

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- |                                     |   |                                     |   |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/>            | Coloured covers /<br>Couverture de couleur  | <input type="checkbox"/>            | Coloured pages / Pages de couleur   |
| <input type="checkbox"/>            | Covers damaged /<br>Couverture endommagée   | <input type="checkbox"/>            | Pages damaged / Pages endommagées   |
| <input type="checkbox"/>            | Covers restored and/or laminated /<br>Couverture restaurée et/ou pelliculée   | <input type="checkbox"/>            | Pages restored and/or laminated /<br>Pages restaurées et/ou pelliculées   |
| <input type="checkbox"/>            | Cover title missing /<br>Le titre de couverture manque  | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/<br>Pages décolorées, tachetées ou piquées  |
| <input type="checkbox"/>            | Coloured maps /<br>Cartes géographiques en couleur  | <input type="checkbox"/>            | Pages detached / Pages détachées  |
| <input type="checkbox"/>            | Coloured ink (i.e. other than blue or black) /<br>Encre de couleur (i.e. autre que bleue ou noire)  | <input checked="" type="checkbox"/> | Showthrough / Transparence  |
| <input type="checkbox"/>            | Coloured plates and/or illustrations /<br>Planches et/ou illustrations en couleur   | <input checked="" type="checkbox"/> | Quality of print varies /<br>Qualité inégale de l'impression  |
| <input checked="" type="checkbox"/> | Bound with other matériel /<br>Relié avec d'autres documents  | <input type="checkbox"/>            | Includes supplementary materials /<br>Comprend du matériel supplémentaire   |
| <input type="checkbox"/>            | Only edition available /<br>Seule édition disponible  | <input type="checkbox"/>            | Blank leaves added during restorations may<br>appear within the text. Whenever possible, these<br>have been omitted from scanning / Il se peut que<br>certaines pages blanches ajoutées lors d'une<br>restauration apparaissent dans le texte, mais,<br>lorsque cela était possible, ces pages n'ont pas<br>été numérisées. |
| <input type="checkbox"/>            | Tight binding may cause shadows or distortion<br>along interior margin / La reliure serrée peut<br>causer de l'ombre ou de la distorsion le long de la<br>marge intérieure. |                                     |   |
| <input checked="" type="checkbox"/> | Additional comments /<br>Commentaires supplémentaires:  |                                     | Continuous pagination.  |

# The Canadian Patent Office

## RECORD





Vol. XXVI.—No. 5.

MAY 31st, 1898.

{ Price free by post in Canada and the United States, \$2.00.  
SINGLE NUMBERS, - - - 20 Cts

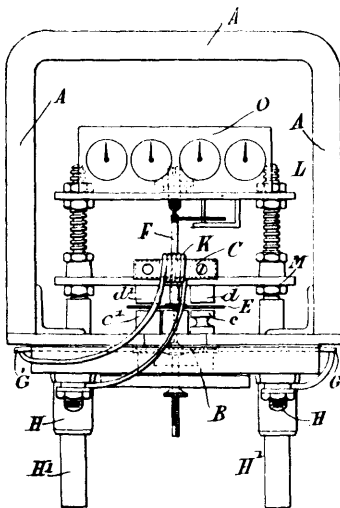
### NOTICE.

All solicitors, agents or attorneys who, in circulars or advertisements, or otherwise, refer to the Commissioner or Deputy Commissioner of Patents, or to any other official of the Patent Office, for evidence of their professional standing, do so without authority.

### INVENTIONS PATENTED.

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

#### No. 59,778. Electricity Meter. (*Electromètre.*)



59778

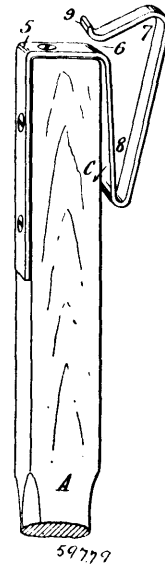
George Hookham, 7 and 8 New Bartholomew Street, Birmingham, England, 2nd May, 1898; 6 years. (Filed 19th September, 1896.)

*Claim.*—1st. In an electricity meter for continuous currents, in which the motor armature is immersed in mercury and rotates together with the brake in the field of a permanent magnet, in combination, the arrangement of the brake magnetic pole pieces in parallel with the motor magnetic pole pieces instead of in series so that the magnetic polarities at the opposite sides of the rotating armature are opposite in kind, and the passage of the current across the armature from side to side instead of from side to centre to increase the driving force, substantially as hereinbefore described. 2nd. In an electricity meter for continuous currents, in which the motor armature is immersed in mercury and rotates together with

the brake in the field of a permanent magnet, in combination, the arrangement of the brake magnetic pole pieces in parallel with the motor magnetic pole pieces instead of in series so that the magnetic polarities at the opposite sides of the rotating armature are opposite in kind, and the passage of the current across the armature from side to side instead of from side to centre to increase the driving force, said armature having slits, the armature being filled in at the slits, and coated on both sides with non-conducting composition, only the periphery being left conducting to limit the path of the current across the disc, substantially as hereinbefore described.

#### No. 59,779. Clothes Line Prop Head.

(*Appui pour cordes à linge*)



59779

Walter Henry Baxter Miller, 159 Queen Street, Melbourne, Victoria, Australia, 2nd May, 1898; 6 years. (Filed 10th January, 1898.)

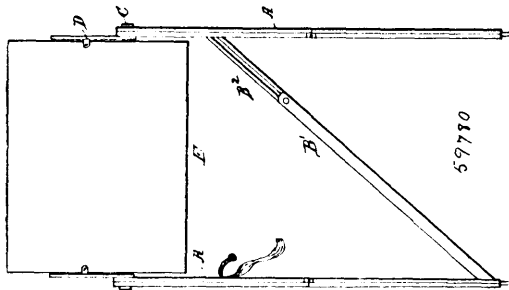
*Claim.*—1st. A clothes line prop head having in combination the mouth, the converging throat having sufficient to grip the line, and an elevated recess substantially as and for the purpose set forth. 2nd. In a clothes line prop head, the combination of the parts 8, 12 and 7, substantially as set forth, so that upon the line rising from part 8 it will be guided on striking part 12 towards the recess 7 for the purposes indicated. 3rd. A clothes line prop head having, in combination the respective parts hereinbefore set forth with reference to figure 2 of the drawings.

#### No. 59,780. Easel. (*Chevalet.*)

Edmond Dyonnet, Montreal, Quebec, Canada, 2nd May, 1898; 6 years. (Filed 5th February, 1898.)

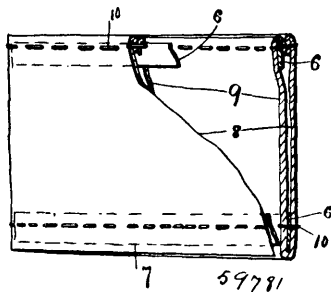
*Claim.*—1st. In an easel, the combination of side standards, an extensible cross-bar pivotally connected thereto, clamps pivoted to the top of such standards, and adapted to hold a canvas or block

between them as described. 2nd. In an easel, the combination of two pairs of legs pivoted at their upper ends, an extensible cross-bar



pivotally connected to the corresponding leg of each pair, clamp frames pivoted on the pins connecting the legs, and adapted to hold the canvas or block between them. 3rd. In an easel, the combination of clamps adapted to hold the opposite edges of a canvas or block, and adjustable pivot pins thereto in the sides of the easel, as described. 4th. In an easel, the combination with adjustable side standards of adjustable clamps pivoted thereto, and a block or canvas adapted to be held by such clamps and to form a rigid connection between the side standards as described.

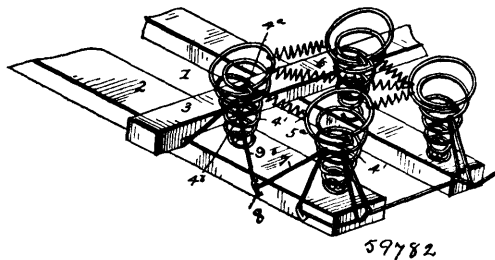
**No. 59,781. Garment Holder. (Porte-vêtement.)**



John Allan, Montreal, Quebec, Canada, 2nd May, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—1st. As a new article of manufacture, a combined stocking top, knicker cuff and trouser holder, adapted to overlap the bottom edge of the trouser leg when drawn up, and the upper edge of the sock. 2nd. As a new article of manufacture, a combined stocking top, knicker cuff and trouser holder consisting of a tubular length of knitted material 8, 9, and elastic bands 6 and 7 arranged and fastened together by stitching 10, substantially as shown and described and for the purpose set forth.

**No. 59,782. Spring Bed Bottom. (Sommier élastique.)**



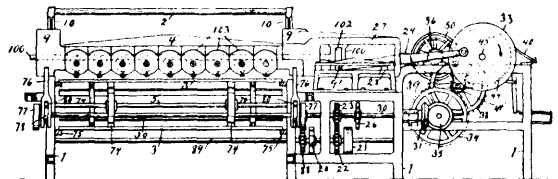
Peter Pelham Pengh, Wheeling, Missouri, U.S.A., 2nd May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. A spring bed bottom, comprising a bottom frame, conical or flaring resilience springs mounted thereon in parallel longitudinal rows, each spring having its upper end bent to form a hook 4a extending under its upper coil and an eye 4b, projecting laterally beneath said coil and short spiral springs 5, each having one of its ends connected with the upper coil of one resilience spring diametrically opposite its eye, and its other end inclined downward and connected with the lateral eye of an adjoining spring in the same longitudinal row, substantially as described. 2nd. A spring bed bottom, comprising a frame, guides on the outer side and end edges of the frame, conical or flaring resilience springs 4 mounted in parallel rows on said frame, each spring having its upper end bent to form a hook 4a extending under its upper coil and having a laterally projecting eye, a series of short spiral springs 5 having one of its ends connected with the upper coil of one resilience spring diametrically opposite its eye and its other end connected with the eye of the next adjoining spring in the same longitudinal row, a series of

long spiral springs extending continuously between and connecting the inner sides of adjoining resilience springs, said springs being arranged in crossed pairs and extending parallel with the diagonal rows of resilience springs, and a brace wire extending continuously through the said guides around the frame and provided with lateral loops engaging the side and end resilience springs, substantially as described.

**No. 59,783. Wire Fence Making Machine.**

(Machine à faire des clôtures en fil de fer.)

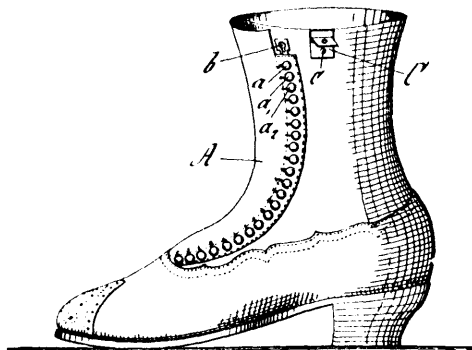


William Augustus Kilmer, Chicago, Illinois, U.S.A., 2nd May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. In a machine shown and described for making mesh wire fence, the combination of the endless travelling bed formed of endless sprocket chains, and cross bars provided with longitudinal and cross grooves for the reception of the strand wires and picket wires, the means for supporting and intermittently driving said endless travelling bed, the means for feeding the strand wires and picket wires to their respective grooves in said cross bars of said travelling bed, and the means for severing the picket wires after being fed to the travelling bed, all arranged to operate substantially as and for the purpose set forth. 2nd. In the machine shown and described for making mesh fence, the combination of the endless travelling bed formed with grooves for the reception of strand wires and picket wires, the frame for holding said wires in their respective grooves, and means for supporting, and for intermittently driving said travelling bed, and means for alternately twisting the strand wires together in opposite directions between the picket wires substantially as and for the purpose set forth. 3rd. In a machine shown and described for making mesh wire fence, the combination of a pair of feed rolls having their peripheries alternately plain and crimped for feeding forward and crimping the picket wires, the means for intermittently driving said rolls, the guide for conducting the picket wire to the endless travelled bed, the shear mechanism for severing the wire-pickets from each other. 4th. In the machine shown and described for making mesh wire fence the combination of the two feed rolls 53 each having their peripheries alternately plain and crimped, for feeding forward and alternately crimping the wire pickets, substantially as and for the purpose set forth. 5th. In the machine shown and described for making mesh wire fence, the combination of the endless travelling bed having grooves for holding the strand wires, one a short distance above the other, and for holding the picket wires so they may feed forward between the strand wires, the means for intermittently driving said travelling bed, the series of coiling pinions for twisting the strand wires together in opposite directions alternately between the picket wires, the means for elevating and lowering and for driving said coiling pinions and for turning them slightly backward to release them from the twisted strand wires all arranged to operate substantially as and for the purpose set forth. 6th. In the machine shown and described for making mesh wire fence, the combination of the cross head 9, the means for elevating and lowering said cross head, the rack bar 100 and means for reciprocating said rack bar, pinions 105 and 106 and their shaft 107, coiling pinion 108 having its forward journal recessed, the detachable wearing plate 113 seated in said recess, spring plate 111, yieldingly bearing against the rear journal, of said coiling pinion, stud 109, coil spring 110 carried on said stud and bearing against plate 111 and plates 103, 104 and 105, for holding said pinions in place, all arranged to operate substantially as and for the purpose set forth. 7th. In the machine shown and described for making mesh wire fence, the coiling pinion 108 having its forward journal recessed, in combination with the detachable wearing plate 113 seated in said recess, substantially as and for the purpose set forth. 8th. In the machine shown and described for making mesh wire fence, the combination with the cross head 9, the coiling pinion 108, the spring plate 111 bearing yieldingly against the rear part of said pinion, and the means for driving said coiling pinion, all arranged to operate substantially as and for the purpose set forth. 9th. In the machine shown and described for making mesh wire fence, the combination of the intermittently driven rolls 53, 53, having their faces provided with alternate plain and crimped portions, the wire guide 90, 55, the stationary cutting die 84, the movable cutting die 83 and the means for operating said movable die, all arranged to operate, substantially as and for the purpose set forth. 10th. In the machine described for making wire mesh fence, the combination of shaft 45, crank wheel 33 fast on said shaft and having the lugs 48, the slides 46 and 47, cross bar 46 for connecting said slides, gear wheel 44 loose on said shaft, the cam 41 secured to said gear wheel, the short cross shaft 42 journalled in said gear wheel near its

periphery, the dog 43<sup>1</sup> and said arm 43 secured respectively one on each end of said cross shaft, the drive arm 45 secured to shaft 45<sup>1</sup> and adapted to be engaged and intermittently rotated by said dog, the cam wheel 40<sup>1</sup> secured on the hub of the gear wheel 44, the brake wheel 43<sup>1</sup> secured on shaft 45<sup>1</sup>, brake strap 40 for engaging said brake wheel, lever 42 having a brake shoe for bearing against the cam wheel 40<sup>1</sup> and connected with said brake strap, the trip 42, pitman 29, twister pinions 108, and rack car 100, all arranged to operate, substantially as and for the purpose set forth. 11th. In the machine shown and described for making mesh wire fence, the combination of a pair of feed rolls having their peripheries alternately plain and crimped for feeding forward and crimping the picket wires, means for conducting the picket wire in place between the strand wires, the shear mechanism for severing the wire pickets from each other and the means for operating said shear mechanism. 12th. In the machine shown and described for making mesh wire fence, the combination of the means for feeding forward the picket wire, the means for guiding the picket wires between the stranded wires, the means for severing the picket wires from each other and the means for operating said shearing mechanism all arranged to operate, substantially as and for the purpose set forth. 13th. In the machine shown and described for making mesh wire fence, the combination of the means for conveying the strand wires and picket wires in place to be twisted, the means for holding said strand wires and picket wires during the twisting operation, and the means for intermittently feeding forward the strand wires and picket wires, all arranged to operate, substantially as and for the purpose set forth. 14th. In the machine shown and described for making mesh wire fence, the combination of the means for conveying the strand wires and picket wires in place to be twisted, the means for holding said strand wires and picket wires during the twisting operation, the means for intermittently feeding forward the strand wires and picket wires, the means for twisting the strand wires together between the picket wires, and the means for elevating and lowering the coiling pinions, all arranged to operate substantially as and for the purpose set forth. 15th. In the machine shown and described for making mesh wire fence, the combination of the means for intermittently driving the coiling pinions, the means for releasing the coiling pinions from the twisted strand wires and the means for operating said coiling pinions, all arranged to operate substantially as and for the purpose set forth. 16th. In the machine shown and described for making mesh wire fence, the combination of a rack bar, means for reciprocating the said rack bar, coiling pinions in mesh with said rack bar having their forward journal recessed and provided with wearing plates seated therein, means for yieldingly holding said coiling pinions forward, and means for elevating and lowering said coiling pinions and rack, substantially as and for the purpose set forth. 17th. In the machine shown and described for making mesh wire fence, the combination of a coiling pinion having its forward journal recessed and the means for preventing wear of the pinion, substantially as and for the purpose set forth. 18th. In the machine shown and described, the combination of the means holding and operating the coiling pinions and for yieldingly bearing against the coiling pinions, substantially as and for the purpose set forth. 19th. In the machine shown and described for making mesh wire fence, the combination of the means for intermittently driving the wire picket rolls, the means for guiding the wire pickets to and between the strand wires, and the means for cutting the picket wire into picket length, substantially as and for the purpose set forth. 20th. In the machine shown and described for making mesh wire fence, the combination of the means for reciprocating the rack and the means for stopping and starting the devices for reciprocating said rack, substantially as and for the purpose set forth.

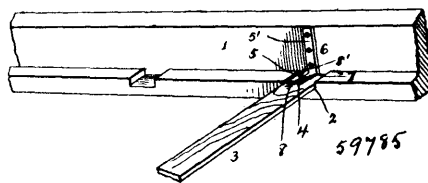
**No. 59,784. Button Boot. (Chaussure à bouton.)**



George Hillengass, Mannheim, Baden, Germany, 2nd May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—Buttoned boots with mechanical fastening, specially distinguishable in that part of the upper of a buttoned boot A to be folded over, a steel splint or plate B is fixed, which, through the putting and keeping together of the top part by means of a pressure snap or snap-fastening C, holds the buttoned boot properly closed.

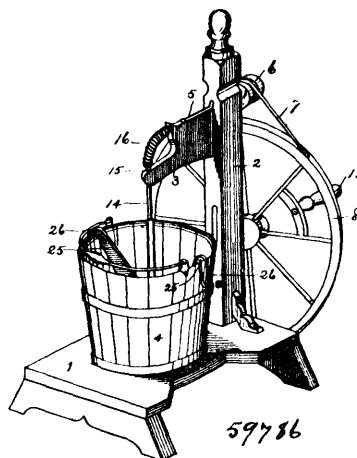
**No. 59,785. Bed Slat. (Planche de lits.)**



Mollie Pickett, Roby, Texas, U.S.A., 2nd May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—The combination with a side rail of a bed, of a slat having a notched end adapted to rest on said side rail, a horizontally-disposed rod secured to the slat inwardly from the end thereof and extending across the notch in the same, and a fastener comprising a vertically-disposed base portion connected to the side rail, a lower outwardly-extending horizontal portion resting on the ledge of the side rail, and a second upwardly-extending portion disposed away from the side rail and provided with an upper bent end which extends towards the side rail, the hook thus formed being adapted for reception in the notch of the slat to receive the rod between the lower and upper horizontally-extending portions.

**No. 59,786. Churn. (Baratte.)**



George Avery Norcross, New York City, U.S.A., 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

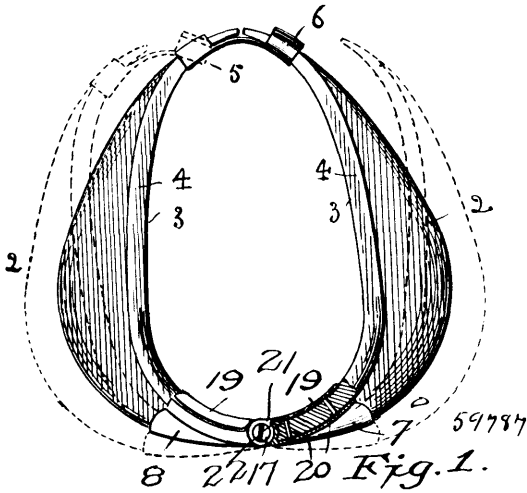
*Claim.*—1st. The combination of a dasher seated at its lower end, a driving-shaft, and a flexible and axially-expandible coupling-shaft arranged to communicate rotary motion to the dasher-staff and to hold the latter seated, substantially as specified. 2nd. The combination of a dasher-staff stepped at its lower end in a depression or socket, a stem mounted in alignment with the dasher-staff for rotary and axial movement, said stem and staff having interlocking extremities adapted to be held in operative relation by endwise pressure of the stem toward the staff, a driving-shaft, and a flexible coupling-shaft connecting said stem to the driving-shaft to communicate rotary motion from the shaft to the stem and being axially expansive to yieldingly hold the stem in operative relation with the staff, and also hold the dasher-staff in the depression or socket in which its lower extremity is stepped, substantially as specified.

**No. 59,787. Horse Collar. (Collier à cheval.)**

John C. Fessenden, St. Francis, Minnesota, U.S.A., 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

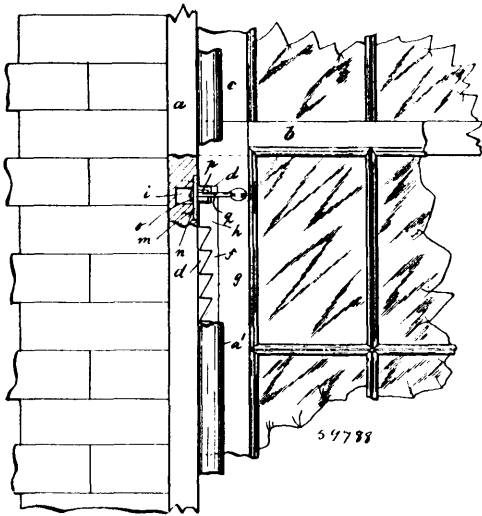
*Claim.*—1st. A padded or stuffed horse collar having a hinge joint between its sides, as and for the purpose specified. 2nd. A horse collar having a spring hinge between its sides, as and for the purpose specified. 3rd. A horse collar having sides upon which hames are secured, and a spring hinge between said sides tending to close the same, substantially as described. 4th. A horse collar having a hinged metallic coupling between its sides or padded parts, substantially as described. 5th. A padded collar having hames creases, and having its lower parts connected by a conforming and adjustable spring coupling, substantially as described. 6th. A horse collar having a spring coupling to normally close the collar and adapting the same to be opened, substantially as described. 7th. The combination with the stuffed or padded sides of a horse collar, with connecting conforming plates hinged as described, the closing spring, and adjusting conforming plates, substantially as described. 8th. A horse collar having a hinge in its lower part, in combination with a closing spring, and the clasp for the upper ends of the collar, substantially as described. 9th. As a new article of manufacture, a spring coupling for the lower parts of a horse collar, as described. 10th. As a new article of manufacture, a spring hinge

provided with sockets to receive the lower ends of the sides of a horse collar, substantially as described. 11th. As a new article of



manufacture, the adjustable spring hinge for attachment to the lower parts of a horse collar, substantially as described. 12th. A horse collar, having interlocking ears at its lower end, and removable spring-carrying parts connected therewith and forming a spring hinge between the sides of the collar.

**No. 59,788. Sash Fastener. (Arrête-croisic.)**



Adolph Haenichen, Paterson, New Jersey, U.S.A., 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

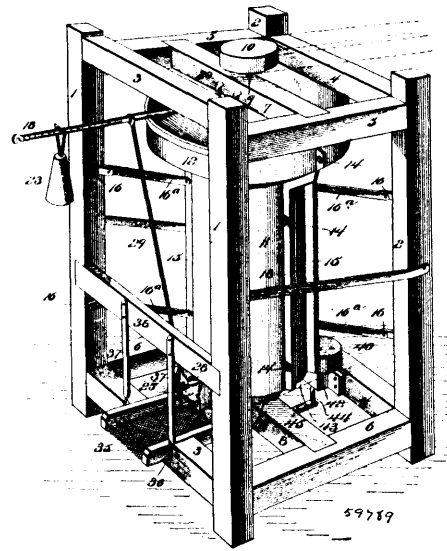
*Claim.*—The combination with a vertically movable sash and with the window frame respectively having teeth and a socket oppositely arranged on their adjacent faces, of a bead secured to said frame and provided with an aperture therein, a plate secured to said frame over said socket and extending beneath the bead and its aperture, an elongated spring secured at one end to the outer end of said plate and on the rear face thereof, a bolt and a notched operating lever rigidly secured to said spring at right-angles thereto and penetrating said plate, the bolt being in alignment with said teeth and the lever being in alignment with the bead aperture, projecting through the same and adapted to be pressed toward said sash to operate the spring, and a locking pawl pivoted to said bead and adapted to engage the notch in said lever, substantially as and for the purposes described.

**No. 59,789. Grain Scourer. (Machine à teurer le grain.)**

Columbus Stone, Greenville, Tennessee, U.S.A., 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. In a grain scourer, the combination with a frame, of a cylinder supported within the frame to have limited vertical but no rotary movement, a vertical shaft supported to rotate in said

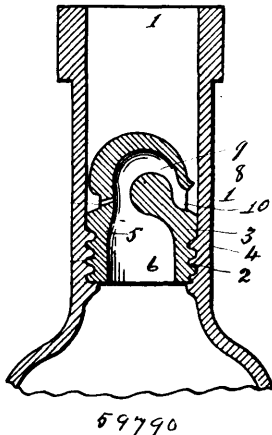
cylinder, a plurality of scouring blades secured to the cylinder within it, a plurality of scouring blades radiating from the shaft to



work between the blades on the cylinder, and means to automatically control the vertical movement of the cylinder, substantially as described. 2nd. In a grain scourer, the combination of the frame, a cylinder supported to have a limited vertical movement with the frame, and having a plurality of vertical series of horizontal scouring blades firmly secured therein, a vertical shaft journaled to rotate in said cylinder, a plurality of vertical series of horizontal scouring blades carried by said shaft to work between said fixed blades, each blade being wedge-shaped in cross-section and provided with an abrading surface on opposite faces, and the thin edges of the rotating blades opposite the thin edges of the fixed blades, and tie bars connected to the cylinder and frame to prevent rotary movement of the cylinder, substantially as described. 3rd. In a grain scourer, the combination with the frame, a cylinder supported to have limited vertical movement within the frame, said cylinder being provided with a series of fixed scouring blades and with a discharge opening at its lower end, and a shaft provided with a series of securing blades, journaled to rotate within said cylinder, of a scale beam fulcrumed on the frame and connected at one end to the cylinder, a weight adjustable on the other end of the beam, a door to close the discharge opening, and connections between the weighted end of the beam and said door, substantially as described. 4th. In a grain scourer, the combination with the frame, and a scouring cylinder provided with a discharge opening at its lower end, of parallel series of radiating links pivotally connected at their ends to the cylinder and frame, respectively, to permit a limited vertical movement of the cylinder within the frame, a scale beam fulcrumed on the frame and connected at one end to the cylinder, a weight adjustable on the other end of the beam, a door to close the discharge opening, and connections between the weighted end of the beam and said door, substantially as described. 5th. In a grain scourer, the combination of a cylinder supported to have limited vertical movement but no rotary movement and having a plurality of vertical series of scouring blades projecting inwardly towards its centre, of a vertical shaft supported to rotate in the axial centre of the cylinder, a plurality of vertical series of scouring blades radiating from said shaft to work between the blades of the cylinder parallel thereto, each blade being wedge-shaped in cross section and provided with an abrading surface on its upper and lower sides, and the thin edges of the fixed blades opposing the thin edges of the moving blades, and means to automatically control the vertical movement of the cylinder, substantially as described. 6th. In a grain scourer, the combination with a frame, of a cylinder supported within the frame to have limited vertical but no rotary movement, and having a discharge opening at its lower end, a movable door to close said opening, a vertical shaft supported to rotate in said cylinder, a plurality of series of scouring blades secured to the cylinder within it, a plurality of series of scouring blades radiating from the shaft to work between the blades on the cylinder parallel thereto, means to automatically control the vertical movement of the cylinder and also to operate the door of the discharge opening, and a shifting device on which the grain is discharged, substantially as described. 7th. In a grain scourer, the combination with the enclosing casing or cylinder, of two sets of scouring blades arranged within the casing and respectively fixed and movable, each blade being wedge-shaped in cross section and provided on both inclined faces thereof with a series of ribs extending the full length of the blade parallel with the longitudinal edges thereof and presenting cutting edges towards the advancing or thin edges of the fixed

and movable blades opposing each other, substantially as specified. 8th. In a grain scourer, the frame, a weighted beam fulcrumed at the top of the frame, a self-adjusting vertically movable scouring cylinder suspended from one end of the weighted beam and having a discharge opening, a movable closure for said opening, a connection between said closure and the weighted beam, and scouring devices arranged within the cylinder, substantially as set forth. 9th. In a grain scourer, the frame, an oscillatory weighted beam fulcrumed at the top of the frame, a scouring cylinder suspended from one end of the beam and having a movable discharge door and a plurality of pivotal link connections with the frame, a connection between said door and the weighted beam, and scouring devices arranged within the cylinder, substantially as set forth.

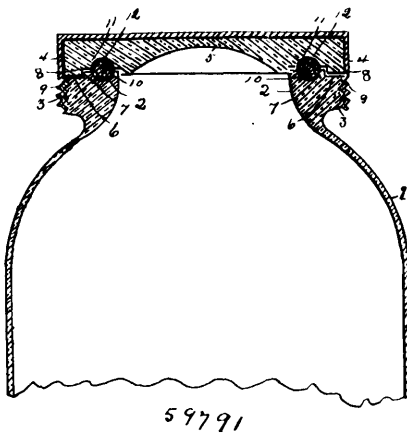
**No. 59,790. Non-refillable Bottle.**  
(*Bouteille non ré-emplissable.*)



Dora Myers, Toledo, Ohio, U.S.A., 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—A bottle, a plug adapted to be secured in the neck of the bottle, a dome on said plug, a curved duct leading from the bottom of the plug to an opening near the base of the dome, and an air duct opposed to and in horizontal relation with said opening.

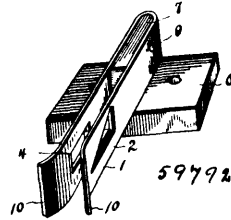
**No. 59,791. Fruit Jar and Cover.**  
(*Jarre à fruits et couvercle.*)



Albert W. Mallo, Leavenworth, Kansas, U.S.A., 2nd May, 1898; 6 years. (Filed 13th April, 1898.)

*Claim.*—A fruit-jar and cover therefor, comprising a body portion, a neck for the same, an outer screw-threaded surface along the outer wall of the neck, a horizontal ledge located adjacent to said screw-threaded surface, a vertical wall bounding the inner circle of the ledge, an annular groove being formed on the upper surface of the neck between the vertical wall referred to and the inner circle of the neck, an inside cover having a peripheral depending rim adapted to rest on the ledge and bear against the vertical wall of the same, an annular groove being formed along the inner surface registering with the groove of the neck, the resulting groove being adapted to receive a suitable packing-ring, and an outer cap or cover adapted to be passed over the inside top and secured to the outer screw-threaded wall of the neck, the depending rim of the inside cover being out of contact with the packing-ring, the latter being wholly confined within the inner and outer circles of the neck, substantially as set forth.

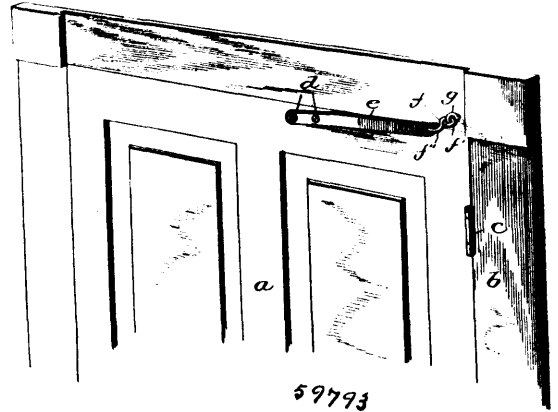
**No 59,792. Blind Fastener. (Arrête-persiennes.)**



Ezra Putnam Chappell, Mobile, Alabama, U.S.A., 2nd May, 1898; 6 years. (Filed 13th April, 1898.)

*Claim.*—1st. In a device of the class described, a loop-shaped spring, the ends of the arms of which are made flaring, one arm having a hook formed integrally with said spring, and the other arm slotted to receive said hook, and a base-plate engaging the loop end of said spring and adapted to be secured to the window-sill or other support, substantially as described. 2nd. A device of the class described comprising a pair of substantially parallel spring-arms, one of the arms being provided with a slot and the other arm having at its inner face a hook projecting through the slot and presenting a beveled or inclined front edge, said arms being reversible to bring the hook into a vertical or horizontal position, substantially as described. 3rd. A device of the class described consisting of the loop-shaped spring constructed of a single strip of resilient material and composed of a pair of substantially parallel arms, one of the arms being provided with a slot and the other arm having an integral hook presenting an inclined or beveled front edge and formed by slitting the metal and bending it upward, said hook extending from the inner face of its arm and projecting through the slot of the other arm, substantially as described.

**No. 59,793. Door Check. (Arrête porte.)**



Henry Porter, Ridgetown, Ontario, Canada, 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

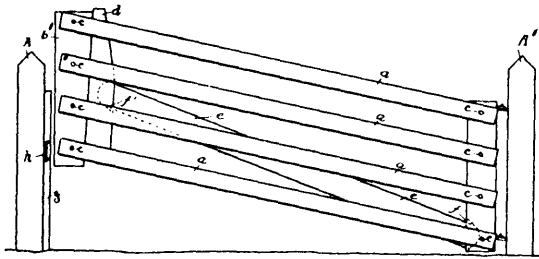
*Claim.*—1st. The combination with a hinged door and its casing, of a plate spring fixedly secured to and having its free end projecting away from the door, and a link secured to the free end of the spring and to a relatively immovable object, such as the door frame, the arrangement being such that the free end of the spring passes over and behind the axial line of the hinges of the door, whereby the door is closed and is held open, substantially as described. 2nd. The combination with a hinged door and its casing, of a plate spring fixedly secured to and having its free end projecting away from and above the top of the door, and a link secured to the free end of the spring and to a relatively immovable object, such as the door frame, the arrangement being such that the free end of the spring passes over and behind the axial line of the hinges of the door, whereby the door is closed and is held open, substantially as described. 3rd. The combination with a hinged door and its frame, of a plate spring having one end fixed on and unmovable with the door, and its free end projecting away from and beyond the edge of the door, a fastening device on the door frame, a line having hooked ends connecting the free end of the spring with a fastening device, the parts being so relatively located that the free end of the spring passes behind the axial line of the hinges of the door, substantially as described.

**No. 59,794. Gate. (Barrière.)**

John W. Keller, Elk Point, South Dakota, U.S.A., 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. A farm and stock-yard gate composed of double rails pivotally secured to uprights at each extremity of said rails, a standard freely held between the rails at the free end of said gate said standard having a socket on the inner edge, near the central portion of said standard, a brace adapted for insertion in said socket

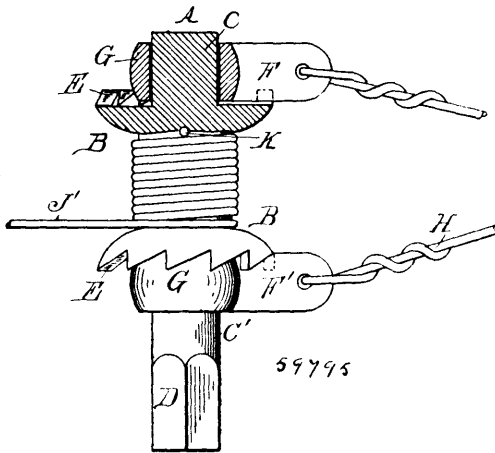
and extending diagonally between the double rails to a corresponding socket at the lower end of upright at the hinge end of said gate,



said brace and standard adapted to be adjusted to the changed position of said gate as the same is raised and lowered, and capable of maintaining the rigidity of said gate, substantially as described. 2nd. A farm and stock-yard gate having double rails *a, a, a*, pivotally secured by bolts *o, o, o*, to uprights *b* and *b¹*, at the ends of said gate, a wedge-shaped standard freely held between said double rails and adjacent to said upright *b¹*, said upright *b* and standard *d* having sockets *f* and *f¹*, facing inwardly, a brace *c*, extending diagonally between said upright and standard and adapted for insertion in said sockets, said brace and standard adapted for adjustment to the position of said gate and capable of maintaining the rigidity of the same, substantially as described.

**No. 59,795. Tension Device for Wires.**

(*Tendeur de fil de fer.*)

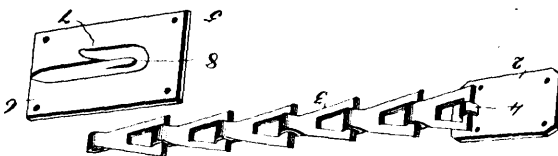


John Stuart, Windsor, Ontario, Canada, 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—The combination of a spool, comprising a shaft having the heads *B* provided by the ratchet-teeth *E* on their outer faces, the journals *C C¹*, the pawls *F F¹* having the sleeves *G* engaging the journals, and the looped wire *H*, the parts being arranged as and for the purposes described.

**No. 59,796. Horse Blanket Fastener.**

(*Attache de couverture de cheval.*)



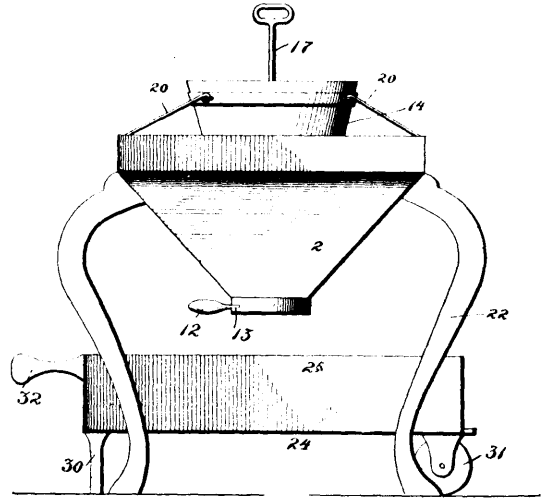
Adam Ferguson Fraser, Crosspoint, Quebec, Canada, 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. A fastening device, comprising a plate, secured to a blanket or other article, said plate having a chain secured thereto and adapted to be received within a hook, said hook being secured to the opposite side of the article, substantially as described. 2nd. A fastening device, comprising a plate, secured to a blanket or other article, said plate having a chain secured thereto and adapted to be received within a hook secured to the opposite side of the article, said hook comprising a plate having a hooked portion formed integrally therewith, substantially as described. 3rd. The combination of a plate, secured to a blanket or other article, a chain secured to

said plate and adapted to be received within a hook, said hook being secured to the opposite side of the article, substantially as described.

**No. 59,797. Device for Pickling Seed Wheat.**

(*Appareil pour laver le blé de semence.*)



Paul Fredrickson, Bru, Manitoba, Canada, 2nd May, 1898; 6 years. (Filed 12th April, 1898.)

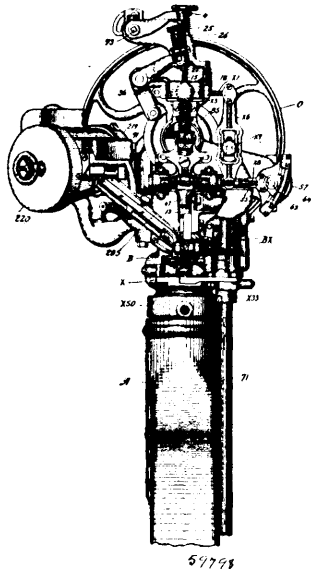
*Claim.*—1st. A device for pickling wheat, comprising a hopper mounted upon suitable legs, a bucket removably secured within said hopper, a truck located beneath said hopper, and means for regulating the flow of the liquid and passage of the wheat. 2nd. A device for pickling wheat, comprising a hopper mounted upon suitable legs, a bucket removably secured within said hopper, said bucket having perforated and supplemental bottoms, a funnel below said bucket having openings thereon and provided with a slide to regulate the passage of the wheat, a truck adapted to be located beneath said hopper to receive the wheat, said truck comprising a box-like body having an opening in one end normally closed by a slide, said body being provided with wheels and suitable legs and handles, and perforations in bottom of said body communicating with a gutter secured beneath said perforations. 3rd. A device for pickling wheat, comprising a hopper mounted upon suitable legs, a bucket removably secured within said hopper by means of hooks and eyes, and having a supplemental and a perforated bottom, said supplemental bottom being hinged and provided with a rod or handle, and means for holding said supplemental bottom in a raised position, a funnel into which said bucket is adapted to be seated, said funnel having opening below the bottom of said bucket, a slide located in the bottom of said funnel, comprising a lower fixed plate and an upper movable plate pivoted together, a handle secured to said movable plate, and both plates being provided with segmental openings, a truck adapted to be located beneath the hopper to receive the wheat, said truck comprising a box-like body having an opening in one end normally closed by a slide, said body being provided with wheels at one end and suitable legs and handles at the other, and perforations in the bottom of said body communicating with a gutter secured beneath said perforations.

**No. 59,798. Lasting Machine.** (*Machine à enformer.*)

Sherman William Ladd and Ronald Francis McFeely, both of Beverly, Massachusetts, U.S.A., 2nd May, 1898; 18 years. (Filed 4th April, 1898.)

*Claim.*—1st. A lasting machine having pincers for holding the upper, and means for pulling the upper held thereby, combined with means for moving the pincers over the last forwardly and laterally and turning the pincers, the pincers holding the upper continuously during said movements, substantially as described. 2nd. A lasting machine, having pincers for holding the upper, and means for pulling the upper held thereby, combined with means for moving the pincers over the last forwardly and laterally and turning the pincers all at one time, the pincers holding the upper continuously during said movements, substantially as described. 3rd. A lasting machine, having pincers for holding the upper, and means for pulling the upper held thereby, combined with means for moving the pincers over the last forwardly and laterally and turning the pincers, the pincers holding the upper continuously during said movements, said forward and lateral movements being imparted to the pincers through the medium of springs or similarly yielding connections, whereby the pincers conform to shifting strains of the upper material, substantially as described. 4th. A lasting machine of the character indicated, having devices for holding the upper, and

devices for stretching the upper held thereby, combined with means for turning and shifting the positions of said devices relatively to



the last, whereby the upper is twisted with relation to the edge of the last and carried forwardly and laterally over the same, and strained continuously during said operation, substantially as described. 5th. A lasting machine, having pincers adapted for holding the upper, and means for pulling the section of upper held thereby, combined with means for moving the pincers laterally and turning the pincers, and means whereby the pincers lateral and turning movements may be suspended during continued operations of the machine, substantially as described. 6th. A lasting machine, having pincers adapted for holding the upper, and means for pulling the section of upper held thereby, combined with means for moving the pincers laterally and turning the pincers, and means under control of the operator for starting and suspending the turning and lateral movements of the pincers at will, substantially as described. 7th. A lasting machine, having pincers adapted for holding the upper, and means for pulling the section of upper held thereby, combined with mechanism for turning and moving the pincers laterally, and a part adapted for movement to vary the amount of turning and lateral movement of the pincers, substantially as described. 8th. A lasting machine, having pincers adapted for holding the upper, and means for pulling the section of upper held thereby, combined with mechanism for turning and moving the pincers laterally, and a part adapted for movement to start and stop and vary the pincers turning and lateral movements, and a shifting connection to be operated by the workmen, for moving said movable part, substantially as described. 9th. A lasting machine, having pincers adapted for holding the upper, and means for pulling the section of upper held thereby, combined with mechanism for turning and moving the pincers laterally, said mechanism including an actuator which runs continuously during operation of the machine, and a part adapted for movement to start and stop the lateral and turning movements of the pincers independently thereof, substantially as described. 10th. A lasting machine, having pincers for gripping the upper, means for pulling the upper held thereby, and means for turning and moving the pincers laterally in opposite directions, combined with shifter connections for causing the pincers turning and lateral movement to take place in one or other of said directions as desired during the lasting process, substantially as described. 11th. The pincers of a lasting machine, supported by a ball at the top end thereof and permitting movement forward, backward and laterally over the last, and mechanism connected with said ball for turning the pincers, substantially as described. 12th. In a lasting machine adapted to work on different portions of the upper successively in repeated operations of the machine, a plurality of work pressers, arranged in different vertical planes relatively to the last bottom, combined with actuating mechanism for repeatedly moving a work presser during a number of repeated operations of the machine, substantially as described. 13th. In a lasting machine adapted to work on different portions of the upper successively in repeated operations of the machine, a plurality of work pressers, combined with actuating mechanism for repeatedly moving a work presser during a number of repeated operations of the machine, and means under control of the operator for starting and suspending the said operative movement of the work presser at will, substantially as described. 14th. A lasting machine, having in combination, a plurality of work pressers, a shaft from which motion is imparted to the pressers through a movable driver, and connections for moving the driver in order to start or suspend the movement of a presser, substantially as

described. 15th. A lasting machine, having in combination, a movable work presser, actuating connections for moving the work presser to press the shoe upper, arranged to repeat the movements of the work presser automatically during continued operations of the machine, and means to suspend the operations of the work presser independently of the continued operations of the machine, substantially as described. 16th. A lasting machine, having in combination, a movable work presser, actuating connections for moving the work presser against the shoe upper, arranged for repeating the movements of the presser automatically during continued operations of the machine, and means controllable by the workman to start or suspend the operation of the work presser independently of the continued operations of the machine, substantially as described. 17th. A machine of the character indicated, having a plurality of separately movable work pressers, and supporting connections permitting movement to place a presser in position desired for bearing upon the overturned upper, combined with means whereby the presser may be placed in or removed from said position when required during the lasting process, substantially as described. 18th. A lasting machine of the character indicated, having a plurality of separately movable work pressers, and supporting connections permitting movement for placing the presser in position upon the overturned upper, combined with means under control of the operator whereby the pressers are separately placeable in said position and removable therefrom at will, substantially as described. 19th. A lasting machine, having a plurality of separately movable work pressers, supporting connections permitting movement to place the pressers in position for bearing upon the overturned upper, mechanism whereby the pressers are placeable in and removable from said bearing position, an actuating mechanism whereby the pressers are moved in working the upper over the last, combined with means whereby operation of the mechanism to place one of the pressers in the bearing position puts in operation the mechanism to actuate another of the pressers movably over the upper, substantially as described. 20th. A lasting machine, having a plurality of separately movable work pressers, supporting connections permitting movement to place the pressers in position for bearing upon the overturned upper, mechanism whereby the pressers are placeable in and removable from said bearing position, according to the will of the workman, an actuating mechanism whereby the pressers are moved in working the upper over the last, combined with means whereby operation of the mechanism to place one of the pressers in the bearing position puts in operation the mechanism to actuate another of the pressers movably over the upper, substantially as described. 21st. A lasting machine, having upper stretching devices adapted for stretching a part or section of the upper at one operation, actuating mechanism to operate said devices in stretching the upper over the last and repeat the operations thereof, at intervals, for stretching the different parts of the upper at different times, a movable work presser and means for moving the same over the upper and repeat the movements thereof at intervals conformably with the operations of the upper stretching devices and means to suspend operations of the presser independently during repeated operations of the stretching devices, substantially as described. 22nd. A lasting machine, having upper stretching devices, adapted for stretching a part or section of the upper at one operation, actuating mechanism, to operate said devices in stretching the upper over the last and repeat the operations thereof at intervals for stretching the different parts of the upper at different times, combined with a movable work presser and means for moving the presser over the upper, having provision to repeat the operations of the presser conformably with the repeated operations of the stretching devices, means to suspend operations of the presser during repeated operations of the stretching devices, and means controllable by the workman for starting and suspending the operations of the presser at will, substantially as described. 23rd. A lasting machine, having upper stretching devices adapted for stretching a part or section only of the upper at one operation, mechanism for moving the upper stretching devices in stretching the upper over the last, including provision to repeat the operations at intervals for stretching the different parts of the upper at different times and also to differently move said devices, at times, for working the upper laterally, a movable presser and actuating connections for moving the presser over the upper and connections whereby the operations of the presser are automatically limited to taking place in conjunction with the said movements of the upper stretching devices for working the upper laterally, substantially as described. 24th. A lasting machine, having upper working devices and actuating connections for moving said devices in working the upper over the last and differently move said devices at times in order to plait or crimp the upper laterally, a work presser adapted for movement and actuating mechanism to move the presser over the upper, and connections whereby the operations of the presser are automatically limited to taking place in conjunction with the movements of the upper stretching devices for plaiting or crimping the upper laterally and means controllable by the workman to start or suspend the plaiting and crimping operations of the upper stretching devices at will, substantially as described. 25th. A lasting machine, having upper stretching devices and actuating mechanisms for moving said devices in straining the upper over the last and differently moving said devices at times for working the upper laterally, a work presser adapted for movement over the upper along the line of strain thereon by the upper stretching devices, actuating mechanism for moving



