said combined toothed segment and pinion and adapted to receive motion from the elongated pinion of the type-carrier, substantially as set forth. 9th. In a type-writing machine, the combination with a type-carrier carrying an elongated pinion and a series of key-levers, of a flier consisting of a toothed segment having arms, said toothed segment meshing with said elongated pinion, a combined toothed segment and pinion mounted on the same stud with the flier but independently thereof and adapted to transmit motion to the elongated pinion of the type-carrier, rack-bars meshing with the pinion of the combined toothed segment and pinion and connections between said rack-bars and the key-levers, substantially as set forth. 10th. In a type-writing machine, the combination with a frame having a segmental guiding-flange, a type-carrier and gearing connected with said type carrier, of a series of key-levers mounted on the frame and terminating forwardly of said guiding-flange and spaced apart at their forward extremity whereby to permit the free forward ends of the key-levers to be bent laterally within the segmental guiding-flange, said forward extremities of the key-levers having cam-faces to actuate said gearing, substantially as set forth.

11th. In a type-writing machine, the combination with a type-carrier and gearing connected therewith, of a pivoted lever adapted to mark the arc of a circle and constructed to transmit motion to said gearing and a series of key-levers having cam ends to engage said lever and move the same different distances and a shoulder on one end of the cam of each key-lever, said shoulders being adapted to engage the first-mentioned lever when a key-lever has been fully depressed, substantially as set forth. 12th. In a type-writing machine, the combination with a type-carrier and gearing connected therewith, of levers co-operating with said gearing, devices constructed to lock said levers and gearing in their normal positions, and key-levers constructed to co-operate with said first-mentioned levers and locking devices, whereby to actuate said levers and gearing and move the type-carrier to writing position according to the key-lever operated, substantially as set forth. 13th. In a type-writing machine, the combination with a type-carrier and key-levers, of gearing between the type-wheel and key-levers, said gearing being constructed and adapted to hold the type-carrier rigid when set to writing position, and devices connected with said gearing and adapted to positively lock the type-wheel in normal position, substantially as set forth. 14th. In a type-writing machine, the combination with a type-carrier, and gearing with said type-wheel, of levers connected with said gearing, key-levers having cam ends to engage said first-mentioned levers, and vertically-movable frames constructed and adapted to lock the type-wheel and gearing in their normal position, and hooks or projections on the key-levers for raising one or the other of said vertically-movable frames and thus unlocking the gearing and type-wheel, substantially as set forth. 15th. In a type-writing machine, the combination with a type-carrier having an elongated pinion, of a combined toothed segment and pinion, the former meshing with the elongated pinion, oscillatory shafts, rack-bars secured to said shafts and meshing with the pinion carrying the toothed segment, levers projecting from said shafts, key-levers having cam ends to engage said levers, a vertically-movable having cam-faces, and pins on said shafts to engage said frames and adapted to be moved by said cam-faces, substantially as set forth. 16th. In a type-writing machine, the combination with a type-carrier and an impression-hammer, of a force-hammer, a normally loose spring connected with the force-hammer, a trip device normally locking said force-hammer, key-levers and devices operated by the key-levers and constructed and adapted to first apply tension to said spring while the force-hammer is locked and then operate said trip to release the force-hammer, substantially as set forth. 17th. In a type-writing machine, the combination with a type-carrier and an impression-hammer, of a force-hammer, a trip device serving to normally lock the force-hammer, a normally loose spring for the force-hammer, a pivoted yoke, key-levers and connections between one end of said yoke and the key-levers, the other end of said yoke being adapted to apply tension to said spring while the force-hammer remains locked and then operate the trip, when a key-lever is pressed, substantially as set forth. 18th. In a type-writing machine, the combination with a type-carrier and an impression-hammer, of a force-hammer, a normally loose spring therefor, a trip device serving to normally lock said force-hammer, key-levers, vertically movable frames adapted to be raised by the key-levers, and a pivoted yoke having arms disposed over portions of the respective vertically-movable frames and also having an arm connected with the force-hammer spring and adapted to operate said trip device to release the force-hammer, substantially as set forth. 19th. In a type-writing machine, the combination with a carriage and a ratchet-bar thereon, of a pivoted plate having a fixed dog at one end to engage said ratchet-bar, a dog pivoted to said plate and adapted to co-operate with the first-mentioned dog, a single-bow-spring bearing against the pivoted dog, means for adjusting said bow-spring, vertically movable frames, an arm projecting from said pivoted plate and terminating over portions of both frames, and key-levers adapted to raise said vertically-movable frames, substantially as set forth. 20th. In a type-writing machine, the combination with a carriage and a ratchet-bar thereon, of a pivoted plate, ratchet devices carried by said plate co-operating with the ratchet-bar to effect the feed of the carriage, an arm projecting from said pivoted plate, a key-lever connected with said arm whereby to actuate the ratchet devices to effect a step-by-step feed of the carriage, means for limiting the movement of said key-lever, and a key connected with the arm of the pivoted plate whereby to move the dogs out of engagement with the ratchet-bar and effect the release of the carriage, substantially as set forth. 21st. In a type-writing machine, the combination with a type-carrier having a pinion and key-levers having cam ends, of a combined toothed segment and pinion, two oscillatory shafts, rack-bars carried by said shafts and meshing with said last-mentioned pinion, two levers, one secured to each oscillatory shaft, said levers being normally disposed coincident with the segment of a circle marked by the cam ends of the key-levers, substantially as set forth. 22nd. In a type-writing machine, the combination with vertically movable frames and key-levers adapted to raise said frames, of ribbon-reels having ratchet-teeth, pivoted levers, a dog pivoted to one arm of each of said levers and adapted to engage ratchet-teeth of the ribbon-reels, vertically-movable rods adapted to engage the other arms of said levers, and pins projecting from said rods and adapted to be engaged by portions of said vertically movable frames, substantially as set forth. 23rd. In a type-writing machine, the combination

with a framework and a top plate, of key-levers, vertically-movable frames to be raised by said key-levers, ribbon-reels mounted on the framework and each comprising two ratchet-wheels, a pivoted lever adjacent to each ribbon-reel, a dog carried by one arm of each lever and adapted to engage one ratchet-wheel of each reel, vertically-movable rods to engage the other arms of said levers, a cross-bar connecting said rods, pins projecting from said rods and over portions of the vertically-movable frames, a sliding switch-bar on the top plate of the machine, dogs pivoted to said top plate to engage a ratchet-wheel of the ribbon-reels and cam-arms carried by said switch bar and adapted to raise the dogs from the ratchet-wheels of one reel and permit the dogs of the ratchet-wheels of the other reel to engage the same, substantially as set forth. 24th. In a type-writing machine, the combination with the framework and a carriage, of a bar secured to the framework, a stop adjustably secured to said bar, an oscillatory rod mounted on the carriage, a pin on said rod, normally out of line with said stop, and an arm secured to said rod for maintaining said pin out of line with the stop and serving as means whereby to oscillate said rod to move the pin in line with the stop, whereby to regulate the margin on the paper being written upon, substantially as set forth. 25th. In a type-writing machine, the combination with a framework and a carriage, of a ratchet-bar secured to the framework, a stop adjustably secured to said ratchet-bar, an oscillatory rod mounted on the carriage, a pin on said rod normally out of line with said stop, an arm on said rod for normally maintaining said pin out of line with the stop and serving as means whereby to oscillate the rod to move the pin on the latter in line with said stop, and a pin on said arm to engage the carriage and form a stop for said arm and oscillatory rod, substantially as set forth. 26th. In a type-writing machine, the combination with a carriage and paper-feed rollers mounted therein, of a star-wheel and a knob on one of the journals of one of said rollers, a pivoted detent, a roller carried by said detent and adapted to engage the star-wheel, a spring attached to the free end of said detent and to the carriage, a pin on the detent, a pivoted arm and a hook on said pivoted arm to engage said pin, substantially as set forth. 27th. In a type-writing machine, the combination with the framework, a carriage and ratchet-feed mechanism for the carriage, of a combined spring-actuated drum and bell, a strap attached at one end of the carriage and removably attached at the other end to the spring-actuated drum, and a hammer for said bell attached to the frame of the machine and carrying a trip device to be actuated by a projection on the carriage, substantially as set forth. 28th. In a type-writing machine, the combination with a framework having two segmental notched flanges, radial slots and segmental grooves in its top, of key-levers guided by said notched flanges and radial slots and having pivot-pins seated in said segmental grooves, said key-levers terminating within the inner segmental flange, a type-wheel and gearing between said type-wheel and key-levers and adapted to be actuated by the inner ends of the latter to turn said type-wheel, substantially as set forth. 29th. In a type-writing machine, the combination with a carriage and paper-feed rollers, of a ratchet-wheel on one of the journals of one of said rollers, a pivoted lever carrying a dog to engage said ratchet-wheel, a tubular arm on said lever, and a spring-actuated dog mounted in said tubular arm and adapted to engage a stop on the carriage or to be moved out of line with said stop, substantially as set forth. 30th. In a type-writing machine, a type-wheel consisting of a ring having a perforated web, a hollow shank extending through said web, a plate on the shank, on which plate said web rests, a pin projecting from said plate and entering the web and a strip containing characters on said ring, substantially as set forth.

No. 58,976. Metallic Studding Holder.

(Porte-poteau métallique.)

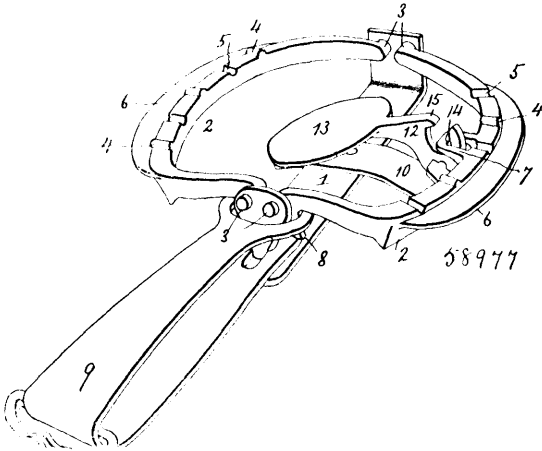


James P. Buchanan, Allegheny, Pennsylvania, U.S.A., 10th February, 1898; 6 years. (Filed 10th November, 1897.)

Claim.—1st. In combination with a supporting column or post, a box or frame having a flange the ends of which project upwardly and inwardly forming clamps to engage a beam extending at right angles to the supporting column or post, substantially as shown and described. 2nd. A metallic studding holder for door jambs and the like, consisting of a box or frame, which receives the end of the studding, said box provided with flanges which are formed into clamps at the end of the box, and adapted to engage a beam extend-

ing at right angles to the studding, substantially as shown and described. 3rd. In combination with a studding, a box or frame, formed with a flange terminating in clamps adapted to engage a beam extending at right angles to the studding, and means for holding the box or frame at a desired position on the beam, substantially as shown and described. 4th. A flanged metallic box or frame that fits over the top of a vertical post and which is provided upon its opposite ends with vertical flanges terminating in inwardly extending flanges, the box serving as a means for connecting two beams that extend at right angles to each other, substantially as shown and described.

No. 58,977. Animal Trap. (Piège.)



Thomas H. Donlon, Kansas City, Missouri, Kansas, U.S.A., 10th February, 1898; 6 years. (Filed 13th November, 1897.)

Claim.—1st. An animal-trap, comprising a base-plate, jaws pivoted thereon, one of them provided with a loop, a pivoted trigger provided with a locking-hook adapted to engage the loop of said jaw, and a second hook for engagement with said loop after the latter is disengaged from the locking-hook, and an actuating spring whereby an upward-pressure is brought to bear upon said jaws, substantially as described. 2nd. An animal-trap comprising a base-plate, jaws pivoted thereto, one of them having a loop, a cross-plate secured to the base-plate, a trigger pivoted to the cross-plate, provided with a bait-plate, and notched to form a locking-hook, and a second hook above and inward of the locking-hook, and a spring which exerts a closing pressure continuously upon said jaws, substantially as described. 3rd. An animal-trap, comprising a base-plate, jaws pivoted thereto and provided with alternately arranged tongues and grooves at their inner or opposing sides, and with flanges 6 projecting upwardly and outwardly, and a spring for exerting continuously a closing pressure upon said jaws, substantially as and for the purpose described.

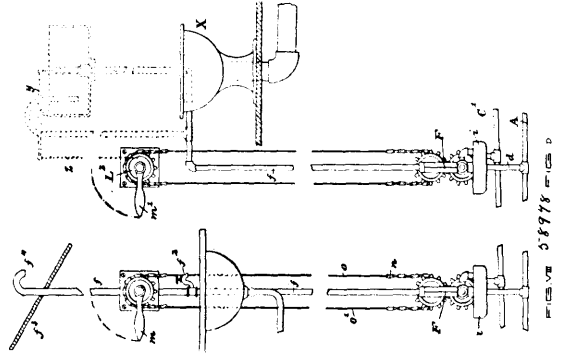
No. 58,978. Water Pipe Dry System for Houses.

(Système de tuyau à eau.)

Edward Walter Giles, Baltimore, Maryland, U.S.A., 10th February, 1898; 6 years. (Filed 27th September, 1897.)

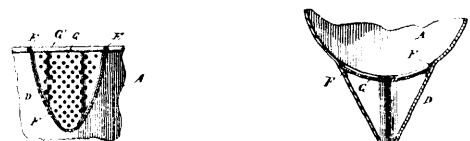
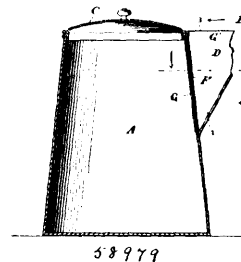
Claim.—1st. In a system for water-distributing pipes in houses, the combination of a lower distributing pipe for hot water, and another pipe for cold water, a union with which both of said pipes connect, a single pipe leading upward from said union and terminating in an always-open discharge nozzle, a valve in said union which opens communication either with the hot-water pipe and the discharge nozzle or the cold-water pipe and the discharge nozzle, a drain-water pipe, and a valve-controlled drain-tube connecting from the hot and cold water pipes, respectively, to said drain-water pipe. 2nd. In a system for water-distributing pipes in houses, the combination of a lower distributing pipe for hot water, and another pipe for cold water, a union with which both of said pipes connect, a single pipe leading upward from said union and terminating in an always-open discharge nozzle, a valve in said union which opens communication between either the hot-water pipe and the discharge nozzle or the cold-water pipe and the discharge nozzle, a controlling valve in each distributing pipe, and means located adjacent the discharge nozzle and connecting therefrom to the said controlling valves as set forth. 3rd. In a system for water-distributing pipes in houses, the combination of a lower distributing pipe for hot-water, and another pipe for cold-water, a union with which both of said pipes connect, a single pipe leading upward from said union and terminating in an always-open discharge nozzle, two inclined valve-seats in said union, one having a hot-water port and the other a cold-water port, a tilting or vibrating valve to close either one of said ports, a drain-water pipe, a valve-controlled drain-tube connecting from the hot and cold-water pipes, respectively, to said drain-water pipe, and means located adjacent the discharge nozzle and connect-

ing therefrom to the said controlling valves, as set forth. 4th. In a system for water-distributing pipes in houses, the combination of a



lower distributing pipe for hot-water and another pipe for cold-water, a union with which both of said pipes connect, a single pipe leading upward from said union and terminating in an always-open discharge nozzle, a valve in said union which opens communication between either the hot-water pipe and the discharge nozzle or the cold-water pipe and the discharge nozzle, a drain-water pipe, a controlling valve in each distributing pipe, a drain-tube connecting from each of said controlling valves to the drain-water pipe, and means located adjacent each discharge nozzle and connecting therefrom to the said controlling valves, as set forth. 5th. In a system for water-distributing pipes in houses, the combination of a distributing pipe, an always-open discharge nozzle, a drain-water pipe in the lower part of the building, a valve-case in said distributing pipe, a drain-tube connecting from said valve-case to the drain pipe, a rotary plug-valve in said valve-case and provided with a gear-wheel, a sprocket-wheel and gear-wheel loosely mounted on said valve-case, the gear-wheel engaging the gear-wheel on the plug-valve, and an endless-chain connection from a point near the said always open nozzle to the sprocket-wheel on the valve-case. 6th. In a system for water-distributing pipes in houses, the combination of a distributing pipe having an always-open end, an ordinary draw-off cock on said pipe, a valve and valve-case in said distributing pipe in the lower part of the building, a drain-tube connecting from said valve-case, a lever handle and sprocket-wheel near the ordinary draw-off cock, and an endless-chain connection from sprocket-wheel to the lower valve. 7th. In a system for water-distributing pipes in houses, the combination of a distributing pipe having an always-open discharge nozzle, a valve and valve-case in said distributing pipe, a drain-tube connecting from said case, a lever handle and sprocket-wheel, and an endless-chain connection therefrom to the valve, a flush tank for a water-closet, and a connection from the lever handle to the flush-valve in the flush-tank, whereby when the lever handle is turned to the open or closed position, the flush-valve will be simultaneously opened or closed.

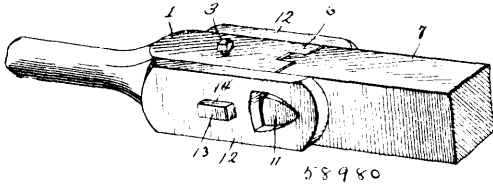
No. 58,979. Coffee or Tea-Pot. (Cafetière ou théière.)



Amanda Macy, Macy, South Dakota, U.S.A., 10th February, 1898; 6 years. (Filed 28th January, 1898.)

Claim.—The herein-described coffee or tea-pot, having the spout D punched out of the body of the pot, the upper edge of the spout and pot proper being beaded as at E, the guideways F, the detachable strainer-plate G slidable within said guideways, the upper edge thereof being beaded as at G¹, so that when the strainer is inserted into place the beaded edge will come into coincidence with the body edge of the pot, and thereby provide an unbroken circle within which the flange of the top is adapted to fit, substantially as shown and described.

No. 58,980. Anti-Friction Joint. (Joint anti-frottant.)

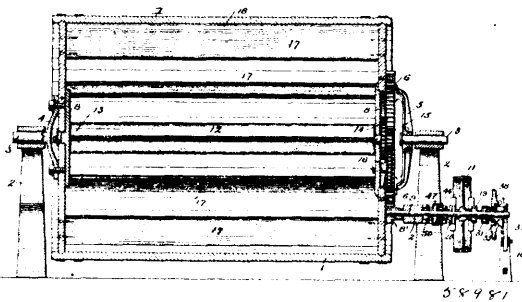


Nelson Moore, Butte, Montana, U.S.A., 10th February, 1898; 6 years. (Filed 31st January, 1898.)

Claim.—1st. In a device of the character set forth, the combination with a pitman or other operative part of a piece of machinery having a V-shaped extension at one end, of a second operative part having a V-shaped recess in its outer end, into which said extension is adapted to fit, and whose edges lie at a greater angle to one another than the edges of said extension, triangular lugs upon the outer sides of the part containing said recess, and clamping plates adapted to fit over said parts and provided with triangular-shaped openings in which said lugs are adapted to fit and move, substantially as and for the purpose specified. 2nd. In a device of the character set forth, the combination with a pitman or other operative part of a piece of machinery having a V-shaped extension at one end of a second operative part, having a V-shaped recess in its outer end into which said extension is adapted to fit, and whose edges lie at a greater angle to one another than the edges of said extension, triangular lugs upon the outer sides of the part containing said recess, whose apices are in line with the apex of said V-shaped recess, and clamping plates adapted to be secured to the sides of said parts having triangular slots or openings therein, within which said lugs are adapted to fit and move, and whose sides lie at a greater angle to one another than the sides of said lugs, substantially as and for the purpose described. 3rd. In a device of the character set forth, the combination with a pitman or other operative part of a piece of machinery having a transverse slot therein, a V-shaped extension upon its forward end, and shoulders having concave faces upon each side of said extension, of a second operative part having a V-shaped recess in its outer end in which said extension is adapted to fit, whose edges lie at a greater angle to one another than the edges of said extension, and said part being formed with a rounded end adapted to bear against said shoulder, triangular-shaped lugs upon the outside of said part whose apices are in line with the apex of said triangular recess, clamping plates upon the sides of said parts, having rectangular slots therein which register with the transverse slot in said pitman, and having triangular slots or openings in which said lugs are adapted to fit and move, and whose sides lie at a greater angle to one another than the sides of said lugs, and a key fitting the aligned slots in said plates and pitman, substantially as and for the purpose described.

No. 58,981. Combined Churn and Butter Worker.

(Baratte et batte à beurre combinées.)



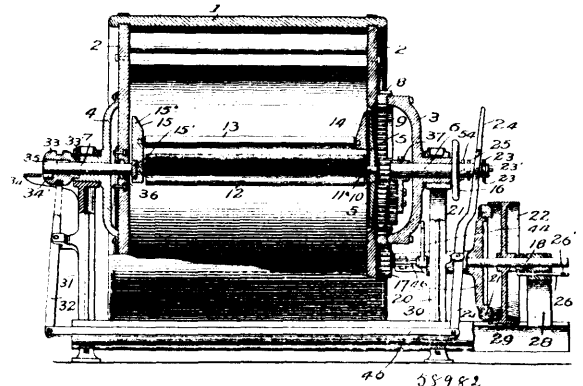
Thomas Jefferson Howe, David Jackson Ames and Henry Newton Labare, all of Awatonna, Minnesota, U.S.A., 10th February, 1898; 6 years. (Filed 21st January, 1898.)

Claim.—1st. In a combined churn and butter-worker, the combination of a suitable cylinder, means connected therewith for rotating it, and flights or carriers, wedge-shaped in cross section located in said cylinder and arranged so as to have a space between them and the cylinder, substantially as and for the purpose set forth. 2nd. In a combined churn and butter-worker, the combination of a suitable cylinder, means connected therewith for rotating it, and a pair of cylindrical paddles located within the cylinder, and arranged to have a space between them and to have the blades on one of the paddles opposite, but not entering an interdenal space on the other, as and for the purpose set forth. 3rd. In a combined churn and butter-worker, the combination of a cylinder, a pair of rolls located therein, and means connected with the cylinder and rolls for revolving the cylinder and rolls at different rates of speed, substantially as and for the purpose set forth. 4th. In a combined churn and butter-worker, the combination of a cylinder, having a cog-wheel secured

thereto, suitable means in connection therewith for rotating it, a pair of rolls mounted within said cylinder and provided with cog-wheels, a pinion on one of said cog-wheels, and an intermediate cog-wheel between the cog-wheel on the cylinder and the pinion, substantially as and for the purpose set forth. 5th. In a combined churn and butter-worker, the combination of a suitable cylinder, means in connection therewith for rotating the cylinder, and suitable mechanism in connection therewith for producing variable speed, substantially as and for the purpose set forth. 6th. In a combined churn and butter-worker, the combination of a suitable cylinder, means connected therewith for rotating said cylinder at different speeds, consisting of a cog-wheel secured to the cylinder, a pinion rigidly mounted on a driving shaft, and in engagement with said cog-wheel, a pulley loosely mounted on said shaft, a rigid and a loose clutch also mounted on said shaft, a reducing mechanism connected with a loose clutch, and suitable means for moving the pulley into engagement with either of the clutches, substantially as and for the purpose set forth. 7th. The combination of a suitable cylinder, having a cog-wheel connected thereto, a pinion rigidly mounted on a driving shaft in engagement with said cog-wheel, a loose pulley mounted on said shaft, a clutch rigidly mounted on said shaft, and suitable means for drawing the pulley into engagement with the clutches, consisting of a collar having a pair of dogs in engagement with the pulley, a sleeve provided with an external screw thread surrounding said collar, an abutting collar in engagement with said sleeve, and a hand-wheel having a turning connection with the abutting collar and working on the screw threaded sleeve, substantially as and for the purpose set forth. 8th. The combination of a suitable cylinder, having a cog-wheel secured thereto, a pinion in engagement with said wheel and rigidly mounted on a drive-shaft, a loose pulley mounted on said shaft, a clutch also loosely mounted on said drive-shaft, a speed reducing mechanism in connection with said clutch consisting of a pinion formed on the hub of the clutch, a cog-wheel mounted on the frame and of larger diameter than the pinion in engagement therewith, and having a pinion of smaller diameter secured thereto, a cog-wheel of larger diameter loosely mounted on the shaft carrying the driving-pinion and provided with projections on its face and a cog-wheel rigidly mounted on the drive-shaft and provided with projections with which the projections of the loose cog-wheel engages, and suitable means for moving the pulley into engagement with the clutches, substantially as shown and described. 9th. The combination, of the wooden drum formed of a series of staves and having an opening in its side or peripheral wall, with a polygonal metallic frame fitting said opening, and having curved ends whereto the staves at the ends of said openings are fastened, said frame having a flat ledge not lower than the straight inner edges of said frame, at the sides thereof, and a door fitting upon said ledge to close the opening, substantially as described. 10th. The combination, in a churn, of the drum, with a rectangular frame provided in the peripheral wall thereof, and having curved ends whereto the staves are attached, said frame having a flat ledge, and a door fitting said ledge between the ends of the frame and over-lapping the sides of the frame, and means for securing the said door upon said flat ledge, substantially as described. 11th. The combination, of the wooden drum formed of a series of staves and having an opening in its side or peripheral wall, with a metallic frame fitting said opening and having curved ends whereto the staves at the ends of said opening are fastened, said frame having a flat ledge and a door fitting the same between the ends of said metallic frame and over-lapping the sides of said metallic frame, substantially as described.

No. 58,982. Combined Churn and Butter Worker.

(Baratte et batte à beurre combinées.)

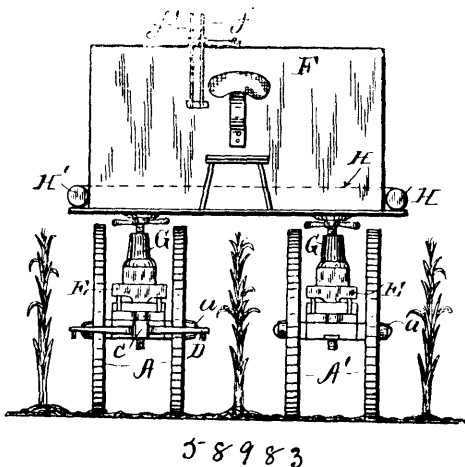


Thomas Jefferson Howe, David Jackson Ames and Henry Newton Labare, all of Owatonna, Minnesota, U.S.A., 10th February, 1898; 6 years. (Filed 21st January, 1898.)

Claim.—1st. In a combined churn and butter-worker, wherein the butter-working parts within the drum may be held stationary or caused to revolve with the drum at will, the combination, with the drum, the rolls and roll-supporting devices, of means for simultaneously locking the roll-supporting devices at both ends of the drum

to the frame of the machine or releasing the same therefrom. 2nd. In a combined churn and butter-worker, the combination, with the drum, of the butter-working rolls arranged within the drum, sub-heads supporting said rolls, and connecting means for simultaneously locking both said sub-heads against rotary movement to the frame of the machine or releasing the same therefrom, for the purpose set forth. 3rd. In a combined churn and butter-worker, the combination, with the drum, of the butter-working rolls arranged in said drum, of means for rotating said drum either at a high or low speed, means for causing said rolls to rotate with said drum, to rotate upon their own axes or to remain stationary, for the purpose set forth. 7th. In a combined churn and butter-worker, the combination, with the drum and the butter-working rolls supported therein, of the shaft 6 provided with the pin 54, and means for sliding said shaft, the cross-head carried by said shaft and supporting the journals of the butter-working rolls, and the clamp-wheel 16 arranged upon said shaft and provided with a cam face, for the purpose set forth. 8th. The combination, with the drum, provided with the internal gear wheel 9, the butter-working rolls arranged in said drum, of the shaft 6, means for sliding said shaft, the cross-head carried by said shaft and supporting the journals of the butter-working rolls, the pinions carried by said cross-head, one of said pinions being adapted to be moved into or out of engagement with said internal ring gear 9, the pin 54 upon said shaft, and the clamp-wheel 16, provided with a cam-face, for the purpose set forth. 9th. The combination, with the drum provided with the external ring gear 8, of the shaft 18 provided with the pinion 17 engaging said ring gear, the clutch 20 provided with the friction blocks 21 and with the pinion 49, the sliding drive pulley 22 adapted to engage said friction blocks, the shaft 45 provided with the pinions 48 and 47, and the pinion 19 upon said shaft 18 connected to said shaft by a suitable spline, the movable slide engaging said pinion and adapted to hold said pinion in engagement with the pinion 47 or with the clutch 20. 10th. In a combined churn and butter worker, the combination, with the drum, of the butter-working rolls supported in said drum, the sliding shaft 6, the cross-head carried by said shaft and supporting the journals of the butter-working rolls, the pins 54 and 25 upon said shaft, the clamp-wheel 16 provided with the cam surface 16¹ and with the projection 59, and the lever 24 provided with the opening 60, for the purpose set forth.

No. 58,983. Watering Cart. (Voiture pour arroser.)

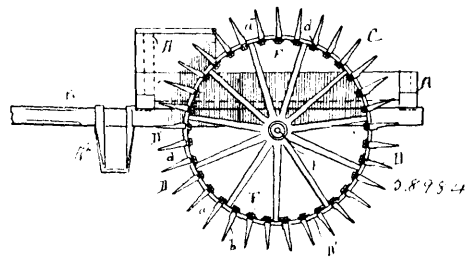


Rosella Rebecca Reilly, Dubuque, Iowa, U.S.A., 10th February, 1898; 6 years. (Filed 19th January, 1898.)

Claim.—1st. In a cart for sprinkling corn, the combination of the trucks, the planks connecting the trucks, a water-tank, the jack-screws at the ends of each plank to support the tank and adjust it in height, the rear pipes and the side pipes, as set forth. 2nd. In a cart for sprinkling corn, the combination of the trucks, the planks connecting the trucks, a water tank, the jack-screws at the end of

each plank to support the tank and adjust it in height, the rear pipe and the side pipes, the pipe-valves and the valve-levers, all substantially as set forth.

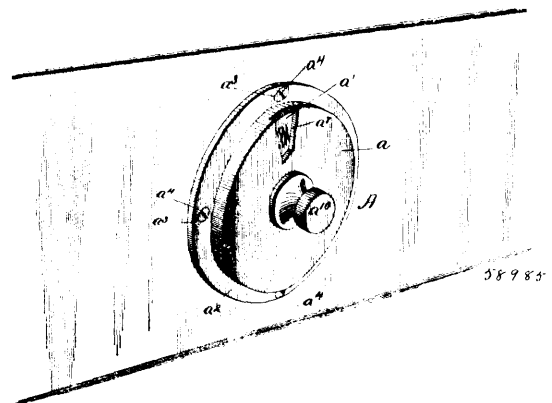
No. 58,984. Rotary Spade Plough. (Charrue rotatoire.)



John E. Swanstrom, Worcester, Massachusetts, U.S.A., 10th February, 1898; 6 years. (Filed 27th January, 1898.)

Claim.—In a rotary spade plough, the combination of the wheels C, C' with the transversely arranged spades D adapted to fit the rims of the wheels, and having ears d, d at each side to fit over the edges of the peripheries of the wheels, and means for rigidly fastening said spades to said peripheries of the wheels, substantially as and for the purpose set forth.

No. 58,985. Office Indicator. (Indicateur de bureau.)



William Weaver, Hope Bay, Ontario, Canada, 10th February, 1898; 6 years. (Filed 20th November, 1897.)

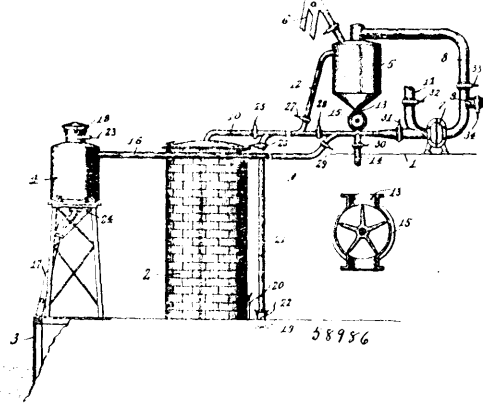
Claim.—An indicator, comprising a disc provided with sections formed on its front face, said sections containing designations of different import, a cover for said disc, having an opening arranged to expose the contents of one of said sections, a screw-threaded stud secured to said disc and extending centrally through said cover, and a nut removably secured on said stud and adapted to hold said disc in position and form a rotating means therefor, substantially as described.

No. 58,986. Pneumatic Grain Moving Apparatus. (Appareil pneumatique pour transporter le grain.)

The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, Connersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

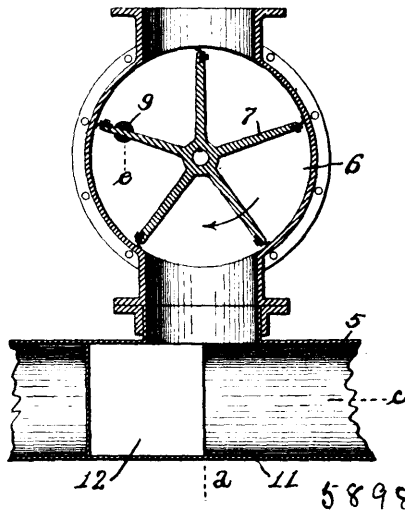
Claim.—1st. The combination, substantially as set forth, of an elevated loading-tank having a top opening, a gate at such top opening, a loading-pipe connected with the base of the tank, a gate in such pipe, a blast-pipe connected with the upper portion of the tank, and air-forging and grain-supplying devices connected with said blast-pipe. 2nd. The combination, substantially as set forth, of an air-tight receiving vessel, a pipe connected to the upper portion thereof for the delivery of grain thereto, a pipe from the base of the receiving vessel for the discharge of grain, a pipe from the top of the receiving vessel to the suction side of a blower, an inlet branch to said last-mentioned pipe, a pipe from the discharge side of the blower connected to said discharge-pipe leading from the receiving vessel and provided with an inlet branch, and gates for the control of said pipes. 3rd. The combination, substantially as set forth, of a receiving vessel, a blower, a suction-pipe connecting the receiving vessel with the blower and having an inlet branch, a discharge-pipe from the blower to a point of delivery for grain, a pipe to the upper portion of the receiver from said discharge-pipe between the blower and the delivery end of the discharge-pipe, a second discharge-pipe connected with the first mentioned discharge-pipe between the blower and its delivery end, a pipe connecting the base of the receiving vessel with the first-mentioned discharge-pipe, and gates for the

control of the pipes. 4th. The combination, substantially as set forth, of a receiving vessel, a blower, a pipe from the top of the



receiving vessel to the blower and having an inlet branch, a discharge-pipe from the blower to a point of grain delivery, a feeding-pipe from the base of the receiving vessel to said discharge-pipe, an air-outlet pipe connected to the discharge-pipe between the blower and said feeding-pipe, a pipe to the upper portion of the receiving vessel from said discharge-pipe between said feeding-pipe and the delivery end of the discharge-pipe, and gates for the control of the pipes.

No. 58,987. Feeder for Grain Transfer Systems.
(Alimentateur pour système de transport du grain.)

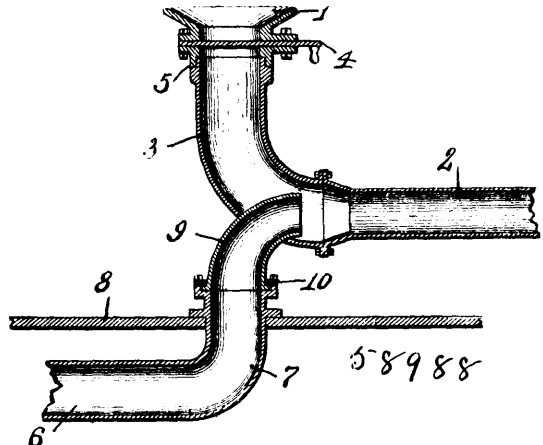


The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, both of Connersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. The combination, substantially as set forth, of a vacuum-chamber, a discharge-pipe, a pipe connection from the base of the vacuum-chamber to said discharge-pipe, a cylindrical feeder-chamber arranged in and forming a part of such pipe connection, and a paddle-wheel arranged for rotation in said chamber and having close connections with the walls thereof. 2nd. The combination, substantially as set forth, of a vacuum-chamber, a discharge-pipe, a pipe connection from the base of the vacuum-chamber to said discharge-pipe, a cylindrical feeder-chamber arranged in and forming a part of such pipe connection, a paddle-wheel arranged for rotation in said chamber and having close connections with the walls thereof, and an outwardly-opening valve communicating with the interior of said cylindrical chamber. 3rd. The combination, substantially as set forth, of a vacuum-chamber, a blast pipe connected with a source of air-pressure and leading to a point of discharge, a pipe connection placing the base of said vacuum chamber in communication with said blast-pipe between its source of air-pressure and point of discharge, a cylindrical chamber forming a part of said pipe connection, and a paddle-wheel mounted for rotation in said cylindrical chamber and closely engaging the walls thereof. 4th. The combination, substantially as set forth, of a vacuum-chamber, a blast-pipe leading from a source of air-pressure to a point of discharge, a divider disposed in said pipe and serving to divide the air-current passing therethrough, a pipe connection from the base of said vacuum-chamber to said blast-pipe at a point beyond said

divider, a cylindrical chamber forming a part of said pipe connection, and a paddle wheel mounted for rotation within said cylindrical chamber and closely engaging the walls thereof.

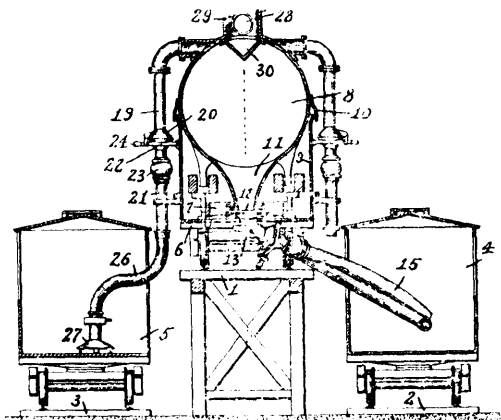
No. 58,988. Swivel for Pneumatic Grain Pipes.
(Joint tournant pour tuyaux à grain pneumatiques.)



The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, both of Connersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—The combination, substantially as set forth, of a discharge-pipe, an elbow having one extremity connected with said discharge-pipe, a swivel-joint at the other extremity of said elbow, an elbow-nozzle connected with said elbow and presenting its nozzle portion within said elbow toward said pipe and presenting its opposite extremity in the axial line of but away from said swivel-joint, a swivel-joint at the base of said elbow-nozzle and having its axis in line with that of the first mentioned swivel, and an air-pipe connected with said elbow-nozzle through the medium of the last-mentioned swivel-joint.

No. 58,989. Grain Transfer Apparatus.
(Appareil de transport à grain.)

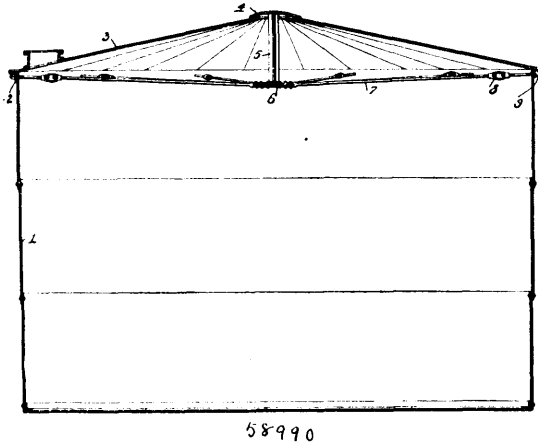


The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, both of Connersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. A transfer apparatus, comprising, substantially as set forth, an elevated structure, a tank thereon, and connected with air-exhausting mechanism, ways on a low level alongside said elevated structure at each side thereof, receptacles adapted for travel on said ways, and suction and discharge-pipes connected with said tank and having flexible extensions adapted for disposition within the receptacles on either of said low-level ways. 2nd. A transfer apparatus, comprising, substantially as set forth, an elevated structure, weighing scales supported thereon, a tank supported on said weighing scales and connected with air-exhausting devices, ways on a low level alongside said elevated structure and at each side thereof, receptacles adapted for travel on said ways, and suction and discharge-pipes connected with said tank and having flexible extensions adapted for disposition within the receptacles on either of said low-level ways. 3rd. In a transfer apparatus, the combination, substantially as set forth, of a supported pipe having a flaring mouth, a second pipe having a conical coupling-piece removably engaging

said flaring mouth, a support for said conical coupling-piece independent of the support of the first-mentioned pipe, and a slip-joint upon the end of the second pipe. 4th. In a transfer apparatus, the combination, substantially as set forth, of a cylindrical tank having a suction-opening in the top thereof, an angular conduit along under the roof of the tank and open at its centre to said suction connection and open at its ends to the interior of the tank, and inlet connections to said tank in the roof thereof at the sides of and between the ends of said angular conduit. 5th. In a transfer apparatus, the combination, substantially as set forth, of an elevated horizontally disposed tank having a pair of hopper-discharge openings at the base thereof near the ends, flexible discharge-pipes connected with said openings and adapted for projections and use at either side of said tank, a suction-pipe surmounting said tank and having connections with the interior of the tank, a pair of inlet-pipes connected at each side of said tank near the ends of the top thereof, and flexible extensions adapted for connection and use on said inlet-pipes. 6th. A grain transfer apparatus, comprising an elevated structure, a tank thereon, a plurality of discharge-pipes connected therewith at the bottom of the tank, a suction-pipe having a plurality of connections with the top of the tank, suction-pipes leading into each of said connections upon opposite sides, and ways on a low level upon each side of the elevated structure. 7th. A grain transfer apparatus, comprising an elevated structure, a tank thereon and connected with air-exhausting mechanism, ways on a low level alongside said elevated structure and at each side thereof, receptacles adapted to travel on said ways, a pair of discharge pipes connected with the base of said tank and having flexible extensions adapted for disposition in said receptacle on either of said low-level ways, and a pair of suction-pipes having flexible extensions and adapted for connection on either side of said tank, and for disposition within a receptacle on either of said low-level ways.

No. 58,990. Tank Cover. (*Couvercle de citernes.*)



The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, both of both of Connersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—In a tank-cover, the combination, substantially as set forth, of a tank-wall cylindrical in plan, a flange at the rim thereof, a crowning roof with its periphery resting upon said flange, a crown-plate secured at the centre of said crowning roof, a strut projecting downwardly from said crown-plate, a horizontal plate secured to the foot of said strut, and a series of rods connected with said plate at the foot of said strut and projecting radially into engagement with the rim of the tank-wall.

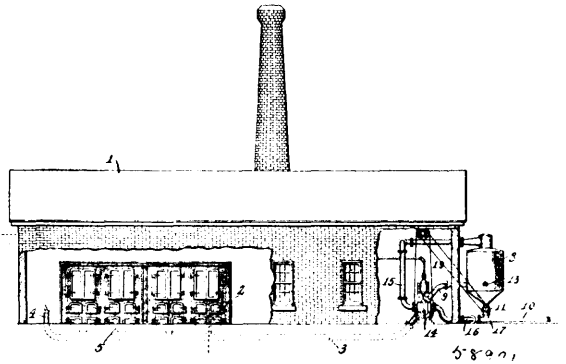
No. 58,991. Ash Conveying Apparatus.

(*Appareil de transport à cendres.*)

The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, both of Connersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. In an ash-conveying apparatus, the combination, substantially as set forth, of a hopper in the floor near a furnace, a vacuum-chamber, a pipe leading from the base of said hopper to the lower portion of said vacuum-chamber, a pump, a pipe from the upper portion of said vacuum-chamber to the inlet side of said pump, a pipe leading from the discharge side of said pump to the point of deposit for the ashes, a pipe connection from the base of the vacuum-chamber to the last-mentioned pipe between said pump and said point of deposit, and a rotary feeder disposed in the last-mentioned pipe connection and serving to permit the downward movement of ashes from the vacuum-chamber but to prevent the upward passage of air from the discharge-pipe. 2nd. In an ash-conveying apparatus, the combination, substantially as set forth, of a series of hoppers disposed in the floor in front of a rank of furnaces, a trap-door for each hopper, a grating at each

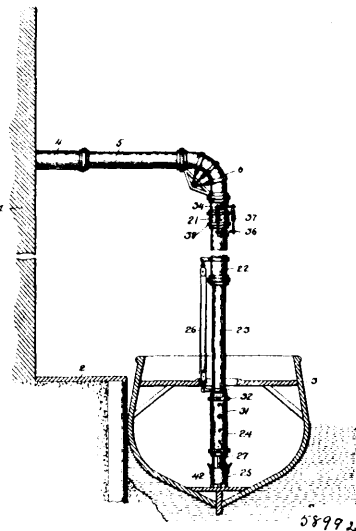
hopper, a vacuum-chamber, a pipe leading from the bases of all the hoppers to the lower portion of the vacuum-chamber, a pump, a pipe



from the upper portion of said vacuum-chamber to the inlet side of said pump, a pipe leading from the discharge side of said pump to the point of deposit for the ashes, a pipe connection from the base of the vacuum chamber to the last-mentioned pipe between said pump and said point of deposit, and a rotary feeder disposed in the last-mentioned pipe connection and serving to permit the downward movement of ashes from the vacuum-chamber but to prevent the upward passage of air from the discharge-pipe.

No. 58,992. Elevator Marine Leg.

(*Appareil d'élévateur marin.*)

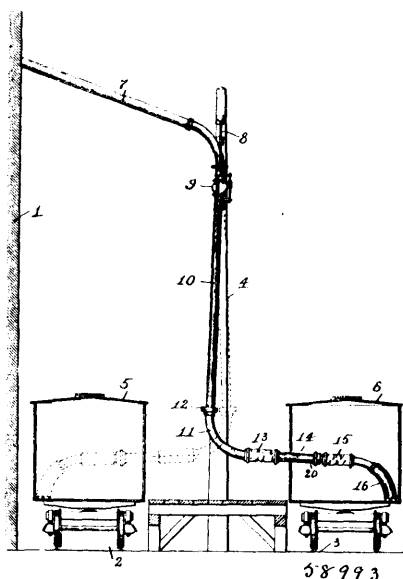


The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, both of Connersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. The combination, substantially as set forth, of an elevator structure, a pipe projecting outwardly therefrom, an elbow at the outer end of said pipe, a flexible pipe-joint at the base of said elbow, a pipe-section suspended from said flexible joint, a telescopic pipe-section sliding within said suspended pipe, a flexible pipe-section at the base of said telescopic pipe, a mouthpiece at the base of said flexible pipe-section, and rope-tackle supported direct by said suspended pipe and connected with the pipe parts below it and having its hand-rope near said mouthpiece. 2nd. The combination, substantially as set forth, of two pipe-sections, a series of short frusto-conical pipe-sections connecting the first-mentioned pipe-sections and having intermembering inner and outer hook-shaped flanges, and a flexible jacket surrounding said series of frusto-conical sections and attached at its ends to the first-mentioned pipe-sections. 3rd. The combination, substantially as set forth, of a pair of pipe-sections, elastic rings surrounding the ends thereof, a flexible jacket surrounding said elastic rings and extending from one ring to the other, and draw-hands encircling said jacket exterior to said rings and compressing said jacket and rings. 4th. The combination, substantially as set forth, of a pipe-section having its end formed directly with an outward flare, a pipe-section with its end fitting loosely directly within said flaring end, brackets rigidly secured to and projecting from said pipe-sections, suspension-links connecting

said brackets, and a flexible jacket connected with said pipe-sections and enclosing their juncture. 5th. In a flexible joint connection, the combination of a pipe-section having a flared end, with a second pipe-section fitting loosely and directly within said flared end, oppositely disposed brackets rightly secured to and projecting from the pipe-sections, oblong interlocking links connecting said brackets, and a flexible jacket connected with said pipe-sections and enclosing their juncture. 6th. A mouthpiece for pneumatic grain-tubes consisting of the open end of the tube in combination with a jacket surrounding and adjustably supported upon the tube with an annular space between the tube and jacket, the lower end of the jacket projecting below the lower end of the tube, and spacing means interposed between the tube and jacket, and projecting slightly below the latter, substantially as described. 7th. The combination, substantially as set forth, of a mouth-pipe, a jacket surrounding the same and leaving an annular space outside the mouth-pipe, brackets secured to and projecting outwardly from the mouth-pipe within and into engagement with the jacket, and means for securing said jacket at selective heights directly to said brackets, consisting of pins passing through holes in the jacket and entering one of a series of holes in each bracket. 8th. The combination, substantially as set forth, of a mouth-pipe, a jacket surrounding the same and leaving an annular space around the mouth-pipe, brackets connecting the top of the jacket with the mouth-pipe, and bows within the annular space around the mouth-pipe and engaging the mouth-pipe and jacket and projecting below the end of the mouth-pipe and serving to maintain the end of the mouth-pipe free of a supporting-surface below it.

No. 58,993. Car Unloader. (Appareil à décharger les chars.)



The Steel Storage and Elevator Construction Company, assignee of Frederick John Weber, both of Commersville, Indiana, U.S.A., 11th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. In a car-unloader, the combination, substantially as set forth, of an elevated support, an elevated pipe having a flexible joint carried by said support, a vertical pipe pendulous from said flexible joint, an elbow united to the base of said flexible pipe by a swivel-joint, and a mouthpiece united to said elbow by piping having a flexible portion. 2nd. In a car-unloader, the combination, substantially as set forth, of an elevated support, an elevated pipe having a flexible joint carried by said support, a vertical pipe pendulous from said flexible joint, an elbow united to the base of said flexible pipe by a swivel-joint, a flexible pipe connected with the lower extremity of said elbow, a telescope pipe connected with the outer end of said flexible pipe, a flexible pipe at the outer end of said telescope pipe, and a mouthpiece connected with the outer end of said flexible pipe. 3rd. In a car-unloader, the combination, substantially as set forth, of an elevated support, an elevated pipe having a flexible joint carried by said support, a vertical pipe pendulous from said flexible joint, an elbow united to the base of said flexible pipe by a swivel-joint, a curved mouthpiece, and a pipe having a flexible portion uniting the upper end of said curved mouthpiece with the outer end of said elbow.

No. 58,994. Artificial Fuel. (Combustible artificiel.)

The Compressed Coal Company, New York, State of New York, assignee of John Thomas Davis, San Francisco, California, both in the U.S.A., 11th February, 1898; 6 years. (Filed 15th December, 1897.)

Claim.—1st. An artificial fuel, comprising divided coal and a binder impervious to water, substantially as described. 2nd. A composition of matter for artificial fuel, consisting of divided coal, saccharine matter, and lime partially slaked by a solution of sulfate of iron, substantially as described. 3rd. A composition of matter for artificial fuel, consisting of divided coal, saccharine matter, and lime partially slaked by a hot solution of sulfate of iron, substantially as described. 4th. The herein-described process of making an artificial fuel, which consists in mixing together coal, saccharine matter, and lime partially slaked by a hot solution of sulfate of iron, and completing the slaking of the lime by the moisture in the saccharine matter, substantially as described. 5th. A composition of matter for artificial fuel, consisting of the following elements by weight: One hundred parts of coal-dust, eight parts of lime partially slaked by a hot solution of sulfate of iron, and eight parts of saccharine matter, such as molasses, the refuse of beet-sugar factories or the like, the whole being incorporated or mixed together in a suitable apparatus, and then pressed into pieces or blocks of any desired form or size, substantially as described.

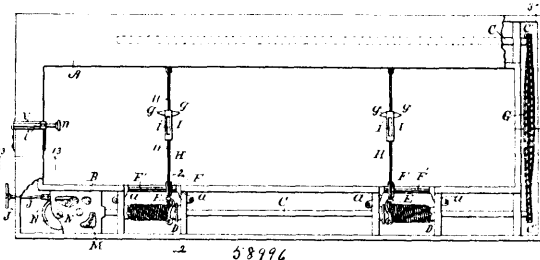
No. 58,995. Artificial Fuel. (Combustible artificiel.)

The Compressed Coal Company, New York State of New York, assignee of John Thomas Davis, San Francisco, California, both in the U.S.A., 11th February, 1898; 6 years. (Filed 15th December, 1897.)

Claim.—1st. The process of making an agglomerate fuel, which consists in adding to finely-divided coal a solution of gelatin, and then a solution of a suitable gelatin-chromatizing agent, substantially as described. 2nd. The process of making an agglomerate fuel, which consists in adding to finely-divided coal, lime, a solution of gelatin, and then a solution of a suitable gelatin-chromatizing agent, substantially as described. 3rd. The process making an agglomerate fuel, which consists in adding to finely-divided coal, slaked lime, a solution of gelatin, and then, a solution of bichromate of potash, substantially as described. 4th. The process of making an agglomerate fuel, which consists in adding to finely-divided coal, slaked lime, a solution of gelatin, then a solution of bichromate of potash, and then heating the mass to one hundred and fifty degrees F, more or less, substantially as described. 5th. An agglomerate fuel, containing chromatinized gelatin, substantially as described. 6th. An agglomerate fuel, containing gelatin and bichromate of potash, or its equivalent, for the purpose described. 7th. An agglomerate fuel, consisting of comminuted coal, lime, and chromatinized gelatin, substantially as described. 8th. A composition of matter for artificial fuel, consisting of finely-divided coal, slaked lime, a solution of gelatin, and a solution of bichromate of potash, in about the proportions specified, substantially as described. 9th. A composition of matter for artificial fuel, consisting of the following ingredients, by weight:—finely-divided coal two thousand parts, slaked lime eighty parts, gelatin six to ten parts, bichromate of potash one part, substantially as described.

No. 58,996. Burial Device.

(Appareil pour descendre les cercueils dans les fosses.)



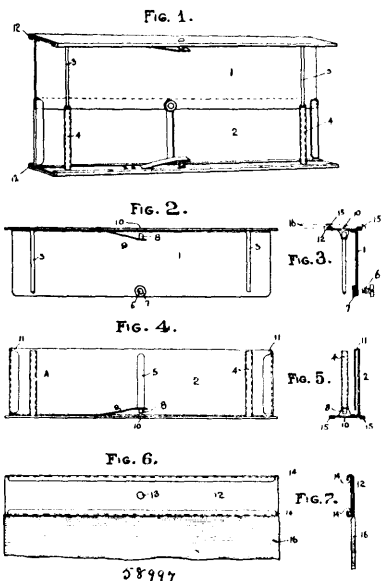
The National Burial Device Company, assignee of Richard R. Kinney and Gardner P. Barnard, all of Coldwater, Michigan, U.S.A., 11th February, 1898; 6 years. (Filed 15th November, 1897.)

Claim.—1st. In a burial apparatus, the combination of a suitable frame work, longitudinal shafts C C¹ on the side of said frame, a crossed sprocket chain G, connecting the same, a block b between the parts of the chain to prevent their engaging and rubbing upon each other, windlasses D D, D D, two on each shaft opposite each other formed with right and left hand spirals facing each other, lowering ropes H, to rest in said spirals, guides E, engaging said spirals to be carried thereby and having eyes for the passage of the ropes, the rods F¹ towards the inside of said frame carrying sheaves to receive the lowering ropes, a detaching device between the ends of the ropes, and suitable brake mechanism to apply to one of the shafts, all coating together substantially as described for the purpose specified. 2nd. In a burial apparatus, the combination of a suitable frame work, longitudinal shafts C C, on the side of said frame a crossed sprocket chain G, connecting the same, a block b between the parts of the chain to prevent their engaging and rubbing upon each other, windlasses D D, D D, two on each shaft opposite each other formed with right and left hand spirals facing

each other, lowering ropes to rest in said spirals, guides E, engaging said spirals to be carried thereby and having eyes for the passage of the ropes, the rods F¹ towards the inside of said frame carrying sheaves F, to receive the lowering ropes. 3rd. In a burial apparatus, the combination of a suitable frame, shafts to each side thereof, windlasses on said shafts situated opposite each other, the windlasses on each side containing right and left hand spirals, lowering ropes adapted to be received by said spirals, guides engaging the spirals on said windlasses to be carried thereby having suitable eyes for the passage of the ropes, suitable means of detaching the lowering ropes and means for controlling the shafts, for the purpose specified. 4th. In an apparatus of the class described, the combination of a windlass D, containing a suitable spiral groove, a rope or cable therefor, guides E, engaging said spirals to be carried thereby containing a suitable eye for the passage of the rope to deliver the same into the spirals, for the purpose specified. 5th. In an apparatus of the class described, the combination of a windlass D, containing a suitable spiral groove, a rope or cable therefor, guide E, engaging said spirals to be carried thereby, containing a suitable eye for the passage of the rope to deliver the same into the spirals, a shaft extending longitudinally of said windlass bearing a suitable guiding roller adapted to slide over the same to receive and guide the rope, for the purpose specified. 6th. In a burial apparatus, the combination of lowering ropes, a separate releasing device between the ropes consisting of a plate I, with laterally projecting wings G, containing pins U U, joined together by a plate I, having a depending portion I¹ with a foot T, at the bottom to engage loops upon the lowering ropes so that when a load is lowered the plate will press from the loops below the pins and release the same, for the purpose specified. 7th. In a burial apparatus, the combination of suitable shafts carrying windlasses, ropes adapted to extend therefrom across a grave, a brake mechanism consisting of a pinion P¹ on one of said shafts, parallel shafts I and N, gear P, on said shaft I, meshing with the pinion P¹, the gear-wheels M M¹, on said shafts I and N, respectively meshing with each other, a brake-wheel N¹, a metal band O, having facing O¹ of leather or similar material embracing the wheel N¹, brackets R, R¹, containing screw-thread on the ends of said band O, rod J, with a screw-thread for adjusting said brackets R, R¹ to apply and release the brake, a link Q supported on link Q¹, and loosely surrounding the rod J between the brackets R, R¹, to support the same, and suitable means of rotating the shaft J¹ to apply and release the brake, coacting for the purpose specified. 8th. In a burial apparatus, the combination of suitable shafts with windlasses thereon for actuating and controlling the lowering ropes, a brake-wheel with a band O, having a facing O¹ of leather or similar material round the same to form a brake, a suitable rod with a screw at its end extending through brackets at the ends of said bands for applying and releasing the brake, a link connecting the same with the supporting case and a train of gears between the brake-wheel and the controlling shaft for the purpose specified. 9th. In a burial apparatus, the combination of a suitable frame, lowering ropes, means of controlling the same and a suitable gauge consisting of a bracket V, with an adjustable rod i, therein having a guide plate n at its end to locate the coffin or casket in position, for the purpose specified.

No. 58,997. Loose Leaf Book Binder.

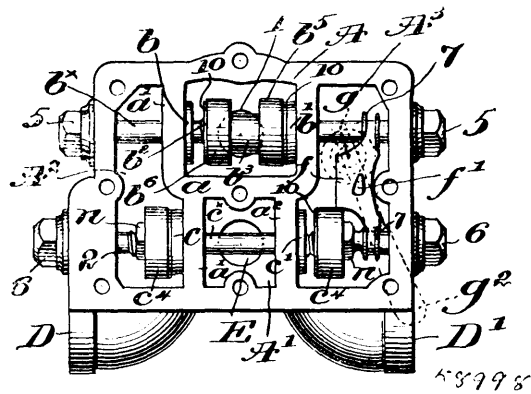
(Relieure de livres à feuilles volantes.)



Arthur Opalla and Charles H. Mason, both of Chicago, Illinois, U.S.A., 11th February, 1898; 6 years. (Filed 4th January, 1898.)

Claim.—1st. In a loose leaf book binder, the combination of two L-shaped back-pieces, so arranged that the vertical flange of the one slides parallel and closely to the vertical flange of the other one, and within slideways of the latter, with rods and tubes, extending vertically from the two horizontal flanges of the back-pieces respectively, and sliding one within the other as the back-pieces are moved towards or away from each other, for the purposes specified. 2nd. In a loose leaf book binder, the combination of one L-shaped back-piece, provided with a vertical slot in its vertical flange and tubes vertically extending from the horizontal flange, with another L-shaped back-piece, having rods vertically extending from the horizontal flange and provided with a nut in its vertical flange, and a screw passing through the vertical slot in one of the back-pieces and screwing into the nut of the other back-piece. 3rd. In a loose leaf book binder, the combination of one L-shaped back-piece, provided with a vertical slot in its vertical flange, and tubes vertically extending from its horizontal flange, another L-shaped back-piece provided with a nut in its vertical flange and rods vertically extending from its horizontal flange, the vertical flange of the one back-piece sliding within slideways in the vertical flange of the other back-piece, and a clamping screw adapted to be tightened or loosened by means of a specially formed key only, substantially as specified. 4th. In a loose leaf book binder, the combination of two L-shaped back-pieces, having rods and tubes respectively, with slides and hereto attached covers of any convenient material, said slides formed to be slipped easily over the horizontal flanges of the back-pieces respectively and arrested by pins 8, mounted on springs 9 and passing through holes 10 of the horizontal flanges into holes 13 of said slides.

No. 58,998. Valve. (Soupape.)



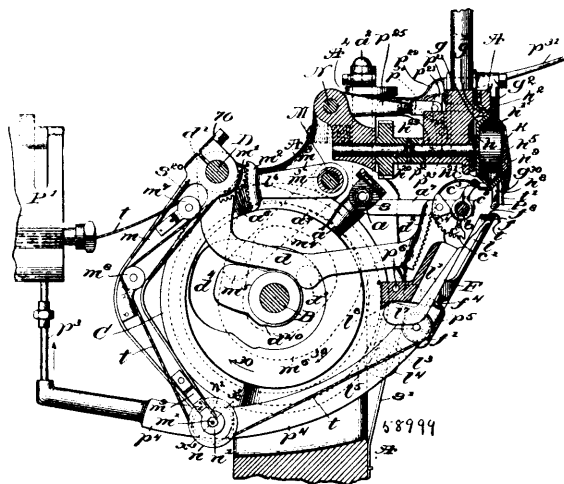
The Friction Pulley and Machine Works, Sandy Hill, New York, assignee of George William Dodge, Livermore Falls, Maine, both in the U.S.A., 11th February, 1898; 6 years. (Filed 11th November, 1897.)

Claim.—1st. In an apparatus of the class described, a valve case having inlet, exhaust and discharge chambers, oppositely located ports in the inlet and exhaust chambers, communicating directly with the discharge chambers, a double valve within the inlet chamber between the ports thereof, a valve in each discharge chamber opposite the port in the exhaust chamber, and means to impart initial movement simultaneously and in the same direction to all of the valves, the fluid pressure in the chambers completing the valve movement and retaining the valves in position to establish communication between the inlet and one discharge chamber, and the exhaust and the other discharge chamber, and vice versa, substantially as described. 2nd. In an apparatus of the class described, a valve case interiorly divided to form discharge chambers at the ends thereof, interposed inlet and exhaust chambers located side by side and communicating with the discharge chambers by ports having valve seats, valves to co-operate with said ports and movable at right angles to the planes of the seats, and means to positively reciprocate all of the valves simultaneously, to establish communication between the inlet and one discharge chamber and the exhaust and the other chamber, and vice versa, substantially as described. 3rd. In an apparatus of the class described, a valve case, discharge chambers therein at or near its end, interposed common inlet and exhaust chambers, ports communicating with the discharge chambers, a reciprocable double valve within the inlet chamber, to control communication with the discharge chambers, the pressure of the fluid within said inlet chamber acting to complete movement of and hold the valve seated, a valve movable in each of the latter chambers, to control the exhaust therefrom, spindles on which the valves are mounted, and means to reciprocate said spindles to operate the valves simultaneously, substantially as described. 4th. In an apparatus of the class described, a valve case having inlet, exhaust and discharge chambers, oppositely located ports in the inlet and exhaust chambers, communicating with the discharge chambers, two valve spindles extending through said ports and having bearings in the case ends, valves on one of said spindles within the discharge chambers to co-operate

with the adjacent port seats, a double valve on the other spindle within the inlet chamber, and means to reciprocate the spindles simultaneously, substantially as described. 5th. In an apparatus of the class described, a valve case having inlet, exhaust and discharge chambers, oppositely located ports in the inlet and the exhaust chambers, communicating with the discharge chambers, valve spindles extended through said ports and having bearings in the case ends, said spindles having threaded portions, a double valve adjustable on one spindle within the inlet chamber, two adjustable valves on the other spindle, in said discharge chambers, and means to move the spindles longitudinally and simultaneously, substantially as described. 5th. A valve, including a hub and concentric flange, each provided with an opposed projecting annular retaining rib, and a yielding non-metallic ring held in place by and compressed between said ribs and extending beyond the hub and flange, to form the valve face, substantially as described.

No. 58,999. Sole Sewing Machine.

(Machine à coudre les semelles.)



The Goddu Sewing Machine Company, Boston, assignee of Louis Goddu, Winchester, both of Massachusetts, U.S.A., 11th February, 1898; 6 years. (Filed 1st November, 1897.)