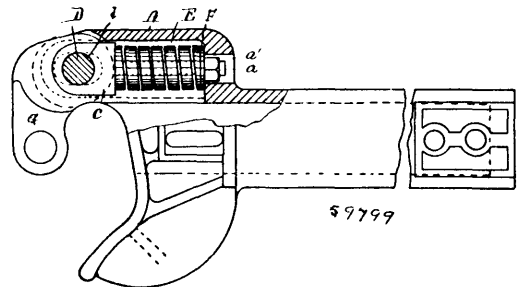
the presser and connections wherethrough the operations of the presser are automatically limited by taking place in conjunction with the movements of the upper stretching devices for working the upper laterally, and means controllable by the workman to suspend operations of the presser during one or more repeated operations of the upper stretching devices for working the upper laterally, substantially as described. 26th. A lasting machine, having pincers adapted for holding the upper, means for pulling the section of upper held thereby, a presser and means to support it against the overturned upper, adjacent to the line of the pincers pull thereon, a second presser and means to actuate it movably over the upper along the said line of pincers pull, substantially as described. 27th. A lasting machine, having pincers adapted for holding the upper, means for pulling the section of upper held thereby, a presser and holding connections to support it against the overturned upper, adjacent to the line of the pincers pull thereon, a second presser and means to actuate it movably over the upper along the said line of pincers pull, and means to turn and move the pincers laterally, substantially as described. 28th. A lasting machine, having upper working devices and actuating mechanisms therefor, adapted for holding the upper and stretching the section of upper held thereby, a presser and means to support it against the overturned upper and means to change the relative positions of said devices and pressers laterally, and a second presser and means to actuate it movably over the upper, and all co-operative, whereby the upper is strained over the last and plaited or felled, substantially as described. 29th. A lasting machine, having upper stretching devices and actuating mechanisms for moving said devices in working the upper over the last and differently moving said devices at times in working the upper laterally, combined with a plurality of separately movable work pressers, and means to actuate the pressers movably over the upper and connections wherethrough an operative movement by one of the pressers is made to take place in conjunction with the operation of said stretching devices for working the upper laterally in one direction, and an operative movement by another of said pressers is made to take place in conjunction with a movement of the stretching devices for working the upper laterally in the other direction, substantially as described. 30th. In a lasting machine adapted to work by repeating the operations of the machine on different parts of the upper, at different times, a work presser adapted for pressing upon the overturned upper and mechanism for holding the shoe mechanically pressed against said presser, combined with a second presser, and means to actuate the second presser over the upper, repeatedly during repeated operations of the machine, substantially as described. 31st. In a lasting machine adapted to work by repeating the operations of the machine on different parts of the upper at different times, a work presser adapted for pressing upon the overturned upper, a jack for holding the shoe, means to change the relative positions of the jack and presser, whereby the presser is mechanically pressed against the upper, a second presser and means to actuate the second presser over the upper repeatedly during repeated operations of the machine, substantially as described. 32nd. A lasting machine, having upper working devices adapted for holding the upper and means for pulling the section of upper held thereby, a passer adapted for support against the upper adjacent to the line of pull thereon, a jack for holding the shoe, means to change the relative position of the jack and presser is mechanically pressed against the upper, a second presser adapted for movement over the upper along the said line of pull thereon, and means to support and move the pressers respectively, substantially as described. 33rd. A lasting machine, having upper working devices adapted for holding the upper and means for pulling the section of upper held thereby, a presser and means to support it against the upper adjacent to the line of pull thereon, a jack for holding the shoe and permitting movement by the workman, a locking mechanism engagable with the jack for holding it locked at times against movement by the workman, a second presser adapted for movement and means to actuate it movably over the upper, substantially as described. 34th. In combination  $X^{15}$ ,  $X^{16}$ , adapted for endwise movement, the pressers,  $X^{25}$ ,  $X^{26}$ , supported by the bars, the slide,  $X^{23}$ , having connection with the bars for endwise movement thereof in one direction, and spring devices for moving the bars in the opposite direction, substantially as described. 35th. A machine of the character indicated, having a plurality of work pressers supported for movement from a position for bearing upon the upper to a retracted position away from the upper, and means for repeatedly moving a presser, combined with a part to be operated for movement of a presser to a retracted position and automatically suspending the operations of a moving presser, substantially as described. 36th. A lasting machine, adapted for working upon different parts of the upper successively in repeated operation of the machine, having a work presser adapted for bearing upon the upper, and a second presser combined with means for repeatedly moving said second presser over the upper at one side of the first named presser during a number of repeated operations of the machine, substantially as described. 37th. A lasting machine of the character indicated, having a plurality of work pressers, supported for movement from a position away from the upper material, during a number of repeated operations of the machine, combined with means to advance and withdraw the pressers collectively as desired, substantially as described. 38th. A lasting machine of the character indicated, having a work presser supported for movement from a position against the upper material to a retracted position away

from the upper material, combined with means for shifting the presser from one end to the other of said positions, and means to actuate the presser movably over the upper, substantially as described. 39th. A lasting machine of the character indicated, having pincers for gripping the upper, combined with means for pulling the upper held thereby, and means for moving the pincers over the last and turning the pincers to grip the upper at an angle to the central cross sectional plane of the machine, substantially as described. 40th. A lasting machine of the character indicated, having pincers for gripping the upper and means for pulling the section of upper held thereby, combined with mechanism for changing the relative position of the pincers and last, the combination operating to arrange the pincers for gripping the upper, with the gripping plane of the pincers' jaws angular to the central cross sectional plane of the machine, and thereafter gripping and turning the gripped upper over the last, substantially as described. 41st. A lasting machine of the character indicated, having pincers for gripping the upper and means for pulling the section of upper held thereby, combined with mechanism for changing the relative positions of the pincers and last, the combination operating to arrange the pincers for gripping the upper at one side of the central longitudinal plane of the machine, with the gripping plane of the pincers' jaws angular to the central cross sectional plane of the machine, and thereafter gripping and turning the gripped upper over the last, substantially as described. 42nd. A machine of the character indicated, having a work presser for pressing the upper over the inner-sole, a part provided with a work bearing face arranged below the plane of said presser for bearing against the side or edge part of the shoe, and a second part provided with a longer bearing face, adapted for overlapping the bearing face of said first part, means to support said second part in position with its bearing face extended over the bearing face of said first part to the plane of the work presser, and means permitting movement of said second part whereby to expose said first part for use separately, substantially as described. 43rd. In a lasting machine of the character indicated, mechanism adapted for feeding and delivering different sized 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 to receive the tacks, combined with means for changing the relative position of the resting and delivering mechanisms, and means for relatively shifting the delivering and driving mechanisms, the combination operating to locate different sized tacks at different distances from the edge of the shoe sole and drive them to different altitudes, substantially as described. 44th. In a lasting machine, the combination of mechanism adapted for feeding and separately delivering different sized tacks and permitting movement whereby it is shifted from delivering one sized tacks to delivering another sized tacks, a tack driving mechanism adapted for driving the tacks to different planes whereby the driven tacks are left with their head ends at different altitudes relatively to the plane or surface penetrated by the body parts thereof, said mechanism permitting movement to change its operation from driving the tacks to one of said planes or altitudes to the operation for driving tacks to another of said planes or altitudes, and a connection between the feeding and delivering mechanism and the driving mechanism by means of which the shifting of one effects a corresponding shifting of the other, substantially as described. 45th. A lasting machine, having upper stretching devices, and actuating mechanism for moving said devices in working the upper over the last, and differently moving said devices, in working the upper laterally, at times, combined with a pair of movable work pressers, means to actuate the pressers movably over the upper, including provision to cause operative movement by one of the pressers, in conjunction with the movement by said stretching devices to work the upper laterally in one direction, and cause operative movement by the other presser, in conjunction with the movement of said stretching devices to work the upper laterally in the other direction, and means wherethrough a presser is located in a position adapted for bearing against the shoe upper conjunctively with the operative movement by a presser over the upper, substantially as described. 46th. A lasting machine of the character, indicated, having upper lasting appliances for lasting the upper over the last, combined with an auxiliary presser mechanism arranged for use in fulling or crimping the upper, substantially as described. 47th. A lasting machine of the character indicated, having upper working appliances for lasting the upper over the last, combined with an auxiliary presser mechanism for use in fulling or crimping the upper, and means for putting the said auxiliary mechanism into and out of operation, as desired, during the lasting process, substantially as described. 48th. A lasting machine of the character indicated, having upper lasting appliances for lasting the upper over the last, and a work presser mechanism comprising a plurality of presser members, combined with means for moving a presser in co-operative relation with another presser, the combination operating for crimping or fulling the upper, substantially as described. 49th. A lasting machine of the character indicated, having pincers for gripping the upper, and means for pulling the upper held thereby, combined with means for turning and moving the pincers laterally in opposite directions, the combination operating to turn and move the pincers laterally in one direction while holding a section or part of the upper, and turn and move the pincers laterally in the opposite direction while holding another section or part of the upper, differ-

ent parts of the upper being moved and turned in different directions during the lasting process, substantially as described. 50th. In a lasting machine, the combination of mechanism adapted for feeding and separately delivering different sized tacks and permitting movement whereby it is shifted from delivering one sized tacks to delivering another sized tacks, a tack driving mechanism adapted for driving the tacks to different planes, whereby the driven tacks are left with their head ends at different altitudes relatively to the plane or surface penetrated by the body parts thereof, said mechanism permitting movement to change its operation from driving the tacks to one of said planes or altitudes to the operation for driving tacks to another of said planes or altitudes, mechanism including a rest against which the shoe is positioned for receiving the tack, adapted for resting the shoe in different positions laterally with relation to the point of driving the tack, whereby the driven tacks are located at different distances from the edge of the shoe sole, and permitting movement to change the rest from a point for supporting the shoe in one of said positions to the point for supporting it in another of said positions and means wherethrough a movement of the parts effecting the change in one of said mechanisms is made to cause the movement of parts whereby the change is effected in the other of said mechanisms respectively, substantially as described. 51st. The combination in a lasting machine, of mechanism adapted for feeding and separately delivering different sized tacks, and permitting movement whereby it is shifted from delivering one sized tack to delivering another sized tacks, driving mechanism adapted for driving the tacks to different planes whereby the driven tacks are left with their head ends at different altitudes relatively to the plane or surface penetrated by the body parts thereof, said mechanism permitting movement to change its operation from driving the tacks to one of said planes or altitudes, mechanism including a rest against which the shoe is positioned for receiving the tack, adapted for resting the shoe in different positions laterally with relation to the point of driving the tack, whereby the driven tacks are located at different distances from the edge of the shoe sole and permitting movement to change the rest from a point for supporting the shoe in one of said positions to the point for supporting it in another of said positions, and means wherethrough a movement of the parts effecting the change in one of said mechanisms is made to cause the movement of parts whereby the change is effected in the other of said mechanism respectively, and means controllable by the workmen at will whereby to effect the said change of parts as desired in the lasting operation, substantially as described. 52nd. In the tack feeding mechanism, in combination, a plurality of raceways, a separator, a stop mechanism for staying the advance of articles in the raceway towards the separator and permitting movement for opening and closing a raceway to the separator, and means, actuated by movement of the stop in closing the raceway, for displacing the articles to the path of the separator, preliminary to the closing of the raceway, substantially as described. 53rd. In the tack feeding mechanism, in combination, a plurality of raceways, a part in connection with the raceway, provided with an opening wherethrough articles traversing the raceway to the discharge end thereof are allowed to pass, said part being adapted for stopping the advance of articles through the raceway, except through said opening, and permitting movement for opening and closing the raceway, and provided with bevelled or cam faces, adjacent to the opening, to co-operate with the raceway part for displacing articles located in the opening, preliminary to closing the raceway, substantially as described. 54th. In the tack feeding mechanism, in combination, a plurality of raceways, leading to separate points for discharge, the part, 240, provided with the passage, 246, and a side opening, wherethrough articles are admitted from the raceways to the passage 246, a connection for supporting the part, 240, to permit movement relatively on the raceway part, and a part, 250, bearing against the part, 240, for holding it against detachment from the raceway part, substantially as described. 55th. In the track feeding mechanism, in combination, a plurality of raceways, leading to separate points for discharge, the part, 240, having the passage, 246, and a side opening, wherethrough articles are admitted from the raceways to the passage, 246, a connection between the part, 240, and the raceway part, whereby the part, 240, is supported against the raceway part to permit movement relatively, for placing the passage, 246, in operative communication with the different raceways, a notch or recess in the part, 240, and a stop, 250, in said recess to engage the block at opposite sides of the recess, and stop movement of the part as the passage, 246, moves into alignment with the raceways, substantially as described. 56th. In the track feeding mechanism, in combination, a plurality of raceways leading to separate points for discharge, the part, 240, having passage, 246, and side opening wherethrough articles are admitted from the raceways to the passage, 246, a suitable connection between the part, 240, and the raceway part for supporting the part, 240, against the raceway part and permitting movement of the part, 240, rotatively for placing the passage, 246, in communication with the different raceways, the lever, 260, suitably pivoted in the raceway part and bearing its outer end against the part, 240, and a spring applied to the lever, 260, whereby its end is pressed yieldingly into notches suitably formed in the part, 240, and the separator, having its rotating spindle provided with groove, 267, and a connection under the lever, 260, in alignment with said groove and co-operating with the spindle to lock the lever, 260, during a part of each rotation of the spindle, substantially as described. 57th. A device for taking

tacks and the like from a raceway, comprising a conical disc having a cam slot therein, a prong for engaging a tack, said prong projecting from the side of the slot adjacent the tacks and means for rotating said disc, substantially as described. 58th. A device for taking tacks and the like from a raceway comprising a revoluble disc having a flange projection conically therefrom, a cam slot in said flange, and prongs projecting away from each other from opposite sides of the slot, whereby a tack is held between a prong and the top of the disc, and then dropped, the cam slot serving to throw the point of the tack forward while the back is thus held, substantially as described. 59th. The tack raceway part, and the tack separator arranged for rotation in the raceway part, combined with the spring actuated stop, 239, supported to press yieldingly inward on the separator, substantially as described. 60th. A device for taking tacks and the like from a raceway, comprising an inclined plate having a cam slot therein and retaining prongs between which the tack is taken and dropped, the tack being carried point forwardly by the cam slot while it is between the taking and retaining members, substantially as described.

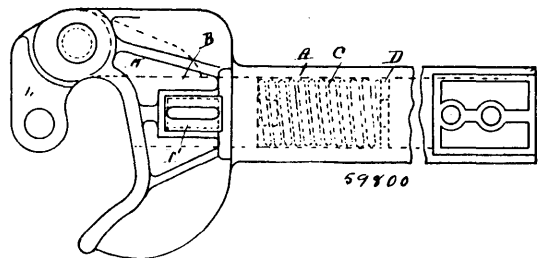
**No. 59,799. Car Coupler. (Attelage de chars.)**



(George K. Hamfeldt, Rankin, Pennsylvania, U.S.A., 2nd May; 6 years. (Filed 18th April, 1898.))

*Claim.*—1st. In a car-coupler, the combination of a bolt, an eye-head secured thereto, or integral therewith, said bolt adapted to reciprocate within the draw-head, a spring having a seat within the draw-head and carried upon the shank of said bolt, a main pin passing through the eye in said eye-head, a pivoted knuckle on the draw-head, substantially as described and for the purpose set forth. 2nd. In a car-coupler, the combination of a knuckle pivoted to the draw-head, a main pin passing through the draw-head, eye bolts or plates each having an opening to receive the pin, a spring in contact with each of said eye bolts or plates, all so arranged that the knuckle that is in contact with the main pin, when impact is made will cause, through the eye bolts or plates, the springs to compress, substantially as described and for the purpose set forth. 3rd. In a car-coupler, a main pin passing through the draw-head in an opening allowing for a lateral movement of said pin, a spring arranged at the side near each end of said main pin, said spring mounted in the draw-head adjacent to the main pin so arranged that when a pulling strain is applied to the coupler, the parts submitted to strain are cushioned by said springs, substantially as described and for the purpose set forth.

**No. 59,800. Car Coupler. (Attelage de chars.)**

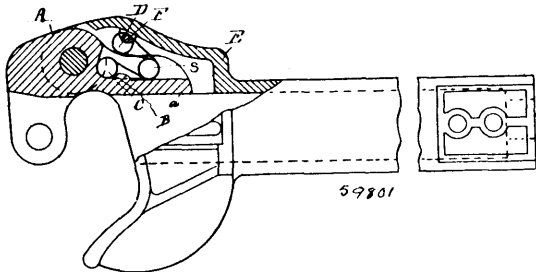


(George K. Hamfeldt, Rankin, Pennsylvania, U.S.A., 2nd May, 1898; 6 years. (Filed 18th May, 1898.))

*Claim.*—1st. In a device for locking the knuckle of a car-coupler, the combination of a block adapted to reciprocate within the shank of the coupler, a spring, or its equivalent, adapted to operate said block, a coupling-pin arranged to pass through the coupling-head and said block, said coupling-pin provided on the side toward the said spring with a portion flaring outward toward the block a projection on the block resting against said coupling-pin adjacent to said outwardly-flaring portion when the pin is inserted with the block, said coupling-pin provided on the side opposite the spring with an upwardly-outwardly flaring portion, a knuckle-lip adapted to rest against the side of said block when the coupling is made, substantially as described and for the purpose set forth. 2nd. In a device for locking the knuckle of a car-coupler, a spring-actuated block adapted to reciprocate within the shank of the coupler, one

end of said block provided with an inclined portion, a knuckle-lip adapted to rest against the side of said block near the end provided with said inclined portion, a pin adapted to pass through the blocks said pin having a downwardly outwardly flaring portion on one side and an upwardly outwardly flaring portion on the opposite side thereof, so arranged that when the lip comes in contact with said inclined portion of said block, the block will be moved into the shank against the tension of said spring, at the same time the portion of the block adjacent to the pin raises the pin, and when the lip passes said block, the spring forces the block forward allowing the pin to drop and holds the knuckle locked, substantially as described and for the purpose set forth. 3rd. In a device for locking the knuckle of a car-coupler, a spring actuated reciprocating block within the shank of the coupler, a coupling pin arranged to pass through the coupler-head and through said block, said pin having a downwardly outwardly flaring portion on one side, and an upwardly outwardly flaring portion on the opposite side thereof, said coupling-pin prevented from creeping by means of a projecting rib on said block against an inclined portion of said pin and held against said pin by the action of a spring, substantially as described and for the purpose set forth.

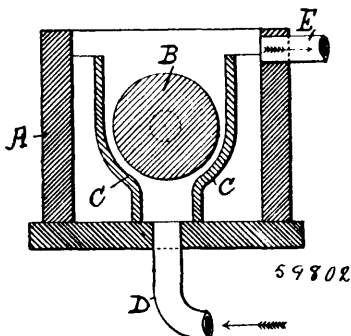
**No. 59,801. Car Coupler. (Attelage de chars.)**



George K. Hamfeldt, Rankin, Pennsylvania, U.S.A., 2nd May, 1898; 6 years. (Filed 18th April, 1898.)

*Claim.*—1st. In a device for opening the knuckle of a car-coupler, a hinged spring composed of three divisions, each division coiled in the form of a helix, one of said divisions secured to the coupler-head, the division at the opposite end of said spring secured to the lip of the knuckle, so arranged that the resiliency of the spring tends to separate and throw apart forcibly the lip from connection with the coupler-head, substantially as described and for the purpose set forth. 2nd. In a device for opening the knuckle of a car-coupler, a knuckle, a recessed seat in the lip of said knuckle adapted to receive a spring, a hinged spring composed of three divisions, each division coiled in the form of a helix, a pin or bolt arranged to secure one division of said spring in the coupler-head, the opposite division of said spring secured in said recessed seat, substantially as described and for the purpose set forth.

**No. 59,802. Apparatus for Electro-Depositing Metals. (Appareil d'ouvrage galvano-plastique.)**

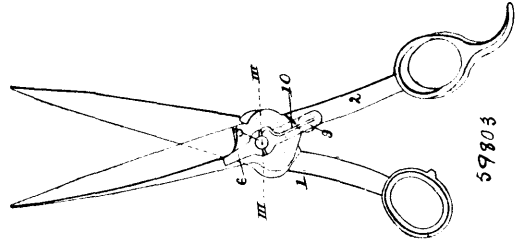


John Oliver Surtees Elmore, Leeds, York, England, 2nd May, 1898; 6 years. (Filed 4th September, 1896.)

*Claim.*—1st. For effecting rapid electro-deposit of metals, causing a very large volume of the electrolyte liquid to flow through narrow spaces between the anodes and the cathodes, substantially as described. 2nd. In refining a metal by electrolysis, causing a very large volume of electrolyte liquids to flow in a zigzag course between successive pairs of parallel plates, each pair consisting of an anode plate of the crude metal to be dissolved and a cathode plate to receive deposit of the refined metal, substantially as and for the purpose set forth. 3rd. Apparatus for purifying metals by electrolysis, comprising a series of non-conducting frames and sheets of lead or other suitable metals carrying plates of the crude metal to be refined, these frames and sheets being piled over one another and clamped firmly together, the lowest and uppermost sheets con-

nected respectively to the terminals of a source of electricity, and the sheets having holes through them alternately arranged for passage of electrolyte liquid in a zigzag course between each plate and the sheet above it, substantially as described. 4th. In combination with the pile of frames, sheets and plates above referred to, a pump, a tank, a rocking trough and pipes arranged and operating substantially as described. 5th. In refining a metal by electrolysis, causing a very large volume of electrolyte liquid to flow in a zigzag course between the parallel plates of the metal arranged in a closed tank, substantially as and for the purpose set forth. 6th. Apparatus for refining metals by electrolysis, consisting of a closed tank containing cross frames placed at intervals apart in the tank, these frames holding plates or slabs of the metal to be refined and having through them large apertures situated alternately above and below the slabs, an anode plate and outlet pipe at the one end and a cathode plate and inlet pipe at the other end of the tank, arranged and operating substantially as described.

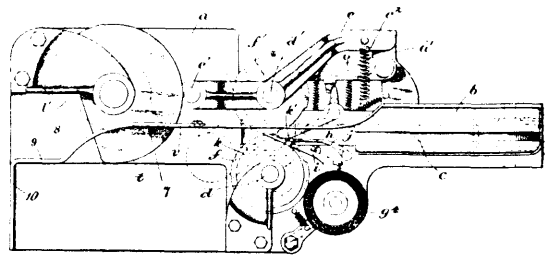
**No. 59,803. Scissors. (Ciseaux.)**



Eli Bailey, Macon, Missouri, U.S.A., 2nd May, 1898; 6 years. (Filed 4th March, 1898.)

*Claim.*—1st. In a pair of shears or scissors, the combination with the blades of a pivot pin or pintle provided with a perforation, a lever adapted to fit over the pin and to bear at one end against one of the blades forward of the pin, means for adjusting the other end of the lever, and a hook pivoted to the lever and parallel therewith and the point of which is adapted to enter the perforation in the pin, substantially as set forth. 2nd. In a pair of shears or scissors, the combination of the blades, a pivot-pin provided at one end with a perforation and at the other end with a head, a lever adapted to fit over the pin, a set-screw for tightening one end of the lever, and a hook arranged parallel with the lever having an intumed end riveted into a perforation in one end of the lever and the point of which is adapted to fit in the perforation of the pin, substantially as set forth.

**No. 59,804. Mail Marking Machine. (Machine à marquer les malles.)**

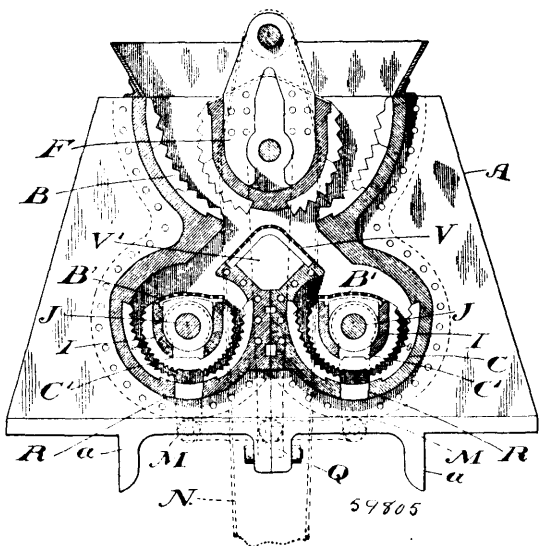


Henry Edward Waite, Newton, Massachusetts, U.S.A., 2nd May, 1898; 6 years. (Filed 10th February, 1898.)

*Claim.*—1st. In a mail-marking machine, co-operating continuously-rotated feed-rolls located on opposite sides of the letter-path, in combination with two movable stops located in the throat between said feed-rolls, and devices on said feed-rolls adapted to co-operate with a letter in successively displacing the two stops. 2nd. In a mail-marking machine, the feed-rolls located on opposite sides of the letter-path and having letter-engaging portions, a movable stop normally located in the throat between said feed-rolls, a letter-displacing abutment on one of said feed-rolls adapted to co-operate with a letter in displacing the stop, and a second stop located beyond the first stop and adapted to arrest the letter after it has passed said first stop and to hold the same until gripped between the letter-engaging portions of the feed-rolls. 3rd. In a mail-marking machine, printing-rolls, one of which contains a movable platen or impression-pad, a normally inoperative mechanism for projecting said platen to the periphery of its roll, a trip controlling said mechanism, feed-rolls for introducing the letters to the printing-rolls, and a continuously-operated rotary device adapted to co-operate with a letter in displacing said trip to render the pad-projecting mechanism operative, previously to the introduction between and engagement by the feed-rolls of said letter. 4th. In a mail-marking machine, a printing-roll carrying a die, an opposed roll carrying a movable impression-pad or platen, mechanism for throwing said pad

into and out of operative relation to the printing-die, a letter-controlled trip which normally engages said mechanism to render the same inoperative, feed rolls having segmental letter-engaging portions, and an abutment located on the same shaft with one of said rolls, in advance of its letter-engaging portion, the said abutment being adapted to co-operate with a letter in displacing the trip and releasing the pad-throwing mechanism. 5th. In a mail-marking machine, an impression-roll containing a platen movable toward and away from the axis of the roll, and mechanism for operating the platen, comprising a normally revolving sleeve surrounding the roll-shaft and operatively connected with the platen, two revolving cams, a stop member controlled by one of said cams in such a manner as to engage and arrest the sleeve during a portion of a revolution of the impression-roll and disengage the same during the remaining portion of the revolution, and a second stop member controlled by the other cam in such a manner as to engage the sleeve before the latter has been released by the first stop member, and continue to arrest the same after it has been released by said stop member, the sleeve being finally released by the second stop member when a revolution of the roll has been completed. 6th. A mail-marking machine, comprising rotary printing devices, rotary feeding devices for timing the introduction of the letters to the printing devices, and a rotary self-feeding device for feeding the letters, one at a time, from a faced pack, and introducing them to the first-mentioned feeding devices, all of said devices rotating continuously and in a forward direction.

**No. 59,805. Rock Crusher. (Machine à broyer.)**



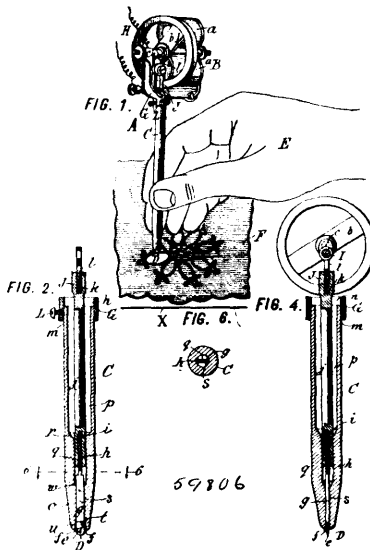
Bagster Roads Seabrook, Victoria, and John Rutter Brown, Harrison Hot Springs, both in British Columbia, Canada, 2nd May, 1898; 6 years. (Filed 18th March, 1897.)

*Claim.*—1st. In a rock crusher, a curved bed, in combination with an oscillator suitably journaled on a shaft carried by the frame of the machine, an arm or arms connected to the oscillator and one or more levers, each suitably journaled on the oscillator shaft and pivotally connected at one end to an oscillator arm, substantially as and for the purpose specified. 2nd. In a rock crusher, an upper curved bed and a lower curved bed communicating therewith, in combination with an upper oscillator suitably journaled on a shaft carried in bearings on the frame of the machine, two lower oscillators fast on shafts suitably journaled on the frame of the machine, an arm or arms rigidly connected to the upper oscillator and extending upwardly therefrom, an arm or arms rigidly connected to the shaft of the lower oscillator, and one or more levers, each suitably journaled on the upper oscillator shaft, pivotally connected at one end to an upper oscillator arm and adapted to rock the lower oscillator arm or arms, substantially as and for the purpose specified. 3rd. In a rock crusher, an upper curved bed and two lower curved beds communicating therewith, in combination with an upper oscillator suitably journaled on a shaft carried in bearings on the frame of the machine, two lower oscillators fast on shafts suitably journaled on the frame of the machine, an arm or arms rigidly connected to the upper oscillator and extending upwardly therefrom, an arm or arms rigidly connected to one or both of the lower oscillator shafts, one or more levers each suitably journaled on the upper oscillator shaft, pivotally connected at one end to an upper oscillator arm, a link connecting each pair of the arms of the lower oscillator shafts, and a pin upon a link adapted to engage in a slot in one of the said levers, substantially as and for the purpose specified. 4th. In a rock crusher, an upper curved bed

and a lower curved bed communicating therewith, in combination with an upper oscillator suitably journaled on a shaft carried in bearings on the frame of the machine, a lower oscillator fast on a shaft suitably journaled in bearings vertically adjustable on the frame of the machine, an arm or arms connected to the upper oscillator and extending upwardly therefrom, an arm or arms rigidly connected to the shaft of the lower oscillator, and one or more levers, each suitably journaled on the upper oscillator shaft pivotally connected at one end to an upper oscillator arm, and adapted to rock the lower oscillator arm or arms, substantially as and for the purpose specified. 5th. In a rock crusher, an upper curved bed and a lower curved bed communicating therewith, in combination with a suitably journaled upper oscillator, a suitably journaled lower hollow oscillator, means for rocking the said oscillators, and a screen covering the said oscillator, discharge openings being formed in the lower side of the said lower oscillator and in the bottom of the machine below the said oscillator, substantially as and for the purpose specified. 6th. In a rock crusher, an upper curved bed and two lower curved beds communicating therewith, in combination with a suitably journaled upper oscillator, two suitably journaled lower oscillators, means for rocking the said oscillators, a wedge-shaped screen located below the upper oscillator and above a suitable chamber, and screens covering the top of one or both lower oscillators, discharge openings being formed in one or both lower oscillators and in the bottom of the machine below each of the said oscillators, substantially as and for the purpose specified. 7th. In a rock crusher, a frame having formed therein two curved beds located one above the other so that the material discharged from one falls in the other, two shafts journaled in said frame one above the other, oscillators journaled on said shafts, arms extending from said oscillators, and means for rocking the said arms, substantially as and for the purpose specified.

**No. 59,806. Fabric Cutting Tool and Method.**

(Méthode et outil pour couper les tissus.)



Charles William Cohn, New York City, U.S.A., 2nd May, 1898; 6 years. (Filed 22nd April, 1897.)

*Claim.*—1st. The improved tool for cutting holes in fabrics and for other purposes, consisting of a handle to be held in the hand, having a smooth lower end for bearing on and moving over the fabric, a rapidly reciprocating cutting blade in the handle having a cutting edge crossing its end and alternately moving entirely within and projecting partly beyond such end, and mechanism carried by the handle and reciprocating the blade. 2nd. The improved tool for cutting holes in fabric and other sheets, consisting of a handle to be held in the hand, having a smooth lower end for bearing on and sliding over the sheet, and a reciprocating blade carried by the handle, having a cutting edge crossing its end, means for reciprocating the blade, and means carried by the handle showing the direction of the cutting edge of the blade. 3rd. The improved cutting tool for cutting holes in fabrics or sheets, consisting of a tubular handle, having a smooth end for pressing on and sliding over the sheet to be cut, and having a tapering wall leading to said end, a blade having a long cutting edge crossing its end, carried in said handle with its flat side towards the flattened end of the handle, and means for rapidly reciprocating the blade so that a person can with the hand move the tool over the sheet with its end against the sheet and can tell by the shape of the handle the direction of the cutting edge. 4th. The improved tool for cutting holes in fabrics or sheets

consisting of a flat sided blade, and a tubular handle carrying the blade and having an oblong rounded end for pressing on and sliding over the fabric. 5th. The improved tool for cutting holes in fabrics or sheets, consisting of a flat sided blade, having a cutting edge crossing its end and on its narrow edges, and a handle having a socket receiving and fitting the blade, and a smooth end for resting on and sliding over the fabric, and means rapidly reciprocating the blade so that its edge projects from and then moves entirely within the handle. 6th. The improved tool for cutting holes in fabrics, consisting of the handle C, blade D, connecting rod J, and motor B.

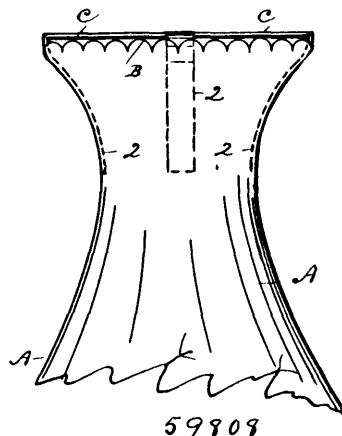
**No. 59,807. Improvements in the Manufacture of Flour and Starch Pastes.** (*Manufacture de pâte d'empois et farine.*)

Charles Michael Higgins, Brooklyn, New York, U.S.A., 2nd May, 1898; 6 years. (Filed 7th June, 1897.)

*Claim.*—1st. The improved process of making a flour paste, consisting in digesting the flour in hot water impregnated with a digesting substance until the gluten is dissolved and the starch rendered soluble, or partly so, and the mass thereby liquefied, then arresting the digesting action before it becomes converted into dextrine and cooling the liquefied mass and allowing it to rest until it sets into a semi-fluid or pasty form, substantially as herein set forth. 2nd. The improved process of making a starch paste herein described, consisting in digesting raw starch in a hot digesting liquid till it becomes fluent, and in that glutinous or soluble state, before it becomes converted into dextrine, arresting the digestion at this point and finally running the fluent mass into jars or receptacles and allowing the same to cool and rest until set in a semi-fluid or pasty form, substantially as herein set forth. 3rd. The improved process described of making a starch or flour paste, consisting in heating a mixture of starch or flour with water impregnated with a digesting acid, arresting the heat and digesting action when the mixture becomes liquefied, and while in that white or opalescent glutinous or soluble state, before it becomes converted into dextrine, adding a neutralizing substance to the solution and allowing the same to cool and rest until set into a semi-liquid or pasty form, substantially as herein set forth. 4th. The process of making an improved starch or flour paste in the manner and proportions described, namely, adding to a given mass of digesting fluid a mass of starch or flour equal to half or more of the weight of the fluid, keeping the mixture agitated and applying heat to the whole mass uniformly at once until it becomes an opalescent liquid, arresting the action before it becomes converted into dextrine, and finally cooling the said liquid until set into a pasty form, substantially as herein set forth. 5th. The improved process of making a starch or flour paste herein described, consisting in digesting raw starch in a hot digesting liquid until it becomes fluent, and in that glutinous or soluble state, before it becomes converted into dextrine, arresting the digestion at this point and finally running the fluent mass into jars or receptacles and applying continual cold or refrigeration thereto until the liquid contents are set into a pasty form, substantially as herein set forth. 6th. The improved process of making a starch or flour paste, consisting in digesting the starch or flour in hot acidulated water till it becomes fluent, and in that glutinous or soluble stage, before it becomes converted into dextrine, then adding to the acid solution an alkaline sodium compound in excess to neutralize the acid and give the solution a decided alkaline reaction and then cooling the solution until set into a semi-fluid or pasty form, substantially as herein set forth. 7th. An improved adhesive compound, consisting essentially of starch digested in water till it becomes fluent and in that glutinous or soluble stage before it becomes converted into dextrine, and then arrested and cooled in this state, forming a homogeneous tenacious paste, substantially as herein specified. 8th. An improved adhesive compound, consisting of starch digested in water till it becomes wholly or partly fluent or soluble, but before it becomes converted into dextrine, and then combined with a boron compound, forming a homogeneous tenacious paste, substantially as herein set forth. 9th. An improved adhesive compound, consisting of starch digested in water into a fluent or soluble form in that state preceding the conversion into dextrine and then combined with a boron compound with a caustic alkali added thereto, substantially as and for the purpose herein set forth. 10th. An improved adhesive paste or compound formed by heating a mixture of starch and water with a converting acid in the presence of dissolved boracic acid until liquefied, and then adding caustic soda to neutralize both acids and form borax in said solution, substantially as set forth. 11th. The specific process herein described for making an improved paste directly from starch or flour, viz., mixing the dry starch or flour with acidulated water at a temperature below or about the paste formation, and keeping the mixture constantly agitated while the heat is applied, continuing the heat and agitation till the pasty mixture becomes liquid and attains a temperature of 190° Fahrenheit or thereabout, adding a neutralizing substance to the solution, discontinuing the heat and running the hot neutralized solution into jars or packages and causing the same to cool and rest until the liquid assumes a semi-liquid or pasty form, substantially as herein set forth.

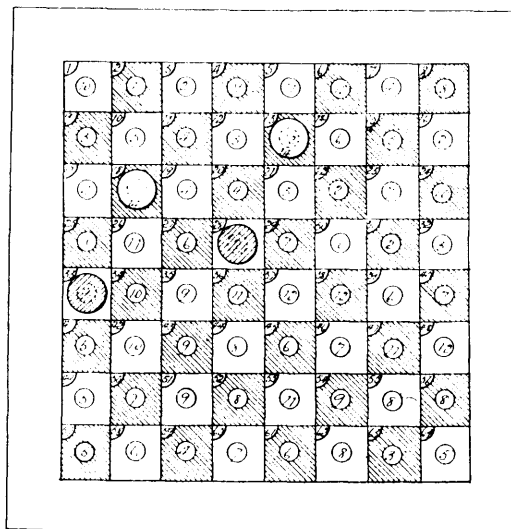
**No. 59,808. Lamp Chimney.** (*Cheminée de lampe.*)

Ebenezer Royden Marshall, Hamilton, Ontario, Canada, 2nd May, 1898; 6 years. (Filed 24th February, 1898.)



*Claim.*—A device for protecting the flame in a lamp, consisting of a disc plate, having a series of lower curved prongs to fit into the upper part of the lamp chimney to securely fasten said disc plate in position on the lamp chimney, substantially as described and set forth.

**No. 59,809. Puzzle.** (*Jeu de patience.*)



Julia Eliza Jarvis, Victoria, British Columbia, Canada, 2nd May, 1898; 6 years. (Filed 25th January, 1898.)

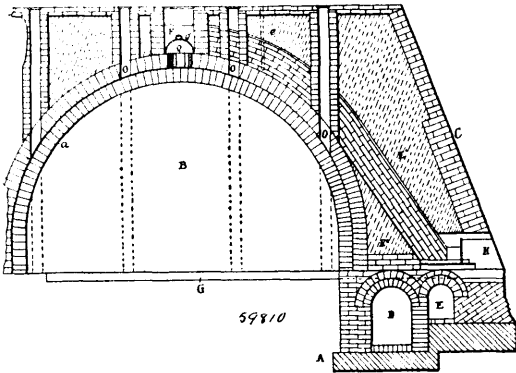
*Claim.*—In a game puzzle board having sixty-four sections marked off and numbered consecutively and each intermediate section being colored, the combination of numbers placed in line and diagonally from each other, the sum of which make 14, such numerals being placed on the spaces as specified, and of checkers for marking such numerals, and marks and numerals on such checkers, as and for the purposes specified.

**No. 59,810. Brick Kiln.** (*Four à brique.*)

Charles E. Coates and Llewellyn Hancock, both of Woodbridge, New Jersey, U.S.A., 2nd May, 1898; 6 years. (Filed 18th December, 1897.)

*Claim.*—1st. The combination in a continuous brick kiln, of a main draft flue leading to the stack, branch flues from said draft flue to the upper and lower part of each section of the kiln, and dampers for controlling communication between said branch flues and draft flue whereby the kiln may be operated with an up-and-down draft, a hot air flue, branch flues extending therefrom to each section of the kiln, and dampers in said last named branch flues and in hot air flue for directing the hot air from the cooling sections to the drying sections, substantially as set forth. 2nd. The combination in a continuous brick kiln, of a main draft flue leading to the

stack, branch flues from said draft flue to the upper and lower part of each section of the kiln, and dampers for controlling communication



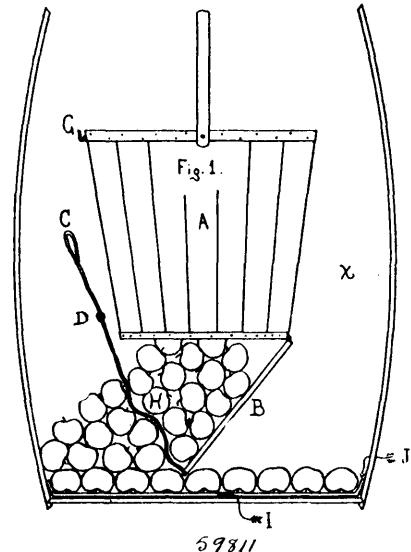
59810

tion between said branch flues and draft flue whereby the kiln may be operated with an up-and down draft, a hot air flue, branch flues extending from said hot air flue to the upper and lower part of each section of the kiln, dampers in said last named flues for controlling communication between the same and the main hot air flue, and dampers in the main hot air flue whereby the hot air from the cooling sections escapes at the top and bottom of each section, and whereby such hot air may be directed into the drying sections at the lower or upper parts thereof, or both, substantially as set forth. 3rd. The combination in a continuous brick kiln, of the two main flues, branch flues extending therefrom to each section of the kiln and dampers opposite each section of kiln for controlling communication between said main flues, by the manipulation of which the draft in the main flues may be regulated, substantially as set forth. 4th. The combination, in a continuous brick kiln, of two main flues D and E, branch flues D<sup>1</sup>, D<sup>2</sup> and E<sup>1</sup>, E<sup>2</sup> extending from the main flues respectively to the top and bottom of each chamber, dampers for controlling communication between said branch and main flues, and dampers in the main flue E opposite each chamber, substantially as and for the purpose set forth. 5th. The combination, in a continuous brick kiln, of two main flues D and E, branch flues D<sup>1</sup>, D<sup>2</sup> and E<sup>1</sup>, E<sup>2</sup> extending from the main flues respectively to the top and bottom of each chamber, dampers for controlling communication between said branch and main flues, a flue F connecting the flues D<sup>1</sup> and E<sup>1</sup> of adjacent chambers, and dampers in the main flue E opposite each chamber, substantially as and for the purpose set forth. 6th. The combination, in a continuous brick kiln, of two main flues D and E, branch flues D<sup>1</sup>, D<sup>2</sup> and E<sup>1</sup>, E<sup>2</sup> extending from said main flues respectively to the top and bottom of each chamber, dampers for controlling communication between said branch and main flues, separate dampers d<sup>1</sup> and e<sup>1</sup> in flues D<sup>1</sup> and E<sup>1</sup> respectively, a flue F connecting the flues D<sup>1</sup> and E<sup>1</sup> of adjacent chambers, dampers f in said flues F, and dampers h in the main flue E opposite each chamber, substantially as and for the purpose set forth. 7th. The combination in a continuous brick kiln, of two stacks, a main draft flue extending entirely around the kiln and communicating with both stacks, branch flues extending from said main flue to each section of the kiln, and dampers in said main flue whereby the kiln may be worked independently in two sections in either direction, or as one continuous kiln in either direction, substantially as set forth. 8th. The combination in a continuous brick kiln, of two stacks, a main draft flue extending entirely around the kiln and communicating with both stacks, branch flues extending from said main flue to each section of the kiln, dampers in the main draft flue at each side of both stacks, by the adjustment of which the kiln may be worked independently in two sections in either direction, and a damper in each stack for cutting out of use either stack to operate as one continuous kiln with either stack, substantially as set forth. 9th. In a continuous brick kiln, the combination of a main draft flue extending entirely around the kiln, branch flues extending therefrom to each section of the kiln, two stacks located at opposite points and with which said main draft flue communicates, a main hot air flue, branch flues extending therefrom to each section of the kiln, and controlling dampers for said main and branch flues and said stacks, substantially as set forth. 10th. The combination, in a continuous brick kiln, having a number of chambers or sections, of the main hot air flue, branch flues extending from said hot air flue to each section, whereby the hot air from a cooling section is conducted to the drying sections in advance of the burning sections, and cross-over connections from the sections on one side of the kiln to the sections on the other side of the kiln, whereby the hot air from the cooling sections on one side of the kiln may be conducted to the drying sections on the opposite side of the kiln independently of the main hot air flue, substantially as set forth. 11th. The combination in a continuous brick kiln, having a number of chambers or sections arranged in two rows with a dividing wall between the two rows, of a main hot air flue extending entirely around the structure, branch flues extending from said main hot air flue to each section, whereby the hot air from a cooling section is conducted to the drying sections in advance of the burning sections, and cross-over connections from

the sections on one side of the kiln to the sections on the other side of the kiln, whereby the hot air from the cooling sections on one side of the kiln may be conducted to the drying sections on the opposite side of the kiln independently of the main hot air flue, substantially as set forth.

**No. 59,811. Apple Packing Device.**

(Appareil pour emballer les pommes.)

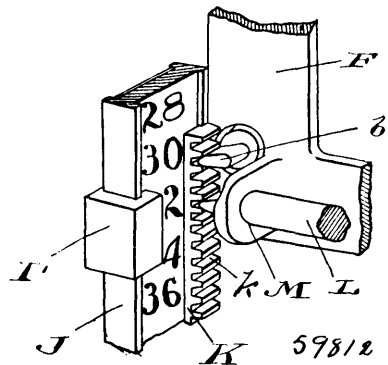


Benjamin M. Sanford, Woodville, Nova Scotia, Canada, 2nd May, 1898; 6 years. (Filed 14th March, 1898.)

Claim.—1st. A fruit packing basket, opening and closing at the bottom, substantially as and for the purpose hereinbefore set forth. 2nd. The pulp head used in combination with the packing basket, substantially as and for the purpose hereinbefore set forth.

**No. 59,812. Cloth Measuring Machine.**

(Machine à mesurer le drap.)



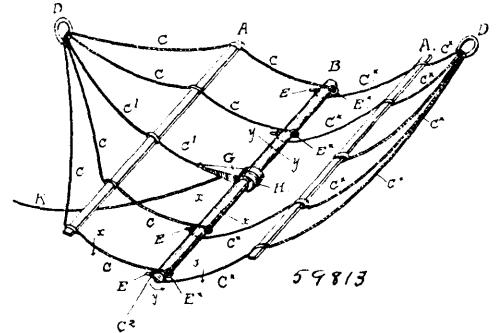
J. Harvey Vanderburgh, Mountsberg, Ontario, Canada, 2nd May, 1898; 6 years. (Filed 16th March, 1898.)

Claim.—1st. A cloth measuring machine, embracing in its construction a frame, a drum provided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, and a detent pawl engaging the rack, substantially as specified. 2nd. A cloth measuring machine, embracing in its construction a frame, a drum provided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, and frictional rolls journalled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, substantially as specified. 3rd. A cloth measuring machine, embracing in its construction a frame, a drum pro-

vided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar, adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, frictional rolls journaled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, a lug or stop connected to the end of the drum, and a resisting spring connected to the frame to engage the lug and arrest the reverse revolution of the drum, substantially as specified. 4th. A cloth measuring machine, embracing in its construction a frame, a drum provided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, frictional rolls journaled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, a lug or stop connected to one end of the drum, a registering spring connected to the frame to engage the lug and arrest the reverse revolution of the drum, and a swinging bale connected to the frame, adapted to swing either to the front or rear of the measuring drum, substantially as specified. 5th. A cloth measuring machine, embracing in its construction a frame, a drum pivoted with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, frictional rolls journaled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, a series of longitudinal grooves extending from end to end of the drum, guide plates connected to each side of each groove to reduce the width of the same, and numerals indicated on the drum to specify the fraction of the yard represented by the groove, substantially as specified. 6th. A cloth measuring machine embracing in its construction a frame, a drum provided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, frictional rolls journaled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, a series of longitudinal grooves extending from end to end of the drum, guide plates connected to each side of each groove to reduce the width of the same, and numerals indicated on the drum to specify the fraction of the yard represented by the groove, substantially as specified. 7th. A cloth measuring machine embracing in its construction a frame, a drum provided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, frictional rolls journaled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, a lug or stop connected to one end of the drum, a registering spring connected to the frame to engage the lug and arrest the reverse revolution of the drum, a series of longitudinal grooves extending from end to end of the drum, guide plates connected to each side of each groove to reduce the width of the same, and numerals indicated on the drum to specify the fraction of the yard represented by the groove, substantially as specified. 8th. A cloth measuring machine embracing in its construction a frame, a drum provided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, frictional rolls journaled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, a lug or stop connected to one end of the drum, a registering spring connected to the frame to engage the lug and arrest the reverse revolution of the drum, a swinging bale connected to the frame, adapted to swing either to the front or rear of the measuring drum, a series of longitudinal grooves extending from end to end of the drum, guide plates connected to each side of each groove to reduce the width of the same, and numerals indicated on the drum to specify the fraction of the yard represented by the groove, substantially as specified. 9th. A cloth measuring machine, embracing in its construction a frame, a drum provided with a spindle or spindles revolvably mounted in the frame, a gear tooth formed on one of the spindles, a sliding registering bar adjacent to the spindle having the gear tooth, and slidably held in suitable guides connected to the frame, a rack connected to the sliding registering bar, the teeth of which mesh with the gear tooth during the revolution of the drum, a detent pawl engaging the rack, frictional rolls journaled in bearings pivotally connected to the frame, and normally engaging the perimeter of the drum, a lug or stop connected to one end of the drum, a registering spring connected to the frame to engage the lug

and arrest the reverse revolution of the drum, a swinging bale connected to the frame, adapted to swing either to the front or rear of the measuring drum, a series of longitudinal grooves extending from end to end of the drum, guide plates connected to each side of each groove to reduce the width of the same, numerals indicated on the drum to specify the fraction of the yard represented by the groove, and a cutting knife consisting of a blade and handle, and wheels connected to the blade to run against the under side of the guide plates, substantially as specified.

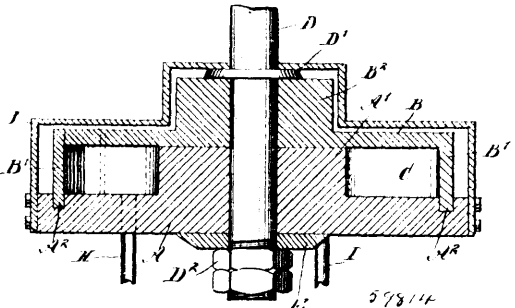
**No. 59,813. Hay Loading Net. (Filet à charger le foin)**



Charles McConnell, McDermitt, Nevada, U.S.A., 2nd May, 1898; 6 years. (Filed 14th April, 1898.)

*Claim.*—1st. In a hay-loading net, the combination with the two separable sections each formed of a slat and cords, a middle bar, pins passing therethrough and each having an eye at one end and the other end free, the cords of one section being permanently secured to said eyes and passing over the bar and those of the other section having loops at their extremities removably engaging the free ends of the pins and passing thence under the bar, of a shouldered cam rigidly secured to the middle bar, a spring-pressed pin adapted to engage said shoulder to hold the middle bar against rotation, and means for retracting said pin to disengage the same from the shoulder, as and for the purpose set forth. 2nd. In a hay-loading net, the combination with two separable sections, a middle bar permanently secured to one and removably connected to the other section, and a collar rigidly secured to said bar and pivoted to a shoulder or cam projection, of a block, arms extending therefrom and surrounding the collar on opposite sides of the cam, a spring-pressed pin within the block adapted to engage the face of the cam to hold the bar against rotation, and means for disengaging the pin and cam, as and for the purpose set forth.

**No. 59,814. Rotary Engine. (Machine rotatoire)**



Thomas Shortliff and William Willerton, both of Kipp, Montana, U.S.A., 2nd May, 1898. (Filed 26th March, 1898.)

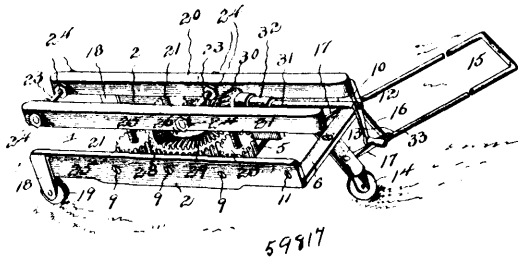
*Claim.*—1st. A rotary engine, comprising a casing formed with a hub and having pivoted abutments, a revoluble piston in the form of a wheel having a rim concentric to the hub of the casing and forming with the said hub an annular working chamber, the said abutments being pivoted near their inner ends and each having a heel at said end adapted to rest against the inner wall or hub, the outer ends of said abutments being adapted to travel on the inner surface of the said rim, and piston heads pivoted near their outer ends on the web of the said wheel, the inner ends of the said piston heads being adapted to travel on the peripheral surface of the hub, substantially as described. 2nd. A rotary engine comprising a casing formed on one face with a hub, the said casing having inlet and exhaust ports alternately arranged, a piston mounted to turn and having its central portion engaging the said hub of the casing, the piston having a solid web and a rim concentric to said hub of the casing and having its outer edge fitted to turn in an annular groove formed on the inner face of the casing thereby forming with the casing an annular working chamber, the said piston being provided with piston heads pivoted near their outer ends to the web of the said piston and mounted to swing in the said chamber, the inner





substantially as set forth. 3rd. A rail brake for cars, having a rigid bifurcated frame with the forward axle journalled through the two parallel limbs, and the rear axle journalled through the end of the single limb, in combination with a pair of horizontal levers hinged to the forward ends of the frame and having brake blocks thereon and a single cam lever operating the two horizontal levers, substantially as set forth. 4th. In a car the combination with axles, of a bifurcated frame journalled thereon, and brackets secured thereto, of levers pivoted to said brackets, depending brake shoes pivotally connected with said levers, a transverse bar connecting the free ends of said levers, a cam lever bearing upon said bar and means for normally holding the brake shoes away from the rails, substantially as set forth. 5th. In a car, the combination with axles, of a bifurcated frame journalled thereon, of levers pivoted to said brackets, depending brake shoes pivotally connected with said levers, coiled retractile springs secured to said levers coiled and to the frame, a transverse bar connecting the free ends of said levers, a rod secured to said bar, a cam lever journalled thereon bearing on said bar, and a coiled spring secured to said lever, substantially as set forth.

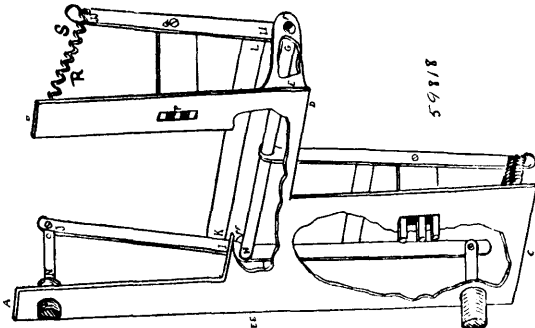
**No. 59,817. Stove Truck. (Camion pour poêles.)**



David Laucks Fogleman, Danville, Pennsylvania, U.S.A., 2nd May, 1898; 6 years. (Filed 14th April, 1898.)

*Claim.*—1st. A device of the class described, comprising a truck frame mounted upon wheels, a centrally arranged master wheel journalled on the truck frame, a vertically movable supporting frame provided with depending screws, pinions provided with threaded openings receiving the screws, said pinions meshing with the master wheel, and means for rotating the master wheel whereby the supporting frame is raised and lowered, substantially as described. 2nd. A device of the class described, comprising a truck frame mounted upon wheels, a vertically movable supporting frame, screws connected with the supporting frame, pinions provided with threaded openings to receive the screws, a master wheel arranged within the pinions and meshing with the same, and an operating shaft provided with a pinion meshing with the master wheel, substantially as described. 3rd. A device of the class described, comprising a truck frame mounted upon wheels, a vertically adjustable supporting frame, vertical screws supporting the same, pinions bearing against the truck frame and provided with threaded openings receiving the screws, a master wheel arranged within the pinions and provided at its periphery with teeth meshing with the same, said master wheel having teeth on one of its faces, a longitudinal shaft journalled in suitable bearings and extending to the front of the truck and a pinion mounted on the rear end of the shaft and meshing with the teeth on the face of the master wheel, substantially as described. 4th. A device of the class described, comprising a truck frame mounted upon wheels and composed of side bars provided at their inner faces with sockets, and cross bars having upturned ends bearing against the inner face of the side bars and secured in the said sockets, a vertically adjustable supporting frame, and means for raising and lowering the same, substantially as described.

**No. 59,818. Sash Lock. (Arrête-croisée.)**



Arthur G. Bailey, Woodstock, New Brunswick, Canada, 3rd May, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.*—A window sash lock, comprising the face plate A, B, C, the arm E, F, and E, E, F, F, supporting the round bolt G, H, and

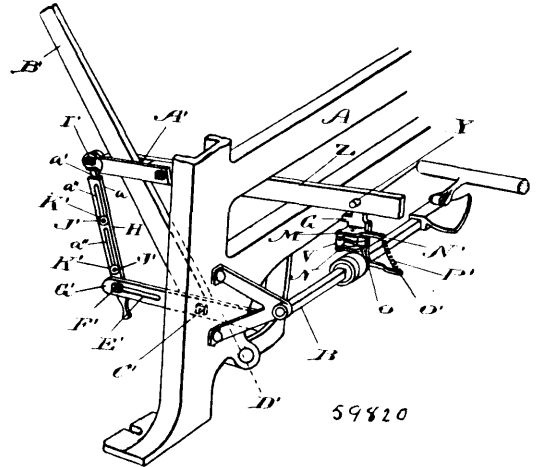
the levers I, J, and I, I, J, J, the flat bolt P, Q, meshing into the rack on the edge of the sash (Figure 2), the spring R, S, connecting the said lever and said face plate, the operating rod N, O, and press button M, as set forth.

**No. 59,819. Ionone or Pseudo-Ionone Product. (Produit ionone ou pseudo-ionone.)**

Edgar de Laire, 92 Rue St. Charles, Paris, France, 3rd May, 1898; 6 years. (Filed 6th November, 1897.)

*Claim.*—1st. The manufacture of iso-ionone by treating ionone or pseudo-ionone with concentrated acids, particularly concentrated sulphuric acid, substantially as described. 2nd. The iso-ionone produced as above set forth.

**No. 59,820. Picking Motion for Looms. (Nœud pour métiers.)**

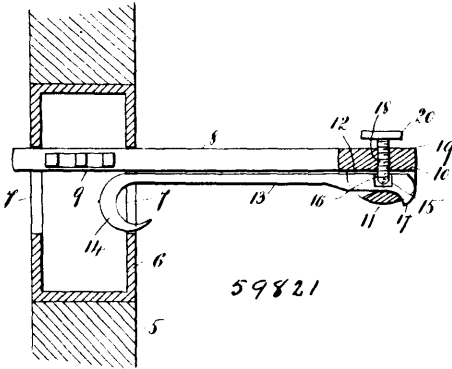


John Jason Brown and Frederick Samuel Arntfield, both of Preston, Ontario, Canada, 3rd May, 1898; 6 years. (Filed 11th November, 1897.)

*Claim.*—1st. In a weaving loom, a pick motion consisting of a picker stick, a sweep stick, a tug strap connected to the sweep stick embracing the picker stick, and means for lowering the tug strap on the picker stick during its stroke, to gradually increase the speed of the pick from the commencement to the completion of the stroke, substantially as specified. 2nd. In a weaving loom, the combination of the picker stick, a sweep stick, a tug strap connected to the sweep stick embracing the picker stick, and a pitman pivotally connected to the rocker arm and to the tug strap, to lower it on the picker stick during its stroke, to gradually increase the speed of the pick from the commencement to the completion of the stroke, substantially as specified. 3rd. In a weaving loom, the combination of the rocker arm, a picker stick pivotally connected to the rocker arm, the sweep stick, a tug strap carried by the sweep stick embracing the picker stick, a pitman pivotally connected to the rocker arm and to the tug strap, substantially as specified. 4th. In a weaving loom, the combination of the rocker arm, an extension for the rocker arm having an elongated slot, a picker stick pivotally connected to the rocker arm, a sweep stick, a tug strap carried by the sweep stick embracing the picker stick, a pitman having one end pivotally connected to the tug strap, and the opposite end provided with a pivot bolt longitudinally movable in the elongated slot of the rocker arm extension, substantially as specified. 5th. In a weaving loom, the combination of the rocker arm, an extension for the rocker arm having an elongated slot, the picker stick pivotally connected to the rocker arm, the sweep stick, a tug strap carried by the sweep stick, a pitman, consisting of telescopic sections, means for locking the telescopic sections in their adjusted positions, one end of the pitman pivotally connected to the tug strap, and the opposite end provided with a pivot bolt longitudinally reversible in the elongated slot, substantially as specified. 6th. In a weaving loom, a relief for the picking motion, consisting of a picking dog mounted on and moving in conjunction with the shoe shaft, and a sweep arm loosely mounted and separately locked to the picking dog, substantially as specified. 7th. In a weaving loom, a relief for the picking motion, consisting of a picking dog having an enlarged hub, through the bore of which passes the shoe shaft, sweep arm loosely mounted on the hub of the picking dog, and means for separably locking together the sweep arm and picking dog, substantially as specified. 8th. In a weaving loom, a relief for the picking motion, consisting of a picking dog, provided with an enlarged hub, through the bore of which passes the shoe shaft, the sweep arm loosely mounted on the hub of the picking dog, a spring actuated latch carried by the sweep arm, normally engaging a cam carried by the picking dog, to separably lock together the sweep arm and picking dog, substantially as specified. 9th. In a weaving loom, a relief for the picking motion, consisting of a picking dog having its top beveled and inclined from

rear to front, and an enlarged hub through the bore of which passes the shoe shaft, a sweep arm loosely mounted on the hub of the picking dog, a spring actuated latch pivotally connected to the sweep arm, a cam carried by the picking dog normally engaged by the latch, an L-shaped lug embracing the top of the picking dog, substantially as specified. 10th. In a weaving loom, a relief for the picking motion, consisting of a picking dog having its top beveled and inclined from rear to front, and enlarged hub through the bore of which passes the shoe shaft, a sweep arm loosely mounted on the hub of the picking dog, a spring actuated latch pivotally connected to the sweep arm, a cam carried by the picking dog normally engaged by the latch, an L-shaped lug embracing the top of the picking dog, a tooth extending rearwardly from the end of the latch, a trip dog pivotally connected to the sweep arm, to normally engage the tooth of the latch, and overhanging the sweep arm to be engaged by the return of the picking dog, substantially as specified. 11th. In a weaving loom, a relief for the picking motion, consisting of a picking dog having its top beveled and inclined from rear to front, an enlarged hub through the bore of which passes the shoe shaft, a sweep arm loosely mounted on the hub of the picking dog, a spring actuated latch pivotally connected to the sweep arm, a cam carried by the picking dog normally engaged by the latch, an L-shaped lug embracing the top of the picking dog, a tooth extending rearwardly from the end of the latch, a trip dog pivotally connected to the sweep arm, to normally engage the teeth of the latch, and overhanging the sweep arm to be engaged by the return of the picking dog, and a spring connected to the sweep arm and picking dog, to facilitate their return to their normal position after being separated, substantially as specified.

**No. 59,821. Key Fastener. (Attache de clé.)**



Joseph Richard Parker, London, Middlesex, England, 3rd May, 1898; 6 years. (Filed 21st March, 1898.)

*Claim.*—1st. A key, provided with a head in which is formed a longitudinal passage which ranges parallel with the shaft of the key, and a key-bolt or rod which is adapted to be passed therethrough, one end of which is adapted to enter the key-hole and the other end of which is provided with an oblong head in which is formed a notch or recess, and a screw which is passed through the head of the key and adapted to operate in said notch or recess, substantially as shown and described. 2nd. A key, comprising the usual shaft, and provided at one end with a key-head and at the opposite end with a knob or head, said knob or head being provided at one side with a longitudinal passage which ranges parallel with the shaft of the key, and a key-bolt or rod which is provided at one end with a hook and at the opposite end with an oblong head in which is formed a notch or recess, said knob or head of the key being also provided with a set-screw which is adapted to operate in said notch or recess, substantially as shown and described. 3rd. A key, the shaft of which is provided with a knob or head in which is a longitudinal passage, and a sliding rod or bolt mounted in said passage and adapted to be locked therein, one end of said sliding rod or bolt being adapted to enter the key-hole of a lock when the key is inserted therein and turned, substantially as shown and described.

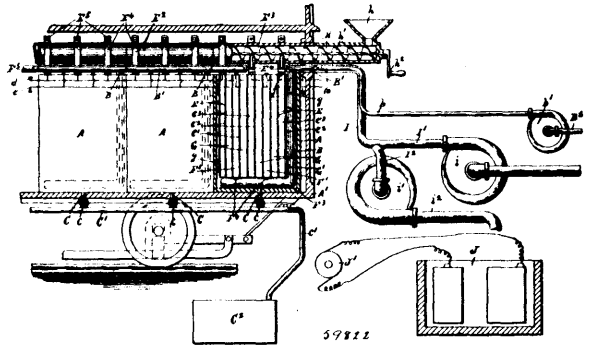
**No. 59,822. Chemical Electric Generator.**

(Générateur chimique électrique.)

Henry Kasper Hess, Syracuse, New York, U.S.A., 3rd May, 1898; 6 years. (Filed 8th November, 1897.)

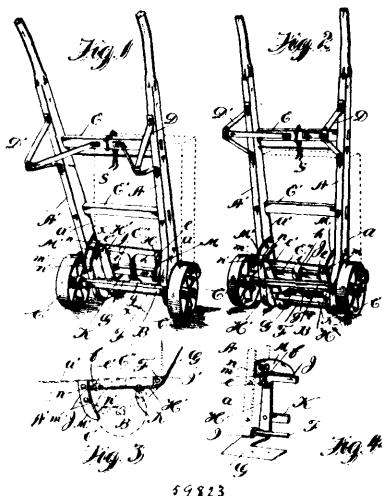
*Claim.*—1st. The combination with an electrolyte-containing casing, and a series of negative electrodes arranged within the casing, of a series of positive electrodes interposed between the negative electrodes, and each comprising an electrical conductor and a metal-amalgam, enclosing supports for the positive electrodes, and a conduit provided with a series of branch passages communicating with the inner chambers of the enclosing supports for discharging the metal-amalgam therein, substantially as and for the purpose described. 2nd. The combination with an electrolyte-containing casing, and a series of positive electrodes arranged within the casing, of a series of negative electrodes interposed between the positive electrodes, and each comprising a body of

active material, and an electrical conductor provided with an inner chamber for receiving the body of active material, said electrical



conductors being formed with pores leading from their exterior faces to their inner chambers, and a conduit provided with a series of branch passages communicating with the inner chambers of the electrical conductors for conveying the active material into said chambers, substantially as and for the purpose specified. 3rd. The combination with an electrolyte-containing casing, a series of positive electrodes arranged within the casing and each comprising an electrical conductor and a metal-amalgam, enclosing supports for the positive electrodes, and a conduit provided with a series of branch passages communicating with the inner chambers of the enclosing supports for discharging the metal-amalgam therein, of a series of negative electrodes interposed between the enclosing supports for the positive electrodes and each comprising a body of active material and an electrical conductor provided with an inner chamber for receiving the body of active material, said electrical conductors for the negative electrodes being formed with pores leading from their exterior faces to their inner chambers, and a conduit provided with a series of branch passages communicating with the inner chambers of the electrical conductors for conveying the active material into said chambers, substantially as and for the purpose set forth. 4th. The combination with a series of electrodes each consisting of an electrical conductor and a metal-amalgam, of enclosing supports for the metal-amalgam of the electrodes, said supports being provided with inlet-openings for permitting the entrance of the metal-amalgam, a conduit having branch passages for conducting the metal-amalgam to said inlet-openings, and a feeding device movable within the conduit, substantially as and for the purpose described. 5th. The combination with positive electrodes, non-electric conducting enclosing supports for the electrodes, said supports being provided with perforated walls, and a non electric conducting filling for the perforations of said walls, of negative electrodes provided with porous walls and inner chambers, active material arranged within said chambers, and insulating pieces interposed between said supports and electrical conductors and formed with openings in their lower portions, substantially as and for the purpose specified.

**No. 59,823. Truck. (Camion.)**

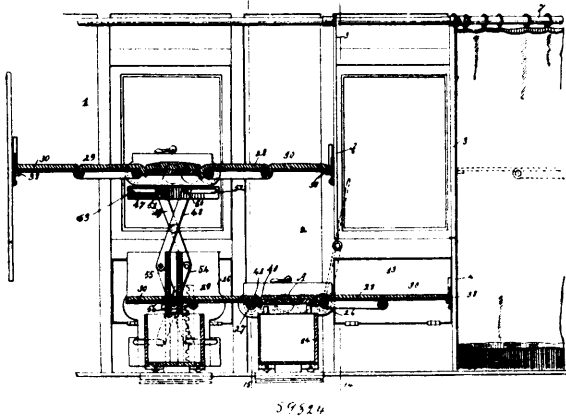


Cornelius Andrew Buck, San Francisco, California, U.S.A., 3rd May, 1896; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. The combination with a truck, of a shovel pivoted to said truck, and foot actuated means for changing the angle between said shovel and the direction of the handles of the truck set forth.

2nd. The combination with a truck, of a shovel pivoted to said truck, the outer extremity of said shovel being capable of but a single motion in the arc of a circle, and foot actuated means for changing the angle between said shovel and the direction of the handles, as set forth. 3rd. The combination with a hand truck, of a shovel pivoted to said truck, said pivotal point being stationary relative to said truck and foot actuated means for shifting and locking said shovel in the desired position, substantially as set forth. 4th. A truck provided with a terminal shovel and foot actuated means for changing the angle between said shovel and the direction of the handles of the truck, said shovel being so connected with said truck that the distance between the outer extremity of the former and the lower extremity of the latter will remain approximately constant as set forth. 5th. A truck provided with a hinged shovel having a relatively stationary pivot, arms leading from said shovel and rigidly connected thereto and foot actuated means for locking said arms in the desired position, substantially as set forth.

**No. 59,824, Sleeping Car. (Chur-dortoir.)**

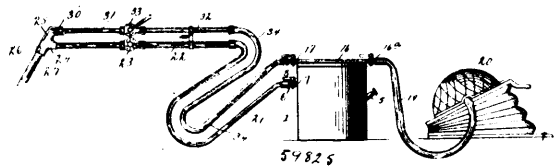


James Madison Osgood, Boston, Massachusetts, U.S.A., 3rd May, 1896; 6 years. (Filed 14th March, 1898.)

*Claim.*—1st. In a parlor and sleeping car, in combination with curtains running parallel with the aisle, partitions folding into the framing of the car and when in use extending transversely, separating said car into sections, an intermediate partition dividing each state-room into compartments, thereby furnishing a separate dressing-room for each berth contained in said compartments, substantially as specified. 2nd. In a parlor and sleeping car with partitions folding into the framing of the car and when in use extending transversely of the car, a bar attached to said partitions, provided with pins which interlock with ends of the berths, holding them to the partitions in firm manner for night use and automatic locking devices on the partitions for engaging over the berths, substantially as specified. 3rd. A railway-car, partitions therein and adapted to be extended transversely of the car, to divide it into sections for night use, each section containing two chairs or seats capable of being converted into berths for night use a portion of one chair interlapping about half-way over the other chair, means for interlocking portions of the chairs with the partitions, whereby the chair portion may be independently detached from the partitions and swung up or down in a vertical position, thus providing a free space from the floor to the top of the car, substantially as specified. 4th. A car, having a slot-track extended longitudinally of the car, a series of seats, each of said seats having a guide-block engaging in said slot-track, and a spring-actuated lever on the guide-block, for locking the seat in position in said guide-block, substantially as specified. 5th. A car having a longitudinal channel form in its floor, strips secured to said floor and overlapping said channel, one of said strips having shoulders formed in it, a series of seats, a guide-block on each seat having flanged portions to engage under the strips, and a locking-lever on the block to engage with one of said shoulders, substantially as specified. 6th. A car having recesses formed in its side wall, a receptacle adapted to fold therein, and a hinged cover for said recess, the said cover also forming a seat when arranged in a horizontal position, substantially as specified. 7th. A parlor and sleeping cars having a series of transversely arranged seats, a series of seats at right angles thereto adapted to fold up against the side wall of the car, and a receptacle having a front board and flexible sides pivoted rearward of each of said right angle seats, substantially as set forth. 8th. A parlor and sleeping car, having recesses formed in its side wall, partitions adapted to fold into said recesses, rods extended transversely of the car, pins projected from said rods and adapted to pass through holes in the partitions, and automatic latches carried by the partitions to engage with said pins and rigidly hold the partitions in their transverse positions, substantially as specified. 9th. A parlor and sleeping car, having recesses in its side wall, partitions adapted to fold into said recesses and also to be moved transversely of the car, automatic means for locking said

partitions in their transverse positions, car seats adapted to be converted into berths, supports on the partitions with which the ends of the berth are engaged, and automatic latches for engaging over the ends of the berths, to prevent an accidental upward movement thereof, substantially as specified. 10th. The combination with a seat, of a back-section having swinging connection therewith, the said back consisting of two sections, an extension-section pivotally connected to said back-section, a leg-rest having swinging connection with the seat, gearing for adjusting said back and leg-rest in unison, the said back and legs being each movable independently of the gearing, and means for locking the several sections in position, substantially as specified. 11th. The combination with a car-seat, of leg-rests pivoted to one edge thereof, a back pivoted to the opposite edge thereof, a chain of gearing for operating said rests and back, the said rests and back also being movable independently of the gearing, and a rack-bar for locking said gearing, substantially as specified. 12th. The combination with a car-seat, of leg-rests pivoted to one edge thereof, a back pivoted to the opposite edge thereof, a chain of gearing for operating said rests and back, a rack-bar for locking said gearing, and a cam-lever for moving said rack-bar out of engagement with the gearing, substantially as specified. 13th. The combination with a car-seat, of leg-rests pivotally connected to one side thereof, a back pivotally connected to the opposite side thereof, and consisting of sections adapted for independent movement with relation to each other, means for locking said back-sections to move in unison, means for locking the leg-rest sections to move in unison, a chain of gearing for operating the back-sections relatively to the seat and a leg-rest section relatively to the seat, a rack for locking said gearing, a cam-lever for holding the rack out of engagement with the gear, locking mechanism between the back-sections and said gearing, and locking mechanism between the leg-rest sections and said gearing, substantially as specified. 14th. A car-seat adapted to be converted into a berth, and comprising a base portion, a seat portion movable vertically with relation to the base portion, lazy-tongs mechanism for causing said movements, a pinion on a shaft of the lazy-tongs, a fixed rack with which the pinion engages, a leg-rest pivotally connected to one edge of the seat, a back-rest pivotally connected to the opposite end of said seat, whereby said rests may be extended horizontally to form a berth, or moved into position to form a seat, substantially as specified. 15th. A car-seat, comprising a base portion, a seat portion movable relatively thereto in a vertical direction, lazy-tongs links for causing said vertical movements, a pinion mounted on a shaft of the lazy-tongs, and a rack secured to the seat-boxing engaged by said pinion, substantially as specified. 16th. A car-seat, comprising a base-portion, a seat movable vertically with relation thereto, a lazy-tongs mechanism for causing said vertical movements, a pinion carried by the lazy-tongs, a fixed rack engaged by the pinion, extensions pivotally connected with the opposite edges of the seat, and gearing for operating said extensions, substantially as specified. 17th. A car-seat, comprising a base portion having casings at its upper end, gearing mounted in said casings, a rack-bar for engaging the gearing, a cam-lever for moving the rack-bar out of engagement with the gearing, a seat mounted on the support, extension-pieces pivoted to opposite edges of said seat, and detachable connections between the extensions and gearing, whereby the several sections may be moved in unison and whereby thesections may be independently moved, substantially as specified. 18th. A car-seat, having transversely-concaved edges extending across the upholstery, and extension-pieces pivoted to the opposite edges and having convex portions extending across the upholstery to engage in said concavities, whereby a substantially unbroken surface may be provided between the extensions and seat when said extensions are extended horizontally, substantially as specified.

**No. 59,825. Carburetor. (Carbureteur.)**

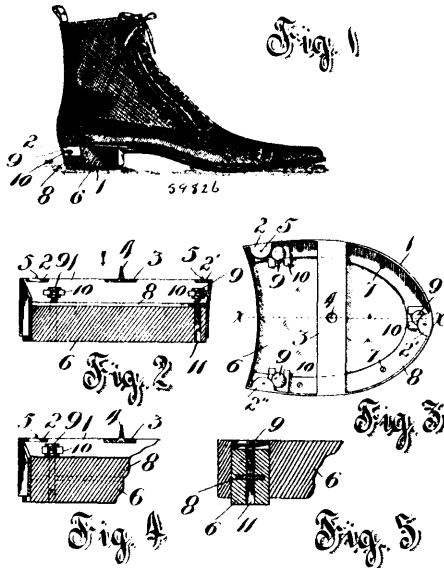


Charles W. Ingraham, Heppner, Oregon, U.S.A., 3rd May, 1898; 6 years. (Filed 13th October, 1897.)

*Claim.*—In a gas-generating apparatus, an upright oil-tank provided above its horizontal center with a horizontal partition-plate between which and the top of the tank is confined an upper air-chamber, and below which partition-plate is confined a lower oil-chamber, said tank also having at one side directly below the partition plate an off-standing valved gas-outlet pipe, a central air-tube depending from the partition-plate to a point in close proximity to the bottom of the tank, series of parallel diaphragms fitted within the tank around the central air-tube and provided with a series of perforations or oil openings of vertical alignment, a horizontal deflecting-plate fitted on the central air-tube between the uppermost diaphragm and the side gas-outlet pipe, a straight air-distributing tube arranged flat on the top of the lid of the tank and provided with valved extremities, and at an intermediate point with a central

discharge-check projected through an opening in the lid of the tank, a blowpipe device having pipe connections respectively with the gas-outlet pipe and one of the valved ends of the air-distributing tube, and an air-supply tube connected with the other valved end of said distributing-tube, substantially as set forth.

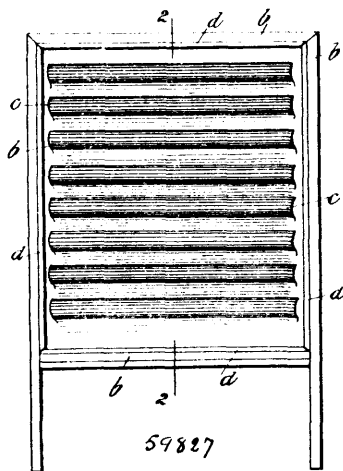
**No. 59,826. Adjustable Heel for Shoes.**  
(*Talon ajustable pour chaussures.*)



Bernard McKiernan, Stockton, California, U.S.A., 3rd May, 1898; 6 years. (Filed 6th April, 1898.)

*Claim.*—1st. In a device of the class described, the combination with an outer shell of an inner wearing surface and means for adjusting said surface relation to said shell as set forth. 2nd. In a device of the class described, the combination with an outer shell of an inner wearing surface and means for adjusting said surface relative to said shell, said surface being capable of reversal within said shell, substantially as set forth. 3rd. A heel for shoes provided with a wearing surface, said surface being adjustably secured to said shoe for the purpose set forth. 4th. A flexible yielding surface for the heels of shoes, said surface being cast or moulded about one or more metal plates, said plates being perforated for the reception of a screw or other securing means. 5th. A heel for shoes provided with a yielding surface, a metal plate secured to said surface and one or more adjustable screws penetrating said plate, substantially as set forth.

**No. 59,827. Washing Board.** (*Planche à laver.*)



George Brown and William Catto Greig, both of 183 Hereford Street, Christchurch, New Zealand, 3rd May, 1898; 6 years. (Filed 16th February, 1898.)

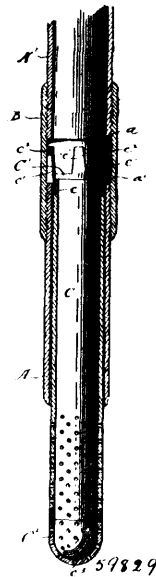
*Claim.*—An improved washing board, the rubbing surface of which consists of a sheet or slab of corrugated india-rubber, substantially as and for the purposes herein described and illustrated in the drawings.

**No. 59,828. Paint.** (*Peinture.*)

Allan Twistleton Hall, Ivy Cottage, near Hull, York, England; 3rd May, 1898; 6 years. (Filed 16th November, 1897.)

*Claim.*—1st. The preparation of colour-wash or distemper paints by mixing and heating together pigment, glue, linseed oil and oak varnish, and then oxidizing them. 2nd. The preparation of colour-wash or distemper paint by mixing and heating together pigment, glue, linseed oil, glycerine and oak varnish, and then oxidizing them. 3rd. The preparation of colour-wash or distemper paints by mixing and heating together pigment, glue, linseed oil, a disinfectant and oak varnish, and then oxidizing them. 4th. The preparation of colour-wash or distemper paints by mixing and heating together pigment, glue, linseed oil, glycerine, a disinfectant and oak varnish, and then oxidizing them. 5th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil and oak varnish. 6th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil, glycerine and oak varnish. 7th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil, a disinfectant and oak varnish. 8th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil, glycerine, a disinfectant and oak varnish. 9th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil and oak varnish, with the addition of a colouring material. 10th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil, glycerine and oak varnish, with the addition of a colouring material. 11th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil, a disinfectant and oak varnish, with the addition of a colouring material. 12th. Colour-wash or distemper paint, consisting of an oxidized mixture of pigment, glue, linseed oil, glycerine, a disinfectant and oak varnish, with the addition of a colouring material.

**No. 59,829. Artesian Well Strainer.**  
(*Filtre pour puits artésiens.*)



Mark D. Wheeler, Redfield, South Dakota, U.S.A., 3rd May, 1898; 6 years. (Filed 17th November, 1897.)

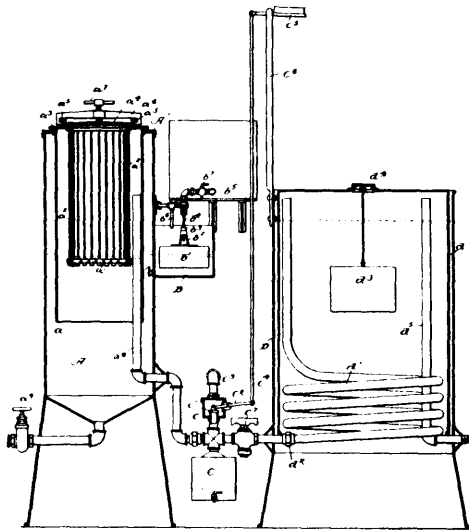
*Claim.*—The combination with a well tubing having sections A and A' connected to each other by a coupling B so as to leave an annular space between the adjoining ends of said sections, of a strainer consisting of the part C the lower portion of which is perforated and provided with a threaded aperture, the upper end of the part C being threaded together with a threaded sleeve or thimble C' in engagement with the upper end of the part C and having upwardly and outwardly projecting spring arms c' with blocks or heads at their free ends, substantially as shown and for the purpose set forth.

**No. 59,830. Gas making Apparatus.**  
(*Appareil pour la fabrication du gaz*)

Julius Leede, Minneapolis, Minnesota, U.S.A., 3rd May, 1898; 6 years. (Filed 26th November, 1897.)

*Claim.*—1st. In a gas making apparatus the combination of a generating chamber, a water chamber below said generating chamber, an exterior water supply and means arranged outside the chamber for adjusting the normal water line in the water chamber to vary the rate of generation of the gas. 2nd. In an apparatus for making gas, the combination of a gas generating chamber, a main water

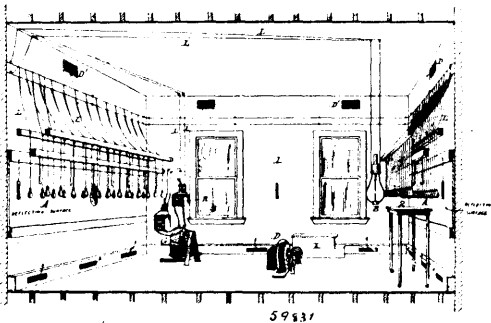
chamber surrounding the generating chamber, an exterior water supply and means outside the chambers for adjusting the normal



59830

water line in the water chamber and thus vary the rate of generation of the gas, substantially as described. 3rd. In apparatus for making gas, the combination of a water chamber, a generating chamber enclosed by the water chamber, a carbide cage within the generating chamber, a gas holder, a buoyant weight attached to the holder bell and pipe connection between the generator and holder, substantially as described. 4th. In apparatus for making gas, the combination of a water chamber, a generating chamber within the water chamber, a carbide cage within the generating chamber, an exterior water supply, an adjustable float valve for establishing the normal water line a gas holder, a buoyant weight attached to the gas holder bell, and a passage between the generator and holder, substantially as described.

**No. 59,831. Method of Preserving Perishable Substances.** (*Méthode de préservation de substances périssables.*)



59831

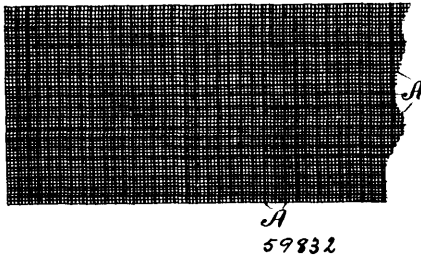
Willard Gibson Day, Baltimore, Maryland, U.S.A., 3rd May, 1898; 6 years. (Filed 24th January, 1898.)

*Claim.*—1st. The method of preserving organic perishable substances, which consists in producing waves of radiant energy, bringing said radiant energy to the required strength and activity, and causing it to penetrate and act upon perishable substances placed in proximity to said point of action for a sufficient length of time to destroy all germs of decay, substantially as set forth. 2nd. The method of preserving organic perishable substances, which consists in generating electrical energy, producing by said energy waves of radiant energy, bringing said radiant energy to the required strength and activity, and causing it to penetrate and act upon the perishable substances placed in proximity to said point of action for a sufficient length of time to destroy all germs of decay, substantially as set forth. 3rd. The method of preserving organic perishable substances, which consists in generating electric currents, carrying said currents to any desired point, producing by said currents light, heat and actinic waves of energy, bringing said waves to the required strength and activity, and causing them to penetrate and act upon the perishable substances placed in proximity to said point of action for a

sufficient length of time to destroy all germs of decay, substantially as set forth. 4th. The method of preserving organic perishable substances, which consists in generating electric currents, carrying said currents to any desired point, producing by said currents a focus of radiant energy in, for example, an incandescent or arc lamp, by which light, heat and actinic waves are produced, and causing said waves to penetrate and act upon the perishable substances placed in proximity to said focus for a sufficient length of time to destroy all germs of decay, substantially as set forth. 5th. The herein described method of preserving organic perishable substances from decay and deterioration, which consists in producing powerful light, heat and actinic or chemical rays capable of penetrating said substances, and in proximity exposing the same to the penetrative action of said rays for a sufficient length of time to accomplish the required result. 6th. The method herein described of preserving organic perishable substances from decay and deterioration, which consists in producing powerful light, heat and actinic or chemical rays capable of penetrating said substances in proximity, exposing the same to the penetrative action of said rays, and regulating the amount of energy in accordance with the demand, and subjecting said germs to said action for such time as is in accordance with the strength of the germs to be destroyed in each particular case. 7th. The method of preserving organic perishable substances from decay, which consists in producing light, heat and actinic or chemical rays capable of penetrating said substances, and in proximity exposing said substances to the penetrative action of said rays, and subjecting said substances, while under the influence of said currents, to a circulation of air for carrying off therefrom the moisture liberated by the heat energy of said electric currents, substantially as set forth. 8th. The method of preserving organic perishable substances, which consists in generating electric currents, carrying said currents to any desired point, producing by said current light, heat and actinic waves of energy, bringing the said waves to the required strength and activity, and causing them to penetrate and act upon the perishable substances placed in proximity to said point for a sufficient length of time to destroy all germs of decay, and subjecting said substances, while under the influence of said currents, to a circulation of artificially dried air for carrying off therefrom the moisture liberated by the heat energy of said electric currents, substantially as set forth. 9th. The method of preserving organic perishable substances, which consists in generating electric currents, carrying said currents to any desired point, producing by said currents light, heat and actinic waves of energy, bringing the said waves to the required strength and activity, and causing them to penetrate and act upon the perishable substances for a sufficient length of time to destroy all germs of decay, and subjecting said substances, while in proximity to, and under the influence of said currents, to a circulation of artificially dried and filtered air for carrying off therefrom the moisture liberated by the heat energy of said electric currents, substantially as set forth. 10th. The method of preserving organic perishable substances, which consists in generating electric currents, carrying said currents to any desired point, producing by said currents, light, heat and actinic waves of energy, bringing the said waves to the required strength and activity, and causing them to penetrate and act upon the perishable substances for a sufficient length of time to destroy all germs of decay, and subjecting said substances while in proximity to, and under the influence of said currents, to a circulation of artificially dried and filtered air for carrying off therefrom the moisture liberated by the heat energy of said electric currents, substantially as set forth. 11th. The herein described method of producing an article of food, which consists in subjecting the food substance, placed in proximity to the radiant energy of electric currents, utilizing therefrom the light, heat and actinic waves produced thereby, and carrying off the moisture liberated by the heat energy of said currents, substantially as set forth. 12th. The method of producing an article of food, which consists in subjecting the food substance placed in proximity to the radiant energy of electric currents, utilizing therefrom the light, heat and actinic waves produced thereby, carrying off the moisture liberated by the heat energy of said currents, and finally pulverizing or grinding said substances, substantially as set forth. 13th. The method of producing an article of food, which consists in subjecting the food substance placed in proximity to the radiant energy of electric currents, utilizing therefrom the light, heat and actinic waves produced thereby, carrying off by artificially dried air the moisture liberated by the heat energy of said currents, and finally pulverizing or grinding said substance, substantially as set forth. 14th. The method of producing an article of food, which consists in subjecting the food substance placed in proximity to the radiant energy of electric currents, utilizing therefrom the light, heat and actinic waves produced thereby, carrying off by artificially dried and filtered air the moisture liberated by the heat energy of said currents, and finally pulverizing or grinding said substance, substantially as set forth. 15th. An improved food product, composed of an uncooked, unsmoked, unsalted or chemically unchanged organic substance in which the destructive germs have been sterilized, and in which the natural juices remain in quiescent, but unchanged and utilizable condition, substantially as described. 16th. An improved food product, composed of an uncooked, unsmoked, unsalted or chemically unchanged organic substance in which the destructive germs have been sterilized, and in which the natural juices remain in a quiescent, but unchanged and utilizable condition, said product being pulverized, substantially as described.

**No. 59,832. Stiffening Fabric.**

(*Tissus pour donner de la rigi lité.*)

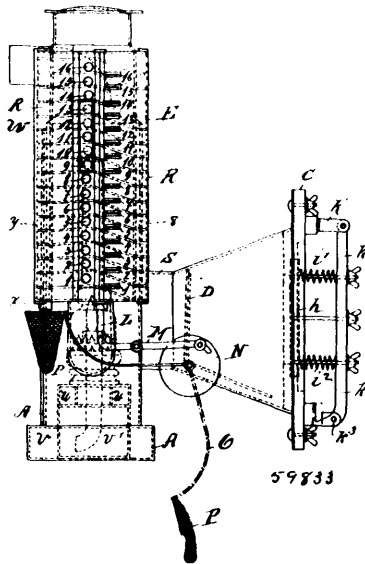


Edward Kirk Warren, Three Oaks, Michigan, Ohio, U.S.A., 3rd May, 1898; 6 years. (Filed 9th December, 1897.)

*Claim.*—1st. A woven stiffening fabric, composed of warp and weft threads, one, at least, of which shall contain resilient strands formed of a continuous longitudinal thread with hairs or fibers distributed along the same, and having overlapping meeting ends, and a wrapping thread binding said hairs to the longitudinal thread, as specified. 2nd. A woven stiffening fabric, having a warp and weft, one of which at least, shall contain strands made up of stiff resilient fibers having overlapping ends, retained together by a closely wrapping thread wound thereon, as specified. 3rd. A woven stiffening fabric, having a warp and weft, one of which at least, shall contain strands made up of hairs having overlapping ends retained together by a closely wrapping thread wound thereon, as specified. 4th. A woven stiffening fabric, composed of warp and weft thread, one, at least, of which shall contain resilient strands formed of a continuous longitudinal thread with fibers or splints of stiff resilient material distributed along the same and have overlapping meeting ends, and a wrapping thread binding said fibers or splints to the longitudinal thread, as specified.

**No. 59,833. Photo Copying Apparatus.**

(*Appareil à copier les photographies.*)



Emil Buhler, 8 Weber Strass of Heidelberg, Baden, Germany, 3rd May, 1898; 6 years. (Filed 31st January, 1898.)

*Claim.*—1st. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within the casing, another casing located in front of the burner of said lamp, a flap arranged in said other casing, and adapted to keep the light emitted by the lamp off the other casing, a third casing forming a spiral way, a ball adapted to roll down upon the spiral way, and a lever connected to said flap, and extending below the exit of the spiral way, substantially as and for the purpose hereinbefore set forth. 2nd. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within said casing, another casing located in front of the burner of the lamp, a third casing forming a spiral way, a ball adapted to roll down upon the spiral way, a lever terminating below the exit of said, and adapted to catch the said ball, a flat arranged in said other casing, and secured to the axle of said lever, and means for keeping the ball back within the casing until said flap is opened so as to allow of the light emit-

ted by the lamp passing into the said second casing, substantially as and for the purpose hereinbefore set forth. 3rd. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within said casing, another casing located in front of the burner of said lamp, a copying frame attached to the outer end of said other casing, a flap arranged within the latter, and adapted to keep the light emitted by the lamp off said frame, a third casing forming a spiral way, a ball adapted to roll along the latter, a lever connected to said flap, and terminating below the exit of said spiral way, and a vertical series of openings located at the outer side of said third casing, and serving for the introduction of the ball into the spiral way, substantially as and for the purpose hereinbefore set forth. 4th. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within said casing, another casing located in front of the burner of said lamp, a flap arranged in said other casing, and adapted to keep the light emitted by the lamp off the other casing, a third casing forming a spiral way, a ball adapted to roll down upon said spiral way, and a lever connected to said flap, and extending below the exit of the spiral way, said spiral way being composed of descending and ascending parts, substantially as and for the purpose hereinbefore set forth. 5th. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within said casing, another casing located in front of the burner of said lamp, a flap arranged in said other casing, and adapted to keep the light emitted by the lamp off the other casing, a third casing forming a spiral way, a ball adapted to roll down upon said spiral way, and a lever connected to said flap, and extending below the exit of the spiral way, the outer wall of said spiral way being formed by a layer of felt, substantially as and for the purpose set forth. 6th. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within said casing, another casing located in front of the burner of said lamp, a flap arranged in said other casing, and adapted to keep the light emitted by the lamp off the other casing, a third casing forming a spiral way, a ball adapted to roll down upon said spiral way, and a lever connected to said flap, and extending below the exit of the spiral way, the basin of said lamp having a lower compartment for the reception of the oil and an upper compartment for the reception of water, a reservoir for the water, and pipes connecting said reservoir with said upper compartment so as to allow of a circulation of the water, substantially as and for the purpose hereinbefore set forth. 7th. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within said casing, another casing located in front of the burner of said lamp, a copying frame attached to the outer end of said other casing, a flap arranged within the latter, and adapted to keep the light emitted by the lamp off said frame, a third casing forming a spiral way, a ball adapted to roll along the latter, a lever connected to said flap, and terminating below the exit of said spiral way, and a vertical series of openings located at the outer side of said third casing, and serving for the introduction of the ball into the spiral way, a vertical axle arranged at the side of said series of openings and having pins adapted to take into the spiral way and to keep said ball back until said axle is turned, and means connecting said axle with the flap, substantially as and for the purpose hereinbefore set forth. 8th. In a copying apparatus for photographs and the like, the combination with a casing, a lamp arranged within said casing, another casing located in front of the burner of said lamp, a copying frame attached to the outer end of said other casing, a flap arranged within the latter, and adapted to keep the light emitted by the lamp off said frame, a third casing forming a spiral way, a ball adapted to roll along the latter, a lever connected to said flap, and terminating below the exit of said spiral way, and a vertical series of openings located at the outer side of said third casing, and serving for the introduction of the ball into the spiral way, and a slide adapted to be moved along upon said series of openings and having an opening adapted to afford access to one of said openings, all for the purpose hereinbefore set forth.

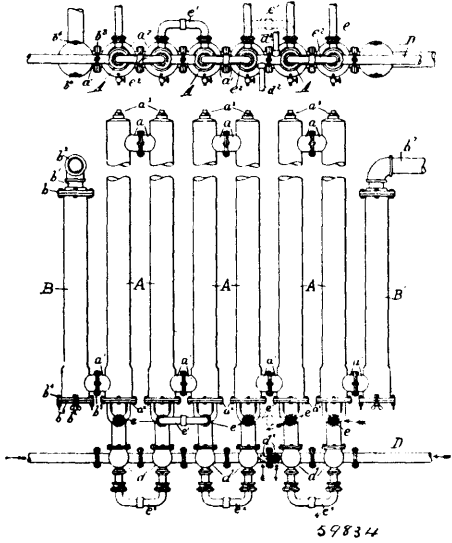
**No. 59,834. Wort Cooling Machine.**

(*Machine à refroidir la mout.*)

Henry Emil Deckebach, Cincinnati, U.S.A., 3rd May, 1898; 6 years. (Filed 1st December, 1897.)