Claim.—1st. In a sewing-machine of the class described, devices to form a loop of needle-thread, a shuttle containing a bobbin, an independent co-operating measuring device, to measure a fixed quantity of shuttle-thread to be interlocked with the needle-loop, a take-up to draw the inter-locked portion of said thread into the work, and a shuttle-thread lock to determine the position of the interlocked loops in the work, substantially as described. 2nd. In a sewing-machine of the class described, stitch-forming mechanism including a hooked needle, a shuttle and its contained bobbin, means independent of the shuttle to measure a fixed quantity of shuttle-thread to be interlocked with the needle, a take-up, and a locking device for the shuttle-thread, substantially as described. 3rd. In a sewing-machine of the class described, stitch-forming devices, including a shuttle having a bobbin, means independent of the shuttle to draw off a measured quantity of shuttle-thread, and a lock to prevent feed of the said thread at predetermined times, substantially as described. 4th. In a sewing-machine of the class described, stitch-forming devices, including a shuttle having a bobbin, a stationary face-plate having a longitudinal thread-guide and a transverse intersecting notch, and an independent finger to at times engage the shuttle-thread and depress it into the notch, to thereby draw off a measured quantity of the thread, substantially as described. 5th. In a machine of the class described, stitch-forming devices, including a rotating shuttle having a contained bobbin, a face-plate having a thread-delivery and an external thread-guide, and a locking device moving toward and from the guide, to directly engage and clamp the exposed shuttle-thread and prevent delivery thereof at predetermined times, substantially as described. 6th. In a machine of the class described, stitch-forming devices, including a shuttle having a bobbin, a face-plate having a thread-guide and an intersecting depression, and a connected finger and stop, to alternately act directly upon the shuttle-thread, to respectively draw off a fixed quantity and to positively lock it thereafter and prevent its delivery, substantially as described. 7th. In a machine of the class described, a rotatable shuttle having a contained bobbin, an independent face-plate having a depression in its face below the path of the thread, a shaft provided with a finger to engage and move a portion of the thread into said recess, to thereby measure a fixed quantity of shuttle-thread, and means to rock the shaft at predetermined times, to move the finger into operative or inoperative position, substantially as described. 8th. In a sewing-machine, a shuttle, a non-continuous circular flange projecting rearwardly therefrom, a support for the shuttle having a curved race to receive the flange, a continuously-rotated actuator to operate

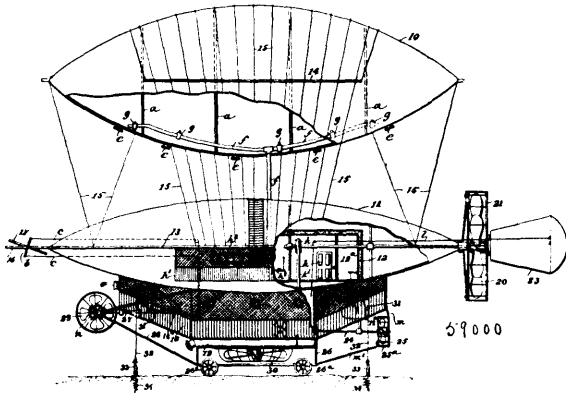
the shuttle, and a fixed retaining device independent of said actuator to hold the shuttle in its race, substantially as described. 9th. A discoidal bobbin-containing shuttle, consisting of a fixed circular-end and a removable circular end, an intermediate annular connecting-wall, inwardly flared from each of said ends, and a non-continuous flange extended rearwardly from the periphery of said wall parallel with the shuttle-axis, substantially as described. 10th. In a sewing-machine, a shuttle having a hook, means to rotate it, a stationary face-plate for and independent of the shuttle, said face-plate having a thread passage and guide, and a delivery-nose extended from the face-plate substantially to the path of the hook of the shuttle, substantially as described. 11th. In a sewing-machine, a shuttle, means to rotate it, a stationary face-plate for and independent of the shuttle, having a thread passage and guide, and a delivery-nose for the thread radially extended beyond the face-plate, substantially as described. 12th. In a sewing-machine, a rotatable shuttle, its support, a face-plate for the shuttle, having a thread-passage communicating with the interior of the shuttle and a thread-delivery, and a fixed retaining device for the shuttle, having projections to engage and prevent rotation of the face-plate, substantially as described. 13th. A shuttle having an open and a closed circular end, a cop or bobbin holder loosely mounted axially upon the closed end, and a detachable face-plate adapted to engage the cop holder, said face-plate having an external rib provided with a diametrical thread-guide, and an intersecting depression, and a radially-extended delivery-nose, substantially as described. 14th. In a sole-sewing-machine, a work-support, having a needle-hole, and also a thread-guide in its outer face below the said hole, the upper end of the guide terminating in an opening in the work-support below the needle-hole, a portion of the opening having a downwardly-inclined edge in front of the needle-path and over which edge the thread passes, a curved hooked needle to enter the needle-hole, and a looper to engage the thread back of the thread-guide and between the needle-hole and the inclined edge of the guide-terminal opening, to put the thread into position to be taken by the needle-hook, substantially as described. 15th. In a sewing-machine, a rotating shuttle, a stationary face-plate thereof having an open thread-guide, a stop supported independently of the shuttle, and means to move said stop to act upon the shuttle-thread and clamp it upon the said face-plate, substantially as described. 16th. In a sewing-machine, a rotating shuttle, a stationary face-plate thereof having an exterior recess crossed by the shuttle-thread, a finger supported independently of the shuttle, and means to move said finger against the thread and into the recess in the face-plate, to draw-off a fixed quantity of shuttle-thread, substantially as described. 17th. In a sewing-machine, a shuttle, a stationary face-plate having an open thread-guide and an intersecting recess, and an independently-supported combined shuttle-thread lock and measuring device, clamping the thread against the face-plate to lock it, and engaging the thread and entering the recess to measure off a fixed length of shuttle-thread, substantially as described. 18th. A discoidal shuttle, having a closed circular end, an axially-mounted cop-holder thereon, an annular wall having sides inwardly divergent from its periphery, a non-continuous rearwardly-extended flange on the wall having a hook in continuation of said flange, and a closure for the shuttle and cop-holder, adapted to be secured to the latter, substantially as described. 19th. In a sewing-machine, a rotatable shuttle, a face-plate over which the shuttle-thread is led and exposed, a combined thread lock and measuring device, to alternately engage the shuttle-thread, and means to actuate said locking and measuring device and to retain it out of engagement with the shuttle-thread as the loop of needle-thread passes around the shuttle, substantially as described. 20th. In a sewing machine, a feeding-awl, a shaft upon which it is mounted, and having a longitudinal recess in one end thereof, means to positively move said shaft longitudinally to effect the feed, a spring located within said recess to return the shaft and awl into starting position, an adjusting-shaft provided with a cam to bear against the opposite end of the awl-shaft, and means to rotate said cam-shaft to thereby regulate the length of feed, substantially as described. 21st. In a sole-sewing-machine, stitch-forming devices, including an oscillating hooked needle, a looper co-operating therewith, a shuttle having a contained bobbin, said shuttle being moved in a path at right angles to and intersecting the needle-path, a peripheral flange at the rear end of said shuttle, cut away to permit passage of the needle and having a hook at one end of said recess to enter and spread the loop of needle-thread, and a needle-guard, said needle when retracted being protected by the flange and guard, substantially as described. 22nd. In a sewing machine, a shuttle adapted to pass through a loop of thread, a non-continuous circular flange projecting rearwardly therefrom, but within the plane of the shuttle end, and provided with a loop-engaging hook, a shuttle-support having a curved race to receive the said flange, and means to continuously rotate said shuttle at a variable speed, substantially as described. 23rd. In a sole-sewing-machine, a fixed support, a yielding presser having two sets of oppositely-inclined ratchet-teeth upon its bar, a pawl-carrier having a constant throw, two concentrically-mounted oppositely-pointed pawl-fingers thereon, one for each of said sets of ratchet-teeth, and a fixed shield to permit more or less of the ratchet-teeth of both sets to be exposed according to the thickness of the work, engagement of one of said pawl-fingers with its set of teeth lifting the presser, the other pawl-finger locking the presser when in engagement with its set of teeth, substantially as described. 24th.

In a sole-sewing-machine, a fixed work-support, a yielding presser having two sets of oppositely-inclined ratchet-teeth in alignment upon its bar, a fixed shield to permit more or less of the ratchet-teeth to be exposed according to the thickness of the work, a pawl-carrier having a constant throw, and two concentrically-mounted oppositely-pointed pawls thrown adapted to ride over the shield and engage the exposed ratchet-teeth at the ends thereof, one pawl serving to positively lift the presser and the other pawl to hold it clamped upon the work, substantially as described. 25th. In a wax-thread sewing-machine, stitch-forming devices, a wax-pot, a take-up intermediate said wax-pot and switch-forming devices, to draw thread from the former and co-operate with the latter in the formation of the stitch, and tension devices on said take-up, at the delivery end thereof and near the wax-pot respectively, to maintain the thread taut upon said take-up during its movement, substantially as described. 26th. In a sewing-machine, a take-up lever, bent between its ends, means to rock it, a thread-tension device near its fulcrum and a second tension device at its free end, to effect the drawing off and delivery of the needle-thread, and thread-guides intermediate said devices, whereby the thread is held taut on the take-up at all times, substantially as described. 27th. In a sewing-machine, a take-up lever bent between its ends, means to actuate it, a spring-clamp near its fulcrum, to bear upon the thread, an adjustable tension-sheave at the delivery end of said lever, and guide-sheaves intermediate said devices, to maintain the thread taut at all times on and during the movement of the said lever, substantially as described. 28th. In a wax-thread sewing-machine, stitch-forming devices, a wax-pot, a take-up intermediate said wax-pot and stitch-forming devices, to draw thread from the former and co-operate with the latter in the formation of the stitch, tension devices on said take-up, and adjusting means whereby said device may be made to act constantly and uniformly upon the thread, substantially as described. 29th. In a sewing-machine, a thread supply, stitch-forming devices, an intermediate take-up arm, a thread tension device thereon, adjusting means to cause said devices to act constantly and uniformly upon the thread, and means to move said arm to draw off thread from the supply and deliver it to the stitch-forming devices, and to thereafter draw the thread taut to complete the stitch, the tension device yielding to the pull of the thread when the stitch is completed, substantially as described. 30th. In a sewing-machine, a thread-supply, stitch-forming devices including a shuttle, a take-up arm located between said supply and stitch-forming devices and provided with a sheave, and with means to hold said sheave to act upon the thread with a constant and measured degree of friction to enable it to aid in drawing back the thread in completing the stitch, combined with means to move said arm positively, to give up to the shuttle the necessary thread-loop to pass around it, and thereafter to take up said thread, substantially as described. 31st. In a sewing-machine, a thread-supply, stitch-forming devices, including a rotatable shuttle, a take-up arm to draw thread from the supply during one direction of its movement, and to give up thread to the shuttle as required thereby in the formation of the loop, said arm having at one end a sheave and means to hold the said sheave to act upon the thread with a constant and measured degree of friction to enable it to draw back the thread and complete the stitch after withdrawing the loop of needle-thread from the shuttle, combined with means to move said arm positively, substantially as described. 32nd. In a wax-thread sewing-machine, a vibrating take-up having at its free end a frictionally-held tension-sheave, combined with an arc-shaped heating-surface against which the end of the take-up bears throughout its movement, to thus continuously and uniformly heat the said sheave and the thread as drawn off therefrom, substantially as described. 33rd. In a sewing-machine, a rotatable shuttle to pass entirely through a loop of thread, having a non-continuous cylindrical flange projecting rearward from the periphery of the shuttle-body, one end of said flange tapering in the direction of its length to form a hook-and-loop spreader, substantially as described. 34th. In a sewing-machine, stitch-forming devices comprising a hooked needle, a circularly-moving shuttle, and a looper combined with a take-up having a frictionally-held sheave thereon, adjusting means for said sheave, to cause it to act with a constant and measured degree of friction upon the thread, actuating mechanism for the take-up and looper, whereby the former gives up thread to the looper as it lays the thread in the hook of the needle, and needle and shuttle actuating means, continued movement of the take-up giving up needle-thread as the loop thereof passes around the shuttle, substantially as described. 35th. In a sewing-machine, a hooked-needle, a looper, a take-up having a frictionally-held sheave carried by and moving with it, means to move the looper to lay the thread into the hook of the needle and to provide sufficient thread for one side of the loop, a controlling device for the sheave, to cause it to act constantly and uniformly upon the thread, and take-up actuating mechanism, the take-up first giving up thread to the looper and thereafter continuing its movement in the same direction to give up the necessary thread for the other side of the loop, substantially as described. 36th. In a sewing-machine of the class described, the following instrumentalities, viz: a curved hooked needle, a circular-movable shuttle, a looper, and a take-up provided at its end with a frictionally-held sheave about which the needle-thread is wound, combined with means to move the said devices in the order substantially as described, whereby the take-up is made to give up to the looper the thread to be presented to the hook of the needle, and then by a

further movement in the same direction give up sufficient needle-thread to enable the shuttle to pass through a loop therein, when the take-up by a movement in the reverse direction pulls the thread of the loop discharged from the shuttle directly back from the work on which the stitch is made and completes the stitch, substantially as described. 37th. In a sewing-machine of the class described, the following instrumentalities, viz: a curved hooked needle, a circular-moving shuttle having a point to enter and expand the loop of needle-thread, combined with a take-up provided with a frictionally-held sheave, and means to move said sheave toward the material while the shuttle is passing through the loop of needle thread, and to move it away from the material after the loop of needle-thread has been carried around the shuttle, whereby the sheave is enabled to exert a direct pull on the needle-thread extended from it to the material when completing the stitch, substantially as described. 38th. In a sewing-machine, a rotatable shuttle having a contained bobbin, and independent face-plate have a recess in its face below the path of the thread, a finger to engage and move a portion of the thread into the recess to measure a fixed quantity of shuttle-thread, and means to actuate the finger at predetermined times, and an adjusting device to regulate the movement of the finger and thereby the amount of shuttle-thread drawn off, substantially as described. 39th. A circularly-moving shuttle having a hook provided with an inwardly-inclined breast, said shuttle having at its rear side an inwardly-directed groove, one side of which presents a bevel substantially tangent to the path of the needle, and a non-continuous flange extended toward but within the plane of the back of the shuttle to form the other side of said groove, said flange being tapered to join the base of the shuttle-hook, combined with a curved hooked needle adapted to enter said groove adjacent the stitch-forming point, the tapering part of said flange and the inclined breast of the hook serving to lift the thread from the hook of the needle, substantially as described. 40th. In a sewing-machine, a circularly-moving shuttle provided with a hook and having at its rear side a groove leading from the side of the point of said hook, combined with a curved, hooked needle to enter and stand in said groove during the passage of the shuttle through the loop of needle-thread, whereby the point of the needle may remain close to the stitch-forming point, in position to have the thread taken from it by the hook of the shuttle, substantially as described. 41st. In a sewing-machine of the class described, a shuttle having at its median line a hook provided with an inclined breast, and having a groove in its body extended inwardly to the plane of the path of the shuttle-hook point, combined with a curved hooked needle adapted to enter said groove, and stand, when fully retracted, with its hook substantially in the path of rotation of said hook-point, substantially as described. 42nd. In a sewing-machine of the class described, a curved hooked needle to form a loop, a work-support, a circularly-movable shuttle located above the work support and provided with a bobbin-case, and a face-plate provided with a thread-delivering nose extended to the periphery of the shuttle, the said nose receiving and aiding in delivering the cast off loop of needle-thread close to the material, substantially as described. 43rd. In a sewing-machine of the class described, a work-support, a curved hooked needle, a circularly-movable shuttle located in a vertical plane above the said work-support and at right angles to the path of the needle, said shuttle having its periphery oppositely bevelled and having a hook, the point of which is at one side of the median line of the shuttle, said shuttle having at its rear side and wholly within its body a groove open at the heel of the shuttle, and means to move the said shuttle at a variable speed to cause the needle to operate to take the needle-thread between the heel and point of the shuttle-hook, substantially as described. 44th. In a sewing-machine of the class described, a looper, a curved hooked needle and a shuttle, and means to move them, combined with a take-up arm provided with a frictionally-held thread-sheave, a controlling device for said sheave to cause it to act constantly and uniformly upon the thread, and means to move said thread-sheave in one direction to supply the thread required by the looper, the needle and the shuttle, and to move them in the opposite direction after the loop of needle-thread has been passed around the shuttle to draw the discharged loop back through the material, the take-up at all times keeping the thread taut between it and the devices manipulating it in the formation of the loop and taking up the loop as soon as discharged from said devices, substantially as described. 45th. In a sewing-machine of the class described, a work-support, having a recess therein, a guide-roll at the lower portion thereof and a take-up movable toward and from said guide-roll, combined with a yielding hook mounted in the recess in the work-support and in engagement with the thread between said guide-roll and the material, to normally deflect the thread slightly, but permitting the thread to assume a straight line when under tension to compensate for stretch in the thread, substantially as described. 46th. In a sewing-machine of the class described, a shuttle having a hook and provided at its rear side, within the plane of the back of the shuttle, with a circular groove which extends through the heel and the side of the hook adjacent its face, combined with a grooved needle, the point thereof when retracted remaining in said groove, substantially as described. 49th. In a sewing-machine, a shuttle, its support, and means to rotate the shuttle continuously in one direction at a variable speed, said means comprising two circular gears of different diameters, having an equal number of spiral teeth, whereby the gears rotate synchronously, the

teeth of the driving gear varying in angularity and length, substantially as described. 48th. In a sewing-machine, a shuttle, a guide in which it may rotate, a shuttle actuator and its shaft, and means to rotate the said shaft in one direction at a variable speed, said means including two gears having spiral teeth, the teeth of the driving gear varying in angularity and length, substantially as described. 49th. In a sewing-machine, a continuously rotated shuttle, a support therefor, and means to rotate the shuttle in one direction at a variable speed, said means comprising two gears having spiral teeth, the teeth of the gears varying in angularity and length, substantially as described. 50th. In a sewing-machine, an oscillating hooked needle, means to actuate it, a shuttle, and means to rotate it continuously in one direction at a variable speed, said means including two gears having spiral teeth varying in angularity and length, the teeth of the driving gear of greater angularity and length, cooperating with the teeth of lesser angularity and length on the driven gear to decrease the speed of the shuttle at the loop-taking point, substantially as described.

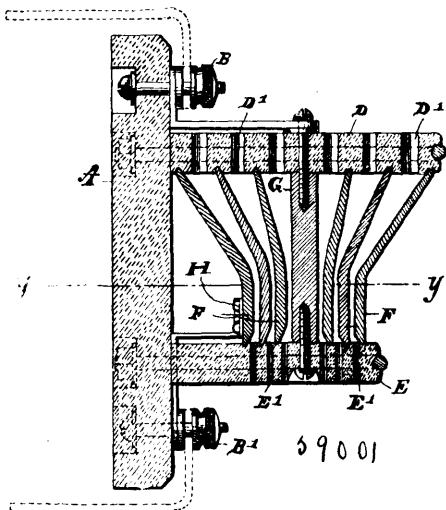
No. 59,000. Air Ship. (Vaisseau aerien.)



Thomas M. Crepar, William C. Gilbert and Arthur P. White, all of Grand Rapids, Minnesota, U.S.A., 11th February, 1898; 6 years. (Filed 16th September, 1897.)

Claim.—1st. An air ship having a gas shell, an aero-plane running around the sides of the gas shell, a cabin projecting upwardly from the bottom of the gas shell and into the interior thereof, the cabin opening at the sides of the gas shell, and having a power room beneath it, and propelling and controlling devices running from the cabin and power room to the exterior parts of the shell, substantially as described. 2nd. An air ship having a gas shell, an aero-plane running around the sides of the gas shell, a frame held at the front of the gas shell and in horizontal alignment with the aero-plane, a rocking aero-plane mounted within the frame and co-acting with the first-named aero-plane, and means for controlling the rocking aero-plane, substantially as described.

No. 59,001. Lightning Arrester. (Paratonnerre.)

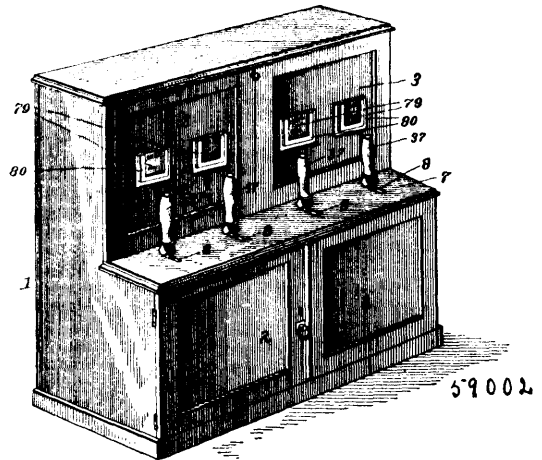


Cummings C. Chesney and John F. Kelly, both of Pittsfield, Massachusetts, U.S.A., 11th February, 1898; 6 years. (Filed 7th September, 1897.)

Claim.—1st. In a lightning-arrester, a series of concentric cylinders having flaring sides, said cylinders being spaced apart through-

out their length, suitable insulated supporting means and circuit-terminals therefor. 2nd. In a lightning-arrester, a series of concentric cylinders having flaring sides, insulated retaining pieces at opposite ends of said cylinders, said pieces having openings therein, circuit-terminals for the inside and outside cylinders. 3rd. In a lightning-arrester, a series of concentric cylinders having flaring sides, which successively increase in the angle of the apex, insulated supporting and retaining pieces at opposite ends of said cylinders, said pieces being perforated, circuit-terminals for the inside and outside cylinders. 4th. In a lightning-arrester, a series of concentric parts, spaced apart throughout, said parts being substantially parallel toward their lower ends, and flaring outwardly toward their upper ends, circuit-terminals therefor. 5th. In a lightning-arrester, a series of concentric parts nested together, but separated from each other throughout their entire length, the lower ends of said parts being parallel, while the upper ends flare outwardly, the flaring ends increasing successively in the angle of the apex, and circuit-terminals therefor. 6th. In a lightning-arrester, a nest of concentric cylinders having flaring sides, said parts being separated from each other, a line-terminal and a ground-terminal, the latter being connected to the outer cylinder, substantially as and for the purpose specified.

No. 59,902. Voting Machine. (Machine a voter.)



A. Genest and Company, assignee of Achille Genest, both of Gently River, Quebec, Canada, 11th February, 1898; 6 years. (Filed 28th August, 1897.)

Claim.—1st. In a voting machine, the combination with suitable registering mechanism, of an alarm adapted to be actuated thereby for indicating the registration of a vote, and means for locking the registering mechanism to prevent operation thereof, substantially as described. 2nd. In a voting machine, the combination with a series of winding reels and a tape passing thereover, of means for actuating said reels, an alarm adapted to be operated in conjunction with said reels for indicating the registration of a vote, and means for locking said actuating means to prevent simultaneous registration of a plurality of votes, substantially as described. 3rd. In a voting machine, the combination with a series of winding reels and a tape passing thereover, of an operating handle for actuating said reels, suitable connections between said reels and said handle, and means for locking said actuating means to prevent simultaneous registration of a plurality of votes, substantially as described. 4th. In a voting machine, the combination with a series of winding reels arranged in pairs and tapes passing thereover, of an operating handle for actuating each pair of said reels, a rock shaft suitably connected to said handles, an alarm for indicating the registration of a vote, and suitable connections between said alarm and the rock shaft, whereby the alarm is sounded when said shaft is operated, substantially as described. 5th. In a voting machine, the combination with a series of winding reels arranged in pairs, the tapes passing thereover, of an operating handle for actuating each pair of said reels, a rock shaft suitably connected to said handles, an alarm for indicating the registration of a vote, suitable connections between said alarm and rock shaft, whereby the alarm is sounded when said shaft is operated, and means for locking said handles to prevent simultaneous registration of a plurality of votes, substantially as described. 6th. In a voting machine, the combination with a series of winding reels arranged in pairs, and tapes passing over said reels, of a ratchet wheel carried by one of the reels of each of said pairs, an operating handle for actuating the said reel, a push rod connected to said handle and adapted to engage the teeth of said ratchet wheel, a pawl for preventing reverse rotation of said ratchet wheel, a series of oppositely disposed lever arms arranged adjacent to said pawl and push rod, and a yoke connected to said lever arms and adapted to lock the same in engagement with the push rod and the pawl for freeing the

latter from engagement with the ratchet wheel, substantially as described. 7th. In a voting machine, the combination with suitable registering mechanism, of means for actuating the same, a series of bolts adapted to engage said actuating means for locking the same, a releasing rod suitably connected to said bolts for freeing the same from engagement with said actuating means, and means for returning the releasing rod to its normal position when pressure thereon is removed, substantially as described. 8th. In a voting machine, the combination with suitable registering mechanism, of means for actuating the same, a series of spring-actuated bolts adapted to engage said actuating means to lock the same, a releasing rod for operating said bolts, link connections between said rod and the bolts, means for limiting the movement of said rods, substantially as described. 9th. In a voting machine, the combination with a suitable registering mechanism, of means for actuating the same, a series of spring-actuated bolts adapted to engage said actuated means to lock the same, a releasing rod for operating said bolts, a stop carried by said releasing rod, and a series of pins arranged adjacent thereto and adapted to be connected thereby for limiting movement of the rod, substantially as described. 10th. In a voting machine, the combination with suitable registering mechanism, of means for actuating the same, a series of bolts for locking said actuating means, a releasing rod suitably connected to said bolts for actuating the latter, and an alarm adapted to be operated in conjunction with the registering mechanism to indicate the registration of a vote, substantially as described. 11th. In a voting machine, the combination with suitable registering mechanism of means for actuating the same, a series of bolts for locking said actuating means, a releasing rod suitably connected to said bolts for actuating the latter, an alarm adapted to be operated in conjunction with the registering mechanism to indicate the registration of a vote, and means for preventing simultaneous registration of a plurality of votes, substantially as described. 12th. In a voting machine, the combination with suitable registering mechanism, of means for actuating the same, means for locking said actuating means, means for releasing said locking means, and an alarm adapted to be actuated in conjunction with the registering mechanism for indicating registration of a vote, substantially as described. 13th. In a voting machine, the combination with suitable registering mechanism, of a series of operating handles for actuating the same, a chain passing around said handles and adapted to prevent simultaneous registration of a plurality of votes, and wires connected to said chain for taking up the slack therein, substantially as described. 14th. In a voting machine, the combination with suitable registering mechanism, of a series of operating handles for actuating the same, a chain passing around said handles and adapted to prevent simultaneous registration of a plurality of votes, a staple carried by each of the said handles for retaining the chain thereon, and a guard plate also carried by each of the said handles for preventing downward movement of the chain, substantially as described. 15th. In a voting machine, the combination with suitable registering mechanism, of a series of handles for actuating the same, a chain passing around said handles adapted to prevent simultaneous registration of a plurality of votes, a staple carried by each of said handles adapted to retain the chain thereon, bearings also carried by the handles for facilitating movement of the chain, guard plates for preventing downward movement of the chain, rollers arranged adjacent to the chain and over which the latter passes, and means for taking up the slack in said chain, substantially as described. 16th. In a voting machine, the combination with suitable registering mechanism, of a series of operating handles for actuating the same, a rock shaft arranged adjacent to said handles and suitably connected thereto, an alarm, a lever for operating said alarm, and a staple carried by said rock shaft and adapted to contact with said lever, whereby the latter is adapted to actuate the alarm when the rock shaft is operated, substantially as described. 17th. In a voting machine, the combination with a casing provided with a series of sight openings, of a series of winding reels disposed in said casing and arranged in pairs, a tape passing over the reels of each pair, means for actuating said reels, and a roller arranged adjacent to each of said pairs of reels and above the sight opening corresponding thereto, whereby the tape is adapted to lie adjacent to said sight opening during its passage from one reel to the other, substantially as described. 18th. In a voting machine, the combination with a series of winding reels arranged in pairs, and tapes passing over said reels, of a series of operating handles for actuating said reels, a ratchet wheel carried by one of the reels of each pair, a push rod connected to each of said handles and engaging the teeth of the ratchet wheel arranged adjacent thereto, whereby when said handles are operated the reels are partially rotated, a rock shaft arranged adjacent to said handles, arms carried by said rock shaft, links pivotally connected to said arms and the operating handles, an alarm, a lever for actuating said alarm, suitable connections between the rock shaft and said lever, whereby when the said shaft is rocked the alarm is sounded, and means for locking the operating handles, substantially as described. 19th. In a voting machine, the combination with a series of winding reels arranged in pairs, and tapes passing over said reels, of a series of operating handles for actuating said reels, a ratchet wheel carried by one of the reels of each pair, a push rod connected to each of said handles and engaging the teeth of the ratchet wheel arranged adjacent thereto, whereby when said handles are operated the wheels are partially rotated, a rock shaft arranged adjacent to said handles, arms carried by said

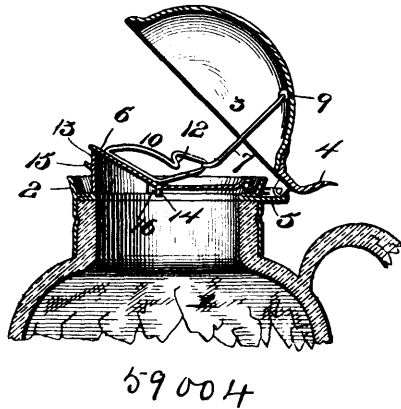
rock shaft, links pivotally connected to said arms and the operating handles, an alarm, a lever for actuating said alarm, suitable connections between the rock shaft and said lever, whereby when the said shaft is rocked the alarm is sounded, means for locking the operating handles, and means for preventing simultaneous registration of a plurality of votes, substantially as described.

No. 59,003. Process of Manufacturing Incandescible Materials. (*Procédé pour la fabrication de matériel incandescent.*)

The Canadian Sterling Light Company, Camden, assignee of William Lawrence Voelker, Elizabeth, both in New Jersey, U.S.A., 11th February, 1898; 6 years. (Filed 23rd August, 1897.)

Claim.—The process hereinbefore described for manufacturing incandescible materials, consisting in reducing the oxides of magnesium and calcium to salts, then decomposing the salts and recombining them into the oxides, then fusing the resultant mass and finally cooling to a solid state.

No. 59,004. Syrup Pitcher. (*Pot à sirop.*)



Elmer G. Lantz and Mrs. Mary E. Hendricson, both of Albany, Oregon, U.S.A., 11th February, 1898; 6 years. (Filed 28th January, 1898.)

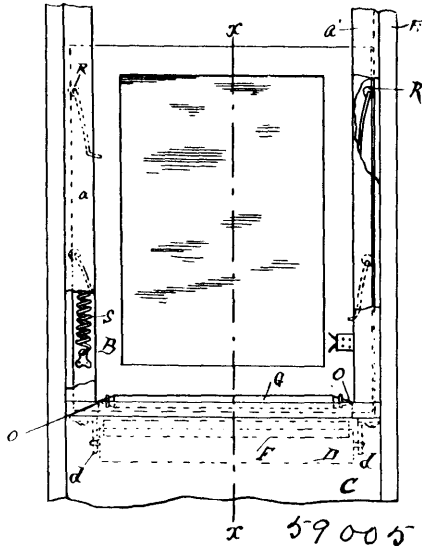
Claim.—1st. The combination with a syrup pitcher provided with inner and outer lids, of a guide mounted on the inner lid and provided with a shoulder, and a link carried by the outer lid and engaging said guide, whereby the two lids are loosely connected, said link being adapted to engage the shoulder of the guide to close the inner lid and cut off the flow of liquid before the outer lid closes, substantially as described. 2nd. The combination with a syrup pitcher provided with inner and outer lids, of a guide consisting of a loop mounted on the inner lid and provided at its top with a shoulder, and a link hinged to the outer lid and engaging the guide, substantially as and for the purpose described. 3rd. The combination of a syrup pitcher provided with inner and outer lids, a link loosely connecting the lids to cause the inner one to open after the outer lid and close before the same, and means for engaging the link in closing the lids, whereby the inner lid is held firmly closed by the outer lid for cutting off the flow of syrup positively, substantially as described. 4th. The combination of a syrup pitcher, provided with inner and outer lids, and means for loosely connecting the lids to cause the inner lid to open after the outer one and to close before the same, said means comprising a guide mounted on one of the lids, a link connected with the other lid and with the guide, and a stop arranged to be engaged by the link in closing the lids, whereby a positive connection between them is provided, substantially as and for the purpose described.

No. 59,005. Car Window. (*Fenetre de chars.*)

Solomon H. Boltz and Jonathan Stoal, both of Reading, Pennsylvania, U.S.A., 11th February, 1898; 6 years. (Filed 27th January, 1898.)

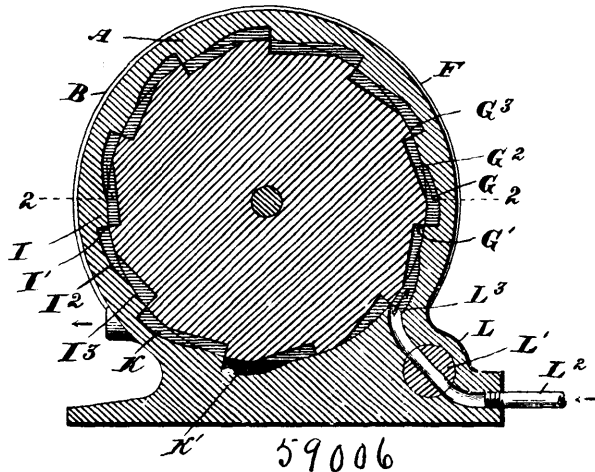
Claim.—In a car-window the frame A having hollow strips a^1 at either side thereof in which are secured coiled springs, the sash travelling in said frame, having said springs attached to the lower end thereof and adapted to be raised by said springs, a roller D secured in the casing below said window, on which is wound a screen, and a supplemental roller F arranged on a vertical line with the opening a^1 in the sill, an operating rod G, secured to the top of said screen and adapted to enter grooves b^1 in the lower end of said sash,

said sash having friction rollers R mounted on wire springs and embedded in the edges thereof, and adapted to bear against the frame



in the ways in which said sash travels, all substantially as and for the purpose set forth.

No. 59,006. Rotary Engine. (*Machine rotatoire.*)



Samuel W. Barr, Mansfield, Ohio, U.S.A., 14th February, 1898; 6 years. (Filed 28th January, 1898.)

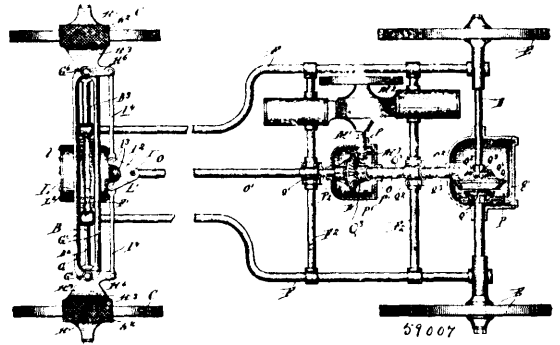
Claim.—A rotary engine, comprising a piston-head the circumference of which is formed with depressions or pockets, the walls of which form two parallel series of teeth for the impact of the steam, said packets being separated by transverse ribs and an annular separating rib, the transverse and annular separating ribs having their outer surfaces formed for contact with the interior of the cylinder in which the piston is rotatable, the cylinder being provided with an induction port opening into one series of pockets, and an eduction or exhaust port opening from the other series, the inner surface of the cylinder being formed with pockets in two parallel series to act in conjunction with the pockets of the piston-head, one of the pockets of both series in the cylinder being cut through the separating rib and forming a pocket extending entirely across the cylinder, and two pockets of one series of cylinder pockets being omitted, forming an extended curved surface in advance of and beyond the eduction of exhaust port, and one of the pockets of the series being omitted, forming an extended curved surface in advance of the induction port, substantially as and for the purpose set forth.

No. 59,007. Motor Vehicle. (*Voiture à moteur.*)

Frank Roswell McMullin and Charles Theodore Hildebrandt, both of Chicago, Illinois, U.S.A., 14th February, 1898; 6 years. (Filed 27th January, 1898.)

Claim.—1st. A motor-driven vehicle, comprising a running gear, a motor supported thereon, front and rear wheels on said frame,

one of said pairs of wheels being steering wheels, means for driving both pairs of said wheels comprising two differential gear-mechan-

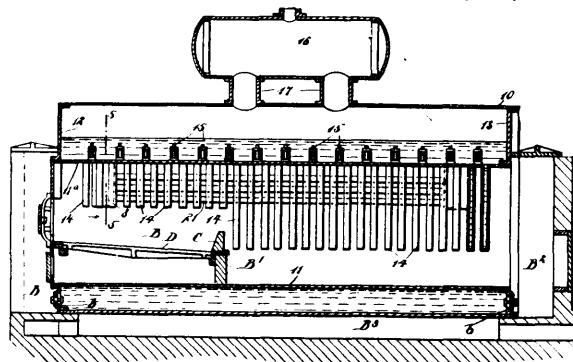


isms, one connected with each pair of wheels, and operative connections between said differential gear-mechanisms and the motor. 2nd. A motor-driven vehicle, comprising a running gear frame, a motor supported thereon, front and rear pairs of wheels on said frame, one of said pairs of wheels being steering wheels and being pivotally connected with said frame to swing on vertical axes, means for driving said wheels comprising two differential gear-mechanisms, one connected with each pair of wheels, and operative connections between said differential gear-mechanisms and the motor. 3rd. A motor-driven vehicle, comprising a running gear, a motor supported thereon, front and rear pairs of wheels on said frame, one of said pairs of wheels being steering wheels, means for driving said wheels comprising two differential gear-mechanisms, one connected with each pair of wheels, and differential gear connections between said motor and the gear-mechanisms of said wheels. 4th. A motor-driven vehicle, comprising a running gear frame, a motor supported thereon, front and rear axles connected with the frame, one of which comprises a steering axle, and means for driving both of said axles from the motor comprising two differential gear-mechanisms, one of which is carried by each of said axles, and operative connections between said motor and the said gear-mechanisms. 5th. A steering mechanism for vehicles, comprising a frame, a rotative shaft mounted therein, a spindle pivoted to said shaft by a flexible connection, a steering wheel on said spindle, and a yoke pivoted to the frame to swing on a vertical axis above said flexible connections, and having vertically rigid engagement with the spindle. 6th. A steering mechanism for vehicles, comprising a running gear frame, a rotative shaft mounted in one end of said frame, spindles pivoted to each end of said shaft by flexible connections, wheels on said spindles, said frame consisting of an upper horizontal member, two vertically arranged members connected therewith above said flexible connections of the spindles and shaft, and yokes pivoted to said vertical members to swing on vertical axes, said yokes being connected with the wheel spindle by vertically rigid connections. 7th. A motor-driven vehicle, comprising a running gear frame, a motor supported thereon, a steering axle comprising two sections arranged in axial alignment with each other, wheels on the outer ends of said axle, and means for driving said axle from the motor, comprising a differential gear mechanism on said axle, and operative connections between said gear-mechanism and the motor, said steering wheels being so arranged as to permit horizontal oscillatory movement thereof with relation to said gear mechanism. 8th. A motor-driven vehicle, comprising a main frame, a motor supported thereon, a frame comprising a rotative shaft, spindles which are pivoted thereto by flexible connections, said rotative shaft comprising a shaft section, and a sleeve or tubular section which have telescopic engagement at their inner ends, wheels carried by said spindles, means for preventing vertical flexure between said shaft and spindles, and means for driving said shaft and spindles, and means for driving said shaft and spindles from the motor, embracing a differential gear-mechanism on said shaft, and operative connections between said gear-mechanism and the motor. 9th. A motor-driven vehicle, comprising a running gear frame, a motor supported thereon, an axle rotatively mounted in the rear part of said frame, a rotative shaft mounted in the forward end thereof, said axle and shaft each comprising a shaft section, and a sleeve section which have telescopic engagement at their inner ends, and means for driving both said axle and shaft from the motor, comprising a differential gear-mechanism carried by said axle and shaft, and operative connections between said motor and the gear-mechanism. 10th. A steering mechanism for vehicles, comprising a steering frame upon which the body of the vehicle is supported, a rotative shaft mounted in said frame, a spindle pivoted to said shaft by a flexible connection, a steering wheel on said spindle and a yoke pivoted to the frame to swing on a vertical axis above said flexible connection, and having a vertically rigid engagement with the spindle. 11th. A steering mechanism for vehicles, comprising a steering frame upon which the body is supported, a rotative shaft mounted in said frame, a spindle pivoted to said shaft by a flexible connection, a steering wheel on said spindle, a yoke pivoted to the frame to swing on a vertical axis above said flexible connection and having a vertically rigid engagement with the spindle, a rotative

shaft provided with a steering wheel which is located within reach of the operator, and operative connections between said shaft and yoke. 12th. A steering mechanism for vehicles, comprising an intermediate frame upon which the body of the vehicle is supported, a shaft rotatively mounted in said frame, spindles pivoted to each end of the shaft by flexible connections, wheels on said spindles, said frame consisting of an upper horizontal member, two vertically arranged members connected therewith above said flexible connection, and yokes pivoted to said vertical frame members to swing on vertical axes, said yokes being connected with the wheel spindles by vertically rigid connections. 13th. A steering frame for vehicles, comprising an intermediate frame upon which the body of the vehicle is supported, yokes pivoted to the opposite ends of the same to swing on vertical axes, a shaft rotatively mounted in said frame and having vertically rigid engagement at its opposite ends with said yokes, wheels on said shafts between the arms of the yokes, and flexible joints in said shaft vertically below the pivot between said yokes and intermediate frame at each end thereof. 14th. A steering mechanism for vehicles, comprising an intermediate frame upon which the body of the vehicle is supported, a shaft rotatively mounted in said frame, spindles pivoted to each end of the shaft by flexible connections, wheels on said spindles, said frame consisting of an upper horizontal member, two vertically arranged members connected therewith above said flexible connection, and yokes pivoted to said vertical frame members to swing on vertical axes, said yokes being connected with the wheel spindles, rearwardly extending arms on said yokes, and a shaft rotatively mounted in the frame and provided on one end thereof with a hand-wheel and connected at its opposite end with said arms of the yokes. 15th. A steering mechanism for vehicles comprising an intermediate frame upon which the body of the vehicle is supported, a shaft rotatively mounted in said frame, spindles pivoted to each end of the shaft by flexible connections, wheels on said spindles, said frame consisting of an upper horizontal member, two vertical members connected therewith and arranged vertically above said flexible connection, and yokes which engage said spindles by vertically rigid connections, said yokes being provided with inwardly extending apertured arms which are pivoted to said vertical members so as to swing upon vertical axes. 16th. In a vehicle running gear, the combination with two oppositely arranged longitudinal side members, an axle connected with the rear ends thereof, and an axle frame provided with a horizontally arranged cylindrical casing, of a bolster block mounted on said casing to which the forward ends of said side members of the frame are attached. 17th. In a vehicle running gear, the combination with two oppositely arranged longitudinal side members, an axle connected to the rear ends thereof, and a steering frame provided with a rotative shaft, a motor on the vehicle, gear mechanism between said motor and shaft of the steering frame, a cylindrical casing surrounding the gear mechanism on said shaft, of a bolster block mounted on said casing and provided with laterally extending arms with which the forward ends of said side members are connected, and means for securing said block upon the casing. 18th. In a vehicle running gear, the combination with oppositely arranged longitudinal side members, an axle connected with the rear ends thereof and a front axle frame, of means for pivotally connecting said frame with the forward ends of said longitudinal members to swing on a horizontal axis, comprising a cylindrical casing supported on said frame, a bolster block pivotally mounted on the casing and provided with oppositely and laterally extending arms with which the forward ends of the said members are connected, laterally extending lugs on said block and a strap extending between the opposite ends of said lugs and embracing said casing. 19th. In a motor-driven vehicle, the combination of a running gear embracing oppositely arranged longitudinal side members, an axle connected with the rear ends thereof, a frame provided with a rotative shaft, a motor on the vehicle, gear-mechanism between said shaft and said motor, and a cylindrical casing inclosing the gear-mechanism of said shaft, of a bolster block mounted on said casing and with which the casing has pivotal engagement, means for connecting the forward ends of the said members to the said block, and means for holding said block upon the casing. 20th. In a motor-driven vehicle, the combination with the running gear embracing oppositely arranged longitudinal side members, an axle connected with the rear ends thereof, a steering frame embracing a rotating shaft, spindles pivoted to the opposite ends thereof by universal joint connections, means for preventing vertical flexure between said shaft and spindles, a motor on the vehicle, gear connections between said motor and said shaft, and a cylindrical casing inclosing the gear-mechanism of said shaft, of a bolster block pivotally mounted on said casing, to which the forward ends of the side members of the running gears are connected, and means for holding said block upon the casing. 21st. In a motor-driven vehicle, the combination with the running gear embracing oppositely arranged longitudinal side members, an axle connected with the rear ends thereof, a steering frame embracing a rotative shaft spindles pivoted to the opposite ends thereof by flexible connections, means for preventing said vertical flexure between said shaft and spindles, a motor on the vehicle, gear connections between said motor and said shaft, and a cylindrical casing inclosing the gear mechanism of said axle, of a bolster block pivotally mounted on said casing to which the forward ends of the side bars of the running gears are connected, and means for holding said block on the casing comprising laterally extend-

ing lugs on said block, and a strap extending between the opposite ends of said lugs and embracing the casing. 22nd. In a motor-driven vehicle, the combination with a running gear embracing oppositely arranged longitudinal side members, an axle connected with the rear ends thereof, a steering frame comprising an upper horizontal member, two vertical members connected therewith, yokes pivoted to said vertical members, a rotative shaft mounted in said frame, spindles mounted in the yokes and pivoted to the opposite ends of the shaft by flexible connections vertically under said pivotal connection of said yokes with the frame, a motor on said vehicle, gear connections between said motor and said shaft of the steering frame, and a cylindrical casing enclosing the gear-mechanism on said steering axle and supported in said frame, of a bolster block which is pivotally engaged with said casing, and means for connecting the forward ends of said side bars with said block. 23rd. In a motor-driven vehicle, the combination with a running gear embracing oppositely arranged longitudinal side members, an axle connected with the rear ends thereof, a steering frame comprising an upper horizontal member, two vertical members connected therewith, a rotative shaft mounted in said frame, spindles connected with the shaft by flexible connections, yokes pivoted to said vertical members of the frame to swing on a vertical axis vertically above said flexible connections of the shaft spindles and in the lower ends of which the spindles are mounted, a motor on the vehicle, gear connections between said motor and shaft, a cylindrical casing enclosing the gear-mechanism of said shaft, and means for supporting said casing in the frame comprising a bar connected at its opposite ends with said vertical members of the frame and engaging the lower side of said casing, of a bolster block pivotally engaged with said casing, means for securing the forward ends of the side members thereto, and means for holding said block upon the casing.

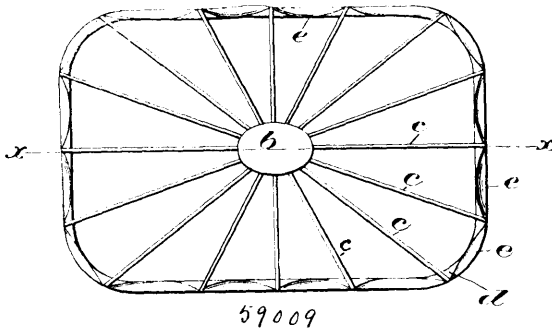
No. 59,008. Steam Boiler. (*Chaudière à vapeur.*)



Enos Hook, New York, State of New York, U.S.A., 14th February, 1898; 6 years. (Filed 31st January, 1898.)

Claim.—1st. In a steam boiler, the combination with an outer and an inner shell, end walls for the boiler, and water tubes depending from the top wall of the inner shell to receive heat from a fire chamber in the inner shell, of water tubes secured by their ends within header boxes, affixed to the inner shell of the boiler and in open communication with the water space of said boiler, substantially as described. 2nd. In a steam boiler, the combination with an outer and an inner shell, walls engaging the ends of said shells to produce an annular water space for the boiler, and water tubes depending from a flat crown sheet on the inner shell, so as to be enveloped by heat produced in a fire chamber within the inner shell, of sets of longitudinally disposed water tubes at opposite sides of the inner shell, between the depending water tubes and said inner shell, and a header box for each end of each set of tubes, which boxes are secured on the inner shell and are in open communication with the annular water space of the boiler, substantially as described. 3rd. In a steam boiler, the combination with an outer and an inner shell, end walls for the boiler, spacing the inner shell from the outer shell, a crown sheet on the inner shell, crown bars therefor, and water tubes depending from said crown sheet between the crown bars, of hollow header boxes secured on the inner wall of the inner shell, between said shell and the depending water tubes at each side of the boiler, and horizontal water tubes having their ends affixed in one of the walls of the header boxes and spaced apart therein, the opposite walls of said header boxes being apertured and said apertures being closed, the sides of the boxes attached to the boiler shell being in open communication with the water space of the boiler, substantially as described. 4th. In a steam boiler, the combination with an outer and an inner shell, end walls for the boiler, spacing the inner shell from the outer shell, and depending water tubes closed at their lower ends and hung from the upper side of the inner shell, of series of horizontally disposed water tubes at each side of the depending tubes, said water tubes having their ends in open communication with header boxes communicating with the water space of the boiler, and series of heat conducting flues located in the water space of the boiler and affixed at their ends in the end walls of the boiler, substantially as described.

No. 59,009. Canopy Top. (*Capote de voiture.*)

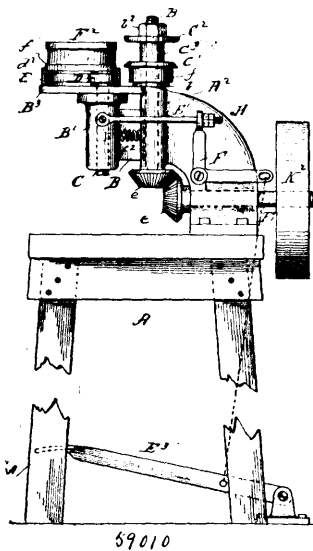


Chauncey Thomas, Boston, Massachusetts, U.S.A. 14th February, 1898; 6 years. (Filed 27th January, 1898.)

Claim.—1st. A canopy-top, composed of a centre-piece, an edge-frame provided with a series of concavities, and a radial series of ribs connecting said centre-piece and said edge-frame at points between said concavities, and a top cover applied to said frame, the cover overlapping the ribs and following the concavities of the edge-frame, substantially as described. 2nd. A canopy-top, consisting of a centre-piece, an edge-frame composed of two layers *d, d'*, the upper surface of the layer *d* being provided with a series of concavities *e*, a series of radial ribs connecting said centre-piece and edge-frame, and a top cover covering all the said top and having its edges confined between the two layers of the edge-frame, substantially as described. 3rd. A canopy-top, composed of a centre-piece, an edge-frame provided with a series of concavities, and a radial series of ribs connecting said centre-piece and said edge-frame at points between said concavities, and a top cover applied to said frame, the cover overlapping the ribs and following the concavities of the edge-frame, the edge of said cover being slitted opposite the outer ends of the said ribs, substantially as described. 4th. A canopy-top frame, composed of a centre-piece, an edge-frame provided with concavities, and a series of ribs connected with said centre-piece and engaging said edge-frame, substantially as described. 5th. A canopy-top frame composed of a centre-piece, an edge-frame provided with concavities, and a series of ribs connected with said centre-piece and engaging said edge-frame, the outer ends of said ribs projecting above the upper side of the said edge-frame, substantially as described. 6th. A canopy-top frame composed of a centre-piece, an edge-frame provided with concavities, and a series of ribs connected with said centre-piece and engaging said edge-frame, the outer ends of said ribs being bevelled at their undersides to rest on said edge-frame, and means to unite said ribs and edge-frame, substantially as described.

No. 59,010. Can-head Crimping Machine.

(*Machine à gaufrer.*)



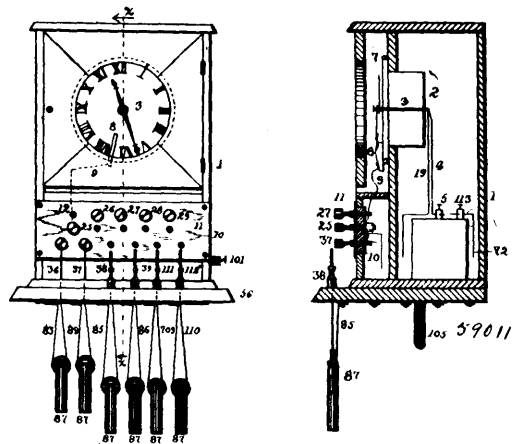
James F. Neilson, New Westminster, British Columbia, Canada, 14th February, 1898; 6 years. (Filed 19th November, 1897.)

Claim.—1st. In a can-end crimping machine, the combination with the rotary crimping disc, of a loose can-holding ring, of

mechanism for throwing the can-holding ring toward the crimping disc so as to cause the said disc to engage with and crimp the flange of the can carried by the holding ring, and of devices for imparting rotary motion to the said can holding ring. 2nd. In a can-end crimping machine, the combination with the crimping mechanism, of a loose can-holding ring shaped to conform to the shape of the can to be crimped, and of mechanism for moving the can-holding ring toward and from the crimping disc. 3rd. In a can-end crimping machine, the combination with the crimping mechanism, of a loose can-holding ring shaped to conform to the shape of the can to be crimped and of devices for imparting rotary movement to the can-holding ring. 4th. A can-end crimping machine, provided with loosely working and removable can-seat or holder, consisting of a rotatable holding ring shaped to conform to that of the can to be crimped. 5th. In a can-end crimping machine, the combination with the crimping mechanism, of a loose can-holding ring shaped to conform to that of the can to be crimped, a seat formed therein upon which the can rests, and of device for placing the can carried by the holder into engagement with the crimping mechanism and imparting rotary motion to the said holder. 6th. In a can-end crimping machine, the combination with the crimping mechanism, of a loosely-working can-holding ring shaped to conform to the can to be crimped, mechanism which moves the can-holding ring carrying the can towards and from the crimping mechanism and imparts rotary motion to the can-holding ring, and of a device for holding the can in its seat during the crimping operation. 7th. In a can-end crimping machine, the combination with the rotatable crimping spindle, of the sleeve within which the same works, the crimping device carried by the said spindle, the guide spindle working within a guide-spindle sleeve, a spring clamp connection between the said sleeves, of mechanism for moving the guide-spindle sleeve toward the sleeve of the crimping spindle, and of a can-holding seat carried by said guide-spindle sleeve. 8th. In a can-crimping machine, the combination with the crimping spindle, of the crimping disc carried thereby, the elastic-cushioned collar mounted upon the said spindle below the crimping disc, a guide spindle provided with a circular head, a can-holding ring loosely fitting over the said head, said ring conforming to the shape of the can to be crimped, and of mechanism for moving the holding ring toward the crimping disc in order to clamp the said ring between the head of the guide spindle and the face of the roll carried by the crimping spindle so as to impart rotary motion to the said can-holding ring. 9th. In a can-end crimping machine, the combination with the crimping mechanism, of a can holding ring shaped to conform to the shape of the can to be crimped, and of the rolls or spindles between which the can-holding ring is located. 10th. In a can-end crimping machine, the combination with the crimping mechanism, of a removable can-holding ring shaped to conform to that of the can to be crimped, and of mechanism for placing the can carried by the holding ring into engagement with the crimping mechanism.

No. 59,011. Electric Signal Clock.

(*Horloge à signal électrique.*)

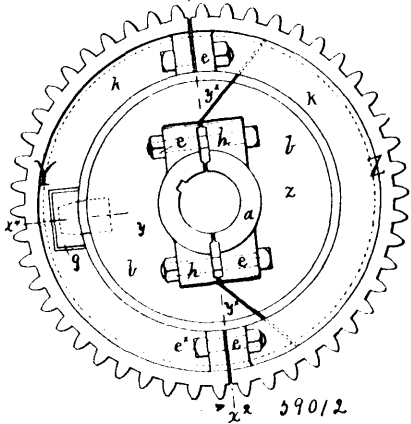


Frank C. Jordan, Wadsworth, Ohio, U.S.A., 14th February, 1898; 6 years. (Filed 9th August, 1897.)

Claim.—1st. The combination with a clock, having its hour-hand in connection with one pole of a battery of contact fingers adapted to make connection with said hour hand, and connected with a switch-board and one post of a series of bells, the other posts of said bells connected with the opposite pole of said battery, and sliding plates to simultaneously connect said contact plates, to cause all of said bells to ring by the contact of said hour hand and any of said fingers, substantially as shown and described. 2nd. The combination of a clock, having its hour-hand in connection with one pole of a battery, of contact fingers adapted to make connection with said hour-hand, a series of transverse plates each connected with a con-

tact finger, a series of detached plugs adapted to connect said plates, a series of dependent plates connected with said transverse plates, a series of plugs each connected with one pole of a bell and adapted to connect with said dependent plates, a series of independent bells connected with said last named plugs and with the opposite pole of said battery, substantially as shown and described. 3rd. The combination of a clock and battery, the clock having its hour-hand in connection with one pole of the battery, a series of electric bells each having one pole in connection with the opposite pole of the battery, a multiple switch-board consisting of a perforated non-conducting base 10, a series of independent plates 50, 51, 52, 53, 54, on said base connected severally with contact fingers adapted to make connection with said hour-hand, said plates arranged to be connected by plugs, a number of series of plates as 88, 43; 89, 46; 90, 47; 91, 48; 92, 49; each of these series as 91, 48; and one of said independent plates as 53, being all electrically connected together, and plugs 36, 37, 38, 39, 111, 112, arranged to connect with any of said plates, said plugs being connected with said bells, substantially as shown and described.

No. 59,012. Gear Wheel. (Roue d'engrenage.)



Joseph Patrick Mullin, Arlington, New Jersey, U.S.A., 14th February, 1898; 6 years. (Filed 28th January, 1898.)

Claim.—1st. A split-wheel comprising a hub centre and a rim, both sectional, and respectively provided with an interlocking peripheral edge and groove and with integral means for preventing lateral movement of one on the other, means for securing together the sections of the rim and means for securing together the sections of the hub-centre. 2nd. A split-wheel comprising a sectional hub-centre with a bevelled periphery or edge, a sectional rim having a circumferential groove to receive said edge of the hub-centre when the parts are fitted, whereby lateral displacement of one part on the other is prevented, means independent of the centre for drawing and securing the sections of the rim together and means independent of the rim, for securing the sections of the hub-centre together. 3rd. A split-wheel consisting of a hub-centre of circular contour provided with a bevelled periphery edge *c*, and dove-tail groove *d*, the rim provided with circumferential groove *c'* and peripheral edge *d'*, these latter being adapted to fit and interlock with the edge *c* and groove *d* on the hub-centre and means for securing together the sections of the hub-centre and the sections of the rim. 4th. A split-wheel comprising an annular, sectional rim, and a sectional hub-centre, said rim and centre having circular interlocking parts and laterally overlapping parts which prevents lateral displacement, the division of said hub-centre being unequal, whereby both joints of the hub-centre are overlapped by the same section of the rim. 5th. A split-wheel comprising an annular, sectional rim and a sectional hub-centre, said rim and centre having circular interlocking parts and lateral overlaps, and being held against relative displacement, the one on the other, and a safety key *f*, engaging registering key ways in the respective rim and centre sections. 6th. A split-wheel comprising a sectional annular rim and a sectional circular hub-centre, on which the rim fits and is held, one of said parts having a circumferential groove which receives an edge on the other part and overlaps it at both sides to avoid lateral displacement, means independent of the rim which secure the sections of the centre together and means independent of the centre which draw together the sections of the rim so that it clamps the centre tightly.

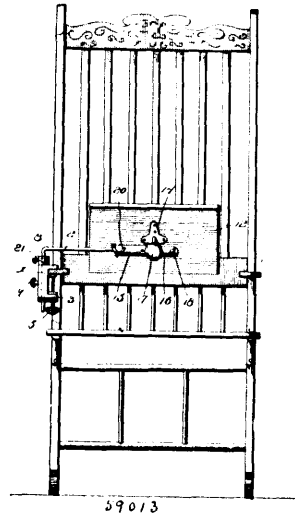
No. 59,013. Table Attachment for Chairs and Beds.

(Attache de table pour chaises et lits.)

Francis Thomas Heatly, Comanche, Iowa, U.S.A., 14th February, 1898; 6 years. (Filed 28th January, 1898.)

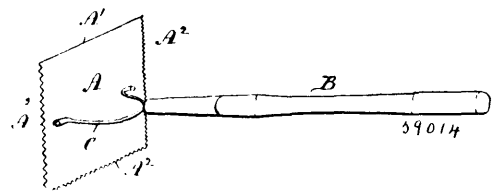
Claim.—1st. In an attachment for chairs, beds and the like, the combination with a standard bearing a rest or support, of a clamp comprising a bar having a longitudinal opening, lateral extensions at one side, and a right-angulary-disposed extension having an

opening at right angles to the opening of the bar, and clamp screws for securing the clamp to the article to which the attachment is to



be applied and for securing the standard in one or the other of the aforesaid openings in an adjusted position, substantially as set forth. 2nd. In an attachment for beds, chairs and the like, the combination of a rest or support, a ball applied to the support, a ball-socket clamp for securing the ball and support in any desired position, and a standard for receiving and carrying the ball-socket clamp, substantially as set forth. 3rd. In an attachment for beds, chairs and the like, the combination of a support or rest, a ball applied thereto, a ball-socket clamp for securing the ball and support in any adjusted position, a standard, and means for adjustably connecting the ball-socket clamp with the standard, substantially as set forth. 4th. In an attachment for chairs, beds and the like, the combination of a support or rest, a ball applied thereto, a ball-socket clamp consisting of an end sleeve, an end clamp, and an intermediate socket, the latter receiving the aforesaid ball and adapted to grip and hold it and the support in an adjusted position when drawing the parts of the end clamp together, a standard, and means for adjustably connecting the ball-socket clamp with the standard in an adjusted position, substantially as set forth.

No. 59,014. Cattle Comb. (Etrille.)



James Levi, Pakenham, Ontario, Canada, 14th February, 1898; 6 years. (Filed 31st January, 1898.)

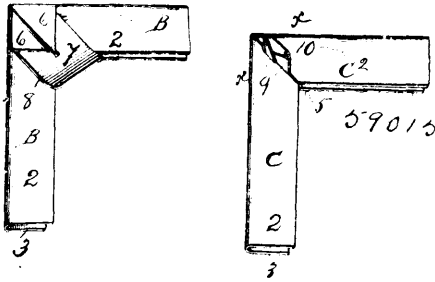
Claim.—1st. As an improved article of manufacture, a cattle comb comprising a sheet metal rectangular blade *A*, having a plain and notched edges forming teeth of different sizes, and a handle *B*, secured at the end to the middle of the plate and at right angles thereto, as set forth. 2nd. A cattle comb comprising a blade *A*, notched on three edges to form teeth of different sizes, and a handle *B*, secured at the end to the middle of the blade at right angles thereto, as set forth.

No. 59,015. Picture Frame. (Cadre.)

John A. Bower, Pittsburg, Pennsylvania, U.S.A., 14th February, 1898; 6 years. (Filed 31st January, 1898.)

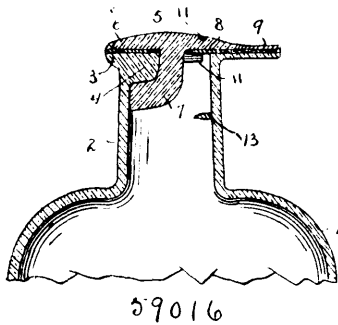
Claim.—1st. A frame, consisting of a series of side pieces, each having a front and rear part, the front part of each piece terminating in a diagonal or mitre cut, and the rear part having triangular portions of each end bent up rearwardly of said rear part to constitute a member to unite it to the bent end of another side piece, substantially as described. 2nd. A frame, consisting of a series of side pieces, each having a front and rear part, the front part of each

piece ending in a mitre cut, and the rear part having each end bent rearwardly of said rear face upon a mitre-line parallel with the



mitre cut and the portions beyond said mitre-line, clasped together, substantially as described.

No. 59,016. Bottle. (Bouteille.)



Martin R. Schaffer, Slatington, Pennsylvania, U.S.A., 14th February, 1898; 6 years. (Filed 25th January, 1898.)

Claim.—1st. In a bottle of the class described, the combination with the neck thereof, provided with an inwardly projecting lug, of a stopper mounted upon the exterior of the neck and having means for engagement with said lug, and sealing tabs arranged at the exterior of the neck for locking the stopper into engagement therewith, substantially as set forth. 2nd. In a bottle of the class described, the combination with the neck thereof provided with an inwardly projecting lug, of a stopper adapted to be mounted on said neck and provided with a locking hook adapted to engage with said lug, and keepers arranged upon the neck and adapted to lock said hook into engagement with the lug, substantially as set forth. 3rd. In a bottle of the class described, the combination with the neck thereof provided with an inwardly projecting lug, of a stopper adapted to be mounted on said neck, and provided with a locking hook adapted to engage with said lug to retain the stopper upon the neck—keepers carried by said neck and adapted to lock said hook into engagement with said lug, and sealing tabs formed on the neck and on the stopper, and adapted to be secured together so as to seal the bottle, substantially as set forth. 4th. In a bottle of the class described, the combination with the neck thereof provided with an inwardly extending lug and having a series of inwardly projecting pins arranged in different planes and adapted to prevent insertion within the neck of a stopper after the original stopper has been removed therefrom, of a stopper having at its lower side a locking hook adapted to engage the outwardly extending lug of the neck, means for hermetically sealing the stopper on the neck, and keepers carried by the neck and adapted to retain the locking hook in engagement with the inwardly extending lug of the neck and preventing disengagement of the same therefrom, substantially as set forth. 5th. In a bottle of the class described, the combination with the neck thereof provided with an inwardly extending lug and having a series of inwardly projecting pins arranged in different planes adapted to prevent insertion within the neck of a stopper after the original stopper has been removed therefrom, of a stopper having at its lower side a locking hook adapted to engage with the inwardly extending lug of the neck, means for hermetically sealing the stopper on the neck, keepers carried by the neck and adapted to retain the locking hook in engagement with the inwardly extending lug of the neck and prevent disengagement therefrom, and sealing tabs formed on the neck and the stopper, said tabs being adapted to be sealed together to securely retain the stopper in said neck, substantially as set forth. 6th. In a bottle of the class described, the combination with the neck thereof, provided with an inwardly extending lug and having a series of inwardly projecting pins arranged in different planes, said pins being adapted to prevent the insertion within the neck of a stopper

after the original stopper has been removed therefrom, said neck being further provided with a series of keepers, of a stopper adapted to be mounted upon the neck and provided with a locking hook, and also having a lining whereby said stopper may be hermetically sealed to the neck, said locking hook being adapted to engage with the inwardly extending lug of the neck and be retained in engagement therewith by said keepers, and sealing tabs formed on the neck and the stopper and adapted to be securely fastened together so as to seal the bottle, substantially as set forth. 7th. In a bottle of the class described, the combination with the neck thereof, provided with an inwardly extending lug and having a series of inwardly projecting pins arranged in different planes, said pins being adapted to prevent the insertion within the neck of a stopper after the original stopper has been removed therefrom, said neck being further provided with a series of keepers, of a stopper adapted to be mounted upon the neck provided with a locking hook and also having a lining whereby said stopper may be hermetically sealed to the neck, said locking hook being adapted to engage with the inwardly extending lug of the neck and be retained in engagement therewith by said keepers, a sealing tab formed integrally with the neck and corresponding with the sealing tab of the stopper, said tabs being adapted to be securely fastened together so as to seal the bottle, and be fractured to permit opening of the latter, substantially as set forth. 8th. In a bottle of the class described, the combination with the neck thereof provided with an inwardly extending lug, and having a series of inwardly projecting pins arranged in different planes, said pins being adapted to prevent the insertion within the neck of a stopper after the original stopper has been removed therefrom, said neck being further provided with a series of keepers, of a stopper adapted to be mounted upon the neck and provided with a locking hook, and also having a lining whereby said stopper may be hermetically sealed to the neck, said locking hook being adapted to engage with the inwardly extending lug of the neck and be retained in engagement therewith by said keepers, said stopper being further provided with a plurality of fracture-grooves, a sealing tab formed integrally with the neck and corresponding with the sealing tab of the stopper, the sealing tab of the latter being adapted to be seated and securely fastened upon the sealing tab of the neck, whereby the bottle is sealed, substantially as set forth. 9th. In a bottle of the class described, the combination with the neck thereof provided with an inwardly extending lug, the lower side of which is bevelled, and having a series of inwardly projecting pins arranged in different planes, said pins being adapted to prevent the insertion within the neck of a stopper after the original stopper has been removed therefrom, said neck being further provided with a series of keepers of a stopper adapted to be mounted upon the neck and provided with a locking hook the upper side of which is bevelled to correspond with the bevelled lower side of the inwardly projecting lug, and also having a lining whereby said stopper may be hermetically sealed to the neck, said locking hook being adapted to engage with the inwardly extending lug of the neck and be retained in engagement therewith by said keepers, said stopper being further provided with a plurality of fracture-grooves, a sealing tab formed integral with said stopper, and a sealing tab formed integral with the neck and corresponding with the sealing tab of the stopper, the sealing tab of the latter being adapted to be held and securely fastened upon the sealing tab of the neck, whereby the bottle is sealed, substantially as set forth.

No. 59,017. Process of Preparing Feed for Stock.

(*Procédé pour préparer le fourrage pour le bétail.*)

Simon Francis McKenzie, Vancouver, British Columbia, Canada, 14th February, 1898; 6 years. (Filed 30th November, 1897.)

Claim.—Cattle feed treated to molasses or a sweetened liquid sufficiently to make it of a glutinous nature and pressed into cakes or bricks, the said treatment makes the bricks or cakes, hold together, and resist the atmospheric changes without damage, as set forth.

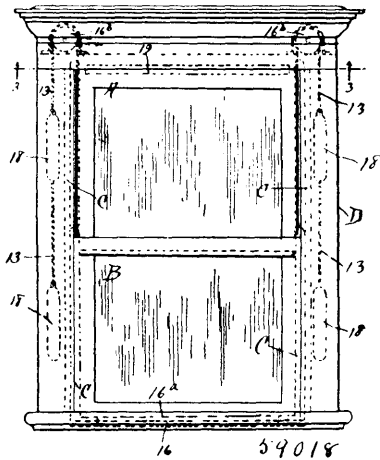
No. 59,918. Window Frame and Sash.

(*Cadre et châssis de fenêtres.*)

David W. Trotter, Butte, Montana, U.S.A., 14th February, 1898; 6 years. (Filed 31st January, 1898.)

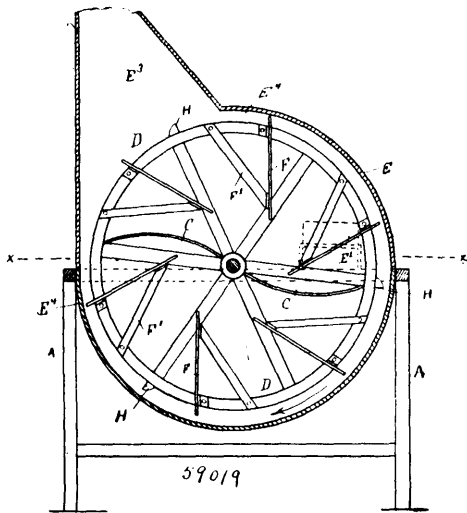
Claim.—1st. A window sash provided with grooves extending through its side and bottom edges, two L-shaped yokes the longer portions of which are fitted in the vertical slots at the side edges of the sash, and the shorter portions of which are pivoted in the horizontal slot at the bottom edge of the sash, and a plate for each yoke, the plates being respectively fitted in slots formed in the upper extremities of the yokes and the plates lying snugly against the upper edge of the sash to prevent the accidental downward movement of the yokes, substantially as described. 2nd. A window sash having grooved side and bottom edges, L-shaped yokes having their vertical portions fitted within the grooves in the side edges of the sash and their horizontal portions fitted within the groove within the bottom edge of the sash, the upper extremities of the yokes being respectively extended above the sash, and each of said upper extremities being provided with a slot forming a hook, the hook

being adapted to carry a weight cord and each yoke also having a recess respectively adjacent to the slots, and a plate for each recess



of the yokes, the plates respectively fitting within the recesses and bearing against the upper edge of the sash, substantially as described.

No. 59,019. Combined Feed Cutter and Blower.
(*Coupe-paille et souffleur combinés.*)

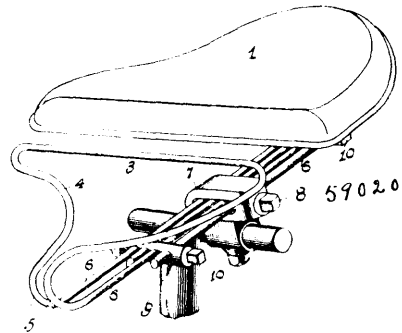


David M. Thom, Watford, Ontario, Canada, 14th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. In a combined cutter and blower, the combination of a fan-case, a wheel located within the fan-case, carrying fans, the inner edges of which are located in advance of a radial line between the centre of said wheel and the point of attachment of the fan to the periphery thereof, substantially as and for the purpose set forth. 2nd. In a combined feed-cutter and blower, consisting of a fan-wheel carrying knives revolving in a case, and having an air-inlet and a delivery-pipe, radial scrapers attached to the periphery of the wheel and running closely within the fan-case, and adapted to cut off the vegetable gum forming thereon as fast as the same is formed, substantially as described. 3rd. In a combined blower and feed-cutter, the combination of a fan-wheel having fan-blades, the inner faces of which are located in advance of a radial line, an air-inlet and an air-outlet located in the upper portion of the said fan-case, said outlet being funnel-shaped in form in the direction of the plane of the fan-case, a multiplicity of scrapers attached to the periphery of the wheel and adapted to act as an air-packing between the wheel and the casing, and also to scrape off vegetable gum that may form upon the interior of the casing, substantially as described. 4th. The process of elevating ensilage and kindred material, consisting in subjecting the same to the combined action of an air-blast and centrifugal force, substantially as described. 5th. The process of elevating ensilage and analogous material, con-

sisting in cutting the same into small particles, then subjecting the same to the combined action of an air-blast and centrifugal force, substantially as described. 6th. In a device for elevating ensilage, the combination of a cutter, a fan-blower and a centrifugal-thrower, all enclosed in a single case, substantially as described. 7th. In a combined cutter and blower, the combination of adjustable feed-rollers adapted to deliver articles to the cutter and blower casing, a casing having an opening therein to admit the articles operated upon, an adjustable shutter to said opening, and means whereby said shutter is operated by the adjuster-roller in such manner as to enable the opening in the casing to substantially conform to the amount of material between the rollers delivered to such opening, substantially as described.

No. 59,020. Bicycle Saddle. (*Selle de bicycles.*)



John Stratton Wright, Duxbury, Massachusetts, U.S.A., 15th February, 1898; 6 years. (Filed 18th January, 1898.)

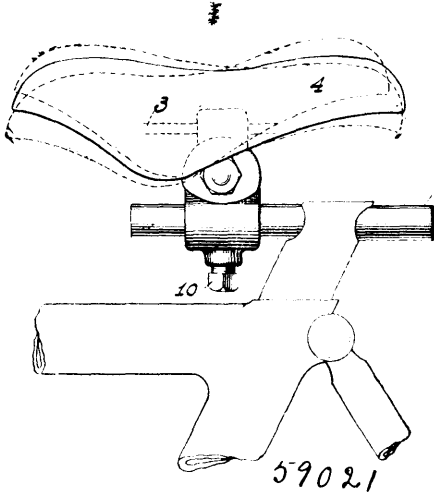
Claim.—1st. A bicycle-saddle, consisting of two parts or seats supported upon springs, said springs being adjustable laterally in a clamp, adapted to be fastened to the saddle-post of a bicycle, substantially as described for the purpose specified. 2nd. A bicycle-saddle consisting of two pads or seats, each pad supported by a single wire spring, comprising a rim to which the pad is fastened, the free ends of the wire being bent downwardly at the side of the seat or rim and extending inwardly to a clamp to which they are adjustably fastened, substantially as described, for the purpose specified. 3rd. A bicycle-saddle, consisting of two pads or seats, each pad supported by a single wire spring, comprising a rim 4, to which the pad is fastened, both ends of the wire having a downward bend 5 at the side of the rim or seat, and extending inwardly to a saddle-post clamp 7, to which they are adjustably fastened, substantially as described, for the purpose specified. 4th. A bicycle-saddle, consisting of two pads or seats, each pad supported by a single wire spring, adjustable laterally in a clamp adapted to be fastened to the saddle post of a bicycle, substantially as described, for the purpose specified. 5th. A bicycle-saddle, consisting of two pads or seats, each pad supported by a single wire spring adjustable laterally in a clamp adapted to be fastened to the saddle post of a bicycle and adjustable devices for varying the resiliency of said springs, substantially as described, for the purpose specified. 6th. A bicycle-saddle, consisting of two pads or seats, each pad supported by a single wire spring comprising a rim 4, to which the pad is fastened, both ends of said wire spring having a downward bend 5 at the side of the rim or seat and extending inwardly to and beyond a saddle post clamp 7, to which they are adjustably fastened, in combination with adjustable auxiliary clamps 9, 9, substantially as described, for the purpose specified. 7th. A bicycle-saddle, consisting of two pads or seats, each pad supported by a single wire spring, comprising a rim to which the pad is fastened, the free ends of said wire spring being bent downwardly to form a pair of spiral springs at the side of the seat or rim, thence extending inwardly to a clamp to which they are adjustably secured, substantially as described, for the purpose specified.

No. 59,021. Bicycle Saddle Clamp.
(*Attache pour selles de bicycles.*)

John Stratton Wright, Duxbury, and Victor Beauregard, Boston, both in Massachusetts, U.S.A., 15th February, 1898; 6 years. (Filed 18th January, 1898.)

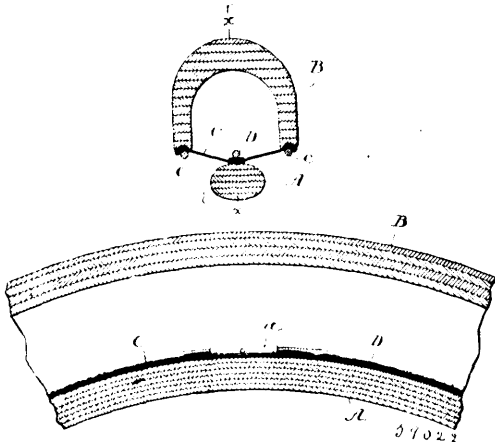
Claim.—1st. A bicycle saddle clamp, consisting of a saddle holder pivoted to a sleeve adapted to be secured to a bicycle saddle post, and means for clamping said saddle holder to said sleeve, substantially as described, for the purpose specified. 2nd. In a bicycle saddle clamp, a holder for the saddle pivoted upon a sleeve adapted to be secured to a bicycle saddle post, in combination with a clamp-bolt 11 and nut 12, whereby said saddle holder and saddle post sleeve are clamped together, substantially as described, for the purpose specified. 3rd. In a bicycle saddle clamp, a holder for the

saddle pivoted upon a sleeve adapted to be secured to a bicycle saddle post, in combination with a clamp-bolt 11 and nut 12, said



clamp-bolt having a conical flange 13 thereon, adapted to fit in a conical recess in the saddle holder, substantially as described, for the purpose specified.

No. 59,022. Wheel Tire. (Bandage de roues.)



Thomas Henry Grigg, Philadelphia, Pennsylvania, U.S.A., 15th February, 1898; 6 years. (Filed 19th January, 1898.)

Claim.—1st. The combination of the felly, the rigid tire, and a transversely and longitudinally elastic web or band interposed between and secured to said felly and tire so as to provide a yielding connection throughout the periphery of the felly, the said web or band being secured along its lateral edges to one of said parts and, intermediate said edges, to the other part, substantially as described. 2nd. The combination of the felly, the rigid tire U-shaped in cross-section, and a transversely and longitudinally elastic connection between said felly and the sides of the tire, substantially as described. 3rd. The combination of the felly, the tire U-shaped in cross-section, the diaphragm covering the inner open side of said tire, the clamp rings securing the lateral edges of said diaphragm to the opposing edges of the tire, and the central clamping-ring securing said diaphragm to the felly, substantially as described. 4th. The described tire, constructed of superposed layers of material built or shaped into U-form in cross-section, in contra-distinction to bending, and means for yieldingly securing said tire to the felly of a wheel. 5th. The described tire, constructed of superposed layers of material built or shaped into U-form in cross-section, a diaphragm of rubber or elastic fabric on the inner open side of said tire, and means for securing said diaphragm to the felly of a wheel.

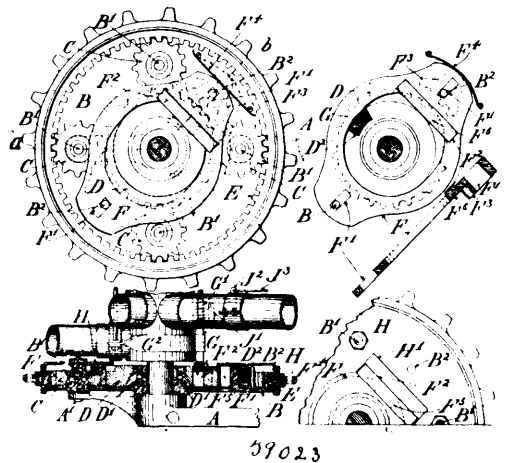
No. 59,023. Driving Gear for Bicycles, etc.

(*Engrenage de commande pour bicycles, etc.*)

William James Thompson, West Kogarah, near Sydney, New Wales, 15th February, 1898; 6 years. (Filed 20th January, 1898.)

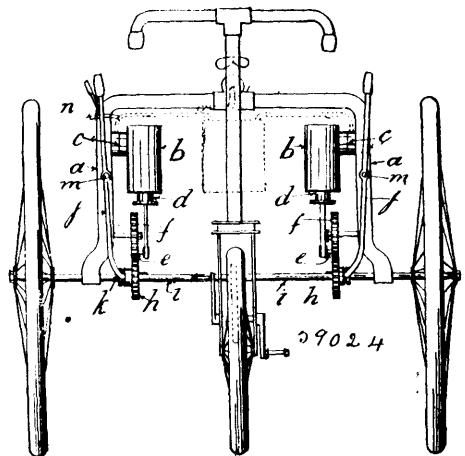
Claim.—1st. Improved duplex driving gear for bicycles and the like, consisting of a rim wheel or sprocket supported in internal teeth by a series of toothed pinions carried by a crank disc and in gear with a central toothed wheel adapted to interchangeably

revolve with said crank disc or to be released therefrom and have no revolving motion substantially as herein described and explained.



2nd. In duplex driving gear of the class set forth, the combination and arrangement with a rim wheel or sprocket such as E toothed pinions, such as C on a crank disc, such as B and a central toothed wheel, such as D of a locking plate, such as F travelling with said disc, such as B and having toothed sector, such as F 3 and key, such as F 5 adapted to gear in said central toothed wheel, such as D, and lock it to said disc, such as B, and to release said wheel, such as D, so that its revolution can be stopped, substantially as herein described and explained and as illustrated in the drawings. 3rd. In duplex driving gear of the class set forth, the combination and arrangement with the other parts and a locking plate, such as F, having a bearing piece or flange, such as F 2, of a spring pin, such as G, adapted to move said plate, such as F, and to lock central toothed wheel, such as D, from revolving, substantially as herein described and explained and as illustrated in the drawings. 4th. The combination and arrangements of mechanical parts all together forming an interchangeable duplex driving-wheel, substantially as herein described and explained and as illustrated in the drawings. 5th. The combination and arrangement of mechanical parts all together forming a duplex driving gear for bicycles operated from the handle bars substantially as herein described and explained and as illustrated in the drawings.

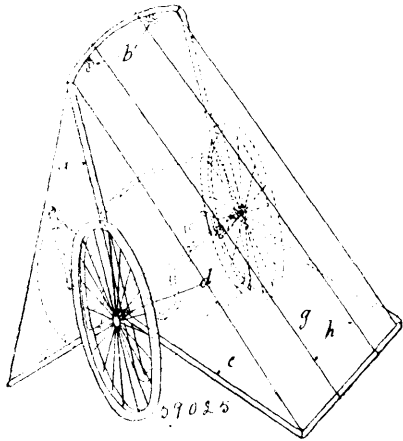
No. 59,024. Motive Power. (Force Motrice.)



Gilbert Paterson, Anghinver Lodge, Fermanagh, Ireland, 15th February, 1898; 6 years. (Filed 20th December, 1897.)

Claim.—1st. In auxiliary motors of the class herein described, the combined construction and arrangement of the various parts, substantially as described. 2nd. In auxiliary motors for velocipedes and vehicles, one or more compressing cylinders operated by pistons which are driven by cranks upon toothed wheels, said toothed wheels being geared to the driving shaft through the medium of toothed wheels sliding upon the driving shaft and operated by a lever or clutch, a hollow frame carrying the mechanism and vehicle, said hollow frame forming a reservoir for the compressed air, a whistle or other form of alarm which maybe sounded or operated by means of the compressed air when required. 3rd. In means for storing compressed air and gas for auxiliary motors, the employment of a hollow frame carrying the mechanism and vehicle, and into which the air or gas is compressed.

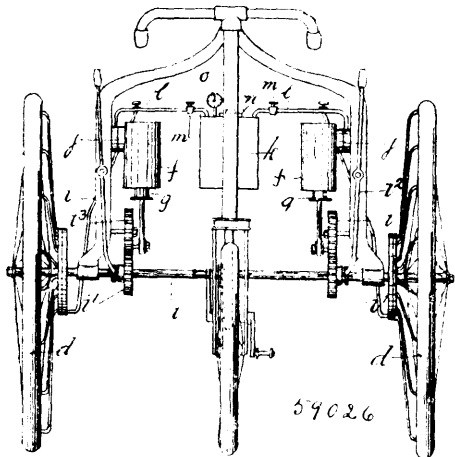
No. 59,025. Tricycle. (Tricycle.)



Gilbert Paterson, Aughinver Lodge, Fermanagh, Ireland, 15th February, 1898; 6 years. (Filed 20th December, 1897.)

Claim.—1st. The combined tricycle, substantially as described and illustrated herein. 2nd. In tricycles of the class herein described, a frame so arranged that the rider when driving the machine does so in an erect position owing to the height of the frame, said frame being provided with handles for the rider to hold when required. 3rd. A collapsible shield or guard attached to a suitable part of a tricycle or machine, for the purpose of protecting the rider when under fire. 4th. A rifle or gun carrier or a luster, consisting of a support to which the rifle or gun is attached, said support being movable in a vertical and horizontal direction, and being carried upon a suitable part of the tricycle or machine. 5th. In combination with a tricycle of the class herein described, an adjustable cover removably attached to a tricycle of the class herein described and consisting of a frame carrying canvas or the like, ropes or cords for collapsing or folding up said cover when required. 6th. In combination with a tricycle of the class herein described, a detachable cover consisting of a hinged or pivoted frame carrying a covering of canvas, locking pieces secured to said frame by means of set screws or the like, so as to maintain same in an extended position for use as an ambulance when required.

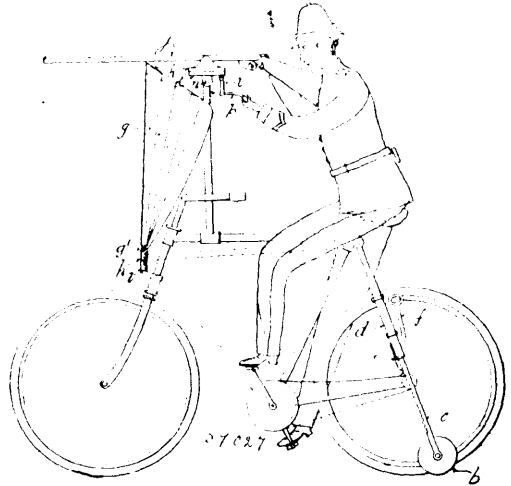
No. 59,026. Means for Driving Velocipedes. (Moyen de propulsion pour velocipedes.)



Gilbert Paterson, Aughinver Lodge, Fermanagh, Ireland, 15th February, 1898; 6 years. (Filed 20th December, 1897.)

Claim.—In auxiliary power for velocipedes, in combination, air compressors operated when required through suitable clutch gearing by the spindle or shaft of the velocipede, a reservoir for containing said compressed air, pipes and stop cocks connecting the reservoir with the compressors, rim rods attached to the rim or hub of the driving spindle for the purpose of reducing the strain upon the ordinary spokes, one or more of which may be hollow for the purpose of supplying compressed air to the rim or to the tyre for the purposes of inflation, a movable disc or plate surfacing upon a fixed disc or plate and through which the compressed air is conveyed to the hollow rim-rods, a pressure gauge and safety valve of any well-known construction.

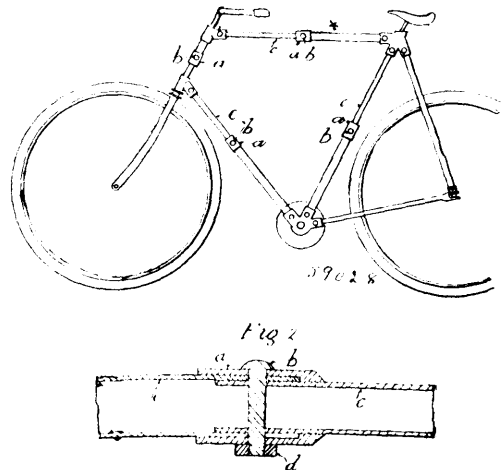
No. 59,027. Bicycle. (Bicycle.)



Gilbert Paterson, Aughinver Lodge, Fermanagh, Ireland, 15th February, 1898; 6 years. (Filed 20th December, 1897.)

Claim.—1st. The combined construction and arrangement of the various parts, substantially as and for the purpose herein set forth. 2nd. In bicycles, the combination therewith of auxiliary supporting wheels, said wheels being carried upon a racked rod sliding in a tube or casing attached to the machine, a controlling spring engaging in said racked rod, a handle for bringing the wheels into or out of contact with the ground or surface, a collapsing shield for protection of the rider, said shield being secured to a suitable part of the machine, a rifle or gun carrier and adjuster consisting of a disc carrying a rifle or gun, said disc carrying the rifle or gun being pivotally carried upon a disc which is pivoted to a support or rod attached to a suitable part of the machine, a lever for tilting or rocking the disc upon said pivot upon the rod or support, substantially as described and illustrated herein.

No. 59,028. Folding Bicycle. (Vicycle pliant.)



Gilbert Paterson, Aughinver Lodge, Fermanagh, Ireland, 15th February, 1898; 6 years. (Filed 20th December, 1897.)

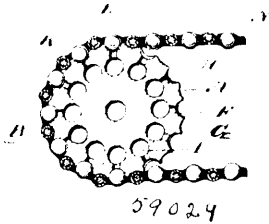
Claim.—In joints for folding-frames for velocipedes, a strengthening cap or cover which encloses or covers the ends of the sections of the tubes or rods forming the frame, which are telescoped at their junction, said cap or cover being secured in position by means of a screw-pin or stud passing through the cap or cover and the ends of the sections of the frame to be connected, said pin being secured by means of a nut or the like.

No. 59,029. Power Transmitter. (Transmetteur de la force.)

Harry A. Sehry, Lordy, Maryland, U.S.A., 15th February, 1898; 6 years. (Filed 17th January, 1898.)

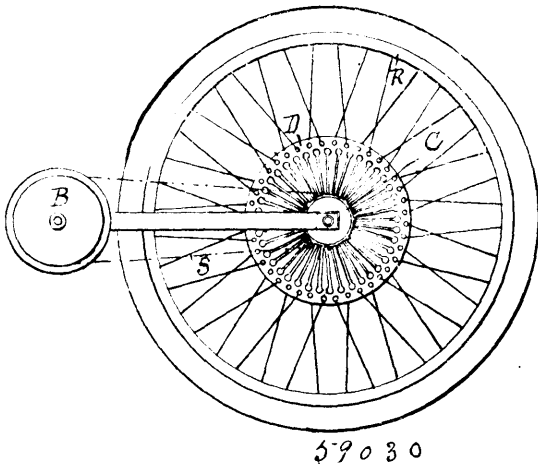
Claim.—1st. A drive chain link composed of two parallel link plates provided with suitable pivotal connections and separators, each plate having an opposite portion of a spherical socket formed in its inner surface, and extended beyond said socket to embrace or overlap the edges of the sprocket wheel when in use, a ball being

seated in said socket, substantially as set forth. 2nd. A drive chain link, composed of two parallel link plates provided with suit-



able end pivotal connections and separators, each plate having an opposite portion of a spherical socket formed in its surface and extending through the plate, the plates being extended beyond said sockets to embrace the overlapping edges of the sprocket wheel when in use, a ball being seated in said socket, substantially as described. 3rd. The combination of a sprocket wheel provided with parts of ball sockets in its rim, with a drive chain composed of links, each of which consists of two parallel plates embracing the edge or rim of the sprocket wheel, each plate being provided with part of a ball socket in its inner face, pivot pins connecting the links together, separators to hold the link plates at a proper distance apart to cause the part sockets to register with parts of one ball socket, and balls seated in the sockets of the links and engaging in the rim sockets of the wheel, substantially as described. 4th. The combination with a chain constructed as described, of a sprocket wheel made of a plate of metal having a suitable hub and rim, the rim being provided with partial spherical sockets in the periphery and shallow notches between them and the sockets having waste ducts leading from the bottom thereof into openings formed in the body of the wheel, substantially as set forth.

No. 59,030. Wheel for Cycles, etc. (*Roue pour cycles, etc.*)



William Joseph Rymer Watson, London, England, 15th February, 1898; 6 years. (Filed 8th January, 1898.)

Claim.—1st. A wheel for bicycles and similar vehicles the hub of which is provided on one side with a dished disc or frame to which spokes are attached, and on the other side with the usual shoulder to which the other spokes are attached, substantially as set forth. 2nd. A wheel for bicycles and similar vehicles, provided with two dished discs or frames to which the spokes are attached, substantially as set forth. 3rd. Constructing a wheel for bicycles and similar vehicles, with a hub having an enlarged shoulder or shoulders for the purpose of reducing the width of the wheel, substantially as and for the purposes set forth.

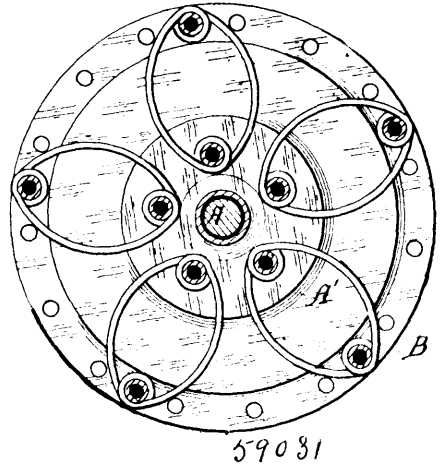
No. 59,031. Wheel for Bicycles, etc.

(*Roue pour bicycles, etc.*)

George Hayes, New York, State of New York, U.S.A., 15th February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—1st. A wheel for bicycles and other vehicles, in which resiliency is derived from tubular-shaped springs of wire spirally coiled, having terminals extending tangentially to the circular curve of the spiral adapted for vibration, essentially as set forth. 2nd. A wheel for bicycles and other vehicles, deriving elasticity and resiliency from spirally-coiled springs, tubular-shaped, and arranged parallel with the axle of the vehicle and connected with other springs also spirally-coiled and tubular-shaped, essentially as set forth. 3rd. A wheel for bicycles and other vehicles, in which coiled springs arranged transversely to the plane of the wheel, and linked

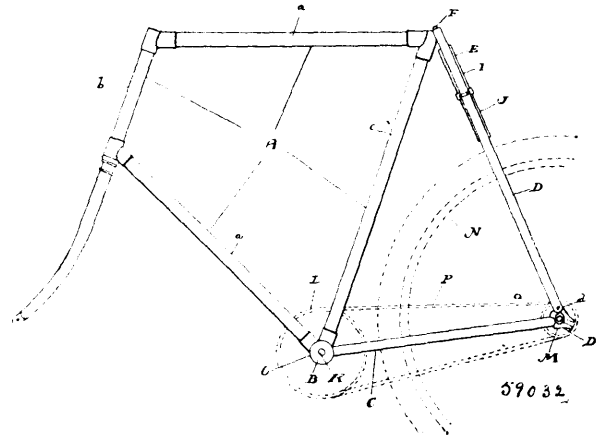
together unitedly, serve to provide elasticity and resiliency in the wheel, essentially as set forth. 4th. A wheel for bicycles and other



vehicles, in which resiliency is derived from series of coiled springs, tubular-shaped, encircling cross-rods or spindles extending parallel to the axle-hub of the wheel between flanges thereof, and engaging with a special spoke-nave, essentially as set forth. 5th. In a wheel for bicycles and other vehicles, the combination, consisting of, first, an axle-hub having end flanges, between which extend spindles encircled by coiled springs, as cylinder or tubes; second, a special spoke-nave provided with spindles encircled by coiled springs, as cylinders or tubes; and third, certain intermediate spindles encircled by coiled springs, as cylinders or tubes, the springs upon the spindles connected together, essentially as set forth. 6th. A wheel for bicycles and other vehicles, in which an axle hub is resiliently suspended within an encircling spoke-nave by sets of coiled springs, with the springs of each set all connected together, essentially as set forth.

No. 59,032. Construction of Bicycle Frames.

(*Fabrication de montures de bicycles, etc.*)

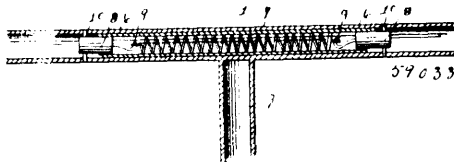


Henry Dixon, Collingwood, Ontario, Canada, 15th February, 1898; 6 years. (Filed 10th January, 1898.)

Claim.—1st. A frame for foot-propelled vehicles, embracing in its construction a crank axle bracket and two side bars, oscillatingly mounted on the crank axle bracket, substantially as specified. 2nd. A frame for foot-propelled vehicles, embracing in its construction a crank axle bracket, two side bars, and an annular strap for each side bar, loosely embracing its respective end of the crank axle bracket, substantially as specified. 3rd. In a frame for foot-propelled vehicles, the combination of the crank axle bracket, the side bars, and an oscillating connection between the crank axle bracket and side bars consisting of a strap for each side bar, loosely encircling its respective end of the crank axle bracket, and united to the adjacent end of its respective side bar, substantially as specified. 4th. In a frame for foot-propelled vehicles, the combination of the crank axle bracket, the side bars, and an oscillating connection between the crank axle bracket and side bars consisting of a strap for each side bar encircling loosely its respective end of the crank axle bracket, a brace for the side bars consisting of a stay, one end of which is connected to one of the side bars and crosses diagonally to the opposite side of the frame between the crank axle bracket and driving wheel, and has its opposite end connected to

the other side bar, a slot in each of the crossed projections, and a bolt passing through the slots and clamping the projections together, substantially as specified. 5th. The rear forks of the frame of a foot-propelled vehicle, embracing in their construction two sets of telescopic sections, each set consisting of two members, working one within the other, a spring within each set of sections to hold them in their normal relative position to each other, in combination with an air cushion consisting of a cylinder, and a plunger working within the cylinder to cushion the telescoping action of the sections, substantially as specified. 6th. The rear forks for the frame of a foot-propelled vehicle embracing in their construction two sets of telescopic sections, each set consisting of two members, working one within the other, a spring within each set of sections to hold them in their normal relative position to each other, in combination with an air cushion consisting of a cylinder, a plunger working within the cylinder to cushion the telescoping action of the sections, and means to regulate the pressure of the springs, substantially as specified. 7th. In a frame for a foot-propelled vehicle the combination of the rear forks, embracing in their construction two sets of telescopic sections, each set consisting of two members, one working within the other, a permanent stop in each of the lower telescoping sections, an adjustable stop in each of the upper telescoping sections, springs within each set of sections bearing against the stops to hold the members of each set of sections in their normal relative position to each other, and an air cushion embracing in its construction a cylinder connected to the upper telescopic sections, and a plunger connected to the lower telescopic sections, substantially as specified. 8th. In a frame for a foot-propelled vehicle, the combination of the rear forks, embracing in their construction two sets of telescopic sections, each set consisting of two members, one working within the other, a permanent stop in each of the lower telescoping sections, an adjustable stop in each of the upper telescoping sections, springs within each set of sections bearing against the stops to hold the members of each set of sections in their normal relative position to each other, an air cushion embracing in its construction a cylinder connected to the upper telescopic sections, and a main frame embracing in its construction a crank axle bracket secured to the standard, two side bars pivotally connected at their rear ends to the lever telescopic sections of the rear forks, and provided at their front ends with annular straps loosely embracing the crank axle bracket, substantially as specified. 9th. In a frame for a foot-propelled vehicle the combination of the rear forks, embracing in their construction two sets of telescopic sections, each set consisting of two members, one working within the other, a permanent stop in each of the lower telescoping sections, an adjustable stop in each of the upper telescoping sections, springs within each set of sections bearing against the stops to hold the members of each set of sections in their normal relative position to each other, an air cushion embracing in its construction a cylinder connected to the upper telescopic sections, and a main frame embracing in its construction a crank axle bracket secured to the standard, two side bars pivotally connected at their rear ends to the lower telescopic sections of the rear forks, and provided at their front ends with annular straps, loosely embracing the crank axle bracket, and a brace for the said bars consisting of two stays connected to the side bars and crossed diagonally in front of the driving wheel, a slot in each of the stays, and a bolt passing through the slots and clamping them together, substantially as specified.

No. 59,033. Handle Bars for Bicycles.
(*Barre de poignée de bicycles.*)

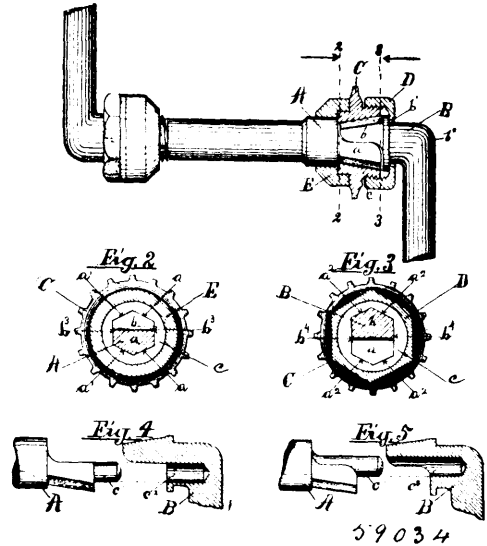


Joseph Paquet, Poughkeepsie, New York, U.S.A., 15th February, 1898; 6 years. (Filed 8th January, 1898.)

Claim.—1st. The combination with a stem having a tubular head and provided with ratchet teeth at or near the ends of the head, of a handle-bar composed of sections having ratchet teeth at their inner ends and secured to the said head so as to turn and a contractible spring located in the head and having at its end portions connected with the handle-bar, sections to draw them inward and hold the teeth thereof in engagement with the teeth of the said head, substantially as set forth. 2nd. The combination with a tubular head having ratchet teeth at or near its end, and having the forward edges of the teeth abrupt and the rear edges inclining, of a handle-bar composed of sections having correspondingly formed ratchet teeth at their inner ends to ride upon the ratchet teeth of the head when lifting upon the grips and to interlock when pressing downward upon the said grips, and a contractible spring located within the head and having connection with the handle-bar sections to draw them inward and hold the teeth in engagement, substantially as set forth. 3rd. In combination, a stem having a tubular head, handle-bar sections rotatably mounted with respect to the tubular

head, interlocking teeth between the handle-bar sections and the head of the stem, a contractible spring located within the head and serving to draw the handle-bar sections inward and hold the teeth in engagement, and a swivel connection between the spring and a handle-bar section to admit of either section being turned independently of the other, substantially as set forth. 4th. In combination, a T stem having a tubular head formed at its ends with ratchet teeth, a tube secured within the head of the stem and projecting beyond the extremities thereof, handle-bar sections mounted upon the projecting ends of the tube and having ratchet teeth at their inner ends to interlock with the ratchet teeth at the extremities of the T head, a contractible spring located within the said head, and swivel connections between the extremities of the spring and the handle-bar sections, substantially as set forth.

No. 59,034. Means for Connecting Bicycles Cranks and Sprocket Wheels with Shafts.
(*Moyen de joindre les bielles et roues dentées aux essieux.*)



Frederick Christopher Avery, Toledo, Ohio, U.S.A., 15th February, 1898; 6 years. (Filed 7th January, 1898.)

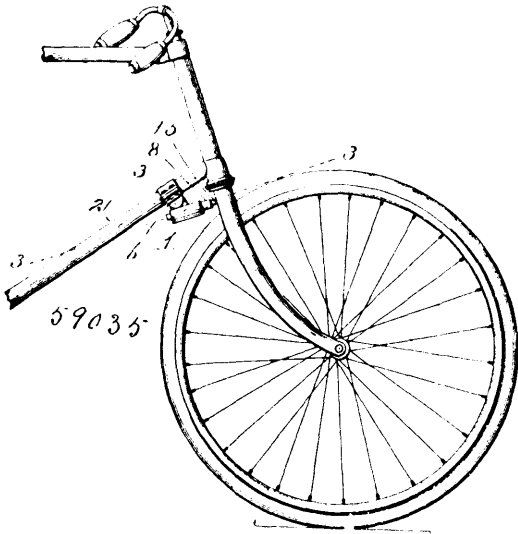
Claim. 1st. The combination of a bicycle shaft and crank, having reduced and oppositely tapered polygonal tenons, a motor wheel having a bore adapted to fit such tenons when lapped as specified, and a nut for engaging said wheel, and causing it to hold the tenons in unyielding contact, substantially as shown and described. 2nd. The combination of the bicycle shaft and crank having longitudinally halved, polygonal tenons which are tapered in opposite directions, so that when lapped they form a tapered part as specified, a sprocket wheel having a hub which is tapered and polygonal corresponding to such jointed part, and has an exterior screw-thread, and a flanged nut which engages a collar on the crank and has an internal screw-thread for connecting with the aforesaid hub, whereby the latter may be forced on the tapered and lapped members to clamp them rigidly together as specified. 3rd. The combination of a bicycle shaft crank tenons which are longitudinally halved and tapered in opposite directions, but provided with two parallel straight sides, as specified, a sprocket wheel hub having a bore which is similarly provided with inclined and parallel sides, and a nut for engaging the wheel hub and holding it in clamping engagement with the shaft and crank as shown and described. 4th. The combination of the bicycle shaft and crank tenons which are made polygonal and tapered in opposite directions, one of them being provided with an axial extension or pilot pin, and the other with a corresponding axial socket, a sprocket wheel whose hub fits on the tapered members when lapped, and a nut applied to the crank and hub of said wheel, as and for the purpose specified.

No. 59,035. Bicycle Guide. (*Guide de bicyclee.*)

Edwin James Austin, Hartford, Connecticut, U.S.A., 15th February, 1898; 6 years. (Filed 13th January, 1898.)

Claim. 1st. The combination with the frame of a bicycle, of a guide comprising a cross-arm that is situated in contact with the rear edges of the steering fork and held in such position under spring tension. 2nd. The combination with the frame of a bicycle, of a spring pressed cross arm secured thereto and normally situated in contact with the rear edges of the fork. 3rd. A guide for bicycle, comprising a socket that is adapted to be secured to the frame adjacent the front wheel, a longitudinally movable plunger carried by said socket, a spring for moving said plunger outwardly, a stop

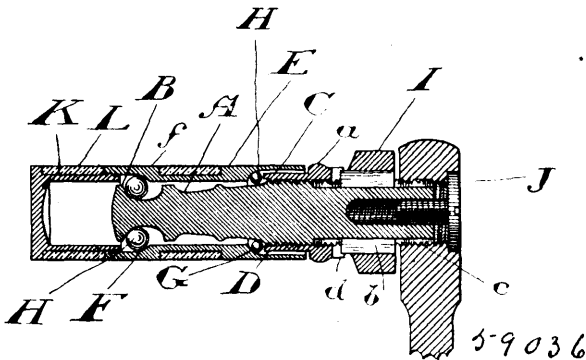
to limit the outward movement of said plunger, and a cross-arm secured to the outer end of said plunger. 4th. A guide for a bicycle,



comprising a socket adapted to be secured to the frame adjacent the front wheel and having an open front end and a closed rear end, an opening in said closed rear end, a longitudinally movable plunger situated within said socket and provided with a rearwardly extending pin that passes through the opening in the rear end of the socket and is provided with a nut, a spring situated within said plunger and socket and bearing at its ends against the outer ends of said parts, and a cross-arm at the outer end of said plunger. 5th. The combination with the frame of a bicycle, of a guide secured thereto that is provided at its front end with a spring pressed cross-arm, said guide being held by a clamping sleeve that is secured to the frame of a bicycle, the axes of said clamping sleeve and guide being situated at an angle. 6th. The combination with the frame of a bicycle, of a guide that is provided at its front end with a spring pressed cross-arm, and devices for securing said guide to the frame of the bicycle, comprising a clamp pivotally connected to the guide and provided with means for holding the clamp and guide rigid with relation to each other. 7th. In a bicycle guide, a spring pressed plunger provided at its forward end with an adjustable cross-arm. 8th. In a bicycle guide, a spring pressed plunger provided at its forward end with a cross-arm, said cross-arm having a medial shank, and a disc upon the shank designed to be secured to the extremity of the plunger.

No. 59,036. Pedal Spindle and Bearing.

(Essieu et coussinet de pédales.)



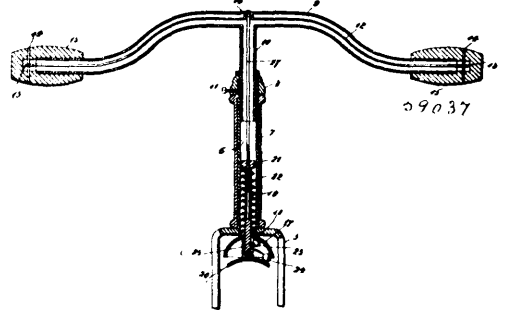
Marmaduke Matthews, Alexander Jardine and Agnes Jardine, all of Bracadale, Ontario, Canada, 18th February, 1898; 6 years. (Filed 2nd October, 1896.)

Claim.—1st. In a pedal, the combination with a spindle having a casing rotating on balls arranged between said casing and spindle, of an adjustable sleeve screwed on the inner end of said spindle and arranged to adjust said balls, a dust cap secured over the outer end of said spindle and protecting the same, the inner end of said spindle being screw-threaded to co-act with a similarly-threaded opening in the crank, and a nut slidingly secured to said spindle and co-acting with said adjustable sleeve, the said nut being non-rotatable and

having angular sides whereby it may be used to adjust the spindle into and out of the crank, substantially as described. 2nd. In a pedal, the combination with a spindle having a casing rotating on balls arranged between said casing and spindle, of an adjustable sleeve screwed on the inner end of said spindle and arranged to adjust said balls, a dust cap secured over the outer end of said spindle and protecting the same, the inner end of said spindle being screw-threaded to co-act with a similarly threaded opening in the crank, and a nut slidingly secured to said spindle and co-acting with said adjustable sleeve by means of a projection adapted to enter slots in the end of said sleeve, the said nut being non-rotatable and having angular sides, whereby it may be used to adjust the spindle into and out of the crank, substantially as described. 3rd. In a pedal, the combination of a spindle having a casing rotating on balls arranged between said casing and spindle, a hollow extension cap removably secured to said casing and forming a protection for the end of the said spindle, and a pedal plate secured partly on said extension cap and partly on said casing, substantially as and for the purpose specified. 4th. In a pedal, the combination with a spindle and a casing having ball bearings between them, of a sleeve screwed upon the spindle and adapted to adjust the bearing, a non-revoluble nut or washer adapted to slide on the spindle and having a projection thereon adapted to engage with any one of one or more notches in the said sleeve, and a crank arm provided with a screw-threaded hole adapted to receive the similarly-threaded end of the spindle, and a set-screw screwed into the end of the spindle and bearing against the crank arm, substantially as and for the purpose specified.

No. 59,037. Bicycle, and Similar Vehicle.

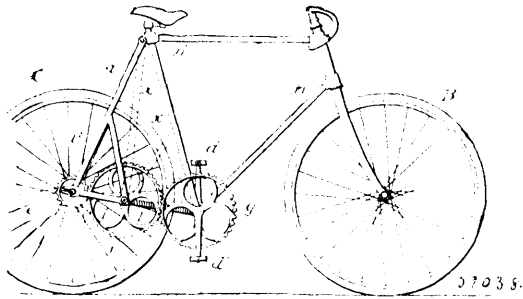
(Bicycle, etc.)



Frederick Clement Palmer, Brooklyn, and Benjamin F. Jones, New York, both in the State of New York, U.S.A., 16th February, 1898; 6 years. (Filed 8th January, 1898.)

Claim.—1st. The combination with the forward fork of a bicycle or similar vehicles and the upwardly directed tubular stem connected therewith, of a tubular handle-bar provided centrally with a depending tube which passes into said tubular stem, handles or grips loosely mounted on the ends of the handle-bar, and free to turn thereon, a rod which passes through the handle-bar, and is connected with said handles or grips, a bell or gong, provided centrally with a tubular extension which is secured to the lower end of said tubular stem, a spring-supported tubular rod which passes upwardly through said bell or gong, and into said tubular stem, a rod which is connected with the rod which passes through the handle-bar, and with said spring-supported tubular rod, and a brake-shoe secured to the lower end of said spring-supported tubular rod and said bell or gong, and said tubular rod being also provided with means for sounding the alarm, substantially as shown and described. 2nd. The combination with the forward fork of the frame of the bicycle or similar vehicle, and the tubular stems connected therewith, of an alarm-device and brake-shoe supported beneath the cross-head of the fork, a tubular handle-bar provided centrally with a tube which passes into said tubular stem, handles or grips mounted loosely on the ends of said handle-bar, and revoluble thereon, a rod which passes through the handle-bar and is connected with said handles or grips, and devices connected with said handles or grips, and devices connected with the rod which passes through the handle-bar for operating the brake and the alarm, said device being located in and passing through said tubular stem, and through the tube connected with the handle-bar, substantially as shown and described. 3rd. The combination with the forward fork of a bicycle or similar vehicle, in which the guide-wheel is mounted, of a brake which is located beneath the cross-head of said forward fork, said fork being provided with the usual tubular stem, a tubular handle-bar connected with said stem, handles loosely mounted on the ends of said handle-bar, and free to turn thereon, a rod passing longitudinally through said handle-bar and connected with said handles, and by means of which said handles are held on said handle-bar, and an operative device connected with said brake and with the rod in the handle-bar, and passing through said tubular stem, said device being adapted to be operated by turning said handles and the rod which passes through the handle-bar, substantially as shown and described.

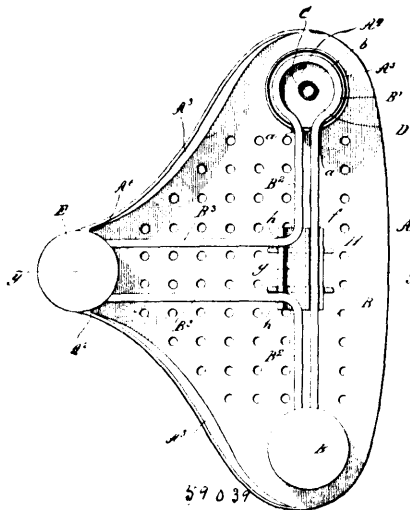
No. 59,038. Chainless Bicycle. (Bicycle sans chaines.)



The Carroll Chainless Cycle Company, Philadelphia, Pennsylvania, U.S.A., 16th February, 1898; 6 years. (Filed 5th January, 1898.)

Claim.—1st. In a chainless bicycle, the combination of the supporting wheels and frame, the crank axle, a train of gear wheels for transmitting the rotations of the crank axle to the rear wheel hub, a gear supporting frame comprising bars or tubes extending partially on each side of the train of gears, a shaft supporting the intermediate gear wheel and connecting the bars of the gear supporting frame and supporting bars or fork forming part of the gear supporting frame and extending upwardly from the connecting shaft to the portion of the rigid frame of the machine. 2nd. The combination in a chainless bicycle, of a gear wheel secured to the crank axle, a gear wheel secured to the hub of the rear driving wheel, gear wheel intermediate between the two, a supporting shaft for said intermediate gear wheel, a supporting bar or tube extending substantially horizontally from the crank axle bracket to said supporting shaft, an upwardly extending bar extending from said supporting shaft to a rigid portion of the frame, and a second horizontally disposed supporting bar extending on the opposite side of the train of gears from the rear wheel hub to the supporting shaft of the intermediate gear wheel and also supported by an upwardly extending bar extending between the supporting shaft and a rigid portion of the frame of the machine. 3rd. In a chainless bicycle, the combination of the frame A, having the rear bars *a*, and crank axle bracket, *D*¹, the crank axle *D*, a gear wheel *g*, secured thereto, a gear wheel *e*, secured to the rear wheel hub, an intermediate gear wheel *f*, a shaft *F*, for said intermediate gear wheel, a bar *I*, extending from the rear wheel hub to the shaft *F*, an upwardly extending bar *i*², between said shaft and a rigid portion of the frame, a bar *I*¹, extending from the crank axle bracket to the shaft *F*, and an upwardly extending bar *i*³, between the shaft *F*, and a rigid portion of the frame.

No. 59,039. Bicycle Saddle. (Selle de bicycles.)

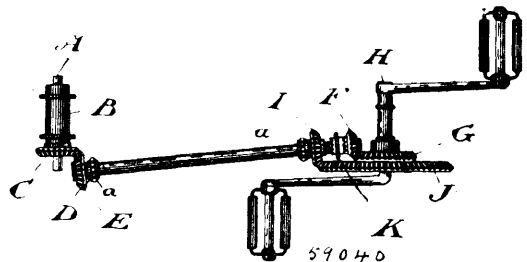


The Universal Trading Company, assignee of Cassius Montezuma Richmond, both of New York, State of New York, U.S.A., 16th February, 1898; 6 years. (Filed 7th February, 1898.)

Claim.—1st. A saddle for bicycles and other vehicles, comprising a seat body formed of a plurality of recesses, beneath the same, resilient cushions within said recesses a spring frame which is adapted to be secured to the vehicle, the ends of said frame being directed against the resilient cushions and bearing upwardly against the arms, and means for securing the seat body and spring frame against mutual detachment, in such manner that the said seat is verti-

cally movable relatively to said spring frame. 2nd. In a saddle of the character described, a support consisting of a spring frame formed of a laterally ranging body provided centrally with a forwardly ranging extension, whereby a plurality of arms are formed resilient from the centre of the frame and extending to each side and to the forward end of the saddle, and adapted to be suitably connected with the seat body to support the same. 3rd. In a saddle of the character described, a seat body consisting of a single integral part formed with a downwardly ranging curved flange at the front thereof, and rearwardly of said flange beneath the horn, with a segmental flange to form a recess, and annular flanges depending from said seat at each side thereof to form like recesses, each of the said recesses being adapted to receive a resilient cushion, and the walls thereof being formed to receive the ends of the supporting frame of the saddle. 4th. In a saddle of the character described, a spring frame consisting of a continuous strip of resilient material, formed of a main or laterally ranging rod with parallel supplemental rods, centrally projected forwardly to form parallel rods ranging at right angles, each of the ends of the spring frame being formed into a loop to support the seat body. 5th. A saddle for bicycles or other vehicles, comprising a seat body, having recesses formed beneath the same at the front and sides thereof, resilient cushions within said recesses, a spring frame adapted to be secured to the vehicle, and having its ends extended to enter said recesses to bear against the cushions, each of said ends being provided with means to engage said cushions whereby they are compressed by downward movement of the seat body, and means or devices for securing the cushions within the recesses and maintaining the spring in relation thereto in such manner that the seat body is vertically movably relatively to said frame. 6th. A saddle for bicycles and other vehicles, comprising a seat body having depending annular flanges upon the under surface thereof to form recesses, resilient cushions within said recesses, a spring frame adapted to be secured to the vehicle and formed with a plurality of arms which project through the flanges or walls of said recesses and bear against the cushions, said walls being formed to permit vertical movement of said arms, and means adapted to engage said flanges or walls to retain the parts within the recesses in such manner as to permit vertical movement of the seat body relatively to the spring frame. 7th. A saddle for bicycles or other vehicles, comprising a seat body provided with annular depending flanges upon the under surface thereof at its front and sides, whereby are formed recesses, resilient cushions in each of the said recesses, a spring frame adapted to be secured to the vehicle and extending laterally between the side recesses and longitudinally to the forward recesses, the ends of the said frame being enlarged or formed to fit within said recesses, said flanges being provided with vertical slots receiving the arms of the frame to permit vertical movement thereof, and discs or caps engaging the flanges to substantially wholly enclose each recess and retain the parts therein. 8th. A saddle for bicycles or other vehicles, comprising a seat body provided with annular depending flanges upon the under surface thereof, whereby are formed recesses, resilient cushions within said recesses, a spring frame adapted to be secured to the vehicle and consisting of a continuous strip formed into parallel lateral rods and central longitudinal rods, the ends of said rods being connected and formed into loops inserted in each of the recesses of the seat body and adapted to bear upwardly against the cushions, the flanges or walls of said recesses being provided with vertical slots through which the frame-rods pass, discs inserted between the loops and the cushions to receive the pressure thereof, and discs or caps engaging the flanges or walls to wholly enclose the recesses, and means for fastening the same.

No. 59,040. Bicycle Gear. (Engrenage de bicycles.)

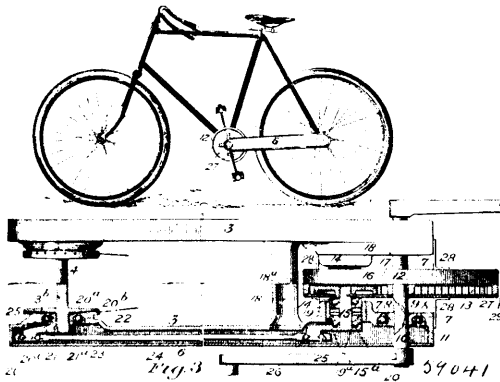


Franklin George McCraney and Hiram McCraney M-Jholland, both of Toronto, Ontario, Canada, 16th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. In a bicycle, the combination of the rear hub, a bevel pinion fast thereon, a pinion shaft journalled in the frame, a bevel pinion fast thereon and meshing with the aforesaid pinion, two bevel pinions loose on the other end thereof, a suitably journalled crank axle, two bevel gear wheels of different sizes fast thereon and meshing with the loose bevel pinions, and clutch mechanism for putting either of the said pinions in driving connection with the shaft, substantially as and for the purpose specified. 2nd. In a bicycle provided with bevel driving gear, the combination therewith of an extra bevel gear-wheel on the crank axle, a bevel pinion on

the pinion shaft meshing therewith, and a clutch mechanism for putting either the ordinary or the extra bevel pinion into driving connection with the pinion shaft on which they are both normally loose, substantially as and for the purpose specified. 3rd. In a bicycle, the combination of the rear hub, a bevel pinion fast thereon, a pinion shaft journaled in the frame, a bevel pinion fast thereon and meshing with the aforesaid pinion, two bevel pinions loose on the other end thereof, a suitably journaled crank axle, two bevel gear wheels of different sizes fast thereon and meshing with the loose bevel pinions which are formed with clutch members thereon, a sliding non-rotatable clutch member between the bevel pinions, and means for moving said clutch member to engage either of the said bevel pinions, substantially as and for the purpose specified. 4th. In a bicycle, the combination of the rear hub, a bevel pinion fast thereon, a pinion shaft journaled in the frame, a bevel pinion fast thereon and meshing with the aforesaid pinion, two bevel pinions loose on the other end thereof, a suitably journaled crank axle, two bevel gear-wheels of different sizes fast thereon and meshing with the loose bevel pinions which are formed with clutch members thereon, a sliding non-rotatable clutch member between the bevel pinions and means for moving said clutch member to engage either of the said bevel pinions, and a spring tending to retain the said sliding clutch member in engagement with one of the said pinions, substantially as and for the purpose specified.

No. 59,041. Bicycle Driving Mechanism.
(*Mécanisme moteur de bicycles.*)

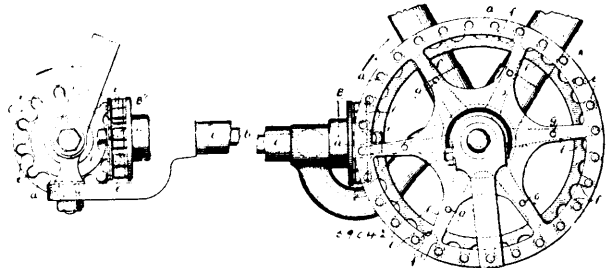


Silas Fader, Adolphus William, John T. Carroll, John L. Beckwith and Lachlan N. Mackenzie, all of Vancouver, British Columbia, Canada, 16th February, 1898; 6 years. (Filed 20th January, 1898.)

Claim.—1st. In a bicycle driving gear, the combination with the rear wheel axle, and the forked supporting frame, of the crank axle journaled in such frame, having a main drive gear mounted thereon at a point in line with the centre of the rear wheel axle, supplemental gears, devices at each side of such central line operated by the said main gear, and power transmitting connections joining such supplemental gears with the opposite ends of the drive wheel axle, as and for the purposes described. 2nd. In a bicycle driving gear, the combination with the forked supporting frame, the rear wheel axle and the pedal crank axle having a drive gear held in a line with the centre of the rear wheel axle, of power-transmitting means eccentrically connected with the main drive wheel and the rear wheel axle, substantially as shown and for the purposes described. 3rd. In a bicycle driving gear, the combination with the rear or drive axle, and the pedal crank axle, said crank axle having a drive gear, of a supplemental gear having a fixed position on the supporting frame held to mesh with the drive gear, and a connecting rod eccentrically connected at one end to the supplemental drive gear, and at the other eccentrically to the rear wheel axle, as and for the purposes described. 4th. In a bicycle drive gear, the combination with the forked frame members, the crank axle having a drive wheel provided with an internal gear rim at each side of its centre, said wheel being held in a line with the centre of the rear wheel axle, of a supplemental gear journaled on the supporting frame at each side of the main wheel held to mesh with such wheel, said supplemental gears having crank axles, the rear wheel axle having crank ends, and the pitman connecting such ends and the supplemental gear crank axles, substantially as shown and described. 5th. In a bicycle drive gearing as described, the combination of a straddle or forked supporting frame, the sides of which are chambered, the rear or drive axle and the crank axle journaled respectively in the rear or front ends of such forked frame, and power-transmitting gearing joining the crank and rear axles, held and operated within the chambered forked frame as specified. 6th. The combination with the forked frame, the drive wheel axle, the crank axle, said axle having a main drive gear, of hubs adjustably held in the said forked frame, stub axles having drive gear to engage the main drive gear journaled in such hubs, and connections joining the said stub axles and the rear or drive wheel axle, as set forth.

7th. A chainless drive gearing for bicycles, comprising in combination with the supporting frame, the crank axle and the rear or drive wheel axle, having crank members, a main drive gear fixedly held on the crank axle centrally thereof, said wheel having internally threaded rims, a pair of laterally adjustable supplemental drive gears 16 held to mesh with such rims, one from each side, said gears 16 having crank axles, pitman rods 24 connecting such axles and the cranks or drive wheel axle, all being arranged substantially as shown and described. 8th. In a driving gear for bicycles, the combination with the main frame of the machine, said frame having the forked supporting members chambered on the outside to form housings, the drive wheel crank axle, the pedal crank axle, the internally toothed drive wheel 12 journaled centrally and fixedly on such pedal axle, the gears 16 projected from opposite sides to engage the gear 12 journaled in the supporting frame, said gears 16 having crank axles, the pitman 24 and the dust guards 27 supported by the forked frame over the side faces of the wheel 12, all being arranged substantially as shown and for the purposes described. 9th. A chainless bicycle gearing, consisting of a rear wheel crank axle, a pedal crank axle, a main drive gear wheel fixedly held centrally on the pedal crank axle, the laterally projected crank supplemental shafts having gears to engage the main gear, pitman connections joining the supplemental crank shafts and the rear wheel cranks, and the supporting frame having its forked members chambered to encase the power-transmitting gear devices, all being arranged substantially as shown and described.

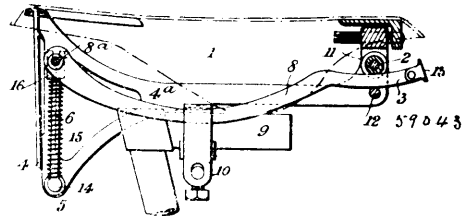
No. 59,042. Driving-Gear for Bicycles, etc.
(*Mécanisme d'engrenage pour bicycles, etc.*)



Waller John Lloyd and William Priest, both of Birmingham, Warwick, England, 16th February, 1898; 6 years. (Filed 12th January, 1898.)

Claim. In driving-gear for bicycles, tricycles, and other velocipedes and motor-vehicles, the use of gear-wheels, each of which consists essentially of a ring or disc, having on one side or face a series of projecting pegs or spindles equi-distant from each other and from the axis of the ring or disc, the axis of the pegs or spindles being parallel, or nearly parallel, to the axis of the ring or disc, the said pegs or spindles carrying rollers of such a diameter that the distance between the pairs of rollers is equal or approximately equal to the diameter of the rollers, the said rollers being made of a slightly conical or conoidal figure at their outer ends, so as to permit the rollers of one wheel to pass between or gear with the rollers of a second wheel at a right or other angle to the rollers of the said second wheel, the roller pegs or spindles being preferably supported at their outer ends by a series of small arms on a ring or disc situated parallel to the disc or ring carrying the pegs or spindles, substantially as set forth and shown.

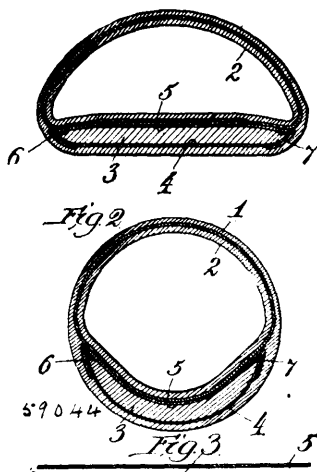
No. 59,043. Cycle Saddle and Support.
(*Support pour selles de cycles.*)



Alexander Joseph Morrison, Botolph House, London, England, 16th February, 1898; 6 years. (Filed 24th January, 1898.)

Claim. 1st. In the support of a cycle saddle, the employment of a curved rail and roller to support one end of the saddle, and a combination of hanging and standing links loosely articulated together at their lower extremities to support the other end of the saddle, substantially as set forth. 2nd. The arrangement and combination of parts, substantially as set forth with references to figure 1. 3rd. The arrangement and combination of parts, substantially as set forth with reference to figures 2, 3, 4 and 5. 4th. The means for returning the saddle to its horizontal position after deviation therefrom, substantially as set forth.

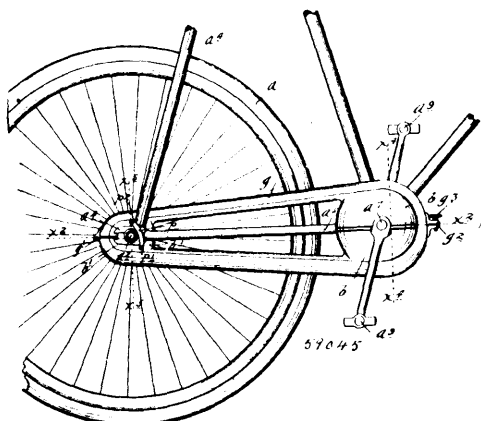
No. 59,044. Self-repairing or Closing Pneumatic Tire. (*Bandage pneumatique à fermeture automatique.*)



Uzziel Putnam Smith, Chicago, Illinois, U.S.A., 16th February, 1898; 6 years. (Filed 4th January, 1898.)