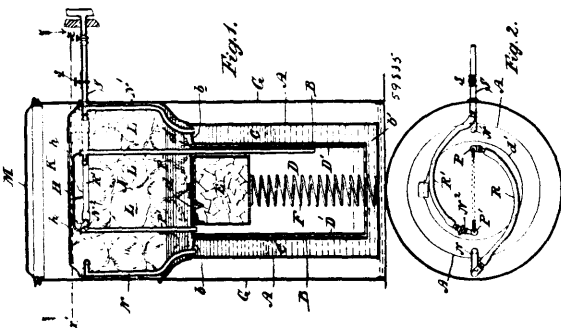
*Claim.*—1st. A wort cooler, composed of a series of similar sections connected together, each section composed of an outer and inner cylinder forming a wort-jacket between said cylinders, conduits for the cooling liquid in said jacket, around which the wort flows, a strainer at the wort-receiving end of the cooler, and a filter at the wort-discharge end of the cooler, induction and eduction pipes conveying the cooling agent through the sections in the opposite direction from the flow of the wort, combined and arranged substantially as shown and described. 2nd. The combination, substantially as hereinbefore set forth, of the cooler, composed of similar sections containing pipes for the cooling agent, and continuous passage for the wort around said pipes, a strainer connected to the first section of the series, said strainer consisting of an outer cylinder and inner perforated cylinder to receive the wort and strain it before passing into the space between the inner and outer cylinders, a branch from strainer leading to the hop-jack, a filtering

cylinder connected to the last section of the series, consisting of an outer cylinder, an inner perforated cylinder closed at the bottom,



and filtering material such as described within said perforated cylinder, a branch from said strainer leading to an exhaust pump for drawing the wort through the cooler, substantially as shown and described. 3rd. The combination, in a wort cooler, of a strainer, consisting of an outer cylinder provided with a removable head, an inner perforated cylinder sustained within the outer cylinder, leaving the space between the cylinders for the passage of the wort, and a discharge branch leading from said space to the cooler, substantially as shown and described. 4th. The combination of the cooler, a filter connected to the wort-discharge end of said cooler, said filter being composed of an outer cylinder and inner perforated cylinder sustained within said outer cylinder, leaving a space between the two cylinders, said inner cylinder being closed at the top and open at the bottom, filtering material such as described within and supported by said perforated cylinder, a branch for connecting said filter to the cooler at one end and a branch for conveying the wort from the filter at the opposite end, substantially as shown and described. 5th. A section for a wort cooler, consisting of an outer cylinder having an inlet for the wort near one end and an outlet near the opposite end and upon opposite sides of the cylinder, an inner cylinder for the cooling liquid forming a jacket with the outer cylinder and extending beyond it, a double coiled pipe forming a spiral path in the jacket between the outer and inner cylinders, having its opposite inner ends communicating with the inner cylinder, and its looped end, which extends beyond the outer cylinder, provided with a coupling to receive either an inlet or outlet pipe for the cooling liquid, substantially as shown and described.

**No. 59,835. Acetylene Gas Generator.**  
(Générateur à gaz acétylène.)

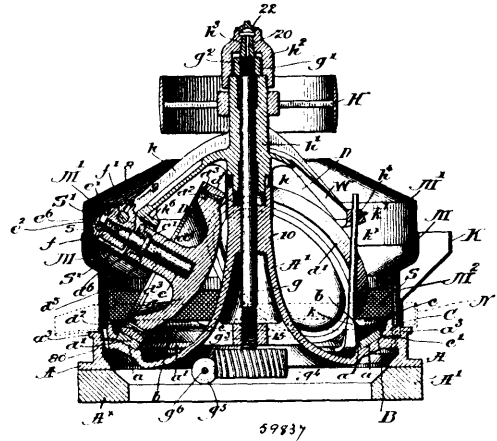


Andrew Holland, Ottawa, Ontario, Canada, 1898; 6 years. (Filed 6th April, 1898.)

*Claim.*—1st. An acetylene gas generator, comprising a water reservoir having an enlarged upper division circumferentially, sponges in said division, a perforated disc covering said sponges, gas pipes within said division and terminating in a lower compartment or gas chamber, said lower compartment subdivided by an annular partition, a removable gas generating chamber surrounded by said partition, and a perforated cage holding the gas generating material and supported within said gas generating chamber, substantially as

set forth. 2nd. An acetylene gas generator, comprising an upper and lower chamber, the upper chamber provided with an outlet gas pipe and in the interior with circulating gas pipes flexibly connected thereto and terminating in the lower chamber, the upper chamber subdivided horizontally by a removable perforated disc forming a sponge chamber below, and an overflow or vacant chamber above said disc, a tubular gas generating chamber containing a carbide holder or cage and an annular partition surrounding said generating chamber, substantially as set forth and for the purpose described. 3rd. The system of installing an acetylene gas plant, which comprises a series or plurality of generators, each sustained on a fixture independent of one another and severally removably connected to a pipe leading to the burners, whereby one generator is removable without impeding the action of the others and the plurality of generators cause production of gas at a low pressure, for safety in burning, and use.

**No. 59,836. Pulverizing Mill.** (Moulin à broyer.)



Edwin Colver Griffin, Newton, Massachusetts, U.S.A., 3rd May, 1898; 6 years. (Filed 4th March, 1898.)

*Claim.*—1st. In a crushing mill, a rotatable carrier having a radial arm, a rocking head mounted therein, a spindle extended inwardly from the head, a curved shield extending around the sides of and beneath the head, and inclosing the outer portion of the head, permitting the latter to rock, a roll on the spindle, and an annular die upon which the roll travels, substantially as described. 2nd. In a crushing mill, a rotatable carrier, a rocking head mounted thereon, a spindle secured to the head and having a longitudinal bore to receive lubricant, means to force the lubricant toward the inner end of the spindle, and a roll mounted rotatably on the spindle, substantially as described. 3rd. In a crushing mill, a rotatable carrier having a radial arm, and a spindle pivotally connected at its outer end with said arm, a roll rotatable on the spindle, an annular die upon which the roll travels, and a curved shield extending beneath the spindles between the roll and the arm and attached to the latter, the rotation of the carrier and the roll inducing a current of air through the shield to keep the working parts free from dust, substantially as described. 5th. In a crushing-mill, an annular die having an inwardly and downwardly inclined upper face, a roll inclined toward the centre of the mill and adapted to rest and travel upon said face, and having its inner side convex, to thereby bring the centre of gravity of the roll low down and near the centre of the mill to relieve the strain upon the roll-support and increase the pressure upon the die, and means to support the roll and carry it around the die, substantially as described. 6th. In a crushing or pulverizing-mill, a rotatable carrier having a radial arm, a rocking head mounted in said arm, a spindle extended inward from the head, a protective shield for said head and spindle and rigidly attached to the arm, the shield surrounding said head and spindle, a roll rotatable about the spindle, means to retain the roll thereon, and an annular die upon which the roll rests and is adapted to travel, substantially as described. 7th. In a crushing-mill, an annular die having an inclined upper face, a roll adapted to rest and travel upon said face, the body portion being concave-convex, the convex side being inward and inclined toward the centre of the mill to bring the centre of gravity of the roll low down and near the centre of the mill, and means to support the roll and carry it around the die, substantially as described.

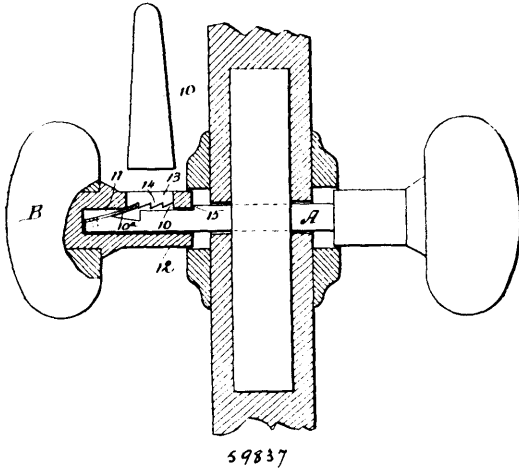
**No. 59,837. Door-Knob Fastener.**

(Attache de bouton de porte.)

James S. Brownson and Frederick Jones, both of Brooklyn, New York, U.S.A., 3rd May, 1898; 6 years. (Filed 19th April, 1898.)

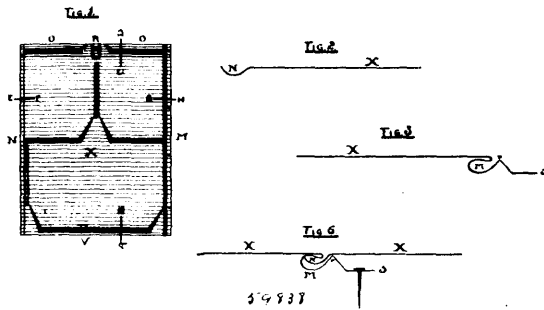
*Claim.*—1st. In combination with a spindle adapted to pass through the lock of a door, a pawl attached thereto, and a knob

adapted to slide over said pawl upon the spindle, said knob having ratchet-teeth for engagement with said pawl. 2nd. In combina-



tion, a spindle passed through a door-lock, a spring pawl attached thereto, a notch formed beneath said pawl, a knob adapted to pass over this end of the spindle, ratchet-teeth formed upon the inside of the shank for engagement with said pawl, and a key adapted to pass through a suitable slot formed in the shank and depress said pawl for the removal of the knob, as specified.

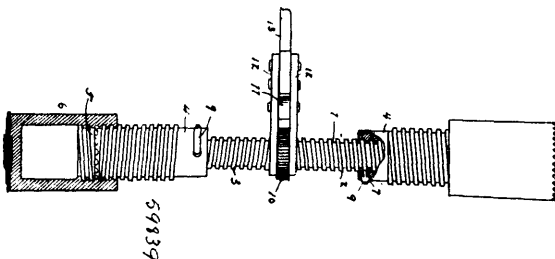
**No. 59,838. Metallic Shingle. (Bardeau métallique.)**



Sarah E. Pedlar, assignee of George Henry Pedlar, both of Oshawa, Ontario, Canada, 3rd May, 1898; 6 years. (Filed 28th March, 1898.)

*Claim.*—1st. In metallic shingles having interlocking side joints, a tongue N formed with an upward curve so as to retain and carry off water in combination with a spring locking joint M, substantially as and for the purpose specified. 2nd. In metallic shingles having top and bottom joints the upper interlocking part of the lower shingle formed with an angular ridge or moulding O, so as to stiffen and strengthen the shingle, substantially as and for the purposes specified. In metallic shingles having interlocking part of the lower shingle formed with an angular ridge or moulding O, in combination with the similarly formed lower edge P, of the upper shingle interlocking so as to form a weather tight joint, substantially as and for the purposes specified. 4th. As a new article of manufacture a metallic shingle having interlocking edges with one lateral edge fashioned into a curved tongue with the concave side up and the edge fashioned into an angular ridge substantially as and for the purposes specified.

**No. 59,839. Lifting Jack. (Cric.)**

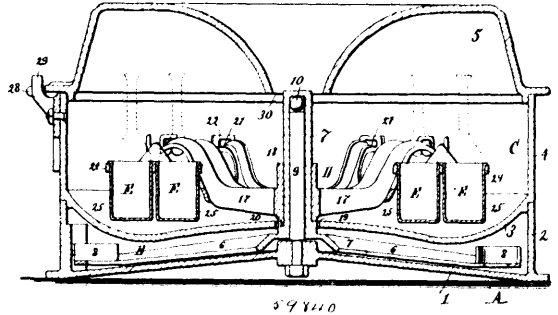


William W. Goodwin and George A. Brown, assignee of Elephalet P. Goodwin, all of Carthage, Ontario, Canada, 4th May, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.*—1st. A jack comprising an operated screw-shaft, a cap on the shaft and operated by the threaded engagement of said parts, an extension-piece on the cap and in threaded engagement therewith, and an automatic locking device serving to lock the cap against movement, the locking of the screw-shaft and cap serving to cause their rotation in unison to thus actuate the extension-piece, substantially as described. 2nd. In a lifting-jack, the combination of telescoping threaded cylinders and means for rotating the inner or smaller one, the inner cylinder having a notch cut in its thread near its outer end, with a spring held-pin passing through the wall of the outer cylinder near its inner end and engaging the said notch to rotate the two cylinders together, and a cylindrical cap for the outer cylinder threaded internally to screw over the same, substantially as described.

**No. 59,840. Centrifugal Milk Tester.**

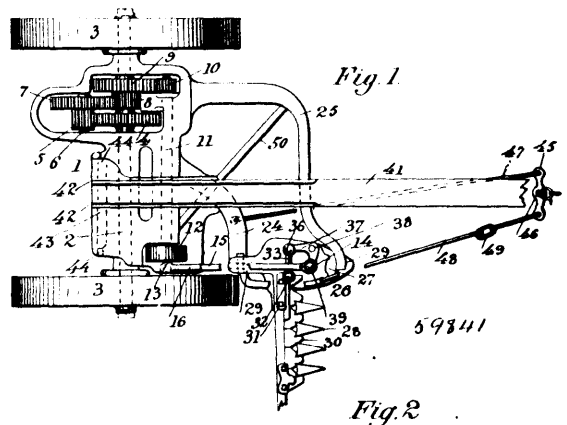
(Appareil centrifuge pour faire l'épreuve du lait.)



D. H. Burrell & Co., Little Falls, New York, U.S.A., assignees of Matthew LaRue Hoyt, Birehton, and Harvey Felmeier, of Little Falls, both in the State of New York, 4th May, 1898; 6 years. (Filed 2nd April, 1898.)

*Claim.*—1st. In a centrifugal testing machine, the combination with a lower chamber, and a steam-motor arranged therein, of an upper chamber, a bottle-carrier arranged therein and connected with said steam-motor, and a steam supply connected with said upper chamber independently of said steam-motor, substantially as set forth. 2nd. The combination with an enclosing casing composed of a lower and an upper chamber, of a steam-motor arranged in the lower chamber and provided with a hub which projects into the upper chamber, a suitable support for said steam-motor, and a bottle-carrier arranged in said upper chamber and having a hub which surrounds the hub of said steam-motor and is rotated by the same, substantially as set forth. 3rd. The combination with a rotary bottle-carrier having radiating arms which have their outer portions elevated above the plane of their inner portions and which are provided at their elevated outer ends with pivot seats, of bottle-holders which are arranged between the elevated outer portions of said arms and provided on their sides with pivotal devices whereby the holders are supported on said seats and enabled to swing into a horizontal position, substantially as set forth. 4th. The combination with a rotary bottle-carrier having its arms provided with side bars connected by a raised cross-bar, of a bottle-holder having laterally projecting trunnions which are supported on said side bars in rear of said cross-bar, and which have downwardly turned ends which engage under said cross-bar when the bottle-holder is swung out, substantially as set forth.

**No. 59,841. Mowing Machine. (Fauçeuze.)**

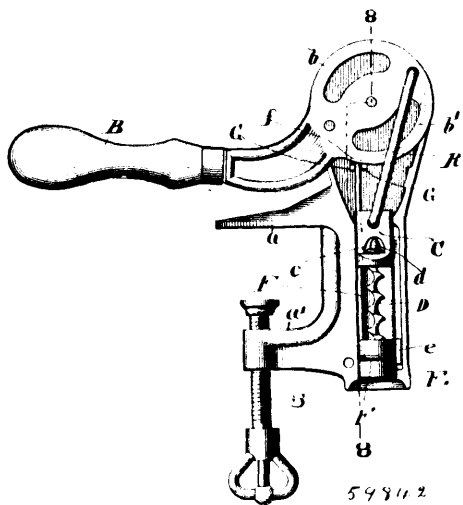


Orson Morris, James Groutage and James Hunter, all of Red Canon, Wyoming, U.S.A., 4th May, 1898; 6 years. (Filed 31st March, 1898.)



*Claim.*—1st. In a mowing machine, the combination with the main supporting frame and cutting mechanism, the driving mechanism and a connection between the driving mechanism and the cutting mechanism, said connection comprising a pitman, the rearward end of which is screw-threaded, a coupling consisting of a block having at one end a longitudinal central aperture to receive the pitman and allow it to rotate therein and prevent other movement thereof, the end walls of said longitudinal aperture being countersunk, nuts located upon said pitman and having rounded heads to fit the countersinks to afford an axial bearing for the pitman, set-nuts for locking the aforesaid nuts against longitudinal movement, thereby preventing swinging or lateral movement of the pitman with respect to the block, and means carried by the other end of the block for securing it to the driving mechanism, substantially as set forth. 2nd. In a mowing machine, the combination with the main supporting frame and cutting mechanism, the driving mechanism and a connection between the driving mechanism and the cutting mechanism, said connection comprising a pitman the rearward end of which is screw-threaded, a coupling consisting of a block having at one end a longitudinal central aperture to receive the pitman and allow it to rotate therein and prevent other movement thereof, the end walls of said longitudinal aperture being countersunk, nuts located upon said pitman and having rounded heads to fit the countersinks to afford an axial bearing for the pitman, set-nuts for locking the aforesaid nuts against longitudinal movement, thereby preventing swinging or lateral movement of the pitman with respect to the block, said block being bifurcated at its opposite end to form clamping jaws, and bolts and nuts for clamping said jaws to a part of the driving mechanism, substantially as set forth.

**No. 59,842. Cork Extractor. (Tire-bouchon.)**

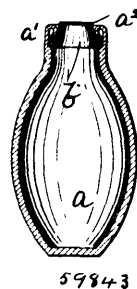


The Arcade Manufacturing Company, assignee of Michael Redlinger, all of Freeport, Illinois, U.S.A., 4th May, 1898; 6 years. (Filed 2nd April, 1898.)

*Claim.*—1st. In a cork-extractor, a reciprocable plunger carrying a rotatable screw, a nut for rotating the screw reciprocally confined in the extractor-case and a rotatable head having an eccentric connection with the plunger and provided with an actuating-handle, and operating, by continued rotation in one direction, to reciprocate the screw-carrying plunger, substantially as described. 2nd. In a cork-extractor, a reciprocable plunger carrying a rotatable screw, a nut for the screw reciprocally confined in the extractor-case, a rotatable head provided with an operating-handle and having an eccentric connection with the plunger, and stop mechanism engaging the nut to lock it, substantially as and for the purpose set forth. 3rd. In a cork-extractor, a reciprocable plunger carrying a rotating screw, a nut for the screw reciprocally confined in the extractor case, a disc-shaped head rotatably supported on a centre and provided with a cam, a link connecting the plunger with the head to one side of its centre, an operating-handle on the head to rotate with it, and a stop-rod extending from the nut into the path of the cam, substantially as and for the purpose set forth. 4th. In a cork-extractor, the combination with a suitable case, of a longitudinally-moving worm, a non-rotating guide conforming to the worm and adapted to rotate the latter when the worm and guide move longitudinally with relation to each other, a swinging lever connected with the worm and adapted to alternately project and retract it and means connecting the lever and the guide, whereby during a predetermined part of the movement of the lever, the guide is held stationary and during

the remainder of such movement the guide slides longitudinally. 5th. The combination with the case, of the lever, B, formed at its inner end with a plate, b, having the flange, bl, the sliding block, C, the non-rotating guide, E, provided with the rod, F, impinging at its free end upon the flange, bl, in certain positions of the lever, B, the worm, D, supported by the block, C, and encircled by the guide, E, and the rod, R, connecting the lever, B, and the block, C, whereby oscillation of the lever alternately projects and retracts the worm, longitudinal movement of the guide, E, being prevented by the rod, F, and flange, bl, during a portion of each oscillation of the lever. 6th. In a corkscrew, the combination with a suitable case, of a block free to slide longitudinally therein, means for moving said block reciprocally in the case and a worm adapted to be inserted in or removed from the block in a line oblique with reference to the line of movement thereof, and when inserted and brought into the line of movement of the block to be secured against longitudinal movement with reference thereto. 7th. The combination with a suitable case, of a block C, sliding longitudinally and formed with a chamber c, and an opening from the chamber through the end of the block, means for moving the block reciprocally in the case and a worm D, having a head d, adapted to lie in the chamber and of greater diameter than the opening in the end of the block, said worm being adapted to be passed obliquely through the chamber and opening in the block and brought into working position, substantially as described.

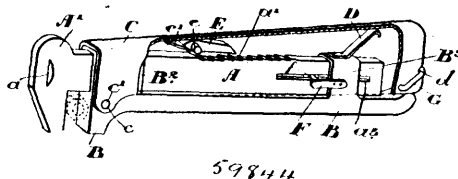
**No. 59,843. Capsule for Holding Fluid. (Capsule pour contenir des liquides.)**



Aerators, Limited, London, England, assignees of Franz Josef Brischar, Zurich, Switzerland, 4th May, 1898; 6 years. (Filed 26th October, 1897.)

*Claim.*—1st. A closing-device for capsules, designed to contain gas or other fluid under high pressure, comprising a central closing piece or packing of annular disc form located within the capsule-neck, a cap-like or disc form carrier for such closing piece or packing, a shoulder or ledge within the capsule-neck to support said carrier and closing piece or packing, and an annular filling passage between the capsule-neck and such central closing piece or packing, the closing being effected by bending the upper part of the capsule-neck over so as to permanently press upon the packing, substantially as herein set forth. 2nd. A closing device for capsules designed to contain gas or other fluid under high pressure, comprising a closing piece or packing located within the capsule-neck, a shoulder or ledge within the capsule-neck to support such closing piece or packing, and a filling passage between the capsule-neck and the outer edge of the closing piece or packing, the closing being effected by bending the upper part of the capsule-neck over so as to permanently press upon the packing, substantially as herein set forth.

**No. 59,844. Wrench. (Clé à écrou.)**



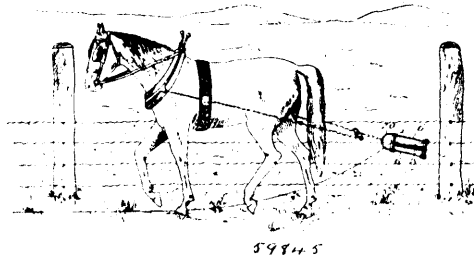
Charles Lewis Henderson and Moses E. Shantz, Berlin, Ontario, 4th May, 1898; 6 years. (Filed 26th February, 1898.)

*Claim.*—1st. In a wrench, the combination with the upper bar having a jaw and ratchet tooth formed on the upper edge thereof, of the lower jaw and sockets, the straddle bar pivoted on the lower jaw and a spring pressed dog suitably journaled on the straddle bar and engaging the teeth of the ratchet bar on the jaws and for the purpose specified. 2nd. In a wrench, the combination with the upper bar having a jaw and ratchet teeth formed on the upper edge thereof, of the lower jaw and sockets, the straddle bar pivoted on the lower jaw, and a spring-pressed jaw suitably journaled

in the interior of the straddle bar and engaging the teeth of the ratchet bar on the jaw and a spring situated between the jaw and the free end of the straddle-bar, as and for the purpose specified. 3rd. In a wrench, the combination with the upper bar having a jaw and ratchet teeth formed on the upper edge thereof, of the lower jaw and sockets, the straddle bar pivoted on the lower jaw, a spring-pressed dog suitably journaled in the interior of the straddle bar and engaging the teeth of the ratchet bar on the jaw and a notch in the movable jaw, as and for the purpose specified. 4th. In a wrench, the combination with the upper bar having a jaw and ratchet teeth formed on the upper edge thereof, of the lower jaw and sockets, the straddle bar pivoted on the lower jaw, a spring-pressed dog suitably journaled in the interior of the straddle bar and engaging the teeth of the ratchet bar of the jaw, a spring-pressed pin attached to the lower bar and a suitable limiting groove in the upper bar into which it fits, as and for the purpose specified. 5th. In a wrench, the combination with the upper bar having a jaw and ratchet teeth formed on the upper edge thereof, of the lower jaw and sockets, the straddle bar pivoted on the lower jaw, a spring-pressed dog suitably journaled in the interior of the straddle bar and engaging the teeth of the ratchet bar of the jaw, and a link pivoted in the straddle bar and designed to hold the free-end of the straddle bar and lower jaw together as and for the purposes specified.

**No. 59,845. Wire Coiling Machine.**

(Machine à rouler le fil de fer.)



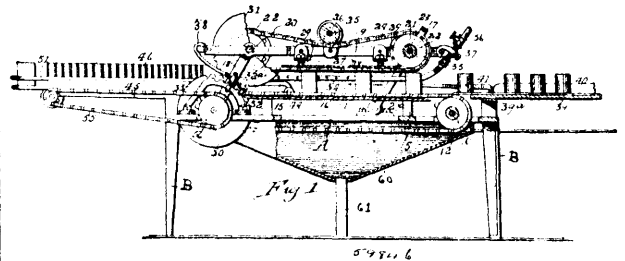
Kitselman Bros., Ridgeville, Indiana, U.S.A., assignee of William Henry Jones, Liberty, in Indiana, aforesaid, 4th May, 1898; 6 years. (Filed 29th March, 1898.)

*Claim.*—1st. In a wire-coiling machine, the frame, a rotatable boxing arranged within the frame, and a plurality of former or dies mounted within the boxing and carried therewith about the wire, said formers or dies being arranged at opposite sides of the longitudinal center of the boxing and set in planes providing for the bonding of a coil in the wire, as it passes through the boxing, substantially as set forth. 2nd. In a wire-coiling machine having a frame carrying a plurality of dies, one of which dies is arranged obliquely, substantially as set forth. 3rd. A wire-coiling machine having a rotatable die holder carrying a plurality of dies, one of which dies is arranged obliquely, substantially as set forth. 4th. In a wire-coiling machine, a portable frame carrying a plurality of dies arranged alternately at opposite sides of the longitudinal centre thereof, and the central of which dies is disposed obliquely with respect to the remaining dies, substantially as set forth. 5th. In a wire-coiling machine, a portable frame carrying a plurality of rotatable die wheels arranged alternately at opposite sides of the longitudinal center thereof, and the central of which wheels is disposed obliquely with respect to the remaining wheels, substantially as set forth. 6th. In a wire-coiling machine, a portable frame, a wheel boxing swivelled within said frame and arranged longitudinally thereof and a plurality of rotatable die wheels journaled in said boxing and arranged alternately at opposite sides of the longitudinal centre thereof, substantially as set forth. 7th. In a wire-coiling machine, a portable frame essentially comprising opposite parallel and frame bars and tie-rods adjustably connecting said frame bars, a handle bail fitted to one end of the frame, and a wheel boxing swivelled longitudinally within the frame, on the end bars thereof, and carrying a plurality of die-wheels arranged alternately at opposite sides of the longitudinal centre thereof, substantially as set forth. 8th. In wire-coiling machine, a portable frame having oppositely located end bars provided with central wire openings and central bearing sockets, an elongated wheel boxing having tubular studs at its ends swivelled in the oppositely located bearing sockets and provided intermediate its ends with a lateral deflection, and a plurality of rotatable die-wheels journaled in the boxing and arranged alternately at opposite sides of the longitudinal centre thereof, the central one of said die-wheels being disposed, by the deflection of the boxing, at an inclination or obliquely with respect to the remaining wheels, substantially as set forth. 9th. In a wire-coiling machine, a portable frame, an elongated wheel boxing swivelled within said frame and arranged longitudinally thereof, a plurality of rotatable die-wheels journaled in the boxing and arranged alternately at opposite sides of the longitudinal centre thereof, certain of said die wheels being movable and having their spindle extremities extended through slots in the sides of the boxing, and screw-adjusted yokes embracing the boxing and receiving the spindle extremities of the movable die-wheels, sub-

stantially as set forth. 10th. In a wire-coiling machine, a frame, and a rotatable boxing swivelled within the frame and carrying a plurality of formers or dies arranged alternately at opposite sides of the longitudinal centre of the boxing, one of said formers or dies being set obliquely, substantially as set forth. 11th. In a wire-coiling machine, a frame, a rotatable boxing having a ball bearing support within said frame and a plurality of formers or dies arranged within the boxing alternately at opposite sides of the longitudinal centre thereof, and one of which formers or dies is set obliquely, substantially as set forth. 12th. In a wire-coiling machine, the frame, and a rotatable boxing swivelled within the frame and carrying a plurality of formers or dies arranged alternately at opposite sides of the longitudinal centre of the boxing, one of said formers or dies being set obliquely, and certain other of said formers or dies at opposite sides of the obliquely set former or die being adjustable toward and away from the longitudinal centre of the boxing, substantially as set forth.

**No. 59,846. Can Wiping Machine.**

(Machine à essuyer les boîtes métalliques.)



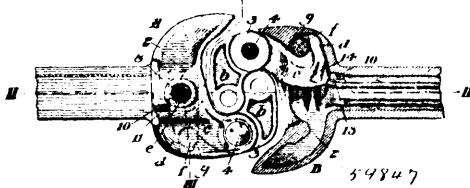
John Kellington, Terra Nova, and Daniel J. Munn, New Westminster, all of British Columbia, Canada, 4th May, 1898; 6 years. (Filed 7th April, 1898.)

*Claim.*—1st. In a can-wiping machine, in combination with a bed A, shafts 10 and 11 suitably mounted near the opposite ends thereof, wheels 12 and 13 secured on such shafts, the said wheels being arranged to receive chain-belts 14 and the same to lie parallel to each other, and a table or support 16 arranged on the under side of the upper plane of the said belts, whereby the same will be prevented from sagging downwards, as and for the purposes set forth. 2nd. In a machine of the class described, the combination of a bed, wheels mounted near opposite ends of said bed, chain-belts taking round the same, brackets 17 and 18 pivotally fixed to the bed A, a frame 19 pivotally supported on said brackets on a level plane, shafts 20 and 21 passing through bushings in the brackets 17 and 18 which support the frame 19, wheels 22 rigidly fixed on the said shafts and belts arranged to take around said wheels, and arranged to lie on a horizontal plane above the belts supported by the wheels mounted near opposite ends of said bed, and a gear wheel 30 rigidly fixed to the shaft 11 meshing with a similar wheel 31 on the shaft 20, as and for the purposes specified. 3rd. In a can-wiping machine, having a bed A, in combination with belts 14 taking round wheels arranged near opposite end of said bed, means for supporting the upper plane of such belts, an adjustable frame 19 supported by the bed above the belts 14, wheels arranged in opposite ends of said frame, belts 23 and 24 taking round said wheels, a depressing plate 28 supported above the lower plane of these belts 23 and 24, the said plate being hung from brackets 27 secured to opposite side of the frame 19, and springs 29 interposed between such brackets and the said plate, as specified, and means for taking up the slack of the belts, as set forth. 4th. A machine of the class described having a bed A and belt-wheels mounted thereon and belts taking round the same, in combination with an adjustable frame 19 pivotally secured in brackets 17 and 18 above such bed, an arc-shaped bracket 33 rigidly secured to the bed A, in proximity to one of the brackets 18, a projection 32 on such bracket 18, a screw-bolt 32 taking through such projection, and the head of the screw-bolt arranged to lie in notches in the arc 33, whereby the frame 19 may be rigidly set at any altitude above the said bed, as specified. 5th. In a machine for wiping cans, in combination with a bed, belt-wheels arranged to turn in journals suitably secured thereto, and similar wheels arranged in an adjustable frame above the bed, and belts mounted on the said wheels, pipes 34 secured to either cross-end pieces of the frame 19, and arranged to pass on either side of a can-chute beneath the belts mounted on said wheels in the frame 19, perforations on the inner sides of the pipes 34, said pipes being closed, where secured to the cross-piece, at 38, and connecting at the opposite end with a supply pipe 36, and means for supplying water or steam to such pipes, as and for the purposes specified. 6th. In a machine of the class described, the combination with a bed, shafts suitably mounted on opposite ends thereof, wheels secured to such shafts, and belts 14 taking therearound, and means for supporting the upper plane of said belts, an adjustable frame arranged on brackets above the belts 14, wheels mounted in such frame, and belts 24 taking therearound, and an elastic belt 23 arranged over the belts 24, such belt 23 having a pliable face to engage and close the open ends of cans, and means for pressing the lower plane of such belts downwards, as set forth. 7th.

In a can wiping machine having a bed with wheels mounted thereon and belts passing over said wheels and forming a carrier for cans above the plans of such bed, in combination with a frame 19 adjustably mounted above such carrier, wheels arranged in such frame and belts taking therearound, means for adjusting the lower plane of the belts taking round the wheels in the upper frame, so that cans passing along on belts beneath will be engaged by the belts in the frame 19, and means for imparting the same movement and speed to the upper and lower belts as specified, and means for spraying hot-water or steam to the peripheries of cans while being passed beneath the belts 23 and 24, and for the purposes set forth. 8th. In a machine of the class described, in combination with a bed A, wheels mounted near opposite ends of such bed, belts taking round said wheels and forming a carrier for cans in a vertical position, and adjustable frame 12 arranged above the carrier, wheels mounted in such frame and belts taking round the same, the said belts travelling in the same direction and at the same speed as the belts forming the carrier beneath, a bracket 62 secured to the rear cross-piece of the frame 19, a pan 64 secured to such bracket to lie in close proximity to the rising periphery of the belt 23, a scraper 63 to engage such belt above the pan, whereby the surplus water will be deposited in the said pan and will be directed from the track of the cans, as specified. 9th. In a can wiper having a bed and a passage for cans over the same, means for supplying hot-water or steam through pipes 34 on either side of such passage, in combination with a drying table 43 secured to or integral with the rear end of the bed, an upright bracket or backing 46 secured to or integral with the rear end of the bed, an upright bracket or backing 46 secured to the rear side of such table, resilient metallic brushes 46<sup>a</sup> secured to the bracket 46, a metal belt 53 passing along beneath the projecting brushes 46<sup>a</sup>, the same being arranged to engage the lower rims of the cans, and a rubber or frictions strip 48 arranged to engage and grip the opposite lower peripheries of the cans, whereby the cans will be revolved against the brushes by the metallic brushes 53, as set forth. 10th. In a machine of the kind illustrated having a bed and a passage for cans thereover, in combination with a drying or wiping table 43, a bracket 46 secured to the rear side of such table, a metallic belt 53 lying in proximity to such bracket, projecting pins 53<sup>a</sup> extending from the belt 53 and passing in a groove in the bracket 46, a groove 53<sup>b</sup> in the opposite side of such belt, to receive the rims or flanges of cans, and metallic brushes 46<sup>a</sup> to engage the peripheries of the same, and a frictions strip 43 to engage to opposite sides of the cans, whereby, when the metallic belt is put in motion, the cans will be revolved against metallic brushes. 11th. In a machine for cleaning cans, a bed A having shafts 10 and 11 mounted near opposite ends thereof, wheels secured to such shafts and belts taking round the same, in combination with a drying table secured to or integral with the said bed, a shaft 54 secured in journals in the rear end of said table, a wheel 55 secured to the shaft 11, a smaller wheel 56<sup>a</sup> secured to the shaft 54, and a belt 52 taking therearound, a wheel 53<sup>a</sup> rigidly fixed on the opposite end of the shaft 54, and a metallic belt 53 taking thereover and round a loose pulley on the shaft 11, whereby the cans engaged by the belt 53 will be made to revolve rigidly. 12th. In a machine of the kind described having a bed and a carrier for cans thereover, in combination with a drying or wiping table 45, stationary resilient metallic brushes secured to and projecting into one side of a can chute in such table, a conveyor 33 arranged to travel beneath such brushes, an adjustable guide-rail on the opposite side of the table, means for fixing the said rail to engage cans of different dimensions, and a frictions surface on the inner wall of said guide-rail, to engage the vertical walls of cans whereby they will be caused to rotate against the brushes on the opposite side of the table, as set forth. 13th. In a can wiping machine having a bed A with belts 14 passing over the same, designed to carry cans in a vertical position, in combination with a belt 49 passing over a loose pulley on shaft 11, means for imparting slower movement to the belt 40 than to the said belts 14, and guides 41 and 42 for conducting cans from the belt 40 to the belts 14, as and for the purpose specified.

**No. 59,847. Car Coupler. (Attelage de chars.)**

Fig. 1

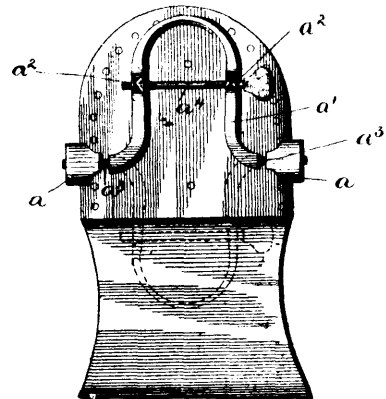


The National Malleable Castings Company, assignee of Clinton A. Tower, all of Cleveland, Ohio, U.S.A., 4th May, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. A coupler having a knuckle, a movable lock, a floating lock-set unattached to the lock and having a portion extending into the path of its motion so as to be engaged, raised and moved laterally thereby into supporting position, substantially as described.

2nd. A coupler having a knuckle, an upwardly movable lock, a floating lock-set unattached to the lock and having a portion extending into the path of its motion so as to be engaged and raised thereby, and having a bearing at the drawhead whereby it may be moved into the supporting engagement with the tail of the knuckle, substantially as described. 3rd. A coupler having a knuckle, an upwardly moving lock, a floating stilt-like lock-set unattached to the lock, but having a lock-supporting step, and an arm extending into the path of the lock's motion and adapted to be successively engaged, raised and moved laterally thereby into supporting position on the knuckle's tail, substantially as described. 4th. A coupler having a knuckle, a movable lock, and a stilt-like lock-set consisting of an upright bar having projecting portions between which the lock operates to move the lock-set, substantially as described. 5th. A coupler having a knuckle, a locking and knuckle-opening piece movable to open the knuckle, and a lock-set adapted to be raised into supporting position by the locking and opening piece when the motion of the latter is restrained by the interlocking of a companion knuckle and to be supported by the locking and opening piece when the latter is moved to the limit of its motion in opening the knuckle, substantially as described. 6th. A coupler knuckle having on the upper surface of its tail a basin or groove adapted to support and retain the foot of the lock-set, said basin or groove having a retaining rim on the side next to the end of the tail, substantially as described. 7th. A coupler knuckle having on the surface of the end portion of its tail a basin or groove leading towards the margin of the knuckle and adapted to support and retain the foot of a lock-set, and a lock-set or stilt whose foot is adapted to fit in said groove and which extends upwardly through the draw-bar, substantially as described. 8th. A stilt-shaped lock-set having a lock-supporting step-portion, and a lifting-arm, said parts providing an intermediate space adapted to receive a lock by which the lock-set is operated, substantially as described. 9th. A stilt-shaped lock-set having a lock-supporting step-portion, and a lifting arm, said parts providing an intermediate space adapted to receive a lock by which the lock-set is operated, said lock-set extending through the draw-head to the exterior thereof, substantially as described.

**No. 59,848. Ice Creeper. (Grappin.)**



Joseph Vital Charron, assignee of Onésime Galameau, both of Montreal, Quebec, Canada, 4th May, 1898; 6 years. (Filed 26th March, 1898.)

*Claim.*—1st. An ice creeper, comprising a spur carrying frame, spurs mounted thereon, attaching lugs rotatively mounted on said frame, and a screw-threaded pin to removably secure said attaching lugs to the side of a heel. 2nd. An ice creeper, comprising a "bowl"-shaped spur-carrying frame, the ends of said frame extending laterally from said thread and provided with screw-threads, spurs formed on one face of said frame, and attaching lugs adjustably and rotatively mounted on said screw-threaded ends, said lugs being adapted to engage with the side of the heel. 3rd. An ice creeper, comprising a spur-carrying frame, spurs mounted thereon, attaching lugs adjustably and rotatively mounted on said frame, and a threaded pin, mounted on said frame, adapted to move said attaching lugs into and out of engagement with the side of a heel, substantially as described.

**No. 59,849. Door Locking Bar.**

(Barre à fermer les portes.)

Hyson Boyles, Janelew, West Virginia, U.S.A., and John Edwin Post and Minter Earle Jackson, both of Janelew, 4th May, 1898; 6 years. (Filed 28th March, 1898.)

*Claim.*—1st. The combination with a door and door-frame, of keepers secured to the frame on opposite sides thereof, a pair of locking bars slidably supported on the door to engage or disengage with the keepers, a lock-case secured to the door and having a dividing

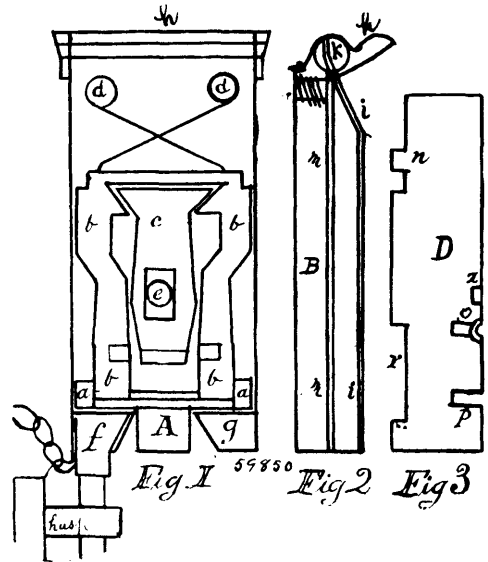
plate, a pair of discs pivoted respectively on opposite sides of said plate and connected to turn together, the inner ends of the locking-



bars being connected to one of said discs, a key to engage either of said discs to operate the bars, and a locking device common to both discs, substantially as described. 2nd. The combination with a door and door-frame, of keepers secured to the frame on opposite sides thereof, a pair of locking-bars slidably supported on the door to engage or disengage with the keepers, a lock-case secured on the door and having a dividing-plate, a pin secured in said plate and projecting on each side thereof, a pair of discs pivoted respectively on the pin on opposite sides of the dividing-plate, to one of which discs the inner ends of the locking-bars are pivotally connected, said discs being connected together to have simultaneous movement on the pin, a spring-actuated locking device supported within the lock-case and common to both discs, and a key to turn either of said discs to operate the sliding-bars, substantially as described. 3rd. The combination with a door and door-frame, of keepers secured to the frame on opposite sides, a pair of locking-bars slidably supported on the door to engage or disengage with the keepers, a lock-case secured in the door and having a dividing-plate, a pin secured in said plate and projecting on each side thereof, a pair of discs pivoted respectively on the pin on opposite sides of the dividing-plate, one of said discs having oppositely-disposed V-shaped recesses in one of its faces, in the apexes of which the inner ends of the respective rods are pivoted, means to connect the discs together for simultaneous movement on the pin, a locking device supported within the casing common to both discs, and a key to engage the locking device on either side of the dividing-plate and operate the discs, substantially as described. 4th. The combination with a door and a door-frame, of keepers secured to the frame on opposite sides thereof, a pair of locking-bars slidably supported on the bar to engage or disengage with the keepers, a lock-case secured to the door and having a dividing-plate, a pin secured in said plate and projecting on each side thereof, said plate having a vertical slot in the plane of the pin and two oppositely-disposed curved slots concentric with the pin, a pair of discs pivoted respectively on the pin on opposite sides of the dividing-plate and to one of which discs the inner ends of the locking-bars are connected, pins connecting said discs together and extending through the curved slots, a locking-plate supported in said vertical slot and extending across the peripheries of the discs to engage notches therein, and a key adapted to engage the locking-plate on either side of the dividing-plate and to turn the discs to operate the sliding-bars, substantially as described. 5th. The combination with a door and door-frame, of keepers secured to the frame on opposite sides thereof, a pair of locking-bars slidably supported on the door to engage or disengage with the keepers, a lock-case secured in the door and having a dividing-plate, a pair of discs pivoted respectively on opposite sides of the dividing-plate, to one of which discs the inner ends of the locking bars are connected, said discs having spaced notches in their peripheries in alignment with each other, means to connect the two discs to move simultaneously on their pivots, a locking-plate supported in the case and adapted to engage notches in the peripheries of the discs, a pair of spring-arms connected to each end of the locking-plate, divergent bars secured to the lower end of the arms of each pair, and each bar having a lug projecting into the path of the operating key, and a spring to normally hold the locking-plate in contact with the discs, substantially as and for the purpose specified. 6th. The combination with the locking-bars, of a lock-case secured on the door and having a dividing-plate, a pin secured in said plate and projecting on each side thereof, a pair of discs pivoted respectively on the pin on opposite sides of the dividing-plate, one of said discs having oppositely-disposed V-shaped recesses in one of its faces, in the apexes of which the inner ends of the respective locking-bars are pivoted, and each disc having a pair

of spaced notches in its periphery, said dividing-plate having a vertical slot in the plane of the pin and two oppositely-curved slots concentric with the pin, pins connecting said discs together and extending through the curved slots, a locking-plate supported in said vertical slot and extending across the peripheries of the disc to engage the notches therein, a pair of spring-arms connected at each end of the locking-plate, diverging bars secured to the lower ends of the arms of each pair, each bar having a lug projecting into the path of travel of the operating key, and a spring to normally hold the locking-plate in contact with the discs, substantially as and for the purpose specified. 7th. In a lock of the class described, the combination of a casing having a partition, a pair of discs pivoted respectively on opposite sides of the partition and connected to one of said discs, and a locking device common to both discs and adapted to be disengaged therefrom by the operating-key from either side of the casing, substantially as described.

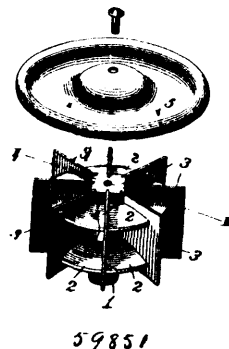
**No. 59,850. Seal Lock. (Serrure à cachet.)**



William T. Scribner, Hampton, assignee of George Harper Steadman, Hopewell Cape, both in New Brunswick, Canada, 4th May, 1898; 6 years. (Filed 26th November, 1897.)

*Claim.*—1st. The combination of the case A, with the pin *f*, substantially as and for the purpose specified. 2nd. The combination of the case A, with the plate D, add the skeleton frame E with the ears *n*, substantially as and for the purpose specified. 3rd. The combination of the case A, with cap *h*, and the cover *i*, with the bosses *k*, substantially as and for the purpose specified.

**No. 59,851. Gas Burner. (Bec de gaz.)**

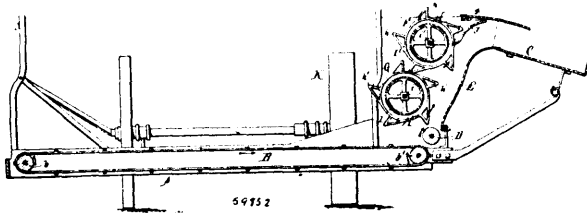


The Monarch Water Heater Company, Pittsburg, and Adolf Beler, Allegheny, Pennsylvania, U.S.A., 4th May, 1898; 6 years. (Filed 3rd March, 1898.)

*Claim.*—1st. In a gas burner, the combination of a central tube, a series of two or more radially slotted flanges formed integral with the tube, a series of radial wings arranged in the slots in the flanges and bearing at their inner edges against the central tube and passages connecting the interior of the tube with the pockets formed by the flanges and wings, substantially as set forth. 2nd. In a gas burner, the combination of a central tube, a series of two or more radial flanges formed integral with the tube, a series of wings inde-

pendent of the tube and projecting between the flanges and supported thereby, and passages connecting the interior of the tube with the pockets formed by the wings and flanges, substantially as set forth. 3rd. In a gas burner, the combination of a central tube, a series of two or more flanges formed integral with the tube and arranged intermediate of the ends of the tube, a cap secured on the upper end of the tube and projecting beyond the flanges, a series of wings independent of the tube and projecting between the flanges and the cap and passages connecting the interior of the tube with the pockets formed by the flanges, cap and wings, substantially as set forth.

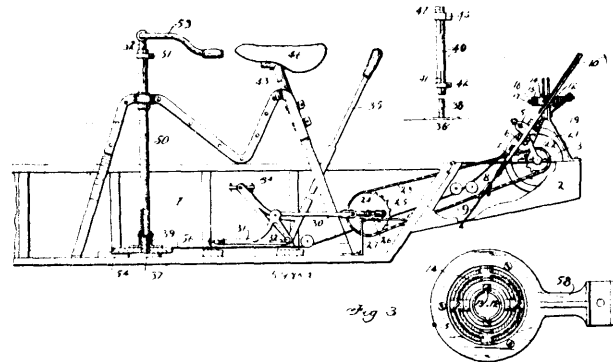
**No. 59,852. Harvester. (Moissonneuse.)**



The Johnston Harvester Company, assignee of George A. Farrall and Edward Pridmore, all of Batavia, New York, U.S.A., 4th May, 1898; 6 years. (Filed 17th February, 1898.)

*Claim.*—1st. The combination with the platform apron, the elevated binder deck, and the throat plate between the same, of a grain elevating mechanism, containing a lower and an upper rotary feed drum, one of said drums being provided with single elevating teeth and the other with pairs of elevating teeth which straddle the single teeth of the other drum and operate as strippers for the same, substantially as set forth. 2nd. The combination with the platform apron, the elevated binder deck, and the throat plate between the same, of an elevating mechanism containing a lower and an upper rotary feed drum rotating in the same direction and each provided with elevating teeth which have inclined front sides, substantially as set forth. 3rd. The combination with the platform apron, the elevated binder deck, and the throat plate between the same, of a starting roller arranged over the delivery portion of the apron, a lower rotary feed drum arranged above the starting roller and provided with single elevating teeth, an upper feed drum provided with elevating teeth in pairs which straddle the single teeth of the lower drum, and stripping devices which engage between the teeth of the upper feed drum, substantially as set forth.

**No. 59,853. Boat Propelling Device. (Propulsion de vaisseaux.)**

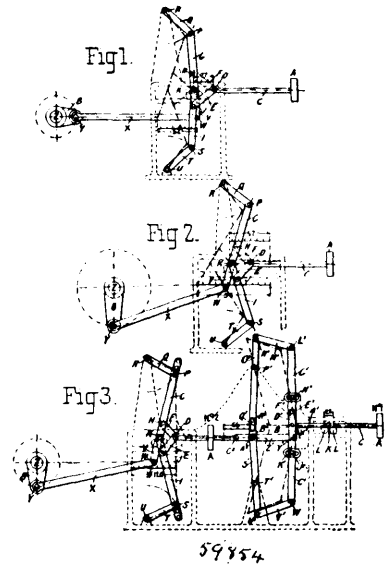


Nelson Therien and Frank Reiling, both of South Chicago, Illinois, U.S.A., 4th May, 1898; 6 years. (Filed 10th February, 1898.)