Claim.—1st. An inflatable wheel tire having a compressible or compressed body of rubber between the outer casing and the inner cushion of air, and disconnected or substantially free to act at its main or body portion, substantially as described. 2nd. An inflatable wheel tire having an outer casing, an inner air tube, and a body of compressible or compressed rubber between the outer casing and the inner air tube and practically disconnected between its lateral edges so as to be free to act therein, substantially as described. 3rd. An inflatable wheel tire, having a tread portion of rubber normally uncompressed connected to a non-extensible fabric at two or more points so as to allow the body portion to act freely and be compressed laterally when the tire is inflated, substantially as described. 4th. An inflatable wheel tire having a tube of compressible rubber inserted between the outer cover and the inner air cushion, and an outer body of non-extensible fabric secured to the inner compressible tube at two or more points, but allowing the body portion of the compressible rubber to act freely when the tire is inflated, and automatically close puncture therethrough, substantially as described. 5th. A pneumatic tire having a self-puncture-closing tread portion composed of a body of rubber constantly held under compression by the retractile force of a layer of rubbers secured to one surface thereof and substantially disconnected between its edges from all non-extensible material in the tire, substantially as described.

No. 59,045. Bicycle Gear Case. (*Elui pour engrenage de bicycles.*)

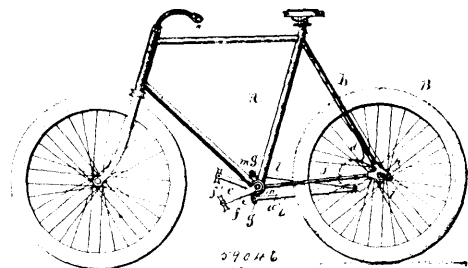


Charles Brooks Holmes, Minneapolis, Minnesota, U.S.A., 16th February, 1898; 6 years. (Filed 27th January, 1898.)

Claim.—1st. A gear case for a sprocket and chain drive, involving hood sections with pronged sides that substantially cover the sides of the sprocket-wheels, channel-shaped inside case sections extending between said hoods, and a channel-shaped marginal cover for said hoods and inside case sections adapted to embrace said parts and complete the gear case, substantially as described. 2nd. A

gear case for a sprocket and chain drive, involving pronged hoods which are split or divided on the line of a plane cutting the axes of both of said hoods, or substantially cutting the same, channel-shaped inside case sections uniting the sections of the different hoods, and a channel-shaped marginal cover for said hoods and inside case sections, adapted to embrace and clamp said parts together, substantially as described. 3rd. A gear case for a sprocket and chain drive, involving the supplemental hood sections b^2 , with half seats b^3 , and half collars b^4 , the supplemental hood sections b^1 , with elongated half seats b^5 , the inside case sections b^6 , uniting said hood sections b and b^1 in pairs, and outside marginal cover for said hoods and inside case sections, and a ring-like split clamp adapted to embrace said half collars b^5 , substantially as described. 4th. A gear case for a sprocket and chain drive, involving pronged and sectioned or two-part hoods, at least one of which hoods is divided or split on the line of a plane cutting its axial centre in the general direction of the length of the gear case, channel-shaped inside case sections uniting the sections of different hoods, a channel-shaped marginal cover for said hoods and inside case sections, the said axially split hood having elongated half seats and keepers k^2 , and the overlapped slot-closing plates k working between said keepers k^2 , and provided with the reversely extending slots k^1 , substantially as and for the purposes set forth.

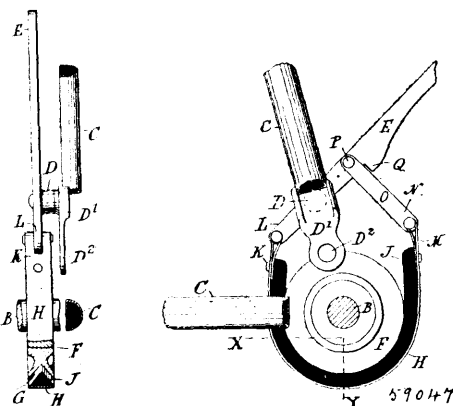
No. 59,046. Bicycle. (*Bicycle.*)



Frank John Wadman, Onondaga, New York, U.S.A., 16th February, 1898; 6 years. (Filed 27th January, 1898.)

Claim.—1st. In a bicycle, the combination with the frame and driving-wheel, of two cranks operating independently of each other, pedals imparting oscillatory motion to said cranks, pitmen receiving reciprocating motion from the cranks, and gears transmitting rotary motion from said pitmen to the driving-wheel, as set forth. 2nd. The combination with the frame and driving-wheel, of a shaft journaled on the frame, a crank fixed to said shaft, a crank mounted revolvably on said shaft, separate pedals operating said cranks, pitmen connected to the cranks, and gears transmitting rotary motion from said pitmen to the driving-wheel, as set forth.

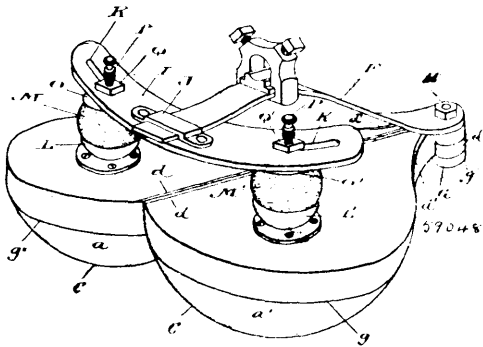
No. 59,047. Wheel Brake for Bicycles, etc. (*Frein de bicycles, etc.*)



William Taylor, Ballarat, Victoria, Australia, 16th February, 1898; 6 years. (Filed 4th February, 1898.)

Claim.—1st. In a wheel brake for bicycles and the like, the combination of a lever E , having a tooth at Q , and fulcrumed as at D , to an attachment D^1 to the frame, or fulcrumed direct to the frame, with a spring strap with lining $H J$, having one end connected pivotally to said lever at one side of said fulcrum, and the other end connected pivotally to a link O , which is pivoted to said lever on the other side of said fulcrum, and bears against the said tooth Q when the brake is off, substantially as set forth. 2nd. The general combination and arrangement of the whole parts of a brake, substantially as described, with reference to figure 2.

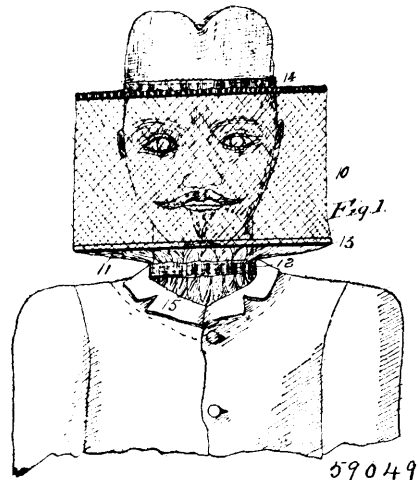
No. 59,048. Bicycle Saddle. (Selle de bicyclet.)



James A. McLarty, Toronto, Ontario, Canada, 16th February 1898; 6 years. (Filed 4th February, 1898.)

Claim.—1st. A bicycle saddle consisting of two independent seat sections hinged or pivotally connected together at their front ends and arranged to be adjusted radially from the centre of the hinge or pivotal connection, substantially as specified. 2nd. A bicycle saddle consisting of two independent seat sections hinged or pivotally connected together at their front ends and arranged to be adjusted radially from the centre of the hinge or pivotal connection and means for locking them in their adjusted positions, substantially as specified. 3rd. A bicycle saddle consisting of two independent seat sections hinged or pivotally connected together at their front ends and arranged to be adjusted radially from the centre of the hinge or pivotal connection, a slotted link located below the seat sections at the rear of the hinge or pivotal connection, a pin extending from each of the seat sections through the slotted link and a clamping nut to lock the pins to the link and hold the seat sections in their adjusted position, substantially as specified. 4th. A bicycle saddle consisting of two independent seat sections hinged or pivotally connected together at their front ends and arranged to be adjusted radially from the centre of the hinge or pivotal connection, a slotted link located below the seat sections at the rear of the hinge or pivotal connection, a pin extending from each of the seat sections through the slotted link and a clamping nut to lock the pins to the link and hold the seat sections in their adjusted position, and a spring support interposed between each section and the link, substantially as specified. 5th. A bicycle saddle, consisting of two independent seat sections hinged or pivotally connected together at their front ends and arranged to be adjusted radially from the centre of the hinge or pivotal connection, a curved link, a curved slot in each end of the link, a spring connected to each seat section provided with a pin projecting through its respective slot, and clamping nuts to lock the pins in their adjusted position in the slots, substantially as specified. 6th. A bicycle saddle, embracing in its construction two independent seat sections, the horn portion of each section provided with a hinge member and pin, a curved link, slots in the curved link, the curvature of the slots being struck from the centre of the hinge pin, a pneumatic spring for each seat section, a pin projecting upwardly from the top of the pneumatic spring, through the base of its respective seat section, to which it is rigidly clamped, and a corresponding pin projecting through its respective slot in the link, clamping nuts for each of the pins to hold them in any adjusted position along their respective slots, substantially as specified. 7th. A bicycle saddle, embracing in its construction two independent seat sections, the horn portion of each section provided with a hinge member and pin, a curved link, slots in the curved link, the curvature of the slots being struck from the centre of the hinge member, a pneumatic spring for each seat section, a pin projecting upwardly from the top of the pneumatic spring, through the base of its respective seat section, to which it is rigidly clamped, and a corresponding pin projecting through its respective slot in the link, clamping nuts for each of the pins to hold them in any adjusted position along their respective slots, a saddle spring, the front end of which is contiguous to the under side of the lower hinge member and held by the hinge pin, a loop formed on the link to hold the rear end of the saddle spring, substantially as specified. 8th. A bicycle saddle, embracing in its construction two independent seat sections, the horn portion of each section provided with a hinge member and pin, a curved link, slots in the curved link, the curvature of the slots being struck from the centre of the hinge member, a pneumatic spring for each section, a pin projecting upwardly from the top of the pneumatic spring, through the base of its respective seat section, to which it is rigidly clamped, and a corresponding pin projecting through its respective slot in the link, clamping nuts for each of the pins to hold them in any adjusted position along their respective slots, a cup interposed between the top of each of the pneumatic springs and the under side of the base-plate, and a corresponding cup interposed between the underside of each of the pneumatic springs and the top of the link, substantially as specified.

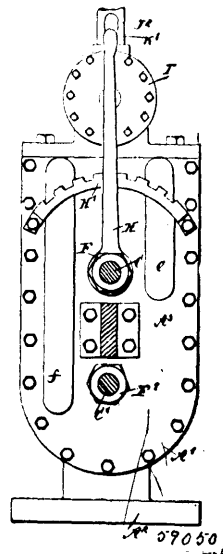
No. 59,049. Mosquito Veil. (Voile pour moustiques.)



William Frederick Collins, Vancouver, British Columbia, Canada, 16th February, 1898; 6 years. (Filed 18th January, 1898.)

Claim.—1st. In a mosquito veil, having a netting 10 arranged to be secured to a hat-band, the combination of a flexible wire-band 13 secured to the said netting and to depend at some distance below the brim of the hat to which it is attached, a drawstring 12 arranged to contract the depending net below the band 13 and a frill or flap extending therefrom upon the shoulders of the wearer, as set forth. 2nd. In a mosquito veil, having a net secured to a hat-band and depending from the brim thereof, the combination of a resilient band 13 secured to the veil, and a contracted portion 1 with a linen flap or frill beneath, a sleeve secured to one end of the wire-band 13, an opening in the free end of the sleeve into which the opposite end of the resilient band is received, whereby the said band may be folded into a double loop, substantially as set forth.

No. 59,050. Rotary Engine. (Machine rotatoire.)

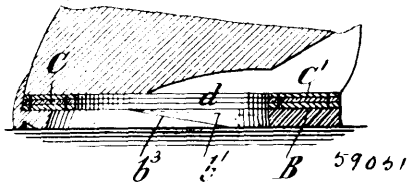


Carl Engberg, St. Joseph, Michigan, U.S.A., 16th February, 1898; 6 years. (Filed 3rd February, 1898.)

Claim.—1st. A rotary engine, comprising a pair of cylinders opening into each other at their peripheral surfaces, pistons mounted to turn in the said cylinders and in peripheral contact with one another, piston heads dovetailed on the said pistons adapted to pass one another at recesses in the peripheries of the said pistons, said heads consisting of separate blocks dovetailed into the pistons, for admitting and exhausting the steam to and from the said cylinders by way of the said pistons, substantially as shown and described. 2nd. A rotary engine, comprising a pair of cylinders opening into each other at their peripheral surfaces, pistons mounted to turn in the said cylinders and in peripheral contact with one another, piston heads on the said pistons and adapted to pass one another at recesses in the peripheries of the said pistons, means for admitting and exhausting the steam to and from the said cylinders by way of

the said pistons, and cut-off valves within the said pistons and under the control of the operator, as set forth. 3rd. A rotary engine, comprising a pair of cylinders opening into each other at their peripheral surfaces, pistons mounted to turn in the said cylinders and in peripheral contact with each other, piston heads secured on the said pistons, and adapted to pass each other at recesses in the peripheries of the said pistons, cut-off valves arranged in recesses in the said pistons and connected by ports in the said pistons with the interior of the cylinders, and an admission and exhaust valve connected with ports leading to the said recesses, substantially as shown and described.

No. 59,051. Hoof Pad. (*Coussin pour sabots.*)

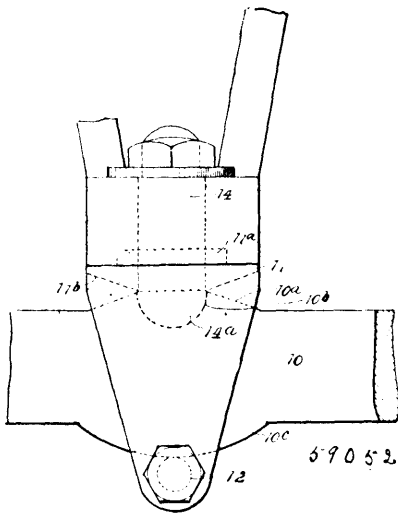


Nicholas G. Mooney, Sing-Sing, New York, U.S.A., 16th February, 1898; 6 years. (Filed 3rd February, 1898.)

Claim.—1st. A hoof-pad, consisting of an elastic cushion of U-shape, the connecting portion of which is much thicker than the side portions, said side portions being recessed to form tongues or fins at the upper surface of the cushion, and a sole-plate secured to the cushion and provided with a central opening conforming nearly in size to the space within the shoe, substantially as set forth. 2nd. A hoof-pad, consisting of an elastic cushion thickened at its rear part and provided with tapering forwardly-extending tongues or fins, and with tapering ribs at the inner edges of the said tongues or fins, and a sole-plate attached to the cushion and provided with a central opening, substantially as set forth.

No. 59,052. Goose Neck Coupler for Drays.

(*Cou d'attelage de voitures.*)



James William Hall, Vancouver, British Columbia, Canada, 16th February 1898; 6 years. (Filed 3rd February, 1898.)

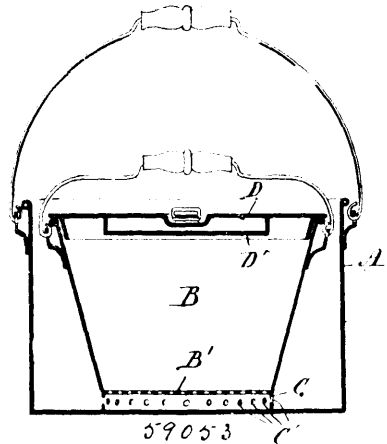
Claim.—In a goose-neck coupler for vehicles having an axle with enlarged portions on the upper and on the under sides, a semi-circular recess in the enlarged portion on the upper side and the lower enlarged portion having its peripheries at even radii from the axis of the said recess, a clevis passing over the enlarged portion the forks of which depend beneath the portion 10^a, a bolt 12 passing through said forks and lying beneath the concaved portion 10^c, a bolt 14 having a semi-circular head to lie in the recess in the top of the axle and pass upward through the clevis and the hub of a goose-neck, and a nut on said bolt to jam on the same in close proximity to the top of the said hub, whereby the same will be allowed to turn, as set forth.

No. 59,053. Culinary Vessel. (*Ustensile de cuisine.*)

George William Tipper and William Henry Lehman, both of Ravenscliffe, Ontario, Canada, 17th February, 1898; 6 years. (Filed 2nd February, 1898.)

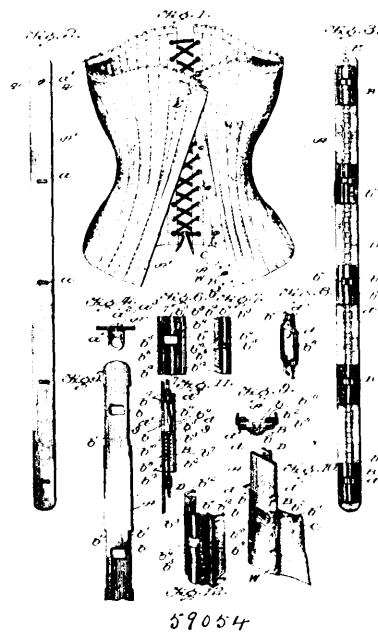
Claim.—1st. A culinary vessel or pot B, having a perforated bottom B', a perforated rim C, at the bottom, and a lid or cover D,

having on the underside a raised floor D', to fit within the perforated rim and against the perforated bottom when said cover is inverted



and transferred from the top to the bottom of the pot or vessel, as and for the purpose set forth. 2nd. The combination with imperforated outer pot or vessel A, of an inner pot B, having a perforated bottom B', and rim C, and cover D, having on the underside a raised floor D', fitting against said perforated bottom and within said rim, substantially as set forth.

No. 59,054. Corset. (*Corset.*)

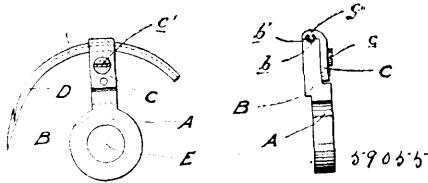


Oliver Mansfield Chesney, Topeka, Kansas, U.S.A., 17th February, 1898; 6 years. (Filed 1st February, 1898.)

Claim.—1st. A corset having overlapping bust-stays, one of which is provided with an upper engaging device pivotally mounted on and projecting from the face of said stay at right-angles thereto, and a series of stationary engaging devices also projecting from the face of said stay, an upper fastener on and parallel with one of the faces of the other bust-stay designed to engage said pivoted device and form a pivotal connection between said stays, and a series of fasteners connected with said former fastener for engaging with said stationary devices, substantially as set forth. 2nd. A corset having overlapping bust-stays, one of which is provided with an upper engaging device, consisting of a staple pivotally mounted on and projecting from the face of said stay at right-angles thereto, and a series of stationary staples also projecting from the face of said stay, an upper fastener on and parallel with one of the faces of the other bust-stay designed to engage said pivoted staple and form a pivotal connection between said stays, and a series of fasteners connected with said former fastener and designed to fit over and hold said staples, each of said fasteners having a movable member designed to engage its respective staple, said pivoted staple being designed to be first engaged with its fastener in uniting said stays, substantially as set forth. 3rd. A corset having one of its bust-stays formed with a series of openings, a corresponding series of

fasteners, comprising sliding plates movable across said openings, and enclosing casings for said plates having their sides hugging the side edges of said stay adjoining said openings, substantially as set forth. 4th. A corset having one of its bust-stays formed with a series of openings, and a series of recesses in its side-edges adjoining said openings, a corresponding series of fasteners comprising sliding plates movable over said openings, and enclosing casings for said plates having side flanges designed to fit in said recesses and to be bent over against the opposite face of said stay, substantially as set forth. 5th. A corset having one of its stays provided with a series of openings, a corresponding series of fasteners, comprising sliding plates movable over said openings, an enclosing casing therefor having teeth projecting therefrom, and a covering for said stay designed to be penetrated by said teeth, which latter are then bent down to hold said covering, as set forth. 6th. A corset having one of its bust-stays formed with a series of openings, and a series of recesses in its side edges adjoining said openings, a corresponding series of fasteners, comprising sliding plates movable over said openings, enclosing casings for said plates having side flanges designed to fit in said recesses and to be bent over against the opposite face of said stay, and also having teeth at the ends of said flanges, and a covering for said stay designed to be held thereon by said teeth, substantially as set forth. 7th. A corset having one of its stays formed with openings, a series of casings attached to said stay adjoining said openings, said casings having inwardly projecting lips, sliding plates enclosed by said casings having tongues designed to project across said openings and formed with grooves, springs located between said lips and said grooves, and a series of chains or cords connecting said sliding plates, substantially as set forth.

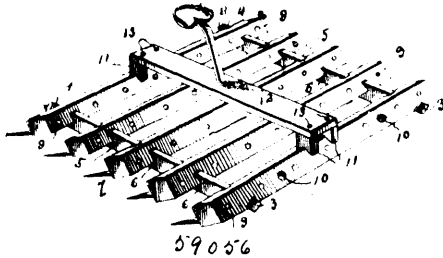
No. 59,055. Needle Guard for Sewing Machines.
(*Guide-aiguille pour machines à coudre.*)



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

Claim.—A needle guard composed of the portions B and C, the latter having an overlapping lip *c'*, between which and the end *b* of the piece B is formed an opening of the exact contour of the needle, substantially as described and for the purpose set forth.

No. 59,056. Combined Clod-Crusher, Leveler and Harrow.
(*Brisse-motte et herse combinés.*)



Samuel B. Jones, Butler, Indiana, U.S.A., 17th February, 1898; 6 years. (Filed 5th February, 1898.)

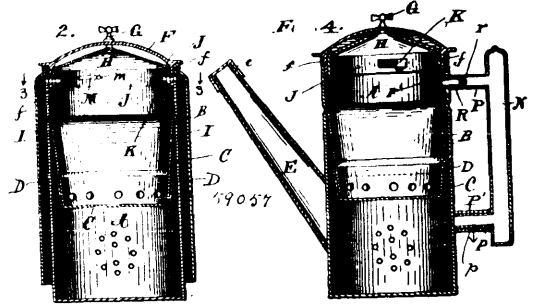
Claim.—In an agricultural implement of the character set forth, a series of square bars arranged in parallel relation with a corner in position to engage with the ground, tie-rods for connecting the bars, space-blocks mounted upon the tie-rods between the bars and having V-shaped notches in their ends to receive the corners of adjacent bars, rest-blocks mounted upon the bars and having V-shaped notches in their lower ends to receive the upper corners thereof, a longitudinal seat-support placed upon the rest-blocks, means for securing the seat-support, rest-blocks and bars together, and a seat mounted upon the said support, substantially as set forth.

No. 59,057. Tea and Coffee-Pot. (*Cafetière et théière.*)

Edwin E. Crook, Indianapolis, Indiana, U.S.A., 17th February, 1898; 6 years. (Filed 7th February, 1898.)

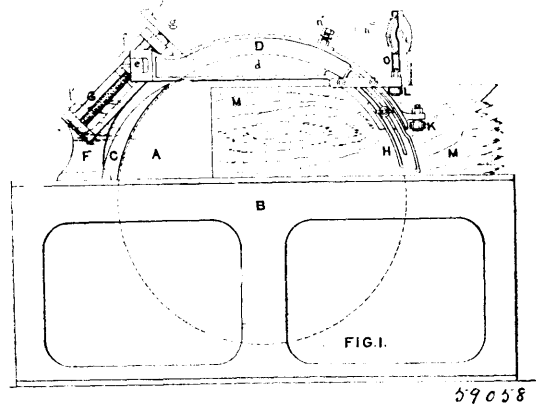
Claim.—1st. In combination with a tea or coffee-pot, a pair of outside tubes which are opened to the outer air at their lower ends, and communicate at their upper ends with the interior chamber, and a lid with an adjustable flange to close the openings, said flange having perforations to be brought into register with the openings to the outside tubes at certain adjustments of the flange, substantially

as described and specified. 2nd. In combination with a tea or coffee pot, a hinged lid having a flange with perforations, an adjust-



able flange inside of the flange of the lid having perforations which register at certain adjustments of the flange with the perforations of the lid-flange, and outside tubes which are open to the outer air at their lower ends and communicate at their upper ends with the interior chamber through the openings in the flange of the lid, all substantially as described and specified. 3rd. The combination with a tea or coffee-pot of a hollow handle having hollow cross-bars connecting said handle with the pot, the upper of said bars having communication with the interior of the pot and with the hollow handle and the lower of said bars having communications with the hollow handle and with the outside air, and the sleeve with outside annular flanges at one end and a woven wire covering at its other end said sleeve being inserted from the inside of the pot into the upper hollow cross-bar, all substantially as described and for the purpose specified. 4th. The combination with a tea or coffee-pot A, having a handle or spout E, with a cap *c*, working on the guide *c'*, the tubes I, open at the lower end to the outer air and to the interior of the pot at their upper ends, the hinged lid F having the flange *f*, with perforations registering with the openings to the tubes I, disc H, pivotally secured to the top of the lid and having the flange J, with openings which can be brought into register with the openings through the flange of the lid and the wings E, all substantially as described and for the purpose specified.

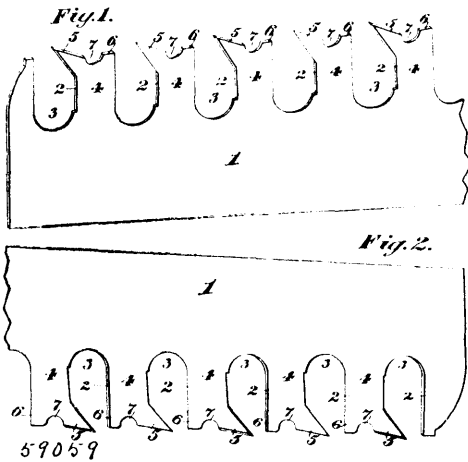
No. 59,058. Guard for Circular Saws. (*Scie circulaire.*)



Edward Williams, Lealand Road, Chester, England, 17th February, 1898; 6 years. (Filed 4th January, 1898.)

Claim.—1st. A saw guard for circular saws comprising a pivoted hood swinging in a horizontal plane, substantially as described. 2nd. The combination with a swinging pivoted hood, of a fixed bracket and supporting arm by which the hood is supported, substantially as described. 3rd. The combination with a pivoted swinging hood, of a roller K by which it is pressed open, a roller L for guiding the timber, and a weight N and cord *n* for holding the guard in position, substantially as described. 4th. The combination with a circular saw A and saw bench B, of a bracket F with inclined slides, a screw rotating therein, a horizontal arm sliding therein and raised and lowered by the screw, and a swinging hood pivoted to the arm and covering the saw, substantially as described. 5th. A guard for circular saws, comprising a pivoted hood swinging in a horizontal plane, a rising and falling arm to which the hood is pivoted, a fixed bracket with inclined slides in which the arm slides up and down, a screw for raising and lowering the arm, an extension piece H at the front end of the hood, rollers affixed to the hood to press against and guide the timber, a weight to draw the hood towards the saw, a cord for connecting the weight and a pulley over which the cord passes, substantially as described.

No. 59,059. Ice Saw. (*Scie pour la glace.*)

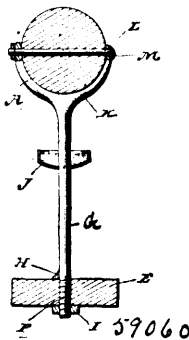


George Albert Foster, Meriden, Connecticut, U.S.A., 17th February, 1898; 6 years. (Filed 5th February, 1898.)

Claim. An ice-saw, consisting of a flat blade provided with integral teeth arranged at intervals and comprising shanks having straight parallel front and rear edges and forming recesses 3, the edges of the blade at the top of the recesses being semi-circular, the forwardly-extending triangular cutting points 5 disposed at a slight inclination, bevelled at both the top and bottom to form cutting edges, the latter being arranged at an angle to each other, and heels located in rear of the cutting-points and provided with blunt lower edges, said teeth being provided between the heels and the cutting-points with substantially semi-circular recesses 7, substantially as described.

No. 59,060. Insect Guard for Poultry Perches.

(*Garde-insectes pour perchoirs à volaille.*)



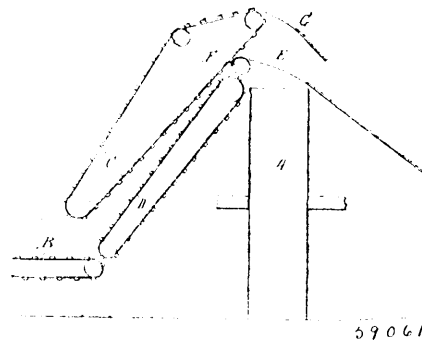
Cora Alma Polson, Winkler's Mills, Kansas, U.S.A., 17th February 1898; 6 years. (Filed 4th February, 1898.)

Claim.—1st. A device for protecting poultry from parasites, consisting of a bracket secured to a wall or other place and carrying an upwardly-extending arm secured to a roost and provided with a liquid chamber, substantially as shown and described. 2nd. A device for protecting poultry from parasites, consisting of the bracket or base, a bar or standard secured therein and carrying a chamber for the reception of oil or the like, and having, at its upper end, the outwardly-branching or forked arms to receive a roost, and a bolt or locking pin passing through said arms and the roost, for the purpose set forth. 3rd. The herein described device for protecting poultry from parasites, consisting of a bracket or base, a bar or standard secured therein and provided with a tit or projection H, and the lower-screw-threaded portion F, to enter said base, a nut to secure said base or bracket against the tit or projection, the standard or bar being provided with the chamber for the reception of the liquid, the upper portion of said bar having the forked arms to receive the roost, and suitable connections extending through the upper portion of said forked arms, for the purpose set forth. 4th. A device for protecting poultry from parasites, consisting of a bracket or base, an upwardly-extending bar or standard carrying a liquid chamber and provided with the forked ends to receive the roost, and suitable connecting bars passing through the said forked arms and the roost, for the purpose set forth. 5th. The combination with a wall of a coop or other compartment, of a bracket secured thereto, an upwardly-extending bar or standard having the screw-threaded lower end secured within said bracket, and a tit or projection upon the bar above the same, a chamber surrounding a portion of the

standard as shown, the standard being provided at its upper portion with the outwardly and upwardly-extending forked arms carrying the roost, and a bolt passing through said upper extension and the roost, for the purpose set forth.

No. 59,061. Harvester Elevator.

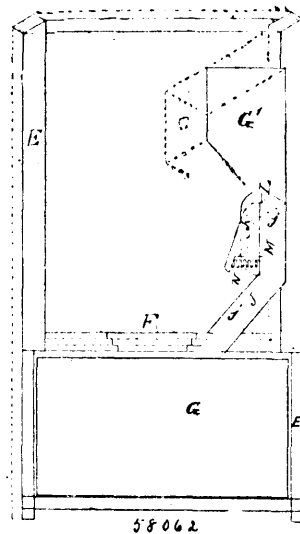
(*Elevateur pour moissonneuses.*)



Maurice Kane, Austin, Illinois, U.S.A., 17th February, 1898; 6 years. (Filed 31st January, 1898.)

Claim.—1st. A harvester-elevator, comprising the usual upper and lower elevator aprons, supported by rollers at each end, a binder table, and an additional elevating roller located beyond the upper end of the lower elevator apron, and in such proximity to the under ply of the upper elevator apron as to co-operate therewith in feeding the grain to the binder table and in preventing such grain, after it is backed up, from being fed backwards and downwards between the lower elevator apron and the binder table, substantially as and for the purpose set forth. 2nd. A harvester-elevator, comprising a binder-deck or table, the usual upper and lower elevator aprons, including the rollers for supporting the same, an auxiliary roller located above the lower elevator apron and in such proximity to the under ply of the upper elevator apron as to co-operate therewith in elevating the grain and in preventing such grain, after it is backed up on the binder table, from being drawn down by the slats of the lower elevator apron between such apron and the binder table, and gearing connecting such roller with the upper roller of the lower elevator apron, substantially as and for the purpose set forth.

No. 59,062. Earth-Closet. (*Latrines sèches.*)

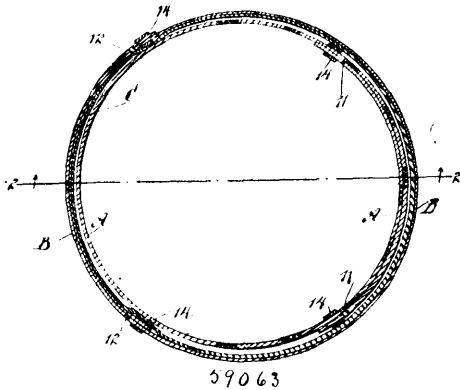


Reuben Barber, Toronto, Ontario, Canada, 17th February, 1898; 6 years. (Filed 31st December, 1897.)

Claim.—1st. A dry earth closet, embracing in its construction a seat portion provided with an opening, a receptacle below the seat portion to receive the animal matter and urine, a hopper located above the seat portion to contain dry earth, ashes, lime, or other granular substances, a chute from the hopper through the seat to the receptacle, and a means for controlling the feed of the material from the hopper to the receptacle, substantially as specified. 2nd. A dry earth closet, embracing in its construction a seat portion pro-

vided with an opening, a receptacle below the seat portion to receive the animal matter and urine, a hopper located above the seat portion to contain dry earth, ashes, lime, or other granular substances, a chute from the hopper through the seat to the receptacle, a means for controlling the feed of the material from the hopper to the receptacle, and a ventilator for the compartment containing the receptacle consisting of a shaft extending under the floor of the closet to the compartment, and from the compartment up the outer wall of the closet, substantially as specified. 3rd. A dry earth closet, embracing in its construction a seat portion, a removable receptacle below the seat portion to contain the animal matter and urine, a hopper above the seat portion, a chute into the top of the hopper, a lid to close the chute, a chute from the hopper through the seat to the receptacle, a slide to normally close the passage from the hopper to the chute, and a check-slide to close the passage through the chute when the slide is open, a pivoted link coupling the slide and check-slide, a spring bearing against the lower end of the link and the outer side of the chute, a ventilating shaft extending up the back of the closet communicating with the compartment containing the removable receptacle, and a ventilating shaft under the floor of the closet communicating with the said compartment, substantially as specified.

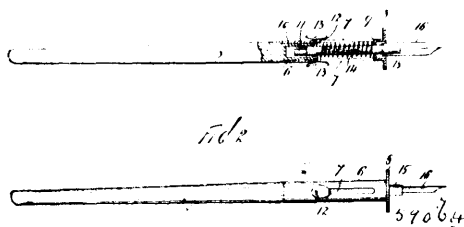
No. 59,063. Embroidery Frame. (Cadre à broderie.)



Norris Clayton Leonard, McMinnville, Tennessee, U.S.A., 17th February, 1898; 6 years. (Filed 27th December, 1897.)

Claim.—1st. As an improved article of manufacture, an embroidery frame comprising two open hoops, the ends of each hoop lapping on each other, each hoop being provided with series of apertures and with pins at their ends to enter the apertures, said pins pointing in opposite directions and clamps preventing the pins from leaving the apertures into which they are placed, as and for the purpose specified. 2nd. As an improved article of manufacture, an embroidery frame comprising two open hoops, the ends of each hoop lapping on each other, each hoop being provided with series of apertures and with pins at their ends to enter the apertures, said pins pointing in opposite directions, and clamps held to slide on the hoops, being adapted to embrace the lapped portions thereof and prevent the pins from leaving the apertures accidentally when once they are entered therein, as and for the purpose specified.

No. 59,064. Pen Holder. (Porte-plumes.)

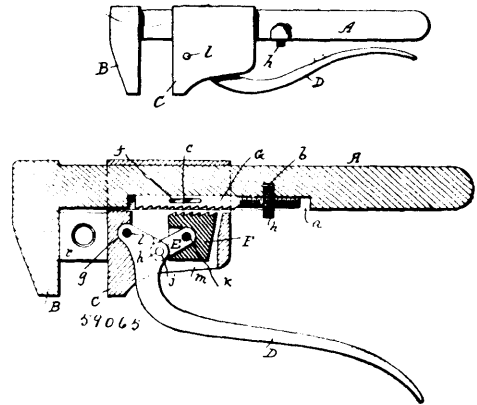


Mulford Wade Lansing, Lisha's Kill, New York, U.S.A., 17th February, 1898; 6 years. (Filed 3rd January, 1898.)

Claim.—As a new article of manufacture, a pen-holder consisting of a stock of any desirable form, and a sleeve secured thereto and provided on its opposite sides with longitudinal slots therein, an annular flange on the rim of the outer end thereof, a cross-plate or bar mounted in said tube near the outer ends of said slots, the outer end of said pen-stock being provided with a chamber centrally formed therein, a rod mounted in said cross-plate and extending through said tube, a cross-bar secured to the inner end of said rod and projecting through said slots, discs or plates slightly concave on either end of said bar outside of said tube, a spring mounted on said rod between said cross-bars and cross-plate, a suitable pen-holder secured

to the outer end of said rod adapted to engage the pen, all of said parts being combined, substantially as and for the purposes set forth and described.

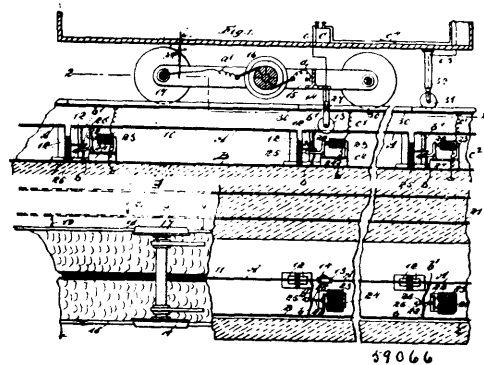
No. 59,065. Wrench. (Clé à écrou.)



Isaac N. Lincoln, Providence, Rhode Island, U.S.A., 17th February, 1898; 6 years. (Filed 19th November, 1897.)

Claim.—In a wrench, the combination consisting of the stationary jaw B, with the shank A integral therewith, a slot a in said shank, and provided with a screw ratchet G adjustable in the slot by the thumb-nut h, the movable sleeve C having a cavity g, the operating lever D having its front end rounded to fit said cavity, with the pin l to secure said lever to the sleeve, the ratchet block F having a cavity i, the link E having its rear end rounded to fit said cavity, with the pin k to secure said link to the block, the forward end of the link fitting into the cavity h of the lever and secured by the pin j, so constructed to produce a powerful forward movement of the jaw C, substantially as shown and described.

No. 59,066. Electric Railway. (Chemin de fer électrique.)



August Casazza, Hoboken, New Jersey, U.S.A., 17th February, 1898; 6 years. (Filed 25th January, 1897.)

Claim.—1st. In an electric railway, the combination of a generator, a feed wire, a conduit having a slotted top, a line wire composed of sections having their ends insulated and mounted on raised supports in the conduit, switch devices adapted when actuated to place the feed wire in circuit with the sections of the line wire, said switch devices each comprising a magnet and its armature, a car having a motor circuit, including a trolley arm having a trolley adapted to traverse the sections of the line wire, a conductor at the side of the conduit slot extending parallel to the line wire and composed of corresponding sections, each section of said conductor being connected to one switch device and a local circuit carried on the car and including spring-pressed plates adapted to traverse the sections of the conductor at the side of the slot in the conduit and extending parallel to the line-wire, substantially as set forth. 2nd. The combination with the electrically-operated switch, the trolley and the line-wire, of the spring-pressed plates on the trolley arms, the conducting strips opposite the said plates, and an electric circuit including a generator, the contact plates, the conducting strips, and the electrically-operated switch, substantially as described. 3rd. The combination of the conduit having a conducting strip at the slot, the switch in the conduit, the electrical connections between the conducting strip and switch, the trolley arm, the spring-pressed plates held on the trolley arm and against the strip, and electrical connections with the plates, substantially as described. 4th. The combination of the slotted conduit, the sectional conducting strip or

wire suspended by hangers at the side of the slot, the sectional line wire, the feed wire, and switches for connecting the line wire sections with the feed wire, the operating mechanism of each switch being electrically connected to one of the sections of the said conducting strip or wire, substantially as described.

No. 59,067. Process of Making Rivets, Studs, etc.

(*Procédé pour faire des rivets, etc.*)

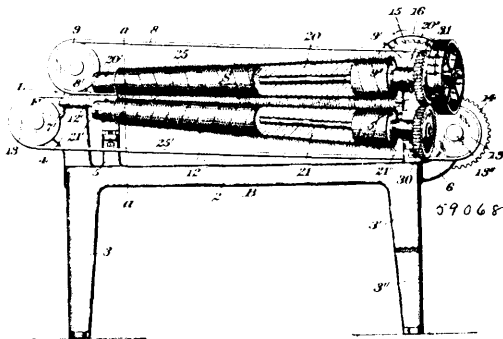


The Indianapolis Chain and Stamping Company, Indianapolis, Indiana, U.S.A., assignee of Charles Edward West, same place, 17th February, 1898; 6 years. (Filed 7th August, 1897.)

Claim.—1st. That process of forming rivets having hardened centres and softer ends, which consists in first forming therewith metal of substantially the degree of hardness which it is desired the ends shall have, then covering said ends with closely fitting caps of material adapted to protect them from the action of the hardening process, then charging with carbon the exposed central portion by heating and then immersing in a hardening liquid or compound, and then removing said caps, all substantially as set forth. 2nd. A joint pin or rivet with case-hardened body of cylindrical form and soft ends of less diameter for rivet heads made by first forming the rivet of metal of substantially the degree of hardness which it is desired the ends shall have, then covering said ends with a closely fitting caps of material adapted to protect them from the action of the hardening process, then charging with carbon the exposed middle-length portion, and hardening by heating and suddenly cooling and finally removing said caps, all substantially as set forth.

No. 59,068. Leaf Stemming Machine.

(*Machine pour culer les tiges des feuilles.*)



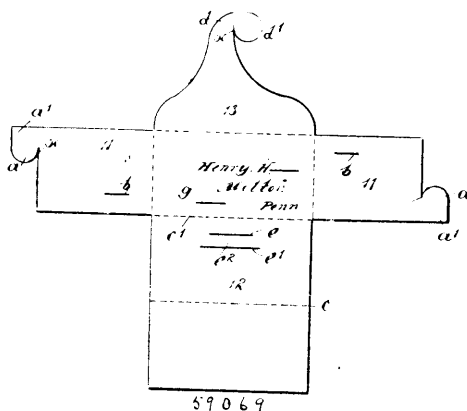
William Henry Butler, Harrison, New York, U.S.A., 17th February, 1898; 6 years. (Filed 12th January, 1898.)

Claim.—1st. Leaf-stemming means comprising coating opposing surfaces adapted, in operation, to work with a wiping action upon the leaf, portions of one or both of said surfaces being of different efficiencies, and means for operating one or both of said surfaces. 2nd. Leaf-stemming means comprising coating opposing surfaces adapted, in operation, to work with a wiping action upon the leaf, portions of each said surfaces being of different efficiencies, and means for operating said surfaces. 3rd. Leaf-stemming means comprising coating opposing brush-like working surfaces adapted, in operation, to work with a wiping action upon the leaf, portions of each of said surfaces being of varying efficiencies, and means for operating said surfaces. 4th. Leaf-stemming rolls having coating opposing surfaces adapted, in operation, to work with a wiping action upon the leaf, portions of each of said roll-surfaces being of different efficiencies, combined with means for operating said rolls. 5th. Leaf-stemming rolls having coating opposing working surfaces portions of each of which are of different efficiencies and of different peripheral velocities, adapted, in operation, to work with a wiping action upon the leaf, combined with means for operating said rolls. 6th. In combination, with a feed mechanism, leaf-stemming means comprising coating surfaces adapted, in operation, to work with a wiping operation upon the leaf, portions of each of said surfaces being of varying efficiencies, and means for operating said surfaces. 7th. A leaf-stemming machine, comprising co-operative stemming-rolls having brush-like surfaces of decreasing rigidity from the entrant end toward the exit end thereof, and means for rotating said rolls, the construction being such that the rolls operate upon the leaf with a wiping action of decreasing pressure when said leaf is passed between and from the entrant ends toward the exit ends of said rolls. 8th. A leaf-stemming machine comprising co-operative stemming rolls one of which has a spiral brush-like surface of decreasing

rigidity in the direction of the length of the roll, the construction of the rolls being such that the same will operate upon the leaf with a wiping action of decreasing pressure when said leaf is passed between and from the entrant ends toward the exit ends of said rolls. 9th. In a leaf-stemming machine, the combination, with suitable feed mechanism, of stemming-rolls having co-operative brush-like surfaces whose successive portions are of relatively different elasticities and are adapted to act upon successive portions of the leaf with a wiping action of varying pressures. 10th. In a leaf-stemming machine, stemming-rolls having circumferential teeth arranged in opposing spirals, the teeth of one roll relatively to those of another roll, and of decreasing rigidity from the entrant ends toward the exit ends of said rolls, the construction being such that the rolls will operate upon the leaf with a wiping action of gradually-decreasing pressure when the leaf is passed between and from one end toward the other end of said rolls. 11th. In a leaf-stemming machine, stemming mechanism embodying a stemming-roll having a brush-like surface which is inclined with relation to the axis of said roll, and the successive portions of which are adapted to act with a progressive wiping action upon successive portions of the leaf with different peripheral velocities as the same is passed from one toward the other end of said rolls, combined with complementary stemming and leaf-feeding devices. 12th. A leaf-stemming mechanism comprising a stemming-roll having a brush-like surface inclined from end to end relatively to the axis of said roll and of gradually-increasing flexibility in the direction of the length thereof, whereby the leaf is subjected to a progressive wiping action of varying efficiency, a complementary stemming device in operative relation with said roll, and means for feeding the leaf longitudinally of said rolls. 13th. In a machine of the class specified, a stemming-roll having a conical surface composed of spirally-disposed teeth, combined with a complementary stemming device, means for feeding the leaf in the direction of the length of the rolls, and means for rotating the roll whereby successive portions of the roll have a wiping action upon the leaf of varying peripheral velocities. 14th. In a machine of the class specified, a stemming-roll having resilient teeth of increasing lengths from the entrant toward the exit ends of said rolls, combined with means co-operating with said stemming-roll to cause the leaf to be operated on with a wiping action of gradually-decreasing pressure when the same is passed between said stemming-roll and co-operating means. 15th. In a machine of the class specified, the combination with suitable leaf-feeding mechanism, of stemming members having intermeshing teeth of decreased density or rigidity from the entrant ends toward the exit ends of said members, and means for actuating said members whereby said teeth will operate upon the leaf with a wiping action of decreasing pressure, when the same is advanced by the feeding mechanism, from the entrant toward the exit ends of said members. 16th. In a machine of the class specified, leaf-stemming rolls, each having a brush-like surface of increasing pliability in the direction of the length thereof operating upon the leaf with a progressive wiping action, and one of said rolls having one end of smaller diameter than the opposite end thereof, combined with means for rotating said rolls, and means for feeding the leaf between, and in the direction of the length of said rolls. 17th. In a leaf-stemming machine, the combination, with stemming mechanism embodying stemming-rolls having co-operative brush-like faces of gradually-increasing resiliency from the entrant ends toward the exit ends thereof, said faces operating with a progressive wiping action upon the leaf, of feeding mechanism comprising instrumentalities for engaging the stem of, and for advancing, the leaf in the direction of the length of the rolls and simultaneously drawing said leaf through the rolls in a plane transverse to the longitudinal axis of the rolls, and means for rotating the rolls and for actuating the feed mechanism. 18th. In a leaf-stemming machine, the combination, with two conical stemming-rolls set with their axes at acute angles to the line of feed, and also having brush-like wiping surfaces of increased pliability in the direction of their lengths, combined with leaf-feeding mechanism located on one side of and in close proximity to the smaller ends of the stemming-rolls, and effective for engaging the stem of and for feeding the leaf in the direction of the length of said rolls. 19th. In a leaf-stemming machine, the combination, with suitable feed mechanism, of stemming mechanism, comprising two stemming-rolls set with their adjacent surfaces in relatively divergent lines vertically, and at acute angles horizontally, with relation to the line of feed, and having intermeshing, circumferential, resilient teeth, which are of gradually-decreasing rigidity in the direction of the length of the rolls, said teeth operating with a wiping action upon the leaf. 20th. In a leaf-stemming-machine, the combination of rotative stemming-rolls separating the body of the leaf from the stem by a wiping action and arranged with their axes at acute angles to the line of feed, and having their leaf-engaging surfaces of gradually-increased pliability in the direction of the length of the rolls, mechanism for rotating said rolls, and means for feeding the leaf in a line transverse to the plane of rotation of said rolls. 21st. In a leaf-stemming machine, the combination of stemming mechanism including stemming rolls having oppositely-spiraled brush-like surfaces for advancing one end of the leaf in unison with the feed mechanism and longitudinally of the rolls, and for simultaneously removing by a wiping action the body of the leaf from the stem, and leaf-feeding mechanism constructed and organized to engage and advance the opposite end of the leaf in the direction of the length of the rolls

and to simultaneously draw said leaf longitudinally through the rolls in a plane intersecting the longitudinal axis of said rolls. 22nd. In a leaf-stemming machine, the combination, with continuously-progressive feed mechanism, comprehending instrumentalities for engaging and advancing the leaf in the direction of the length of the stemming rolls, of stemming-rolls supported with their axes at acute angles with relation to the line of feed and having their co-operative faces of increased pliability in the direction of the length of the rolls, and also having their operative faces formed in oppositely-arranged spirals for advancing the body of the leaf in unison with the feed mechanism, said teeth operating with a wiping action upon the leaf, mechanism for rotating said rolls, and means for adjusting the rolls to change the relation of their co-operative surfaces. 23rd. In a leaf-stemming machine, the combination, with feed mechanism for advancing the leaf, of co-operative stemming-rolls supported with their axes in divergent lines vertically with relation to each other and at an acute angle horizontally with relation to the line of feed, and having co-operative, resilient surfaces, the successive portions of which are of relatively-varying rigidities and operate with a progressive wiping action on the leaf.

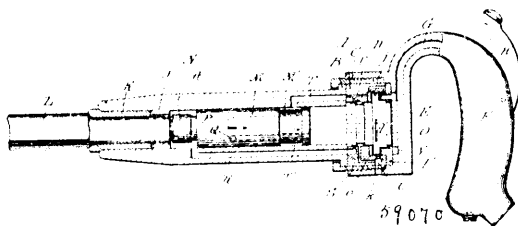
No. 59,069. Safety Envelope. (Enveloppe de sûreté)



Ruth Newey Smith, Patchogue, New York, U.S.A., 17th February, 1898; 6 years. (Filed 10th January, 1898.)

Claim.—A safty envelope, comprising a blank having two foldable ends flaps, locking tabs on said end flaps that may engage slots in said flaps when the end flaps are folded, and two side flaps one of which is adapted for double folding and is provided with a keeper band produced by two spaced slots therein, the opposite flap being narrowed toward the free end whereon a locking tab is laterally formed, said tab and the neck of the flap being adapted to pass below the keeper band when the envelope is folded, and the lateral tab to be interlocked with a single slot provided in the front side of the envelope, substantially as described.

No. 59,070. Pneumatic Hammer. (Marteau pneumatique)



Joseph Boyer, St. Louis, Missouri, U.S.A., 18th February, 1898; 6 years. (Filed 3rd January, 1897.)

Claim.—1st. In a pneumatic hammer, a valve for controlling the movements of the piston, consisting of a cylindrical shell located in the piston chamber, and adapted to have the piston pass through it, and provided with opposing pressure areas against which the motive fluid acts to shift the valve in opposite directions. 2nd. In a pneumatic hammer, a valve for controlling the movements of the piston, consisting of a cylindrical shell located in the piston chamber and adapted to have the piston pass through it, and provided with opposing pressure-surfaces of different areas, against the smaller of which the motive fluid constantly acts, to press the valve in one direction, and to the larger of which the motive fluid is intermittently admitted, to move the valve in the opposite direction. 3rd. In a pneumatic hammer, the combination, with the piston chamber and piston, of a valve located in the piston chamber, and consisting of a cylindrical shell through which the piston passes, and provided with differential pressure areas, against the smaller of which the

motive fluid constantly acts to press the valve in one direction, and a passage controlled by the piston for intermittently admitting the motive fluid to the larger pressure area, to move the valve in the opposite direction. 4th. In a pneumatic hammer, the combination with the piston chamber and piston, of a valve located in the rear end of the piston chamber, and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential pressure areas, against the smaller of which the motive fluid constantly acts to press the valve in one direction, and a passage controlled by the piston, and opened by the latter at its forward stroke to admit motive fluid to the larger area of the valve. 5th. In a pneumatic hammer, the combination with the piston chamber and piston, of a valve located in the rear end of the piston chamber, and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential pressure areas, against the smaller of which the motive fluid constantly acts to press the valve forward, and a passage controlled by the piston and opened by the latter at its forward stroke to admit motive fluid to the larger area of the valve, to move the valve rearward. 6th. In a pneumatic hammer, the combination with the piston chamber and piston, of a valve located in the rear end of the piston chamber, and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential pressure areas, against the smaller of which the motive fluid constantly acts to press the valve forward, and a passage controlled by the piston and opened by the latter at its forward stroke to admit motive fluid to the larger area of the valve, to move the valve rearward, said valve when moved forward by the constantly-acting pressure against its smaller area opening an annular port around its rear end to admit the motive fluid to the rear end of the piston-chamber, and when moved in the opposite direction by the intermittent pressure admitted to its larger area opening a passage leading to the front end of the piston chamber. 7th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve for controlling the movements of the piston, consisting of a cylindrical shell located in the piston-chamber and adapted to have the piston pass through it, and provided with differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston and opened by the latter at its forward stroke to admit motive fluid to the larger area of the valve, and an exhaust-passage leading from said larger area of the valve and opened by the piston at its rearward stroke. 8th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve having differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston for intermittently admitting motive fluid to the larger area of the valve to move the latter in the opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and a passage leading from the larger area of the valve to one end of the piston-chamber through which the motive fluid admitted by the auxiliary passage may pass to said end of the piston-chamber and drive the piston toward the opposite end of the chamber. 9th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve having differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve forward, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to the larger area of the valve and move the latter rearward, an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and a passage leading from such larger area of the valve to the front end of the piston chamber through which the motive fluid supplied by the auxiliary passage may be admitted to the front end of the piston chamber to drive the piston rearward. 10th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve having differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one-direction, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to the larger area of the valve and move the latter in opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and a passage leading from such larger area of the valve to the front end of the piston-chamber, through which the motive fluid supplied by the auxiliary passage may be admitted to the front end of the piston-chamber to drive the piston rearward, the capacity of the aforesaid auxiliary passage being greater than the combined capacity of the other two passages communicating with the larger area of the valve. 11th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve having differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one direction, a live-air passage leading directly from the source of supply to the piston-chamber, through the wall of the latter and independently of the piston and a passage leading from the piston-chamber to the larger area of the valve, the piston operating to close communication between said passages except when it approaches one end of its stroke, and then place said passages in communication with each other, to thereby admit the motive fluid to the larger area of the valve. 12th. In a pneumatic

hammer, the combination with the piston-chamber and piston, of a valve having differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one direction, a live-air passage leading directly from the source of supply to the piston-chamber through the wall of the latter and independently of the piston, a passage leading from the piston-chamber to the larger area of the valve, the piston operating to close communication between said passages, and being provided with a circumferential groove which places said passages in communication with each other as the piston approaches its forward limit of stroke, to thereby admit the motive fluid to the larger area of the valve, and an exhaust-passage from the larger area of the valve opened by the piston at the forward end of its stroke. 13th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve having opposing pressure areas to which the motive fluid is admitted for shifting the valve in opposite directions, a passage controlled by the piston, for intermittently admitting motive fluid to one of the pressure areas of the valve, to move the latter in one direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit an additional supply of motive fluid to said area of the valve, and a passage leading from said area of the valve to one of the piston-chamber, through which motive supplied by the auxiliary passage may be admitted to said end of the piston-chamber to move the piston toward the opposite end of said chamber. 14th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the piston-chamber and consisting of a cylindrical shell through which the piston passes, and provided with differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston for intermittently admitting the motive fluid to the larger pressure area of the valve, to move the latter in the opposite direction, and an auxiliary passage opened by the last-mentioned movement of the valve to admit an additional supply of motive fluid to the larger area of the valve. 15th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve for controlling the movements of the piston, consisting of a cylindrical shell located in the rear end of the piston-chamber and adapted to have the rear end of the piston pass through it at the end of its rearward stroke, and provided with differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to the larger area of the valve and move the latter in the opposite direction, and an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply. 16th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the piston-chamber and consisting of a cylindrical shell through which the piston passes, and provided with differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to the larger area of the valve and move the latter in the opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and an exhaust-passage leading from said larger area of the valve and opened by the piston at its rearward stroke, said exhaust-passage being of larger area than the auxiliary passage by which the motive fluid is admitted to the larger area of the valve. 17th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve for controlling the movements of the piston, consisting of a cylindrical shell located in the piston-chamber and adapted to have the piston pass through it and provided with differential-pressure areas, against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston, to admit motive fluid to said larger area of the valve and move the latter in the opposite direction, and an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, said auxiliary passage exceeding in area the said pressure controlled by the piston. 18th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the piston-chamber and consisting of a cylindrical shell through which the piston passes, and provided with differential-pressure areas, against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston for intermittently admitting the motive fluid to the larger area of the valve to move the latter in the opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and a passage leading from the larger area of the valve to one end of the piston-chamber, through which the motive fluid admitted by the auxiliary passage may pass to said end of the piston-chamber, and drive the piston toward the opposite end of the chamber. 19th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve for controlling the movements of the piston, consisting of a cylindrical shell located in the rear end of the piston-chamber and adapted to have the rear end of the piston pass through it at the end of its rearward stroke, and provided with differential-pressure areas, against the smaller of

direction, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to the larger area of the valve and move the latter in the opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and a passage leading from such larger area of the valve to the front end of the piston-chamber, through which the motive fluid supplied by the auxiliary passage may be admitted to the front end of the piston-chamber, to drive the piston rearward. 20th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the rear end of the piston-chamber, and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential-pressure areas, against the smaller of which the motive fluid constantly acts to press the valve in one direction, a passage controlled by the piston, and opened by the latter at its forward stroke to admit motive fluid to the larger area of the valve to move the latter in the opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and a passage leading from such larger area of the valve to the front end of the piston-chamber, through which the motive fluid supplied by the auxiliary passage may be admitted to the front end of the piston-chamber to drive the piston rearward, such passage leading to the front end of the piston-chamber being of less capacity than the aforesaid auxiliary passage whereby the necessary pressure against the larger area of the valve may be maintained by the motive fluid admitted through the auxiliary passage, notwithstanding the escape of the motive fluid through the passage leading to the front end of the piston-chamber. 21st. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the rear end of the piston-chamber and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential pressure areas against the smaller of which the motive fluid constantly acts to press the valve forward, a passage controlled by the piston for intermittently admitting the motive fluid to the larger area of the valve, to move the latter rearward, and an auxiliary passage opened by such rearward movement of the valve to admit an additional supply of motive fluid to the larger area of the valve. 22nd. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the rear end of the piston-chamber and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential pressure areas against the smaller of which the motive fluid constantly acts to press the valve forward, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to the larger area of the valve, to move the valve rearward, an auxiliary passage opened by such rearward movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and an exhaust-passage communicating with the larger area of the valve and opened by the piston at its rearward stroke. 23rd. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the rear end of the piston-chamber and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve forward, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to the larger area of the valve, to move the valve rearward, an auxiliary passage opened by such rearward movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, and an exhaust-passage communicating with the larger area of the valve directly from the source of supply, and a passage leading from the larger area of the valve to the front end of the piston-chamber, through which the motive fluid supplied by said auxiliary passage may be admitted to the front end of said chamber to drive the piston rearward. 24th. In a pneumatic hammer, the combination with the piston-chamber and piston, of a valve located in the rear end of the piston-chamber and consisting of a cylindrical shell through which the rear end of the piston passes at the end of its rearward stroke, and provided with differential-pressure areas against the smaller of which the motive fluid constantly acts to press the valve forward, a passage controlled by the piston and opened by the latter at its forward stroke, to admit motive fluid to such larger area of the valve, to move the valve rearward, an auxiliary passage opened by such rearward movement of the valve to admit motive fluid to the larger area of the valve directly from the source of supply, a passage leading from the larger area of the valve to the front end of the piston-chamber, through which the motive fluid supplied by said auxiliary passage is admitted to the front end of said chamber to drive the piston rearward, and an exhaust passage leading from the larger area of the valve and opened by the rearward movement of the piston. 25th. In a pneumatic hammer, the combination of a cylinder, a cylinder-head, a valve-block interposed between the cylinder and head, and having a longitudinal bore forming a continuation of the piston-chamber in the cylinder, and a valve located in said valve-block consisting of a cylindrical shell adapted to have the piston pass through it at the end of its rearward stroke, and provided with opposing pressure areas to which the motive fluid is admitted for shifting the valve in opposite directions. 26th. In a pneumatic hammer, the combination of a cylinder, a cylinder-head, a valve-block interposed between the

cylinder and head and having a longitudinal bore forming a continuation of the piston-chamber in the cylinder, and a valve located in said valve-block and consisting of a cylindrical shell adapted to have the piston pass through it at the end of its rearward stroke and provided with differential-pressure areas to the smaller one of which the motive fluid is constantly admitted through an inlet in the cylinder-head and to the larger one of which the motive fluid is intermittently admitted through a passage controlled by the piston.

27th. In a pneumatic hammer, the combination of a cylinder, a cylinder-head, a valve-block confined between the cylinder and head and having a longitudinal bore forming a continuation of the piston-chamber in the cylinder, and a valve located in said valve-block and consisting of a cylindrical shell adapted to have the piston pass through it at the end of its rearward stroke, and provided with differential-pressure areas, to the smaller rear one of which motive fluid is constantly admitted through a series of ports registering with a circular groove in the cylinder-head, and to the larger forward one of which the motive fluid is intermittently admitted through a passage controlled by the piston.

28th. In a pneumatic hammer, the combination of a cylinder having an external annular flange at its rear end, a cylinder-head having a forwardly projecting cylindrical cap provided with screw-threads, a threaded coupling-sleeve engaging said cap and provided at its front end with an internal annular flange engaging the external flange upon the rear end of the cylinder, a cylindrical valve-block fitting within the coupling-sleeve and a cap and confined by them between the cylinder and cylinder-head, said valve-block having a longitudinal bore forming a continuation of the piston-chamber in the cylinder, and a valve located in said valve-block and consisting of a cylindrical shell adapted to have the piston pass through it at the end of its rearward stroke and provided with opposing pressure areas to which the motive fluid is admitted to shift the valve in opposite directions.

29th. In a valve mechanism for controlling the movements of a piston, a valve provided with differential-pressure areas to the smaller one of which the motive fluid is constantly admitted to press the valve in one direction, and to the larger one of which the motive fluid is intermittently admitted, to move the valve in the opposite direction, and a passage leading from said larger area of the valve to one end of the piston-chamber, through which motive fluid supplied by the auxiliary passage may be admitted to said end of the piston-chamber to move the piston toward the opposite end of said chamber.

30th. In a valve mechanism for controlling the movement of a piston, a valve consisting of a cylindrical shell located in the piston-chamber and adapted to have the piston pass through it, and provided with opposing pressure areas to which the motive fluid is admitted to shift the valve in opposite directions.

31st. In a valve mechanism for controlling the movements of a piston, a valve consisting of a cylindrical shell located in position to have the piston pass through it and provided with differential-pressure areas to the smaller one of which the motive fluid is constantly admitted to press the valve in one direction, and to the larger one of which the motive fluid is intermittently admitted to move the valve in the opposite direction.

32nd. In a valve mechanism for controlling the movements of a piston, a valve located in the piston-chamber and consisting of a cylindrical shell adapted to have the piston pass through it, and provided with differential-pressure areas to the smaller one of which the motive fluid is constantly admitted to press the valve in one direction, and to the larger one of which the motive fluid is intermittently admitted, to move the valve in the opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit an additional supply of motive fluid to the larger area of the valve.

33rd. In a valve mechanism for controlling the movement of a piston, a valve located in the piston-chamber and consisting of a cylindrical shell adapted to have the piston pass through it, and provided with differential-pressure areas to the smaller one of which the motive fluid is constantly admitted, to press the valve in one direction, and to the larger one of which the motive fluid is intermittently admitted, to move the valve in the opposite direction, an auxiliary passage opened by the last-mentioned movement of the valve to admit an additional supply of motive fluid to the larger area of the valve, and an outlet-passage from the larger area of the valve for conveying to one end of the piston-chamber motive fluid supplied by said auxiliary passage.

34th. In a valve mechanism for controlling the movement of a piston, a valve located in the rear end of the piston-chamber and consisting of a cylindrical shell adapted to have the piston pass through it at the end of its rearward stroke, and provided with differential-pressure areas, to the smaller one of which the motive fluid is constantly admitted, to press the valve forward, and to the larger one of which the motive fluid is intermittently admitted through a passage controlled by the piston, to move the valve rearward, said valve when moved forward by the constantly acting pressure against its smaller area opening an annular port around its rear end to admit the motive fluid to the rear end of the piston-chamber, and when moved in the opposite direction by the intermittent pressure admitted to its larger area opening a passage leading to the front end of the piston chamber.