*Claim.*—1st. In a boat of the character described, the combination with the propeller rod, the fixed blade connected therewith, the hinged section, the tube with which said fixed section is connected, the crank shaft and the crank connected with said tube, the sprocket wheel secured to said shaft and the sprocket wheel and chain for operating the same, of the gimbal-sleeve through which said tube passes, the strips secured to said tube, the gimbal-ring, to which said sleeve is journaled, the annulus having an arm, the curved transverse rod secured thereto and the rim for supporting said annulus, substantially as specified. 2nd. In a boat of the character described, the combination with the well or housing, the crank shaft and means for rotating the same, of the sleeve journaled to the crank shaft, the tube passing therethrough, the hinged propeller blades, the strips on said tube, the gimbal-sleeve through which said tube passes formed with slots with which said strips engage, the gimbal-ring to which said sleeve is journaled, the annulus having a peripheral groove, the fixed rim engaging there-

with, the arm on said annulus, the curved transverse bar secured thereto, the cord, the steering bar and tube and the pulley secured to said tube around which said cord passes, substantially as specified. 3rd. In a boat of the character described, the combination with the well or housing, the crank shaft, the propeller rod connected therewith, the sprocket wheel secured to said shaft, the rotatable double crank shaft having a sprocket pinion, the adjustable half-boxes in which said double crank shaft is journaled, the pitmen, the triangular oscillating levers provided with treadles, and the hand bar engaging with a socket in one of said levers, substantially as specified.

**No. 59,854. Force Transmitting Mechanism. (Mecanisme transmetteur de la force.)**

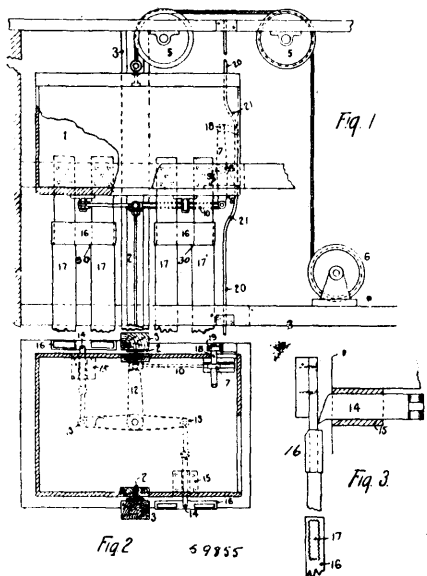


Henry A. Miller, George Street, and William George Dauncey, Hunter Street, both of Sydney, New South Wales, Australia, 4th May, 1898; 6 years. (Filed 24th November, 1897.)

*Claim.*—1st. The use and adaptation of intermediary mechanism of the class set forth and interposed between the prime mover operating such mechanism and a combined crank and crank shaft to which the rotary movement is imparted through the medium of the said intermediary mechanism as herein described. 2nd The intermediary mechanism, supported upon fixed pivots as illustrated in figures 1 and 2 and operated by a prime mover whose traversing movement is less than the movement imparted by the said mechanism to a rotary crank, as set forth. 3rd. The combination, a rotary crank, a connecting rod and the combined intermediary mechanism suspended upon fixed pivots as herein described and illustrated in figures 1 and 2 apart from the connections to the prime mover. 4th. The use and adaptation of intermediary mechanism of the class set forth in figure 3 interposed between a primary or high pressure power and a low pressure power receiving its movement from the aforesaid high pressure power and combined with a crank to which rotary movement is imparted through the medium of the said intermediary mechanism, as herein described. 5th. The combination and arrangement of the parts illustrated in figure 4, operating as intermediary mechanism in the manner described and for the purposes set forth. 6th. The combination, two traveling crossheads whose movements are controlled by intermediary mechanism associated therewith and the fixed pivots for supporting the said mechanism, as described and for the purposes set forth. 7th. The combination, a roller crosshead and two friction rollers with their associated links and pins, as described and illustrated in figure 11 and for the purposes set forth. 8th. In intermediary mechanism of the class set forth, and having movable pivots, the combination and arrangement of the parts illustrated in figure 5, as herein described and for the purposes set forth. 9th. In intermediary mechanism of the class set forth, the combination, a lever, a pin, a guide roller or rollers and guide therefor, a pinion and a fixed rack as described and illustrated and for the purposes set forth. 10th. In intermediary mechanism having fixed pivots of the class set forth, the combination and arrangement of the parts shown in figure 7 as described and for the purposes set forth. 11th. In intermediary mechanism, the combination and arrangement of the parts illustrated in figures 8, 9 and 10, as and for the purposes set forth. 12th. In intermediary mechanism of the class set forth, the triple combination of the roller cross-head operating in the manner described and for the purposes set forth. 13th. The use and adaptation of intermediary mechanism set forth in figure 12 interposed between a primary or high pressure power and a low pressure power receiving

its movement from the aforesaid high pressure power, but running parallel thereto, the said powers combining in the transmission of force through the medium of the said intermediary mechanism to a rotary crank. 14th. The combination of the high and low pressure powers with the associated intermediary mechanism immediately connecting the said powers apart from the mechanism which finally transmits the increased movement to the rotary crank, the movement of the aforesaid high and low pressure powers being dissimilar. 15th. The combination and arrangement of the intermediary mechanism as illustrated in figure 12 having combined fixed and movable pivots, and operated by the combined prime movers whose movements are less than the movement imparted by the said mechanism to a rotary crank, as set forth. 16th. In intermediary mechanism of the class set forth, a compound fulcrum, a walking beam operating within the said fulcrum, in the manner described and for the purposes set forth. 17th. In intermediary mechanism of the class set forth, the compound fulcrum, its associated walking beam, the supporting links and associated parts, as herein described and as illustrated in figures 12, 13, 14, 15, 16, 17, 18, 19 and 20, for the purposes herein set forth.

**No. 59,855. Elevator. (Elevateur.)**

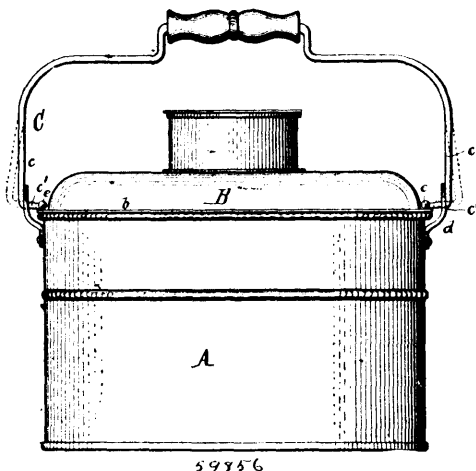


Rudolph Charles Smith, Yorkers, and James Cruickshank, Kingston, both of New York, U.S.A., 4th May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. The combination with an elevator car having part of its structure projecting in the way of normally stationary clamps, of an elevator shaft in which said car moves, slide-ways supported in tension by said elevator shaft, and the normally stationary clamps on said slide-ways to be engaged by said projecting part of the car structure, the portion of the slide-ways below said clamps being proportioned to resist the motion of the clamps and the latter being slidable by abrading the slide-ways, as described. 2nd. The combination of an elevator car having movable dogs normally in the path of safety clamps, of an elevator shaft in which said car moves, slide-ways supported in tension by said elevator shaft, clamps normally stationary on said slide-ways and in the path of the movable dogs but slidable by abrasion on said slide-ways, and means to keep the dogs from striking the stop clamps when the car travels at a safe speed, as described. 3rd. The combination of an elevator car having moving dogs normally in the path of the safety clamps, with an elevator shaft in which said car moves, slide-ways supported in tension by said elevator shaft, stop clamps normally stationary on said slide-ways, and in the path of the movable dogs, but slidable by abrasion on said slide-ways, means for keeping the dogs from striking said clamps when the car travels at a safe speed, and a compulsory track for maintaining said dogs in a normally outward position, as described. 4th. The elevator car, the movable dogs carried thereby, and mechanism for operating said dogs, combined with suspended slide-ways located in the elevator shaft and arranged in pairs, and the stop-clamps encompassing said slide-ways and normally stationary thereon, the inner surfaces of said clamps being of greater cross-section than at said clamps, substantially as set forth. 5th. The elevator car, the movable dogs carried thereby, the lever mechanism for operating said dogs, and the stationary rail for said lever mechanism, the said rail having the outward curve at a definite point, combined with the suspended slide-ways in the path of said dogs when the latter are in their normal outward position, said slide-ways having a greater cross-section below than at said stop-clamps, substantially as set forth. 6th. The car having a

projecting arm, combined with a vertical slide-way suspended in the elevator shaft, and stop clamp on said slide-way and normally stationary thereon and in the path of said projecting arm, substantially as set forth.

**No. 59,856. Dinner Pail. (Potager.)**



Sidney Shepard & Co., assignee of Anthony Ferber, all of Buffalo, New York, U.S.A., 4th May, 1898; 6 years. (Filed 2nd April, 1898.)

*Claim.*—1st. The combination with a dinner-pail or similar vessel having ears which project above the rim of the cover, of an elastic bail having pivots which extend horizontally through the ears and are capable of lengthwise movement therein, said pivots projecting over the cover in their normal position and in all positions of the bail to retain the cover in place, while they can be withdrawn from the cover to release the same by springing the pivots away from the cover, substantially as set forth. 2nd. The combination with a dinner-pail or similar vessel having ears which project above the rim of the cover, of an elastic bail having pivots which extend inwardly through the ears and are capable of lengthwise movement therein, and provided at their inner ends with stops which prevent the withdrawal of the pivots from the ears, said pivots projecting over the cover in their normal position and in all positions of the bail to retain the cover in place, while they can be withdrawn from the cover to release the same by springing the pivots outwardly, substantially as set forth.

**No. 59,857. Food Product. (Produit alimentaire.)**

The Foods Enrichment Syndicate, Bloomfield House, London Wall, assignee of Edwin Burges Watson, Vellere, Mowbray Road, Norwood, Surrey, all in England, 4th May, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.*—1st. A flour or meal produced from pea-nuts or ground-nuts which have been heated by dry heat to 180° Fahrenheit or thereabouts, or by damp heat to 212° Fahrenheit or thereabouts, and have had their husks and skins removed, substantially as and for the purposes set forth. 2nd. A flour or meal, suitable for use as food, produced by grinding up pea-nuts or ground-nuts which have been heated and decorticated and have had their germs either removed or sterilized, and have been subjected prior to the grinding operation to pressure to remove the whole or the greater part of the oil, substantially as described. 3rd. A flour or meal, suitable for use as a food stuff and for mixing with wheaten flour and other food stuffs, manufactured from pea-nuts or ground-nuts, substantially as hereinbefore described.

**No. 59,858. Treatment of Calcium Carbide. (Traitement de carbure de calcium.)**

James A. Deuter, Boston, Massachusetts, U.S.A., 4th May, 1898; 6 years. (Filed 19th September, 1896.)

*Claim.*—1st. The process of generating acetylene gas at a regulated rate, which consists in first mixing metallic carbide with an inert substance and then subjecting the prepared carbide to the action of water, whereby the production of acetylene gas is retarded. 2nd. As a new article of manufacture for the production of acetylene gas, a cartridge containing in a divided state metallic carbide and an inert substance uniformly mixed throughout the same, whereby on exposure to water the reaction will be retarded. 3rd. As a new article of manufacture for the production of acetylene gas, a cartridge containing in a divided state metallic carbide and an inert substance uniformly mixed throughout the same to form a coherent compact body, whereby on exposure to water reaction will be retarded. 4th. The process of generating acetylene gas at a regulated rate, which consists in first mixing together metallic car-

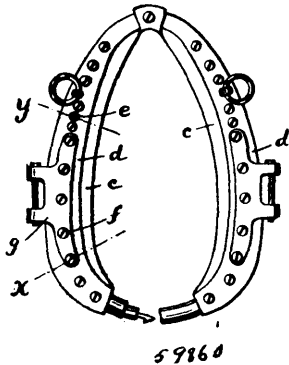
bide compounds of different compositions to produce a compound of uniform composition and impregnating the same with an inert substance, and then subjecting the prepared carbide to the action of water, whereby the production of acetylene gas is retarded. 5th. The herein described process, which consists (1) in mixing together metallic carbide compounds of different compositions to produce a compound of uniform composition, (2) in mixing with said compound an inert binding substance to make the same coherent, and (3) in forming said compound into tablets which represent by decomposition a definite amount of gas. 6th. As a new article of manufacture, a cartridge containing in a divided state metallic carbide and a bond by which its particles are held together to form a compact body, said compact body being destructible by the action resulting from exposing the cartridge to water.

**No. 59,859. Ointment. (Onguent.)**

John Goldstaub, Plum Coulee, Manitoba, Canada, 4th May, 1898; 6 years. (Filed 2nd March, 1898.)

*Claim.*—A compound composed of common soap, beeswax and onions with honey, olive (or sweet) oil and goose fat, substantially in proportions, and for the purposes set forth.

**No. 59,860. Horse Collar. (Collier à cheval.)**

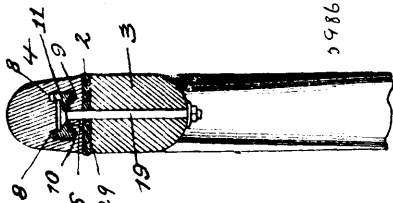


Edwin Lewis Brundage, East Orange, New Jersey, U.S.A., 4th May, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. The improved pneumatic collar comprising a frame, a pneumatic sac or pad extending around the sides of said frame when said sac or pad is inflated and a jacket enclosing both the frame and sac, the said pad or sac presenting a continuous and even bearing surface to said jacket, and a pneumatic valve and draft eye plates, all combined substantially as set forth. 2nd. The improved horse collar, comprising a frame, the frame enclosing jacket of leather, the edges of which overlap upon said frame, the pneumatic pad within said jacket, the exterior clamp plate, and screws extending through said clamp plate and overlapping edges of the jacket and into said frame, substantially as set forth. 3rd. The improved horse collar, comprising the frame corresponding in general shape to the neck or shoulders of the animal, a leather jacket, a draft eye clamp plate, clamping the edges of said jacket, and screws all arranged and operating, substantially as set forth. 4th. The improved horse collar, comprising the enclosed frame, the grooved inflated pads, the jackets covering both pads and frame, and means for removably fastening said jackets over said pads and frame, and draft eye plates, all arranged and operating substantially as set forth. 5th. The improved horse collar, comprising the enclosed frame and pneumatic pads, a jacket for enclosing said frame and pads, concave convex shells, draft eye clamping plates and screws, all combined and operating, substantially as set forth.

**No. 59,861. Pneumatic Tire.**

(*Banlague pneumatique.*)



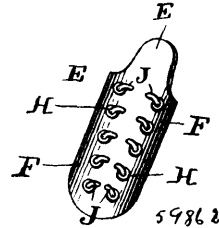
Webber Grant Kendall, Providence, Rhode Island, U.S.A., 4th May, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. As an article of manufacture, a rubber tire having an interior longitudinal chamber, said chamber being extended, at

one or more points of its width, in the direction of its tread, and adapted to receive a resistance means, said tire being constructed to permit access to its chamber. 2nd. A rubber tire, having an interior longitudinal chamber, said chamber being extended at two points of its width, in the direction of its tread, in combination with a clamping-band and resistance means, whereby the tire may be secured onto a wheel, and injury to the same, by lateral strain, is prevented. 3rd. A rubber tire, having an interior longitudinal cavity, said cavity being extended, at two of its width, in diametrically opposite directions, and having a channel or slot opening from the inner periphery into said cavity, in combination with a clamping band provided with oppositely extending resistance means and bolts whereby the band, and thereby the tire, may be secured onto the wheel.

**No. 59,862. Shoe Lasting Machine.**

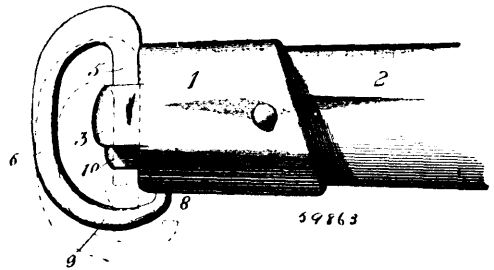
(*Machine à enformer.*)



William H. Usher, Philadelphia, Pennsylvania, U.S.A., 4th May, 1898; 6 years. (Filed 5th April, 1898.)

*Claim.*—1st. An attachment consisting of a plate and rows of hooks thereon, said hooks being adapted to enter eyelets in the quarters of a shoe, and said plate being formed of pliable material adapted to conform to the places of contact. 2nd. An attachment consisting of a plate, rows of hooks thereon, and a grasping piece projecting from the upper end of said plate.

**No. 59,863. Whiffletree Hook. (Crocket de palonnier.)**

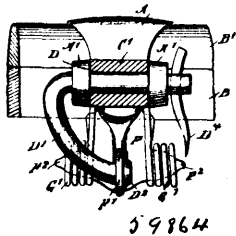


Finis Ewing Lack, Paducah, Kentucky, U.S.A., 4th May, 1898; 6 years. (Filed 6th April, 1898.)

*Claim.*—1st. In means for securing a trace or tug to a whiffletree or the like, the combination of a ferrule having a cross bar at its outer end, and a hook having its shank slidable mounted in the space formed between the said cross bar and terminal of the ferrule and having its extremity headed to engage with the rear side of the cross bar and limit the forward movement of the hook, and having its bill portion extending beyond the cross bar and curving in the rear of the headed end of the shank and engaging with the rear side of the ferrule, substantially as shown for the purpose specified. 2nd. In means for securing a trace or tug to a whiffletree or the like, the combination of a ferrule provided at its outer end with a cross bar, and a hook having its shank portion slidable mounted in the space formed between the cross bar and outer end of the ferrule and headed to engage with the rear side of the cross bar, and having its bill portion exterior to the cross bar and curving around it and the headed end of the shank and having the extremity of the bill bent and adapted to enter a depression on the rear side of the ferrule so as to make positive engagement therewith, substantially as set forth. 3rd. In combination, a ferrule having a cross bar at its outer end midway between its front and rear sides and having a depression in its rear side a short distance from its outer end and having a notch forward of the cross bar, and a hook having its shank portion slidably mounted in the space formed between the cross bar and outer end of the ferrule and having its inner end headed to engage with the rear side of the cross bar and its front end normally fitted in the said notch, and having its bill curving around the cross bar and the headed end of the shank and bent to make positive engagement with the recess in the rear side of the ferrule, substantially as and for the purpose specified.

**No. 59,864. Anti-rattler for Thill Couplings.**

(Compensateur pour armons de limonières.)



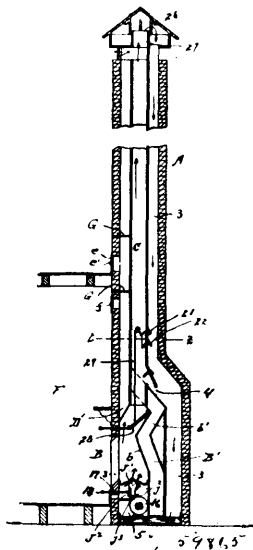
59864

Frank P. Johnson, Danville, Pennsylvania, U.S.A., 4th May, 1898; 6 years. (Filed 6th April, 1898.)

*Claim.*—An anti-rattler, comprising a bolt for securing the thill to the axle-clip, the bolt having one end extended downwardly and inwardly, a wear-plate, the lower end of which has connection with the downwardly and inwardly ranging extension of the bolt, and a spring engaging the lower portion of the wear-plate and pressing forward the upper portion of the wear-plate and pressing forward the upper portion thereof.

**No. 59,865. Heating and Ventilating Device.**

(Appareil de chauffage et de ventilation.)



59865

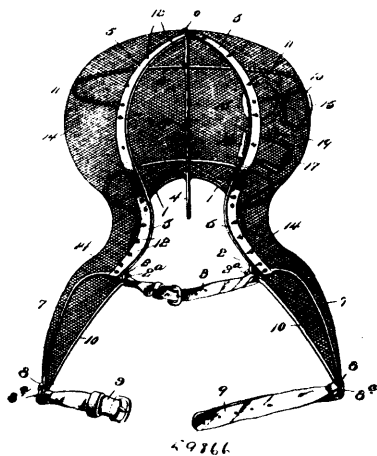
Franklin Emerson Humphreys, Mason City, Iowa, U.S.A., 4th May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. In a fireplace-heater, an oxygen-burner composed of upper and lower sections provided with openings movable into and out of register substantially as shown and described. 2nd. In a fireplace-heater, an oxygen-burner comprising a lower section having a concave plate and an opening through the same, and an upper section having a convex plate and an opening through the same, and a distributor communicating with said opening, the said convex and concave plates being fitted together substantially as shown and described. 3rd. In a fireplace-heater, an oxygen-burner composed of a lower section and an upper section and provided with projecting arms adapted to play between the bars of the grate as said section is moved substantially as shown and described. 4th. The combination of the fireplace having a hot-air space or chamber and a flue or flues leading therefrom, the smoke-flue leading from the fireplace, and the fresh-air flue leading downward along the smoke-flue and opening into the hot-air chamber substantially as shown and described. 5th. The combination of the fireplace, the hot-air space or chamber, the chimney having the smoke-flue leading from the fireplace, the fresh-air flue leading down alongside the smoke-flue and opening into the hot-air space. 6th. In a fireplace-heater, an oxygen-burner composed of upper and lower sections, one of such sections being movable with respect to the other substantially as set forth. 7th. The combination of the fireplace, having the hot-air space or chamber, and a flue or flues leading therefrom, the smoke-flue leading from the fireplace, the return smoke-flue leading downward through the chimney and communicating with the said fireplace, the air-flue leading downward through the chimney and opening into said hot-air space, substantially as described. 8th. The combination fireplace, the hot-air space or chamber, the smoke-flues

leading from said fireplace, hot-air flues leading from said hot-air chamber communicating with the rooms to be heated, a hollow cap supported above the said chimney having an inlet thereto directly over the outlet of the said smoke-flue, a return flue communicating with said hollow cap and leading down through said chimney to said fireplace, means for producing a down draft in said return flue, deflectors arranged in the inner walls of the said return flue arranged to register with suitable openings therein, and means for controlling said deflectors, substantially as described.

**No. 59,866. Face and Neck Protector.**

(Protecteur pour la figure et le cou.)



59866

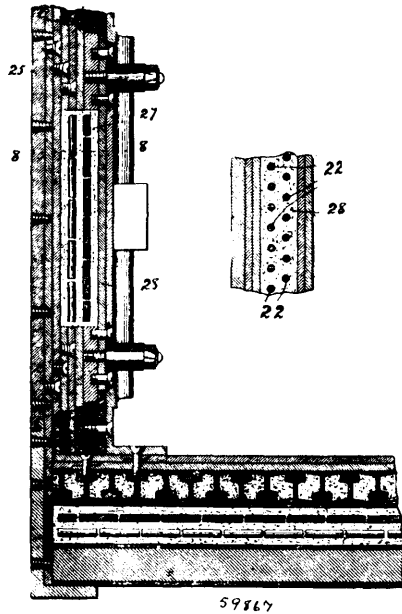
Jacob Weil, Las Animas, Colorado, U.S.A., 4th May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. A face and neck protector, comprising a supporting frame to fit over the head, neck and shoulders of the wearer and adapted to be sprung open on a vertical line at one side thereof, said frame being formed in part of similarly contracted strips pivoted at their upper ends to each other and to a fixed part of the frame and having their lower ends connected to movable parts of the frame, a covering of wire netting secured to the frame, and means applied to said strips to lock the frame in its closed position, substantially as described. 2nd. A face and neck protector, comprising a supporting frame to fit over the head, neck and shoulders of the wearer, said frame formed in part of two strips of metal arranged one above the other on one side of the frame and pivoted together at their upper ends and to a fixed part of the frame, and connected at their lower ends to movable parts thereof, one strip having a series of headed pins and the other a series of loop holes to fit over said pins, and a covering of wire netting to fit over said frame, substantially as and for the purposes specified. 3rd. A face and neck protector, comprising a skeleton frame adapted to fit over the head and neck of the wearer and having shoulder yokes one of which is divided, said frame being formed of spring wire and two superposed strips of spring sheet metal, connected at their lower ends to the respective sections of the divided shoulder yoke, and pivotally connected together at their upper ends and to a fixed part of the frame, means to detachably lock the strips together, and a covering of wire netting secured to the frame, said netting being divided on one side and secured to the respective metal strips, substantially as described. 4th. A face and neck protector, comprising a skeleton frame adapted to fit over the head and neck of the wearer, and having a covering of wire netting secured thereto, said frame and covering being adapted to open a vertical line on one side thereof, and the frame having a shoulder yoke at each side, one of the yokes being separable, and side strips connecting the parts of the separable yoke with the upper fixed part of the frame, and strips at the lower ends of the yokes to fit under the armpits of the wearer, substantially as described. 5th. In a protector for the head and neck, the combination of shoulder yokes, one of which is separable at a medial point, side pieces conforming to the outline of the head, neck and shoulders and having their lower ends secured to the middle portion of the fixed shoulder yoke and to the separable ends of the other shoulder yoke, and having their upper ends meeting and pivotally connected, fastening means applied to the separable or complementary members of the side strips having connection with the separable shoulder yoke, and wire netting secured to the shoulder yokes and side pieces, substantially as set forth. 6th. In a head and neck protector, the combination of a fixed and a separable shoulder yoke, and a side piece conforming approximately to the outline of the head, neck and shoulder secured at its lower end to the fixed shoulder yoke, and corresponding side pieces composed of complementary members pivotally connected at their upper ends to each other and to the upper end of the first mentioned side piece and having their lower ends secured to the upper terminals of the parts of the separable shoulder yoke, fastening means applied to the complementary members of the separ-



able side piece, front and rear brace bars connecting corresponding end portions of the shoulder yokes, means for securing the lower terminals of the shoulder yokes and the outer extremities of the front and rear brace bars, and a wire netting secured to the shoulder yokes, front and rear brace bars and to the side pieces, substantially as set forth. 7th. The herein described head and neck protector, comprising a fixed and a separable shoulder yoke, a side piece conforming approximately to the outline of the head, neck and shoulder secured at its lower end to the upper portion of the fixed shoulder yoke, a corresponding side piece composed of complementary members pivotally connected at their upper ends and to the fixed side piece and having their lower ends connected with the extremities of the parts of the separable shoulder yoke, fastening means applied to the parts comprising the separable side piece, upper and lower horizontally disposed curved rods connected midway of their ends to the fixed side piece and at their extremities to the complementary parts of the separable side piece, front and rear horizontal brace bars connected with corresponding lower terminals of the shoulder yokes, means for connecting the extremities of the shoulder yokes, and front and rear brace bars, and a meshed covering secured to the shoulder yokes, front and rear brace bars and to the said side pieces and extending over the curved rods and held distended thereby, substantially as set forth.

**No. 59,867. Vault. (Voûte.)**

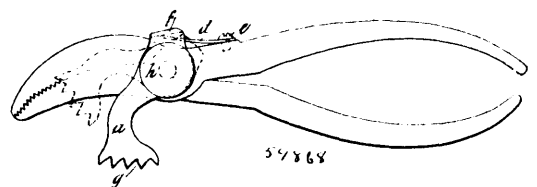


Edward Clapp Shankland, Chicago, Illinois, U.S.A., 4th May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. In a safety deposit vault, the combination of a plurality of wall layers, each composed of parallel rails interlocked, substantially as shown, and an interfilling of concrete or other material of low conductivity, the rails of adjacent layers crossing each other, substantially as described. 2nd. In a safety deposit vault, the combination of a plurality of wall layers each composed of parallel rails and an interfilling material of low conductivity in the spaces between adjacent rails, the rails of adjacent layers crossing each other, and adjacent rails of the same layer being placed in contact, whereby to afford an efficient support for the interfilling material, substantially as described. 3rd. In a safety deposit vault, the combination of two wall layers each composed of parallel rails and an interfilling material of low conductivity in the spaces between said rails, the rails of the outer layer being arranged with their heads pointing alternately toward each other and the flanges and heads overlapping, and the rails of the inner layer being arranged to cross the rails of the outer layer and with their heads pointing alternately toward each other and the extremities of the flanges, in contact but not overlapping, substantially as described. 4th. In a safety deposit vault, the combination of a plurality of wall layers each composed of parallel rails interlocked, substantially as shown, and an interfilling of concrete or other material of low conductivity, the rails of adjacent layers crossing each other, and a partition plate between adjacent layers, substantially as described. 5th. In a safety deposit vault, the combination of a plurality of wall layers each composed of parallel rails and an interfilling material of low conductivity in the spaces between adjacent rails, the rails of adjacent layers crossing each other, the adjacent rails of the same layer being placed in contact, whereby to afford an efficient support for the interfilling material, and a partition plate between said layers, substantially as described. 6th. In a safety deposit vault, the combination, with an inclosing wall, of a plurality of wall layers, each

layer composed of parallel rails interlocked, and an interfilling of concrete or other material of low conductivity, the rails of adjacent layers crossing each other. 7th. A wall for vaults, safes, etc., comprising two layers of rails in combination with a plurality of insulated metallic inserts, substantially as described. 8th. A wall for vaults, safes, etc., comprising a plurality of layers composed of rails in combination with a plurality of insulated metallic inserts between said layers, substantially as described. 9th. A wall for vaults, safes, etc., comprising a plurality of layers composed of rails embedded in concrete in combination with insulated metallic inserts, substantially as described. 10th. A wall for vaults, safes, etc., comprising a plurality of layers composed of rails, the rails of adjacent layers crossing each other, and embedded in concrete in combination with insulated metallic inserts, substantially as described. 11th. A wall for vaults, safes, etc., comprising a plurality of layers composed of rails, the rails of adjacent layers crossing each other, in combination with insulated metallic inserts, substantially as described. 12th. In safety vault construction, a protecting means comprising an enclosing space within the wall or door, an interfilling material thereof of high electrical resistance, and broken sections or pieces of tool resisting metal embedded in said interfilling material and so disposed as to be electrically insulated, not only from the surrounding metal lining of the enclosing space, but also from each other, substantially as described. 13th. In a safety vault construction, a protecting means comprising an enclosing space within the wall or door, an interfilling material thereof of high electrical resistance, and short steel rods embedded in said interfilling material and so disposed as to be electrically insulated, not only from the surrounding metal lining of the enclosing space, but also from each other, substantially as described. 14th. In a safety vault construction, the combination with a door and a lock located inside of the centre of said door, of an enclosing space in the door in front of said lock, an interfilling material of high electrical resistance in said enclosing space, and a plurality of broken pieces of tool resisting metal embedded in said interfilling material, and so arranged as to be electrically insulated not only from the surrounding metal of the enclosing space, but also from each other, substantially as described. 15th. In a safety vault construction, the combination with a door and a lock located inside of the centre of said door, of an enclosing space in the door in front of said lock an interfilling material of high electrical resistance in said enclosing space, and a plurality of steel rods embedded in said interfilling material, and so arranged as to be electrically insulated not only from the surrounding lining of the enclosing space, but also from each other, substantially as described. 16th. A wall for vaults, safes, etc., comprising a supporting structure or frame, tool resisting metallic inserts, and insulating material whereby said inserts are held so as to be electrically insulated from said frame and from each other, substantially as described. 17th. A wall for vaults, safes, etc., comprising a supporting structure or frame, tool resisting metallic inserts of varying dimensions and insulating material whereby said inserts are held so as to be electrically insulated from said frame and from each other, substantially as described. 18th. A wall for vaults, safes, etc., comprising a supporting structure or frame containing tool resisting metallic inserts embedded in a material of high electrical resistance, and so disposed as to be electrically insulated from said frame and from each other, substantially as described. 19th. A wall for vaults, safes, etc., comprising a supporting structure or frame containing tool resisting metallic inserts embedded in concrete, and so disposed as to be electrically insulated from said frame and from each other, substantially as described. 20th. A wall for vaults, safes, etc., comprising a supporting structure or frame containing tool resisting metallic inserts of varying dimensions embedded in a material of high electrical resistance, and so disposed as to be electrically insulated from said frame and from each other, substantially as described. 21st. A wall for vaults, safes, etc., comprising a supporting structure, and tool resisting metallic rods inserted therein, and electrically insulated from said frame and from each other, substantially as described. 22nd. A wall for vaults, safes, etc., comprising a supporting structure, and tool resisting metallic rods of varying dimensions inserted therein, and electrically insulated from said frame and from each other, substantially as described.

**No. 59,868. Lasting Pliers. (Pinces à enformer.)**



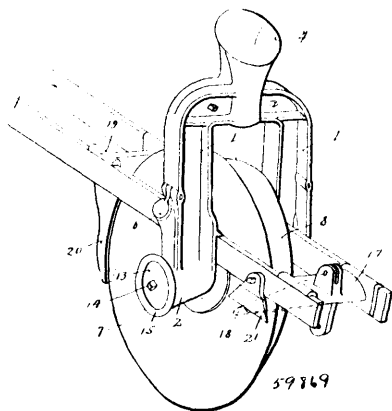
Daniel Edward Smith and Alfred Tyree, both of 183 Hereford Street, Christchurch, New Zealand, 4th May, 1898; 6 years. (Filed 13th April, 1898.)

*Claim.*—1st. The combination with lasting pliers having claws pivotally attached to serve as a fulcrum a series of points or teeth at the end of such claws arranged one behind the other, substantially

as and for the purposes set forth herein. 2nd. The combination with lasting pliers having claws pivotally attached to serve as a fulcrum of a hammer head formed upon the pivot pin of such pliers, substantially as and for the purposes set forth herein.

**No. 59,869. Disc for Seeding Drills.**

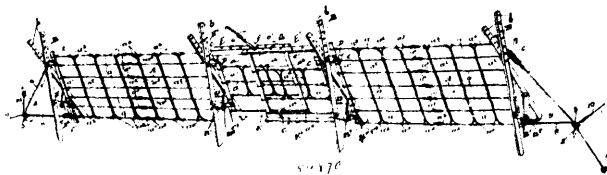
(Disque pour forets.)



John C. Lundy, Wilsonville, Ontario, Canada, 4th May, 1898; 6 years. (Filed 15th April, 1898.)

*Claim.*—1st. A disc attachment for drills, involving a frame or bracket, and a disc journaled to said frame by a bearing that extends from that side of the disc which is turned from the furrow, whereby the furrow side of the disc is left clear, substantially as described. 2nd. A disc attachment for drills, involving a frame or bracket, and a pair of discs set at an angle to each other and journaled to said frame by bearings that extend outward from said discs, thereby leaving the space between the discs open and permitting the same to set close together. 3rd. A disc attachment for drills, involving an approximately U-shaped frame or bracket provided with journal boxes, and a pair of discs set at an angle to each other and provided with out-turned trunnions that are journaled in said journal boxes, substantially as and for the purposes set forth. 4th. A disc attachment for drills, involving a frame or bracket, and a disc journaled to said frame or bracket and mounted to run on an anti-friction bearing device, substantially as described. 5th. In a disc attachment for drills, the combination with a frame or bracket provided with a cylindrical journal box, of a disc provided with a projecting trunnion working in said journal box, and a roller bearing device working between said trunnion and said journal box, substantially as described. 6th. The combination with the frame or bracket, of a drill attachment provided with a journal box, of a disc provided with a projecting trunnion working in the said journal box, a retaining disc or washer removably secured to said trunnion and working against a co-operating part of said journal box, substantially as described.

**No. 59,870. Fence. (Cloture.)**

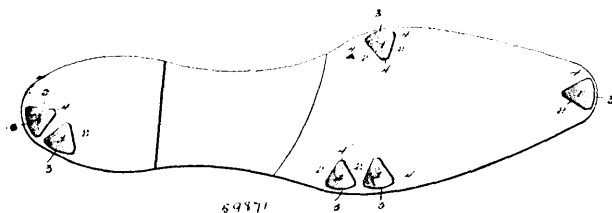


Adolphus Henry Cook, Markham, Ontario, Canada, 4th May, 1898; 6 years. (Filed 5th July, 1897.)

*Claim.*—1st. In a portable fence, a panel comprising end bars or strips, longitudinal wires, upright double wires twisted on each side of the longitudinal wires and having angular bracing ends, the ends of which are twisted around the top and bottom wires of the panel, as and for the purpose specified. 2nd. In a portable fence, a panel comprising the end bars or strips, longitudinal wires, and vertical wires, and loops formed intermediate of the length of the longitudinal wires, vertically above each other and designed to form a hinge in the centre of the panel, as and for the purpose specified. 3rd. The combination with the panels and end bars thereof, of the cross-posts provided with a series of holes in their upper ends, bolts extending through the oppositely set cross-holes and connecting the end bars together, the toggle-jointed bar connecting the lower portion of the cross-posts and bolts extending through the centre of the toggle joint and connecting the lower ends of the end bars of the panel, as and for the purpose specified. 4th. The combination with the panels and end bars thereof, of the cross-posts provided with a series of holes in their upper ends, the upper brackets affixed to the end bars, and bolts extending through such brackets and oppositely

set holes in the upper portion of the cross-posts, the toggle-jointed bar connecting the lower portion of the cross-posts, the brackets secured to the lower portion of the end bars of the panels and bolts extending through the brackets and centre of the toggle-jointed bar, as and for the purpose specified. 5th. The combination with the panels provided with suitable end bars, of the crossed-posts, suitable brackets supporting the posts on the cross-bars, the upper wire rod extending to one side of the crossed-bar and resting in the apex of the angle and provided with loop-hooked ends surrounding the end bars and the lower wire rod extending between the crossed posts and resting upon the crossed connection of the posts and provided with loop-hooked ends surrounding the end bars of the panels, as and for the purpose specified. 6th. The combination with the posts and the wire panels and end bars all suitably connected together and supported in position, of the flat anchor 2 having an eye 3 and the anchor wires 6 and 8 connected to the top and bottom of the end bar of the panels and to the eye of the anchor, as and for the purpose specified. 7th. The combination with the posts and the wire panels and end bars all suitably connected together and supported in position, of the flat anchor 2 having an eye 3 and the anchor wires 6 and 8 connected to the top and bottom of the end bar of the panels and to the eye of the anchor and the supplemental anchors 4 having eyes 5 and bracing wires 10 connecting such eyes to the eye of the main anchor 2, as and for the purpose specified. 8th. The combination with the wire panels and posts and means for connecting the panels together, of the overlapping central panel provided with a series of holes in the top and bottom rails adapted to receive the pins carried by a lever for adjusting the relative position of said rails, as and for the purpose specified. 9th. The combination with the wire panels and posts and means for connecting the panels together, of the overlapping central panel provided with a series of holes in the top and bottom rails and the staples designed to extend into the holes in the overlapping portion of the rails, as and for the purpose specified.

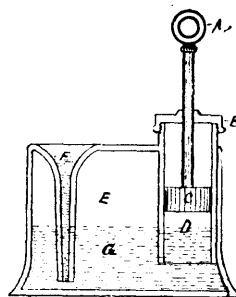
**No. 59,871. Shoe-Plate. (Plaque pour chaussures)**



Mansfield M. West, Cleveland, Ohio, U.S.A., 4th May, 1898; 6 years. (Filed 15th April, 1898.)

*Claim.*—A shoe-plate, comprising a flat triangular body having opposite convergent straight edges and its remaining edge curved and convex, said body being further provided at the corners or angles thereof with right-angled disposed prongs substantially as and for the purpose specified.

**No. 59,872. Ink Bottle. (Bouteille à encre.)**



William Rawley Rundle, Portage la Prairie, Manitoba, Canada, 4th May, 1898; 6 years. (Filed 15th March, 1898.)

*Claim.*—The combination of the air-chamber D with piston C and the well or ink-dip E, substantially as and for the purposes hereinbefore set forth.

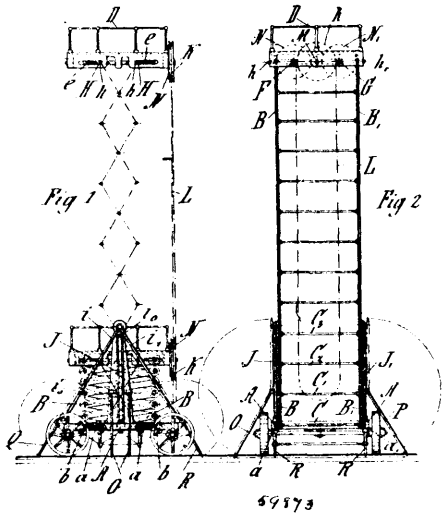
**No. 59,873. Vertically Lifting Platform.**

(Plate-forme à hissage vertical.)

Johann Doldt, Ettingen, Baden, Germany, 4th May, 1898; 6 years. (Filed 18th April, 1898.)

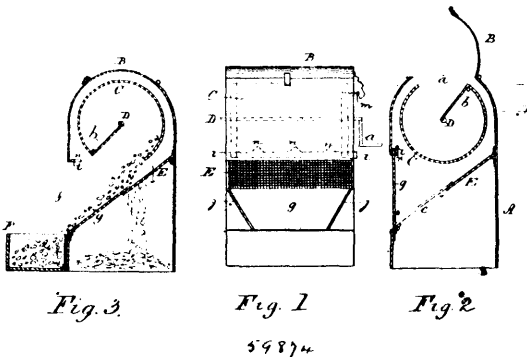
*Claim.*—A vertically-lifting elevated standing-place, specially distinguishable herein, that on a wagon-frame A, which can be strutted from all sides by shores O, P, Q and R, two scissors-like link-frames are fixed on the long sides of the wagon-frame, their

corresponding scissors-like links B and B' being joined together by rods C, C', C'', and the uppermost links of which carry a platform



E provided with a balustrade D, and also that the height may be varied as desired by the working of spindles F and G, furnished with contrarily-acting screws, as well from above by the use of a hand or rope-wheel K as also from below by the employment of an endless rope or chain L.

No. 59,874. Ash-Sifter. (Tamis à centres.)

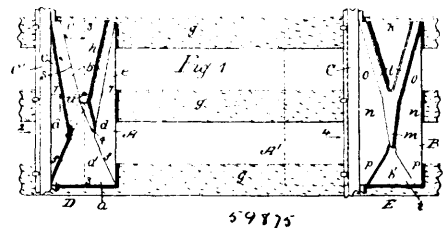


George Prentice Harrison, Toronto, and Samuel John Stratton, Hamilton, both in Ontario, Canada, 4th May, 1898; 6 years. (Filed 21st April, 1898.)

Claim.—An ash-sifter, comprising a rectangular case having a feed door at the top, and within a perforated inclined diaphragm or floor E, an opening in the front closed by a hinged inclined chute K when raised to the perpendicular, said chute provided with cinder-guides j, j, a rotary sifting cylinder above said chute, and a rod i locking the chute when closed, as set forth.

No. 59,875. Retracking Frog.

(Rail de croisement pour remettre les chars sur la voie.)

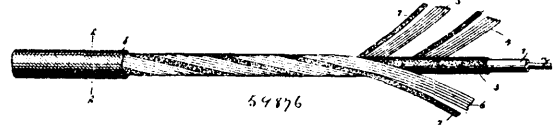


Henry B. Gilbert and Burnett W. Coyne, both of Newark, New York, U.S.A., 4th May, 1898; 6 years. (Filed 19th April, 1898.)

Claim.—1st. A retracking-frog comprising two separate sections formed with thin ends, and upward inclines for raising the car wheels, and rigid guides or levers for the wheels, and a shiftable tongue for controlling the wheels, substantially as shown and

described. 2nd. A railway retracking-frog comprising two separate sections formed with thin ends, and inclines for raising the car wheels, and guides for the wheels, and short track-surfaces for the wheels, said track-surfaces of one section being level with the adjacent railway rail, and the track-surface of the other section being higher than the adjacent railway rail, substantially as and for the purpose specified. 3rd. A railway retracking-frog comprising two sections adapted to be placed upon the ties at the sides of the respective rails of the track, each section being formed with upward inclines and guides for controlling the wheels of the car, and sections being formed with spikes projecting from their under surfaces, for the purpose specified.

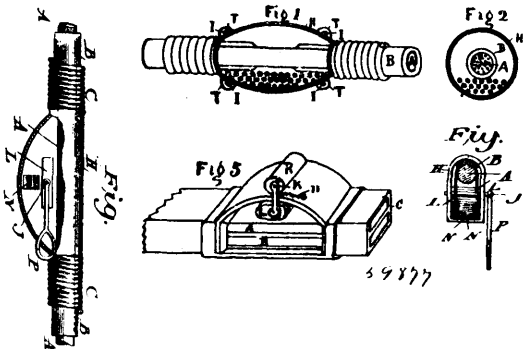
No. 59,876. Electric Cables. (Cable électrique.)



John D. Gould, Brooklyn, Kings Co., New York, U.S.A., 4th May, 1898; 6 years. (Filed 26th November, 1897.)

Claim.—1st. An electric cable, comprising insulating material, and a series of conductors extended along the insulating material and insulated one from another, the several conductors being distinguishable one from another by having their exposed surfaces of metal differing in colour one from another, substantially as specified. 2nd. An electric cable, comprising a fusible core, an insulating material covering the same, a series of conductors wound spirally around said insulating material, and an insulating cord wound between adjacent spirally wound conductors, substantially as specified. 3rd. An electric cable, comprising a fusible core, a copper or similar wire extended longitudinally through said core, an insulating material covering the core, a series of conductors wound spirally around said insulating material, and an insulating cord wound spirally around the insulating material between adjacent spirally wound conductors, substantially as specified.

No. 59,877. Motor Vehicle. (Voiture à moteur.)

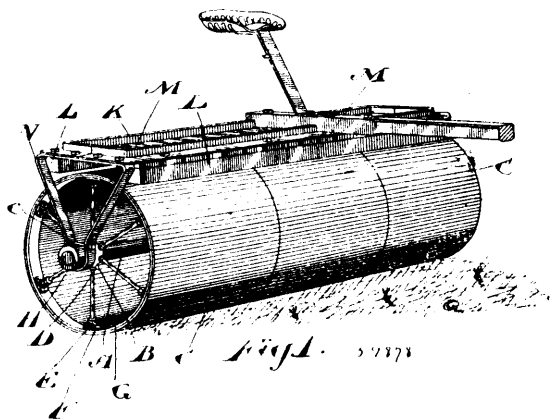


Addison Norman, Toronto, Ontario, Canada, 4th May, 1898; 6 years. (Filed 7th June, 1897.)

Claim.—1st. In an electric cable for the propulsion of vehicles, the combination of the supply conductor made of one or more strands of wire, and covered throughout its whole length with insulating material, except where it is enclosed by short metal switches, with the working conductors and switches knit into one rope, substantially as set forth. 2nd. In an electric cable for the propulsion of vehicles, the combination of the sectional working conductors with the supply conductor and which forms a coat of protection or covering for the supply conductor, substantially as set forth. 3rd. In an electric cable for the propulsion of vehicles, the combination of the coat or covering of the supply conductor which also serves as working conductors, with switching devices, which form a part of the cable also, substantially as set forth. 4th. In an electric cable for the propulsion of vehicles, the combination of the switching devices attached at intervals to and around the insulating material which covers the supply conductor, with the supply conductor made of one or more strands of wire, and the working conductors which are firmly and closely attached to the insulating material covering the supply conductor, as set forth. 5th. In an electric cable for the propulsion of vehicles, the combination of switching devices contained in a watertight case fitting closely at each end over the insulating material being cut away within the case to permit the switching device to close the circuit between the supply conductor the case and a working conductor secured to the outside of the said insulating material, substantially as set forth. 6th. In an electric cable for the propulsion of vehicles, the combination of switching devices contained in a

water-tight case fitting closely at each end over the insulating material which covers the supply conductor, said switching devices consisting of a horizontal shaft extending through the walls of said case and provided with a contact plate or cam within the case and a weighted lever without the case, whereby the circuit is closed between the supply conductor, the case and a working conductor in contact with said case when the cable is raised, substantially as set forth. 7th. In an electric cable for the propulsion of vehicles, the combination of switches attached to and forming part of an electric cable, composed of a water-tight case containing small metallic balls or other free flowing conductor, working conductors and switches joined into one rope, substantially as set forth. 8th. In an electric cable for the propulsion of vehicles, the combination of a supply and return conductor, with a double set of switches and insulating material joined into one rope, as set forth and described. 9th. A railway cable conduit consisting of a main portion formed of a single U-shaped piece, and two covers spaced apart and each comprising a horizontal upper portion on the other surface of which are two depending flanges for gripping the top edge of the main portion, a vertical slot portion resting against the inner walls of the main portion, whereby the cover is retained in position without the use of bolts or other fastenings, substantially as set forth. 10th. A support for a conduit electric cable consisting of a series of longitudinal stringers having their upper surface grooved to receive the cable and held directly beneath the slot in the conduit by coiled wire springs having their ends secured to the cover plates of the conduit, as set forth.

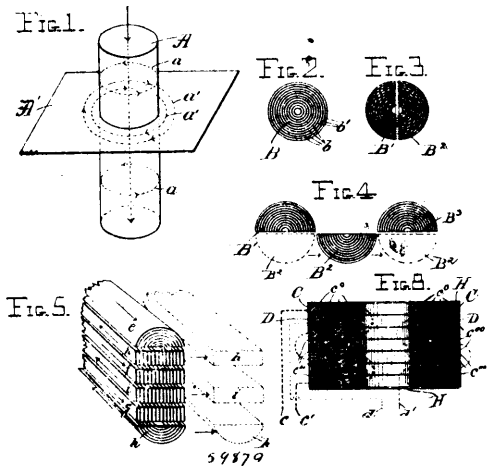
**No. 59,878. Land Roller. (Rouleau d'agriculture.)**



Torrance E. Bissell, Fergus, Ontario, Canada, 5th May, 1898; 6 years. (Filed 15th April, 1898.)

*Claim.*—1st. In a land roller, a drum and sockets connected with the inner surface of the drum, in combination with one or more hubs, spokes radiating therefrom and having their ends within the said sockets, and nuts screwed upon the spokes and bearing against the said sockets, substantially as and for the purpose specified. 2nd. In a land roller, a drum, one or more divided fellos secured therein and sockets connected with the said fellos in combination with one or more hubs, spokes radiating therefrom and having their ends within the said sockets, and nuts screwed upon the spokes and bearing against the said sockets, substantially as and for the purpose specified. 3rd. In a land roller a combined frame and weigh box comprising an angle bar frame, two longitudinal wooden stringers and a series of wooden cross bars securely bolted between the angle bar frame and the stringers, substantially as and for the purpose specified. 4th. In a land roller a combined frame and a weight box comprising an angle bar frame, two longitudinal wooden stringers and a series of wooden cross bars securely bolted between the angle bar frame and the stringers, and downwardly projecting hangers secured thereto, in combination with journal boxes supported by the said hangers and a drum, the axle of which is journaled in the said boxes, substantially as and for the purpose specified. 5th. In a land roller a combined frame and weight box comprising an angle bar frame, two longitudinal wooden stringers and a series of wooden cross bars securely bolted between the angle bar frame and the stringers, and downwardly projecting hangers secured thereto in combination with journal boxes supported in loops in the said hangers, bolts passing through the hangers above the journal boxes, and a drum the axle of which is journaled in the said boxes, substantially as and for the purpose specified. 6th. In a land roller a drum and the axle thereof in combination with a journal box, a series of rollers between the axle and the inner surface of the bearing box, and a cage engaging the ends of the rollers to hold them in alignment, substantially as and for the purpose specified. 7th. In a land roller a drum and a divided felloe secured therein in combination with a hub, spokes radiating therefrom and means for connecting the spokes with the felloe so that the latter may be expanded, substantially as and for the purpose specified.

**No. 59,879. Electric Conductor. (Conducteur électrique.)**

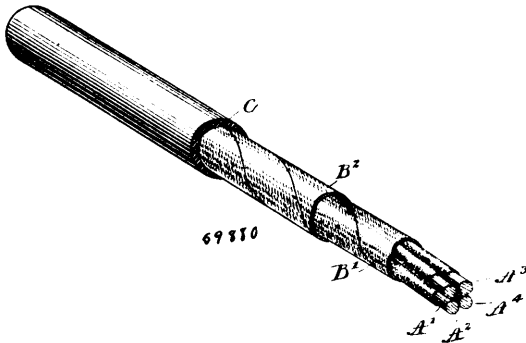


John Millis, Washington, Columbia, U.S.A., 5th May, 1898; 6 years. (Filed 22nd January, 1898.)

*Claim.*—1st. An electric conductor made of thin strips or laminations of material which is both a conductor of electricity and also capable of being affected by, and of readily transmitting magnetic force or influence, and having the laminae separated by insulating material. 2nd. An electric conductor composed of strips or laminae of iron or soft steel separated by an insulating substance, and so arranged as to afford uninterrupted paths for electric currents only in directions along the length of the conductor, while the transverse magnetic stresses are afforded nearly or quite free paths through the metal of the conductors. 3rd. An electric conductor composed of laminations of material which is both a conductor of electricity and also capable of being affected by, and of readily transmitting, magnetic force or influence, an insulating substance separating the laminae of said conductor and the said laminae so disposed as to afford uninterrupted paths for electric currents only in directions along the length of the conductor, while the transverse magnetic stresses are afforded nearly or quite free paths through the metal of each conductor. 4th. An electric conductor constructed in whole or in part of magnetic material, properly insulated and designed for use as the active parts of the general class of electro-magnetic or magneto-electric machines, instruments and apparatus, in which the desired results are produced by the direct electro-magnetic inductive effects between different conductors or between different parts of the same conductor, either with or without dynamic action and relative motion of the conductors or parts of conductor. 5th. In a dynamo-electric machine having an armature whose coils are both conductors of the electric current and magnetic in their action, and the field of said machine being composed of coils similar to the armature coils. 6th. In a dynamo-electric machine or motor, the combination with a movable conductor composed of laminations of material which is both a conductor of electricity and magnetic in its action, and having the laminae of said conductor separated from each other by insulating material, of a stationary conductor of similar structure mounted near the parallel or nearly so to said movable conductor, and the laminated conductor so arranged as to afford uninterrupted paths for the electric currents only in directions along their lengths, while the transverse magnetic stresses are afforded nearly or quite free paths through the metal of each conductor. 7th. In a dynamo-electric machine or motor, the combination with a plurality of movable conductors, composed of laminations of material which is both a conductor of electricity and magnetic in its action, and having the laminae of said conductor separated from each other by insulating material, of a plurality of stationary conductors of similar structure mounted near and parallel or nearly so to said movable conductors, and the laminae of all the said conductors so arranged as to afford uninterrupted paths for electric currents only in directions along the lengths of the conductors while the transverse magnetic stresses are afforded nearly or quite free paths through the metal of the conductors. 8th. In a dynamo electric machine, the combination with a plurality of conductors composed of laminations of material which is both a conductor of electricity and magnetic in its action, and the laminae of said conductor separating material, a shaft and means for securing said conductors at intervals from each to and around the said shaft, a frame having bearings in which said shaft is journaled, a plurality of stationary conductors of similar structure secured in a frame and enclosing and concentric with the movable conductor, and the laminae of all the said conductors so arranged as to afford uninterrupted paths for electric currents only in directions along the lengths of the conductors, while the transverse magnetic stresses are afforded nearly or quite as free paths through the metal of the conductors. 9th. Electrical apparatus dependent upon the direct electro-magnetic

inductive effects of its active parts, in which the parts between said inductive effects take place are all conductors of electricity and magnetic in their action.

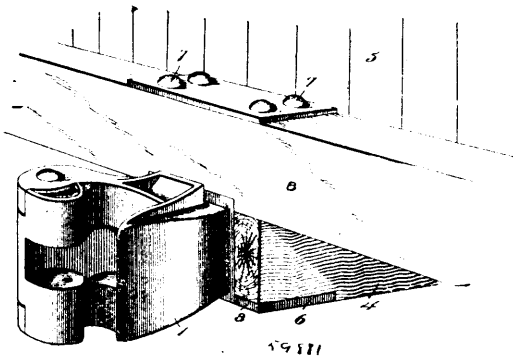
**No. 59,880. Electric Cable. (Cable électrique.)**



John Hall Kelman, Pittsfield, Massachusetts, U.S.A., 5th May, 1898; 6 years. (Filed 1st December, 1897.)

*Claim.*—1st. A cable consisting of several conductors each separately coated with a continuous coating of varnish hardened by oxidation, and a covering holding said conductors together in close proximity, substantially as described. 2nd. A cable consisting of several conductors, each separately coated with a continuous coating of linseed oil varnish, and a covering holding said conductors together in close proximity, substantially as described.

**No. 59,881. Car Coupler. (Attelage de chars.)**

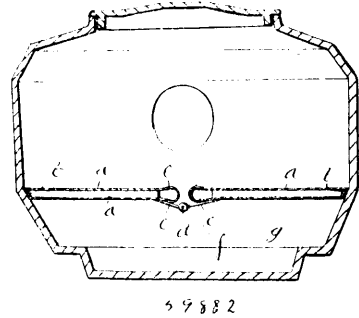


John Christie, Irvine, Pennsylvania, U.S.A., 5th May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. The combination with a draw-head, of a frame or stirrup supporting the draw-head and designed to be mounted on a car, and a safety-key mounted on the shank of the draw-head in rear of the frame or stirrup adapted to engage the same to prevent the draw-head from being drawn out entirely from the car, substantially as described. 2nd. The combination with a draw-head, of a frame or stirrup receiving the draw-head and provided at its top with a vertical flange to engage the frame of a car, said frame or stirrup being provided at the bottom with laterally extending flanges adapted to be bolted to the lower faces of the draft timbers of the car, and a key mounted on the shank of the draw-head in rear of the frame or stirrup and adapted to engage the same, substantially as described. 3rd. The combination, of a draw-head provided in its shank with opposite slots, and a safety key consisting of an enlarged body portion fitting within the shank of the draw-head, and arms extending through the slots of the shank and adapted to engage a car, said key being adapted to be partially rotated in the shank of the draw-head to extend its arms through and withdraw them from the said slots, substantially as specified. 4th. The combination, of a draw-head provided in its shank with opposite longitudinal slots, and a safety key consisting of a ball fitting snugly within the shank of the draw-head, and opposite arms extending from the ball and adapted to project through the slots of the shank of the draw-head to engage a car, substantially as described. 5th. The combination of a draw-head provided in its shank with slots, a frame or stirrup supporting the same and forming a stop, and a safety-key consisting of an enlarged portion fitting the opening of the shank, and opposite arms extending through the slots of the shank and arranged to engage the frame or stirrup, substantially as described. 6th. The combination, of a draw-head, a tail-pin or bolt, a key mounted on the pin or bolt, and a locking washer provided with a slot to receive the key and adapted to be interposed between the same and a follower plate, said groove being

concave and the edge of the key being rounded to conform to the configuration thereof, substantially as described. 7th. The combination, of the draw-head, a tail-pin or bolt provided with a slot, a key arranged in the slot of the pin or bolt, and a locking washer provided with a groove to receive the key and designed to be interposed between the same and a follower plate, said washer being provided with opposite lugs forming a guide, substantially as specified.

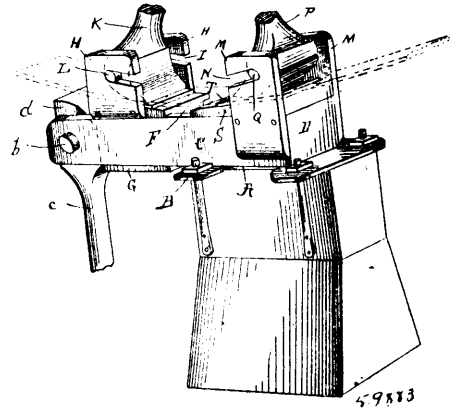
**No. 59,882. Kettle. (Chaudron.)**



Paul Richard Krasel, Montreal, Quebec, Canada, 5th May, 1898; 6 years. (Filed 15th April, 1898.)

*Claim.*—1st. A device for use in kettles to facilitate heating water therein, and consisting of a plate with a central aperture, substantially as described. 2nd. A device for use in kettles to facilitate heating water therein, and consisting of the semi-circular sections *a, a'*, hinged as at *c, d*, and having lips *e* with central aperture *f* between, substantially as described.

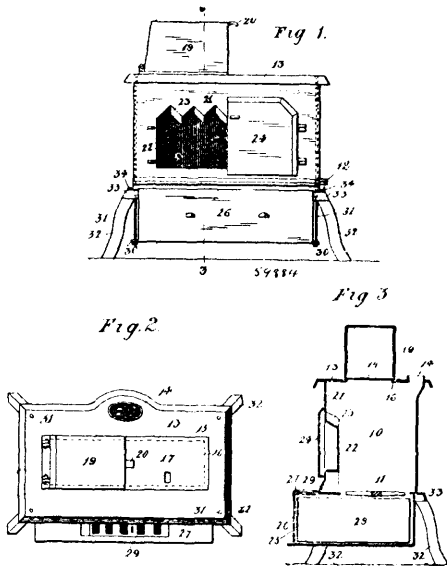
**No. 59,883. Tire Upsetter. (Appareil à poser les bandages.)**



John M. Bender, Alexandria, Louisiana, U.S.A., 5th May, 1898; 6 years. (Filed 16th April, 1898.)

*Claim.* 1st. A tire-shrinker, consisting of a horizontal base *A* provided at its upper face with the parallel webs *C*, a stationary clamping-surface spanning the upper edge of said webs at a point over the said base, parallel arms *M* projecting upwards from said webs at opposite sides of said clamping-surface, a cam-arm pivoted between said arms *M* and co-acting with the stationary clamping-surface, the webs *C* projecting beyond said base, a cam-operating lever pivotally supported between the extremities of said webs, a movable follower situated between said extending webs at a point between the cam-lever and the stationary clamping-surface, the follower having supporting shoulders interlocking with said webs and carrying a clamping-surface at a point above the upper edges of the webs, the clamping-surface having upwardly-extending arms at opposite sides thereof, and a cam-arm pivotally supported by said arms and co-acting therewith, substantially as described. 2nd. A shrinker, consisting of a base *A*, the arms *C* projecting beyond and longitudinal the base, a follower movable between the arms beyond the base, the follower carrying a horizontal clamping-device, the rear inner ends of the arms having a horizontal clamp at their upper sides, at a point over the base the rear ends of the arms or webs being closed by a back, thus forming a housing between the stationary clamping-surface and the base *A*, a spring situated in the said housing having one end engaging the inner side of the follower, and an operating-lever pivotally supported between the projecting extremities of the arms or webs *C* and in contact with the outer face of the follower, substantially as described.

**No. 59,884. Stove. (Poêle)**

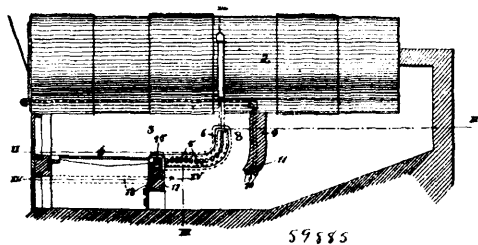


Philorum Henry Picard, Ormstown, Quebec, Canada, 5th May, 1898; 6 years. (Filed 18th April, 1898.)

*Claim.* - 1st. In a stove, for the purpose described, the combination with the top of the stove, having a rectangular opening therein and a ledge formed around the said opening, of two stove-lids adapted to entirely cover the said opening, one of the said lids having the cover hinged thereto, adapted to receive the irons to be heated, the said lids being interchangeable, substantially as set forth and for the purposes herein described. 2nd. In a stove for the purpose described, the combination with the fire-box of the stove, of a front having a recess formed therein inwardly, the upper part of said recess being formed with pointed arches, and doors closing the said recess, substantially as set forth and for the purposes described. 3rd. In a stove, the combination with a cornice or projection 33 of the legs or feet 32, secured to the corners of the cornice or projection by means of bolts and nuts 34, substantially as set forth and herein shown.

**No. 59,885. Water Heater and Smoke Consumer.**

(*Chauffeur d'eau et foyer fumivore.*)

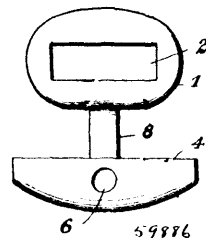


William H. Bradley, Bellevue, Pennsylvania, U.S.A., 5th May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.* - 1st. The combination of grate-bars for the quick or slow combustion of green fuel, a set of hollow water-tubes extending horizontally and upwardly, the forward tubes forming grate-bars and the rear upwardly-extending tubes forming a bridge-wall having interstices, a hanging deflecting wall, in rear of the bridge-wall, an air conduit, having jet-orifices, situated below and in front of the hollow water-conducting grate-bars, and water-conduits leading from the boiler to the hollow grate bars and from the grate-bars to the boiler, substantially as and for the purpose specified. 2nd. The combination of water-chambers situated in the side-walls, a series of water-tubes extending horizontally and upwardly between the side chambers, the forward sections of which tubes constitute grate-bars and the rear upwardly extending sections thereof forming a bridge-wall, a hanging-wall deflector, in rear of the bridge-wall, a water-pipe at the base of the hanging wall, which pipe communicates with one of the side chambers, an air conduit having jet-orifices in proximity to the hollow grate-bars, and water conduits leading from the boiler to the water-heating tubes and from one of the side chambers to the boiler, substantially as and for the purpose specified. 3rd. The combination of the forward grate-bars, the rear grate-bars which constitute a bridge-wall having interstices, the hanging wall or deflector, in rear of the bridge-wall, and an air con-

duit, having jet-orifices situated below and in front of the rear grate bars, substantially as and for the purpose specified. 4th. A boiler grate comprising the two side chambers having upwardly projecting rear ends, a transverse chamber connecting the forward ends of said side chambers, and a series of transverse tubes connecting the horizontal and the upwardly extending branches of the side chambers, the upwardly extending tubes forming a bridge wall, substantially as described. 5th. The herein described boiler-grate comprising the side chambers extending horizontally rearward and then upwardly, the transverse tubular chamber connecting the forward ends of the side chambers and constructed to support the rear end of a front or main grate, the tubes connecting both the horizontal and the vertically extending portions of the side chambers, the upwardly extending section of the grate thus forming a bridge wall, and the boiler connections, substantially as described. 6th. The combination of the forward grate bars, the rear grate bars, which constitute a bridge wall, past which the gasses are adapted to flow or pass and extend at right angles to the line of the forward grate bars, and a hanging wall or deflector at a distance from the bridge wall, so as to leave a space between the bridge wall and the hanging wall whereby the gasses passing said bridge wall will strike the hanging wall and be diverted downwardly into the flue, substantially as described. The combination of the forward grate bars, the rear grate bars, which constitute a bridge wall past which the gasses are adapted to flow or pass, and a hanging wall or deflector at a distance from the bridge wall, said wall having one or more water tubes on its lower edge whereby the gasses passing said bridge-wall will strike the hanging wall and be diverted downwardly into the flue, substantially as described. 8th. The combination of the forward grate bars, rear grate bars, composed of hollow tubes having interstices between the tubes and forming a bridge-wall, a hanging wall at a distance from the bridge-wall, and one or more water tubes on the lower face of the hanging wall, all of said tubes and tubular grate bars being connected with a tube leading from the bottom of the boiler and with a return pipe leading to the top of the boiler, substantially as described. 9th. The combination of the forward grate, rear tubular grate bars extending upwardly at their rear ends to form a water-tube bridge-wall through the interstices in which the gasses are adapted to flow, and a closed wall dividing the ash-pit transversely at the juncture of the forward and rear grate-bars, substantially as described.

**No. 59,886. Harness Dec. (Harnais.)**

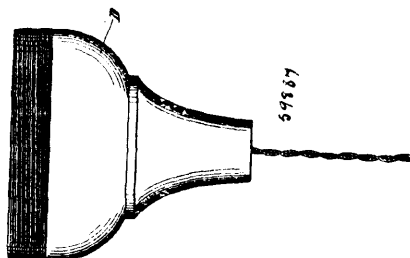


Scott Harter Hull, Oskaloosa, Iowa, U.S.A., 5th May, 1898; 6 years. (Filed 21st April, 1898.)

*Claim.* - 1st. As an improved article of manufacture, a harness dec, consisting of a guide plate with an opening therein, a shank extending therefrom which is in part laterally deflected, and an extended base plate connected to said shank and standing in a plane different from the plane of said guide plate. 2nd. As an improved article of manufacture, a harness dec, consisting of a guide plate with an opening therein, a shank, and an extended base plate lying in a plane to one side of the plane of the guide plate, the latter being in advance of the said base plate. 3rd. As an improved article of manufacture, a harness dec, consisting of an apertured guide plate, a shank, and a base, the shank being primarily adjustable on the base to position the guide loop at varying angles.

**No. 59,887. Electric Ceiling Cut Out.**

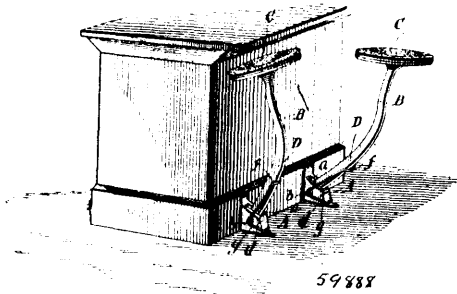
(*Interrupteur électrique.*)



William Heelas, London, Ontario, Canada, 5th May, 1898; 6 years. (Filed 20th October, 1896.)

*Claim.*—1st. An electric cut out for concealed work, consisting of a canopy D, the insulating ring or collar E, in the outer end thereof, in combination with a fuse block A, and means for connecting the canopy with the fuse block, substantially as and for the purpose set forth. 2nd. In an electric cut out for concealed work, the canopy D, the insulating ring or collar E, in the outer end thereof, in combination with a fuse block A, in which the opening B, is formed, to which block the fuses C, are secured, and said canopy screwed on said block, substantially as and for the purpose set forth.

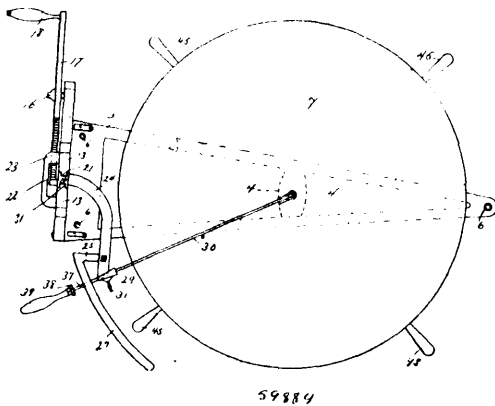
**No. 59,888. Store Stool. (Banc de comptoir.)**



Albert R. Milner, Canal Dover, Ohio, U.S.A., 5th May, 1898; 6 years. (Filed 16th April, 1898.)

*Claim.*—1st. In a counter-stool, a recessed floor-bracket, a curved stool-arm pivoted in the bracket and engaging one of the walls of the bracket to form a stop to limit the outward movement of the arm, a spring encircling the pivot of the arm having extensions engaging, respectively, the stool-arm and bracket, a seat-plate formed on the upper end of the steel arm and disposed in a plane substantially at right angles to the upper end on said stool-arm when the latter is in a folded position, whereby the seat of the stool will fold close against the counter, the said angle of the seat-plate with the steel-arm being such as to cause the seat to lie in a horizontal plane when the latter is in position for use and a seat secured to the seat-plate. 2nd. In a store or counter-stool, a recessed floor-bracket, an arm pivoted to the bracket and engaging one of the walls of the bracket to form a stop to limit the outward movement of the arm, a spring engaging the stool-arm and bracket respectively, a seat-plate formed on the upper end of said stool-arm that when the latter is in a folded position the seat of the stool will fold close against the counter, the said angle of the seat-plate with arm being such as to cause the seat to lie in a horizontal plane when the latter is in position for use, and a seat secured to the seat-plate, substantially as described.

**No. 59,889. Cheese Cutting Machine. (Machine à couper le fromage.)**

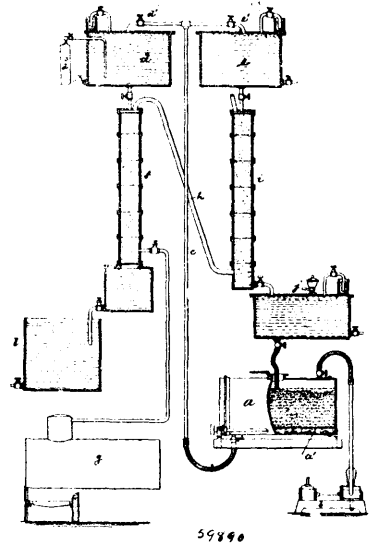


Alverdo Ball, Hills Groove, Rhode Island, U.S.A., 5th May, 1898; 6 years. (Filed 16th April, 1898.)

*Claim.*—1st. A machine for cutting cheese, and other articles, consisting of a base plate or frame, a table or board pivotally mounted and adapted to turn thereon, an upright or uprights mounted at one end of said base plate or frame, a vertically-movable rack-bar connected therewith, an arm connected with said rack-bar, and a blade connected with said arm and projecting radially of said pivoted plate or board, and means for operating said rack-bar, said blade being adapted to be turned laterally in its supports, substantially as shown and described. 2nd. A machine for cutting cheese and other articles, consisting of a base plate or frame, a circular plate or board pivotally mounted thereon, and adapted to turn

thereon, and an upright at one end of said base plate or frame, a rack-bar connected therewith, a crank-wheel for operating said rack-bar, an arm connected with said rack-bar, a plate connected with said arm and projecting radially of said pivoted plate or board, and a cutting-plate mounted below said plate and supported thereby, said cutting-blade being adapted to be turned in its supports, substantially as shown and described. 3rd. In a machine for cutting cheese or other articles, the combination with a plate or frame, a revoluble plate or board pivotally mounted thereon, and standards mounted on said plate or frame, of a vertically-movable bar supported and guided by said standards, means for elevating and lowering said bar, an arm attached to said bar, a plate supported by said arm, a swivel thereon, a guide 27, a cutting-blade pivotally attached to said swivel and moving laterally in said guide and means whereby said plate may be turned on its supports, substantially as described. 4th. In a machine for cutting cheese or other articles, the combination with a plate or frame, a revoluble plate or board pivotally mounted thereon, and standards mounted on said plate or frame, of a vertically-movable bar supported and guided by said standards, means for elevating and lowering said bar, an arm attached to said bar, a vertical cross-head thereon, a plate supported by said cross-head, a swivel thereon, a guide 27, a cutting-blade pivotally attached to said swivel and movable laterally in said guide, a laterally-extending lug, a vertically-movable spring-actuated bolt mounted thereon, and abutment thereon adapted to come in contact with the cutting-blade and means whereby said blade may be turned on its supports, substantially as described.

**No. 59,890. Gold Extracting Process and Apparatus. (Procédé et appareil pour extraire.)**

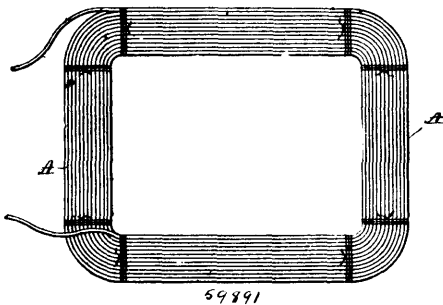


Henry Remer Cassel, and Bertrand Chase Hinman, both of New York City, U.S.A., 5th May, 1898; 6 years. (Filed 18th March, 1897.)

*Claim.*—1st. The process of extracting gold from ores which consists in gradually percolating a solution of a bromin compound of an alkaline base capable of being decomposed by an acid, through a body of ore containing a suitable percentage of a substance having acid properties, the ore being maintained in a quiescent state during such percolation, substantially as specified. 2nd. The process of an alkaline base capable of being decomposed by an acid, through a body of ore containing a suitable percentage of a substance having acid properties, the ore being maintained in a quiescent state during such percolation, and covering the ore during the treatment by a layer of a liquid capable of absorbing any bromin fumes that may arise from the ore, substantially as specified. 3rd. The process of treating auriferous ores which consists in subjecting the ore to the action of a solution of a bromin compound of an alkaline base, so as to form active bromin in the body of the ore, setting free the combined bromin, vaporizing the bromin, mixing it with a sub-divided body of a vapor of an alkali, and precipitating the gold, substantially as specified. 4th. The process of extracting gold from ores which consists in treating the ore with bromin, filtering the solution, increasing its surface by sub-division, separating the free bromin from the sub-divided solution by vaporization, and precipitating the gold, substantially as specified. 5th. The process of extracting gold from ores which consists in treating the ore with bromin, filtering the solution, increasing its surface by sub-division, separating the free bromin from the sub-divided solution by vaporization, condensing the bromin vapors, and precipitating the gold, substantially as specified. 6th. The process of extracting gold from ores which consists in treating the ore with bromin, add-

ing a re-agent to set free the bromin, sub-dividing the solution to increase its surface, separating the bromin from the sub-divided solution by vaporization, and precipitating the gold, substantially as specified. 7th. The process of extracting gold from ores which consists in treating the ore with bromin, adding chlorin to the solution, sub-dividing the solution to increase its surface, separating the bromin from the sub-divided solution by vaporization, and precipitating the gold, substantially as specified. 8th. The process of extracting gold from ores which consists in treating the ore with bromin, adding chlorin, sub-dividing the solution to increase its surface, vaporizing the bromin and chlorin from sub-divided station, condensing the bromin and chlorin vapors, and precipitating the gold substantially as specified. 9th. The process of extracting gold from ores, which consists in treating the ore with bromin, adding chlorin, sub-dividing the solution to increase its surface, vaporizing the bromin and chlorin from the subdivided solution, condensing the bromin and chlorin vapors, precipitating the gold, and adding the condensed halogens to a fresh body of ore, substantially as specified. 10th. An apparatus for extracting gold from ores, which consists of a vaporizing-tower filled with pebbles or other obstructive bodies, a dissolving vessel and a condensing-tower communicating with the vaporizing-tower, and a vaporizing-pipe that communicates with the lower end of the vaporizing-tower, substantially as specified. 11th. An apparatus for extracting gold from ores, which consists of a dissolving vessel, a pair of intermediate tanks connected therewith, a vaporizing and a condensing tower connected respectively to the intermediate tanks and also to each other, and a vaporizing-pipe communicating with the lower end of the vaporizing-tower, substantially as specified. 12th. An apparatus for extracting gold from ores, which consists of a vaporizing-tower, a dissolving vessel and a vaporizing-pipe communicating respectively with the upper and lower ends thereof, a liquid seal at the bottom of the vaporizing-tower, and a receiving or precipitating tank communicating with the liquid seal, substantially as specified. 13th. An apparatus for extracting gold from ores, which consists of a vaporizing-tower, a dissolving vessel and a condensing-tower communicating with the vaporizing-tower, and a vaporizing-pipe and a receiving or precipitating tank communicating with the lower end of such tower, substantially as specified. 14th. An apparatus for extracting gold from ores, which consists of a dissolving vessel, a pair of intermediate tanks connected therewith, a vaporizing and condensing-tower connected respectively to the intermediate tanks and also to each other, and a vaporizing-pipe and a receiving or precipitating tank communicating with the lower end of the vaporizing-tower, substantially as specified. 15th. The combination, in an apparatus for extracting gold from ores, of the following elements: a dissolving vessel, a pair of intermediate tanks connected therewith, a vaporizing and a condensing-tower connected respectively to the intermediate tanks and also to each other, a vaporizing-pipe communicating with the lower end of the vaporizing-tower, a liquid seal at the bottom of such tower, a receiving or precipitating tank communicating with the liquid seal, and a filter-press communicating with the receiving or precipitating tank, substantially as specified.

**No. 59,891. Electrical Flexible Insulated Conductor.**  
(*Conducteur flexible isolé électrique.*)



John Hall Kelman, Pittsfield, Massachusetts, U.S.A., 5th May, 1898; 6 years. (Filed 19th July, 1897.)

*Claim.*—1st. A flexibly insulated conductor for electrical purposes, consisting of an extended length of electric conductor and a coating thereon of oxidized oil varnish such as linseed oil varnish, substantially as described. 2nd. A flexibly insulated conductor for electrical purposes consisting of an extended length of tinned copper conductor, and a coating thereon of linseed oil varnish, substantially as described. 3rd. A coil of flexibly insulated conductor for electrical purposes consisting of a coiled copper wire and a flexible and uniform coating of hardened linseed oil varnish adhering thereto, the coatings of the several turns being separate at the points of contact, substantially as described. 4th. A coil of flexibly insulated conductor for electrical purposes consisting of an electrical conductor and a coating of ozone hardened linseed oil varnish, substantially as described. 5th. A coil of flexibly insulated conductor for electrical purposes consisting of a coiled copper conductor having a tinned surface, and a coating of ozone hardened linseed oil, substantially as described. 6th. The process of applying and hardening coatings of japan or

other materials having similar drying qualities to articles of extensive lengths consisting in continuously passing a continuous length of the article to be coated through a bath of the material to be applied, and then through a hardening chamber, and subjecting succeeding portions of the coated article while in said hardening chamber to the action of heat of continuously increasing temperature, substantially as described. 7th. The process of applying and hardening coatings of japan or other materials having similar drying qualities to articles of extensive lengths consisting in continuously passing a continuous length of the article to be coated through a bath of the material to be applied and then through a vertical hardening chamber and subjecting succeeding portions of the coated article while in a vertical position to the action of heat of continuously increasing temperature, substantially as described. 8th. The process of applying and hardening coatings of japan or other materials having similar drying qualities to articles of extensive lengths consisting in continuously passing a continuous length of the article to be coated through a bath of the material to be applied, and then through a vertical hardening chamber and subjecting succeeding portions of the coated article while in a vertical position to the action of heat of continuously increasing temperature with ozone, substantially as described. 9th. The process of applying and hardening coatings of japan or other materials having similar drying qualities to extensive lengths of copper or other similar electrical conductors, which consists in first tinning said conductor, then passing it through a bath of the material to be applied and then through a hardening chamber and subjecting succeeding portions of the coated conductor while within said hardening chamber to the action of heat, substantially as described. 10th. An apparatus for applying and hardening coatings of japan or other materials having similar drying qualities, consisting of a vertical hardening chamber, and means for heating the same, a bath of the material to be applied, and means for continuously passing extended lengths of the article to be coated through said bath and vertically through said hardening chamber, whereby successive portions of the article are coated and the coating hardened while subjected to the action of heat of continuously increasing temperature, substantially as described. 11th. An apparatus for applying and hardening coatings of japan or other materials having similar drying qualities, consisting of a vertical light proof ozone chamber, and means for heating the same, an ozone generator supplying ozone to said chamber, a bath of the material to be applied and means for continuously passing extended lengths of the article to be coated through said bath and vertically through said ozone chamber, whereby successive portions of the article are coated and the coating hardened while subjected to the action of ozone and continuously increasing heat, substantially as described.

**No. 59,892. Funnel. (Entonnoir.)**

FIG. 1.

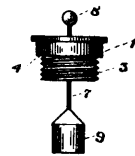
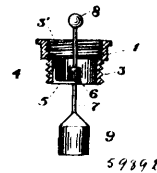


FIG. 2.



John Samuel Crellin, New York City, U.S.A., 5th May, 1898; 6 years. (Filed 17th January, 1898.)

*Claim.*—In a liquid receptacle filler, a tube made flaring at the upper extremity, and having a male thread at the bottom and a female thread at the top, a guide located within the tube, and a wire mounted in the guide, said wire bearing a head at the top, and a buoyant block at the bottom, the whole combined and arranged to operate, substantially as shown and described.

**No. 59,893. Spring Jack for Telephone Switchboards.**  
(*Levier à ressort pour échanges de téléphones.*)

The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 6th May, 1898; 6 year. (Filed 20th October, 1896.)

*Claim.* 1st. The combination with a spring-jack having a tubular contact-thimble and a contact-spring, of a plug having a contact-



ring for the said contact spring and an insulating-ring of larger diameter than the said contact-ring placed before the said contact-

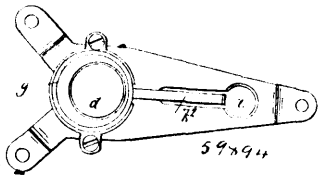


59893

ring, whereby the ring is prevented from touching the contact-thimble, as described. 2nd. The combination with a spring-jack having a tubular contact-thimble with a flared orifice and a contact-spring, of a plug having a contact-ring for the spring sunk between two collars of insulating material, whereby the said contact-ring is prevented from touching the contact-thimble, as described. 3rd. The combination with a connecting-plug provided with a cylindrical tip, a contact-ring, and a collar of insulating material in the rear of said tip, larger than the said contact-ring, of a spring-jack provided with a spring adapted to enter behind the said insulating-collar to make contact with the ring and to hold the plug in the spring-jack, as described. 4th. The combination with a plug having a cylindrical tip, a contact ring in the rear of said tip, and a collar of insulating material, of larger diameter than the said contact ring, between the said ring and the tip, of a spring-jack provided with two contact-springs, one adapted to rest on the said tip and the other adapted to rest on the said ring, substantially as described. 5th. The combination in a connecting plug, of a cylindrical tip of small diameter, a contact collar of larger diameter at the rear of said tip, a contact sleeve of still larger diameter at the rear of said collar, and insulating collar separating the different contact portions, substantially as described.

**No. 59,894. Signal for Telephone Switchboards.**

(Signal pour échanges de téléphones.)



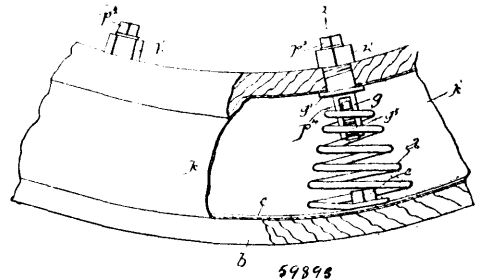
59894

The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Frank Robert McBerty, Downey's Grove, Illinois, U.S.A., 6th May, 1898; 6 years. (Filed 5th January, 1897.)

*Claim.*—1st. The combination with a telephone-line and means for altering its electrical condition, of a signal-indicator associated with the line, a magnet controlling the indicator responsive to currents in the line, an appliance whose position or condition is altered during connection with the line, and a mechanical device actuated in the movement of said appliance adapted to act upon the indicator in the same manner that the magnet does, as described. 2nd. The combination with a telephone-line and means for changing the electrical condition of the line while the telephone is in use, of a signal-indicator associated with the line, a magnet controlling the indicator responsive to currents in the line, an appliance whose position is altered in the act of making connection with the line, and a mechanical device actuated by the said appliance when its position is changed, adapted to move the indicator in the same manner that the magnet does, while the said appliance is in use, as described. 3rd. The combination with a telephone-line, a source of current therein and a circuit at the substation closed through the substation-telephone continuously during the use thereof, of a plug and a plug circuit for making connection with the line, a signal-indicator associated with the plug, an electro-magnet responsive to currents in the line controlling the indicator, and mechanism in the normal resting-socket of the plug also controlling the indicator in the same way that the said magnet controls it, as described. 4th. The combination with a telephone-line and means for producing current in it continuously during the use of the telephone, of a plug and plug-circuit for making connection with the line, a signal-indicator associated with the plug, a magnet controlling the indicator excited by the current in the line and adapted thereon to cause the concealment of the indicator, and mechanism in the plug-socket made active through the presence of the plug in its socket adapted

to conceal the indicator, substantially as described. 5th. The combination in a supervisory signal of an indicator and means for causing its display, an electro-magnet adapted to prevent the display of the indicator when excited, and a mechanical device in the plug-socket acting upon said indicator to prevent its display when the plug is present in the socket, as described. 6th. The combination with a connecting-plug and the normal resting-socket thereof, a signalling instrument comprising a magnet and a target controlled thereby associated with a plug, of a mechanical device in the plug-socket to be operated by the plug adapted to conceal the signal, substantially as described. 7th. The combination with a group of telephone lines and switches at the stations thereof for closing the lines during the use of the telephones, of plugs and a plug-circuit therefor independent of the lines adapted to be connected with one line, a magnet connected with the plug-circuit and an indicator controlled thereby to be displayed when the magnet is inert, a resting-socket for one of the plugs and mechanism therein controlling the indicator to effect its concealment when the plug is in its socket, and a source of current adapted to be brought into circuit of a line and the plug circuit when a plug is connected with the line and to produce current through the said magnet while the telephone is in use at the sub-station of the line, whereby the indicator is concealed when the plug is disconnected from the line and in its socket, or when the plug is connected with the line and the line is in use, being displayed when the plug is connected with the line and the line is in use, as described. 8th. The combination with a group of telephone lines and switches at the stations thereof for closing the lines during the use of the telephones, of a pair of plugs and a plug-circuit therefor independent of the lines, each plug being adapted to be connected with the plug-circuit and an indicator controlled thereby to be displayed when the magnet is inert, an appliance associated with the plug-circuit whose position is changed during the use of the plugs in uniting lines, and mechanism actuated by the said device adapted to conceal the indicator when the plugs are not in use, a source of current and means for closing a circuit thereof through the said magnet and the telephone line with which a plug is connected, substantially as described.

**No. 59,895. Wheel Tire. (Bandage de roue.)**



59895

Charles Taylor, and George Sanderson, of Montreal, and George Plunkett Magann, of Toronto, all in Canada, 6 May, 1898; 6 years. (Filed 10th September, 1896.)

*Claim.*—1st. In combination with the rim of a wheel, a series of guides secured thereto, a series of sections adjustable longitudinally of said guides, a series of helical springs one end of each of which takes about one of said guides and bears upon one of said adjustable sections and the other end of each being connected to a tread, for the purpose set forth. 2nd. In combination with the rim of a wheel, a tread and an annulus located inside of and in contact with said tread, a series of guides secured to said tread, a series of sections adjustable longitudinally of said guides, a series of helical springs one end of each of which takes about one of said guides and bears upon one of said adjustable sections and the other end of each being connected to said annulus and a covering for said springs consisting of a pair of separate strips, the inner side edges whereof are connected to said rim and the outer side edges confined between said annulus and tread, for the purpose set forth. 3rd. In combination with the rim of a wheel, a series of guides carried by said rim, a series of bearing sections carried by said guides and adjustable longitudinally thereof, a series of helical springs located between said rim and tread and each adapted to bear at one end upon the inside of said tread and having an outer end thereof encircling the end of one of said guides and bearing upon said adjustable bearing section and means for adjusting said bearing sections, for the purpose set forth. 4th. In combination with the rim of a wheel, such rim having openings therethrough, a series of guides each consisting of a slitted tubular section provided with a rigid collar and having one end screw-threaded and adapted to project through the openings in the rim to receive a retaining nut thereon, a portion of the opening through said tubular section being diminished to form a shoulder, a bolt having one end projecting through said diminished opening and finished in a squared head, a collar formed rigidly upon said bolt, the other end of said bolt being screw-threaded, a collar adapted to be screwed upon said bolt and having radially projecting arms passing through the slits in said tubular section, a series of

helical springs one end of each of which takes about one of said tubular guides and bears upon the said arms and their other ends being connected to a tread, and a covering for said springs connected to said rim and to said tread, for the purpose set forth. 5th. In combination with the rim of a wheel, such rim having openings therethrough, a series of guides each consisting of a slitted tubular section provided with a rigid collar and having one end screw-threaded and adapted to project through the openings in the rim to receive a retaining nut thereon, a portion of the opening through said tubular section being diminished to form a shoulder, a bolt having one end projecting through said diminished opening and finished in a squared head, a collar formed rigidly upon said bolt, the other end of said bolt being screw-threaded, a collar adapted to be screwed upon said bolt and having radially projecting arms passing through the slits in said tubular section, a series of helical springs one end of each of which takes about one of said tubular guides and bears upon said arms, and their other ends being connected to a tread and a covering for said springs consisting of a pair of separate strips, the side edges whereof are connected one to said rim and the other to said tread, for the purpose set forth. 6th. In combination with the rim of a wheel such rim having openings therethrough, a series of guides each consisting of a slitted tubular section provided with a rigid collar and having one end screw-threaded and adapted to project through the openings in the rim to receive a retaining nut thereon, a portion of the opening through said tubular section being diminished to form a shoulder, a bolt having one end projecting through said diminished opening and finished in a squared head, a collar formed rigidly upon said bolt, the other end of said bolt being screw-threaded, a collar adapted to be screwed upon said bolt and having radially projecting arms passing through the slits in said tubular section, a series of conical helical springs one, the smaller, end of each of which takes about one of said tubular guides and bears upon the said arms, and their other ends being connected to a tread, and a covering for said springs connected to said rim and to said tread, for the purpose set forth. 7th. In combination with the rim of a wheel, such rim having openings therethrough, a series of guides each consisting of a slitted tubular section provided with a rigid collar and having one end screw-threaded and adapted to project through the openings in the rim to receive a retaining nut thereon, a portion of the opening through said tubular section being diminished to form a shoulder, a bolt having one end projecting through said diminished opening and finished in a squared head, a collar formed rigidly upon said bolt, the other end of said bolt being screw-threaded, a collar adapted to be screwed upon said bolt and having radially projecting arms passing through the slits in said tubular section, a series of conical helical springs one, the smaller, end of each of which takes about one of said tubular guides and bears upon the said arms, and their other ends being connected to a tread, and a covering for said springs consisting of a pair of separate strips and side edges whereof are connected one to said rim, and the other to said tread, for the purpose set forth.

**No. 59,896. Dunnage Bag. (Sac de fardage.)**

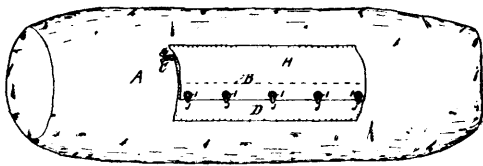


FIG. 1

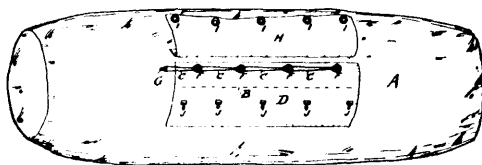


FIG. 2 59896

Simon Leiser, assignee of Alexander von Hagen, both of Victoria, British Columbia, Canada, 6th May, 1898; 6 years. (Filed 3rd December, 1897.)

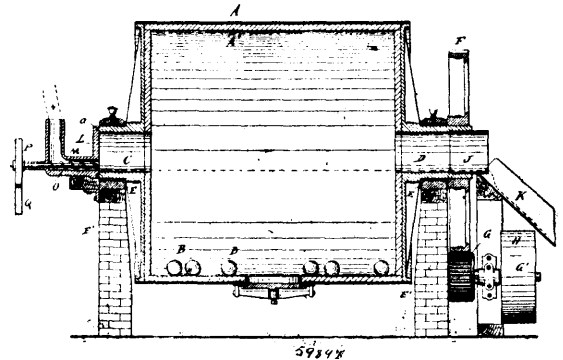
*Claim.*—As an article of manufacture, a dunnage bag having a central slit or opening B, flap D, eye-lets and cords for securing the edge of flap D to the body of the bag over the slit opening, an outer flap H and fastenings to secure the same over the edge of the inner flap, substantially as and for the purpose hereinbefore set forth.

**No. 59,897. Ore Pulverizing Machine.**

(*Machine à pulvériser le minéral.*)

The Clark Crusher and Concentrator Company, Chicago, Illinois, assignee of Joseph Kithcart Clark, Butte City, Montana, all in the U.S.A., 6th May, 1898; 6 years. (Filed 13th September, 1897.)

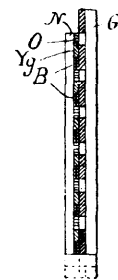
*Claim.*—1st. In a pulverizing apparatus of the class described, the combination with a rotary receptacle, of grinding balls or pebbles



arranged in a mass therein, inlet and outlet openings in said receptacle, means for gradually feeding the product to be pulverized into said receptacle through said inlet opening, the apparatus as a whole being constructed to preserve the contained mineral from the influence of a blast or current of air, whereby the pulverized product will be discharged through said outlet opening in a flowing stream substantially under the action of the feed alone, substantially as described. 2nd. In a pulverizing apparatus of the class described, the combination with a rotary cylinder having axial inlet and outlet passages opposite each other, and grinding balls or pebbles arranged in a mass in said cylinder, of forced feeding mechanism in said inlet passage, said outlet passage being unobstructed and being of a diameter considerably less than that of the cylinder, the apparatus as a whole being constructed to preserve the contained mineral from the influence of a blast or current of air, whereby the pulverized mineral will be caused to rise by gravitation to the surface of the materials in the cylinder and will be discharged through said outlet passage in a flowing stream, substantially under the action of the forced feed alone, substantially as described.

**No. 59,898. Production of Photographic Prints.**

(*Production d'empreinte photographique.*)



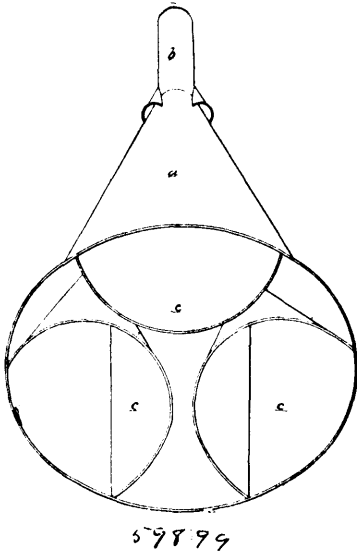
59898

The Sampo Company, Montclair, New Jersey, assignees of Charles Louis Adrien Brasseur and Sebastian Pascal Sampo, both of New York City, U.S.A., 6th May, 1898; 6 years. (Filed 10th November, 1897.)

*Claim.*—1st. The mode or art herein described of forming printing surfaces for colour printing from a photograph, from nature, or artists' work, which consists in first making a subdivided photographic representation, composed of differing partial-images in side by side areas of the representation, then producing photographically a separate partial-print for and from each partial-image, and then producing a printing-block or surface for and from each partial-photo-print, substantially as described. 2nd. The mode or art herein described of forming a photographic print from any of differing partial-images forming parts of a subdivided photographic representation of a multi-coloured object, and formed or lying in side by side areas of the representation, which consists in forming a print of the desired partial-image by means of the action of light from or through the chosen partial-image and through a screen having side by side areas respectively light-retarding or opaque and light-transmitting, the transmitting areas thereof exposing the chosen partial-image and the retarding or opaque areas thereof obscuring or stopping out the remainder of the said partial-images during the printing, substantially as described. 3rd. The mode or art herein described of forming a photographic print from any one of differing partial-images forming parts of a subdivided photographic representation of a multi-coloured object, and formed or lying in side by side areas of the representation, which consists in forming a print of the desired partial-image by means of the action of light from or through the chosen partial-image and through a screen having side by side areas respectively light-retarding or opaque and light-transmitting, the transmitting areas thereof exposing the chosen partial-image and the retarding or opaque areas

thereof obscuring or stopping out the remainder of the said partial-images during the printing, and in causing relative motion of the image-bearer and screen taken as one, and the print-film, during the printing, to expose new or additional areas of the print-film to the action of the light from or through the said partial-image, substantially as described. 4th. The mode or art herein described of forming a photographic print from any one of differing partial-images forming parts of a subdivided photographic representation of a multi-coloured object, and formed or lying in side by side areas of the representation, which consists in exposing a sensitive film to the action of light from or through one of said partial-images and in stopping out the remainder of said partial images, substantially as described. 5th. The mode or art herein described of forming a photographic print from any one of differing partial-images forming parts of a subdivided photographic representation of a multi-coloured object, and formed or lying in side by side areas of the representation, which consists in exposing a sensitive film to the action of light from or through one of said partial-images, in stopping out the remainder of said partial-images, and in causing relative motion of the image-bearer and screen taken as one, and the print-film, during the printing, to expose new or additional areas of the print-film to the action of the light from or through the said partial image, substantially as described. 6th. The mode or art herein described of forming printing surfaces for colour printing from a photograph from nature or artists' work, which consists in first taking a subdivided photographic representation composed of differing partial-images in side by side areas of the representation, second, producing photographically a separate partial-print for and from each partial-image, each by exposing a sensitive film to the action of light from or through one of said partial-images, stopping out the remainder of said partial images and causing the light to act upon the whole or the desired parts of the sensitive film, and third, producing a printing-block or surface for and from each partial-print so obtained, substantially as described.