35th. The herein described valve, consisting of the cylindrical shell O having the ring *b* provided with the ports *l*, and the differential-pressure areas *c*, *d*.

36th. The herein described valve, consisting of the cylindrical shell O having the circumferential groove *a*, the projecting ring *b*, provided with the ports *l*, and the differential-pressure areas *c*, *d*.

37th.

The combination of the valve-block having the internal circumferential groove *h* open to the exhaust, of the valve located in said block and consisting of the cylindrical shell O having opposing pressure areas to which the motive fluid is admitted, to shift the valve in opposite directions, and provided with the ring *b* having the ports *l* adapted to register with the exhaust-groove *h* when the valve is in one position.

38th. The combination of the valve-block having the internal circumferential groove *h* open to the exhaust, of the valve located in said block and consisting of the cylindrical shell O having opposing pressure areas to which the motive fluid is admitted to shift the valve in opposite directions, and provided with the ring *b* having the ports *l* adapted to register with the exhaust-groove *h* when the valve is in one position, said valve when in its opposite position cutting off communication with the exhaust-groove *h* and opening the annular port *p* around its end to admit the motive fluid to its interior.

39th. The combination, with the valve-block, of the valve located therein and consisting of the cylindrical shell O having the ring *b* provided with the ports *l*, and the differential-pressure areas *c*, *d*, and said valve-block having the circumferential exhaust-groove *h* co-operating with the ports *l* in the valve, the inlet passage U and exhaust passage P communicating with the pressure area *c* of the valve, and the inlet ports W communicating with the pressure area *d* of the valve.

40th. The combination, with the valve-block, of the valve located therein and consisting of the cylindrical shell O having the ring *b* provided with the ports *l*, and the differential-pressure areas *c*, *d*, and said valve-block having the circumferential exhaust-groove *h* co-operating with the ports *l* in the valve, the passages U and P communicating with the pressure area *c* of the valve, the inlet ports W communicating with the pressure area *d* of the valve, and the auxiliary passage X communicating at one end with the inlet ports W and at its other with the space *e* adjacent the pressure area *c* of the valve.

41st. The combination, with the valve-block, of the valve located therein and consisting of the cylindrical shell O having the ring *b* provided with the ports *l*, and the differential-pressure areas *c*, *d*, and said valve-block having the circumferential exhaust-groove *h* co-operating with the ports *l* in the valve, the inlet passage U and exhaust-passage P communicating with the pressure area *c* of the valve, the inlet-ports W communicating with the pressure area *d* of the valve, the auxiliary passage X communicating at one end with the inlet-ports W and at its other with the space *e* adjacent the pressure area *c* of the valve, and outlet-passage S leading from the space *e* to the piston-chamber.

42nd. The combination, with the valve-block, of the valve located therein and consisting of the cylindrical shell O having the external circumferential groove *a*, the differential-pressure areas *c*, *d*, and the ring *b* provided with the ports *l*, and said valve-block having the circumferential grooves *m*, *n* and passages R and *o* co-operating with the groove *a* of the valve, the circumferential exhaust-groove *h* co-operating with the ports *l* in the valve, the inlet passage U and exhaust-passage P communicating with the larger area *c* of the valve, and inlet-ports W communicating with the smaller area *d* of the valve.

43d. The herein-described valve-block, composed of the part I bored to different diameters, and the part I¹ fitting against the end of the part I and provided with the projecting annular flange or ring I¹¹ fitting the larger bore of the part I, the part I being provided in its larger bore with the circumferential groove *h* communicating with the exhaust-ports *i*, and the port I¹ being provided with the inlet-ports W.

44th. The herein described valve-block, composed of the part I bored to different diameters, and the part I¹ fitting against the end of the part I and having the projecting annular flange I¹¹ entering the larger bore of the part I, the part I being provided with the circumferential grooves *m*, *n* in its smaller bore and the circumferential groove *h* in its larger bore, the grooves *n* and *h* communicating with exhaust-ports, the part I being also provided with the passages P U communicating with its larger bore, and with the passage R communicating with the groove *m*, and the part I¹ being provided with the inlet-ports W.

45th. The herein described valve-block, composed of the part I bored to different diameters, and the part I¹ fitting against the end of the part I and having the projecting ring I¹¹ entering the larger bore of the part I, and having the inlet-ports W opening through said ring, the part I having the circumferential grooves *m*, *n* in its smaller bore and the circumferential groove *h* in its larger bore, the passage R communicating with the groove *n*, the exhaust-port *o* communicating with the groove *n*, and the exhaust-port *i* communicating with the groove *h*, the passages U P S communicating with the larger bore of the part U, and the passage X communicating with the inlet-port W.

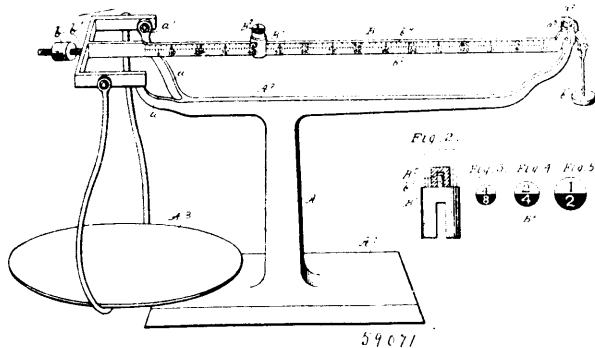
46th. A pneumatic hammer, provided at its front end with a tool-receiving bore opening into the front end of the piston-chamber and adapted to receive and be closed by the shank of the removable working tool, and having a passage for admitting the motive fluid to the front end of said piston-chamber, whereby the shank of the working tool is made to form part of the end wall of the piston-chamber against which the motive fluid acts to force the piston rearward.

47th. A pneumatic hammer, having a piston-chamber whose front end is partially closed by an annular shoulder surrounding an opening adapted to receive the shank of the removable working tool, and having a passage for admitting the motive fluid to the front end of said piston-chamber, whereby the shank of the tool is made to form part of the end wall of the chamber against which the motive fluid acts to force the piston rearward.

48th. A pneumatic hammer, having a piston chamber whose front end is partially closed by an annular shoulder, surrounding an opening adapted to receive the shank of the removable working tool,

so that said tool forms part of the end wall of the piston-chamber against which the motive fluid acts to force the piston rearward, in combination with a piston provided upon its front end with a projecting stem adapted to enter and fit said tool-receiving opening when the absence of the working tool from position to receive the blows of the piston permits the latter to make an abnormal forward stroke, whereby the piston is cushioned at the ends of such strokes and not permitted to strike the end of the piston-chamber. 49th. A pneumatic hammer having a piston-chamber whose front end is partially closed by the integral annular shoulder J surrounding the opening which receives the shank of the removable working tool, D, and having the passage R for admitting the motive fluid to the front end of the piston-chamber where it may act upon the shoulder J and the shank of the tool to force the piston rearward. 50th. A pneumatic hammer whose piston chamber is partially closed at its front end by the integral annular shoulder J surrounding the tool-receiving opening, and whose front end is provided with a bore into which is driven the chisel-sleeve, and which is provided with the passage R for admitting motive fluid to the front end of said piston-chamber, the chisel-sleeve and the opening surrounded by the shoulder J being adapted to receive the shank of the removable working tool L, whereby the latter is made to form part of the end wall of the piston chamber against which the motive fluid acts to drive the piston rearward. 51st. A pneumatic hammer whose piston-chamber is partially closed at its front end by the annular shoulder J adapted to receive the shank of the removable working tool L, and which has the passage R for admitting motive fluid to the front end of said chamber, in combination with the piston M having the stem N adapted to enter and fit the opening surrounded by the shoulder J when the absence of the tool L from working position permits the piston to make an abnormal forward stroke, whereby the piston is cushioned at the ends of such strokes, and prevented from striking the shoulder J. 52nd. The combination, with the coupling-sleeve having the internal serrated flange, of a locking member seated in a recess beneath said flange and pressed outward into locking engagement with the flange by means of a spring, said locking member being adapted to be depressed out of engagement with the flange and turned into its recess, and means for holding it in such disengaged position. 53rd. The combination with the coupling-sleeve having the internal serrated flange, of a locking member seated in a recess beneath the flange and pressed outward into locking engagement with the flange by means of a spring, said locking member being provided with a shoulder and being adapted to be pressed inward out of engagement with the flange and turned in its recess, and means co-operating with its shoulder, when so depressed and turned, to hold the member out of engagement with the flange. 54th. The combination, with the cylinder A having the annular flange B, and the coupling-sleeve C provided with the internal flange co-operating with the flange B and serrated upon its inner edge, of the locking block Y seated in a recess in the wall of the cylinder A and provided upon its upper or outer end with one or more teeth to co-operate with the serrations of the coupling-sleeve, the spring Z beneath said locking-block, and the pin G co-operating with the shoulders D' of the locking-block to maintain the latter out of engagement with the serrations of the coupling sleeve, substantially as and for the purpose described.

No. 59,071. Computing Scale. (Balance.)

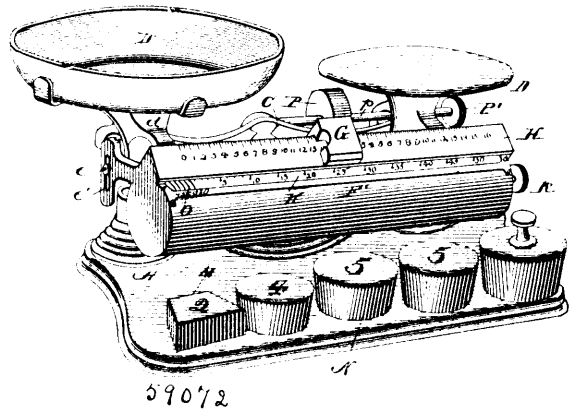


Benjamin Franklin Brough, Indianapolis, Indiana, U.S.A., 18th February, 1898; 6 years. (Filed 7th January, 1898.)

Claim. 1st. A computing-scale, comprising a scale-beam having two sets of graduations thereon, the graduation of each set indicating a unit of cost at any price and one set indicating double the amount indicated by the other set, and a weight slidable on the beam and indicating two prices per pound, one price being double that of the other, substantially as described. 2nd. A computing-scale, comprising a scale-beam having a series of graduations thereon, each of the graduations indicating a unit of price, and a series of weights each indicating a price per unit and each adapted to be mounted on the said beam, substantially as described. 3rd. A computing scale comprising a scale-beam having two sets of graduations thereon, each graduation of each set indicating a unit of price, the graduations of

one set bearing a definite relation to the graduations of the other set, and a weight indicating two prices per unit and slidably mounted on the beam, the said prices per unit bearing the above mentioned definite relation to each other, substantially as described. 4th. In a scale, a base, a supporting-arm mounted thereon and having at one end upwardly-extending diverging arms, a scale-beam having fulcrum-bearings in said diverging portions, the said beam being graduated into units of commodity value, a pea slidably mounted on the beam and having an upwardly-extending pin, and a weight bearing a price-mark and having a recess whereby the weight may be engaged over the pin on the pea and prevented from slipping off laterally, substantially as specified.

No. 59,072. Computing Scale. (Balance.)



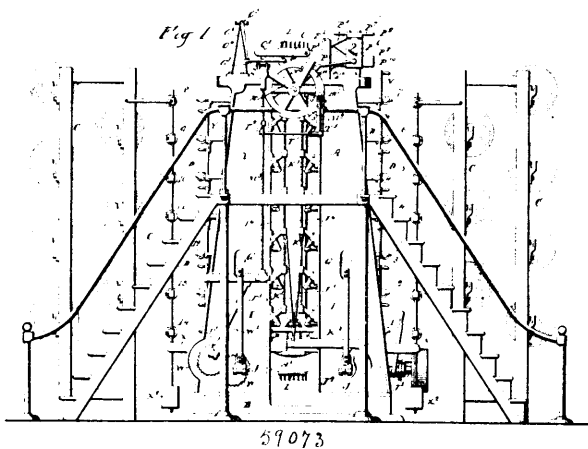
Orange Oscar Ozias, Dayton, Ohio, U.S.A., 18th February, 1898; 6 years. (Filed 8th January, 1898.)

Claim.—1st. In an evenbalance scale, the combination with the centrally pivoted beam or frame and the receiver for the goods to be weighed and disk for the removable weights pivotally supported on the opposite end of said pivoted beam or frame, of the vertically adjustable price computing member connected with said pivoted beam or frame and a movable poise for registering with the computations on said member for determining the value of articles weighed on the scales, substantially as described. 2nd. In a scales, the combination with the centrally pivoted beam or frame and the receiver for the goods to be weighed and disk for the removable weights pivotally supported on opposite ends of said pivoted beam or frame, of the vertically adjustable rotary price-computing member mounted on said frame and extending on opposite sides of its pivotal center, substantially as described. 3rd. In a scales, the combination with the pivoted member, receiver for the goods and weights, of the vertical guides on the beam, the price computing member adjustably supported on said guides and a movable poise for registering with the computations on the price-computing member, substantially as described. 4th. In a computing scale, the combination with the rotary member having tables of computations thereon, of a casing inclosing said rotary member having a sight-opening for exposing the tables of computations to view, and a poise having an indicator for registering with said computations projecting within the casing, substantially as described. 5th. In a computing scale, the combination with the cylindrical rotary member, having tables of computations thereon, of the cylindrical casing inclosing said rotary member and having a sight-opening for exposing the tables of computations to view, and a longitudinal slot or opening, of a poise having an indicator projecting into the casing through said slot or opening and registering with the computations on the rotary member beneath the sight opening, substantially as described. 6th. In a computing scale, the combination with the rotary member having tables of computations thereon, of the cylindrical casing inclosing said rotary member, a poise having an indicator for registering with the computations on the rotary member projecting within the casing, and a flexible gate for closing the opening in the casing through which the indicator projects, whereby the entry of dirt is prevented, substantially as described. 7th. In a computing scale, the combination with the rotary member having tables of computations thereon, and the cylindrical casing inclosing said rotary member having a sight-opening and a longitudinal slot or opening at one side of the sight-opening, of a poise having an indicator projecting within the casing through said longitudinal opening, and a flexible curtain or gate for closing said opening, whereby the entry of dirt is prevented, substantially as described. 8th. In a computing scale, the combination with the rotary member having tables of computations thereon, and a graduated bar or beam mounted in an inclined position, of the cylindrical casing having a sight-opening at the lower edge of said bar or beam, and the longitudinal slot or opening behind and beneath said beam, whereby the entry of dirt into said opening is

prevented, and a poise moving over said bar or beam and having an indicator projecting through said longitudinal slot or opening for registering with the tables of computations, substantially as described. 9th. In a scales, the combination with the bar or beam mounted in an inclined position, of a track or guideway mounted in fixed position with relation thereto on the rear side, of a poise supported on said track and registering with the graduations on the front side of the inclined bar or beam, whereby the poise is prevented from wearing the surface of the bar or beam, substantially as described. 10th. In a scales, the combination with the inclined bar or beam, graduated on its front and upper surface, and a track or guideway extending longitudinally and mounted in fixed relation to said bar or beam, of the sliding poise working on said track or guideway and overlying the front of the graduated inclined bar or beam, but supported out of contact with the surface thereof, whereby the wearing or mutilation of the graduations is prevented, substantially as described. 11th. In a computing scale, the combination with the beam, sliding poise and removable weights of a rotary member having tables of computations of value thereon, of articles balanced by the sliding poise at different rates per unit and at one end columns of computations of values of articles exactly balanced by the removable weights at corresponding rates per unit and figures marked on the member mounted in fixed relation to the rotary member corresponding to the removable weight or weights and indicating which column of figures is to be read in connection with the different removable weights, substantially as described. 12th. In a computing scale, the combination with the beam, sliding poise, removable weights and rotary member having tables of computations thereon with which the sliding poise registers to indicate the cost of articles balanced by the sliding poise and having also columns of figures at one end indicating the value of articles exactly balanced by the removable weights, of a casing inclosing said rotary member and having a sight opening through which the tables of computations and columns of figures are exposed to view, and figures in fixed relation to and opposite said columns of figures on the rotary member corresponding to the removable weight or weights and indicating which column of figures is to be read in connection with the removable weights, substantially as described. 13th. In a scales, the combination with a frame pivotally supported on separate bearings at a point intermediate its ends, to swing in a vertical plane coincident with its greatest length, and receivers for the goods and removable weights supported on opposite ends of said frame, of a graduated bar mounted on and extending longitudinally of the frame in proximity to the front pivotal bearing, with a sliding weight on said bar, and a tare weight mounted on said frame in proximity to the rear pivotal bearing, said bar and its weight and the tare weight being located on opposite sides of a vertical plane taken longitudinally of the pivotal frame at a point midway between the pivotal bearings, substantially as described.

No. 59,073. Egg Case Machine.

(Machine pour boites à œufs.)



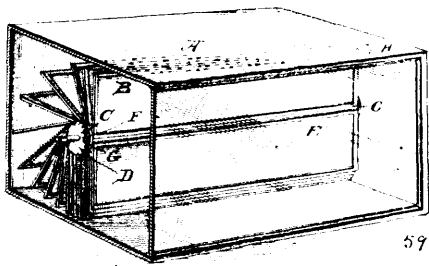
James Henry Batchelder, Tama, Iowa, U.S.A., 18th February, 1898; 6 years. (Filed 10th January, 1898.)

Claim.—1st. The combination with intermittently moving carriers for the slotted strips, of a number of punch-heads equal to the whole number of strips in the cell-case, adapted to punch and cut off the strips, and mechanism for feeding said strips into the carriers. 2nd. The combination with a plurality of punch-heads adapted to punch and cut off singly the total number of strips in the cell-case, at each movement for said punch-head, mechanism adapted to feed the strip material under the punches, and a plurality of strip carriers, equal to or greater than the number of punch-heads, adapted to receive the strips singly and progressively, whereby they are filled on completing the circuit of all the punch-heads, as described. 3rd. The combination with a series of punch-heads equal in number to the number of strips in the cell-case, mechanism adapted to feed the

strip material under the punches, and a series of intermittently moving strip carriers to receive the strips as cut off, said carrier having one cell space of overlap as to said punch-heads, whereby each succeeding strip of the series enters a succeeding row of holders in said carriers. 4th. The combination of a series of punch-heads equal to the whole number of initial strips of the cell-case, mechanism adapted to feed the strip material under the punches, another series of punch-heads equal to the number of final strips, and set opposite the first series, a series of strip carriers moving successively in front of each punch-head, and means for turning each carrier a quarter revolution after filling with the initial series of strips. 5th. The combination of a pair of vertically reciprocating guide-rollers, a series of punch-heads secured thereto, levers provided with rollers abutting on the lower ends of said guide-rollers, and counterweights suspended from said levers, substantially as described. 6th. In an egg-case machine, the combination of a continuous track, a train of carrier trucks mounted to run therein, means substantially as described for imparting intermittent motion to the train, and strip-holding forms mounted revolubly on said trucks, substantially as and for the purpose set forth. 7th. In an egg-case machine, the combination of a pair of continuous tracks, a train of carrier trucks mounted to run therein, a sprocket engaging successively with each truck, and strip-holding forms mounted revolubly on said trucks. 8th. In an egg-case machine, the combination of endless tracks, a train of strip-carrying trucks mounted to run therein, a sprocket engaging successively with each truck, a ratchet and pawl, adapted to impart intermittent motion to said sprocket, and a continuously revolving crank to give reciprocating movement to said pawl, with suitably connecting mechanism, substantially as described. 9th. In an egg-case machine, the combination with a train of strip-holding carriers, of an intermittent feed apparatus having a slow forward movement and a quick return movement, substantially as and for the purpose set forth. 10th. In an egg-case machine, the combination with feed apparatus and cutting and punching mechanism, substantially as described, of forms adapted to hold the several strips as partially inserted by the initial feed, and a driver, through suitable actuating mechanism, to drive all of a similarly arranged series of strips home at a single blow. 11th. In an egg-case machine, the combination of a train of carrier trucks, revoluble forms mounted on said trucks, a continuous track for the train, a reciprocating slide adapted to engage each form while at rest, successively, and a projection on each side of said form, with which said slide engages. 12th. In an egg-case machine, the combination of a train of strip carrying trucks, forms pivoted thereto and adapted to hold the severed strawboard strips parallel with either side of the form, means substantially as described for turning said forms one quarter of a revolution, and a stop on the carrier engaging with the form at four points ninety degrees apart, to hold the same true while receiving said strips. 13th. In an egg-case machine, the combination of a train of strip-holding carriers, suitable punching and cutting mechanism, a sprocket adapted to engage each truck of the carrier train successively, a ratchet and suitable engaging mechanism to impart intermittent forward movement to said sprocket, and another ratchet and engaging stops to prevent the train being carried too far by its own momentum. 14th. In an egg-case machine, the combination with suitable cutting and punching mechanism, substantially as described, of a train of strip-carriers and tracks therefor, a sprocket adapted to engage with each carrier successively, a ratchet and suitable engaging mechanism to impart intermittent forward movement to the sprocket, and a stop to engage said ratchet and prevent any backward movement thereof. 15th. In an egg case machine, the combination with a suitable perforated strip-holding form, of an ejector composed essentially of a plurality of plungers adapted to pass through said form from the back side and engage the completed filler at several of its intersections, and mechanism to impart a reciprocating movement to said ejector. 16th. In an egg-case machine, the combination with a suitable perforated strip-holding form, of an ejector having a plurality of plunger-rods adapted to pass through the hole in said form from the back side thereof, a guide for said ejector, a cam and connecting mechanism to impart an intermittent movement to said ejector. 17th. In an egg-case machine, the combination of a strip-holding form, a carrier truck on which it is pivotally mounted, both perforated, and the holes in the one registering with the other in any desired position, an ejector having a plurality of plunger rods registering with said holes and connected with a suitable head, a guide therefor, and a revolving cam and connecting mechanism to impart intermittent, reciprocating movement to the ejector. 18th. In an egg-case machine, the combination with feeding, cutting and punching mechanism, substantially as described, of a series of revoluble strip-holding forms, a series of trucks or carriages on which said forms are revolubly mounted, links positively connecting said trucks, guide tracks for said trucks, a sprocket-wheel engaging said truck, mechanism adapted to give intermittent motion to said sprocket-wheel. 19th. In an egg-case machine, the combination with feeding, cutting and punching mechanism, of a series of revoluble strip-holders, a series of positively connected trucks on which said strip-holders are mounted, means, substantially as described, for moving the strip holders intermittently close to the punching mechanism, and side-plates attached to the strip-holders to hold the strips from slipping endwise, as described. 20th. In an egg-case machine, the combination with an oscillating strip-bottomer, of a

spring to throw it out of contact with the strips, an arm adapted to engage a reciprocating cam to depress said bottomer, and a reciprocating cam having a pivoted cam-block to guide said arm in one path while moving in one direction, and in another path during the reverse movement. 21st. In an egg-case machine, the combination with a revoluble strip-holding form provided with suitable projections, of a reciprocating cross-head adapted to engage said projections and turn the form one quarter of a revolution, punch-head guide rods having a constant reciprocating movement, a rock-shaft, and bell-crank levers and connecting links to transmit movement from said guide rods to said cross-head. 22nd. In an egg-case machine, the combination with an ejector and operating mechanism therefor, substantially as described, of an air cylinder mounted above said ejector, a piston therein, connecting with the ejector, and means for regulating the ingress and egress of air, substantially as and for the purpose set forth. 23rd. In an egg-machine, the combination with a train of strip-carriers and mechanism for operating them intermittently through the medium of a sprocket-wheel and ratchet-wheel, of an automatic brake adapted to press at two opposite points on the rim of said ratchet-wheel when near the limits of its stroke, and stop the same by friction, as specified. 24th. In an egg-case machine, the combination with a train of strip-carriers and a sprocket-wheel for actuating them intermittently, of a reciprocating rod to communicate motion to said ratchet-wheel, a yielding friction brake oscillating in and out of contact with said ratchet-wheel, and a lever connected with said rod and brake, substantially as and for the purpose set forth. 25th. In an egg-case machine, the combination with a train of strip-carriers and a ratchet-wheel to actuate the same, of a brake for said ratchet wheel, consisting essentially of a friction-plate lying close to one face of the wheel, and an intermittently oscillating brake adapted to engage the face of the wheel opposite said friction plate, said oscillating brake having a yielding plunger, faced with a suitable frictional material, as fibre, and means for automatically oscillating said brake, substantially as described. 26th. In an egg-case machine, the combination with the ratchet-wheel for driving the train of strip-carriers, of a brake consisting essentially of a friction-plate adjacent to one face of the wheel, a yielding oscillating friction brake opposite thereto, and a spring latch or dog to prevent backlash by engaging the tooth of the ratchet-wheel, substantially as described.

No. 59,074. Advertising Device. (*Appareil de publicité*)



59074

John A. Mangold, Moundsville, West Virginia, U.S.A., 18th February, 1898; 6 years. (Filed 17th January, 1898.)

Claim. 1st. The combination of the case, of a shaft supported in the end walls of the case, discs connected by said shaft, card-letters arranged between said discs and having at their ends pins inserted in perforations in the discs near their outer edges, and a cam-shaped projection on the inner wall of the end of the case and arranged in the path of the bent ends of said pins, all substantially as and for the purpose specified. 2nd. The combination of the case, of a shaft supported in the end walls of the case, discs connected by said shaft, card-letters arranged between said discs and having at their ends pins inserted in perforations in the discs near their outer edges, and a cam-shaped projection on the inner wall of the end of the case and arranged in the path of the bent ends of said pins, and cards carried by said letters and arranged to drop by gravity after being started in such movement by the engagement of said projection with the bent ends of the pins, all substantially as and for the purpose specified.

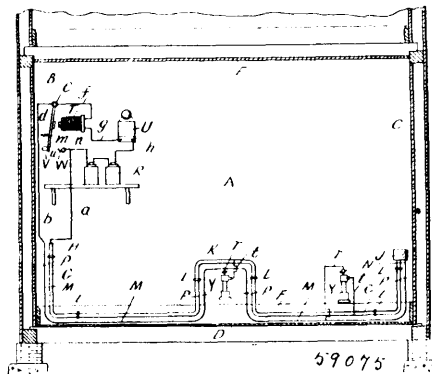
No. 59,075. Electric Fire Alarm System.

(*Système d'avertisseur d'incendie électrique.*)

John Dumeklee Gould, Brooklyn, New York, U.S.A., 18th February, 1898; 6 years. (Filed 2nd August, 1897.)

Claim.—1st. In an electric fire-alarm, the combination of two wires arranged close together side by side but not in contact, one of said wires being formed of a metal fusible at a low temperature and placed above the other wire and connected at one end to one pole of an electric battery and the other wire connected at one end to the other pole of the battery, a bell or other sounding device located in the battery circuit, and a thermostat in electrical connection with said wires, substantially as described. 2nd. An electrical thermostat,

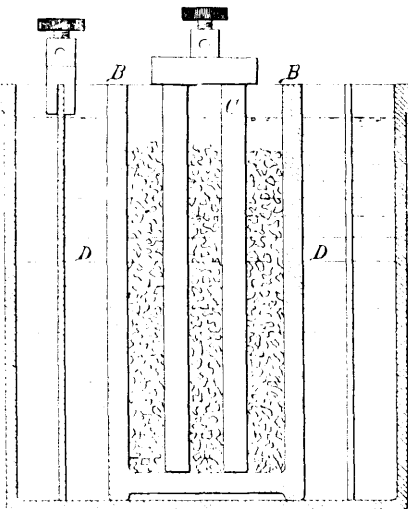
composed of a metal tube, a glass tube cemented thereon, an enlargement of the tube chamber at its bottom for mercury, a cap screwing



59075

onto the bottom of the metal tube, a plunger on said cap to fit in the enlarged chamber of the glass tube, a cap screwing onto the upper end of the metal tube, a wire passing down through the upper cap into the glass tube and insulated from the cap, and the wire being connected electrically with one pole of the battery, and the metal tube, and its caps being connected with the other pole of the electric battery. 3rd. In an electric fire-alarm, the combination of two wires arranged close together side by side but not in contact, one of said wires being formed of a metal fusible at a low temperature and placed above the other wire and connected to one pole of an electric battery and the other wire connected to the other pole of the battery, an insulating block secured over and separating the ends of said wires, and a bell or other sounding device located in the battery circuit, substantially as described.

No. 59,076. Process of Making Commercial Lead from Lead Ore. (*Procédé pour la fabrication du plomb.*)



59076

Pedro Grotjan Salom, Philadelphia, Pennsylvania, U.S.A., 18th February, 1898; 6 years. (Filed 18th August, 1897.)

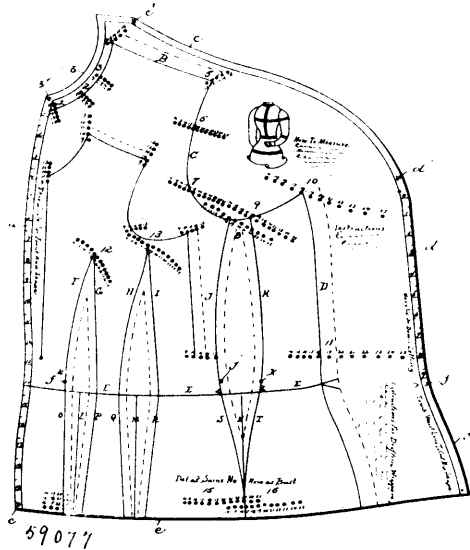
Claim. 1st. The process of converting lead ore into commercial lead, without the application of heat, by subjecting the ore to the action of nascent hydrogen, electrolytically developed, producing thereby a spongy mass, and afterwards, while the mass is in a non-oxidized condition, applying a consolidating pressure thereto, substantially as described. 2nd. The hereinbefore described lead product, to wit, a solid commercial lead produced by subjecting a spongy lead mass to pressure sufficient to effect cold welding, substantially as set forth.

No. 59,077. Dress-chart. (*Patron pour vêtements.*)

Mary D. Leu, Wamscon, Ohio, U.S.A., 18th February, 1898; 6 years. (Filed 17th January, 1898.)

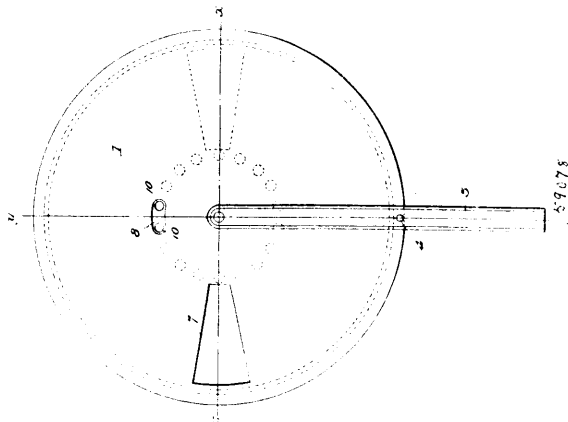
Claim. 1st. A dress-chart having a front chart-member provided with a curved neck-rule having an initial point designated by a suitable character, and a plurality, of neck-scales radiating from the

curve of said neck-rule, respectively at the lower extremity or initial point of the rule and at intermediate points thereof, substan-



tially as specified. 2nd. In a dress-chart, the combination with a front chart member having scales 12 and 13 for determining the positions of the upper ends or points of the darts to agree with the bust measurement, of a dart-rule having curved and straight edges for laying off the dart lines, and provided with transverse scales 17, 18 and 19 for determining the widths and intervals between the darts proportionate to the front form scales, substantially as specified. 3rd. In a dress-chart, the combination with a front chart-member having scales 12 and 13 for determining the positions of the upper ends or points of the darts to agree with the bust measurement, of a dart-rule having curved and straight edges for laying off the dart lines and provided with a scale 17 graduated in accordance with the bust measurements to determine the width of the first dart, a scale 18 of which the numerals represent the difference between waist and bust measurements to determine the interval between the darts proportionate to said measurements, and a scale 19 relative to the scale 18 for determining the width of the second dart, substantially as specified. 4th. A dress-chart having a back chart-member provided with a back-measure a^2 , an initial point 1 set back the distance of a seam-lap from the back-measure, a scale 2 arranged relatively to the point 1 to determine a preliminary shoulder-line and the point of intersection of a preliminary shoulder-line with said neck-line, other scales for determining the positions and lengths of shoulder, arm-hole, side, and waist lines, and a neck-measure b^2 , intersecting and having an initial point coincidental with that of the back-measure for determining the position and length of the rectified neck line and the position of the upper end of the shoulder line, from the upper end of the back-line, determined in position at its lower end by the waist-line measurement and measured through the said point 1, substantially as specified.

No. 59,078. Educational or Advertising Fan.
(*Evantail de publicité.*)

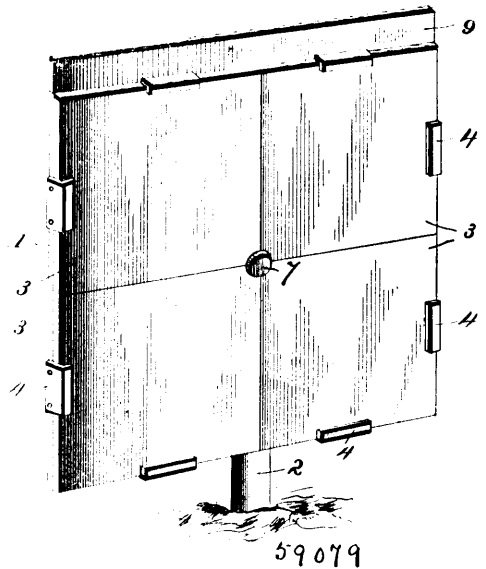


Willard Lesler Hall, Spokane, Washington, U.S.A., 18th February, 1898; 6 years. (Filed 17th January, 1898.)

Claim.—An advertising or educational fan, comprising the front and back pieces secured together at their edges, and provided with

a handle, the front and back pieces being provided with registering perforations or apertures, and the front piece being provided with a vision opening, and a rotatable disk secured between the front and back pieces and having suitable instructions or advertisements adapted to be displayed through the vision opening, and also provided with an annular row of perforations adapted to register with the coincident openings in the back and front pieces of the fan, substantially as set forth.

No. 57,079. Advertising Board. (*Tableau de publicité.*)



Charles Sidney Hotchkiss, Port Huron, Michigan, U.S.A., 18th February, 1898; 6 years. (Filed 30th December, 1897.)

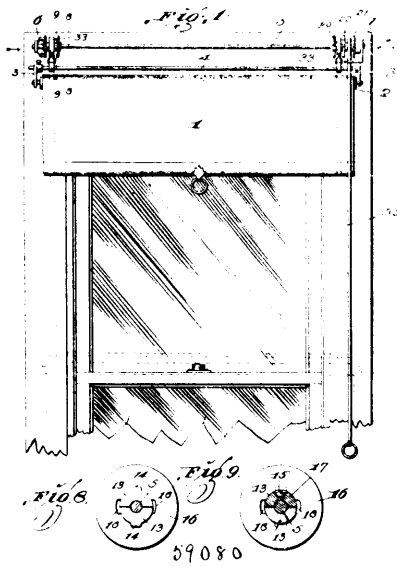
Claim.—1st. A board of the class described, comprising a base board, a series of fastening cleats arranged on the edges thereof, a series of removable panels mounted on said base board and having their outer edges disposed within and gripped by said cleats, and means for locking the inner edges of said panels upon the base board, substantially as described. 2nd. A board of the class described, comprising a base board, a series of fastening cleats arranged on the edges thereof, a series of removable panels mounted on said base board and having their outer edges disposed within and gripped by said cleats, and a bolt for locking the inner edges of said panels upon the base board, substantially as described. 3rd. A board of the class described, comprising a base board provided with a centrally-disposed aperture, a series of L-shaped fastening cleats arranged at intervals around the edges of said board, a series of removable panels mounted upon said board and extending in radial relation to the aperture thereof, whereby the inner corners of said panels lie contiguous to said aperture, and a bolt disposed in said aperture and provided with an enlarged head, said head binding against the inner corners of the panels to lock the latter upon the base board, substantially as described. 4th. A board of the class described, comprising a base board provided with a centrally-disposed aperture, a series of L-shaped fastening cleats arranged at intervals around the edges of said board, a series of removable panels mounted upon said board and extending in radial relation to the aperture thereof, whereby the inner corner of said panels lie contiguous to said aperture, a bolt disposed in said aperture and provided with an enlarged head, said head binding against the inner corners of the panels to lock the latter upon said base board, and a mile board extending along the upper edge of the base board, substantially as and for the purpose described.

No. 59,080. Window Shade Adjuster.
(*Ajustage de stores de fenêtres.*)

Herbert M. Sturgis, St. Louis, Missouri, U.S.A., 18th February, 1898; 6 years. (Filed 7th February, 1898.)

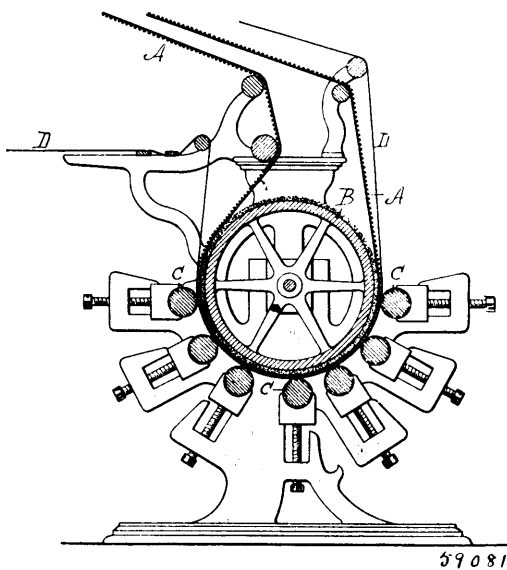
Claim.—1st. In a window shade adjuster, a drum constructed with a pair of mating semi-circular blocks, ears formed integral with the ends of said blocks, a set-screw passing through one of said blocks, and a pair of discs adapted to be located upon the ends of said mating blocks, which discs are provided with notches through which the ears pass when locating said discs on the blocks, substantially as specified. 2nd. In a window shade adjuster, a double winding drum, comprising a pair of semi-circular blocks adapted to be mounted upon the rod, flanges formed integral with said blocks that mate to form the continuous flanges between which the tapes are wound, semi-circular flanges formed integral with the outer pair of the first mentioned flanges, a plate located in the space

formed by the pair of last mentioned flanges, and pawls pivoted to the face of said plate, substantially as specified. 3rd. In a window



shade adjuster, a rod rotatably mounted, a pair of semi-circular blocks adjustably located upon one end of said rod, ears formed integral with said blocks, a set-screw passing through one of said blocks, a pair of discs arranged upon the ends of the mating blocks and locked thereon by the action of the set screw, a pair of winding drums located upon the opposite end of the rod, a ratchet loosely mounted upon the end of the rod adjacent the double winding drum, a sustaining bracket engaging said ratchet and holding the same against rotation, and pawls carried by the double winding drum, the points of which pawls are adapted to engage the upper notch of the ratchet, substantially as specified. 4th. A window shade adjuster, constructed with a shaft adapted to be secured at the top of a window casing, a shade carrying roller, suitable connections between the shaft and the shade carrying roller, and means whereby the shade carrying roller may be adjusted and held at any point beneath the shaft, substantially as specified.

No. 59,081. Blanket for Printing Purposes.
(Blanchet pour presse à imprimer.)



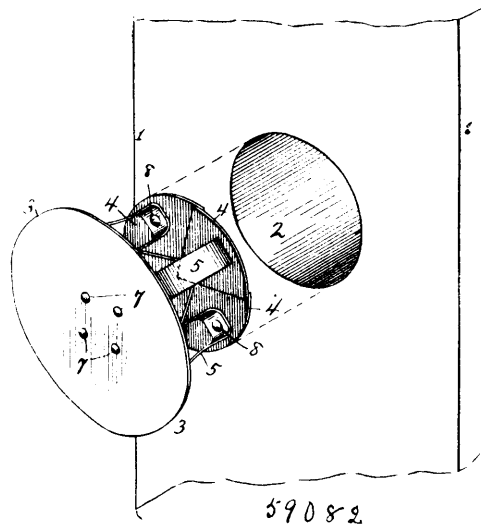
Joseph Eckford Rhodes, Boston, Massachusetts, U.S.A., 18th February, 1898; 6 years. (Filed 10th December, 1897.)

Claim.—1st. A blanket adapted to be applied to the cylinder or platen of a machine for printing on fabric, paper or other surfaces, such blanket consisting of a sheet of rubber or analogous material

having a surface formed with numerous small integral points or projections, substantially as set forth. 2nd. A blanket adapted to be applied to the cylinder or platen of a machine for printing on fabric, paper or other surfaces, such blanket consisting of a sheet of rubber or analogous material having a surface formed with numerous small integral points or projections, each independent of and near to the adjacent projections, substantially as described. 3rd. A blanket adapted to be applied to the cylinder or platen of a machine for printing on fabric, paper or other surfaces, such blanket consisting of a sheet of rubber or analogous material having a surface formed with numerous small integral points or projections larger at their bases than at their upper ends, whereby the area of resistance in each projection is increased in proportion to the compression of said projection, substantially as set forth. 4th. A blanket adapted to be applied to the cylinder or platen of a machine for printing on fabric, paper or other surfaces, such blanket consisting of a sheet of rubber or analogous material having a surface formed with numerous small integral points or projections, each of the shape of a truncated pyramid or cone, substantially as described.

No. 59,082. Fireproof Flue-Stopper.

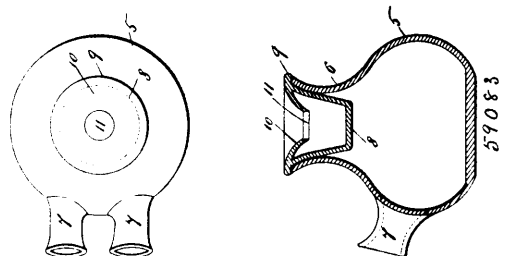
(Bouchon de cheminée à l'épreuve du feu.)



Robert Wain Drinker, Kilbourn, Wisconsin, U.S.A., 18th February, 1898; 6 years. (Filed 4th February, 1898.)

Claim.—1st. In an automatic fireproof flue stopper, the combination of a cap 3, a disc 4 formed of two or more sectors of a circle, having overlapping adapted to pass into the opening, spring arms 5 connecting all sectors to the cap, and means for pressing the sectors or the free ends of spring 5 against the interior of pipe-hole, as and for the purpose substantially as set forth and described. 2nd. In an automatic fireproof flue stopper, the combination of the cap to cover a pipe-hole, a disc formed of a plurality of sectors of a circle with edges overlapping adapted to pass into the opening, and a plurality of spring-arms connecting all the sectors to the cap, and pressing the edge of said disc against the wall, said arms being elongated and bent back to form additional springs to press against the wall and hold the stopper in place, a chamber being formed between said disc and said cap, as and for the purpose substantially as set forth and described.

No. 59,083. Inkstand. (Encrier.)

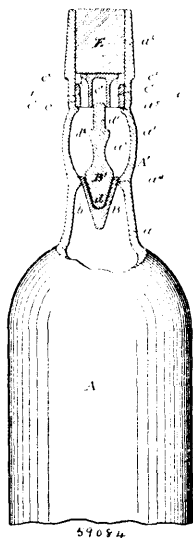


Walter James Grahame, White Mills, Pennsylvania, U.S.A., 18th February, 1898; 6 years. (Filed 29th November, 1897.)

Claim.—1st. A combination inkstand consisting of a main inkstand provided with a neck, and a supplemental inkstand or receiver

which is adapted to be inserted into the neck of the main inkstand, and to be supported thereby, substantially as shown and described. 2nd. A combination inkstand, consisting of a main inkstand, provided with a neck, and a supplemental inkstand which is adapted to be inserted into the neck thereof, and to be supported thereby, said main inkstand being provided at one side with outwardly and upwardly directed nozzles or tubular projections which communicate with the interior thereof, substantially as shown and described. 3rd. An inkstand, provided at one side with outwardly and upwardly directed nozzles or tubular projections, which are adapted to serve as a pen-rack or holder, and through which a pen may be inserted into the inkstand, substantially as shown and described. 4th. A combination inkstand, consisting of a main inkstand comprising a neck, the top of which is bevelled outwardly or conical in form, and a supplemental inkstand which is adapted to be inserted into the neck and provided with an annular flange or rim which rests thereon, said supplemental inkstand being also provided in the top thereof with an inwardly directed annular flange or rim, substantially as shown and described. 5th. A combination inkstand consisting of a main inkstand, comprising a neck, the top of which is bevelled outwardly or conical in form, and a supplemental inkstand which is adapted to be inserted into the neck and which is provided with an annular flange or rim which rests thereon, said supplemental inkstand being also provided in the top thereof with an inwardly directed annular flange or rim, and a main inkstand being also provided at one side with two outwardly and upwardly directed nozzles or tubular projections into which a pen may be inserted, substantially as shown and described.

No. 59,084. Bottle. (Bouteille.)



Edward Madden, Amsterdam, New York, U.S.A., 18th February, 1898; 6 years. (Filed 10th January, 1898.)

Claim.—1st. In a bottle, the combination with the neck A¹ thereof, having in it the enlarged chamber 2³ and annular inclined seat 2⁴ at the bottom of said chamber, and the vertically perforated stopper guide-piece C¹ cemented with the neck of the bottle at a point therein, above said enlarged chamber, of a stopper having inclined sides corresponding with the said annular inclined seat, and adapted to have a longitudinal movement from said seat into said enlarged chamber, and the reverse, substantially as and for the purpose set forth. 2nd. In a bottle, the combination with the neck A¹ thereof, having in it the enlarged chamber 2² and the annular inclined seat 2⁴ at the lower end of said enlarged chamber, and the vertically perforated stopper guide-piece C¹ cemented within the neck at a point therein above said enlarged chamber, of a shell-form stopper having its sides inclined for correspondence with said annular inclined seat, and adapted to have a longitudinal movement from said seat into said enlarged chamber, and the reverse, and a vertically movable stopper provided with a guiding device adapted to be guided by said piece C and be moved simultaneously with said stopper, substantially as and for the purposes set forth. 3rd. In a bottle, the combination with the neck A¹, having in it the enlarged chamber 2³ and the annular inclined seat 2⁴ at the lower end of said enlarged chamber, and the vertically perforated stopper guide-piece C¹ cemented within said neck at a point above said enlarged chamber, of a shell-form stopper having its sides inclined for correspondence with said annular inclined seat, and adapted to have a longitudinal movement from said seat into the said enlarged chamber, and the reverse, and a vertically movable stopper provided

with a guiding device adapted to be guided by said piece C and be moved simultaneously with said stopper, and the outer end-closing cork E, substantially as and for the purposes set forth. 4th. In a bottle, having in its neck an annular inclined seat and an enlarged chamber, above said seat, adapted to receive within it a stopper, adapted to have a movement from said seat to said enlarged chamber, and the reverse, of the longitudinal perforated piece C, having in it, from its lower side, a central longitudinal chamber C² adapted to receive in it a stopper-guiding stem D¹ for guiding such stopper in its longitudinal movements, substantially as and for the purposes set forth.

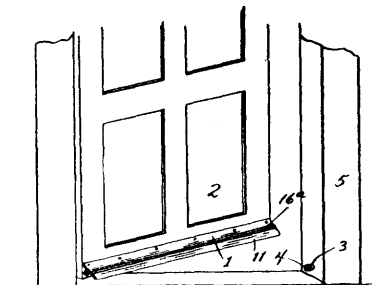
No. 59,085. Material for Covering Walls and Roofs.

(Matières pour couvrir les murs et toitures.)

Paul Lehmann, Berlin, Germany, 18th February 1898; 6 years. (Filed 4th February, 1898.)

Claim.—A material for covering walls and roofs, made of jute steeped with a mixture obtained by boiling linseed oil and silver litharge or board made from leather parings and steeped with a varnish consisting of caoutchouc dissolved in boiling linseed oil, the pieces thus prepared being, after they have become dry, with a mixture of whitening, silver litharge, washed earth colour and linseed oil varnish in order to, while wet, be closely strewn on the one side with ground sandstone and on the other with sand, and afterwards to be coated on the outside with oil paint, substantially as and for the purpose set forth.

No. 59,086. Weather Strip. (Bourrelet de porte.)



George W. White, Jefferson, Iowa, U.S.A., 18th February, 1898; 6 years. (Filed 4th February, 1898.)

Claim.—1st. In a weather-strip, the combination of the housing with the barrel enclosed by the housing and having an apron, the keeper secured to one end of the housing and forming a bearing for the barrel, and a spring having one end connected to the barrel and the other end attached to the said keeper, as set forth. 2nd. In a weather-strip, the combination with a suitable housing, and a barrel operated in the housing and having an apron of means for operating the barrel, comprising a plate-spring having a lug or keeper at each end, one of said keepers being secured upon the inside of the barrel and the other keeper adjustably attached to the housing and forming a bearing for the barrel, as set forth. 3rd. The combination with a weather-strip housing having a central longitudinal bore, and a mouth smaller than the bore, of the tube or barrel operated in the bore and having an apron operating through said mouth, a keeper adjustably secured to one end of said housing and upon which the tube or barrel is oscillated, a keeper secured upon the inside of the barrel, and a spring enclosed by the barrel and attached to the keepers, as set forth. 4th. The combination with the housing having a longitudinal bore, a mouth opening from said bore smaller than the latter, of the tube or barrel operated in the bore, the apron operated through the mouth, the keeper secured to and closing one end of said bore and forming a bearing for the said tube or barrel, a similar keeper secured in the barrel and a spring adjustable secured in the barrel by said keepers, as set forth. 5th. In a weather-strip, the combination of the housing, with the barrel having an apron provided with a slot, the keeper secured to the housing and having a flange enclosing one end of the barrel and engaging said slot, and a spring having one end attached to the keeper and the other end connected to the barrel, as set forth.

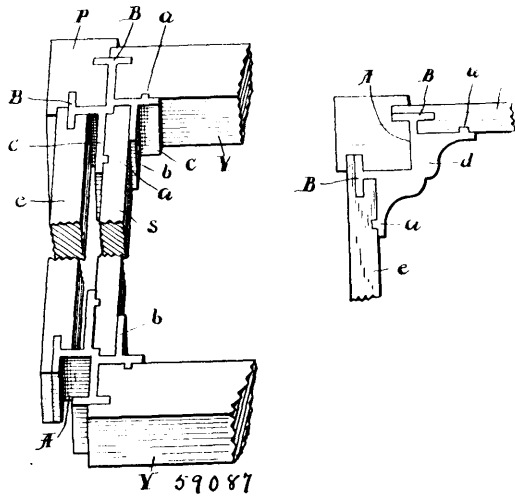
No. 59,087. Furniture Fastening.

(Jointure pour meubles.)

Samuel John DeLong, Henry Benson Pelton, and James Stewart, all of Grand Rapids, Michigan, U.S.A., 18th February, 1898; 6 years. (Filed 4th February, 1898.)

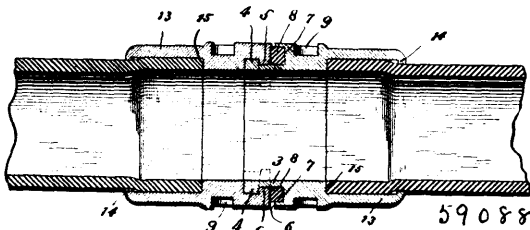
Claim.—1st. In a fastening device, the combination of the annular web A, provided at each end with oppositely projecting flanges B, said flanges extending outward upon both sides of the web, wings C, projecting outward from the sides of the web near the annular portion thereof, and ribs or lugs on the wings adapted to engage with and secure the rail of a piece of furniture to the web, substantially as described. 2nd. In a fastening device, the combination of the

web A, provided at its free ends with oppositely-disposed perpendicular flanges B, which extend outward upon both sides of the



web, and wings C, projecting outward from two sides of the web, substantially as described. 3rd. The combination of a web provided with end flanges, wings as C, extending out from the web and provided with ribs or lugs, a corner post embraced by the web, side and end rails secured to the post by the web and wings, a supplementary rib b, projecting outward from one of said wings, and supplemental rail a, embraced at either end by the said supplementary rib and opposite wing, substantially as described. 4th. In a furniture fastening, an annular web A, adapted to embrace the corner post, wing C, extending out from the web, and a supplementary rib b, projecting outward from one of said wings and arranged parallel with the opposite wing, said rib and adjacent parallel wing being arranged to embrace one end of a supplemental rail, substantially as described.

No. 58,088. Hose Coupling. (Joint de boyaux.)



Nicholas S. Bray, Laurium, Michigan, U.S.A., 19th February, 1898; 6 years. (Filed 4th February, 1898.)

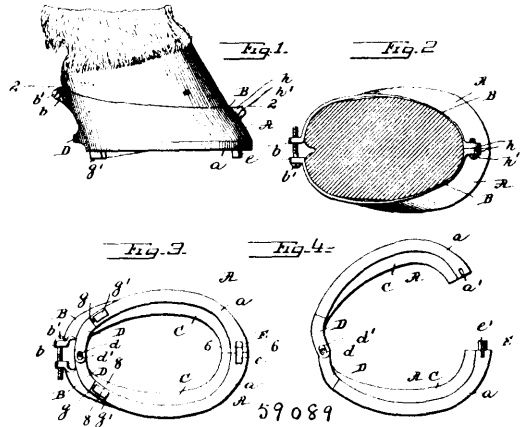
Claim.—A hose-coupling having interlocking male and female members provided with engaging bevelled or inclined lugs, said male member having a reduced extension to fit within the extremity of the female member and being provided in the shoulder contiguous to its extension with a seat which is closed at its outer side and is open at the face of the shoulder, and a washer removably fitted in said seat and held by the inner and outer walls thereof from spreading laterally, substantially as specified.

No. 59,089. Horse Shoe. (Fer à cheval.)

Harry D. Shaiffer, Philadelphia, Pennsylvania, U.S.A., 19th February, 1898; 6 years. (Filed 7th February, 1898.)

Claim.—1st. A horse-shoe, comprising two parts or halves, an adjustable pivotal connection between the rear ends thereof, in combination with a suitable locking device for detachably securing the front ends of said parts or halves together, and a device for approximating the rear ends of said parts or halves. 2nd. A horse-shoe, comprising two parts or halves, each provided with an upwardly and inwardly extending flange adapted for engagement with the outer surface of the hoof, and an inwardly extending flange adapted to rest against the under surface of the hoof, in combination with an adjustable pivotal connection between the rear ends thereof, and a suitable locking device for detachably securing the front ends of said parts or halves together, and a device for approximating the rear ends of said parts or halves. 3rd. A horse-shoe, comprising two parts or halves, in combination with an adjustable pivotal connection between the rear ends thereof, and a device for approximating the rear ends thereof. 4th. A horse-shoe, comprising two parts or halves, each provided with an upwardly and inwardly extending flange adapted for engagement with the outer surface of the hoof,

and an inwardly extending flange adapted to rest against the under surface of the hoof, in combination with an adjustable pivotal con-



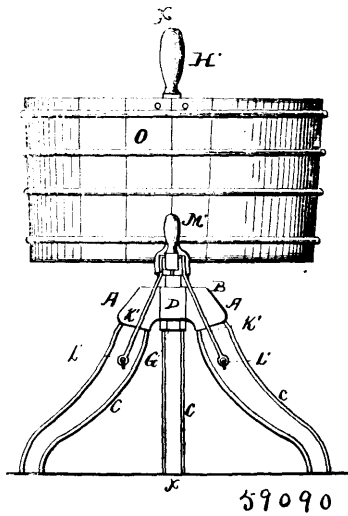
nection between the rear ends thereof, and a device for approximating the rear ends thereof. 5th. A horse-shoe, comprising two parts or halves, each provided with an upwardly and inwardly extending flange adapted for engagement with the outer surface of the hoof, and an inwardly extending flange adapted to rest against the under surface of the hoof, extensions on the rear ends of said parts or halves connected together by a pin and slot connection so as to be free to move toward and from each other laterally, and a suitable locking device for detachably securing the front ends of said parts or halves together. 6th. A horse-shoe, comprising two parts or halves, each provided with an upwardly and inwardly extending flange adapted for engagement with the outer surface of the hoof, and an inwardly extending flange adapted to rest against the under surface of the hoof, extensions on the rear ends of said parts or halves connected together by a pin and slot connection so as to be free to move toward and from each other laterally, a suitable locking device for detachably securing the front ends of said parts or halves together, and a device for approximating the rear ends of said parts or halves. 7th. A horse-shoe, comprising two parts or halves, each provided with an upwardly and inwardly extending flange adapted for engagement with the outer surface of the hoof, and an inwardly extending flange adapted to rest against the under surface of the hoof, extensions on the rear ends of said parts or halves connected together by a pin and slot connection so as to be free to move toward and from each other laterally, and a device for approximating the rear ends of said parts or halves. 8th. A horse-shoe, comprising two parts or halves, in combination with an adjustable pivotal connection between the rear ends thereof, a device for approximating the rear ends thereof, and a device for approximating the front ends thereof. 9th. A horse-shoe comprising two parts or halves, each provided with an upwardly and inwardly extending flange adapted for engagement with the outer surface of the hoof, and an inwardly extending flange adapted to rest against the under surface of the hoof, in combination with a strip of rubber resting against the inner surface of both of said flanges having its greatest thickness at the inner angle between the two flanges. 10th. A horse-shoe provided with an inwardly and upwardly extending flange adapted for engagement with the outer surface of the hoof, and an inwardly and upwardly extending flange adapted to rest against the under surface of the hoof, in combination with a strip of rubber resting against the upper surface of the lower flange and having its greatest thickness at the inner angle between the two flanges and tapering transversely toward the inner edge of said lower flange. 11th. A horse-shoe, comprising two parts, each part having an inwardly and upwardly extending flange adapted for engagement with the outer surface of the hoof, and an inwardly extending flange adapted to rest against the under surface of the hoof, the two parts being hinged pivoted together at their rear ends so that they may be swung upon the hoof, the two parts being so constructed at their front ends that they may be secured together at that point, and being so constructed at their rear ends that the rear ends may be secured together and brought toward each other so as to bind the shoe upon the hoof without severing the hinged or pivotal connection.

No. 59,090. Washing Machine. (Machine à laver.)

Alonzo Abram Casler, Binghamton, New York, U.S.A., 19th February, 1898; 6 years. (Filed 5th February, 1898.)

Claim. In a washing machine, the combination of the tub or receptacle having a central opening, the casting secured to the

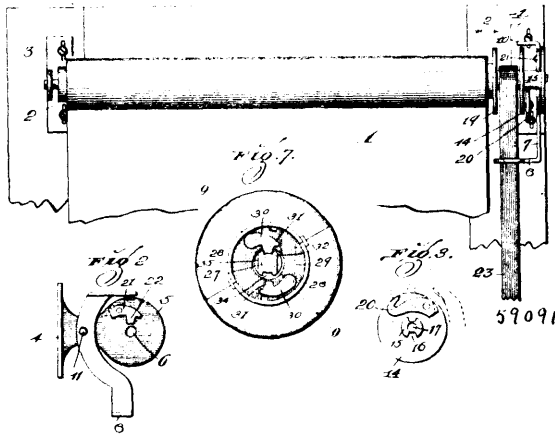
bottom of the tub and formed with an annular groove, a tube having its lower end connected to the casting and extending upward, the



post passing upward through the tube having a squared upper portion and its lower end extended downward below the bottom of the tub and formed with screw-threads, the supporting-legs connected with the said post, the base and nuts on the threaded portion of the post, the washers and balls arranged in the annular groove of the casting, and the rubbing-disc provided with braces having connected at their upper ends a sleeve capable of a vertical movement on the squared end of the post to accommodate the clothes and permit removal of the rubbing-disc.

No. 59,091. Window Shade Roller.

(Bâton pour stores de fenêtre.)

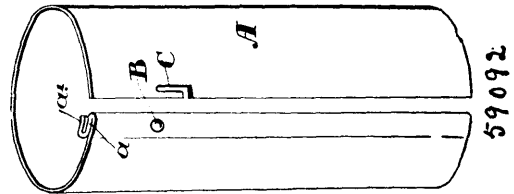


Herbert M. Sturgis, St. Louis, Missouri, U.S.A., 19th February, 1898; 6 years. (Filed 7th February, 1898.)

Claim. 1st. A window-shade roller, mounted for rotation, a tape-drum arranged at one end of said roller, a tape wound upon said tape-drum in a direction opposite to that of the shade, a ratchet carried by said tape-drum, and a pawl pivoted in a fixed position in such a manner as that its point engages the notches of the ratchet, substantially as specified. 2nd. In a device of the class described, a shade roller arranged for rotation in suitable brackets, a tape-drum fixed to one end of said roller, a tape wound upon said tape-drum in a direction opposite to that of the shade, a ratchet carried by said tape-drum, a pawl pivoted to one of the roller-supporting brackets, the tooth of which pawl engages the notches of the ratchet, a tape guide pivoted to the bracket, the upper end of which tape guide is bent laterally, and a hook carried by the tape guide, which hook is arranged to swing outwardly by centrifugal force and to engage the outwardly turned end of the tape guide, substantially as specified. 3rd. In a device of the class described, a roller, a disc placed against one end of said roller, a pin passing through said disc and into the roller, a circular body formed integral with the pin, a flange carried by the outer end of said circular body, a

ratchet formed integral with the outer face of said flange, and a lug formed integral with the end of the ratchet, substantially as specified. 4th. In combination with a rotatably mounted shade roller carrying pivoted pawls, a ratchet held against rotation at the end of the shade roller and in the path of travel of the teeth of the pawls, substantially as specified. 5th. In a device of the class described, a ratchet comprising a circular body, a flange formed integral with one end of said body, in which body are formed oppositely arranged notches, the outer end of said body being squared in the manner set forth, and for the reasons specified. 6th. The combination with a shade roller rotatably mounted and carrying a tape-drum at one end, to which tape-drum are pivoted pawls, of a ratchet held against rotation, which ratchet is provided with oppositely arranged notches in which the teeth of the pawls engage, substantially as specified. 7th. In a device of the class described, a shade roller arranged for rotation, a spindle rigidly fixed in one end of said shade roller, a tape-drum rigidly carried by said spindle, pawls pivoted to said tape-drum, and a ratchet loosely mounted upon the end of said spindle and held against rotation, in which ratchet is formed oppositely arranged notches for the reception of the teeth of the pawls, substantially as specified.

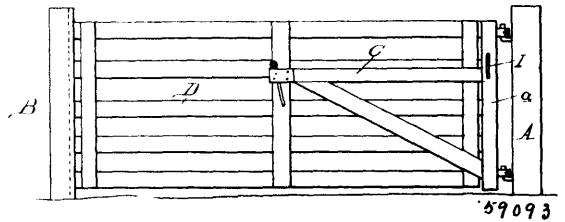
No. 59,092. Stove-Pipe. (Tuyau de poêles.)



George Edward Yeoman, Toronto, Ontario, Canada, 19th February, 1898; 6 years. (Filed 7th February, 1898.)

Claim.—In a stove-pipe or similar article, a blank adapted to be bent so as to form a pipe, and having a double fold at one edge, one fold being an open fold, a rivet extending through the double fold across the open fold, and an open ended slot in the opposing edge designed to be passed over the rivet, so that the inner end of the slot embraces such edge within the open fold, and for the purpose specified.

No. 59,093. Gate. (Barrière.)

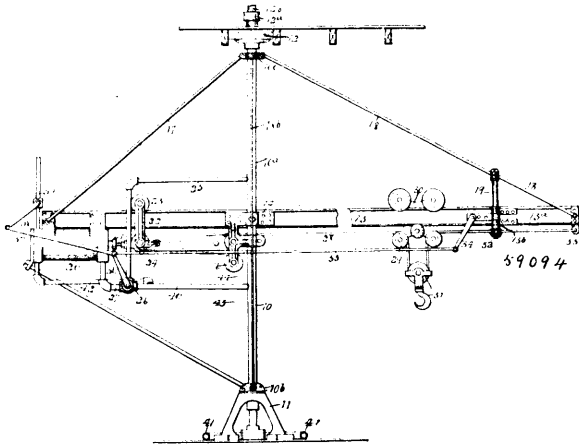


Gustavus Barton, Memphis, Michigan, U.S.A., 19th February, 1898; 6 years. (Filed 2nd February 1898.)

Claim.—1st. The combination of a hinged bracket, a gate, a link at one end, a horizontal projecting portion by which it is pivoted to the bracket, and having at the other end a horizontal projecting portion by which it is pivoted to the gate at or near the middle. 2nd. The combination of a hinged bracket, a link having oppositely-projecting pivots at right angles with the same by one of which it is connected to the bracket, near its end, and a gate suspended near its middle on the remaining pivot. 3rd. The combination of a hinged gate-bracket, a link pivoted to the bracket horizontally, and a gate having a horizontal pivotal connection with said link, and a post with which a part of the gate engages, the pivoted link causing the gate to be retained in engagement with the keeper by gravity. 4th. The combination of a hinged gate-bracket extending substantially to the middle of the gateway, a gate, a link having a horizontal and vertical swivel connection with the bracket, and a pivotal connection with the gate and adapted to be swung to support the gate in different vertical positions. 5th. The combination of a hinged gate-bracket extending substantially to the middle of the gateway, a link, a swiveled pin on the end of the bracket in which said link is horizontally pivoted, a gate horizontally secured on the lower end of the link, said link adapted to be swung to support the gate in different vertical positions, and retainers for both ends of the gate, one on the gate-post and one on the bracket. 6th. The combination of a hinged gate-bracket extending substantially to the middle of the gateway, a link having a horizontal and vertical swivel connection with the end of the bracket, a gate pivoted at its middle to the link and adapted to swing with and be supported by said link in different vertical positions, retainers for the inner ends of the gate on both sides of the bracket, and a gate-post having a retainer with which either end of the gate may engage. 7th. The combination with the gate-posts, of a gate

bracket hinged to one and extending to substantially midway between the posts, a gate, a link suspended from the bracket to which the gate is pivoted, the link being free to swing upward or downward from the bracket, and a stop on the gate with which the link engages in its upward position to hold it from falling, substantially as described. 8th. The combination with the gate-posts, of a gate-bracket hinged to one and extending to substantially midway between the posts, a gate, a link suspended from the bracket and to which the gate is pivoted, the link being free to swing upward or downward from the support on the bracket, and a longitudinal adjustment for the link-support or the bracket.