**No 59,899. Washing Machine. (Machine à laver.)**



James W. Brownell, Linden, Nova Scotia, Canada, assignee of Archibald Stewart, Keota, Iowa, U.S.A., 6th May, 1898; 6 years. (Filed 22nd November, 1897.)

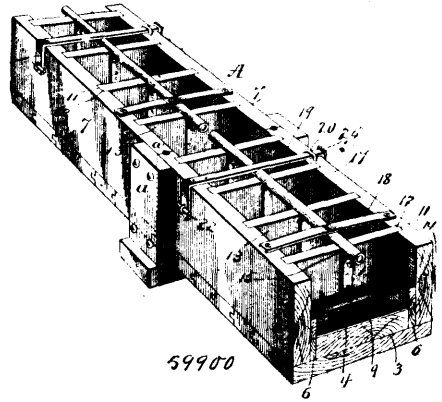
**Claim.**—1st. In a washing machine of the class herein described, the combination of the conical metal air chambers *c c c* with the metal casing *a* and the handle socket *b*, substantially as and for the purpose hereinbefore set forth and described. 2nd. In a washing machine of the class herein described, the combination of the protectors *g g* the air openings *k k* the metal valve seat *d*, the valve *e* and the keeper *f* with the metal casing *a* and the handle socket *b*, substantially as and for the purpose hereinbefore set forth. 3rd. A washing machine of the class herein described, comprising a funnel shaped metal case and handle socket in combination with conical air chambers having openings at the top and bottom, protected air ducts near the top of the machine, a valve seat, valve and valve keeper, substantially as and for the purpose hereinbefore described.

**No. 59,900. Electrolytic Process for the Separation of Metals. (Procédé électrique pour la séparation des métaux.)**

Emanuel Motz, Brewer Mine, and Henry Frost Welch, Charleston, both in South Carolina, U.S.A., 6th May, 1898; 6 years. (Filed 6th November, 1897.)

**Claim**—1st. The process of treating ore for the separation and recovery of metal, consisting in reducing or crushing the ore, then

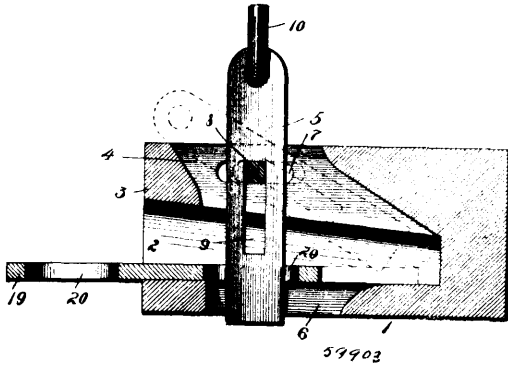
passing it with an electrolyte, between anodes and cathodes included in circuit with an electric generator and simultaneously agitating



the electrolyte, ore and metal by gravity, substantially as set forth. 2nd. The process of treating ore for the separation and recovery of metal consisting in reducing or crushing the ore then mixing it with an electrolyte, then passing the pulp thus made through an undulatory passage having its opposing walls composed respectively of anodes and cathodes, substantially as set forth. 3rd. The process of treating ore for the separation and recovery of metal, consisting in reducing or crushing the ore, mixing it with an electrolyte, then passing the pulp made through a series of undulatory communicating passages having opposing walls composed respectively of anodes and cathodes, substantially as set forth. 4th. The process of treating ore for the separation and recovery of metal, consisting in reducing or crushing the ore, mixing the reduced or crushed ore with an electrolyte and passing said electrolyte and ore between curved and inclined anodes and cathodes included in circuit with an electric generator, substantially as set forth. 5th. The process of separating and recovering metal, consisting in passing an electrolytic containing the metal through an undulatory passage having opposing walls composed of anodes and cathodes. 6th. An electrolytic apparatus consisting of a frame and an undulatory channel having opposing walls composed of anodes and cathodes respectively. 7th. An electrolytic apparatus consisting of a frame and a series of undulatory communicating passages or channels, each having a contracted outlet and each having opposing walls composed of an anode and a cathode respectively, substantially as set forth. 8th. In an electrolytic apparatus, the combination with a frame and an undulatory cathode in the bottom of said frame, of an undulatory anode disposed above said cathode whereby to form an undulatory passage between them, substantially as set forth. 9th. In an electrolytic apparatus, the combination with a frame and a series of convex cathode plates in the bottom thereof, of a corresponding number of convex anode plates disposed over said cathode plates whereby to form undulatory communicating passages, substantially as set forth. 10th. In an electrolytic apparatus, the combination with a frame and a series of convex cathode plates in the bottom thereof, of inclined anode convex plates disposed above the cathode plates so as to form a series of communicating undulatory passages having contracted outlet ends, substantially as set forth. In an electrolytic apparatus, the combination with a frame or sluice and convex blocks disposed in the bottom of said frame or sluice, of a series of convex cathode plates disposed on said blocks, strips disposed within said frame or sluice and having curved upper edges and convex anode plates supported on said curved upper edges and conforming thereto and means for including said anode and cathode plates in circuit with an electric generator, substantially as set forth. 12th. In an electrolytic apparatus, the combination with a frame or sluice, of a series of cathode plates disposed in the bottom of the frame or sluice, a series of anode plates disposed over the cathode plates, a block disposed over each plate and secured thereto, a conductor supported on said blocks, electrical connections between said conductor and the anode plates, means for electrically connecting the cathode plates in series and a conductor connected with one of said cathode plates, substantially as set forth. 13th. In an electrolytic apparatus, the combination with a frame or sluice, and a series of convex blocks located on said blocks and spaced apart, mercury connectors between the adjacent edges of said plates, a bar electrically connected with one of said mercury connectors, a conductor attached to said bar, anode plates disposed over the cathode plates and means for including the anode plates in an electric circuit, substantially as set forth. 14th. In an electrolytic apparatus, the combination with a frame or sluice, of a series of convex cathode plates located in the bottom of said frame or sluice, a series of convex anode plates disposed above said cathode plates, blocks secured to the anode plates and supported in the frame or sluice, each block having a recess in its upper edge, a series of conductors connected with said anode plates and terminating in said recesses in the blocks, a conducting rod disposed in said recesses on the first-mentioned conductors and having a notch



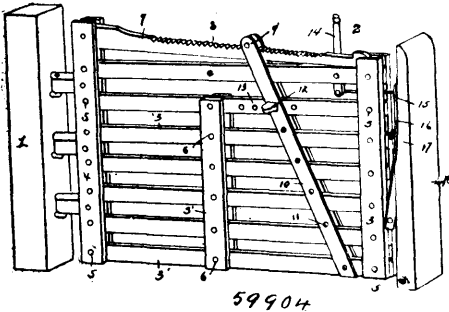
**No. 59,903. Car Coupler. (Attelage de chars.)**



William Charles Sunstrum and Armand Valois, both of Mattawa, Ontario, Canada, 6th May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. A car coupling, comprising a drawhead having a coupling pin secured therein, so as to have vertical and horizontal movement, a coupling link formed of a single piece of metal, and means for operating said coupling pin. 2nd. A car coupling, comprising a drawhead formed with a reduced squared portion, a coupling pin provided with an elongated slot and secured within said drawhead so as to have vertical and horizontal movement, a coupling link formed of a single piece of metal and provided with slots at each end adapted to receive said coupling pin, and means for operating said coupling pin. 3rd. A car coupling, comprising a drawhead formed with a reduced squared portion and provided with slots for the reception of a transverse pin, a coupling pin provided with an elongated slot and secured upon said transverse pin, said coupling pin being adapted to operate in slots formed in the upper and lower parts of the drawhead, a coupling link formed of a single piece of metal and provided with elongated slots at each end adapted to receive the coupling pin, a bar secured transversely to the car and connected to be operated by a handle and rope.

**No 59,904. Gate. (Barrière.)**



Joseph B. Buhman, Gala, assignee of Thomas Richard White Tincastle, all in Virginia, U.S.A., 6th May, 1898; 6 years (Filed 9th April, 1898.)

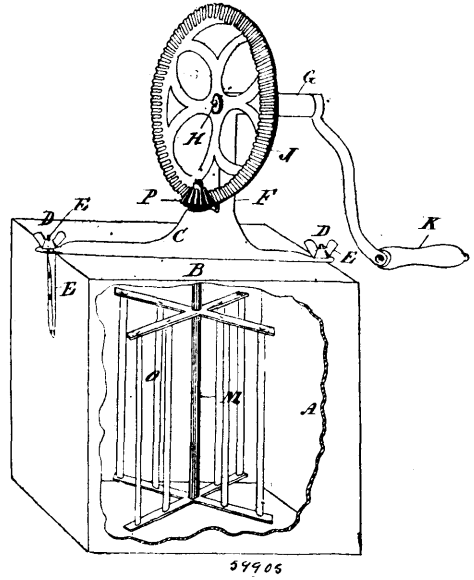
*Claim.*—1st. In a gate, the combination with vertical bars and horizontal rails pivotally connected thereto, of a rack-bar pivoted at one end and extending longitudinally above the gate, and provided with two series of notches separated by a projection, and an oblique locking-bar pivoted at its lower end to the gate and provided with a transverse locking-pin designed to engage the notches upon the rack-bar, substantially as specified. 2nd. In a gate, the combination with a vertical bar and longitudinal rails pivoted thereto, of a longitudinally-disposed rack-bar terminally pivoted adjacent to the hinged end of the gate and provided with two series of notches separated by a toothed projection, and obliquely disposed locking-bar pivoted at its lower end to the gate and provided with a transverse pin and designed to engage the notches in the rack-bar, and a securing-pin designed to engage an aperture in the locking-bar, and one of a series of apertures in one of the horizontal rails, substantially as specified.

**No. 59,905. Churn. (Baratte.)**

Geo. W. Robertson, of Marysville, and Walter S. Fisher, Fredericton, both in New Brunswick, Canada, 6th May, 1898; 6 years. (Filed 5th March, 1898.)

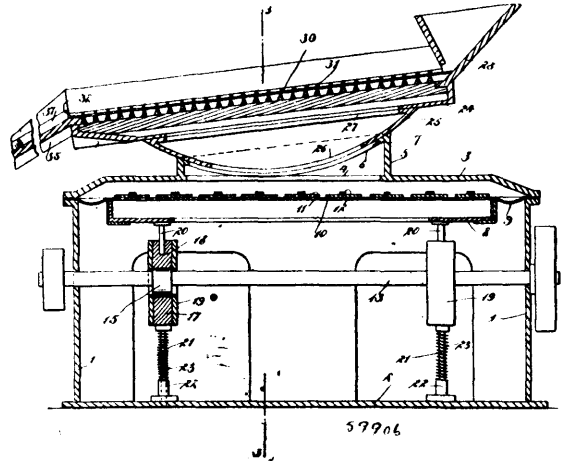
*Claim.*—A churn, comprising a rectangular box A, or cream chamber, provided with an inserted lid B, a bar C, crossing said lid and ends clamped to bolts E, at the sides of the box by thumb-screws

D, said bar having a vertical extension or post F, provided at the top with a tubular horizontal bearing G, having within it a shaft



H, carrying at opposite ends a gear-wheel J, and crank handle K, and a dasher shaft M, having at top a bevelled cog pinion P, meshing with said wheel J, and provided with an open-frame criciform dasher O, as set forth.

**No. 59,906. Ore Separators. (Séparateur de minéral)**

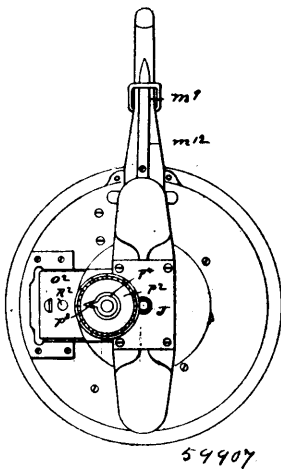


Charles H. Unverzagt, Baltimore, Maryland, U.S.A., assignee of William Hooper, Ticonderoga, Essex County, New York, 6th May, 1898; 6 years. (Filed 16th February, 1898.)

*Claim.*—1st. An apparatus for separating precious metals from sand or the like, comprising a casing arranged at a longitudinal incline, a bed of flexible material secured in the casing, the said bed being inclined from its centre to the sides of the casing, means for agitating said bed, retarding strips on the upper surface of the bed, retarding strips on the upper surface of the bed, the said retarding strips being arranged at an equal angle from the longitudinal centre of the bed to the side edges of the bed, and separator strips arranged on the first-named strips and at an opposite angle thereto, substantially as specified. 2nd. A separator, comprising a frame or casing, a spider arranged in said frame or casing, the bars of said spider being extended in both directions thereof at an acute angle, the longitudinal centre of the spider being higher than the side edges, a bed of flexible material secured on said spider, strips of metal or the like on the upper side of the bed above the bars of the spider and arranged at the same angle therewith, plates extended longitudinally of the bed near its centre and above the said strips, separator strips extended from said plates to the sides of the frame or casing and at an opposite angle to that of the first-named strips, and means for agitating the flexible bed, substantially as specified. 3rd. A separator, comprising a frame, a bed

of flexible material secured in said frame or casing and inclined from its longitudinal centre laterally in both directions, strips of metal or the like on the upper side of the beds, the said strips of metal being extended from the centre of the bed laterally at an acute angle, other strips on the first-named strips and arranged at a reverse angle thereto, a dam extended across the frame or casing at its outlet end, the said dam being connected to the lower series of the first-named strips, means for adjusting the longitudinal incline of the separator, and means for agitating the flexible bed, substantially as specified. 4th. A separator, comprising a frame or casing, a flexible bed in said frame or casing, the said flexible bed being inclined from its longitudinal centre downward to the sides, two series of separating strips arranged on the bed and at an acute angle to the longitudinal centre, the upper strips being at a reverse angle to the lower strips, a hopper at the feed end of the separator, an inclined chute at the outlet end of the separator, and deflector fingers adjustable on said chute, substantially as specified. 5th. A separator, comprising a frame or casing, a bed of flexible material in said frame or casing, separating devices on said bed, a rocker frame secured to the separator frame or casing, the said rocker frame having an opening through its bottom and also communicating with the separator casing underneath its bed, a main frame, a top plate on said main frame having an opening, a boxing surrounding said opening, longitudinally curved plates in said boxing forming beds for the rocker frame, a bellows underneath the top plate, and means for operating said bellows to force air against the flexible bed, substantially as specified. 6th. A separator, comprising a casing, a separating bed in said casing, and a longitudinally rocking frame upon which the casing is mounted, and whereby said casing may be adjusted as to its longitudinal pitch or incline, substantially as specified. 7th. A separator, having a flexible bed, a bellows for forcing air against said flexible bed for agitating the same, and means for operating said bellows, comprising an eccentric consisting of an inner and outer section adjustable one relatively to the other, the outer section being eccentric to the inner section and the inner section being eccentric to the shaft upon which it is mounted, substantially as specified. 8th. The combination with a rotary shaft, of an eccentric consisting of an inner section secured to the shaft and eccentric thereto, an outer section rotatively adjustable on the inner section and eccentric thereto, and means for securing the outer section as adjusted relatively to the inner section, substantially as specified.

**No. 59,907. Fishing Reel. (*Dévidoir de pêche.*)**



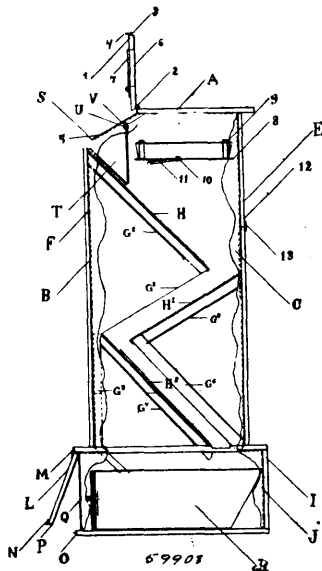
Frances Ida Martin, William K. Jenne, and Benjamin B. Van Deusen, assignees of Herman W. Martin, all of Ilion, New York, U.S.A., 6th May, 1898; 6 years. (Filed 14th February, 1898.)

*Claim.*—1st. In a fishing reel, the combination with a line spool, a casing or frame, and a spring brake lever, of a brake shoe arranged to ride upon the periphery of the line spool, and a connection between said brake shoe and the brake lever whereby the brake shoe is carried by the brake lever and is movable in a plane toward or from the periphery of the line spool, as and for the purposes described. 2nd. In a fishing reel, the combination with a casing or frame a line spool, and a brake lever, of a brake shoe arranged to press against the line spool, and a spring carried by the brake lever and connected with the brake shoe, as and for the purpose described. 3rd. In a fishing reel, the combination with a frame or casing and a line spool, of a spring brake lever, a brake shoe arranged to have peripheral contact with the line spool, and a spring connection between the brake shoe and the brake lever, as and for the purposes described. 4th. In a fishing reel, the combination with a casing or frame and a line spool, of a spring brake lever, a brake shoe to ride against the line spool, and a spring which connects with the brake shoe and brake lever and which is arranged to fit over the reel casing and

serve as a guard to prevent the line from becoming entangled with the reel, substantially as and for the purposes described. 5th. In a fishing reel, the combination with a casing or frame, and a line spool of the spring-pressed brake lever fulcrumed in the frame or casing, a transverse brake shoe fitted to press against the peripheral edge of the line spool, and a spring R which is attached to the brake lever and pivotally connected to the brake shoe, as and for the purposes described. 6th. In a fishing reel, the combination with a casing or frame, a main spring drum having a projection engaging with said ratchet of the spring drum, of a release device mounted externally on the casing or frame adjacent to the detent and movably held in position for adjustment into or out of engagement with said detent, as and for the purposes described. 7th. In a fishing reel, the combination with a ratchet spring drum, a clamp therefor, and a detent to engage with the ratchet of the spring drum, of a release spring bar slidably connected to said clamp and having means for moving the same into and out of engagement with said detent, as and for the purposes described. 8th. In a fishing reel, the combination with a reel and a line-spool, of an arbour or spindle passing through a bushing of the line-spool and having a threaded end, a threaded boss screwed on the end of said arbour and held in place by a check device, and a spring connected to said boss, as set forth. 9th. In a fishing reel, a spring-drum provided with a ratchet and an angular reinforcement band fitted in and secured to the flange of said drum, said reinforcement provided with a lip for attachment thereto of the main-spring, substantially as described. 10th. In a fishing reel, the combination with a main-spring, of a rotatable drum therefor, of a link connected to the outer end of said main-spring and to the drum so as to compensate for contraction or expansion of the spring without breaking the connection between said spring and drum, as and for the purposes described. 11th. In a fishing reel, the combination with a main-spring having a slot, *a*, at its outer end, and a drum provided with a lip or stud, of the link having a key-hole slot for the reception of the lip or stud and carrying a headed stud or pin which fits in the slot of the spring, substantially as and for the purposes described. 12th. In a combination with a frame or housing, and a line-spool, the brake-lever fulcrumed on said housing, a primary spring bearing against the brake-lever, an adjustable stop device for said brake-lever, and a yieldable shoe carried by the brake-lever. 13th. In a fishing reel, the combination with reel housing, and a main-spring, of a revolving line-spool shaft or arbour journaled in said housing and operatively connected with said main-spring, a line-spool mounted loosely on said revolving arbour or shaft, and multiplying and gearing clutch mechanism intermediate between the revolving shaft or arbour and the line-spool mounted thereon, substantially as and for the purposes described. 14th. In a fishing reel, the combination with a reel housing and a main-spring, of a revolving arbour or shaft, a line-spool mounted loosely on said shaft or arbour, a fixed gear or rack on the reel-housing and a rotary crank attached to the arbour or shaft and carrying gears which mesh with said fixed gear or rack and with a gear on the line-spool, as and for the purposes described. 15th. In a fishing reel, the combination with a reel-housing and a main-spring, of the revolving shaft or arbor, a line-spool mounted loosely thereon, internal gear or rack fixed in the reel housing, a clutch connected with the line-spool and carrying a gear pinion, a crank arm attached to the shaft or arbor to rotate therewith, and a compound gear which meshes with the fixed internal gear and with the clutch pinion, respectively, as and for the purpose described. 16th. The combination with a reel-housing and a rotatable line-spool, of brake mechanism comprising a pair of oppositely movable jaws hung to embrace opposite faces of said line-spool and a single controlling lever arranged in operative relation to both jaws of said brake device, as and for the purpose described. 17th. The combination with reel-housing and a line-spool, of a pair of brake jaws fulcrumed to move in opposite directions simultaneously and arranged to embrace opposite faces of said line-spool and a spring controlled brake-lever, one of said jaws being impelled in one direction by a spring and moved in the opposite direction by said brake-lever, and the other jaw being connected with said brake-lever to move therewith, as and for the purposes described. 18th. The combination with a reel-housing and a line-spool, of a brake-supporting device attached to said housing, a spring-controlled brake jaw pivoted to said supporting device, a brake-lever fulcrumed on the housing and arranged to act on the spring jaw against the tension of its spring, and another jaw also pivoted on the supporting device and operatively connected with the brake-lever, substantially as described. 19th. The combination with a reel-housing and a line-spool, of a supporting plate, a brake-jaw pivoted to said plate and carrying a spring which normally impels it upon the line-spool, another brake-jaw hung at a point intermediate of its length on said plate and having a slotted end, and a spring pressed brake-lever fitted in the slotted end of one brake-jaw and carrying a projection to bear upon the other jaw, as and for the purposes described. 20th. In a fishing reel, a brake-lever having a perforated or slotted working face and a friction pad formed by threading a fibrous material through said slotted or perforated face of the jaw, as described. 21st. In a fishing-reel, the combination with a reel-housing and a line-spool, of an idle line guide segmental in form, which is loosely supported between the heads of the reel-housing and provided with a slot or eye for the passage of the line therethrough, substantially as described. 22nd. In

a fishing reel, the combination with a disc-like heads coupled by transverse posts to form a reel-housing, and a line-spool of a segmental guide fitted loosely on said posts and arranged concentric with and between the disc-like heads to play idly on said posts, for the purposes described, substantially as set forth. 23rd. The combination with a reel-housing and a line-spool, of a revolving arbour or shaft on which the line-spool is mounted, and a line-indicator mechanism mounted on said reel-housing and arranged in operative relation to the revolving arbour or shaft to be driven thereby, as and for the purposes described. 24th. The combination with a reel-housing and a line-spool, of a revolving line-spool shaft or arbour, a movable carrier on said reel-housing, and a line-indicator device mounted on said carrier and arranged to have frictional engagement with said revolving shaft or arbour, substantially as described. 25th. In a fishing reel, the combination with a reel-housing and a line-spool, of a revolving shaft or arbour on which a line-spool is mounted, a slidable spring-controlled carrier fitted to said reel-housing, and an indicator mechanism mounted on said carrier and pressed or held thereby into operative contact with said revolving shaft or arbour, substantially as described. 26th. The combination of a revolving arbour or shaft, a fixed keeper or slide-way, a carrier plate fitted in said keeper or slide-way, a spring acting on said carrier plate to normally impel it toward said shaft or arbour, and an indicator mechanism mounted on the carrier plate, as and for the purposes described. 27th. In a fishing reel, the improved line-spool herein shown and described, comprising the parallel discs provided with the rows of coincident perforations and a row of pins which are fitted in the perforations and are headed against the discs, whereby the pins join the discs together and form the hub of the line, as set forth. 28th. The combination with a reel-housing and a line-spool, of a line-guide movable across the face of the line-spool, and a button carried by said guide and movable longitudinally thereon, substantially as described. 29th. The combination with a reel-housing and a line-spool, of a slotted line-guide fitted loosely on said housing, and an eye-formed button mounted loosely in said slotted line-guide, as and for the purposes described.

**No. 59,908. Ash Sifter. (Crible à cendres.)**



Hiram Randall Reynolds, Maurice Brent and John Francis Lennox, all of Stouffville, Ontario, Canada, 6th May, 1898; 6 years. (Filed 8th March, 1898.)

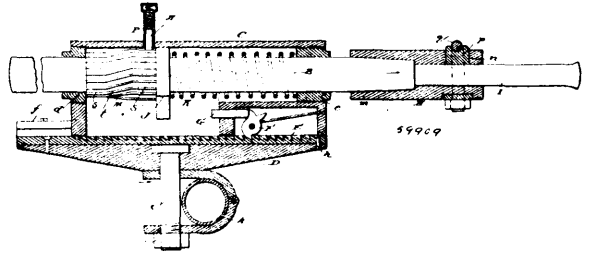
*Claim.*—1st. An ash sifter comprising, an oblong case, with sides A, B, C, D and E fire proof lining F, the dust slides G<sup>1</sup>, G<sup>2</sup>, G<sup>3</sup>, G<sup>4</sup>, G<sup>5</sup>, G<sup>6</sup>, the three coal screens H, H<sup>1</sup>, H<sup>2</sup>, the rectangular parallelogram I, J, K, the lid L, the hinges M, and hook N, the staple O, the strips of rubber or other material P and Q, the receptacle R, the opening S, with valve T, the shaft U, the staples V, the lid 1, hinges 2, staple 3, hook 4, the strips of rubber or other suitable material 5, the scuttle hole G, and valve 7, the ash-pan holder 8, the horizontal holders 9, the shaft 10, and crank 11, the lid 12, the two hinges 13, the hook 14, the staple 15, and strips of rubber or other suitable material 16, all formed, arranged and combined as and for the purpose hereinbefore set forth.

**No. 59,909. Rock Drill. (Barre à mine.)**

Joseph W. De Camp and Lida M. Shaw, both of Helena, Montana, U.S.A., 6th May, 1898; 6 years. (Filed 9th April, 1898.)

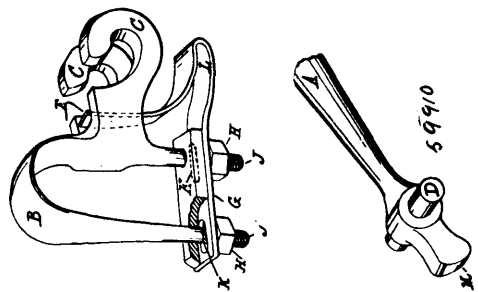
*Claim.*—1st. In a rock drill, the combination of a frame, a reciprocatory drill rod loosely mounted in said frame, means for retracting the drill rod, a longitudinally grooved collar fixed on the drill rod and gradually reduced in diameter from its forward to its rear end,

and a spring pressed detent arranged in the frame and continuously impinging against the grooved collar, substantially as specified.



2nd. In a rock drill, the combination of a frame, a reciprocatory drill rod extending longitudinally through and loosely mounted in said frame, a coiled spring interposed between the frame and the drill rod and adapted to retract said rod and normally hold it with one of its ends extending in rear of the frame so as to permit of it being struck by a hammer, a longitudinally grooved collar fixed on the drill rod and gradually reduced in diameter from its forward to its rear end, and a spring pressed detent arranged in the frame and continuously impinging against the grooved collar, substantially as specified. 3rd. In a rock drill, the combination of a frame, a reciprocatory drill rod mounted in the frame so as to permit it to turn, means for retracting the drill rod, a collar fixed with respect to the drill rod and having longitudinal grooves with their bottoms bevelled in cross-section and respectively comprising the end portions arranged in parallel planes and the intermediate portion disposed at an angle to the end portions, and a spring pressed detent arranged in the frame and impinging against the collar, substantially as specified. 4th. In a rock drill, the combination of a frame, a reciprocatory drill rod mounted in the frame so as to permit it to turn, means for retracting the drill rod, a collar fixed with respect to the drill rod and gradually reduced in diameter from its forward end to its rear end and having longitudinal grooves with their bottoms bevelled in cross section and respectively comprising the end portions arranged in parallel planes and the intermediate portion disposed at an angle to the end portions, and a spring pressed detent arranged in the frame and impinging against the collar, substantially as specified. 5th. In a rock drill, the combination of a guide frame provided with a longitudinal rack having teeth inclined toward the rear of the frame, a slidable frame arranged on and movable lengthwise with respect to the guide frame, a spring pressed dog or pawl pivoted in the slidable frame and normally engaging the rack of the guide frame, a drill rod loosely mounted in the slidable frame and having its rear end extended beyond the rear end of the slidable frame, a spring for retracting the drill rod, a reciprocatory plunger mounted in a guide in the slidable frame and impinging at one end against the dog or pawl, a projection on the drill rod adapted to strike the other end of said plunger when the drill rod is driven forwardly, a collar fixed with respect to the drill rod and gradually reduced in diameter from its forward to its rear end and having longitudinal grooves with their bottoms bevelled in cross section and respectively comprising the end portions arranged in parallel planes and the intermediate portion disposed at an angle to the end portions, and a spring pressed detent arranged in the slidable frame and impinging against the collar, substantially as specified.

**No. 59,910. Thill Coupling. (Arçon de limonière.)**



James Morgan, Julius Scherber, Carl Scherber, Albert E. A. Scherber and Frederick Scherber, all of Timboon, Victoria, Australia, 6th May, 1898; 6 years. (Filed 1st April, 1898.)

*Claim.*—1st. A thill coupling, comprising in combination a thill A, having a pin D and rounded end M, a clip B having hooks C with projections F and screwed ends J, and a spring E L G having elongated slots K, all substantially as and for the purposes described and as illustrated. 2nd. In a thill coupling, the combination of hooks or lugs C, a thill iron having engagement therewith, and means upon said hooks or lugs whereby the forward radial movement of the rear end of the thill iron is limited, substantially as set forth.

**No. 59,911. Steam Boiler. (Chaudière à vapeur.)**

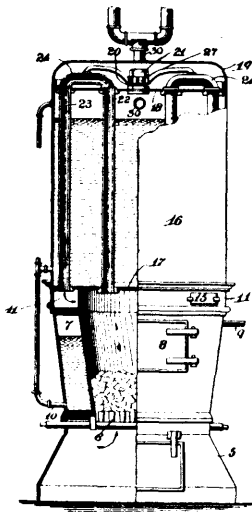


Fig. 1.  
59911

Winard W. J. Toussaint and John H. Pinlo, both of Brookline, Massachusetts, U.S.A., 6th May, 1898; 6 years. (Filed 23rd March, 1898.)

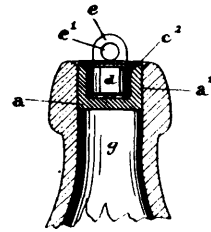
*Claim.*—1st. In a boiler, the combination with a fire box, and an annular flue section, of larger diameter than the fire box, mounted thereon, of a boiler section, mounted on the flue section, and having direct fire tubes disposed above the fire box and return tubes connecting with the flue section. 2nd. In a boiler, the combination with the fire box comprising an annular water chamber, and a flue section mounted thereon, of a boiler mounted on the flue section and having a series of direct vertical tubes disposed above the fire box, a series of return tubes disposed above the flue section and connecting therewith, and removable connections between the upper ends of each pair of tubes. 3rd. The combination, in a boiler, with a fire box, and the annular flue section 11 mounted thereon, of a boiler section mounted on the flue section and comprising the plates 17 and 18, a suitable shell, the tubes 22 and 23 secured in said plates and disposed as described, and a series of elbows for connecting the upper ends of the tubes in pairs, and releasable means for securing the elbows. 4th. In a boiler, the combination with the fire box having the annular water chamber 7, and the flue section 11 mounted thereon, of a boiler section mounted on the flue section and comprising the shell 16 having the tube plates 17 and 18, the tubes 22 secured in said plates and disposed above the fire box, and the tubes 23 secured in said plates and disposed above the flue section. 5th. In a boiler, the combination with a shell having upper and lower tube plates, and direct and return tubes secured in said plate, of a series of elbows removably seated at the upper ends of the tubes and connecting them in pairs, a spider having arms bearing on the several elbows, and means for securing the spider. 6th. The combination with the fire box having the annular water chamber, and the annular flue section 11 mounted thereon, and having the partitions 12 and 13 and the flue connection 14, of the boiler section mounted on the flue section and comprising the shell 16 having the plates 17 and 18, the plate 18 having the bolt 20 with the nut 21, the tubes 22 and 23 secured in said plates, elbows 24 connecting the tubes in pairs, and the spider 27 secured on bolt 21 and having arms as 28 and 29 bearing on the elbows, as and for the purposes described.

**No. 59,912. Bottle Stopper. (Bouchon de bouteille.)**

The Baltimore Wood Stopper Company, assignee of Charles Neuhans, all of Baltimore, Maryland, U.S.A., 6th May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. A bottle-stopper, comprising a compressible cup-part, and a metal core-part having two discs, one of which fits in the bottom of the cup and the other within the top-edge of the cup, and a shank which unites the two discs. 2nd. A bottle-stopper, comprising a compressible cup-part, a metal core-part having two discs, one of which has a sharp edge that cuts into the wall of the cup when the latter is compressed, and the other serves as a cap-piece to cover the hollow of the cup, and means uniting the said two discs. 3rd. A bottle-stopper, comprising a compressible cup-part, a metal core-part having two discs, one of which fits in the bottom of the cup and the other within the top-edge of the cup, the latter having a projecting flange which takes over the top-edge of the cup, and a shank uniting the discs. 4th. A bottle-stopper,

comprising a compressible cup-part, a metal core-part having two discs, one of which has a sharp edge that cuts into the wall of the



59912

cup when the latter is compressed, and the other fits within the top edge of the cup, means uniting said two discs, and a draw-head or eye-piece above the top-disc.

**No. 59,913. Brake for the Cages of Mine Shafts. (Frein pour ascenseurs de puits de mine.)**

(Frein pour ascenseurs de puits de mine.)



59913

Theodore B. Jacobsen, William Henry Burch and Henry Rabe, all of Thames, Auckland, New Zealand, 7th May, 1898; 6 years. (Filed 18th April, 1898.)

*Claim.*—1st. A the false or movable bottom, C the spindle attached to the under part of the false or movable bottom A, and C the spindle attached to the under part of the roof R, B the brakes working on the spindles C, as described herein and as illustrated by the accompanying drawings. 2nd. The combination of the parts, A false or movable bottom, B brakes, C spindles, D springs, F openings for brakes, C slippers, H metal plates to openings, J true bottom, K iron frame of cage, L brackets, M bolts to secure springs D, O coupling pin to top piece P on roof R, P top piece on roof R, R roof to inner frame and S cleats, as described herein for the purposes set forth and as illustrated by the accompanying drawings.

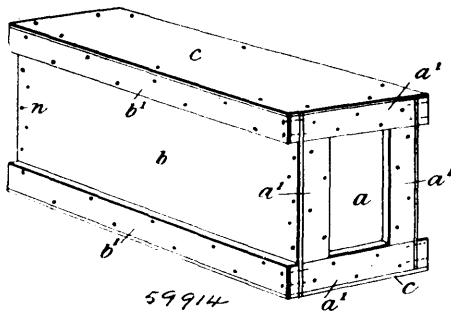
**No. 59,914. Boxes and Cases of Wood. (Boite en bois.)**

The Ironmongery Stores, Limited, London, England, assignee of John E. Davidson, Stratford, Essex, England, 7th May, 1898; 6 years. (Filed 18th April, 1898.)

*Claim.*—1st. The improved construction of boxes or cases having framings, ledges or battens combined with sheets of composite veneer wood having the grains crossed, cemented and compressed,



and having the frames, ledges or battens secured to the sides and end sheets, and to each other by nails, or the like, substantially



as set forth. 2nd. The improved construction of boxes or cases having framings, ledges or battens around or along the external edges of composite veneer wood having the grains crossed cemented and compressed, said frames ledges or battens secured to the side and end sheets and to each other by nails or the like, substantially as set forth. 3rd. The improved construction of boxes or cases having framings, ledges or battens around or along the internal edges of composite veneer wood having the grain crossed, cemented and compressed, said framings, ledges or battens secured to the side and end sheets and to each other by nails or the like, substantially as set forth. 4th. The improved construction of boxes or cases having framings, ledges or battens around or along a portion of the internal and a portion of the external edges of composite veneer wood having the grain crossed, cemented and compressed, said framings, ledges or battens secured to the side and end sheets and to each other by nails or the like, substantially as set forth.

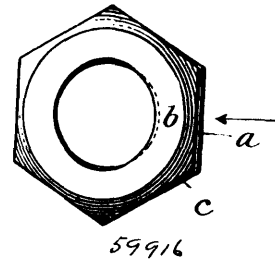
**No. 59,915. Fruit Gatherer. (Jaffet.)**



Ira C. Drake, South Prairie, and John C. Catto, Tacoma, all of Washington, U.S.A., 7th May, 1898; 6 years. (Filed 14th April, 1898.)

*Claim.*—1st. A fruit gatherer comprising, a pole, a fixed jaw arranged at the top of the pole, upper and lower levers fulcrumed intermediate of their ends on the pole and provided with loops, the loop of the upper lever forming a movable jaw and being arranged to co-operate with the fixed jaw, a flexible tube having its ends connected with the loops of the levers, and means for operating the upper lever, whereby the lower lever will be simultaneously operated and caused to close the lower end of the flexible tube automatically, substantially as described. 2nd. A fruit-gatherer, comprising a pole, a fixed jaw mounted on the upper end of the pole, upper and lower fulcrumed intermediate of their ends on the pole, extending from opposite sides thereof and provided at the front ends with loops, the loop of the upper lever forming a movable jaw and being arranged to co-operate with the fixed jaw, a flexible tube having its ends secured to the said loops and being spread by the same, and a connecting-rod disposed longitudinally of the pole and pivoted to the rear ends of the levers, substantially as and for the purpose described.

**No. 59,916. Nut-Lock. (Arrête-écrou.)**

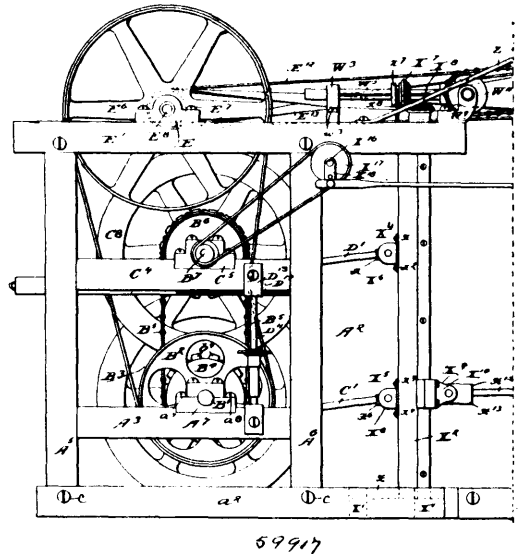


Thomas M. Rghter, Mount Carmel, assignee of Butler Edgar, Sunbury, both in Pennsylvania, U.S.A., 7th May, 1898; 6 years. (Filed 14th April, 1898.)

*Claim.*—A self-locking nut, having a kerf in one side partially severing it on a plane substantially parallel with its upper and lower faces and having the portion above said kerf set inward, the portion of the hole in the nut below the kerf being circular and the portion above being reduced in one of its diameters, whereby the set-in portion is adapted to grip the bolt, substantially as described.

**No. 59,917. Stone-Sawing Machine.**

(Machine à scier la pierre.)

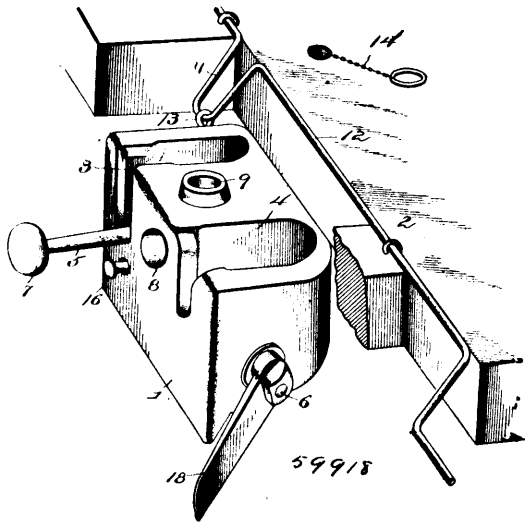


Harry Harrison Cummings and John Dominick Cooley, both of New York City, U.S.A., 7th May, 1898; 6 years. (Filed 14th April, 1898.)

*Claim.*—1st. In a stone-sawing machine, the combination, with a frame, one end of which is provided with longitudinal beams, of short shafts, one above the other, a pulley upon each of the upper shafts, and two driving-pulleys upon the lower one, a belt from the lower pulleys to each of the upper pulleys, a frame upon said beams provided with a toothed rack, a pulley in one end of the rack adapted to engage with the belt from the lower to the upper pulley, a rod, one end of which is provided with a gear-wheel in engagement with the rack, a hand-wheel upon the rod, a sash suspended in the frame, and means for connecting said sash with the two lower shafts, substantially as set forth. 2nd. In a stone-sawing machine, the combination, with a frame, of a sash suspended at one end of the frame and operating mechanism at the other end, a reciprocating frame intermediate the sash and the operating mechanism, a clamp within the frame, a rod for connecting the clamp with the sash therewith, a vertical screw-threaded shaft through the clamp, a longitudinal shaft journaled in the main frame above the reciprocating frame, and mechanism connected with the upper end of the screw-threaded shaft and longitudinally movably connected with the longitudinal shaft, substantially as set forth. 3rd. In a stone-sawing machine, the combination, with a frame provided with posts, of hangers upon the posts, a sash suspended from the hangers, a reciprocating frame at one end of the sash and provided with a clamp, means for removing the reciprocating frame, a vertical screw-threaded shaft through each of the

hangers and the clamp, a train of gearing connected with the screw-threaded shafts, and means for operating the gearing continuously or intermittently, substantially as set forth.

**No. 59,918. Car Coupler. (Attelage de chars.)**



James Cadwell and Walter S. Colborn, both of Mill Run, Pennsylvania, U.S.A., 7th May, 1898; 6 years. (Filed 13th April, 1898.)

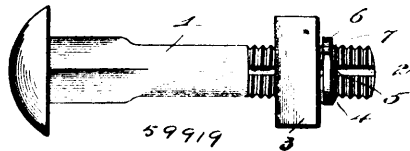
*Claim.*—1st. In a car coupling, the combination of a draw-head, a link pivotally mounted on the draw-head and adapted to engage a corresponding draw-head, an arm connected with the link and arranged at one side of the draw-head, and a weighted lever loosely pivoted at the other side of the draw-head and arranged to be engaged by the arm of another draw-head, whereby the link is cushioned, substantially as described. 2nd. In a car coupling, the combination of a draw-head, a link pivotally mounted on the draw-head and adapted to engage a corresponding draw-head, a weighted bell crank lever pivotally mounted on the draw-head at one side thereof and provided with a laterally extending portion, and an arm arranged at the opposite side of the draw-head, connected with the link and adapted to engage a lever of a corresponding draw-head, whereby the link is cushioned, substantially as described. 3rd. In a car coupling, the combination of a draw-head, a link, an arm connected with the link, and means for cushioning the arm, substantially as described. 4th. In a car coupling, the combination of a draw-head, a rock shaft journaled on the draw-head, a link mounted on the rock shaft and adapted to engage a corresponding draw-head, an arm secured to the shaft, and means for cushioning the arm, substantially as described. 5th. In a car coupling, the combination of a draw-head, a link pivotally mounted on the draw-head, and arranged to swing vertically, said link being provided with an arm, and a push bar mounted on the draw-head, adapted to project therefrom and arranged to engage the arm of the link, whereby the latter will be thrown downward when two cars come together for coupling, substantially as described. 6th. In a car coupling, the combination of a draw-head, a rock shaft mounted on the draw-head and provided at one side thereof with an operating arm, an arm 17 mounted on the rock shaft at the other side of the draw-head, a link mounted on the rock shaft, a push bar adapted to project from the draw-head and arranged to engage the link, whereby it is thrown downward, operating mechanism connected with the operating arm, and a cushion arranged to be engaged by the arm 17, substantially as described. 7th. In a car coupling, the combination of a draw-head provided at one side with an opening and having a socket at the other side, the opening and the socket extending entirely through the draw-head from the top to the bottom thereof, a link mounted in the opening and adapted to engage the socket of a corresponding draw-head, and means for cushioning the link, substantially as described.

**No. 59,919. Nut Lock. (Arrête-écrou.)**

Washington Buffington, Perry, Kansas, and William Saddler, Shenandoah, Iowa, both in the U.S.A., 7th May, 1898; 6 years. (Filed 12th April, 1898.)

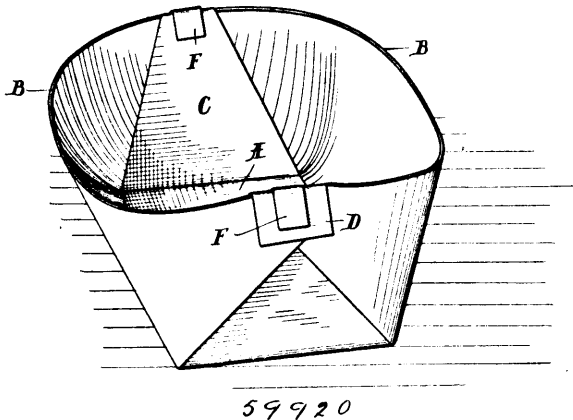
*Claim.*—1st. In a nut-lock, the combination with a threaded bolt having longitudinal grooves upon opposite sides thereof, of a spring-plate curved to encircle the bolt, and a plate rigid with said spring-plate and having a plurality of teeth in different vertical planes with a transverse rib intermediate its edges, substantially as and for the purposes specified. 2nd. In a nut-lock, the combination with

a threaded bolt having longitudinal grooves upon opposite sides thereof, of a spring-plate curved to encircle the bolt, and a plate



rigid with said spring-plate and having a plurality of teeth in different vertical planes with a transverse rib intermediate its edges the ends of the spring-plate being disconnected and turned outwardly, substantially as and for the purpose specified.

**No. 59,920. Butter Plate. (Assiette à beurre.)**



George L. Morrison and Wesley Rolph, both of Shelby, Michigan, U.S.A., 7th May, 1898; 6 years. (Filed 12th April, 1898.)

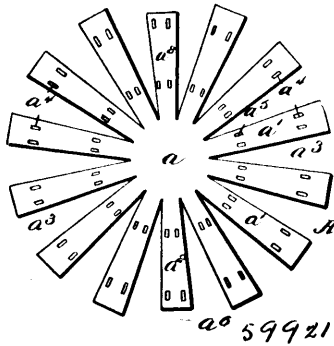
*Claim.*—1st. The herein described blank for a dish, having rounded corners, and scored longitudinally from end to end on two parallel lines A' and scored transversely between said longitudinal scores, near the ends thereof on the parallel lines C', said blank also having notches in each end between said longitudinal scores, and being scored at each end on converging lines S', said scores E' respectively extending diagonally inward from the points of said notches to the junctions of the longitudinal and transverse scores, substantially as described. 2nd. The herein described paper dish, constructed of a blank having rounded corners and each of its ends formed with two notches arranged at opposite sides of and adjacent to its centre, said blank being folded longitudinally on two parallel lines A' to form the sides of the dish and transversely on two parallel lines C' to form the ends G, each of said ends having sides converging from the bottom of the dish to the base of said notches and terminating in a flap D bounded at opposite sides by said notches, and each rounded corner of said blank being bent longitudinally upon itself on the line A' from the diagonal line forming the adjacent side of the end flap to corresponding diagonal line extending from said line A' to the outer edge of the blank, and said doubled portions of the blank at opposite sides of the flap being folded toward each other outside the flaps to form gussets, while the remaining portions of said corners form rounded corners to the dish, and said flaps being bent over said gussets, substantially as shown and described.

**No. 59,921. Basket. (Panier.)**

Joseph Perry and Benjamin F. May, both of Beaver Falls, Pennsylvania, U.S.A., 7th May, 1898; 6 years. (Filed 6th April, 1898.)