No. 59,094. Power Hoist. (Monte-chargees.)

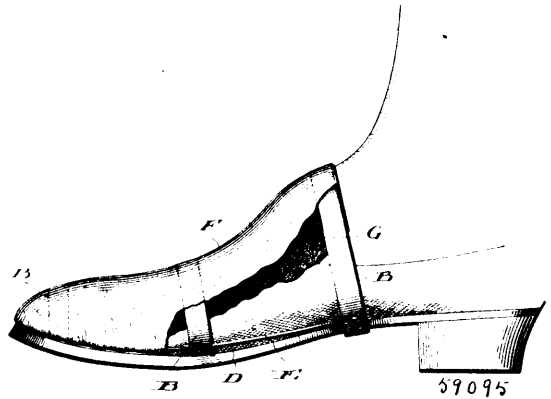


James Des Brisay, New Westminster, British Columbia, Canada, 19th February, 1898; 6 years. (Filed 1st February, 1898.)

Claim.—1st. In a power hoist, the combination of a hollow column divided into two sections 10 and 10^a arranged upon a suitable support and stayed in a vertical position, of a bracket 14 rigidly connected to the said sections and forming a petition therebetween, and a beam 13 placed in a horizontal position and rigidly secured to the bracket 14, guys 17 and 18 connecting the extreme opposite ends of the said beam with the top of the section 10^a, and guys 18^a connecting the two opposite ends of the sections 10 and 10^a, and a pipe connection between the section 10^a and the section 10, as and for the purposes set forth. 2nd. In a power hoist, having a column divided into two compartments, a beam secured at right angles to and at the division of the said compartments, a cylinder secured to one end of the said beam and a piston working therein, a hanger attached to the said piston having pulleys arranged therein, other pulleys arranged in a rigidly fixed hanger 14^a and a cable connecting the said pulleys and the opposite end of the beam, a pipe 25 connecting the section 10^a of the column with a pipe 27 through a valve 26 to the said cylinder, and means for connecting the said pipe 27 with a waste or exhaust-pipe 40, which connects with a section 10, the same having the waste outlets 41, means of connecting and disconnecting the said pipe 25 with the pipe 27, and for connecting and disconnecting the pipes 27 and 40, so that the piston in the cylinder will be oscillated, as set forth. 3rd. In a power hoist, having a hollow column arranged to turn on a support 11, a stuffing box at either end of the said column, a rigidly fixed vertical pipe 47 connecting the lower end of the said column with the outlets 41, a bracket 14 secured to and arranged to divide the said column into two sections, a horizontal beam secured to the said bracket and guys to support the said beam, a cylinder rigidly fixed to one end of the said beam having a piston therein, means for passing liquid or fluid to the said cylinder from the upper section of the column, whereby the piston will be driven backward, and means for passing the said liquid or fluid out through the column 10, whereby the said piston will be allowed to return, and means of connecting the said moving piston with a vertically depending block 31 and a carriage 30 and the opposite end of the beam 13, so that the block 31 will be drawn up and down, as and for the purposes set forth. 4th. In a power hoist, the combination of a hollow vertical column arranged to turn on a suitable support, a beam secured to the said column and arranged to carry a carriage on one end thereof, a steam or water cylinder secured to the opposite end of the said beam, a piston in said cylinder connecting with the carriage on the beam through a series of pulleys arranged intermediately between the piston and the said carriage, a pipe connecting with the cylinder from the upper part of the column, a partition in the said column below such connection, a pipe connecting from the cylinder to the lower part of the column below the partition therein, and a valve arranged at the junction of the pipes 25, 27 and 40, whereby the water or fluid may be passed into the cylinder from the supply reservoir 10^a, or from the cylinder to the waste or exhaust-pipe 40, as set forth. 5th. In a power hoist, having a vertical column arranged to turn upon suitable bearings and a horizontal carriage beam secured thereto, the said beam being divided into two parts, and a hinge connecting the said two part

together, a pillar extending above and below the joint of the hinge, the upper portion being pivotally connected to a rod which connects with the top of the said column and also connected by a second rod with the extreme end of one of the sections of the beam, a spindle on the depending end of the pillar, beneath the hinge, the said spindle being in alignment with a depending bracket on the extreme end of the movable section of the beam and pulley mechanism on a carriage supported by the same, so that when the hinged portion of the beam is swung forward the slack of the cable, which would otherwise appear between the said depending bracket and the pulley mechanism will be received upon and held tight by the said spindle, as set forth.

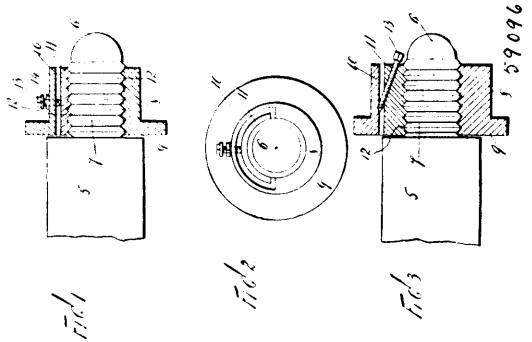
No. 59,095. Foot Covering. (Par-dessus.)



James Hearn Meeteer, New York, State of New York, U.S.A., 19th February, 1898; 6 years. (Filed 7th February, 1898.)

Claim.—1st. A foot-covering, consisting of a frame of spring strips shaped to conform to the boot or shoe to which it is to be applied, with the ends of the strips constructed and arranged to engage the shoe to hold the covering in place, and a lining and covering to said frame, substantially as specified. 2nd. The combination with the longitudinal strip and the transverse curved strips secured thereto, of the cloth lining to the frame, composed of said strips, and a covering over the same, substantially as specified. 3rd. The combination with the central curved spring strip, of the transverse curved spring strips secured thereto, the means joining the ends of said strips and the lining and covering, all substantially as shown and described. 4th. An improved foot-covering, consisting of a spring strip curved to conform to and extend along the upper part of a boot, with its outer end constructed and arranged to engage in the channel of the boot, the transverse curved strips secured to said strip, with their ends arranged to engage in the channel of the boot, the wire joining the ends of the strips, the lining upon the under side of the strips, and the covering upon the outside thereof, all substantially as shown and described. 5th. A foot-covering for the purpose described, consisting of a yielding frame adapted for detachable application to a boot or shoe, and a covering to said frame, substantially as specified.

No. 59,096. Nut-Lock. (Arrête-écrou.)

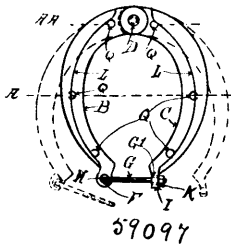


James Douglas, New York, State of New York, U.S.A., 19th February, 1898; 6 years. (Filed 10th February, 1898.)

Claim.—1st. In a nut-lock of the character described, a spindle provided at the end with a plurality of ribs, between which are formed a plurality of grooves, said ribs and grooves being on a plane at right angles to the axis of the spindle, a block mounted on said ribbed portion and provided with an opening, the wall of part of which is provided with a plurality of ribs and grooves which correspond with the said ribs and grooves of the spindle, and a detachable section adapted to be inserted in said opening, said section being segmental in form in cross section, and being provided

on the inner side with a plurality of ribs and grooves which also correspond with said ribs and grooves of the spindle, and means for forming the ribs formed in the said block and the ribs formed in the said detachable section into contact with the ribs and grooves of the said spindle, substantially as and for the purpose described. 2nd. In a nut-lock of the character described, a spindle provided at the end with a plurality of ribs between which are formed a plurality of grooves, said ribs and grooves being in a plane at right angles to the axis of the spindle, a block mounted on said ribbed portion and provided with an opening, the wall part of which is provided with a plurality of ribs and grooves which correspond with the said ribs and grooves of the spindle, and a detachable section adapted to be inserted in said opening, said section being segmental in form in cross-section, and being provided on the inner side with a plurality of ribs and grooves which also correspond with the said ribs and grooves of the spindles, and means for forcing the ribs formed in the said block and the ribs formed in the said detachable section into contact with the ribs and grooves of the said spindle, consisting of a bolt mounted in an oblique screw-threaded bore or passage formed in said detachable section, said bore or passage directed inwardly and upwardly, whereby the inner end of the said bolt is adapted to bear against the wall of the opening formed in the said block, substantially as and for the purpose described.

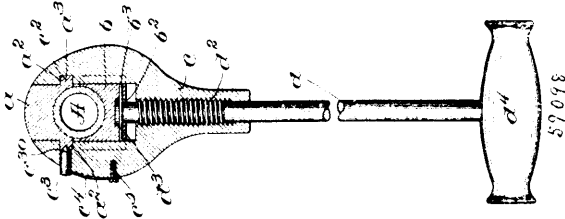
No. 59,097. Horse Shoe. (Fer à cheval.)



John Jacob Adolf Miller, Denver, Colorado, U.S.A., 21st February, 1898; 6 years. (Filed 8th February, 1898.)

Claim.—1st. In a horseshoe, the combination of two independent tread-pieces pivotally secured together at their toe ends by a rivet inserted in a rivet-hole countersunk on both sides of the shoe, each tread having an integral clamping-band arranged to stand at an acute angle to the top surface of the tread and registering substantially with the angle of the surface of the horse's hoof, two vertical slits in said band at predetermined points extending from the top edge to near its union with the treads, a bolt having an eye at one end, a ring formed in the heel of one of the tread-pieces and coupled to the eye of said bolt, a projecting lip on the heel of the opposite tread-piece, a hole through said projecting lip adapted to freely receive the end of said bolt and a suitable thread and nut on the free end of said bolt, substantially as described. 2nd. The combination in a horseshoe, of two independent tread-pieces each forming one-half of the horseshoe, a suitable pivotal joint formed partially in each at their toe ends, and pivotally connected together to swing apart or together, an integral yielding clamping-band arranged to stand vertically at the outer edges of said tread-pieces and at an angle registering approximately with the angle of the horse's hoof, two or more vertical slits in each of said clamping bands, an eye in the heel of one of said tread-pieces, a projecting lug containing an aperture on the heel of the opposite tread-piece, a bolt pivotally linked to said eye-piece and passing through said lug, and a suitable lock-nut on the end of said bolt, substantially as described.

No. 59,098. Pipe-wrench. (Clé à tuyau.)



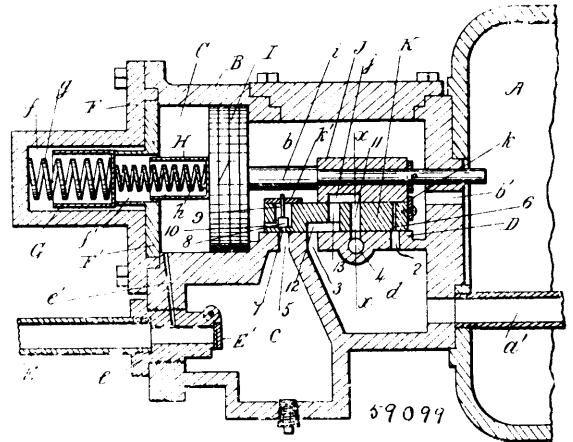
Osborn Boylston Hall, Malden, Mass., U.S.A., 21st February, 1898; 6 years. (Filed 7th January, 1898.)

Claim.—1st. In a pipe-wrench, the combination with a forked support provided with a handle, the said forked support being adapted to embrace the pipe to be operated upon, of a movable wrench member supported and guided in its movement by the forked members of said support, a stationary wrench member supported by and between said forked members, and removable from its normal position to permit the entrance of the pipe to be operated upon between said forked members and means for moving said movable member to grip the pipe, substantially as described. 2nd. In a pipe-wrench, the combination with a forked support adapted to embrace

the pipe to be operated upon, of a handle screw-threaded in the throat end of said forked support, a wrench member having a swivel connection with said handle and supported and guided by said forked support and longitudinally movable with relation thereto in response to the rotation of said handle, and a corresponding wrench member removably secured between the forked members of the support, substantially as described. 3rd. In a pipe-wrench, the combination with a forked support provided with a handle screw-threaded in the throat end thereof, of a longitudinal groove along the inner wall of each forked member of the support, a movable wrench member having a swivel connection with said handle and being provided with tongues fitting said grooves whereby it is supported and guided in its movement with relation to said support, a stationary wrench member also provided with tongues or projections, and transverse grooves in said forked members of the support co-operating with said tongues to retain said member stationary so far as relates to longitudinal movement, said member being laterally removable to permit the entrance of the pipe to be operated upon between the forked members of said support, substantially as described.

No. 59,099. Valve for Air Brakes.

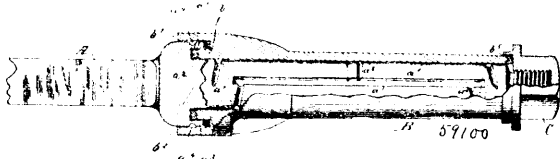
(Soupepe de frein atmosphérique.)



Winfield O. Gunckel, Terre Haute, Indiana, U.S.A., 21st February, 1898; 6 years. (Filed 9th February, 1898.)

Claim.—1st. In an air brake valve, the combination, with a triple valve casing provided with a faced-plate, of an intermediate valve sliding on the said faced-plate, and a valve sliding on the said intermediate valve, the said faced-plate and valves being provided with ports and passages enabling them to effect three stops of different suddenness, substantially as set forth. 2nd. In an air brake valve, the combination, with a triple valve casing provided with a faced plate having port 5, 3 and 2, and an exhaust passage 4 between the ports 2 and 3, of an intermediate valve provided with a port 6, said ports 2 and 6 effecting two service stops of different suddenness, a passage 12 for connecting the ports 5 and 3, a port 13, and an exhaust port 11, and a separate valve operating to uncover the port 6 and provided with an exhaust cavity for connecting the port 11 with the port 13 and passage 12, substantially as set forth. 3rd. In an air brake valve, the combination, with a triple valve casing provided with a faced-plate, of an intermediate valve sliding on the said faced-plate, a valve sliding on the intermediate valve, said faced-plate and valves being provided with ports and passages enabling them to effect three stops of different suddenness, and a reservoir check valve carried by the said intermediate valve, substantially as set forth. 4th. In an air brake valve, the combination, with a valve casing, and a slidable valve, of a light spring and a strong spring pressing the said valve in one direction, a support for the strong spring connected to the said casing, and means for compressing the strong spring after the light spring has been compressed to a prearranged extent, substantially as set forth. 5th. In an air brake valve, the combination, with a triple valve casing provided with a cylinder, a passage connecting the front end of the cylinder with the train pipe, and separate ports connecting the rear end of the said cylinder with the train pipe, and with the brake cylinder respectively, of a piston in the cylinder, and valves operated by the said piston and effecting three stops of different suddenness, the compressed air being constrained to pass slower between the train pipe and the rear end of the cylinder than between the train pipe and the front end of the cylinder than between the train pipe and the front end of the cylinder, substantially as set forth. 6th. In an air brake valve, the combination, with a triple valve casing provided with a cylinder, and a cylindrical chamber secured in the said casing eccentric of the said cylinder and provided with a faced-plate upon one side, of a piston in the said cylinder, and a slide valve operatively connected with the said piston and sliding on the said faced-plate, substantially as set forth.

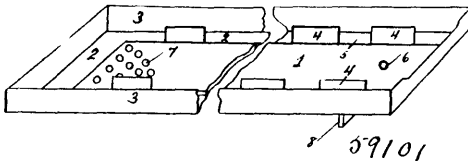
No. 59,100. Lubricating Axle. (Essieu lubrifiant.)



Gordon Macdonald Mather, Canton, Ohio, U.S.A., 21st February, 1898; 6 years. (Filed 8th February, 1898.)

Claim. 1st. An imperforate axle spindle having a longitudinal groove which ends short of the spindle ends, a distributing groove leading from the longitudinal groove and terminating a short distance therefrom, and spiral grooves communicating with the longitudinal groove near its ends, said spiral grooves extending around the spindle and merging into the plane of the spindle at points beyond the ends of the longitudinal groove, substantially as set forth. 2nd. An axle spindle having at its inner end an enlarged head provided with an annular recess which forms an annular flange, the upper surface of which is provided with an annular groove forming a dust trap, in combination with a box having a short inner annular flange adapted to project into said recess, and a longer outer annular flange that projects over the annular head flange and covers the annular groove therein, the short and long flanges of the box forming an annular recess for the reception of the annular flange of the head, substantially as set forth.

No. 59,101. Game Apparatus. (Appareil de jeu.)

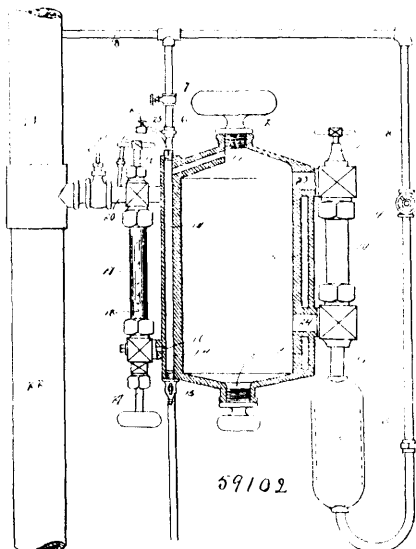


Emil P. Kennel, Hamilton, Ohio, U.S.A., 21st February 1898; 6 years. (Filed 8th January, 1898.)

Claim. 1st. The combination with a track, channels bordering the edges thereof and a series of gaps to admit a ball from the track to the channels of a metal ball formed with an axial opening, and a circumferential groove and a pin capable of being inserted through the axial opening, whereby the ball may be caused to spin on the track. 2nd. A spinning ball formed with an axial opening to admit a removable pin, and with a circumferential groove to receive a cord, and having interior recesses toward the respective extremities of its axis, whereby the greater weight in the plane of the groove causes the groove to remain in a horizontal plane during the spinning of the ball.

No. 59,102. Lubricator for Engines. (Graisseur pour machines à vapeur.)

(*Graisseur pour machines à vapeur.*)



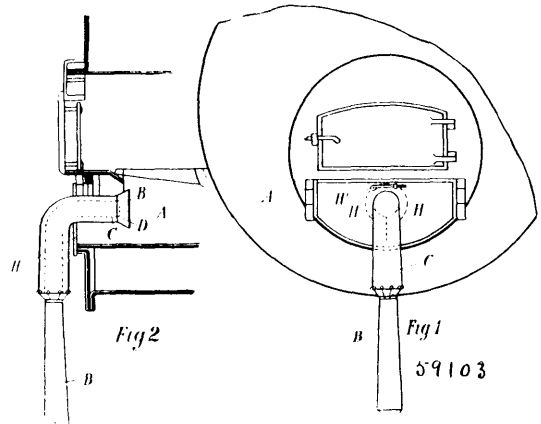
George L. Brislin, McKeesport, Pennsylvania, U.S.A., 21st February, 1898; 6 years. (Filed 8th February, 1898.)

Claim.—1st. The combination with the oil-receiver, a discharge-pipe therefor, the gauge-glass connected to said oil-receiver, the

condenser connected to, and arranged beneath said gauge-glass, whereby the oil in the oil-receiver is permitted to expand, and means for supplying steam to said condenser as and for the purpose set forth. 2nd. The combination of the oil-receiver, a discharge-pipe therefor, the gauge-glass connected to said oil-receiver, the condenser connected to, and arranged beneath said gauge-glass, and means for supplying steam thereto, said oil-receiver having a surrounding steam-jacket, the sight-glass, and means for supplying steam to said steam-jacket, substantially as described.

No. 59,103. Apparatus for Ventilating Mines, etc. (Appareil pour la ventilation des mines, etc.)

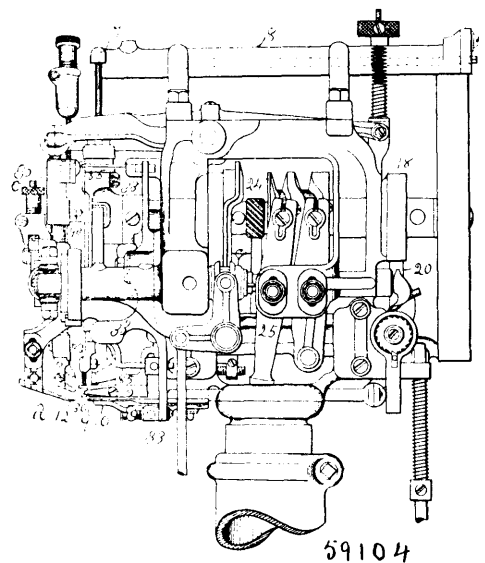
(*Appareil pour la ventilation des mines, etc.*)



William Asmus, Canterbury Road, Albert Park, Victoria, Australia, 21st February, 1898; 6 years. (Filed 7th February, 1898.)

Claim. 1st. In a ventilative appliance such as described, the combination of a suction pipe such as B, and air inlet flue such as C, jacketed around B, with funnel such as D, movable air inlet flaps such as K connected to C, moving pivotally on hinges such as N, and regulation valve and connections such as E, F, FI and G, fixed and applied to a furnace as before described and illustrated. 2nd. In a ventilative appliance such as described, a suction pipe such as B, increasing in circumference downwards or along its course from the furnace, as before described and illustrated. 3rd. As a means of ventilating mines and the like, the combination of a furnace such as A, folding doors thereto such as H H, suction pipe of increasing circumference such as B, an air inlet flue jacketed as described, movable flaps such as K N, catches such as J, and valve and connections such as E, F, FI and G, adjusted, fitted together and applied, substantially as before described and illustrated.

No. 59,104. Lasting Machine. (Machine pour enformer.)



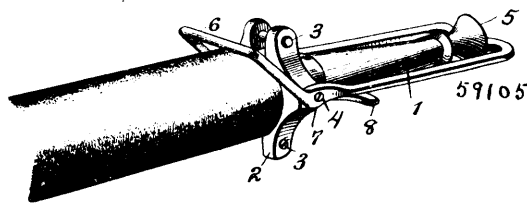
Sherman W. Ladd, Beverly, Massachusetts, U.S.A., 21st February, 1898; 18 years. (Filed 7th February, 1898.)

Claim. 1st. A lasting machine of the character indicated, having a work presser and actuating appliances for moving the presser to

press the upper, said presser having its end or bearing face adapted for pressing the upper inwardly to the angle of union of the shoe, inner-sole and channel lip thereof, substantially as described. 2nd. A lasting machine of the character indicated, having in combination a work presser having at its work bearing end an angular or corner formation for bending the over-turned upper inwardly to the angle of junction between the inner-sole and vertical edge face of the channel lip thereof, substantially as described. 3rd. A lasting machine of the character indicated, having in combination a work presser having at its work bearing end an angular or corner formation for bending the over-turned upper inwardly to the angle of junction between the inner-sole and vertical edge face of the channel lip thereof, and actuating connection for moving the work presser forwardly and backwardly, substantially as described. 4th. A lasting machine, of the character indicated, having in combination a work presser having at its work bearing end an angular or corner formation for bending the over-turned upper inwardly to the angle of junction between the inner-sole and vertical edge face of the channel lip thereof, and actuating connections for moving the work presser laterally, substantially as described. 5th. A lasting machine of the character indicated, having a work presser and actuating appliances for moving the presser to press the upper, said presser having its end or bearing face adapted for pressing the upper inwardly to the angle of union of the shoe inner-sole and channel lip thereof, combined with a securing mechanism having provision for securing a section of upper to the inner-sole, the combination operating for securing the upper to the inner sole while the presser is positioned for bending it into the said angle, substantially as described. 6th. A lasting machine of the character indicated, having appliance for holding a section of upper material, and means for pulling the material held thereby, and a work presser, and means for moving the presser to press the said material, said presser having its end or bearing face adapted for pressing the upper inwardly to the angle of union of the shoe inner-sole and channel lip thereof, combined with a securing mechanism having provision for securing a section of upper to the inner-sole, the combination operating for securing the upper to the inner-sole while the presser is positioned for bending it into the said angle, substantially as described. 7th. A lasting machine of the character indicated, having a work presser and actuating appliances for moving the presser to press the upper, said presser having its end or bearing face adapted for pressing the upper inwardly to the angle of union of the shoe inner-sole and the channel lip thereof, combined with a securing mechanism including means for feeding and delivering loose tacks, and tack driving appliances adapted for causing a limited or partial insertion of said tacks, whereby the same are left with their head ends at a distance above the surface penetrated by the body parts thereof, the combination operating for securing the upper to the inner-sole while the presser is positioned for bending it into said angle, substantially as described. 8th. In a lasting machine, in combination, a work presser and actuating connections having provision to move the presser forwardly and backwardly and laterally, substantially as described. 9th. A lasting machine of the character indicated, having in combination, devices for straining the upper over the last, a work presser, for pressing the over turned upper and actuating connections for moving the work presser cross-wise of and along the line of strain upon the upper, substantially as described. 10th. In a machine of the character indicated, in combination, devices movable for straining the upper over the last, and plating the marginal edge thereof at times, a work presser having at its work-bearing end an angular or corner formation, for pressing the upper cross-wise of the line of said plait, and actuating connections for moving the presser backwardly and forwardly, and laterally, substantially as described. 11th. A lasting machine of the character indicated, having in combination, a last rest, supported to bear against the inner-sole, adjacent to the channel lip thereof, a work presser having at its work-bearing end an angular or corner formation, and actuating connections for moving the work presser forwardly and backwardly, opposite to the last rest, and laterally, substantially as described. 12th. In a lasting machine of the character indicated, a fastener-inserting mechanism having in combination a work rest against which the shoe is made to bear for receiving the fastening device, a driver, movable toward and from the work rest against the fastening device, to effect insertion thereof, a connection adapted for moving to change the distance between the work rest and terminal end of the driver path, an edge guide or rest against which the shoe is positioned laterally for receiving the fastening device, a connection adapted for moving to change the distance horizontally between the guide rest and driver path, and connections, where-through a movement of the parts for changing one of said distances operates a movement of the parts for changing the other of said distances, substantially as described. 13th. In a lasting machine of the character indicated, a fastener-inserting mechanism having in combination a work rest against which the shoe is made to bear for receiving the fastening device, a driver, movable toward and from the work rest against the fastening device, to effect an insertion thereof, a connection adapted for movement to change the distance between the work rest and terminal end of the driver path, an edge guide or rest against which the shoe is positioned laterally for receiving the fastening device, a connection adapted for movement to change the distance horizontally between the guide rest and driver path, and connections, where-through a movement of the parts for changing one of said distances operates a movement

of the parts for changing the other of said distances and means to be actuated by the workman, at will, for moving the said movable connections, substantially as described. 14th. In a lasting machine of the character indicated, a fastener-inserting mechanism, including a driver, movable against the fastening device, to effect insertion thereof, a stop mechanism for stopping the movement of the driver, said stop mechanism permitting movement for stopping the driver at different altitudes, a guide rest permitting movement horizontally towards and from the driver path and suitable connections where-through a movement of the stop mechanism for shifting the altitude of the driver path operates a movement of the guide rest for shifting the position thereof, horizontally. 15th. In a lasting machine of the character indicated, mechanism adapted for feeding and delivering tacks, mechanism for driving the tacks to different planes or altitudes relatively to the surface penetrated by the body parts thereof, and mechanism for resting the shoe in position for receiving the tacks, combined with means for changing the relative positions of said resting and said delivering mechanisms, and means for shifting the driving mechanism, whereby the tacks, driven to different altitudes, are also located at different distances from the edge of the shoe sole, substantially as described. 16th. A lasting machine, adapted for working on different parts of the upper successively in repeated operations of the machine, having a work presser, combined with means for repeatedly moving the presser, whereby a movement of the presser over the upper is repeated a number of times during each operation of the machine, substantially as described. 17th. A machine of the character indicated, having a rest against which the shoe is positioned for support, also a presser arranged for movement above the bearing face of the rest, and means to actuate the presser movably over the shoe bottom, whereby to press the upper material over the inner-sole to the channel lip thereof, and a part arranged for movement above the work presser, combined with means to move said part over the shoe bottom to a point in advance of the work presser, whereby the upper is pressed upon the channel lip of the sole for receiving a tack or fastening device, substantially as described. 18th. In a machine of the character indicated, a fastener-inserting mechanism having in combination a support for holding the fastening, a driver device movable against the fastening device to effect insertion thereof, a driver-holding carrier and actuating mechanism for moving the same to carry the driver backwardly and forwardly over the shoe, to and from the driving position, and a stop mechanism engageable with the driver mechanism, permitting movement for stopping the driver at different altitudes, substantially as described.

No. 59,105. Hose Nozzle. (*Lance de boyaux.*)



Ellsworth D. Kellerman, Montesano, Washington, U.S.A., 21st February, 1898; 6 years. (Filed 1st November, 1897.)

Claim.—1st. An attachment for hose, consisting of a frame in swinging engagement with the nozzle and having a cross bar which limits its movement in one direction, a deflector attached to the frame, and stops limiting the opposite throw of the frame, the said stops being so located as to position the deflector immediately in front of the mouth of the nozzle, substantially as shown and for the purpose set forth. 2nd. An attachment for hose, consisting of a frame in swinging engagement with the nozzle, an angular portion forming the outer part of the frame, a deflector removably attached to the angular portion, and stops for limiting the throw of the frame in one direction, substantially as shown and for the purpose set forth. 3rd. An attachment for hose, consisting of a clip adapted to be clamped upon the nozzle, a frame in swinging engagement with the clip and having a deflector attached thereto, and stops projecting from the clip to limit the throw of the frame and locate the deflector immediately in front of the mouth or exit opening of the nozzle, substantially as shown and for the purpose set forth.

No. 59,106. Welding Compound.

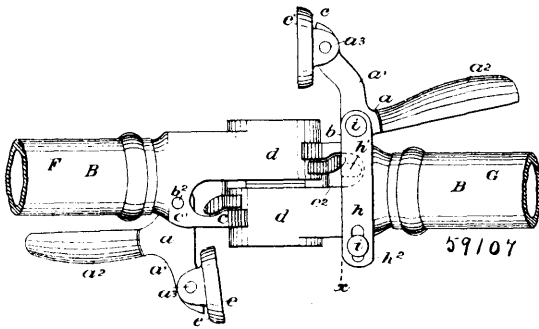
(*Composition pour souder.*)

Thomas Odum, Richmond, Virginia, U.S.A., 21st February, 1898; 6 years. (Filed 28th December, 1897.)

Claim.—1st. A compound for use in facilitating the welding of metals, and for restoring life to burned metals, comprising a mixture of sand, ground marble, borax, salt and powdered charcoal, in approximately the proportions named. 2nd. A welding compound, composed of sand, ground marble, borax, salt and powdered charcoal.

No. 59,107. Air-Brake Coupling.

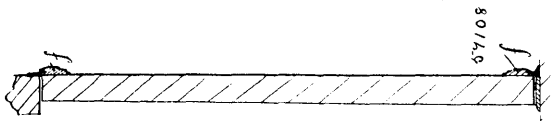
(*Joint de frein atmosphérique.*)



John C. Look, San Jose, California, U.S.A., 21st February, 1898; 6 years. (Filed 7th February, 1898.)

Claim.—1st. In an air brake coupling, a device for closing the port, said device pivoted in the line of the direction of the pipe, and outwardly from the line of the perpendicular face of the coupling, said device being provided at the lower or port end with a cap, and at the upper end with a weight resting outwardly from the pivot, of sufficient power to hold the cap against the port when the coupling is separate and dependent. 2nd. In an air brake coupling, a device for closing the port, said device pivoted to the coupling in the line of the direction of the pipe, with a part thereof provided with a cap, and a weight as part of the device resting outwardly from the pivot, of sufficient power to hold the cap against the port when the coupling is separate and dependent, and the said device to open automatically by reason of the said weight when the coupling is tilted beyond the perpendicular axial line of the pivot. 3rd. An air brake coupling having a compressing arm standing out from the face of the coupling, said arm being bifurcated to admit therethrough a pivoted device for closing the port of the coupling. 4th. In an air brake coupling having a port with a raised gasket, a pivoted device with a cup cap loosely connected thereto for closing the port, said cap being of sufficient depth and width to go over the gasket and close on the face of the coupling without being in contact with the said gasket. 5th. In an air brake coupling, a pivoted device for closing the port, clamps provided with bosses secured to the coupling at the cross section of the compressing arm and in connection therewith for the purpose of providing ears in which to pivot the said port closing device. 6th. In an air brake coupling, a pivoted device for closing the port, clamps secured to the coupling for the purpose of providing ears in which to pivot the said port closing device, said clamps being provided with bosses for recesses in the coupling, and slotted holes with inclines in connection therewith for holding the clamps more firmly in place.

No. 59,108. Weather Strip. (*Bourrelet de portes.*)



Joseph Jerome Barlow, Danville, Quebec, Canada, 21st February, 1898; 6 years. (Filed 17th November, 1897.)

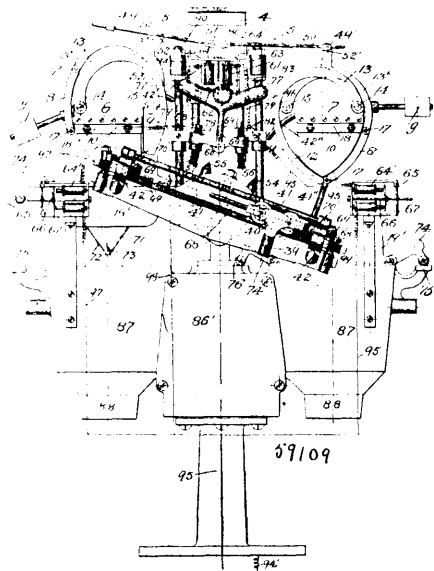
Claim.—A weather strip having a body portion *b* with a base surface provided with projecting lip *c* and a flexible tongue *d* projecting from such lip, as shown and described and for the purpose set forth.

No. 59,109. Weighing Machine. (*Balance*)

William Frederick Brown, Chicago, Illinois, U.S.A., 21st February, 1898; 6 years. (Filed 3rd January, 1898.)

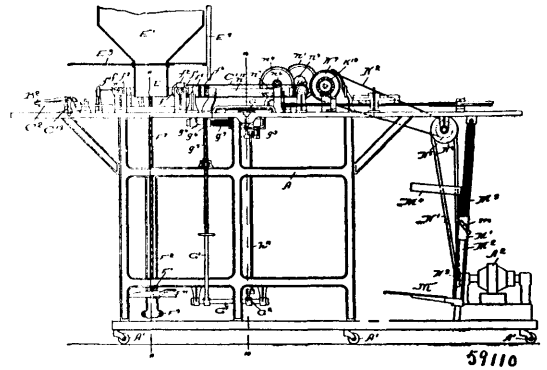
Claim.—1st. In combination in an automatic weighing machine, a scale beam adapted to have free and unobstructed movement to its balanced position having a pan or receptacle thereon, feeding means for the same, means actuated by a power outside of the impetus of the beam for destroying the equilibrium of the same when it reaches a balanced position, and means also actuated by an outside power for shutting off the feed at the moment the balance of the beam is reached, said destroying action taking place independent of any movement of the beam from its balanced position or of any displacement of the pan or its contents relative to the beam, the said outside power and actuating means being controlled entirely independent of the impetus of the beam and without requiring the expenditure of any power on the part of the beam, substantially as described. 2nd. In combination in an automatic weighing machine, a scale beam adapted to have free and unobstructed movement to its balanced position having a rolling weight thereon, a pan or receptacle also on the scale beam, feeding means for the same, means actuated by a power outside of the impetus of the beam, for co-acting with the weight to destroy the equilibrium

of the beam when it reaches a balanced position, and means also actuated by an outside power for shutting off the feed at the



moment the balance of the beam is reached, said destroying action taking place independently of any displacement of the pan or its contents relative to the beam, the said outside power and actuating means being controlled entirely independent of the impetus of the beam and without requiring the expenditure of any power on the part of the beam, substantially as described. 3rd. In combination in an automatic weighing machine, a scale beam, a non-tilting pan carried by the beam, an electric device for destroying the balance of the beam when it reaches a state of equilibrium independent of the displacement of the pan or its contents relative to the beam, a source of supply, an electric device for cutting off the same at the instant the equilibrium of the beam is reached, and the electric contact on the beam for controlling both actions and making them simultaneous, the said beam having free and unobstructed movement to its balanced position whereby the contact will be made only when the weighing is completed, substantially as described. 4th. In combination in a double acting weighing machine, a beam, a rolling weight thereon, the scale pan at each end of the beam, the electric devices one at each end of the beam for co-acting with the weight to destroy the balance of the beam and to cause the weight to roll to the opposite end of the beam, a source of supply, and an electric device to cut off the supply at the instant the beam reaches its balanced position, and an electric contact carried by the beam to control the electric devices and to insure their simultaneous operation, said contact acting when the weighing is completed, substantially as described. 5th. In combination in an automatic weighing machine, a beam, a receptacle carried thereby, a source of supply, a device for cutting off the supply, a catch for holding said device partially closed, means independent of the beam for releasing the catch to control the complete operation of the shut off device, said means being arranged to act when the beam reaches a predetermined position, substantially as described. 6th. In combination in an automatic weighing apparatus, a beam, a receptacle carried thereby, a source of supply, a feeding device controlling the same, mechanical means controlled by the beam for controlling the partial closing of the feeding device as said beam approaches a predetermined position, catches for holding the feeding device in partially closed position, and an electric device for operating the catches and controlling the complete closing of the feeding device, said electric device being in turn controlled by movement of the beam, substantially as described. 7th. In combination in an automatic weighing machine, a beam, a receptacle carried thereby, a source of supply, a feeding device controlling the same, mechanical means carried by the beam for mechanically controlling the partial closing of the feeding device, an electric device controlling the complete closing of the feeding device, and an electric device for destroying the equilibrium of the beam, said beam carrying a contact to close an electric circuit when the beam reaches a predetermined position, substantially as described. 8th. In combination, the beam, the receptacle carried thereby, the feeding device consisting of a movable gate, means moving with the beam for opening said gate and for controlling the partial closing of the gate, a catch for holding the gate in its partially closed position and means for controlling the said catch comprising an electro-magnet and armature with connections to the catch and a circuit closer controlled by the movement of the beam, substantially as described. 9th. In combination, the beam, the receptacle carried thereby, the movable gate for

controlling the feed, said gate having an arm connected therewith, a standard on the beam for opening and controlling the partial closing of the said feed gate as the beam approaches a horizontal position, a catch for holding the gate in its partially closed position, a pivoted arm carrying said catch, an electro-magnet and its armature, means connected with said armature for operating the pivoted arm and a circuit closer controlled by the movement of the beam, substantially as described. 10th. In combination, the beam, the receptacle carried thereby, and a feeding device comprising a pair of pivoted gates arranged to close by gravity, the connection between them consisting of segments meshing with each other, one of said segments having an arm connected therewith, and means carried by the scale beam for holding the said arm against the closing tendency of the gates, substantially as described. 11th. In combination with a weighing or like machine, a receptacle, and a feeding device, comprising a gate having a series of sliding fingers extending from side to side thereof at the point of discharge, substantially as described. 12th. In combination in a weighing or like machine, a receptacle, and a feeding device comprising a pair of gates one of which has a rigid jaw or plate and the other of which has a series of sliding fingers, substantially as described. 13th. In combination in a weighing or like machine, a receptacle and a feeding device comprising a pair of gates converging toward each other at their lower ends, the curved arms carrying said gates extending past each other and pivoted to the frame, and means for operating the gates, said gates having a lifting movement in opening, substantially as described. 14th. In combination in a weighing or like machine, a receptacle and feeding means comprising a pair of feeding gates connected to move in unison, a weight connected to said gates for counterbalance, a scale beam having means for opening said gate and controlling the partial closing of the same, and a catch adapted to hold the gates in their partially closed position with means for operating the same to control the complete closing of the gates, substantially as described. 15th. In combination in a weighing machine, a scale beam and a pivot bearing therefor comprising a bearing part on the beam, a block having a plurality of bearing points, and a socket on the frame for receiving one of said points while the other one acts as the bearing for the beam, said block being symmetrical and reversible. 16th. In combination in a weighing machine, a scale beam and a pivot bearing therefor consisting of the reversible star-shaped piece and a socket for holding said piece removably by receiving one of its points while the other point acts as the bearing, substantially as described. 17th. In a weighing machine, pivot bearings for the movable parts having a conical point and socket forming the bearing on one side of the beam and the knife edge and notched piece forming the bearing on the other. 18th. In combination, in a double acting weighing machine, a scale beam having a receptacle at each end, a feeding device for each receptacle, means for each end of the beam for destroying the balance of the beam and means controlling the action of said feeding devices and balance destroying means arranged to make those for one end of the beam act alternately with those for the other end, substantially as described. 19th. In combination, in a double acting weighing machine, a scale beam having a receptacle at each end, a weight arranged to shift from one side of the centre of gravity to the other, the electro-magnets with their armatures located at the opposite ends of the beam for giving the weight an impetus toward the other end of the beam when it reaches a balanced position, a feeding device for each receptacle of the beam and the electric device for closing the said feeding device, substantially as described. 20th. In combination, in a double acting weighing machine, a scale beam, a receptacle at each end thereof, carried thereby, a feeding device for each receptacle, means carried at each end of the beam for opening the feeding devices alternately, a catch for each feeding device to hold the same partly open, and the electric device for operating the catches when the beam reaches a balanced position in either direction to allow said feeding devices to close alternately, substantially as described. 21st. In combination, the beam with its receptacles, the pair of feeding devices, the catches controlling the closing of the same, the pivoted rods carrying the catches, the electro-magnet, the armature thereof having connection with the pivoted rods and means for closing the circuit when the beam reaches a predetermined position, substantially as described. 22nd. In combination, the beam with its receptacles, the feeding devices, one for each end of the scale beam, the electrical devices for controlling the feeding devices and means for closing the circuit thereto alternately, comprising the contacts on the scale beam, and the shifting contact piece having contacts to be engaged by the contacts on the beam to close the circuit and to be shifted to its opposite position. 23rd. In combination with the scale beam having a receptacle at each end, with electrical devices arranged to act alternately at opposite ends of the beam, the contacts on the beam and the shifting contact piece having points to close the circuit and adapted to be shifted by the movement of the beam. 24th. In combination, the scale beam, the shifting weight having projections at each end, the kicking devices at the ends of the beam and the adjustable bushings through which the projections pass, said bushings acting as stops for the weight carriage. 25th. In combination, the hoppers, the scale beam, the receptacle pivoted thereon and adapted to fit the hopper, and the flange on the receptacle for closing the hopper, substantially as described.

No. 59,110. Sack Filling and Sewing Machine.*(Machine à remplir et coudre les sacs.)*

Arthur Thomas Timewell, Chicago, Illinois, U.S.A., 21st February, 1898; 6 years. (Filed 13th January, 1898.)

Claim.—1st. In a sack filling and sewing machine, the combination with a series of movable opening and closing sack holders an endless recurring track for the holders, a sack filling device, a movable shaker or device for vibrating the holder up and down, a movable bumper or support to engage the lower end of the sack to settle and compact the contents of the sack in connection with said shaker, a device for closing the holder, a sewing device, a thread holder furnished with a thread feed device, a conveyor for moving the holders along said track from the closing device to the sack receiving station, a supplemental conveyor for moving the holders along said track from the filling device to the closing device, and a third conveyor for moving the holders along said track from the sack receiving station to the filling device, substantially as specified. 2nd. In a sack filling and sewing machine, the combination with a sewing device of a movable opening and closing sack holder, a track for the holder, a sack filling device or spout, a movable shaker or device for vibrating the holder up and down to shake the sack, and a movable bumper or support to engage the lower end of the sack to settle and compact the contents of the sack in connection with said shaker, said bumper being provided with a trip operated by the weight of the sack on the bumper to lock or fix the bumper in position, substantially as specified. 3rd. In a sack filling and sewing machine, the combination with a sewing device of a movable opening and closing sack holder, a track for the holder, a sack filling device or spout, a movable shaker or device for operating the holder up and down to shake the sack to settle and compact the contents of the sack in connection with said shaker, and mechanism for raising the shaker provided with a friction clutch to enable the operator to control the upward movement of the bumper, substantially as specified. 4th. The combination with a sack holder of a sack filling device or spout, a movable shaker or device for vibrating the holder up and down to shake the sack, and a movable bumper or support to engage the lower end of the sack, substantially as specified. 5th. The combination with a sack holder of a sack filling device or spout, a movable shaker or device for vibrating the holder up and down to shake the sack, a movable bumper or support to engage the lower end of the sack, and a latch or locking pin for fixing the bumper in position, substantially as specified. 6th. The combination with a sack holder of a sack filling device or spout, a movable shaker or device for vibrating the holder up and down to shake the sack, a movable bumper or support to engage the lower end of the sack, a latch or locking pin for fixing the bumper in position, and a trip on the bumper actuated by the weight of the sack for operating or releasing the locking device, substantially as specified. 7th. The combination with a sack holder of a sack filling device or spout, a movable shaker or device for vibrating the holder up and down to shake the sack, a movable bumper or support to engage the lower end of the sack, mechanism for operating the shaker, and mechanism for raising the bumper furnished with a friction clutch, substantially as specified. 8th. The combination with a sack holder of a sack filling device or spout, a movable shaker or device for vibrating the holder up and down to shake the sack, a movable bumper or support to engage the lower end of the sack, a latch or locking pin for fixing the bumper in position, a trip on the bumper actuated by the weight of the sack for operating or releasing the locking device, mechanism for operating the shaker, mechanism for operating the bumper, and a friction clutch connecting the shaker and bumper operating mechanism, substantially as specified. 9th. In a sack filling or sewing machine, the combination with a movable opening and closing sack holder, a track for the holder, a sack filling device or spout, a sewing device, said track being provided with side guides for keeping the holder closed, and a supplemental short guide or guard for keeping the front portion of the holder closed after emerging from between said guides, substantially as specified. 10th. In a sack filling and sewing machine, the combination with a

movable opening and closing sack holder, a track for the holder, a sack filling device or spout, a sewing device, said track being provided with side guides for keeping the holder closed, and a supplemental short guide or guard for keeping the front portion of the holder closed after emerging from between said guides, the holder being provided with a pin or projection to engage said short guide or guard, substantially as specified. 11th. The combination with a movable opening and closing sack holder and its track, furnished with side guides to keep the holder closed, of a guide or guard to keep the front portion of the holder closed, and a pin or projection on the holder engaging the same, substantially as specified. 12th. The combination with an opening and closing sack holder, of an endless recurring track for the holder, a conveyor, a hook or projection on the holder engaging said conveyor and a guard for holding said hook or projection in engagement with the conveyor, substantially as specified. 13th. The combination with an opening and closing sack holder, of an endless recurring track for the holder, a conveyor, a hook or projection on the holder engaging said conveyor, and a curved guard extending around the conveyor pulley at the curved portion of the track for holding said hook or projection in engagement with the conveyor, substantially as specified. 14th. The combination with an opening and closing sack holder, of an endless recurring track for the holder, a conveyor, a hook or projection on the holder engaging said conveyor, and a curved guard extending around the conveyor pulley at the curved portion of the track for holding said hook or projection in engagement with the conveyor, said holder having also a pin or projection to prevent the holder swinging under the conveyor or its pulley at the curved portion of the track, substantially as specified. 15th. In a sack filling and sewing machine, the combination with a movable opening and closing sack holder, of a sack filling device, a sewing device, a track for the holder, a slide operated by the holder for setting the sewing mechanism in gear, and a friction clutch through which motion is communicated to the sewing device to enable it to be started gradually or without shock, said sack holder having an arm or projecting surface engaging said slide to set the sewing mechanism in motion before the front edge of the sack in the sack holder reaches the needle, substantially as specified. 16th. In a sack filling and sewing machine, the combination with a movable opening and closing sack holder, of a sack filling device, a sewing device, a track for the holder, a slide operated by the holder for setting the sewing mechanism in gear, and a friction clutch through which motion is communicated to the sewing device to enable it to be started gradually or without shock, and a friction brake for stopping the sewing device to enable its motion to be arrested without shock, said sack holder having an arm or projecting surface engaging said slide to set the sewing mechanism in motion before the front edge of the sack holder reaches the needle, substantially as specified. 17th. In a sack filling and sewing machine, the combination with a movable opening and closing sack holder, of a sack filling device, a sewing device, a track for the holder, a slide operated by the holder for setting the sewing mechanism in gear, a friction clutch through which motion is communicated to the sewing device to enable it to be started gradually or without shock, and a thread holder for the free end of the thread or chain provided with a feed device for the thread, substantially as specified. 18th. In a sack filling and sewing machine, the combination with a movable opening and closing sack holder, of a sack filling device, a sewing device, a track for the holder, a slide operated by the holder for setting the mechanism in gear, a friction clutch through which motion is communicated to the sewing device to enable it to be started gradually or without shock, a friction brake for stopping the sewing device to enable its motion to be arrested without shock, and a thread holder for the free end of the thread or chain provided with a feed device for the thread to feed or take up the thread while the friction brake is stopping the sewing device, substantially as specified. 19th. The combination with a sack holder, of a sewing mechanism, a thread holding device for the free end of the thread or chain having a revoluble thread feeding and holding roller and a co-operating holding surface or jaw, and connecting mechanism for operating said roller from the sewing device, substantially as specified. 20th. The combination with a sack holder, of a sewing mechanism, a thread holding device for the end of the thread or chain having a revoluble thread feeding and holding roller and a co-operating holding surface or jaw, connecting mechanism for operating said roller from the sewing device, and a friction clutch through which motion is communicated to the sewing mechanism, substantially as specified. 21st. The combination with a sack holder, of a sewing mechanism, a thread holding device for the free end of the thread or chain having a revoluble thread feeding and holding roller and a co-operating surface or jaw, connecting mechanism for operating said roller from the sewing device, a friction clutch through which motion is communicated to the sewing mechanism, and a friction brake for stopping the motion of the sewing mechanism, substantially as specified. 22nd. The combination with a movable opening and closing sack holder, a track for the holder, a device for closing the holder, and a stencil printing device for printing the sack as the holder is closed, substantially as specified. 23rd. The combination with a sack filling device, of a sack holder, a closing device for the holder, a stencil printing device, and a sewing device, substantially as specified. 24th. The combination with a sack holder, of a stencil printing device operating to print the sack as it is suspended by the holder, substantially as specified. 25th. The combination with a

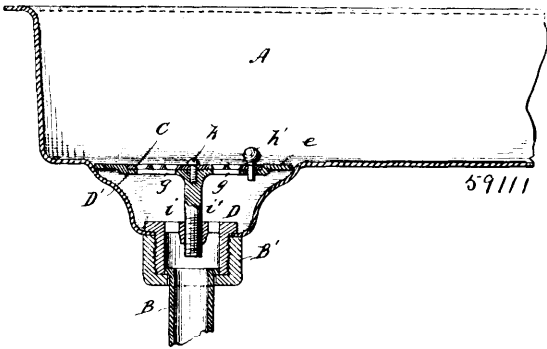
sack holder, of a stencil mounted upon a reciprocating head or holder, a movable inking brush, guides for the stencil carrying head and for the brush, and a reciprocating slide for pressing the stencil against the sack in the holder and operating the said brush, substantially as specified. 26th. The combination with a sack holder, of a stencil mounted upon a reciprocating head or holder, a movable inking brush, guides for the stencil carrying head and for the brush, and a reciprocating slide for pressing the stencil against the sack in the holder and operating said brush, and a device for closing the holder, substantially as specified. 27th. The combination with an opening and closing sack holder, of a reciprocating slide for closing the holder, a treadle for operating said slide, and a chain, pulley, rack and gear for communicating motion from the treadle to said slide, substantially as specified. 28th. The combination with a movable opening and closing sack holder, of a track for the holder, and a hand-operated conveyor wheel furnished with a pin or projection for engaging a pin or projection on the holder and moving it from the sack receiving station to the filling position, substantially as specified. 29th. The combination with a sewing device and an opening and closing sack holder furnished with a pin or projection on its front end or portion, of a track for the holder, side guides for keeping the holder closed, and a supplemental short guide or guard adapted to engage said pin or projection on the holder to keep the holder closed at its front end until its rear end emerges from between said slide guides, substantially as specified. 30th. The combination with a movable or travelling sack holder of a sewing device, and a friction clutch through which motion is communicated to the sewing device, and mechanism actuated by the movement of the holder for setting the sewing device in motion before the front edge of the sack in the holder reaches the needle, substantially as specified. 31st. The combination with a movable or travelling sack holder of a sewing device, a friction clutch through which motion is communicated to the sewing device, and a friction brake for stopping said sewing device, and mechanism actuated by the movement of the holder for setting the sewing device in motion before the front edge of the sack in the holder reaches the needle, substantially as specified. 32nd. The combination with a movable sack holder, of a sewing device, a friction clutch through which motion is communicated to the sewing device, and connecting mechanism for operating said clutch by the movement of said holder, said connecting mechanism being adapted and arranged to operate said clutch before the front edge of the sack in the holder reaches the needle, substantially as specified. 33rd. The combination with a movable sack holder, of a sewing device, a friction clutch through which motion is communicated to the sewing device, a friction brake for stopping said sewing device, connecting mechanism for operating said clutch and brake by the movement of said holder, said connecting mechanism being adapted and arranged to operate said clutch before the front edge of the sack in the holder reaches the needle, substantially as specified. 34th. The combination with a sack holder of a sewing device, a friction clutch through which motion is communicated to the sewing device, and a thread holder for the free end of the thread, or chain furnished with a feed roller, and a co-operating holding surface or jaw, substantially as specified. 35th. The combination with a sack holder of a sewing device, a friction clutch through which motion is communicated to the sewing device, a friction brake for stopping said sewing device, and a thread holder for the free end of the thread or chain furnished with a feed roller, and a co-operating holder surface or jaw, substantially as specified. 36th. The combination with a sack holder of a shaker or device for vibrating the holder up and down, and a bumper, substantially as specified. 37th. The combination with a sack holder of a shaker or device for moving the holder up and down, a movable bumper, and mechanism for raising the bumper into position, substantially as specified. 38th. The combination with a sack holder of a shaker or device for moving the holder up and down, a movable bumper, mechanism for raising the bumper into position, and mechanism for locking or fixing the bumper in position, substantially as specified. 39th. The combination with a sack holder of a shaker or device for moving the holder up and down, a movable bumper, mechanism for raising the bumper into position, mechanism for locking or fixing the bumper in position, and a trip on the bumper, substantially as specified. 40th. The combination with a sack holder of a shaker or device for moving the holder up and down, a movable bumper, mechanism for raising the bumper into position, and a trip on the bumper, substantially as specified. 41st. In a sack filling and sewing machine, the combination with a sewing device of a movable opening and closing sack holder, a track for the holder, a sack filling device or spout, a movable shaker or device for vibrating the holder up and down to shake the sack, and a movable bumper or support to engage the lower end of the sack to settle and compact the contents of the sack in connection with said shaker, substantially as specified.

No. 59,111. Sink. (Evier.)

Albert Arthur Russell, San Francisco, California, U.S.A., 21st February, 1898; 6 years. (Filed 14th December, 1897.)

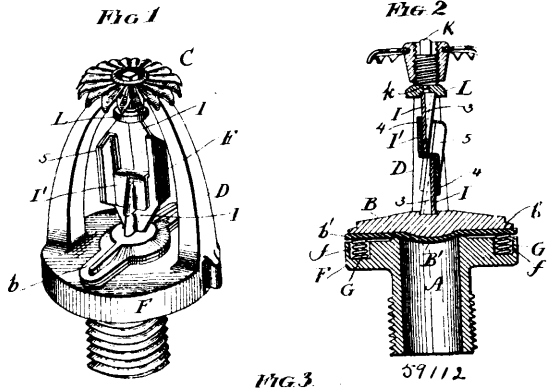
Claim.—1st. The combined cut-off and strainer for sinks as herein shown and described. 2nd. A combined cut-off and strainer for sinks or similar receptacles, consisting of a strainer plate or disc secured over the discharge opening of the sink, said disc or plate having a series of radial outlet openings therein, and of an oscillatory or slide cut-off

disc or plate movably connected to the strainer plate or disc, said cut-off disc or plate having a series of radial openings therein which



register with the outlet openings in the strainer disc or plate when the cut-off disc or plate is turned to draw-off the sink. 3rd. In a combined cut-off and strainer for sinks, the combination with a strainer plate or disc secured over the discharge opening of the sink, said plate or disc provided with a depressed central portion having radial outlet openings therein, and a cut-off disc or plate movably fitted within the depressed portion of the strainer plate or disc, said cut-off disc or plate having a series of radial openings therein which register with those of the strainer plate or disc when the cut-off disc is turned to permit the contents of the sink to be drawn off. 4th. In a combined cut-off and strainer for sinks or similar receptacles, the combination with the strainer plate or disc provided with a series of radial outlet openings, of a screw-threaded stem projecting from the under face of the strainer plate or disc which engages with the discharge opening of the sink, and of a cut-off disc or plate movably secured to the strainer plate or disc, said cut-off disc or plate being provided with a series of radial openings which register with those of the strainer plate or disc when the cut-off disc or plate is turned to permit the contents of the sink to be drawn-off.

No. 59,112. Sprinkler Head for Fire Extinguishers.
(*Tête de lance de boyaux pour extincteurs d'incendies.*)

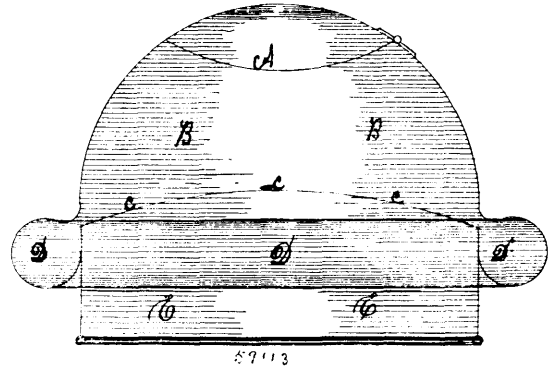


Valentine Lapham, Chicago, Illinois, U.S.A., 21st February, 1898; 6 years. (Filed 3rd January, 1898.)

Claim.—1st. As a new article of manufacture, an element for sprinkler-heads having in combination a rocker having offset ends and two parts bearing in opposite directions against the intermediate portion of the rocker, one of said parts being soldered against the inner face of each of the offset ends of the rocker and both of said parts being cut-away sufficiently to permit them and the offset ends of the rocker to pass, substantially as set forth. 2nd. As a new article of manufacture, an element for sprinkler-heads having in combination two over-lapping parts cut-away to form opposing shoulders, and a rocker having an offset, the rocker having its offset ends secured against the outer faces of the parts first aforesaid, and having its intermediate portion arranged between the shoulders of said parts, substantially as set forth. 3rd. As a new article of manufacture, an element for sprinkler-heads having in combination a rocker, and two parts bearing in opposite directions against said rocker, said parts being soldered together and to the rocker and provided with over-lapping marginal flanges, substantially as set forth. 4th. As a new article of manufacture, an element for sprinkler-heads having in combination a rocker, and two parts bearing in opposite directions against said rocker, said parts and rocker being provided with complementary corrugations and soldered together, substantially as set forth. 5th. As a new article of manufacture, a strut for sprinkler-heads having in combination two parts cut-away to form opposing shoulders, and over-lapping tongues, a rocker having a part occupying said cut-away portions and affording bearings for said shoulders, and having also parts secured against

the outer faces of the parts first aforesaid, said part first aforesaid having at their edges over-lapping flanges for strengthening them, and guiding them, while being assembled, substantially as set forth. 6th. As a new article of manufacture, a strut for sprinkler-heads having in combination two parts cut-away to form opposing shoulders and over-lapping tongues, a rocker having a part occupying said cut-away portions and affording bearings for said shoulders, and having also parts secured against the outer faces of the parts first aforesaid, said parts first aforesaid, and the rocker having complementary corrugations, substantially as set forth.

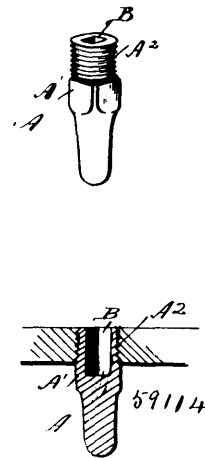
No. 59,113. Cover for Refrigerators.
(*Couvercle de réfrigérateurs.*)



Adolphus Augustus Benson, Brantford, Ontario, Canada, 24th February, 1898; 6 years. (Filed 8th February, 1898.)

Claim.—The bottom or partition C C C connected to, and with openings into reservoir D D D for the purposes set forth, that is, as a refrigerating cover for the cooling of substances.

No. 59,114. Horse-shoe Calk. (*Crampon de fer à cheval.*)



James Barnes and Merrill B. Mills, both of Detroit, Michigan, U.S.A., 24th February, 1898; 6 years. (Filed 29th January, 1898.)

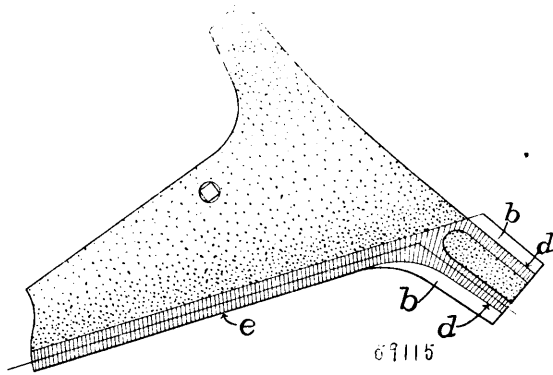
Claim.—1st. A removable horse-shoe calk provided with a cavity arranged for the insertion of a key, substantially as described. 2nd. A removable horse-shoe calk provided with a cavity leading downward a portion of its length, substantially as described. 3rd. A removable horse-shoe calk having a squared portion, a threaded portion and a cavity or key-way leading downward from the top a suitable distance, substantially as described. 4th. A removable horse-shoe calk having a central cavity or key-way, substantially as described. 5th. A removable horse-shoe calk provided with means with which a tool may be engaged for unscrewing the shank after the body of the calk is worn away, substantially as described.

No. 59,115. Ploughshare and Point. (*Soc de charrue.*)

Charles LaDow, Albany, New York, U.S.A., 24th February, 1898; 6 years. (Filed 12th January, 1898.)

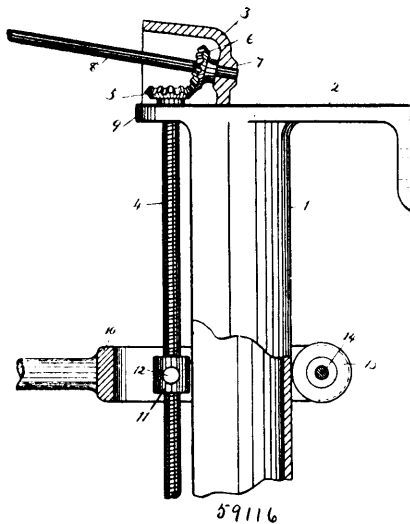
Claim.—1st. As a new article of manufacture, a cast-metal ploughshare having its point composed of vertical, or substantially vertical strata of alternately hard and soft metal disposed lengthwise therein, the edge strata thereof being hard, substantially as and for the purpose set forth. 2nd. A cast-metal ploughshare-point having its lower marginal portions hardened by chilling, and the intervening portion kept normally soft by its contact with sand during the act

of casting. 3rd. A cast-metal ploughshare-point having chilled lower side marginal portions, and unchilled lower intervening por-



tion, substantially as described, whereby the greater friction or abrasion to which its corners are subjected is compensated for by their greater hardness, and the rate of receding wear of the chilled and unchilled portion is made more nearly equal. 4th. A cast-metal ploughshare-point having its lower side arched substantially as described, the under side of the top of said arch being composed of soft metal and the lower parts thereof of hard metal thereby forming runners which elevate the soft portion, whereby the greatest wear of the underside of the point is made to come on the hardest portions thereof.

No. 59,116. Means for Raising and Lowering Forward Ends of Draw-Bars in Road Machines.
(*Moyen de soulever et baisser les bouts de barre d'attelage pour machines de routes.*)

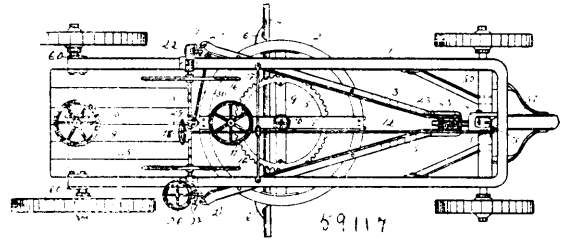


The Indiana Road Machine Company, assignee of Britton Poulson, both of Fort Wayne, Indiana, U.S.A., 24th February, 1898; 6 years. (Filed 22nd January, 1898.)

Claim.—1st. In a road-working machine, a raising and lowering device for the purpose specified, comprising a vertical screw-shaft rotatably mounted in a proper supporting standard, provided upon its upper end with a bevel-pinion adapted for an actuating engagement with a corresponding bevel-pinion on a proper rearwardly-extended actuating-rod, the said screw-shaft having a pivoted connection with the bifurcated coupler by which the said draw-bars are vertically adjusted, all substantially as described. 2nd. In a road-working machine, a raising and lowering device for the purpose specified, consisting of a rigid vertical standard 1 fixed upon the main frame as described, a vertical screw-shaft 4 loosely mounted as described, in the lug 9 on the said standard, and having the perforated screw-threaded block 11 with which it engages, and carrying a bevel pinion 5 on the top thereof, the operating shaft 8 having a bevel pinion 6 adapted for engagement with the pinion 5, and the bifurcated draw-head or coupler 10 connected to the said draw-bars and carrying the said block 11 and the roller 13 and adapted to enclose the said standard 1, all substantially as and for the purpose set forth

and described. 3rd. In a road-working machine, means for vertically adjusting the forward end of draw-bars in road machines, consisting of a vertical screw-shaft rotatably mounted in a proper supporting standard, having upon its upper end a bevel pinion adapted for an actuating engagement with a corresponding bevel pinion on a proper rearwardly extended operating rod, the said screw-shaft having a pivotal connection with said draw-bars.

No. 59,117. Road-Working Machine.
(*Machine à travailler les chemins.*)



The Indiana Road Machine Company, assignee of Britton Poulson, both of Fort Wayne, Indiana, U.S.A., 24th February, 1898; 6 years. (Filed 22nd January, 1898.)

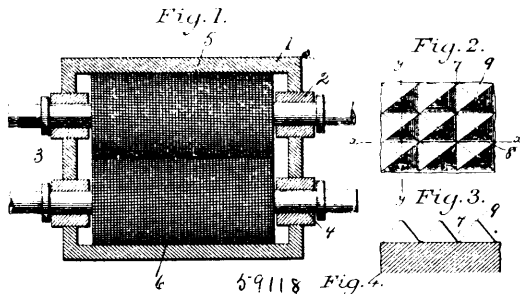
Claim.—1st. In a road-making machine, a device for raising and lowering the forward end of the draw-bars, comprising the hollow vertical post or standard 15 rigidly mounted on the oblique braces 50, and carrying at its extremities proper pulleys having an endless chain or cable mounted thereon, and secured to the draw-head as described, and a pinion 40 adapted to mesh with the worm 13 on the shaft 12, and thereby actuates the said pulleys, an oblique shaft 12 mounted in a proper supporting standard 17, and provided with a worm 13 adapted for engagement with the said pinion, and a bifurcated draw-head 14 loosely mounted in the said draw-bars and secured to the said chain or cable and inclosing the said standard 15, all substantially as described. 2nd. In a road-working machine, the slotted cross-bar 31 rigidly secured at its extremities to the vertical standards 25, provided with a slidable locking device 29 connected to the draw-bars by the rod 30, as shown, and having an actuating sprocket-chain 47 connected thereto, as described, and mounted on the revolvable sprocket-wheels 28 and 28', one of which wheels is provided with an operating rod 27, all substantially as and for the purpose set forth and described. 3rd. In a road-working machine, having a frame mounted on wheels, the combination of the vertically adjusted bifurcated draw-bars having the blade-supporting ring rigidly mounted thereon, means for raising and lowering the front end of the said draw-bars, comprising the vertical standard 15 carrying the endless chain in which the front ends of the draw-bars are mounted, and provided with the described mechanism for actuating the said chain, a single blade-supporting ring having a locking device mounted thereon, as described, the oscillatory blade rigidly mounted on said ring, and means for oscillating the same, the slotted cross-bar 31 carrying the slidable locking device 29, and means for operating the same, the said locking device being adapted to effect a lateral adjustment of the said blade, the described means for vertically adjusting the rear end of the said draw-bars, and a shifting rear axle comprising the axles 61 and 62, with the described means for operating the same, all substantially as described. 4th. In a machine for the purpose specified, a device for lateral adjustment of the blade, comprising a cross-bar 31, rigidly secured to the standards 25, having upon its upper surface a series of notches 76, and provided with a slidable locking device 29 connected to the rear end of the draw-bars by the rod 30, having a gravity-pawl 48, and provided with a sprocket-chain 47 mounted on proper sprocket-wheels loosely mounted in the said standards 25, and having an operating-rod 27 to actuate the said wheels as shown, all substantially as described. 5th. In a road-working machine, a shifting rear axle comprising the axles 61 and 62 loosely mounted in the box 60 and having the rigidly mounted rack-bars as shown, provided upon their upper surface with a series of locking notches, and adapted for alternate engagement with a horizontal actuating pinion, the fixed slotted vertical plates 67, in which is mounted the slidable cross-plate 68, having upon both ends thereof depending locking-lugs adapted for engagement with the said rack-bars and bearing the rigid hollow standard 69, having the operating shaft 19 loosely mounted therein, and carrying upon its lower end the rigid pinion 66 adapted to engage the said rack-bars; and a pedal-lever having a vertical arm adapted to actuate the cross-plate 68, all substantially as described.

No. 59,118. Roller Grinding Mill. (*Moulin à blé.*)

Rosia Washington Welch and Isidore Louis Myers, both of Baltimore, Maryland, U.S.A., 24th February, 1898; 6 years. (Filed 18th January, 1898.)

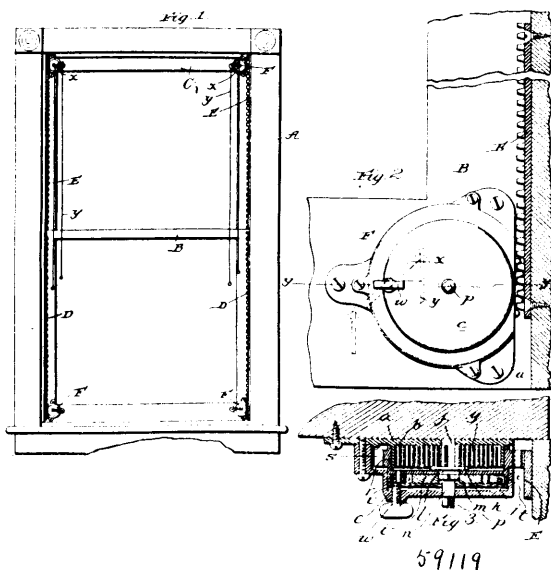
Claim.—1st. In a roller mill, a pair of co-acting rollers, each of which is formed with a series of transverse circumferential grooves, and a series of longitudinal peripheral grooves intersecting the transverse grooves. 2nd. In a roller mill, a pair of co-acting rollers, each of which is formed with a series of transverse circum-

ferential grooves, and a series of longitudinal peripheral grooves arranged at a slight angle to the axis of the roller and intersecting



he transverse grooves. 3rd. In a roller mill, a pair of co-acting rollers, each of which is formed with a series of transverse circumferential grooves and a series of longitudinal peripheral grooves arranged at an angle to the axis of the roller, the inclination of the longitudinal grooves in one roller being in a direction opposite to that of the longitudinal grooves in the other roller. 4th. In a roller mill, a pair of co-acting rollers, both of which are grooved transversely and longitudinally to form series of opposing pyramidal projecting on their peripheries.

No. 59,119. Sash Lift and Fastener. (*Arrête-croisée, etc.*)

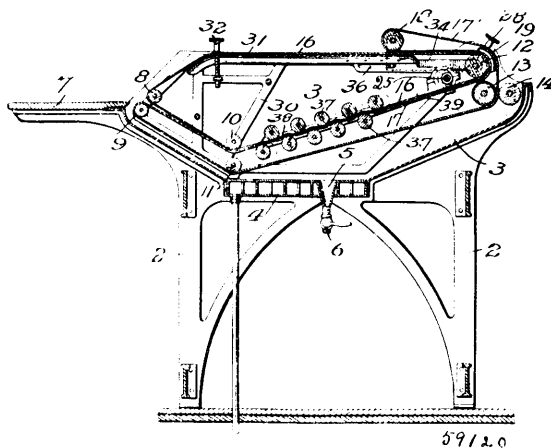


William Kountz Seward, assignee of Karl A. Klose, both of Butte, Montana, U.S.A., 24th February, 1898; 6 years. (Filed 14th January, 1898.)

Claim.—1st. The combination of a suitable casing having the annular flange on the inner side of one of its side plates, an arbor journaled in the side plates of the casing and arranged concentric with said flange, a spring nested within the annular flange and secured at one end to the flange and at its opposite end to the arbor, a wheel loosely mounted upon said arbor and having a lateral flange of a slightly greater diameter than the annular flange of the casing and surrounding the same, and a ratchet and pawl connection between the arbor and the said wheel, substantially as specified. 2nd. In a sash lift and fastener, the combination of a window casing, a rack connected thereto, a sliding sash, a suitable casing connected to the sash and having an annular flange on the inner side of one of its side plates, an arbor journaled in the side plates of the casing and arranged concentric with said flange, a spring nested within the annular flange and secured at one end to the flange and at the opposite end to the arbor, a gear wheel meshing with the rack and loosely mounted on the arbor and having a lateral flange of a slightly greater diameter than the annular flange of the casing and surrounding the same, a ratchet and pawl connection between the arbor and the said wheel, and means for fastening the sash, substantially as specified. 3rd. In a sash lift and fastener, the combination of a suitable casing, an arbor journaled therein, a coiled spring surrounding the arbor and connected at one end to the same and at its opposite end to the casing, a wheel loosely mounted on the arbor, a ratchet and pawl connection between the arbor and said wheel, a disc loosely mounted on the arbor between said ratchet and pawl connection and at one of the side walls of the casing, and a screw extending through a threaded

aperture in the casing and adapted to impinge against said disc, substantially as specified. 4th. In a sash lift and fastener, the combination of a suitable casing, an arbor journaled therein, a coiled spring surrounding the arbor and connected at one end to the same and at its opposite end to the casing, a wheel loosely mounted on the arbor, a ratchet and pawl connection between the arbor and said wheel, a disc loosely mounted on the arbor between said ratchet and pawl connection and one of the side walls of the casing, a screw extending through a threaded aperture in the casing and adapted to impinge against said disc, and having the oppositely directed lateral arms *x*, and depending cords connected with said arms *x*, substantially as specified.

No. 59,120. Starching Machine. (*Machine à empeser.*)



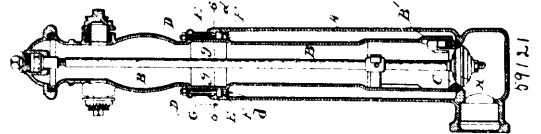
William A. Newton, assignee of Daniel H. Newton, both of Minneapolis, Minnesota, U.S.A., 24th February, 1898; 6 years. (Filed 28th January, 1898.)

Claim.—1st. The combination, in a starching machine, of two endless belts to receive the articles between them, and working devices operating upon opposite sides of the engaging parts of said endless belts, substantially as described. 2nd. The combination, in a starching machine, of two endless belts to receive the articles between them, and working devices operating upon opposite sides of the engaging parts of said endless belts, and substantially supported by said engaging parts of the belts, substantially as described. 3rd. The combination, in a starching machine, of two endless belts to receive the articles between them, with reciprocating means operating upon the said belts and supported thereby, substantially as described. 4th. The combination, in a starching machine, of the endless belts or aprons to receive and convey the articles, with a starch reservoir wherefrom said belts or aprons are saturated, and a reciprocating working mechanism supported upon said belts and having no other support than the said belts, substantially as described. 5th. The combination, in a starching machine, of two endless conveyors having their sides operating in the same direction and in substantial engagement, with working or rubbing means operating upon opposite sides of the engaged parts of the said conveyors, and said means operated by said conveyors and supported thereby, substantially as described. 6th. The combination, in a starching machine, of the two endless conveyors or aprons, and means for wetting or saturating the same, and the working rolls engaging opposite sides of a working stretch of said aprons and supported thereby, substantially as described. 7th. The combination, in a starching machine, of the endless belts or aprons and rolls or guides therefor, with means for driving said belts or aprons, and the opposite sets or groups of rolls engaging opposite sides of said belts, and said belts being crimped or kinked between said rolls, and means for reciprocating said rolls, substantially as described. 8th. The combination, in a starching machine, of the endless belts or aprons, with the staggered or alternated devices engaging opposite sides of said belts, and means for reciprocating said devices to run or work upon the said belts, substantially as described. 9th. The combination, in a starching machine, of the faced or engaging belts, having their engaging sides traveling in the same direction, and with a suitable starch reservoir or holder, opposed alternated rolls engaging the working stretch of the said belts, and means for reciprocating said rolls, substantially as described. 10th. The combination, in a starching machine, of the faced or engaging belts, with means for supplying starch thereto, the opposed rolls engaging opposite sides of said belts and rotated by contact therewith, and independent means for driving said rolls at a greater speed than said belts, substantially as described. 11th. The combination, in a starching machine, of the two endless conveyors or aprons, and means for saturating the same with starch, of the working rolls engaging opposite sides of a working stretch of said aprons and operated by contact therewith to work the aprons and the articles between them, substantially as described. 12th. The combination, in a starching machine, of the opposed alternated rolls, with the endless belts operating between

said rolls in the same direction, and means for reciprocating said rolls in a speed greater than the speed of the travel of said belts, substantially as described. 13th. The combination, in a starching machine, of the two sets or groups of singly acting rolls intersecting a common plane, with the two belts operating between said rolls, and means for operating said belts and reciprocating said rolls, substantially as described. 14th. The combination, in a starching machine, of the two sets or groups of alternating rolls, with the belts operating between the same, said rolls being ribbed, and means for reciprocating said groups of rolls, substantially as described. 15th. The combination, in a starching machine, of the faced endless belts or aprons, with the means for driving the same, the roll frame, the alternated rolls arranged therein and pressing upon the faced portions or working stretch of said belts and means for reciprocating said frame, substantially as described. 16th. The combination, in a starching machine, of the endless belts or aprons having faced portions, with means for supporting and driving the said belts, means for saturating said belts with starch, the opposed working devices arranged in a suitable frame and supported upon the faced portions of said belts, a driving shaft and connecting rods between the same and said frame for reciprocating said frame upon said belts, substantially as described. 17th. The combination, in a starching machine, of the two endless belts or aprons and the guides or rolls therefor, with means for driving said belts, the starch tank or vat, said belts having a working stretch extending in a substantially straight line from the lower to the upper part of said tank or vat, and reciprocating working devices operating upon opposite sides of the working stretch of said belts, substantially as described. 18th. The combination, in a starching machine, of the vat or tank, with the endless belts or aprons having a working stretch extending from the lower to the upper part of said tank or vat, a working mechanism operating upon said working stretch, and driving or guiding rolls arranged at the delivery end of said belts and having enlarged ends to engage the edges of said belts only, whereby the squeezing of the belts is prevented, substantially as described. 19th. The combination, in a starching machine, of a tank or vat, with a pivoted frame therein and removable therefrom, the two endless belts operating over guides or rolls in said frame, and a reciprocating working mechanism upon the faced portions of said belts within said frame, and said reciprocating mechanism being movable with said frame, substantially as described. 20th. The combination, in a starching machine, of the two endless belts having a working stretch, with the starch tank or vat wherein said belts operate, reciprocating rolls engaging said working stretch and supported by the same and means to prevent the squeezing or wringing of said belts and the goods between the same after the departure thereof from said reciprocating rolls, substantially as described. 21st. The combination, in a starching machine, of the endless aprons or belts, with guiding rolls therefor, and adjustable smooth-surfaced plates serving as guides for said rolls whereby the same may be caused to run properly upon said rolls, substantially as described. 22nd. The combination, in a starching machine, of the tank, with the endless belts or aprons, and guiding parts therefor, the first of said aprons being carried upwardly and forwardly over the second belt, to deliver the goods upon the top thereof, which second belt thus serves as a delivery table, substantially as described. 23rd. The combination, in a starching machine, of the tank, with the endless belts or aprons having a working stretch therein, the guiding and driving parts and rolls, the reciprocating working rolls operating upon said working stretch of said belts, the upper belt having a straight returning delivery stretch, and the lower belt having an upwardly and forwardly extending straight delivery stretch co-operating with the delivery stretch of the upper belt to flatten and smooth the articles, substantially as described. 24th. The combination, in a starching machine, of the endless belts or aprons, with the starch tank or vat, a rubbing or working mechanism, the driving rolls, and an adjustable guide or tension plate for each of said belts, and one of said plates constituting a delivery table, substantially as described. 25th. The combination, in a starching machine, of the upper and lower belts and the rolls thereof, with the supporting plate 31, supporting the upper stretch of said upper belt, and therewith constituting a delivery table, substantially as described. 26th. The combination, in a starching machine, of the upper and lower belts and the rolls thereof, with the adjustable plate 31 supporting the upper stretch of said upper belt, substantially as described. 27th. The combination, in a starching machine, of the tank or vat, with the conveyor belt therein, the working or rubbing mechanism operating upon said belt, means for delivering the articles upon the upper side or stretch of said belt, and the plate substantially closing the top of said tank or vat and supporting said belt, substantially as described. 28th. The combination, in a starching machine, of the tank or vat, with the two endless belts, operating therein to carry articles there-through, and the plate substantially closing the upper part of said tank or vat and being an adjustable guide for the upper stretch of the upper belt, substantially as described. 29th. The combination, in a starching machine, of the tank or vat, with the two endless belts supported by suitable rollers, a working or rubbing mechanism, the lower belt having its rear end working over the upper stretch of the upper belt, and the plate or table beneath the upper stretch of the upper belt and extending beneath the forwardly operating part of said lower belt, substantially as described. 30th. The combination, in a starching machine, of a tank or vat, with the upper and lower belt

or apron operating therein, the rear end of said lower belt being carried forward over the upper stretch of the upper belt to deliver the goods thereon, the roll for the forwardly extending loop of the lower belt, and the plate or table extending beneath said roll and the upper stretch of the upper belt, substantially as and for the purpose specified. 31st. The combination, in a starching machine, of the vat, with the working parts carried by a frame which is removable from said vat to permit the cleaning of the vat and the working parts, substantially as described. 32nd. The combination, in a starching machine, of the tank or vat, with the movable frame hinged or pivoted and adapted to be lowered into or raised from said tank or vat, the two endless belts having supports arranged in or upon said movable frame, the working or rubbing mechanism connected with said frame and said belts, and an independent group of driving rolls, substantially as described. 33rd. The combination, in a starching machine, of the tank or vat, with the movable frame hinged or pivoted therein, the two belts or conveyors having supports in said movable frame, the working or rubbing mechanism also supported in said frame and movable therewith, means for delivering the goods upon the upper stretch of the upper belt or conveyor, to be taken therefrom, a pressing roll 18 carried by said movable frame and connected with a fixed part, whereby the relations of said roll and said frame are changed when said frame is raised, substantially as described. 34th. The combination, in a starching machine, of the tank or vat, with the movable frame provided therein, the independent driving rolls, rollers or guides in said frame, the belts operating over said rollers or guides and over said independent driving rolls, the working or rubbing mechanism to operate upon said belts, the operating shaft therefor, the delivery roll upon the upper stretch of the upper belt and connected with said movable frame, and also a fixed part, and said movable frame being pivoted to be raised from said tank or vat, substantially as described. 35th. The combination, in a starching machine, of the operating parts including a belt and its driving rolls, with the driving roll 18 located upon the upper side of said belt and near said driving roll, a frame wherein said belt is carried or mounted, and said roll 18 having a movable or sliding connection with said frame, whereby when said frame is raised said roll will be kept out of contact with said driving roll, substantially as described. 36th. The combination, in a starching machine, of the tank or vat, with the movable frame pivoted therein to be raised therefrom, the endless belts and the rolls therefor in said frame, the driving rolls, the reciprocating working rolls operating upon the working stretch of said belts and upon opposite sides thereof, and means for operating said parts, substantially as described. 37th. The combination, in a starching machine, of the two endless belts, with the ribbed working rolls engaging opposite sides thereof and provided with reduced ends whereon the edges of said belts lap, as and for the purpose specified.

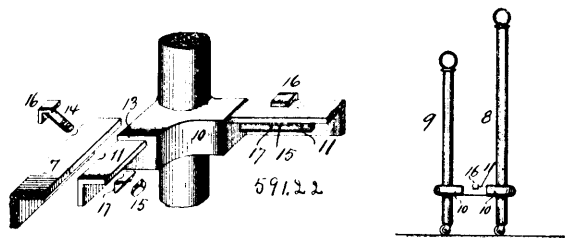
No. 59,121. Fire-Plug. (Tige pour borne-fontaines.)



Edgar C. Wiley and Henry E. McWane, both of Lynchburg, Virginia, U.S.A., 24th February, 1898; 6 years. (Filed 28th January, 1898.)

Claim. A plug comprising the casing having internally near its upper end upper and lower flanges for forming a seat for the bolt, the upper flange being slotted for the passage of the bolt-heads, the stand-pipe having on its outer side a ring-like projection provided with openings for the bolts, and the bolts passed through said openings and fitted to engage with the seat of the casing, substantially as described.

No. 59,122. Metal Bedstead. (Lit en fer.)

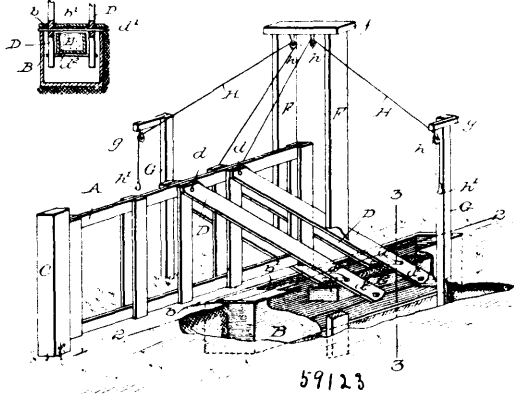


Samuel Newman, assignee of Henry R. Bothwell, both of Cincinnati, Ohio, U.S.A., 24th February, 1898; 6 years. (Filed 2nd February, 1898.)

Claim.—1st. In a joint for connecting the side rails to the corner-posts of the ends of a metal bedstead, the combination of brackets secured to said posts having angle-shaped projections 11, angle-shaped side rails which fit and lap over these projections, a bolt passing

diagonally through the overlapping parts of which each is provided with a hole for such purpose and a triangular washer which fits into the angle of projections 11 and provides with its outwardly-turned side a surface for the nut of the bolt to rest against. 2nd. In a joint for connecting the side rails to the corner-posts of the ends of a metal bedstead, the combination of brackets secured to said posts having angle-shaped projections 11, angle-shaped side-rails which fit and lap over these projections, a bolt passing diagonally through the overlapping parts of which each is provided with a hole for such purpose, and a triangular washer which fits into the angle of projection 11 and provides with its outwardly-turned side, a surface for the nut of the bolt to rest against, projections 11 of one end adapted to fit into the corresponding projections of the opposite end, whereby such ends become capable of direct connection, as and for the purpose described.

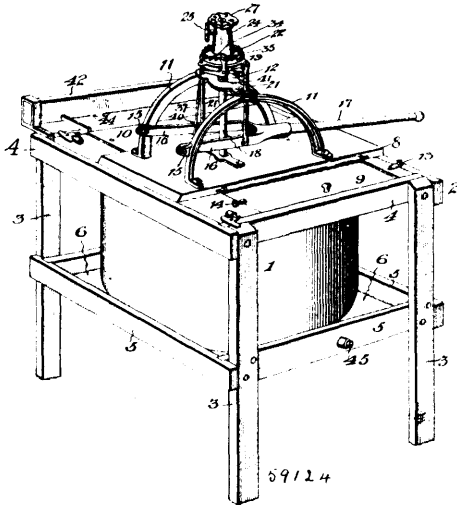
No. 59,123. Gate. (Barrière.)



John Q. Primm, Loyd, Illinois, assignee of Henry W. Parker, Des Moines, Iowa, both in the U.S.A., 24th February, 1898; 6 years. (Filed 29th January, 1898.)

Claim.—In a gate, the combination of a box having a slotted top flush with the surface of the roadway, bolts passing transversely through said box, parallel arms supported in pairs on said bolts and swinging in the slots in the top of said box, bolts passing transversely through each pair of said arms near their lower ends, a sand-box supported on said last-named bolts, and a gate-frame pivotally connected with said arms, as set forth.

No. 58,124. Washing Machine. (Machine à laver.)

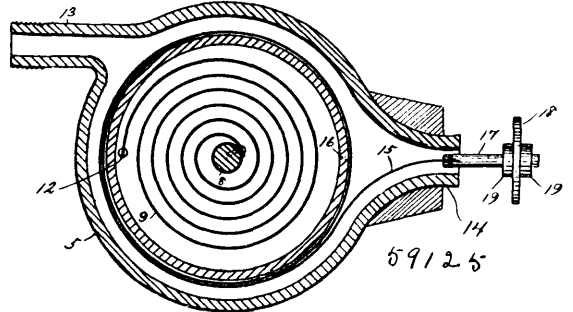


The Star Suction Washer Company, assignee of Leo L. Chase, both of Sandy Hill, New York, U.S.A., 24th February, 1898; 6 years. (Filed 5th February, 1898.)

Claim.—1st. In a washing machine, the combination of a plunger head having a valve opening, a cage arranged at the bottom of the plunger, a valve disk arranged within the cage, sides mounted on the plunger head and forming a chamber, a shaft or stem provided with a spider secured to the plunger head over the valve opening and providing an intervening space for the passage of air, and means

for reciprocating and automatically rotating the plunger head, substantially as described. 2nd. In a washing machine, the combination of a vertical shaft, a plunger head, a bearing bracket, a ratchet wheel mounted on the shaft and adjustably secured to the same, a reciprocating frame swiveled to the shaft, an operating lever fulcrumed on the bearing bracket and connected with the reciprocating frame, a bell crank lever fulcrumed on the reciprocating frame and actuating the ratchet wheel, and connections between the bell crank lever and the operating lever, substantially as described. 3rd. In a washing machine, the combination of a bearing bracket, a vertical shaft, a plunger head carried by the shaft, a reciprocating frame swiveled to the shaft, an operating lever fulcrumed on the bearing bracket and connected with the reciprocating frame, and a coiled spring disposed on the shaft and interposed between the bearing bracket and reciprocating frame, substantially as described. 4th. In a washing machine, the combination of a bearing bracket, a shaft, a plunger head, a reciprocating frame swiveled to the shaft, an operating lever connected with the reciprocating frame, a ratchet-wheel mounted on the shaft, a bell-crank lever fulcrumed on the reciprocating frame, an actuating pawl pivoted to one arm of the bell-crank lever and engaging the ratchet-wheel, and a rod connecting the other arm of the bell-crank lever with the operating lever, substantially as described. 5th. In a washing machine, the combination of a shaft, a bearing bracket, a ratchet-wheel provided with a sleeve detachably secured to the shaft, a disc connected with the ratchet-wheel, a reciprocating frame comprising a head interposed between the ratchet-wheel and the disc, and link-bars connected with the head, an operating lever fulcrumed on the bearing bracket and pivoted to the link-bars, a pawl for actuating the ratchet-wheel, and connections between the pawl and the operating lever, substantially as described. 6th. In a washing machine, the combination of a shaft, a ratchet-wheel mounted thereon, an operating lever connected with the shaft, a vertical bell crank lever, an actuating pawl connected with one arm of the bell-crank lever, a vertically reciprocating rod, and means for connecting the rod with the other arm of the bell-crank lever, substantially as described. 7th. In a washing machine, the combination of a bearing bracket, a central vertical shaft, a forked operating lever fulcrumed on the bearing bracket and straddling the shaft, a ratchet-wheel located above the bearing bracket and adjustably connected with the shaft, a reciprocating frame connected with the ratchet-wheel and provided with link-bars pivoted to the operating lever, a bell-crank lever fulcrumed on the reciprocating frame, a pawl connected with one arm of the bell-crank lever and engaging the ratchet-wheel, a reciprocating rod connected with the operating lever and provided with lugs arranged at opposite sides of the other arm of the bell-crank lever, and a spring interposed between the bearing bracket and the reciprocating frame, substantially as described.

No. 59,125. Device for Cleaning Flues and Flue Pipes. (Appareil à nettoyer les tubes.)



Charles Comstock and John L. Wyckoff, both of Ozone Park, New York, U.S.A., 24th February, 1898; 6 years. (Filed 4th February, 1898.)

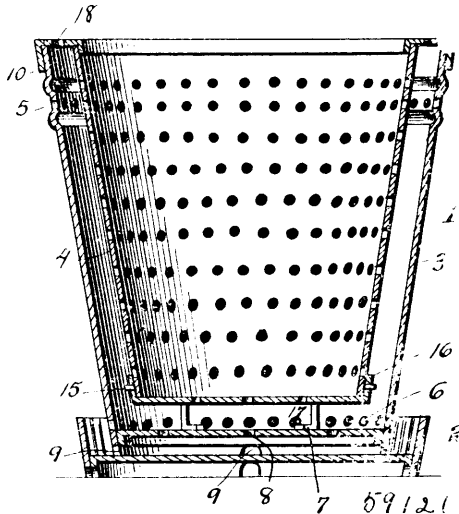
Claim.—A device for cleaning flues and pipes, comprising a suitable circular casing having a removable side, a spring-drum mounted in said casing, a spring-metal tape, cord or band wound on said drum, one end of which is secured thereto and the other to a disc or plate, said casing being provided at one side with a tubular extension by means of which connection with a steam-supply may be made, and at the other end with a conical tubular extension by means of which connection with a flue or pipe may be made, and through which the end of the tape, cord or band which is connected with the disc or plate passes, and said spring-drum being adapted to be wound up by the pressure of the steam on said plate or disc, and said plate or disc being adapted to be blown through the flue or pipe, and to be withdrawn by said spring-drum, substantially as shown and described.

No. 59,126. Flower-Pot. (Pot à fleurs.)

Susan C. Guyn, Morton, Pennsylvania, U.S.A., 24th February, 1898; 6 years. (Filed 13th November, 1897.)

Claim.—1st. A device of the kind specified, consisting of an outer perforated receptacle and an inner perforated receptacle, removably

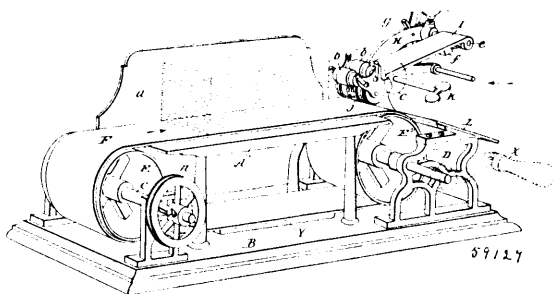
secured therein, said inner receptacle consisting of a collapsible upright wall and a bottom. 2nd. A device of the kind specified,



consisting of an outer perforated receptacle, an inner perforated receptacle, and a rim connecting the upper ends of said receptacle. 3rd. A device of the kind specified, consisting of an outer perforated receptacle, an inner perforated receptacle, and a removable rim connecting the upper ends of said receptacle. 4th. A device of the kind specified, consisting of an outer perforated receptacle, and an inner perforated receptacle removably secured therein and provided at its lower end with feet to rest upon the bottom of said outer receptacle. 5th. In a device of the kind specified, an inner receptacle consisting of an upright wall, perforated as described, and comprising a bent piece fastened together at its ends, and a removable bottom or cup secured to the lower end of said upright wall.

No. 59,127. Stamp Canceller.

(Machine à maculer les timbres-poste.)



Samuel B. Holmes, John W. Milan, William Lindsay and William E. Bradley, all of Frankfort, Kentucky, U.S.A., 24th February, 1898; 6 years. (Filed 3rd August, 1897.)

Claim.—1st. In a machine for cancelling stamps, the combination of a table, a continuous travelling belt extending over the table, a printing roller supported to turn freely and under the action of letters carried by the belt and in contact with the entire length of each letter, a guard or gauge for supporting and guiding a pile of letters resting directly on the belt, the surface of the belt adapted to frictionally engage and carry the letters, and the whole arranged as set forth to permit the letters to be carried successively and without stopping from the pile and beneath the roller, substantially as described. 2nd. The combination of a table, a travelling belt passing over the table, a gauge or guard at the side of the table, and a pivoted frame carrying a printing cylinder or roller, the axis of the same being upon a plane at the rear of the axis of the rear roller around which the travelling belt passes, substantially as described. 3rd. The combination with the table and travelling belt and gauge or guide, of the pivoted frame I carrying a printing cylinder J and a spring, and means for varying the tension of the spring, substantially as set forth.

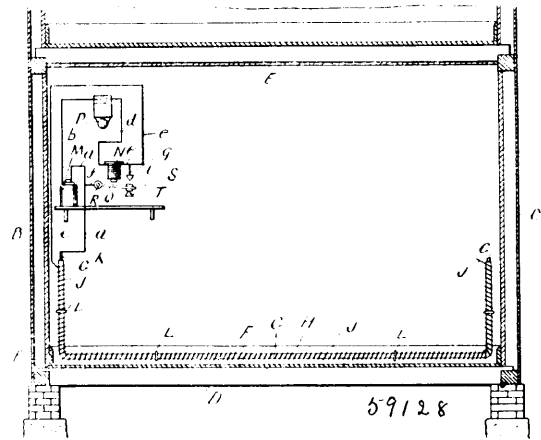
No. 59,128. Electric Fire Alarm.

(Avertisseur d'incendie électrique.)

Charles Darwin Tisdale, Boston, Massachusetts, and John Duncklee Gould, Brooklyn, New York, both in the U.S.A., 24th February, 1898; 6 years. (Filed 2nd August, 1897.)

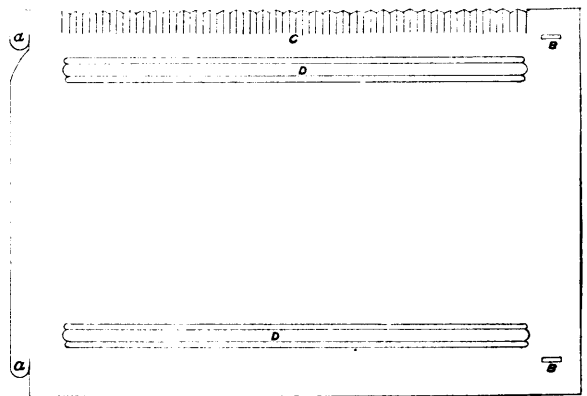
Claim.—1st. In an electric fire-alarm, the combination of two wires arranged in close proximity side by side but electrically

separated one from the other, one of said wires being formed of a metal fusible at a low temperature, and placed above the other



wire, said wires at one end being respectively connected to the poles of an electric battery and electrically separated at their other ends, and a bell or other sounding device located in the battery-circuit, substantially as described. 2nd. In an electric fire-alarm, the combination of two wires, one of which is formed of a metal fusible at a low temperature and covered with an insulating material destructible by a low degree of heat, and one of said wires being wound about the other throughout the length of the latter, said wires at one end being respectively connected to the poles of an electric battery and electrically separated at their other ends, and a bell or other sounding device located in the battery-circuit, substantially as described. 3rd. In an electric fire-alarm, the combination of two wires arranged in close proximity side by side but electrically separated one from the other, one of said wires being formed of a metal fusible at a low temperature, and placed above the other wire, one of said wires being connected to one pole of a battery and the other wire being connected to the other pole thereof and including an electro-magnet and a bell, an armature controlled by said magnet and electrically connected to one of said wires, and a contact connected to the other wire and adapted when the armature is attracted by the magnet to form a short circuit through said electro-magnet, bell and battery, substantially as described. 4th. An electric cable or conductor composed of two wires, one of which is formed of a metal fusible at a low temperature and covered with an insulating material destructible at a low degree of heat, and the other of said wires being wound about the insulating material on the first wire throughout its length.

No. 59,129. Stove Pipe. (Tuyau de poêles.)



Eliza Jane Climo, assignee of Jonathan Brey Climo, both of Cobourg, Ontario, Canada, 24th February, 1898; 6 years. (Filed 30th November, 1897.)

Claim. As an article of manufacture, a stove pipe, composed of a sheet of metal having tongue A, apertures B, and the usual folding edges, swedging ribs and crimping so that the edges may be locked or unlocked, as described and shown.

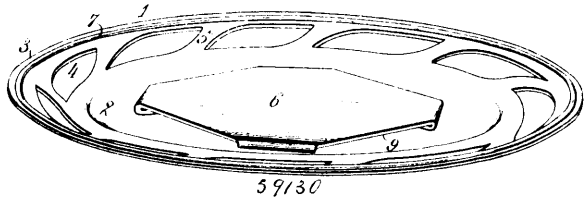
No. 59,130. Fly Poison Dish or Plate.

(Papier tue-mouche à poison.)

Jay Hungerford Smith, Rochester, New York, U.S.A., 25th February, 1898; 6 years. (Filed 13th December, 1897.)

Claim.—1st. A fly-poison dish or plate provided in its bottom with fly-poison paper, said dish or plate having a rim pierced with a

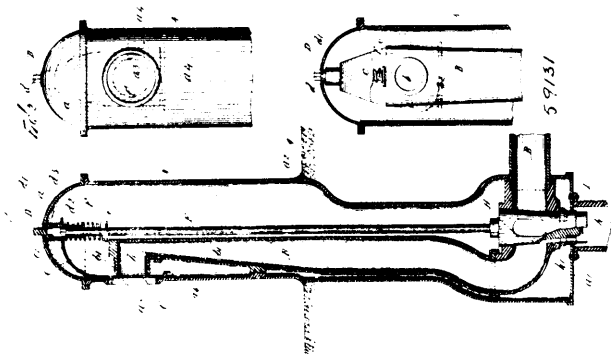
series of openings through which the poisoned water will escape if the dish or plate be tilted or tipped with the intention of drinking



the water, substantially as described. 2nd. The herein described fly-paper dish or plate, consisting of a bowl surrounded by a raised rim pierced by a series of openings, separated by a series of diagonal arms, substantially as and for the purpose set forth. 3rd. The herein described fly-paper dish or plate, consisting of a bowl surrounded by a raised rim pierced by a series of openings, separated by a series of diagonal arms which are wider at their ends than at their middle portions, substantially as and for the purpose set forth. 4th. The combination with a fly-paper dish or plate, of a sheet of poisoned paper supported in the bowl thereof with its body above and out of contact therewith, substantially as and for the purpose set forth. 5th. The combination with a fly-paper dish or plate, of a sheet of poisoned paper having its corners bent under and secured to the bowl of the dish or plate, whereby the body of the poisoned paper is supported above and out of contact with said bowl, substantially as and for the purpose described.

No. 59,131. Hose Hydrant.

(Borne-fontaine pour boyaux.)



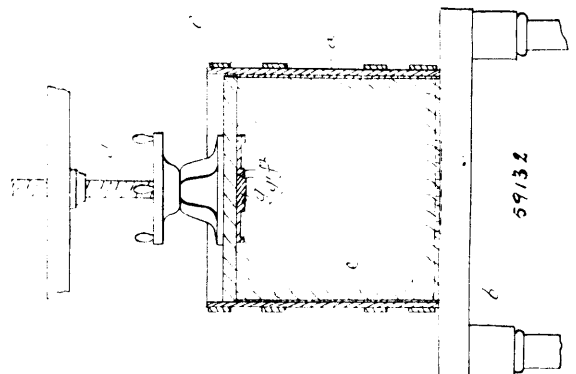
Henry Max Kunz, Brooklyn, New York, U.S.A., 25th February, 1898; 6 years. (Filed 20th December, 1897.)

Claim. - 1st. An improved hose hydrant, comprising a mouth or opening, a slide or plate adapted to close the same, and a rotary plug carrying said slide or plate and having an exteriorly projecting operating end adapted to be engaged by a key or handle, substantially as and for the purpose set forth. 2nd. An improved hose hydrant, comprising a casing having a mouth or opening and provided interiorly with limiting shoulders or flanges arranged with respect to said mouth or opening, a slide or plate adapted to close the opening and operating with respect to said interior flange so that it engages the same when in normal position, and an operating plug carrying said slide or plate and provided with an exteriorly projecting operating end adapted to be engaged by a key or handle, substantially as and for the purpose set forth. 3rd. An improved hose hydrant, comprising a casing carrying a feed mechanism provided with an inlet valve, a rotary stem connected with said valve and extending vertically within the casing, and a rotary depressible plug adapted to engage the valve stem, and provided with an exteriorly projecting operating end adapted to be engaged by a key or handle, substantially as and for the purpose set forth. 4th. An improved hose hydrant, comprising a casing provided with feed pipe mechanism having an inlet valve, a valve stem connected with said valve and extending vertically within the casing, a rotary and vertically slidable operating plug adapted to engage the end of the valve stem and having an operating end exteriorly projecting from the casing and adapted to be engaged by a key or handle, and a spring mechanism for governing the connection, as and for the purpose set forth. 5th. An improved hose hydrant, comprising a casing provided with a feed pipe having an inlet valve, a valve stem connected with said valve and extending vertically within the casing, and a tubular operating plug receiving the top end of said valve stem and adapted to engage the same, said plug being rotatable and depressible with respect to the valve stem, and provided with a projecting end adapted to be engaged by operating devices, substantially as and for the purpose set forth. 6th. An

improved hose hydrant, comprising a casing provided with a feed pipe having an inlet valve, a valve stem connected with said valve and extending vertically within the casing, a tubular operating plug receiving the top end of said valve stem and adapted to engage the same, said plug being rotatable and depressible with respect to said valve stem and provided with an operating end projecting exteriorly from the casing, and adapted to be engaged by an operating device, and a governing coiled spring arranged between the valve stem and said operating plug, substantially as and for the purpose set forth. 7th. An improved hose hydrant, comprising a casing having a mouth or opening and provided with water feed mechanism having an inlet valve, a valve stem connected with said valve and extending within said casing, a rotatable and depressible operating plug adapted to engage a valve stem, and a slide or plate adapted to close the mouth or opening in the casing and carried by said operating plug, substantially as and for the purpose set forth. 8th. An improved hose hydrant, comprising a casing having a mouth or opening and provided with water, feed mechanism having an inlet valve, a valve stem connected with said valve and extending within the casing, a rotatable and depressible plug adapted to engage the valve stem and provided with an operating end extending exteriorly from the casing and adapted to be engaged by an operating key or handle, a slide or plate adapted to close the mouth or opening and carried by said rotatable plug, and spring mechanism for governing the connection between the plug and valve stem, substantially as and for the purpose set forth. 9th. An improved hose hydrant, comprising a casing having a mouth or opening, and provided with water feed mechanism having an inlet valve, a valve stem connected with said valve and projecting vertically within the casing, a tubular operating plug receiving the top end of said valve stem and adapted to engage the same, and provided with an end projecting exteriorly from the casing and adapted to be engaged by an operating key or handle, a slide or plate adapted to close the mouth or opening in the casing and carried by said operating plug, the operating plug being rotatable and depressible with relation to the valve stem, and a coiled spring arranged between the valve stem and plug, and adapted to control the relation of said parts, substantially as and for the purpose set forth. 10th. In a hose hydrant, comprising a casing having a mouth or opening at the bottom of which is arranged an interior flange or limiting device and having a stem extending from inlet valve mechanism, a depressible and rotatable plug adapted to engage said valve stem when the plug is depressed, and a slide or plate adapted to close the mouth or opening, and carried by said plug, whereby the closure plate permits depression of the plug only when said plate is beyond the mouth or opening and out of engagement with the interior limiting flange devices, substantially as and for the purpose set forth. 11th. In a hose hydrant, comprising a casing having a closed bottom from which extends a waste pipe, an inlet pipe extending within said casing and provided with a rotary valve projecting with relation to said waste pipe, and having an exterior groove adapted to form an outlet between the inlet pipe and waste pipe, substantially as and for the purpose set forth. 12th. An improved hose hydrant, comprising a casing and provided with water feed mechanism having an inlet valve, a valve stem extending from said valve, and a rotatable and depressible operating plug adapted to engage said valve stem and carrying a slide or plate adapted to close the mouth or opening of the casing, whereby said plug serves the conjoint office of opening or closing the hydrant and opening or closing the valve, substantially as and for the purpose set forth.

No. 59,132. Branding or Marking of Cheese.

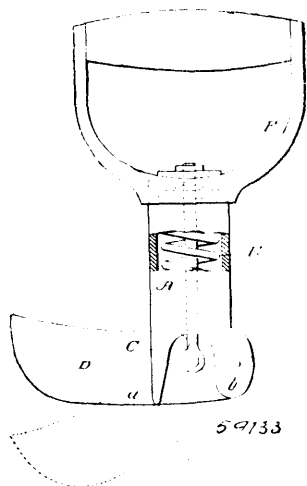
(Appareil à marquer le fromage.)



Charles Bate, Brockville, Ontario, Canada, 25th February, 1898; 6 years. (Filed 26th October, 1897.)

Claim. The combination with the cheese press follower *c*, of the stamp *f* having opening *d*¹, with bevelled sides *f*² and panel *g*, with bevelled edges *g*¹, substantially as described and for the purpose set forth.

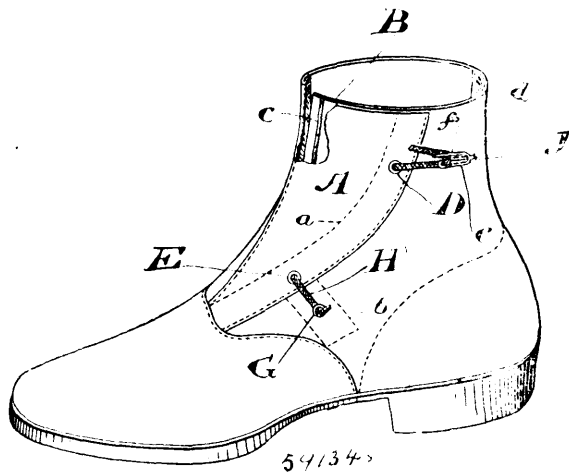
No. 59,133. Pruning Knife and Brush Hook,
(*Sécateur et crochet.*)



Walter R. Benjamin, Grand Tower, Illinois, U.S.A., 25th February, 1898; 6 years. (Filed 4th October, 1897.)

Claim.—A pruning knife and brush hook, consisting of the handle F, the hollow shank and detachably connected thereto, the guides *a a* and *b b* constituting integral extensions of said shank, the rod C spring-supported in the hollow of said shank, the blade B pivoted between the guides *b b* and having also a pivotal connection intermediate of its length with the lower end of the rod C, and the spiral spring E held in the hollow shank and furnishing a yielding support for said rod and blade.

No. 59,134. Boot and Shoe. (*Chaussure.*)

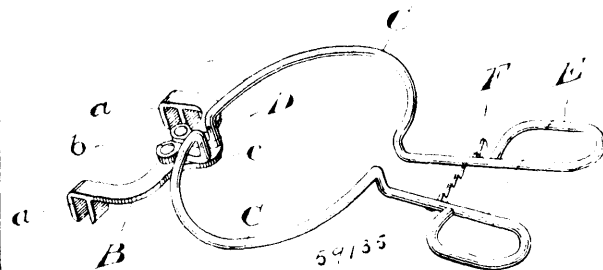


James Ferguson Sharpe, Toronto, Ontario, Canada, 25th February, 1898; 6 years. (Filed 10th February, 1898.)

Claim.—1st. In a boot, a flap having its edge reinforced with a crimped spring to give perfect flexibility in every direction with sufficient stiffness to prevent wrinkling, substantially as and for the purpose specified. 2nd. In a boot, a flap having its edge reinforced with a crimped spring running parallel thereto, in combination with a flap reinforced at one point by a crimped spring running back from the edge, substantially as and for the purpose specified. 3rd. In a boot, a flap having its edge reinforced with a crimped spring running parallel thereto and having an eyelet hole formed therein towards the bottom, in combination with a flap reinforced at one point by a crimped spring running back from its edge opposite the aforesaid eyelet hole and having a loop or part for the attachment of a lace, also opposite the aforesaid eyelet hole, substantially as and for the purpose specified. 4th. In a boot, a flap having its edge reinforced with a crimped spring running parallel thereto and having an eyelet hole formed therein towards the bottom, and another eyelet hole near the top, in combination with a flap reinforced at one point by a crimped spring running back from its edge opposite the aforesaid eyelet hole, and having a loop or part for the attachment of a lace also opposite the aforesaid eyelet hole, and a hook fastener opposite the other eyelet hole, substantially as and for the purpose specified. 5th. In a boot, a flap reinforced with a crimped spring

running back from its edge, the spring having an eye formed therein to project through the flap to form a lace attachment, substantially as and for the purpose specified. 6th. In a boot, a flap having its edge reinforced with a crimped spring running parallel thereto and having an eyelet hole formed therein towards the bottom and another hole near the top, in combination with a flap provided with a jamb fastener opposite the upper eyelet hole and reinforced by a crimped spring running back from the edge opposite the lower eyelet hole, the spring having an eye formed therein for the attachment of a lace, substantially as and for the purpose specified. 7th. The fastener J, comprising the part *d*, the end of which may be fastened beneath the leather of the shoe, the part *e* and the part *f*, the end of which may be passed beneath the leather of the shoe, the three parts lying substantially parallel to one another and forming a loop and tongue between which the lace is jammed, substantially as and for the purpose specified.

No. 59,135. Bag Holder. (*Accroche-sac.*)

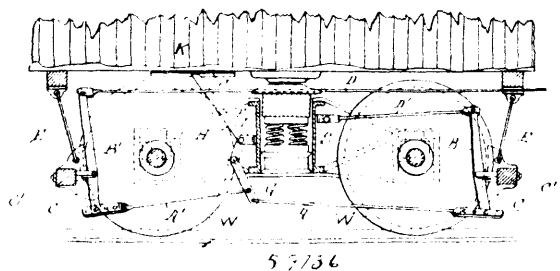


Thomas Delahay, Pembroke, Ontario, Canada, 25th February, 1898; 6 years. (Filed 10th February, 1898.)

Claim.—1st. In a bag holder, a supporting frame, in combination with two half rings pivoted thereon, handles extending outwardly from each half ring, and a notched quadrant connected to one handle and adapted to be engaged by the other, substantially as and for the purpose specified. 2nd. In a bag-holder, a supporting frame, in combination with two half rings, pivot portions off-set downwardly from the rings and pivoted on the said frame, handles off-set downwardly and extending outwardly from each half ring, and a notched quadrant connected to one handle and adapted to be engaged by the other, substantially as and for the purpose specified. 3rd. In a bag-holder, a supporting frame provided with jaws to engage a bin edge, in combination with two half rings pivoted thereon, handles extending outwardly from each half ring, and a notched quadrant connected to one handle and adapted to be engaged by the other, substantially as and for the purpose specified. 4th. In a bag-holder, a supporting frame provided with jaws to engage a bin edge, in combination with two half rings, pivot portions off-set downwardly from the rings and pivoted on the said frame, handles off-set downwardly and extending outwardly and a notched quadrant connected to one handle and adapted to be engaged by the other, substantially as and for the purpose specified.

No. 59,136. Slack Adjuster for Car Brakes.

(*Appareil à ajuster le lâche dans les freins de chars.*)

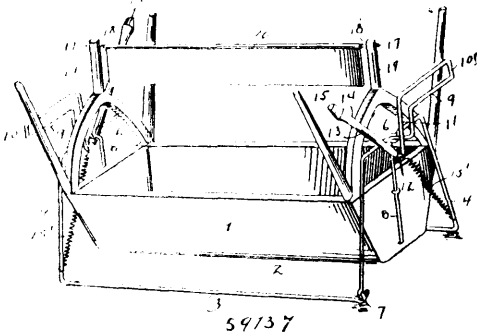


James B. Downing and Harry E. Downing, both of Arkansas, Kansas, U.S.A., 25th February, 1898; 6 years. (Filed 11th February, 1898.)

Claim.—1st. An automatic slack adjuster for car-brakes, consisting of a bottom-rod made in two parts, and an equalizing-lever to which the two parts of the bottom rod are attached and a bell-crank lever pivoted to the truck-frame, said bell-crank lever being connected at one end to the equalizing-lever and having its other end bearing against the bottom of the car-body, substantially as shown and described. 2nd. An automatic slack-adjuster for car-brakes, consisting of a bottom rod made in two parts, an equalizing-lever to which the two parts of the bottom rod are attached, and a lever pivoted to the equalizing-lever and operated by the variation in height of the car-body above the truck, to change the angle of the equalizing-lever and the length of the bottom rod, substantially as shown and described. 3rd. An automatic slack-adjuster for car-

brakes, consisting of a bottom rod made in two sections, an equalizing lever connected to both sections and means operated by the variation in height of the car-body, to vary the position of the equalizing-lever and the length of the bottom rod, substantially as shown and described. 4th. An automatic slack-adjuster for car-brakes, consisting of a bottom rod made in two sections, an adjustable connection between said sections adapted to vary the length of the bottom rod, and means operated by the variation in height of the car-body above the trucks, to operate said adjustment, substantially as shown and described.

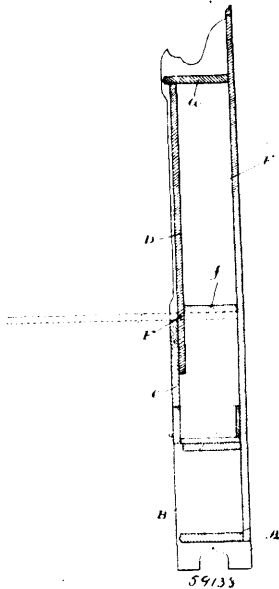
No. 59,137. Cradle. (Berceau.)



John R. Garrett, Emison, Indiana, U.S.A., 25th February, 1898; 6 years. (Filed 11th February, 1898.)

Claim. The combination of a cradle support, consisting of a rod bent to form parallel longitudinal feet, and standards having hanger-seats formed at their upper ends, of a cradle provided with hangers adapted to engage said seats and formed with handles, and upwardly and oppositely projecting extensions, sleeves fitted to said extensions and provided with counterbalancing weights at their upper ends, and a fan supported by said cradle, substantially as set forth.

No. 59,138. Baking Cabinet. (Cabinet de boulangerie.)



Thomas William Baker, London, Ontario, Canada, 25th February, 1898; 6 years. (Filed 4th February, 1898.)

Claim. A baking cabinet, embracing in its construction two opposite sides united by the usual top and bottom cross pieces, a panel connected to the front of the sides at or below the middle, a drop front for the cabinet extending from the bottom of the panel to the top of the closed part of the cabinet, a pivot bolt passing through the sides and through the drop front above the top of the panel, and a cross piece connected to the sides contiguous to the top of the panel to form an abutment for the top of the front in its lowered position, substantially as specified.

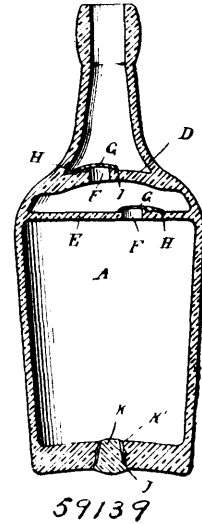
No. 59,139. Non-Refillable Bottle.

(Bouteille non remplissable.)

Frederick Hill, Moose Lake, Minnesota, U.S.A., 25th February, 1898; 6 years. (Filed 12th February, 1898.)

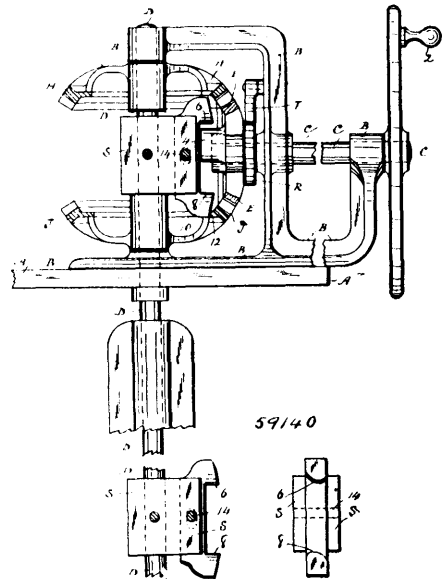
Claim. 1st. A non-refillable bottle, having the diaphragms located in the upper portion thereof, said diaphragms being pro-

vided with the openings, the valves to open and close the openings therein, a filling opening in the lower portion of the bottle, and



means substantially as described for permanently closing said filling opening, for the purpose set forth. 2nd. A non-refillable bottle, having the diaphragms located in the upper portion thereof, said diaphragms being provided with the valves to open and close the openings therein, a filling opening in the bottom of the bottle, and a stopper carrying the springs adapted to be forced into and permanently secured within said filling opening, substantially as shown and described. 3rd. A non-refillable bottle, having the diaphragms formed integral in the upper portion thereof, the openings therein, arranged out of alignment with each other, the hinged valves to automatically open and close said openings, a filling aperture in the bottom of the bottle, and a wedge-shaped plug or stopper carrying the springs adapted to be inserted and permanently secured within said filling aperture, as set forth.

No. 59,140. Washing Machine. (Machine à laver.)



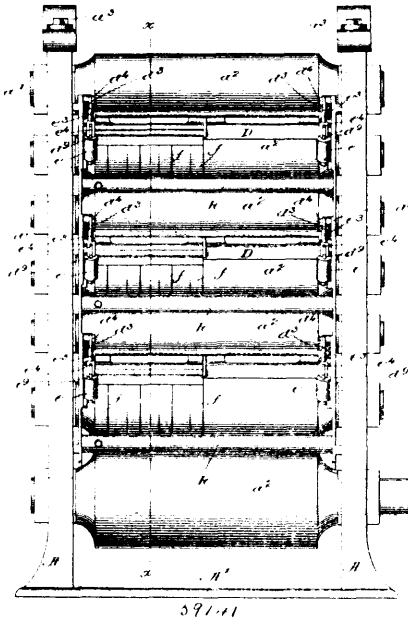
George B. Dowsell, Hamilton, Ontario, Canada, 25th February, 1898; 6 years. (Filed 14th February, 1898.)

Claim. A reciprocating motion for clothes washers of the character described, consisting of a vertical shaft having lower dasher suspended from a metallic framework secured to the cover of a washing machine, and capable of reciprocating movement by means of an horizontal shaft revolved in said framework by means of an outer crank wheel secured thereto, a bevel pinion having a projecting cam secured on inner end of said horizontal shaft and geared into upper and lower bevel wheels which run loosely on said vertical

shaft, and recesses formed in the rims thereof with shoulders to engage with the upper and lower clutches in a vertical casing secured on said vertical shaft to afford reciprocating motion to said shaft, hence to the lower clothes and water dasher, as described.

No. 59,141. Calendering Machine.

(Machine à calandrage.)

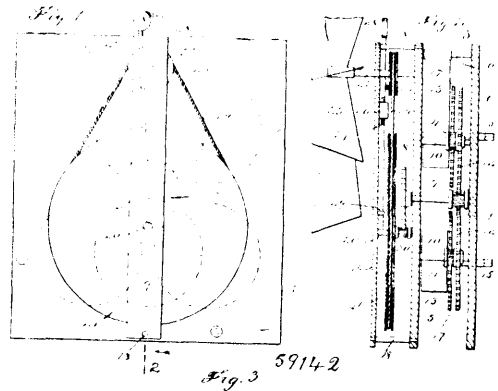


Peter Dillon, Lawrence, Massachusetts, U.S.A., 25th February, 1898; 6 years. (Filed 13th December, 1897.)

Claim.—1st. The combination with a roll and bearings therefor, of a doctor, supports therefor, and a plurality of connections at opposite ends of and connecting the said doctor and supports, and pivoted both to the doctor and supports, substantially as described. 2nd. The combination with a roll and bearings therefor, of a doctor, supports therefor, connecting links jointed both to the supports and doctor, and springs to move said doctor towards said roll, substantially as described. 3rd. In a calendering machine, the combination with a roll, of a doctor, supporting devices for and to permit movement of said doctor, either both ends simultaneously or either end bodily independent of the opposite end toward said roll, and means automatically to cause said bodily independent and simultaneous movements of the ends of said doctor, substantially as described. 4th. In a calendering machine, the combination with a roll, of a doctor, supporting devices for said doctor permitting movement of the working edge of said doctor, either both ends of said working edge simultaneously or either end independent of the opposite end towards and from said roll, and means automatically to cause said simultaneous or independent movements of the ends of said working edge of said doctor, substantially as described. 5th. The combination with a roll, its bearings, and a doctor hung to move bodily towards and from said roll, of a spring lever fixedly pivoted at one end, and connected with and to move said doctor, and a spring and connections between it and said lever, permitting the acting point of the spring to be changed relatively to the said lever, substantially as described. 6th. The combination with a roll, its bearings, of a doctor, supporting links for and at the ends thereof and loosely pivoted to it and to its support, and pivoted bell-crank levers having one of their arms jointed to said doctor, and springs connected with their other arms, substantially as described. 7th. The combination with a roll, and its bearings, of a doctor adapted to be moved towards and from the said roll, the pivoted bell-crank levers connected with said doctor, the spring pivoted cup-shaped seats therefor, and the spring rods adapted to engage the said bell-crank levers, and operate, substantially as described. 8th. The combination with a roll, and its bearings, of a doctor adapted to be moved bodily towards and from the said roll, the pivoted bell-crank levers, having notched arms, springs, and spring rods adapted to engage the said notches, to hold said doctor normally pressed against said roll, substantially as described. 9th. In an apparatus of the class described, a doctor, a support therefor and controlling connections between and permitting relative movement of said doctor and its support, said connections maintaining the different portions of the doctor in substantially unchanged position relatively to each other, substantially as described. 10th. The combination with a calender, of an air supply pipe provided with a nozzle opening adjacent and parallel to the calender rolls, and a steam pipe arranged within the said air supply pipe adjacent said rolls and adapted to project steam into the said nozzle from within the air supply pipe,

whereby the steam is mixed with and condensed by the air immediately before the latter is projected from the nozzle, substantially as described.

No. 59,142. Spring Motor. (Moteur à ressort.)

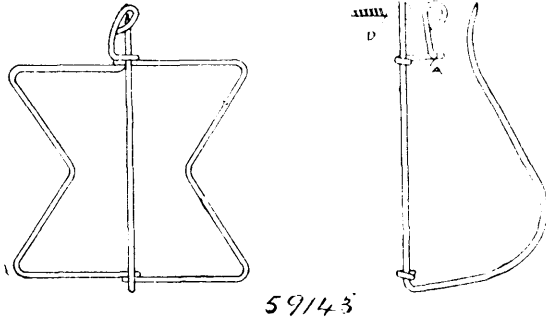


William Myrlin Luther, Buffalo, New York, U.S.A., 25th February, 1898; 6 years. (Filed 7th June, 1897.)

Claim. 1st. In a high-speed motor, the combination, with a source of energy, of a multiplying train of low speed cog-wheels connected with said source, a drum driven by said train, and a high-speed train of drum and belt gearing, comprising the said drum, substantially as described. 2nd. In a high-speed motor, the combination, with a train of low-speed gear-wheels having a source of energy, said wheels being adapted to move at a speed below the point of back-lash, of a drum having connection with the highest speed-wheel of the train, and a train of drum and belt gearing comprising the aforesaid drum, the speed of the last-named train extending beyond the said point of back-lash, substantially as described. 3rd. In a high-speed motor, the combination, with a plurality of gear-wheels each having an energizing spring, of a spindle having common toothed connections with said gear-wheels whereby said spindle is adapted to be revolved at a rate below the point of back-lash of its said connection, a drum carried by the spindle, and a train of drum and belt gearing comprising the said drum, the speed of said last-named train extending beyond the point of the aforesaid back-lash, substantially as described. 4th. In a spring motor for fans, the combination, with a casing, of a shaft 7, a gear-wheel 8 and pin wheel 9 mounted thereon, shafts 10 mounted above and below said shaft 7, a pin-wheel 11 and gear-wheel 12 mounted on each of said shafts 10 and adapted to mesh with said pin-wheel 9, four spring operated shafts 14, a large gear-wheel 17 mounted on each of said shafts 14, said gear-wheels 17 being adapted to operate in connection with the pin-wheels 11 on the shafts 10 and the two gear-wheels 17 at the upper part of the casing being adapted to operate with the upper pin-wheel 11 and the two gear-wheels at the lower part of the casing being adapted to operate in connection with the lower pin-wheel 11, and means for connecting the gear wheel 8 with a fan, substantially as and for the purpose described. 5th. In a spring motor for fans, the combination, with a casing, of a shaft 7, a gear-wheel 8 and a pin-wheel 9 mounted thereon, shafts 10 mounted above and below said shaft 7, a pin-wheel 11 and gear-wheel 12 mounted on each of said shafts 10 and adapted to mesh with said pin-wheel 9, four spring operated shafts 14, a large gear-wheel 17 mounted on each of said shafts 14, said gear-wheels 17 being adapted to operate in connection with the pin-wheels 11 on the shafts 10 and two gear-wheels 17 at the upper part of the casing being adapted to operate with the upper pin-wheel 11 and the two gear-wheels at the lower part of the casing being adapted to operate in connection with the lower pin-wheel 11, and means for connecting the gear-wheels 8 with a fan, said means consisting of a shaft 20, a pinion 30 mounted thereon and adapted to operate with said gear-wheel 8, a large grooved band-wheel 21 mounted on the said shaft 20, a shaft 22 mounted at the top of said casing, a small grooved band-wheel or pulley 23 mounted thereon, a cord or band 24 connecting said pulleys 23 and 21, and a fan mounted upon said shaft 22, substantially as and for the purpose described. 6th. In a spring motor for fans, the combination, with a casing, of a shaft 7, a gear-wheel 8, a pin-wheel 9 mounted thereon, shafts 10 mounted above and below said shaft 7, a pin-wheel 11 and gear-wheels 12 mounted on each of said shafts 10 and adapted to mesh with said pin-wheel 9, four spring-operated shafts 14, a large gear-wheel 17 mounted on each of said shafts 14, said gear-wheels 17 being adapted to operate in connection with the pin-wheels 11 on the shafts 10, and the two gear-wheels 17 at the upper part of the casing being adapted to operate with the upper pin-wheel 11, and the two gear-wheels at the lower part of the casing being adapted to operate in connection with the lower pin-wheel 11, and means for connecting the gear-wheel 8 with a fan, said means consisting of a shaft 20, a pinion 30 mounted thereon and adapted to operate with the said gear-wheel 8, a large grooved band-wheel 21 mounted on the said shaft 20, a shaft 22 mounted at the top of said

casing, a small grooved band-wheel or pulley 23 mounted thereon, a cord or band 24 connecting said pulleys 23 and 21, and a fan mounted upon said shaft 22, and a brake for stopping the operation of said fan, comprising a vertically movable screw-threaded rod 27 having a handle 28 and mounted in-keepers 26 and 29, said keeper 26 being screw-threaded, and the lower end of the rod 27 being adapted to bear against said shaft 20, substantially as shown and described.

No. 59,143. Paper Bag File. (*Enfile-sacs de papier.*)



59143

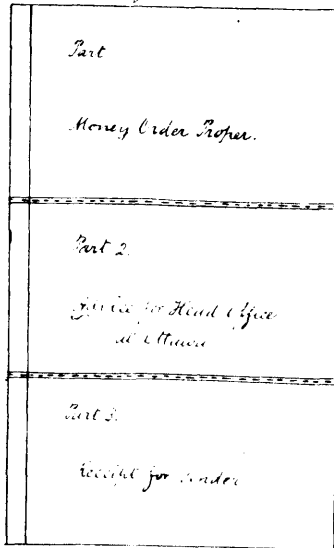
Charles Etienne Edmour Authier, Montreal, Quebec, Canada, 25th February, 1898; 6 years. (Filed 6th November, 1897.)

Claim.—A paper file formed of a continuous piece of wire, twisted to form a rectangular back, an eye at the top of said back, a filing spring pin projecting upward and forward of said back, and a safety catch engaging the upper end of said pin, substantially as described.

No. 59,144. Post Office Money Order Blank.

(*Man-lai de postes.*)

Figure 1.



59144

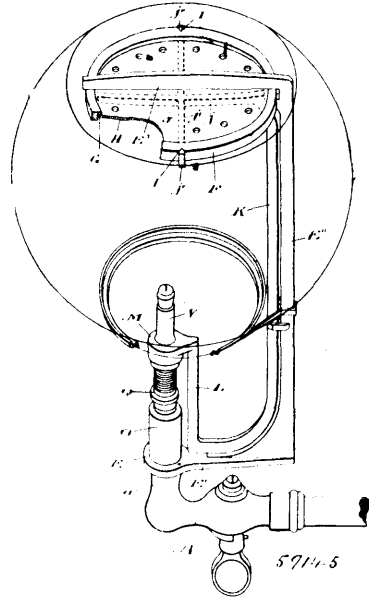
Bernard Gross and Lewis Alexander Hart, both of Montreal, Que., Canada, 25th February, 1898; 6 years. (Filed 13th April, 1897.)

Claim. 1st. A money transmitting blank, comprising a receipt for the amount received, given by the carrier, an advice to be sent to the main office of the carrier, and the message to be sent by the receiving agent of the carrier to the paying agent, said message containing the payee's receipt and address given upon payment of the amount, said receipt, advice and message being detachably connected together. 2nd. A money transmitting blank, comprising a receipt for the amount received, given by the carrier, an advice to be sent to the main office of the carrier, and the message to be sent by the receiving agent of the carrier to the paying agent, said message containing the payee's receipt and address given upon payment of the amount, said receipt, advice and message detachably connected together, and separated only after the date, number and signature of the receiving agent have been placed thereon. 3rd. A money transmitting blank, comprising a receipt for the amount received, given by the carrier, an advice sent by the receiving officer to the main office of the carrier, a notification card sent by the remitter to the payee, and a message to be sent by the receiving agent to the paying agent, said message containing the payee's

receipt and address, given upon payment of the amount, said receipt, advice, notification card and message detachably connected together. 4th. A money transmitting blank, comprising a receipt for the amount received, given by the carrier, an advice sent by the receiving officer to the main office of the carrier, a notification card sent by the remitter to the payee, and a message to be sent by the receiving agent to the paying agent, said message containing the payee's receipt and address, given upon payment of the amount, said receipt, advice, notification card and message being detachably connected together and separated only after the date number and signature of the receiving agent have been placed thereon.

No. 59,145. Cut-off for Gas Burners.

(*Détente pour brûleurs à gaz.*)



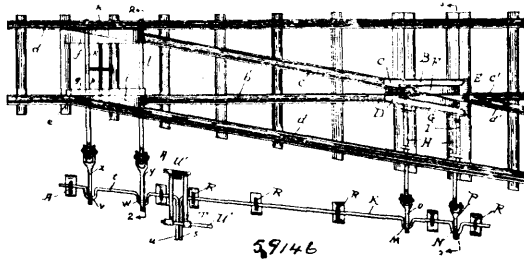
59145

Phillip C. Folwell, Toronto, Ontario, Canada, 25th February, 1898; 6 years. (Filed 29th September, 1897.)

Claim. 1st. In an automatic cut off for gas jets, a thermostat embracing in its construction a slowly expansible ring suspended above the burner and provided with an annular flange, a quickly expansible diaphragm loosely mounted on the flange in combination with a vertically movable frame suspended below the diaphragm, and provided with an arm to operate the valve to open the passage when the diaphragm is heat influenced, substantially as specified. 2nd. In an automatic cut-off for gas jets, a thermostat embracing in its construction a slowly expansible ring provided with an annular flange, a quickly and easily expansible diaphragm, loosely mounted on the flange in combination with a vertically movable frame suspended below the diaphragm, and provided with diametrically opposite lugs embracing the sides of a ring, and an arm depending from the frame to operate the valve controlling the passage through the burner, substantially as specified. 3rd. An automatic cut-off for gas jets, embracing in its construction a cylinder connected to the gas jet, a piston valve within the cylinder, a hollow valve stem connected to the piston valve projecting beyond the cylinder and provided with parts in close proximity to the piston valve, a spring to normally hold the piston valve against the valve seat in the cylinder and close the passage from the gas jet to the burner, a thermostat, an arm controlled by the thermostat when heat influenced to hold the burner depressed and keep open the passage from the gas jet to the burner, substantially as specified. 4th. An automatic cut-off for gas jets, embracing in its construction a cylinder connected to the gas jet, a piston valve within the cylinder, a hollow valve stem connected to the piston valve projecting beyond the cylinder and provided with parts in close proximity to the piston valve, a spring to normally hold the piston valve against the valve seat in the cylinder and close the passage from the gas jet to the burner, a thermostat, an arm controlled by the thermostat when heat influenced to hold the burner depressed and keep open the passage from the gas jet to the burner, provided with an eye encircling the burner, and an adjusting nut fitted on the burner to support the eye of the heat controlled arm and regulate the movement of the hollow valve stem and burner, substantially as specified. 5th. An automatic cut-off for gas jets, embracing in its construction a gas jet, a supporting frame consisting of a standard having two horizontal arms, the lower horizontal arm fitted with an eye supported on the shoulder of the gas jet, the upper horizontal arm holding a ring of slowly expansible metal, a cylinder fitted on the gas jet, binding the eye of the supporting frame against the shoulder, a piston valve within the cylinder, a spring pressing against the top of the gas jet and the under side of the piston valve, a hollow valve

stem connected to the piston valve and having ports in close proximity thereto, a burner fitted to the top of the valve stem, a diaphragm of quickly expansible metal loosely held by the slowly expansible ring, a vertically movable frame below the diaphragm, an arm depending from the frame, an eye connected to the arm encircling the burner, and an adjusting nut fitted on the burner to support the eye, substantially as specified.

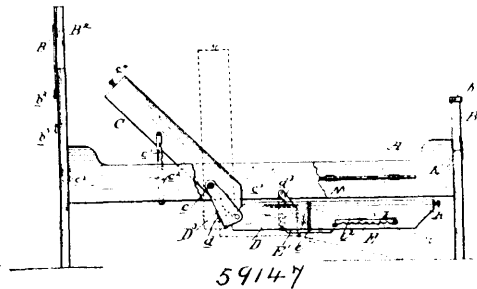
No. 59,146. Railway Switch. (Aiguille de chemin de fer.)



Milton McCully, West Mansfield, Ohio, U.S.A., 25th February, 1898; 6 years. (Filed 11th February, 1897.)

Claim. In a switch system, the combination with switch tongues and frog members adapted to rise and fall to open the main track or sideway, of wedge-blocks adapted to operate the tongues and frog members, bell crank levers having connections with the wedge-blocks to reciprocate them, a frame inclosing the power ends of said levers, a bell crank lever pivoted in the frame and having a broadened adapted to normally lie in the path of the aforementioned levers whereby the latter may be retained in operative position.

No. 59,147. Invalid's Bed. (Lit d'invalides.)

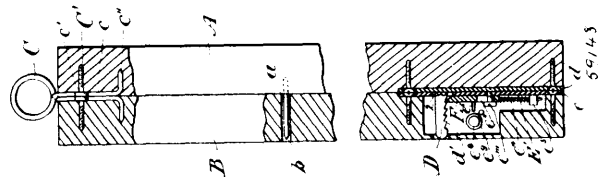


Abijah Benjamin Bennett, Opelika, Alabama, U.S.A., 25th February, 1898; 6 years. (Filed 12th February, 1898.)

Claim. 1st. In an invalid-bed, the combination with a bed-frame of a foot board having a hinged upper section, and a pivoted top rail on the hinged section arranged to be adjusted into a perpendicular position to maintain the hinged section in a horizontal position, substantially as described. 2nd. In an invalid-bed, the combinations with a bed-frame, of a bottom consisting of three movable sections, means for pivotally securing the head section to the frame, a swinging pivotal connection between the head section and central section, a lock for preventing a pivotal movement of the connection, and means for preventing an independent movement of the foot section and central section, substantially as described. 3rd. In an invalid-bed, the combination with a frame, of a bottom consisting of three movable sections, a pivotal connection between the head section thereof and the frame, means for maintaining the head section at different inclinations, a central section, a pivoted swinging connection between the head section and central section, spring-actuated bolts for preventing the movement of said pivoted connection between the frame and the center section, and means for maintaining the foot and center sections in adjusted positions, substantially as described. 4th. In an invalid-bed, the combination with a frame, of the bed-bottom consisting of three movable sections, a pivotal connection between the frame and the head section of the bottom, a link connection between the centre section and the head connection, means for locking the head section and centre section together, a link connection between the frame and centre section, and a detachable connection between the foot section and centre section substantially as described. 5th. In an invalid-bed, the combination with a frame, of bottom section consisting of three movable sections, means for maintaining all of the sections in alignment and in a horizontal position in the frame, a link connection between the head section and the central section of the bottom, a removable connection between the head section and the centre section, and removable central sectional bottom in the central section having projection plates for maintaining the bottom sections of the central section in position, substantially as described. 6th. In an invalid-bed, the combination with the frame, of a bottom consisting of three movable sections, means for maintaining the sections in

adjusted positions, removable apertured supports in the central section of a length less than the length of the space between the end bars of the central section, and pivoted extensions on the apertured supports for engaging the ends of the said section, substantially as described. 7th. In an invalid-bed, the combination with the frame and bed-bottom, consisting of three movable sections, a pivotal connection between the head section and frame, a link connection between the central section and head section, link connections between the central sections and the frame, a hinge connection between the foot section and the central section, and pivoted bars on the foot section arranged to project below the central section, substantially as described. 8th. The combination with the sectional bed-bottom, of stirrups R having the depending portions r, and lateral angular extensions at their ends engaging the sides of the bottom, and a detachable connection between the central section and foot section of the bottom, substantially as described. 9th. In an invalid-bed, the combination with a frame and bottom of a table consisting of a clip O, substantially U-shaped, having an upturned lower end, an arm projecting through the clip and engaging the upturned end, and a table or tray on the outer end of the arm, substantially as described.

No. 59,148. Newspaper File. (Enfile-journaux.)



William Leonard Lambkin, Ottawa, Ontario, Canada, 25th February, 1898; 6 years. (Filed 21st October, 1897.)

Claim. 1st. In a newspaper file, the combination of a pair of rods hinged together at one end, a spring hinge at said end making a close but variable contact between said rods and tending to separate them, pins secured to one of the rods, perforations in the other rod registering with said pins, and a lock at the non-hinge end of the rods, consisting of a fixed ratcheted stud on one rod and on the other rod a perforation with spring operated sliding locking catch engaging and holding the ratchet teeth on said stud, substantially as set forth. 2nd. In a newspaper file, the combination with a pair of rods, of a spring coil C with ends formed into legs c adapted to be secured longitudinally at the ends of said rods and approximately at a right angle to the axis of the coil, and adapted to hold said rods open laterally, substantially as set forth. 3rd. In a newspaper file, the combination of a pair of rods, a ratchet stud rigidly connected to one of them at a right angle, a perforation in the other rod adapted to receive said stud, a catch having a bevelled end adapted to engage the ratchet teeth of said stud held slidingly in a cavity in said rod, a spring pressing the bevelled end of said catch against said stud, means of guiding said catch and means of retracting the same by means of a key, substantially as set forth. 4th. In a lock, the combination of a face plate and a stud with ratchet teeth rigidly secured to said face plate, a cavity formed of a face plate and side plates, a perforation in said face plate adapted to receive said ratchet stud, a catch having a bevelled end adapted to engage the teeth of the stud, a slot in said catch and a screw passing through said slot into the face plate and guiding said catch, a bearing on said face plate, a tail piece on said catch passing through said bearing, a spring upon said tail piece pressing said catch against the stud, a stud upon said catch adapting it to be retracted by a key, a key hole in one side of the casing and a centre pin for the key secured to the other, substantially as set forth.

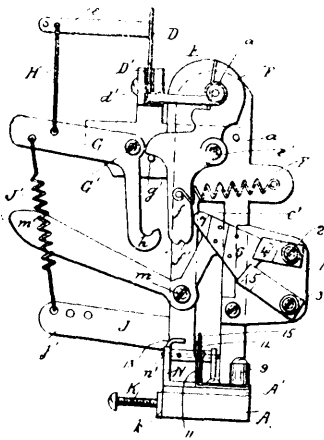
No. 59,149. Stop Motion for Knitting Machines.

(Mouvement d'arrêt pour machines à tricoter.)

Joseph Onelle and Raoul Duperroncel, both of St. Hyacinthe, Quebec, Canada, 25th February, 1898; 6 years. (Filed 18th March, 1897.)

Claim. 1st. The combination, with a pivoted arm carrying a contact-piece and normally supported by the yarn, and two stationary contact-pieces arranged in the path of the aforesaid contact-piece, of a pair of spring-actuated shears, a trigger operating to release the said shears when the yarn is drawn too tight, a movable contact-piece operated by the said shears, and two stationary contact-pieces arranged in the path of the last said contact-piece, the circuit being made in two pieces when the yarn is cut by the shears, substantially as set forth. 2nd. The combination, with means for supporting the yarn, of a pair of shears, a spring for closing the shears upon the yarn, a trigger controlled by the tension of the yarn and normally holding the shears open, two stationary insulated contact-pieces, and a pivoted insulated contact-piece operated by the said shears and completing the circuit when the shears close, substantially as set forth. 3rd. The combination, with a frame, of

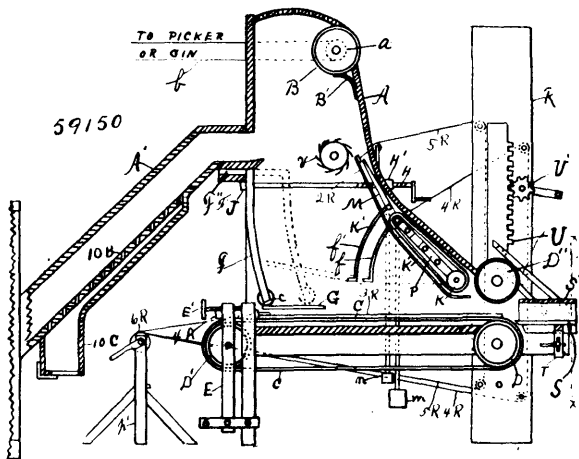
a trigger pivoted to the frame, shears controlled by the said trigger, a bell-crank lever pivoted to the frame, a light spring arranged



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between the trigger and one arm of the said bell-crank lever, and a screw carried by the frame and bearing against the other arm of the said bell-crank lever, whereby the tension of the said spring may be adjusted, substantially as set forth.

No. 59,150. Cotton Cleaning and Mattress Stuffing Machine. (*Machine a nettoyer et bourrer les matelas.*)



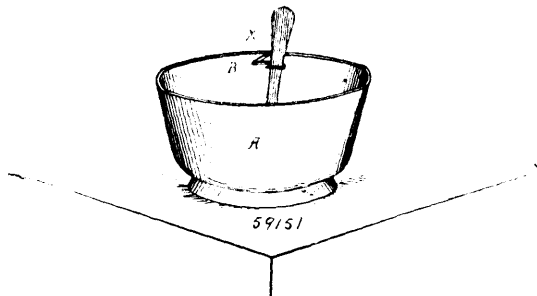
Charles W. White, Waco, Texas, U.S.A., 25th February, 1898; 6 years. (Filed 10th February, 1898.)

Claim.—1st. A mattress stuffing machine having compression rollers and travelling endless aprons, one being mounted above the other, adapted to convey incomplete batting to said rollers and means for applying pressure to the upper one of said aprons. 2nd. A mattress stuffing machine having compression rollers, means for collecting and forming the cotton into bats, travelling endless aprons, one being mounted above the other, adapted to convey the incomplete batting to said rollers, and rollers for applying pressure to the lower part of the upper one of said aprons, substantially as described. 3rd. A mattress stuffing machine having compression rollers, a cleaning and collecting box, travelling aprons one running within and the other running through said box, an auxiliary pressing frame adapted to operate in connection with the upper one of said aprons, said aprons being adapted to convey the incomplete batting to said rollers. 4th. A mattress stuffing machine provided with means for cleaning and collecting material preparatory to forming bats, said means consisting of a box adapted to receive the batting material from a gin or picker, said box having perforations for the escape of air and dust, a pressing frame pivoted in said box, and means for applying pressure to said frame. 5th. A mattress stuffing machine provided with means for pressing cotton into bats, and means for conveying cotton to be pressed, said means

consisting of a box, and endless apron travelling through said box, a second apron mounted within said box, rollers journaled in said box for said second apron drums for applying pressure to the lower part of said second apron and means for driving said aprons. 6th. A mattress stuffing machine having compression rollers, a box for cleaning and collecting the stuffing material, said box being provided with an adjustable back end whereby the length of the mattress may be determined, and means for conveying said material to said rollers. 7th. A mattress stuffing machine provided with a cleaning and collecting box, partitions in said box whereby batting material is collected into bats of different widths, travelling endless aprons, one of said aprons running within said box, adapted to convey the batting to be compressed, and an auxiliary frame adapted to start the stuffing between said aprons. 8th. A mattress stuffing machine having compression rollers, a conveyor apron suitably mounted and adapted to carry stuffing material to said rollers, an auxiliary conveyor apron mounted above said first named apron and adapted to aid the same, and means for applying pressure to the lower part of said upper apron. 9th. A mattress stuffing machine having compression rollers, a travelling apron adapted to convey stuffing material to said rollers, a second travelling apron and rollers therefor, suitable supports for said rollers, said second apron having a pivoted mounting at one end, a frame mounted between said frame and intermediate rollers in said frame whereby pressure is applied to the bottom part of said second apron, said aprons adapted at times to travel in parallel planes in the same direction. 10th. In a mattress stuffing machine, the combination of a receiving and cleaning box, collecting and conveying devices mounted in said box, compression rollers, adapted to receive stuffing material from said conveying devices, suitable driving mechanism, and a tick holder. 11th. In a mattress stuffing machine, the combination of a receiving and cleaning box, conveying aprons running in said box, means for applying pressure to the lower part of one of said aprons, compression rollers journaled in a suitable frame, and an exit pass and tick holder, whereby batting is prepared from raw material and stuffed into tick sin one continuous operation. 12th. In a mattress stuffing machine, the combination of a cleaning and collecting box, conveying aprons running in said box, a back end adjustably mounted in said box adapted to determine the length of bats, compression rollers, means for rotating and raising said rollers, and a tick holder. 13th. In a mattress stuffing machine, the combination of a receiving and cleaning box, travelling endless aprons running in said box, false sides mounted in said box adapted to regulate the width of batting, compression rollers journaled in a suitable frame, means for rotating and raising said rollers, and a tick holder having slots therethrough whereby ticks of different sizes are held. 14th. In a mattress stuffing machine, the combination of a cleaning and condensing box, endless aprons running in said box, devices mounted in said box adapted to determine the length and width of batting, compression rollers journaled in a suitable frame, and a tick holder adapted to hold ticks of different sizes. 15th. A mattress stuffing machine, provided with a collecting and cleaning box, a frame pivotally mounted in said box for aiding in collecting material to form batting, an endless apron to convey batting to be compressed, an auxiliary apron running within said box, a frame having drums for said apron, said frame being extensible and pivotally mounted at one end, weights for applying pressure to said frame, and compression rollers. 16th. A mattress making machine, having compression rollers, travelling endless aprons mounted on said rollers, and adapted to convey incomplete batting between said rollers, the adjacent sides of said aprons running in the same direction, two sets of slats between said aprons, the batting being received between said slats, and means for driving said aprons. 17th. In a mattress making machine, provided with compression rollers and endless aprons adapted to convey batting between said rollers, two sets of slats between said aprons for aiding said aprons to force the completed bat into a tick. 18th. In a mattress making machine, provided with means for collecting and compressing material into bats and tick holder, two sets of slats for forcing the completed bat into a tick, and means for forcing said slats into the tick with said bat. 19th. In a mattress making machine, provided with means for collecting and compressing material into bats and a tick holder, slats for forcing the completed bat into a tick, means for forcing said slats into the tick with said bat, and means for drawing said slats from the tick and replacing the same to receive a new bat. 20th. In a mattress making machine, provided with means for collecting and compressing material into bats, slats adapted to guide the bats into ticks, means for forcing said slats into ticks with said bats, and a drum and cables for withdrawing said slats from said ticks and replacing same to receive new bats. 21st. In a mattress making machine, provided with means for collecting material to form bats, and a pressure frame having a travelling endless apron mounted thereon, flexible slats under said apron, a second travelling endless apron forming the bottom of said machine, and slats thereon, said slats being adapted to guide bats into the tick holder. 22nd. A mattress making machine, having compression rollers, a conveyor apron suitably mounted, and adapted to carry stuffing material to said rollers, an auxiliary conveyor apron mounted above said first named apron adapted to aid the same, and slats to aid said aprons to force completed bats into ticks. 23rd. In a mattress making machine, provided with compression rollers and endless aprons adapted to convey batting between said rollers, slats between said aprons for aiding said aprons to force the com-

pleted bat into a tick, the upper slats being flexible and the lower slats being provided with anti-friction rollers. 24th. In a mattress making machine, provided with a collector and cleaner box and means for compressing material into bats, an adjustable tick holder for holding ticks of different widths. 25th. In a mattress making machine, provided with a collector and cleaner box and compression rollers, a pressure frame pivotally mounted on the upper one of said rollers, and cables having drums and pulleys for raising said frame to an upright position. 26th. In a mattress making machine, provided with a collector and cleaner box and compression rollers a pressure frame pivotally mounted on the upper one of said rollers, cables having drums and pulleys for raising said frame to an upright position, and means for raising said frame and upper rollers. 27th. In a mattress making machine, provided with compression rollers and endless aprons mounted thereon adapted to convey batting between said rollers, two sets of slats between said aprons for aiding said aprons to force the completed bat into a tick, and a pad attached to the lower one of said set of slats.

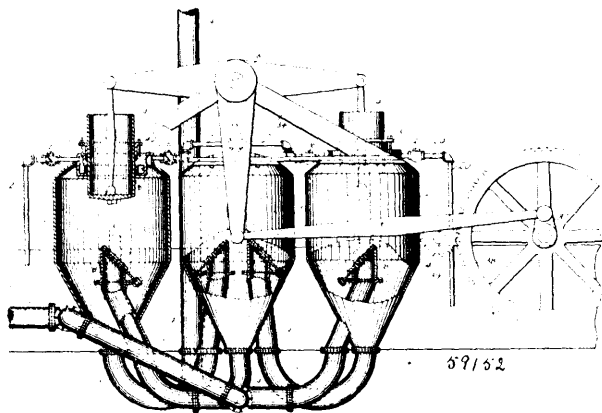
No. 59,151. Spoon Holder. (Porte-cuiller.)



John T. Cassius, Peabody, Massachusetts, U.S.A., 25th February, 1898; 6 years. (Filed 11th February, 1898.)

Claim.—The spoon holder herein described, consisting of a single strip or ribbon of elastic sheet metal bent to form as follows, that is to say: having a rounded bearing C, a vertical arm D, a bend at E at the top of said arm, whereby the strip is turned at right angles to the arm D, an arm F, an arm H adapted to lie in a substantially horizontal position, a short inward-projecting arm J, and an arm L, substantially parallel with the arm H, all as set forth.

No. 59,152. Pump. (Pompe.)



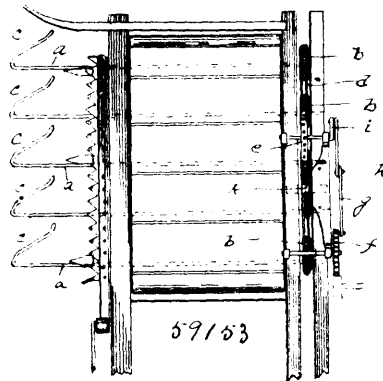
James Bewsher, Seattle, Washington, U.S.A., 26th February, 1898; 6 years. (Filed 16th February, 1898.)

Claim.—1st. In a pump, comprising a suction or pumping chamber and a plunger adapted for reciprocation therein, an auxiliary suction chamber adapted for communication with a source of pure or clean water, and arranged to discharge against the outer or bearing surface of the plunger, whereby movements of said plunger cause a discharge of water from said chamber against the outer surface of the plunger, substantially as and for the purpose described. 2nd. In a pump, comprising a suction or pumping chamber and a plunger adapted for reciprocation therein, suitable means comprising an auxiliary conduit arranged to discharge upon the outer or bearing surface of the plunger, whereby said plunger is automatically flushed by movement of the plunger itself, substantially as and for the purpose described. 3rd. In a pump, comprising a suction chamber and a plunger adapted for reciprocation therein, an auxiliary annular suction chamber, surrounding said plunger and arranged to communicate with a source of supply of pure or clean water and to discharge against the outer or bearing surface of said plunger, whereby the bearing surface of said plunger is automatically flushed by movements of

the plunger itself, substantially as and for the purpose described. 4th. In a pump, comprising a suction chamber, and a plunger adapted for reciprocation therein and having a bearing within a suitable stuffing-box, an auxiliary annular suction chamber located adjacent to the inner end of said stuffing-box and encircling, but out of contact with the plunger, said chamber being provided with suitable apertures arranged to discharge against the outer or bearing surface of the plunger, and a pipe provided with a check-valve, and leading from a source of supply of clean or pure water to the interior of said auxiliary chamber, substantially as and for the purpose described. 5th. A pump, comprising a suction chamber of tapered or frustum shape adjacent to its discharge opening, a plunger adapted for reciprocation in said chamber and of less displacement than the capacity of said chamber, a suction pipe extending into said chamber and provided with a valve, a discharge chamber also of tapered or frustum shape adjacent to its discharge opening, a pipe leading from the tapered end of the suction chamber and into the discharge chamber and provided with a suitable valve, and a discharge pipe leading from the tapered end of the discharge chamber, substantially as described. 6th. A pump, comprising opposite suction chambers and an intermediate discharge chamber, said chambers being all of tapered or frustum shape at their lower ends, plungers adapted for simultaneous, but opposite reciprocation in said suction chambers, and of less displacement than the capacities of said chambers, means for actuating said plungers, suction pipes extending into said suction chambers and terminating above the lower ends thereof and provided with inwardly opening oblique valves, discharge pipes leading from the tapered lower ends of said suction chambers and extending into the discharge chamber, and terminating above the lower end thereof, and provided with inwardly opening, oblique valves, and a discharge pipe leading from the tapered end of said discharge chamber, substantially as described. 7th. In a pump, comprising a suction chamber fitted with a plunger and a discharge chamber communicating therewith, an air-relief pipe connecting the upper portions of said chambers and provided with a check-valve, and arranged to convey accumulated air from the suction chamber into the discharge chamber, during each working stroke of the plunger, substantially as described. 8th. In a pump, comprising a chamber for the reception of liquid, an inlet pipe extending upwardly into said chamber to a point considerably above the bottom thereof, and a valve secured to the inner end of said pipe, and comprising a valve-body having an oblique valve seat and a valve flexibly supported upon said valve-body and adapted for engagement with said seat, substantially as described. 9th. In a pump, comprising a chamber for the reception of liquid, an inlet pipe extending upwardly into said chamber to a point considerably above the bottom of said chamber, and a valve upon the inner end of said pipe, comprising a tubular valve-body provided with an oblique valve seat, a valve comprising a flexible diaphragm and metallic stiffening discs secured to opposite faces thereof, said diaphragm being provided with a marginal projection, and a support for said valve extending from the valve-body below the lower marginal edge of the oblique valve seat and engaging with the projection on said diaphragm at a point more or less remote from said seat, substantially as and for the purpose described.

No. 59,153. Harvester Attachment.

(Attache de moissonneuses.)

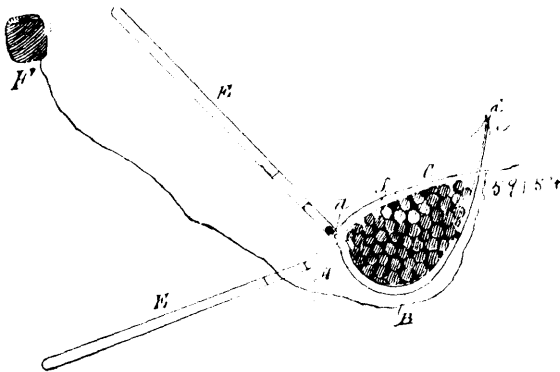


Alvy M. Larue, Downey, Iowa, U.S.A., 26th February, 1898; 6 years. (Filed 16th February, 1898.)

Claim.—1st. A harvester attachment, consisting of a series of rock shafts projecting in front of the cutter-bar and provided with lateral arms to engage under and throw up fallen grain, and means for driving said shafts, substantially as described. 2nd. A harvester attachment, consisting of a series of rock shafts carried by the harvester frame and projecting in front of the cutter-bars and there provided with lateral agitator arms, adapted to pass under and throw up the fallen grain, and means for simultaneously rocking said shafts back and forth, substantially as described. 3rd. The combination with a harvester of a series of agitators projecting in

front of the cutter-bars, a sprocket-wheel on each of the agitators, an endless sprocket-chain engaging said sprocket-wheels, a rocking driving-sprocket, engaging said chain, and means for rocking said sprocket, substantially as described.

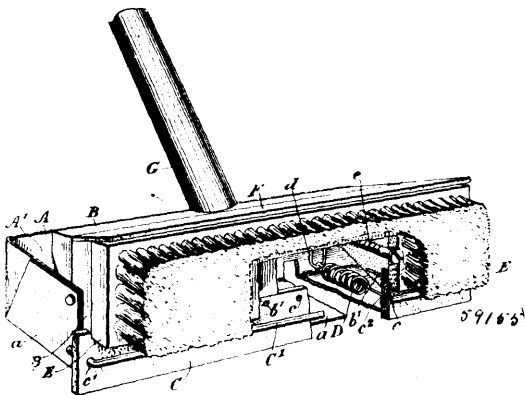
No. 59,154. Sheaf Compressor and Corn Stalk Binder.
(Machine pour mettre en gerbes et lier.)



Elmer Joseph Bell, Glanford, Ontario, Canada, 26th February, 1898; 6 years. (Filed 16th February, 1898.)

Claim.—1st. A machine for compressing and binding sheaves, consisting of two curved levers or prongs pivoted together like shears and provided with handles attached thereto, one lever or prong formed to press downwards on a sheaf, and the other to press upwards and carry the binding twine under the sheaf for binding it, substantially as and for the purpose specified. 2nd. A machine for compressing and binding sheaves, consisting of two curved levers or prongs B, C, pivoted together at the point *d*, and provided with handles E, E', attached to the prongs, a notch *a* and hole *c* formed in the outer end of the lower prong to receive the binding twine F, and a twin cutter *f* attached to the upper prong C, all constructed for compressing and binding sheaves, substantially as specified.

No. 59,155. Scrubber and Dryer.
(Machine à nettoyer et sécher.)



Edward Ethelburt Newton, Montreal, Quebec, Canada, 26th February, 1898; 6 years. (Filed 15th February, 1898.)

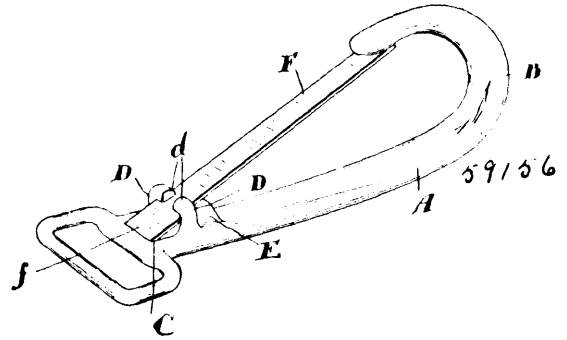
Claim.—1st. In a device of the class described, in combination, a box having one side formed of a flexible strip fixed at its upper edge and projecting beyond but normally held against the edge of the bottom, spiral tension springs fixed at one end within the box and projecting through said strip and engaging with an exterior rod placed longitudinally centrally of said strip, the supporting block and a handle adapted to operate the same, as and for the purpose specified. 2nd. In a device of the class described, in combination the box A, the closing strip C, the rod C', and means for preventing end play thereof, the spring D, the staple *d*, the block B, the recess *b*, the pin *b*¹, the overlapping brush E and the handle G, substantially as and for the purpose specified. 3rd. In a device of the class described, the combination with the scrub brush E and handle G thereof, of the strip F attached to and projecting beyond one edge thereof, as and for the purpose specified.

No. 59,156. Snap Hook. (Crochet à ressort.)

Charles Matthew Parsons, Fairbank, Ontario, Canada, 26th February, 1898; 6 years. (Filed 14th February, 1898.)

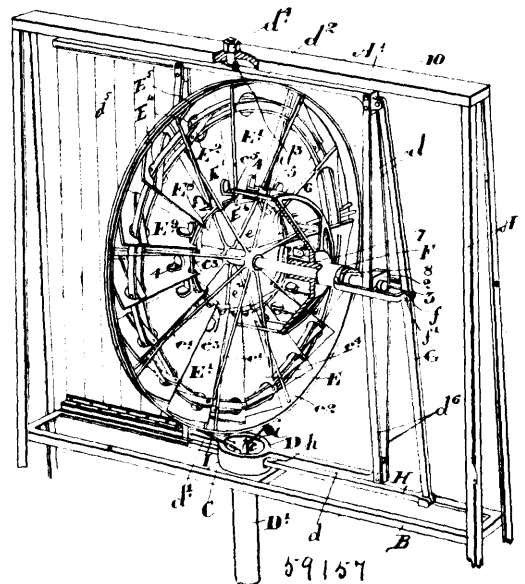
Claim.—1st. In a snap hook, the combination with the body portion and hook, of a supporting boss formed on the stem of the hook, a retaining boss or bosses formed near the looped end of the hook, a

spring passing under the retaining bosses and over the supporting boss and beneath the flat end of the hook and means for retaining



the boss supported end in position as and for the purpose specified. 2nd. In a snap hook, the combination with the body portion and hook, of a supporting boss formed on the stem of the hook, a retaining boss or bosses formed near the looped end of the hook, a flat spring passing under retaining bosses and over the supporting boss and beneath the flat end of the hook, such spring being provided with a broadened lower end and means for retaining such broadened end in position as and for the purpose specified. 3rd. In a snap hook, the combination with the body portion and hook, of a supporting boss formed on a stem of the hook, a retaining boss or bosses formed near the looped end of the hook, a flat spring passing under retaining bosses and over the supporting boss and beneath the flat end of the hook, such spring being provided with a broadened lower end, and a recess formed in the stem next the looped end of the hook to receive the broadened end as and for the purpose specified.

No. 59,157. Wind Mill. (Moulin à vent.)



Ebenezer Scott, East Whitby, Ontario, Canada, 26th February, 1898; 6 years. (Filed 2nd February, 1898.)

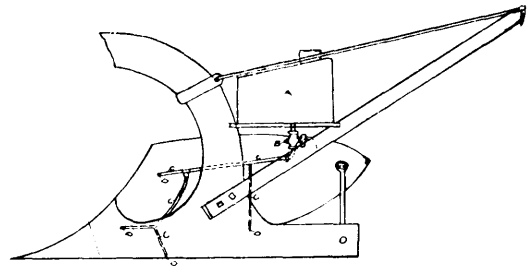
Claim.—1st. In a wind mill, the combination with the wheel provided with a suitable rim connected to and driving the main shaft and substantially radially arranged blades pivoted towards one radial edge thereof within the rim, of a longitudinally adjustable device pivotally connected at the opposite radial edges of the blades, and an automatic governor rotatably connected to the main driving shaft and suitably connected to such longitudinally adjustable device, as and for the purpose specified. 2nd. The combination with the wheel and blades thereof and rim having a driving connection to the main shaft, of a pulley secured on the main shaft, a pulley secured on the counter spindle, a governing device suitably connected to such pulley, and rotatable means connected to such governing device for communicating motion to a longitudinally adjustable device pivotally connected to the free radial edges of the blades of the wheel, as and for the purpose specified. 3rd. In a wind mill, the combination with the wheel provided with a suitable rim connected to and driving the main shaft and substantially radially arranged blades pivoted towards one radial edge thereof within the rim, of lugs secured adjacent to the free radial edge of the

blades, a spider having longitudinal bars pivotally connected to the lugs, an automatic governing device interposed between the spider and the main driving shaft, and the driving means connecting the rim of the wheel with the main driving shaft, as and for the purpose specified. 4th. In a wind mill, the combination with the wheel provided with a suitable rim connected to and driving the main shaft, and substantially radially arranged blades pivoted towards one radial edge thereof, of lugs secured to the blades, a spider having longitudinal bars pivotally connected to the lugs, and slidably connected on but rotating with the wheel shaft, a suitable frame supporting the wheel and shaft, a lever pivoted to the frame and a suitable connection from such lever to the hub of the spider, a vertical cove having an annular enlargement supported in suitable bearings on the main frame and supporting the wheel frame, a bar connected to the end of the lever extending through slots in the frame, a rope having the ends extending through each slot and connected to the bar, a drum in the governor frame around which such rope is wound, a rope extending around the periphery of the wheel and extending through the sleeve and over suitable guide pulleys, the main shaft, and main driving pulley round which the lower end of the wheel rope extends, a pulley on the main shaft connected by belt to a pulley on the counter shaft, and governing means interposed between the pulley and the counter shaft, and the rotatable drum suitably journaled in the governor frame, all arranged as and for the purpose specified. 5th. In a wind mill, in combination, a wheel having a suitable driving connection to the main driving shaft, and spokes and hub, and having the shaft thereof journaled in a suitable frame, the outer pair of metal bands suitably secured to the spokes and extending through holes in the blades, the inner metal bands also secured to the spokes and connected to the ends of the blades, the outer cross bars on the blades having lugs in proximity to the outer holes and pivotal bolts extending through the bands and the lugs, the inner cross bars having lugs near the ends of the blades and a pivotal bolt extending into the band and lugs, and an automatic governing means pivotally connected to the blades whereby such blades are adjusted as the wind increases or decreases, as and for the purpose specified. 6th. In combination, the main driving shaft suitably driven from the wheel, an adjustable device for the blades connected by a rope to a drum on a spindle in the governor frame, the pulley on the main shaft connected to the pulley on the counter spindle, the bevel pinion on the drum spindle, the bevel pinions on the main spindle, the disc on the main spindle, the lugs on the lower bevel pinion and disc, and the bell crank governing arms suitably supported on the counter spindle, all arranged as and for the purpose specified. 7th. In combination, the main driving shaft suitably driven from the wheel, an adjustable device for the blades connected by a rope to a drum on a spindle in the governor frame, the pulley on the main shaft connected to the pulley on the counter spindle, the bevel pinion on the drum spindle, the bevel pinions on the main spindle, the disc on the main spindle, the lugs on the lower bevel pinion and disc, the bell crank governing arms, the adjustable collar on the counter spindle, the rods connecting such collar to the crank arms, the lever pivoted on the governor frame and provided with a counter-balancing weight towards one end, and the chain connected to the drum rope provided with a suitable stop pin extending through the lever and provided with a suitable weight, as and for the purpose specified. 8th. In a wind mill, the combination with the wheel provided with suitable blades and suitably driven, of an automatic rotating governing device and means for connecting such device to the wheel, as and for the purpose specified. 9th. In combination, the main driving shaft suitably driven from the wheel and an adjustable device for the blades connected by a rope to a drum on the spindle in the governor frame, the pulley on the main shaft connected to the pulley on the counter spindle, the pinion on the drum spindle, the pinions on the main spindle, the discs on the main spindle, the governing arms suitably supported on the counter spindle, and means for connecting the governing arms to the disc or pinion, as and for the purpose specified. 10th. In a wind mill, the combination with the main frame and wheel and wheel frame upon journals in which said wheel is supported and the sleeve forming portion of said frame, and extending down into proximity with the ground, of the governing frame suitably connected to the sleeve and capable of rotation therewith, and governing means supported in such frame and suitably connected to the main shaft, as and for the purpose specified. 11th. The combination with the main frame and wheel and wheel frame, of a sleeve forming part of the wheel frame and having a bearing at the top upon the frame and a suitable bearing at the bottom, as and for the purpose specified. 12th. The combination with the main frame and wheel and wheel frame, of a sleeve forming part of the wheel frame and having a bearing at the top upon the frame and a suitable bearing at the bottom, and a supplemental journal pin connected at the top of the wheel frame and pivotally held in the top of the main frame, as and for the purpose specified. 13th. In combination, the main driving shaft suitably driven from the wheel, and an adjustable device for the blades, two ropes connected to the adjustable device and a weight suitably connected to one of the ropes, as and for the purpose specified.

No. 59,158. Plough. (Charrue.)

Alexander Budge Dunnett, Regina, N.W.T., Canada, 26th February, 1898; 6 years. (Filed 1st February, 1898.)

Claim.—1st. The perforations D in the share mould board, sole and landside of plough, substantially as and for the purpose here-

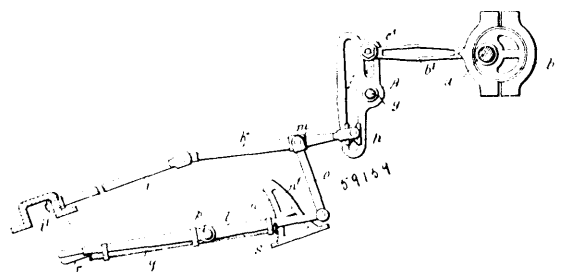


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inbefore set forth. 2nd. The arrangement of the distributing pipes whereby they are in such a position as to be free from liability to injury, substantially as and for the purpose hereinbefore set forth.

No. 59,159. Reversing Gear for Steam Engines.

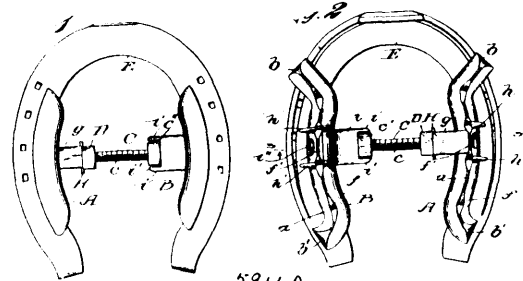
(*Lever de renversement pour machines à vapeur.*)



Karl Voeste, Briesen, Germany, 26th February, 1898; 6 years. (Filed 14th February, 1898.)

Claim.—An improved reversing gear for steam engines, comprising, in combination, the pivoted link A, having the slot f symmetrical with regard to the pivot of the link, the eccentric b on the crankshaft a, a fixed gudgeon g for said link A, the sliding block h adapted to be moved in said slot f, connecting-rod k, slide l, lever l, and rod o, connected to the rod k, for the purpose of reversing or changing the travel of the slide h in its slot f, substantially as set forth.

No. 59,160. Ice-Creeper. (Grappin à glace.)

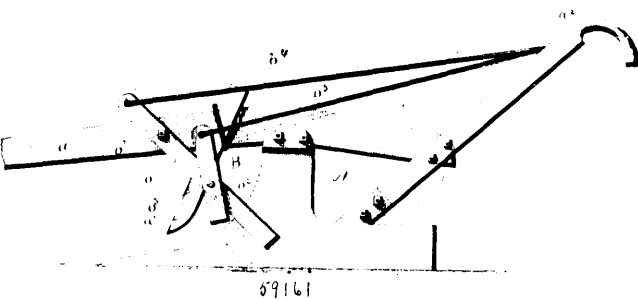


George Consider Hale, Kansas, Missouri, U.S.A., 26th February, 1898; 6 years. (Filed 14th February, 1898.)

Claim. 1st. An ice-creeper appliance for horse shoes, comprising a pair of channeled plates having calks on the lower sides thereof, one plate provided with a forked hollow arm and the other plate having a grooved or notched hollow arm to fit the forked arm of one plate, an adjustable nut with a grooved face arranged next to the arm with the notch or groove therein on the other plate, and a key or pin to fit in said notches or grooves of the adjustable nut and the arm of the last-mentioned plate, as set forth. 2nd. The combination with a horse shoe, of the channeled plates A, B, angular to fit the respective sides of said shoe, and having the angular ends b, b, the middle lugs, and the hollow grooved arm g and the hollow forked arm i respectively, a non-rotatable bolt fitted in said hollow arms and provided with a nut or collar which lies within the forked arm of one plate, a grooved nut fitted on the bolt and gearing against the grooved face of the arm on the other plate, and a key, substantially as described. 3rd. An ice creeper appliance for horse shoes, comprising a pair of plates to fit the respective sides of the horse shoe, one plate provided with an inwardly extending forked arm, and the other plate having an inwardly extending forked arm, and of which has a groove or grooves, the non-rotatable bolt having an enlargement fitted in the forked arm of one plate, an adjustable grooved nut threaded on the bolt and adapted to abut against the

grooved face of the arm on the other plate, and a key or pin fitted in coincident grooves of the abutting faces of said arm and the adjustable nut, as and for the purposes described. 4th. As a new article of manufacture, an ice creeper appliance consisting of plates having integral calks at intervals along their lengths and sockets at the ends of said plates, and insertible calks adapted to be fitted in said sockets of the plates, as and for the purposes described. 5th. As a new article of manufacture, an ice creeper appliance consisting of cast steel plates provided at their ends with sockets and at intervals along their lengths with integral hardened and tempered calks between said sockets, and insertible steel calks fitted in said sockets, for the purposes described, substantially as set forth. 6th. The combination of creeper plates provided with elongated flared sockets, a single bolt having its ends fitted in said sockets to have long bearings therein, and means for holding the bolt rigidly connected to said plates, as and for the purposes described. 7th. The combination with creeper plates, of a single transverse bolt connected to both plates by long bearings which permit the plates to lie one slightly in advance of the other, and means for connecting said bolt rigidly to both plates, as set forth. 8th. The combination of a creeper plate having a calk socket, an insertible headed calk fitted in said socket, and washers fitted on the calk below its head and arranged in the socket of the plate, as and for the purposes described. 9th. The combination of creeper plates, each having at its ends the calk opening and the cavities in the upper face of said plates, the headed calks fitted in said openings, the washers fitted on the calks and in the cavities of said plates, and a bolt connected rigidly to the plates, substantially as and for the purposes described. 10th. The creeper plates having calk openings at their ends, the integral calks between said openings, and the transverse flared sockets, and the insertible calks and washers fitted in said openings in the ends of said plates, combined with a single bolt fitted at its ends in the flared sockets of said plates and connected rigidly, but detachably, to one plate, and an adjustable nut fitted on the bolt and adapted to be fastened to the other plate, as and for the purposes described.

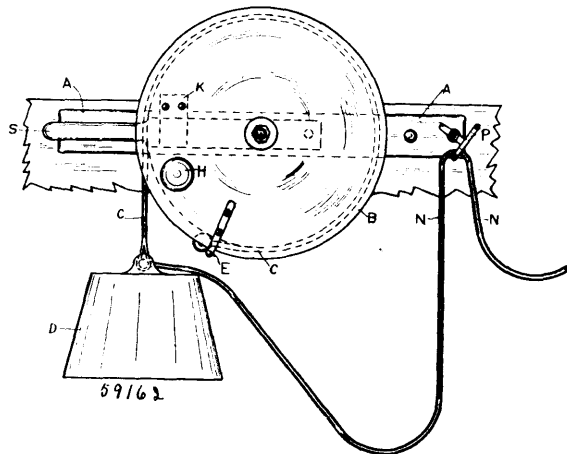
No. 59,161. Plough Cleaner. (Nettoyeur de charrue.)



Walter Shiers, Melbourne, Ontario, Canada, 26th February, 1898; 6 years. (Filed 12th February, 1898.)

Claim.—1st. The combination with a plough, of a long bar pivotally secured to the beam of said plough, a short bar pivotally connected to said long bar, and rods pivotally connected to the upper ends of said long bar and said short bar, and extending rearwardly, the free ends of said rods being held in position at a point in juxtaposition to the handles of said plough. 2nd. The combination with a plough, of a long bar pivotally secured to the beam of said plough, a short bar pivotally connected to said long bar, at a point below the pivotal connection of said long bar to said beam, and operating rods pivotally connected to said bars, and extending rearward in juxtaposition with the handles of said plough.

No. 59,162. Horse Tie. (Appareil à attacher les chevaux.)



George Young, Byckman's Corners, Ontario, Canada, 26th February, 1898; 6 years. (Filed 24th January, 1898.)

Claim.—1st. A horse tie of the character described, consisting of a grooved wheel journalled on a plate secured to a side of a buggy or waggon, a band around said wheel with end attached thereto, a weight secured to lower end of said band, a cord attached to said weight and to the horse's mouth, a handle on the wheel and a stop on the inner side thereof to engage with a spring capable of retaining and releasing said wheel, as described. 2nd. A horse tie of the character described, consisting of a plate secured to a side of a buggy or waggon, a grooved wheel journalled on the plate, a band around the wheel with end secured thereto, a weight at lower loose end of said band, a handle on the wheel, to raise or lower said weight, a spring to engage with a stop on the wheel, to retain the same when the weight is raised, and a cord secured to the weight and passing through an adjustable eye and fastened to the horse's mouth, as described.

TRADE-MARKS

Registered during the month of February, 1898, at the Department of Agriculture--
Copyright and Trade-Mark Branch.

6355. TIDMAN & SON, LIMITED, Bushell Street, Wapping, London, England. Sea Salt, 1st February, 1898.
6356. JAMES SYDNEY McMICHAEL, London, Ont. Medicines, Lotions, Oils and other healing compounds, 3rd February, 1898.
6357. EUSÈBE BONNEVILLE, Montréal, Qué. Plombagine (composition pour polir et lustrer la fonte, etc.), 3 février, 1898.
6358. THE RICHMOND CAVENDISH COMPANY, LIMITED, 2 Roberts Street, Liverpool, England. Tobacco (Smoking and Chewing), Cigars, Cheroots, Cigarettes and Snuff, 4th February, 1898.
6359. | MELLOR & COMPANY, 22 Bridge Street, Worcester, England. Sauce, 4th
6360. | February, 1898.
6361. ANDREW TREW WOOD, WILLIAM VALLANCE, WILLIAM AUGUSTUS WOOD AND GEORGE VALLANCE, Hamilton, Ont.-Cutlery, 5th February, 1898.
6362. ABRAHAM LEWIS FRAID, Cornwall, Ont. A Disinfectant, 7th February, 1898.
6363. GEORGE P. BENT, Chicago, Illinois, U.S.A. Musical Instruments, and more particularly Pianos and Organs, 7th February, 1898.
6364. THE MONARCH FIRE APPLIANCE COMPANY, New York, N.Y., U.S.A. Fire Extinguishing Compounds and Appliances, 9th February, 1898.
6365. BAULD, GIBSON & COMPANY, Halifax, N.S. Tea, 11th February, 1898.
6366. C. BRANDAUER & COMPANY, New John Street West, Birmingham, England. Steel Pens, 11th February, 1898.
6367. BERNARD & COMPANY, Leith Distillery, Leith, Scotland. Beverages, Fermented Liquors and Spirits of all kinds, 11th February, 1898.
6368. THE CANADA PAINT COMPANY, LIMITED, Montreal, Que. White Lead and Paints. 11th February, 1898.
6369. BABCOCK AND WILCOX, LIMITED, Montreal, Que. Water-tube Steam Boilers. 14th February, 1898.
6370. RENOARD, LARIVIÈRE & COMPAGNIE, Paris, France. Une préparation médicinale connue sous le nom de "Eau de Melisse des Carmes Boyer," 15 février, 1898.
6371. HIRAM WALKER & SONS, LIMITED, Walkerville, Ont. Spirituous and Malt Liquors, 18th February, 1898.
6372. WALTER EDOUARD FELIX MARCHAL, 11 Avenue Daumesnil, St. Mandé, Department of the Seine, France. Elastic covers for the chains of bicycles and for transmission chains of other kinds, 18th February, 1898.
6373. B. HOUDE & COMPAGNIE, Québec, Qué. Tabac Coupé, plug et cigarettes mis en paquet, 19 février, 1898.
6374. JULIUS FINKLER, Godramstein, Bavaria, Germany. Digestives, 21st February, 1898.
6375. DR. EDOUARD MORIN, Québec, Qué. Une Liqueur médicinale, 22 février, 1898.
6376. DR. EDOUARD MORIN, Québec, Qué. Un Vin médicinale, 22 février, 1898.
6377. ALFRED BISHOP & SONS, LIMITED, 17 Speck's Fields, Mile End, New Town, London, England. Effervescent Medicinal Preparations for the treatment of Liver, Head, Stomach, Throat and Urinary disorders, Gout, Stone, Anæmia, Fevers, Rheumatism, Glandular ailments and such like affections of the human body, 22nd February, 1898.
6378. THE J. I. CASE THRESHING MACHINE COMPANY, Racine, Wisconsin, U.S.A. High Class Engines and Threshing Machinery and parts thereof, 22nd February, 1898.
6379. CHARLES ERNEST THOMSON, Hamilton, Ont. A Cement for Rubber Tires for Bicycles, etc., 24th February, 1898.

6380. MICHAEL FITZGIBBON, Montreal, Que. Black and Blue Serges, 25th February, 1898.
6381. THE MORTON-PRINGLE GAS HEATING COMPANY, LIMITED, 86 Moorgate Court, Moorgate Street, London, England. Gas Stoves, 25th February, 1898.
6382. STANDARD EMULSION COMPANY, New York, N.Y., U.S.A. Emulsions to be used under conditions of malnutrition, 26th February, 1898.
6383. JONES & SCHOFIELD, St. John, N.B. Groceries: such as Lard, Tea, Spices, Soap, Cigars, Flour, Coffee and Spices, 28th February, 1898.
6384. HENRY ALEXANDER COLE, Coronet Works, Bath Street, Liverpool, England. All kinds of Beltings, Woven Hose, Insertions and Packings, 28th February, 1898.

COPYRIGHTS

Entered during the month of February, 1898, at the Department of Agriculture—
Copyright and Trade-Mark Branch.

9721. ROSE MAGUIRE. Words by Thomas Rowley. Music by Harry Miller. Whaley, Royce & Co., Toronto, Ont., 1st February, 1898.
9722. SHEPHERD'S CRADLE SONG. (Sleep, Baby, Sleep.) Words translated from the German. Music by Arthur Somervell. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 3rd February, 1898.
9723. BOUQUET OF KINDERGARTEN AND PRIMARY SONGS. (With Notes and Gestures.) Selby & Co., Toronto, Ont., 3rd February, 1898.
9724. REVUE CANADIENNE. Février 1898. Alphonse Leclaire, Montréal, Qué., 4 février 1898.
9725. SNOW SCENE. (Showing Stern of H.M.S. *Phaeton* in Esquimalt Graving Dock.) J. W. Jones, Esquimalt, B.C., 4th February, 1898.
9726. THE TORONTO CITY DIRECTORY, 1898. The Might Directory Co., of Toronto (Ltd.), Toronto, Ont., 7th February, 1898.
9727. NUGGETS OF GOLD FOR TEMPERANCE CAMPAIGNS. By John M. Whyte, Toronto, Ont., 7th February, 1898.
9728. TABLES OF WAGES. (50 cents to \$40 per week. 45 to 60 hours per week.) John S. Finch, Toronto, Ont., 7th February, 1898.
9729. RULES OF THE GAME OF KINTO. George Foster, Leamington, Ont., 10th February, 1898.
9730. I'VE GOT THE KLONDIKE FEVER. Words by Lance Gill. Music by A. L. Shanks, M.D., Miami, Man., 11th February, 1898.
9731. PIERRE AND HIS PEOPLE. (Tales of the Far North.) By Gilbert Parker, London, England, 10th February, 1898.
9732. THE DELINEATOR. (A Journal of Fashion, Culture and Fine Arts.) March, 1898. The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th February, 1898.
9733. THE GLASS OF FASHION UP TO DATE. (March, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th February, 1898.
9734. METROPOLITAN FASHIONS. (March, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th February, 1898.
9735. THE DOMINION LAW INDEX. (1867-1897.) Second Edition. By Harris H. Bligh, Q.C., and Walter Todd, Ottawa, Ont., 12th February, 1898.
9736. MY GAL HAS GONE AN' LEF' ME. Words and Music by Edward W. Miller. Whaley, Royce & Co., Toronto, Ont., 15th February, 1898.
9737. THE KNAPP ROLLER BOAT. (Photo.) William Thomson Freeland, Toronto, Ont., 15th February, 1898.
9738. THE GREATEST NAME IN THE WORLD. By Rev. John W. McCallum. William Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 16th February, 1898.
9739. LUCIFERIANISM; OR, SATANISM IN ENGLISH FREEMASONRY. (An Essay.) Part I. By L. Fouquet, O.M.I., Calgary, Alberta, N.W.T., 17th February, 1898.
9740. CLUB DE CROSSE LE NATIONAL, 1897-1898. (Groupe photographique.) Laprés et Lavergne, Montréal, Qué., 17 février 1898.
9741. THE CANADIAN MAGAZINE. (January, 1898.) Ontario Publishing Co. (Ltd.), Toronto, Ont., 17th February, 1898.
9742. THE CANADIAN MAGAZINE. (February, 1898.) Ontario Publishing Co. (Ltd.), Toronto, Ont., 17th February, 1898.
9743. THE MEN OF THE NORTH. (Patriotic Song.) Words and Music by H. H. Godfrey, Toronto, Ont., 18th February, 1898.
9744. LE YUKON ET SON OR. (Livre.) Par Raoul Rinfret, Montréal, Qué., 19 février 1898.

9745. SIMON DALE. By Anthony Hope. Frederick A. Stokes Co., New York, N.Y., U.S.A., 19th February, 1898.
9746. THE MIGHT DIRECTORY COMPANY'S RELIABLE STREET GUIDE OF TORONTO. The Might Directory Co. of Toronto (Ltd.), Toronto, Ont., 21st February, 1898.
9747. ADVERTISING CARD *RE* KOLONA PURE CEYLON TEA. The Eby, Blain Co. (Ltd.), Toronto, Ont., 21st February, 1898.
9748. ENGLISH CASES. (Review Published in "The Canada Law Journal," Toronto, Ont.) (Temporary Copyright.) A. H. O'Brien, Ottawa, Ont., 21st February, 1898.
9749. FLEURS D'ESPAGNE. (Flowers of Spain.) Waltz, for Piano, by M. Linéger. M. Edmondson and R. C. W. Lett, Ottawa, Ont., 21st February, 1898.
9750. GRANNY GOGGLE'S JINGLES. (Booklet.) Cohen Bros., Toronto, Ont., 22nd February, 1898.
9751. OPENING OF NEW PARLIAMENT BUILDINGS AT VICTORIA, BRITISH COLUMBIA, FEBRUARY 10th, 1898. (Photograph marked No. 1.) J. W. Jones, Victoria, B. C., 22nd February, 1898.
9752. OPENING OF NEW PARLIAMENT BUILDINGS AT VICTORIA, BRITISH COLUMBIA, FEBRUARY 10th, 1898. (Photograph marked No. 2.) J. W. Jones, Victoria, B. C., 22nd February, 1898.
9753. OPENING OF NEW PARLIAMENT BUILDINGS AT VICTORIA, BRITISH COLUMBIA, FEBRUARY 10th, 1898. (Photograph marked No. 3.) J. W. Jones, Victoria, B. C., 22nd February, 1898.
9754. OPENING OF NEW PARLIAMENT BUILDINGS AT VICTORIA, BRITISH COLUMBIA, FEBRUARY 10th, 1898. ARRIVAL OF THE LIEUTENANT-GOVERNOR AND SUITE. (Photograph marked No. 4.) J. W. Jones, Victoria, B. C., 22nd February, 1898.
9755. OPENING OF NEW PARLIAMENT BUILDINGS AT VICTORIA, BRITISH COLUMBIA, FEBRUARY 10th, 1898. GUARD OF HONOUR. (Photograph marked No. 5.) J. W. Jones, Victoria, B. C., 22nd February, 1898.
9756. OPENING OF NEW PARLIAMENT BUILDINGS AT VICTORIA, BRITISH COLUMBIA, FEBRUARY 10th, 1898. GUARD OF HONOUR. (Photograph marked No. 6.) J. W. Jones, Victoria, B. C., 22nd February, 1898.
9757. LOVE THOUGHTS WALTZ. For Piano. By Arthur Pryor. Chas. O. Brokaw, St. Joseph, Missouri, U.S.A., 24th February, 1898.
9758. GRIDIRON MARCH. (Two-Step.) For Piano. By Arthur Pryor. Chas. O. Brokaw, St. Joseph, Missouri, U.S.A., 24th February, 1898.
9759. IMOGEN WALTZES. For Piano. By H. O. Wheeler. Chas. O. Brokaw, St. Joseph, Missouri, U.S.A., 24th February, 1898.
9760. ADVERTISING CHEQUE *re* EVERY DAY SOAP. Wm. M. Thawley and Wm. C. Orton, Toronto, Ont., 24th February, 1898.
9761. DICK NIVEN AND HIS HORSE NOBBY. Lantern Slide Lecture, Teaching Kindness to Animals. By Annie G. Savigny, Toronto, Ont., 24th February, 1898.
9762. THE YELLOW HAND. By Allen Upward. Story published in "The Herald," Hamilton, Ont., and "The Telegraph," St. John, N.B., (Temporary Copyright.) National Press Agency (Ltd.), London, England, 24th February, 1898.
9763. SOUVENIR. Valse Brillante. Pour Piano. Par Mme. O. deChavigny-Paré Montréal, Que., 24 février, 1898.
9764. WHAT IS THE VALUE OF YOUR HOUSEHOLD GOODS. (Inventory Book.) Geo. H. Roberts, Toronto, Ont., 25th February, 1898.
9765. TRUTH AND FICTION. (Book.) By Abel Yates, Deseronto, Ont., 25th February, 1898.
9766. UN DRAME AU LABRADOR. Par Dr. Eugène Dick. (Roman Canadien Illustré.) Leprohon et Leprohon, Montréal, Que., 25 février 1898.
9767. THE MODERN WANT LIST. Chas. A. Holden, Merrickville, Ont., 25th February, 1898.
9768. VERA MARCH. (Two-Step.) By Ernest H. Allen, Kingston, Ont., 26th February, 1898.
9769. THE MONROE DOCTRINE AND OTHER ADDRESSES. By Alfred A. Stockton, St. John, N.B., 26th February, 1898.

9770. TREASURERS' CASH BOOK FOR SCHOOL BOARDS. (Authorized by the Ontario Government.) The Queen, represented by the Attorney General of Ontario, 28th February, 1898.
9771. TREASURERS' CASH BOOK FOR SCHOOL SECTIONS. (Authorized by Ontario Government.) The Queen, represented by the Attorney General of Ontario, 28th February, 1898.
9772. AVE MARIA. Solo, avec accompagnement de Violon. Par D. Franchère, Montréal, Qué, 28 février, 1898.
9773. THE KNAPP ROLLER BOAT AND ITS INVENTOR. (Photograph.) Wm. T. Freeland, Toronto, Ont., 28th February, 1898.
9774. KLONDIKERS' BUYING MINER'S LICENSES AT CUSTOM HOUSE, VICTORIA, BRITISH COLUMBIA, FEBRUARY 21, 1898. (Photograph.) J. W. Jones, Victoria, B.C., 28th February, 1898.
9775. THE CANADA LAW JOURNAL. Volume XXXIII. From January to December, 1897. A. H. O'Brien, Ottawa, Ont., 28th February, 1898.