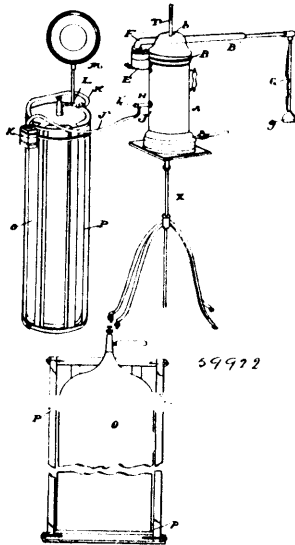
*Claim.*—1st. A sheet metal basket having the bottom and side pieces formed from a single blank, in combination with the rim having the parallel flanges c<sup>3</sup>, extending on opposite sides of the side pieces, and the bead-like portion c<sup>2</sup>, extending across the upper ends of the side pieces and projecting beyond the outer and inner faces thereof and beyond the flanges c<sup>3</sup>, and means for connecting the flanges c<sup>3</sup>, and the side pieces of the basket together, substantially as set forth. 2nd. The herein-described basket, it consisting of a bottom, side pieces or staves extending upwardly from the bottom, one or more of said side pieces being shorter than the others, and a rim having bead-like portions c<sup>2</sup>, extending across the upper ends of the side pieces, and a sectional depending flange adapted to be secured to the relatively long side pieces, each section of the said flange extending from one of the shorter side pieces to another of said shorter staves, whereby a section of the rounded, head-like, portion c<sup>2</sup>, of the rim is provided above said shorter staves to serve as a handle, substantially as set forth. 3rd. The herein-described

basket, it consisting of a bottom and side pieces formed from a single blank, one or more of said side pieces being shorter than the others,



and a metallic rim formed from a blank having notches  $c^1$ , formed in its longitudinal edges, said blank being bent upon itself to form a bead-like portion  $c^2$ , adapted to extend continuously around the top of the basket and depending flanges  $c^3$ , adapted to be secured to the longer side pieces or staves, the notches  $c^1$ , in the rim-blank aligning with the shorter side pieces, substantially as set forth. 4th. The combination with the sheet-steel basket having the central bottom part  $a$ , and the staves or tongue parts integral therewith and bent upward therefrom, and having the series of slots  $a^1$ , formed therein, of the sheet-metal band or hoop  $B$ , extending continuously around the basket and threaded alternately in and out through the said slots or apertures, and having its ends rigidly riveted or otherwise secured to the basket, substantially as set forth. 5th. The herein-described sheet-metal basket having the side parts or staves  $a^1$  and the separably-formed rim-piece having the bead-like expanded part  $c^2$ , and a downward-extending flange integral therewith, and a reinforcing-piece  $D$ , substantially as set forth. 6th. The herein-described basket having the sheet-steel bottom  $a$ , the staves or side pieces  $a^1$  integral therewith, in combination with a separately formed rim-piece arranged to inclose the upper edges of the staves, and a hoop  $B$ , extending around the basket and across opposite faces of adjacent staves below the rim, substantially as set forth.

**No. 50,922. Inhaler. (Inhalateur.)**

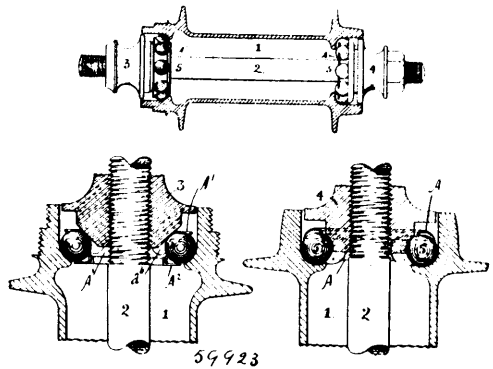


George B. Underwood, assignee of Vigil Warren Blanchard, New York City, U.S.A., 7th May, 1898; 6 years. (Filed 22nd March, 1898.)

*Claim.*—1st. The combination of the casing, the air-heating drum therein, and the vaporizing chamber connected with the air-heating drum, with the detachable heating-cap fitted on the casing and deriving its heat therefrom, and the tube extending from the vaporizing chamber through said cap, substantially as described. 2nd. The combination of the casing, a heating drum therein, gas and air inlets into said drum, and means for regulating the admission of air and gas, with an auxiliary heating-chamber deriving its heat from the casing, and means for conducting the gases from said heating drum through the auxiliary chamber without mixing with the hot

air therein, substantially as described. 3rd. The combination of the casing, a heating-drum therein, gas and air inlets in said drum, and means for regulating the admission of gas and air with vaporizing chamber communicating with said drum, an auxiliary heating chamber deriving its heat from the casing, and a tube for conducting the gases from said vaporizing chamber through the auxiliary heater, substantially as described. 4th. The combination with the casing and heating-drum, of the tube  $H$  having perforations  $h$  and perforated collar valve  $h^1$ , substantially as described. 5th. The combination with the casing and heating-drum, of the tube  $H$  having perforations  $h$  and perforated collar-valve  $h^1$ , and the gas-tube  $J$  leading through the said tube, substantially as described. 6th. The combination of the casing, the drum  $D$  therein, and the tube  $H$  communicating with said drum, having a collar-valve  $h^1$  near its outer end, and a perforated plate  $H^1$  at its inner end, with the tube  $J$  secured in tube  $H$  and passing through plate  $H^1$  and through the side of the tube, and the joint  $J^1$  attached to the tube and connecting with pipe  $J$ , substantially as described. 7th. The combination of the casing, the drum  $D$  therein, and the vaporizing chamber  $E$ , with the removable cap  $B$  fitted on the casing, its pipe  $B^1$ , and the tube  $F$  connected to chamber  $E$  and passing through said cap and pipe, all substantially as described. 8th. The combination of the casing, and the drum  $D$  therein having a false bottom  $D^1$ , with the vaporizing chamber  $E$  communicating with said drum, substantially as and for the purpose described. 9th. The combination of the casing  $A$ , the drum therein having a false-bottom  $D^1$ , and the detachable cap  $B$ , and a tube for conducting the gases from drum  $D$  through cap  $B$ , substantially as described. 10th. The combination of the casing  $A$ , the drum  $D$  having false bottom  $D^1$ , and the vaporizing chamber  $E$ , communicating with said drum, the removable cap  $B$ , its pipe  $B^1$ , and the tube  $F$  conducting gases from chamber  $E$  through said cap and pipe, and the inhaler-tube connected to said tube  $F$ , substantially as described.

**No. 50,923. Ball Bearing. (Coussinet à roulettes.)**



Henry Brinser Keeper, and John Hertzler, both of Lancaster, Pennsylvania, U.S.A., 7th May, 1898; 6 years. (Filed 17th March, 1898.)

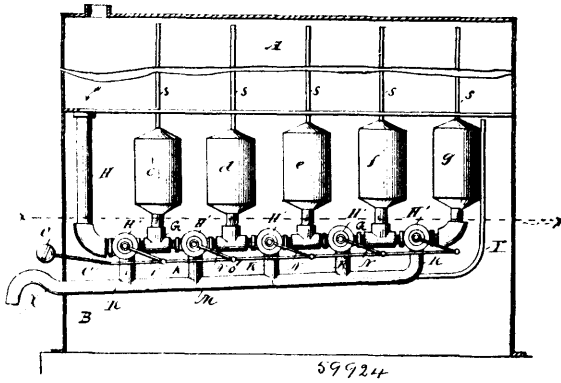
*Claim.*—1st. A ball retainer for anti-friction bearings, the same comprising an annular base portion or ring with an upturned outer edge, a circular series of standards springing from the inner edge of said ring and separated by openings having curved bottoms, and flanges at the ends of the standards of sectoral form and projecting outwardly over the base-ring so as to combine with the flange of the latter in retaining the balls. 2nd. A ball retainer for anti-friction bearings, comprising a central tubular portion cut out at intervals forming U-shaped spaces with intervening standards outward-projecting sectoral flanges on the latter, and a flange on the intact end of the tube with an upturned marginal edge which combines with the edge of the sectoral flanges in confining the balls. 3rd. A ball retainer for anti-friction bearings, comprising a ring plate with ball-seating apertures in its body and a ring flange with a tubular portion sleeved into the smaller end of said ring plate, substantially as hereinbefore set forth. 4th. A ball retainer for anti-friction bearings, comprising a conical ring plate with ball-seating apertures in its body, and a ring flange with its inner edge secured to the narrower end of said conical ring plate, substantially as and for the purpose hereinbefore set forth. 5th. A ball retainer for anti-friction bearings, comprising a funnel-like ring with ball-seating apertures through its body and a tubular ring secured into its smaller inner end, with a second tubular ring securely seated in said former tubular ring and having an outwardly projecting ring flange, all as shown, substantially as and for the purpose hereinbefore set forth.

**No. 50,924. Measure. (Mesure.)**

Ernest W. Clement, Buffalo, and Charles F. Lewis, Jamestown, both in New York, U.S.A., 7th May, 1898; 6 years. (Filed 16th March, 1898.)

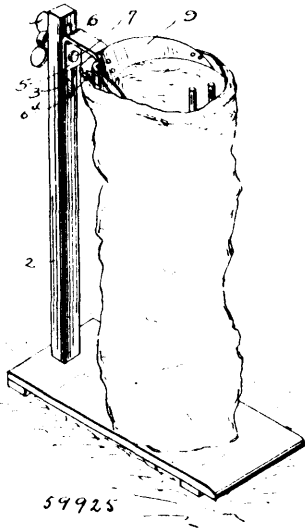
*Claim.*—In a self-measuring vessel, the combination with a supply tank, a series of measuring receptacles mounted on pipes having

connections with unions, three-way globe valves interposed between the said unions, vents S extending from the upper ends of the said



measuring receptacles through the supply tank and opening near the upper portion of the supply tank, of the discharge pipes K and M communicating with the said valves, of the series of rods O disposed in a horizontal plane, and each having connection with a valve lever on the three-way valve stems, the forward end of the said rods being supported in apertures in the wall B, and provided with pulling knobs Q, and the syphon X and air inlet pipe Y in the extremities of the pipe M, substantially as described.

**No. 59,925. Bag Holder. (Accroche-sac.)**

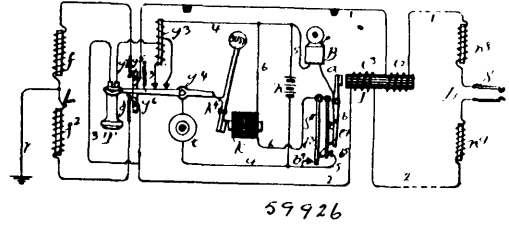


Donald Carl McDonald and Joseph Culloden Tassie, both of Dresden, Ontario, Canada, 7th May, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. In a bag holder, in combination with a standard, a support adjustably secured thereto, a guard plate secured to the support, supporting arms pivotally secured to the support and engaging with the free ends of the guard plate, and a spring secured to the support and bearing against the supporting arms to normally hold the supporting arms and the guard plate in an extended position, substantially as described. 2nd. In a bag holder, in combination with a standard, a support adjustably secured thereto, the support comprising a plate having its free end bent inwardly and terminating in a plurality of projections, supporting arms pivotally secured to the support and normally held in an extended position, the free ends of the supporting arms being formed with projections extending both outwardly and upwardly therefrom, substantially as described. 3rd. In a bag holder, a standard, a support adjustably secured thereto, a guard plate secured to the support, a plate secured to the guard plate, the end of the plate being bent in the form of a loop, supporting arms pivotally secured to the guard plate and passing through the loops carried by the guard plate, and a spring secured to the support and bearing against the supporting arms to normally hold the same and the guard plate in an extended position, substantially as described.

**No. 59,926. Telephone Circuit.**

(Circuit de téléphone.)

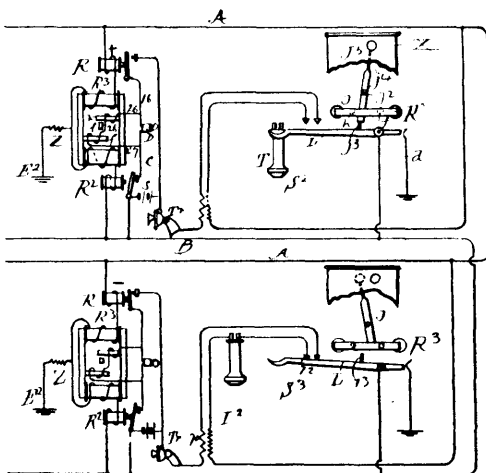


The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of John A. Barret, Summit, New Jersey, U.S.A., 7th May, 1898; 6 years. (Filed 4th September, 1897.)

*Claim.*—1st. A multiple station metallic telephone circuit, and a telephone at each station in a normally open bridge or branch thereof, controlled by an automatic telephone switch, in combination with an independent signaling circuit having a line conductor formed of the two wires of the said metallic circuit joined in parallel, a selective relay at each station in the said signaling circuit, and an associated call signal instrument controlled thereby, each station relay being adjusted to actuate its call instrument on the passage through its coils of a definite and different strength of calling current, and to maintain the irresponsiveness of the said call instrument on the passage of stronger or weaker call currents. 2nd. The combination in a telephone system, of the two wires of a telephone party line, forming in series the direct and return conductors of a metallic telephone circuit, and in parallel the single conductor of a ground return signaling circuit, and a telephone at each subscriber's station connected or adapted for connection in the said metallic circuit, or in a normally discontinuous bridge or branch thereof, with a selective switch or relay connected in the said signaling circuit at each substation, and independent call and busy signals, and a telephone connection lock, associated with said relay and controlled thereby, the several station relays being adjusted to actuate their associated call signals selectively, with a definite strength of calling current different for each, and to actuate their associated busy signals, and telephone locking devices collectively when excited by an actuating current of strength greater than that of the strongest calling-current, substantially as described. 3rd. A grounded signalling-circuit extending from a central station to a number of subscriber's stations, having a line conductor formed by connecting in parallel the two wires of a metallic telephone-circuit, in combination with a substation call-bell connected with a current-generator in a local circuit, and a selective relay with its electro-magnet in the said signalling-circuit, provided with circuit-controlling devices for progressively and successively closing and opening the said local bell-circuit, the said relay being adjusted to close the said local circuit and operate the bell with a current of definite and predetermined strength flowing in the signalling circuit, and to close and instantly reopen the said circuit and thereby prevent the signal from being given, on the passage of a stronger current, substantially as described. 4th. In a telephone system, the two wires of a telephone party line, forming in series the two line conductors of the metallic telephone-circuit, and in parallel, the single conductor of a ground return-signal circuit, in combination at each subscriber's station with a telephone in the said metallic circuit or in a bridge or branch thereof, and an electro-magnetic signal instrument in the said grounded circuit, the electro-magnetic coils of the said instrument being connected half in circuit with one line conductor and a half in circuit with the other, in such manner that the two said halves may co-operate magnetically in the signalling-circuit, and oppose each other magnetically in the talking-circuit, whereby a number of signalling-magnets may be connected with a telephone-circuit without introducing independence. 5th. In combination with the two wires of a multiple-station telephone-line forming severally the outgoing and return conductors of a metallic talking-circuit, and jointly when connected in parallel the single conductor of a ground return signalling-circuit, a subscriber's station apparatus comprising a telephone, and an automatic lever-switch controlling the connections thereof, two local circuits containing respectively the station call-bell, and the actuating electro-magnet of a visual busy-signal and locking device for the said telephone switch-lever, and a selective electro-magnetic switch or relay in the main signalling-circuit, provided with a series of armature-actuated circuit-changing levers controlling said local circuits, and adapted to close the local bell-circuit, to hold it open, and close the busy-signal and switch-lock circuit, according to the strength of current flowing in the main signalling-circuit, substantially as described. 6th. In a telephone subscriber's station apparatus, the combination of a relay or electro-magnetic switch comprising an electro-magnet connected in the main signalling-circuit, a lever attached to the armature thereof, a second lever hung in the path of the first to be actuated thereby, and carrying a front contact-stop therefor, and a third lever hung in the path of the second to be operated thereby, with two normally open local circuits, one containing the station call-bell and leading through the first and second levers, the front contact of the first, and the resting-contact of the second, and

the other containing the electro-magnet of a busy-signal indicator and telephone switch lock, and leading through the third lever and its front contact, whereby the first local circuit may be closed, or closed and immediately opened, and the second local circuit closed, as the relay-armature is by different main-line currents partially or fully attracted and moves one, two or all of said levers, substantially as described. 7th. In a telephone-station apparatus, a selective relay, comprising an electro-magnet, a pivoted lever mounted on the armature thereof, another pivoted lever lying in the path of movement of the said armature-lever, and a third pivoted lever mounted in the path of the second, the third lever being adapted to be operated by the second, and the second by the first, as the armature-lever completes successive portions of its stroke, and independent circuit-changers controlled by the said levers respectively, substantially as described. 8th. The combination in a telephone signalling-circuit, of a series of selective relays or switches, one at each section, each comprising an electro-magnet, an armature therefor and a pivoted lever mounted thereon and carrying a circuit-closer, a second pivoted lever mounted in the path of the armature-lever and carrying a circuit-breaker and a third pivoted lever mounted in the path of the second and carrying a circuit-closer, the third lever being adapted to be actuated by the second, and that by the first, each after its actuating-lever has begun its stroke, and two local circuits for each relay, one containing a call-bell, the circuit-closer of the first lever and the circuit-breaker of the second, and the other containing the electro-magnet of a busy-indicator, and telephone-lock, and the circuit of the third lever, the said relays being selectively adjusted to initially respond by moving their first lever only to a definite strength of current different for each station, and to respond collectively by moving all of their levers to a current stronger than the strongest calling-current, substantially as described. 9th. In a selective switch, the combination with an electro-magnet and a lever actuated thereby, means for opposing the movement of the lever by forces increasing progressively through successive stages of travel, a pair of contact-points adapted to be closed in its first stage of movement, another pair adapted to be separated in its second stage, and a third pair adapted to be closed in its third stage, as described. 10th. The combination in a selective switch, of an electro-magnet and pivoted lever carrying the armature thereof, another pivoted lever lying in the path of movement of the armature-lever, and a third pivoted lever in the path of the second-mentioned lever, adjustable weights upon each of the levers, and switch-contacts controlled by each lever, as described. 11th. In combination with a telephone-line having at its subscribers' stations a telephone-switch adapted when operated to interrupt the line-circuit, a disconnecting or clearing-out annunciator having an indicator and a permanently-polarized electro-magnet normally retaining the indicator in its dormant or concealed position, the said indicator having two equal and oppositely-acting helices, one of these, that tending to reinforce the permanent magnetism being in the main signalling-circuit formed by connecting the two wires of the talking-circuit in parallel, together with a source of current, and the other in an independent circuit, together with a similar source of current, whereby the said annunciator is maintained inert, while the telephone-circuit remains unbroken at the sub-station, but is responsive to the interruption thereof, as described.

**No. 59,927. Electric Signalling System.**  
(*Systeme de signal électrique.*)



59927

The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of George W. Whittemore, Brooklyn, John A. Barrett, Summit, New Jersey, and Warren M. Craft, New York City, all in U.S.A., 7th May, 1898; 6 years. (Filed 21st September, 1897.)

*Claim.*—1st. An electric signalling system comprising a metallic or double-conductor main circuit extending between a central station and a number of sub-stations, a selective signal apparatus consisting of a signal-receiving device in a local circuit controlled by two relays at each sub-station, the receiving device at each station being selectively responsive through the said relays to a definite and separate or different main-circuit current or current combination, and at the central station, a source of calling-current, an earth-conductor, and a series of keys representing respectively the said sub-stations, and controlling the connection of the two main-circuit conductors, the call-current source, and the said earth-conductor terminals, each key being organized to establish a different relation of the said terminals, and adapted thereby to transmit over one or both of the said main-circuit conductors, the particular current or current combination to which the receiving device of the sub-station represented by such key and no other, is responsive, substantially as hereinbefore-specified. 2nd. In a selective-signalling system, the combination of two main-line conductors extending from a central station to a number of sub-stations, a current generator at the central station, a group of circuit-changing keys also at the central station controlling the ends of the said main-line conductors, the poles of the said call-generator, and an earth connection, the several keys being organized to establish different relative arrangements of these factors, for the transmission at will of plus and minus currents over either main conductor alone, over both at once in parallel, and over both in series or when formed into a metallic circuit, and a normally open local circuit containing a call-bell at each sub-station, controlled by relays, the said two relays of each station being adapted to cooperate, and to close their local bell-circuit, and so give the call-signal, in response to one particular combination only of main conductor and current and to the operation of some definite one of the said keys, substantially as specified herein. 3rd. The combination in a system of selective signalling of the two conductors of a metallic telephone-circuit extending between a central station and a number of sub-stations, each conductor having an earth branch at each sub-station, a signal-current generator, a complementary earth connection, and a number of signalling-keys at the central station, each of said keys being adapted to establish a different association of the main conductor, generator and earth connection terminals, and thereby to transmit a current combination distinct from that of any other key, a signal-receiving device in a local circuit capable of being opened and closed at two points, at each sub-station, and two relays at each sub-station connected in the earth or return branches of the main conductors respectively, and controlling each, one of the said local circuit opening and closing points, the character, polarity and mode of connection with the main conductors of the said relays being diverse at each station, whereby the said relays of each sub-station are adapted to close their respective local circuit at both points, and to operate the signal device at such sub-station, in response to the current combination transmitted by a particular one only of the said keys, substantially as and for the purposes specified. 4th. In a system of selective signalling the combination of the two conductors of a metallic party line telephone-exchange circuit, two relays at each substation of the said circuit in derived circuits of the said conductors, the relays of each station being arranged differently with respect to character, polarity, or circuit connection, and made thereby responsive to a signalling current or current combination different for each station, a local circuit at each station having two points controlled by the said relays respectively, where it may be closed and opened, a call signal device included in said local circuit, and adapted to operate and give the signal when the same is closed, and means for transmitting through the said metallic circuit, or through either or both of its conductors at will, the particular signalling current or current combination to which any of the said pairs of substation-relays is responsive, whereby any of the substation local circuits, may be selectively closed, and the signal given at such substation to the exclusion of the others. 5th. In a system of selective signalling, the combination with the two conductors of a metallic telephone-circuit extending from a central station to a number of sub-stations, of substation-signalling apparatus at four of the several stations comprising a polar and a neutral relay, and at the remaining stations comprising two polar relays, the relays of each station being connected differently in derived circuits of the two main conductors, and adapted at each to control a local circuit including a signal-bell, and a current generator and two sets of signal-sending keys at the central station, the keys of one set being adapted to connect the poles of the generator diversely, to one or the other of the main conductors, for the selective operation of the single polar relay of the said four stations, and the keys of the other set being adapted to connect the said generator-poles diversely with both of the said main conductors for the selective operation of the two polar relays of the remaining stations substantially as described. 6th. In a telephone system the combination of the two conductors of a metallic telephone-circuit, a central station at one end of such circuit, a call-current generator, and a number of signal-sending keys at said central station, the said keys being organized to establish a like number of different permutation connections of the said circuit conductors and generator, and thereby to transmit over either or both of the said main conductors a similar number of distinctive currents or current combinations, a series of sub-stations equal in number to the said keys less

two, connected with the said two main-circuit conductors and a selective-signalling apparatus at each of said substations, controlled by relays in earth branches of the said two conductors responsive exclusively to the operation of a corresponding one of the said keys and to the particular current combination transmitted thereby, with a telephone-locking device, and busy-signal at each sub-station actuated by a polarized electro-magnet in the circuit of the station earth branches, the said locking-magnets of all stations being collectively responsive in locking and unlocking to the operation of the remaining two keys and the current combinations, respectively, substantially as herein set forth.

7th. The combination, substantially as hereinbefore described, in a telephone system, of a metallic telephone-circuit, a central station from which such circuit extends, a source of signalling current supply, and a number of signal-sending keys at said central station, the said keys being adapted to establish a like number of different permutations of the circuit conductor and generator connections, and thereby to transmit by means of either or both of the said circuit-conductors a similar number of distinctive currents or current combinations, a series of sub-stations equal in number to the said keys, less two, connected with the said main circuit conductors with a selective-signalling apparatus at each station, consisting of a signal-bell in a normally open local circuit controlled by two relays in earth branches of the said main conductors respectively, each pair of relays being responsive exclusively to the operation of a corresponding one of the said keys and to the particular current combination thereof, a series of polarized electro-magnets, one at each station in circuit with the relays thereof, controlling a telephone-locking device and busy-signal, collectively responsive in locking and unlocking to the operation of the remaining two keys and their current combinations respectively, and an auxiliary winding on the core of said magnet included in the local call-circuit of the station to excite the said magnet and to actuate it to unlock the telephones at a called station independently of the central station unlocking-current combination, substantially as described and for the purposes set forth.

8th. The combination in a telephone system, with a number of selective-signalling appliances each at a different sub-station of the same circuit, and each comprising two relays, and a normally open local circuit controlled thereby containing a signal-bell, the pairs of relays of the several stations being each adapted to respond selectively to a different and distinctive current combination transmitted over the main circuit-conductors, of a telephone-locking and busy-signal device at each station actuated by an independent polarized electro-magnet in circuit with the station-relays, the said magnets of all stations being collectively responsive, both in locking and unlocking, to two additional distinctively main-line current combinations, and means consisting of an auxiliary exciting-helix of the lock-actuating magnet, connected with the local calling-circuit and made operative by the closure of such circuit to give the signal for automatically unlocking the telephones at the called station only, substantially as described.

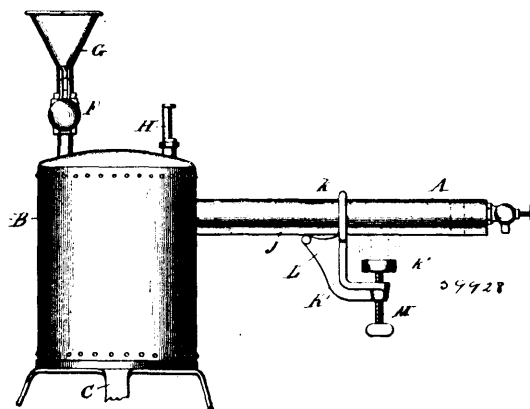
9th. The combination in a telephone system, of the two conductors of a metallic circuit extending from a central station to six sub-stations, with six signalling-keys at the central station, organized and adapted to transmit over the said conductors a like number of different call-current combinations, to wit, plus and minus currents over each conductor separately, and plus and minus currents over the two conductors arranged serially as a metallic circuit, a normally open local signalling circuit at each sub-station containing a signal-bell, and capable of being opened and closed at two separate points, and two relays differently combined at each sub-station connected in earth branches of the said two main conductors respectively, and controlling the said two points in the station local circuit, each set of relays being adapted to respond to a definite and different one of the said current combinations, and to no other, and thereupon to close its local circuit, and sound its call-signal selectively.

10th. In a telephone system, a selective-signal circuit comprising the following elements, the two main conductors of a metallic circuit, extending from a central station to six sub-stations, a group of eight circuit-controlling and signalling-keys at the central station, organized and adapted to connect the terminals of the said main conductors with the terminals of a signalling-current generator as many different ways, and to transit over the said conductors a like number of different current combinations, to wit: plus and minus currents over each conductor separately, plus and minus currents over the two conductors arranged serially as a metallic circuit, and plus and minus currents over both conductors jointly in parallel, a normally open local signalling-circuit at each sub-station containing a signal-bell, and capable of being opened and closed at two separate points, a differently combined pair of relays at each sub-station, connected in earth branches of the said two main conductors respectively, and controlling the said two points in the station local circuit, each pair being responsive to a different one of the said keys and current combinations, for the simultaneous setting and releasing of the said locking devices of the several stations, substantially as set forth.

11th. In a telephone signalling system, the combination of the two main conductors of a metallic circuit connecting a number of sub-stations with a central station, with a

series of local circuits each containing a signal-bell, one for each sub-station, and a series of relays two for each sub-station, connected in derived circuits of the two main conductors respectively, the currents to which said pairs of relays are responsive differing from each other in direction over both main conductors severally connected in circuits completed through the earth or through a common return-conductor, in direction over the two conductors connected in series, and in direction over the two conductors connected in parallel, whereby any pair of said relays but only one pair at a time, may be operated to close its local circuit, as set forth.

**No. 59,928. Vulcanizer. (Vulcanisateur.)**



Morgan and Wright, assignees of F. W. Morgan, P. L. Clark and J. E. Parker, all of Chicago, Illinois, U.S.A., 7th May, 1898; 6 years. (Filed 7th February, 1898.)

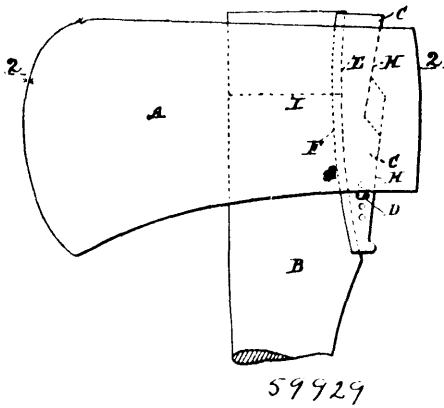
*Claim.*—1st. The combination, in a vulcanizer having a holder-supporting portion, of a vulcanizing surface situated below said portion, means for heating said surface, and a detachable holder provided with an adjustable seat arranged opposite said vulcanizing surface, and with a bearing portion adapted to engage said supporting portion, as set forth. 2nd. The combination, in a vulcanizer having an arm or extension, of a vulcanizing surface provided by said arm or extension, means for heating said surface, and a detachable holder provided with an adjustable seat arranged opposite said surface, and with a bearing portion adapted to engage said arm or extension, as set forth. 3rd. The combination, in a vulcanizer having an arm or extension, of a vulcanizing surface provided by the latter, means for heating said surface, and a holder provided with an adjustable seat arranged opposite said surface, and with a bearing portion adapted to engage said arm or extension, and situated at one side of said seat, whereby the article being vulcanized may be removed and replaced without removing the holder, as set forth. 4th. A portable vulcanizer, comprising a boiler, a pipe attached to said boiler and provided with a flat vulcanizing surface, and a detachable clamp arranged to embrace the pipe and provided with screw means for adjusting the article to be vulcanized against the vulcanizing surface, substantially as described. 5th. In a vulcanizer, a clamp for holding an article to be treated in contact with the vulcanizing surface, said clamp being provided with means of attachment, a brace or extension for contact with said surface at one side of the point of attachment, and means for pressing the article against said surface on the opposite side of said point of attachment, substantially as described. 6th. A vulcanizer adapted for vulcanizing pneumatic tires or inner tubes therefor, and provided with a vulcanizing surface having an inwardly extending aperture adapted to receive the tire or tube valve nipple, substantially as and for the purpose set forth.

**No. 59,929. Means for Securing the Heads of Axes, Hammers, Picks, etc., to their Handles. (Moyen d'assujettir les têtes de haches, marteaux, etc. aux manches.)**

Frederick Baker, Maylands, Kambrook Road, Caulfield, and Agar Wynne, Colonial Chambers, No. 421 Collins Street, Melbourne, all in Victoria, Australia, 7th May, 1898; 6 years. (Filed 5th February, 1898.)

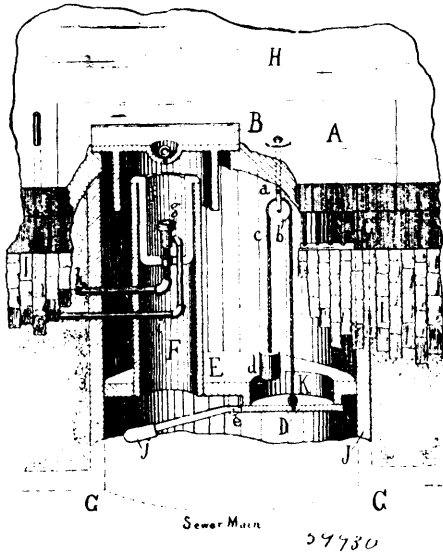
*Claim.*—1st. The herein described means for securing the heads of axes, hammers, picks and the like to their handles, consisting essentially of a curved tapering locking piece, such as C, driven between an inclined surface in the eye of the tool and the edge of the handle, substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawings. 2nd. In means for securing the heads of axes, hammers, picks and the like to their handles, a tapering locking piece, such as C, having one side inclined and the other curved to correspond to a similar curve on the edge of the end of the handle, substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawings. 3rd. In means for securing

the heads of hammers, picks and the like to their handles, a tapering locking piece, such as C, formed with two inclined surfaces, as H H,



in combination with a tool head having corresponding inclined surfaces in its eye, substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawings. 4th. In means for securing the heads of axes, hammers, picks and the like to their handles, a curved tapering locking piece, such as C, in combination with a split pin or screw, such as D, for securing it in its operative position, substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawings.

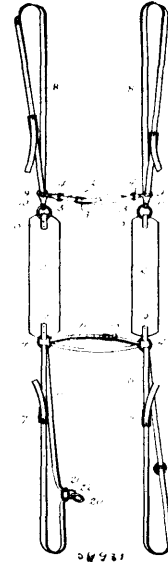
**No. 59,930. Apparatus for Rendering Sewer Gas Innocuous.** (*Appareil pour rendre le gaz d'égouts inoffensif.*)



George R. Siming, assignee of Harvey Perry, both of Rochester, New York, U.S.A., 7th May, 1898; 6 years. (Filed 4th February, 1898.)

*Claim.*—1st. In a sewage system, a flue extending upwards from the sewer and arranged to deliver surface drainage to such sewer, in such flue a diaphragm, in such diaphragm a valve arranged to close automatically when not acted upon by the pressure of a column of water or surface drainage in such flue, in such diaphragm a tube extending upwards therefrom and through which the gas escaping from such sewer must pass, and in such tube germ destroying agencies for rendering innocuous the gas escaping from such sewer. 2nd. In a sewage system, a flue arranged to deliver surface drainage to a sewer, in such flue a diaphragm, in such diaphragm a valve arranged to open only under the pressure of a column of water or drainage and through which all of such surface water or drainage must pass in going to such sewer, means for closing such valve automatically except when operated upon by such a column of surface water or drainage, in such diaphragm also a tube extending upwards therefrom and through which the gas escaping from such sewer must pass, in such tube means for subjecting the gas escaping upwards therethrough to a temperature sufficient to destroy the disease germs resident in such sewer gas.

**No. 59,931. Harness.** (*Harnais.*)



Charles D. Calkins and James B. Baldwin, assignees of Louis L. Bales, all of Seattle, Washington, U.S.A., 7th May, 1898; 6 years. (Filed 1st February, 1898.)

*Claim.*—1st. A pack harness, comprising opposite shoulder-bands, back and front pack-straps, means to suspend said straps from the back and front ends of said bands and means to determine the separation of said shoulder-bands, substantially as set forth. 2nd. A pack harness, comprising opposite shoulder-bands, opposite back and front pack-straps, means to suspend said straps from the back and front ends of said bands and back and chest tie-straps to determine the separation of the shoulder-bands, substantially as set forth. 3rd. A pack harness, comprising opposite shoulder-bands, opposite back and front pack-straps, suspension-rings secured at opposite ends of said bands and adapted to suspend said pack-straps and back and chest tie-straps with suitable connection with the shoulder-bands to determine the separation thereof, substantially as set forth. 4th. A pack harness comprising opposite shoulder-bands, opposite back and front pack-straps, means to suspend said straps from the back and front ends of said bands, back and chest tie-straps to determine the separation of the said shoulder-bands and means to connect said front pack-straps to the back pack-straps to provide for carrying a single pack, substantially as set forth. 5th. A pack harness, comprising opposite shoulder bands, opposite back and front pack-straps, means to suspend said straps from the back and front ends of said bands and means to determine the separation of the bands, the said back pack-straps provided with adjustable devices for connection with the front pack-straps when desirable to carry a single pack, substantially as set forth. 6th. A pack harness, comprising opposite shoulder bands, opposite back and front pack-straps, the said back pack-straps each providing a hitch-loop with a strap-ring therein and a lock-ring inclosing the stems of said hitch-loop, means to suspend said pack-straps from the back and front ends of said bands, and back and chest tie-straps to determine the separation of the said shoulder-bands, the said front pack-straps adapted to engage said strap-rings when desired to carry a single pack, substantially as set forth. 7th. A pack harness, comprising opposite shoulder bands, opposite back pack-straps and means to suspend same from said shoulder-bands, opposite front pack-straps and suspension-rings and release-hooks to connect same to the shoulder-bands, a chest tie-strap to connect the said front pack-straps and a back tie-strap to connect the back ends of said shoulder-bands and to determine the separation thereof, said release-hooks so formed as to adapt them for ready release from said rings whereby the said harness is separated to release the packer, substantially as set forth. 8th. In a pack harness, adapted to support a pack at the front and back of the packer, and comprising shoulder-bands and front and back pack-straps suspended from said band, and means to determine the separation of said bands, U-shaped hooks arranged to connect the said front pack-straps to the said bands and adapted to permit separation of said harness and the packs, substantially as and for the purpose specified. 9th. In a pack harness, comprising opposite shoulder-bands and front and back pack-straps suspended therefrom, and back and chest tie-straps to determine the separation of said shoulder-bands, hooks to connect the said front pack-straps to the said bands and being so formed as to provide for ready release and consequent separation of said harness and release of the packer, substantially as set forth. 10th. A pack harness, comprising shoulder-bands 2 with suspension-rings 3 and 4 fixed thereto, back pack-straps 6, and a back tie-strap 11 through the rings 4, front

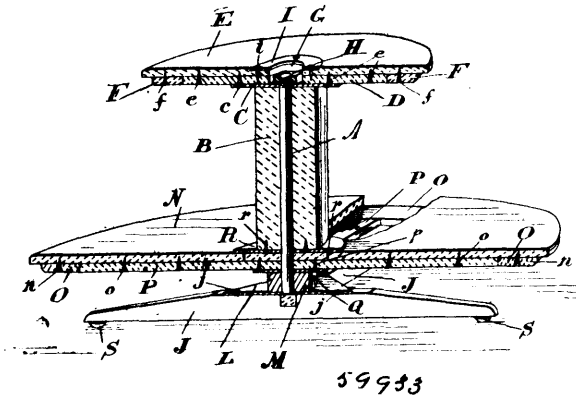
pack-straps 8 with open release-hooks 10 to engage the rings 3 and a chest tie-strap 12 with hooks to engage the eyes of the release-hooks, all substantially as and for the purpose specified. 11th. A pack harness, comprising shoulder-bands 2, suspension-rings 3 and 4 fixed thereto, back pack-straps 6, with strap-rings 20 adjustably mounted thereon, and a back tie-strap 11 through the rings 4, front pack-straps 8 with U-shaped release-hooks 10 to engage the rings 3 and chest tie-straps 12 with snap-hooks 14 to engage the eyes of the release-hooks, all substantially as and for the purpose specified.

**No 59,932. Chromotype Transferring System.**  
(*Système de reproduction photographique.*)

Carl Fleming, Lindenruh-Glagau, assignee of Wilhelm Wachter, Ilmenau, both in the German Empire, 7th May, 1898; 6 years. (Filed 29th November, 1897.)

*Claim.*—1st. The process of transferring chromotypes under the glaze upon ceramic objects, which have been burnt the first time, consisting in applying to the said objects a coating of alcoholic-shellac, varnish and liquid-glue, upon which coating, the chromotype is transferred, subsequently covering the chromotype and the first mentioned coating with an aqueous solution of gum-arabic or india-rubber chromotypes under the glaze upon ceramic objects dextrin and finally applying the glaze, substantially as and for the purpose hereinbefore set forth. 2nd. The process of transferring which have been burnt the first time, consisting in applying in the first instance of a coating of raw glaze, subsequent hereto applying of a coating of alcoholic shellac, varnish and liquid-glue, upon which coating, the india rubber chromotype is transferred, subsequently applying to the india rubber chromotype and the before mentioned coating, an aqueous solution of gum-arabic or dextrin, and finally applying the glaze, substantially as and for the purpose hereinbefore set forth.

**No. 59,933. Revolvable Stand for Tables, etc.**  
(*Porte-table tournante, etc.*)



William Alexander Charlebois, Ottawa, Ontario, Canada, 9th May, 1898; 6 years. (Filed 12th April, 1898.)

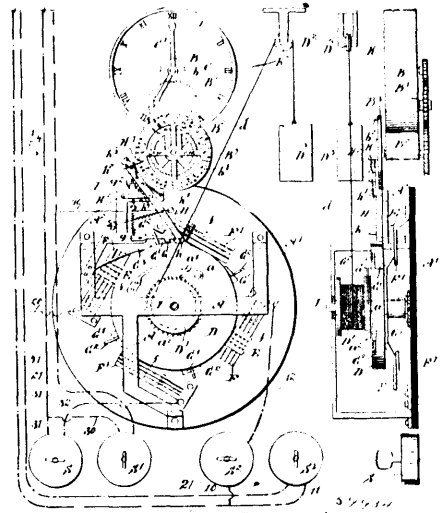
*Claim.*—1st. In a revolvable stand the combination with the upright rod and supports thereof, of a sleeve encasing such rod and supporting shelves secured to the upper and lower ends of the sleeve, as set forth and for the purpose specified. 2nd. In a revolvable stand, the combination with the supporting legs provided with strengthening cross plate and the bearing block and rod extending upwardly from same, of the lower supporting shelf through the centre of which the rod extends, as and for the purpose specified. 3rd. In a revolvable stand, the combination with the supporting legs provided with strengthening cross plate and the bearing block and rod extending upwardly from same, of the lower supporting shelf through the centre of which the rod extends and the sleeve secured to the top of the lower shelf and the upper shelf secured to the top of the sleeve, as and for the purpose specified. 4th. In a revolvable stand, the combination with the supporting legs provided with a strengthening cross plate and the bearing block and rod extending upwardly from same, of the lower supporting shelf through the centre of which the rod extends, the sleeve secured to the top of the lower shelf, the lower shelf provided with the central aperture, the central plate secured to the bottom of the shelf and provided with a hole central with the aperture through which the rod extends and a suitable nut on the top of the rod, as and for the purpose specified.

**No. 59,934. Clock-Controlled Switches.**  
(*Aiguille actionnée par une horloge.*)

Franklin L. Mackey, New Castle, Lawrence Co., Pennsylvania, U.S.A., 9th May, 1898; 6 years. (Filed 20th December, 1897.)

*Claim.*—1st. An automatic switch, comprising a disc having locking stops spaced thereon and carrying switch points, means acting

on the said disc to rotate it, a pawl engaging the stops to hold the disc, fixed switch points attachable to the circuit, and means oper-

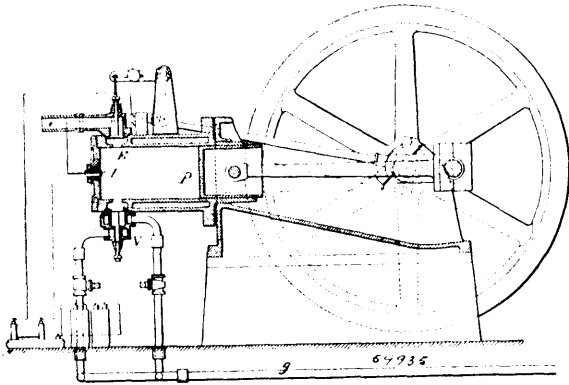


ated by a clock to momentarily lift the locking pawl, substantially as described. 2nd. An automatic switch, comprising a disc having locking stops spaced thereon and carrying switch points, means acting on said disc to rotate it, a pawl engaging said stops to hold the disc, fixed switch points attachable to the circuit, a toothed bar or hook engaging said pawl to lift it, a link pivoted to said bar and forming a swinging pivot therefor, a spring attached to the bar to hold the hook thereof beneath the locking pawl, and means operated by a clock to momentarily lift the locking pawl, substantially as described. 3rd. An automatic switch, comprising a disc having locking stops spaced thereon and provided with switch points, means acting on said disc to rotate it, a pawl engaging said stops to hold the disc, fixed switch points engageable by the moving switch points, a bar connected to the pawl to lift it, an arm pivoted thereto and projecting from one side as a hook, pins limiting the side swing of said arm, a wheel having pins and mounted to revolve so as to engage said arm to lift the pawl, and a clock mechanism for rotating said disc, substantially as described. 4th. An automatic switch, comprising a rotating disc having locking stops thereon and carrying switch points, means for rotating said disc, a pawl engaging said stops to hold the disc, fixed switch points engageable by the moving switch points, a bar connected to the pawl to lift it and free the disc, and a pin upon the disc adapted to engage the bar to free the pawl as the disc revolves, substantially as described. 5th. An automatic switch, comprising a rotatable disc having locking stops and switch points thereon, means acting on said disc to rotate it, a pawl engaging said stops to hold the disc, fixed switch points adapted to be engaged by the moving switch points, a bar having a tooth engaging the pawl to lift it, a link pivoted to said bar to form a swinging pivot therefor, a spring acting on said bar to draw it toward the disc and to swing it on its pivot, an arm pivoted to the end thereof opposite the tooth and projecting to the opposite side therefrom, pins upon the bar at opposite sides of the arm limiting its swing, a spring holding said arm normally toward the centre, a disc having pins adapted when revolved to engage the swinging end of said arm to raise it and the bar, and a clock mechanism for revolving said disc, substantially as described. 6th. An automatic switch, comprising a disc having switch points thereon, means for rotating the disc, fixed switch points consisting of spring bars supported from one end and extending tangentially to the disc, said disc having lugs projecting therefrom, a pawl engaging the lugs to prevent forward rotation of the disc, a spring pawl engaging the lugs to prevent backward rotation of the disc, and means operated by the clock mechanism to momentarily lift the first pawl, substantially as described. 7th. An automatic switch comprising a disc having switch points thereon, means for rotating the same, fixed switch points consisting of spring bars supported from one end and extending tangentially to the disc, said disc having lugs projecting therefrom, a pawl engaging the lugs to prevent forward rotation of the disc, a spring pawl engaging the lugs to prevent backward rotation of the disc, means operated by a clock mechanism to lift the first pawl, and a pin upon the disc engaging the pawl lifting means to free the pawl as the disc revolves, substantially as described. 8th. An automatic switch, comprising a disc having switch points thereon, means for rotating the same, fixed switch points consisting of spring bars supported from one end, said disc having lugs projecting therefrom, a pawl engaging the lugs to pre-



vent forward rotation of the disc, a spring pawl engaging the lugs to prevent backward rotation of the disc, a disc or wheel rotated by clock mechanism and having a series of holes therein, pins insertible in the holes, and a bar connected to the holding pawl and engageable by set pins to free the pawl and permit rotation of the switch disc, substantially as described. 9th. An automatic switch, comprising a switch disc having a rotating means connected thereto, switch points attached to the disc, a locking pawl, studs spaced upon said disc, and adapted to be engaged by said pawl, a wheel or disc connected with a clock to rotate once for each cycle of time, and having a series of holes therein subdividing the same, pins insertible in said holes, a bar having a projection in the path of said pins and engaging the locking pawl to lift it, and a pin on the switch disc adapted to engage said bar to free it from the locking pawl, substantially as described.

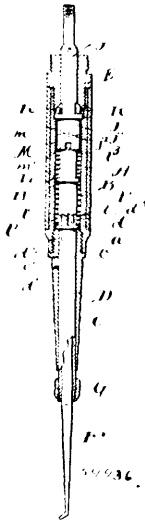
**No. 59,935. Hydrocyanic Acid Manufacture.**  
(*Fabrication d'acide hydrocyanique.*)



Alfred Kirby Huntington, King's College, Strand, London, England, 9th May, 1898; 6 years. (Filed 24th February, 1897.)

*Claim.*—The herein described manufacture of cyanogen combined with hydrogen, by combustion of a mixture of acetylene with nitric oxide.

**No. 59,936. Dental Plugger.** (*Tampon lenteaire.*)

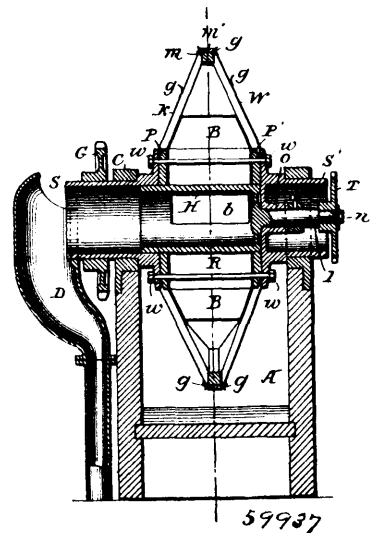


Alden Bush, Elyria, Ohio, U.S.A., 9th May, 1898; 6 years. (Filed 26th January, 1898.)

*Claim.*—1st. In a dental plugger, the combination of a tubular casing, having near its lower end an internal offset forming an annular shoulder, and a plunger working through said end and having on its inner end an external annular shoulder and a row of cam-teeth, with a plug secured in and closing the upper end of said casing, a rotatable hammer in said casing having an annular row of cam-teeth on its lower end and an external annular flange above its lower end, a spring surrounding the hammer and thrusting endwise against the plunger and the flange on the hammer, and a shaft which rotates said hammer and passes through the plug in the

upper end of the casing, the part of the shaft which passes through the plug being of smaller diameter than the part of the shaft which is below said plug and in the casing, substantially as specified. 2nd. In a dental plugger, the combination of a casing having near its lower end an offset which forms an internal annular shoulder, a plug secured in and closing the upper end of said casing and forming an annular internal bearing, a longitudinally movable tool-holding plunger which works through the lower end of the casing and has an annular flange in the casing above said shoulder and also an annular row of cam-teeth on its inner end, with a rotatable hammer in the casing having cam-teeth on its lower end and an external annular flange, a spring surrounding the hammer and thrusting endwise against said flange and the inner end of the plunger, and a shaft adapted to rotate said hammer, which shaft projects through the plug in the upper end of the casing and has within the casing an annular enlargement, and a row of antifriction balls placed between said annular enlargement and the inner end of the plug, substantially as specified. 3rd. In a dental plugger, the combination of a casing, a tool-holding plunger which projects through the lower end of the casing and has an annular row of cam-teeth on its inner end, a rotatable hammer mounted in the casing having on its end which is adjacent to the plunger an annular row of cam-teeth, the adjacent ends of said hammer and plunger having respectively a striking-pin and a recess in which said pin operates, a spring exerts its force to separate the two annular rows of cam-teeth, and a shaft extending out of the upper end of the casing for rotating the hammer, substantially as specified. 4th. In a dental plugger, the combination of a casing, a plunger movable through one end of the casing having on its inner end an annular row of cam-teeth, a rotatable hammer in said casing having on its lower end an annular row of cam-teeth and also having an external flange above its lower end, and a coil-spring surrounding the hammer and thrusting endwise against said flange and the inner end of the plunger, with a plug closing the upper end of the casing, a rotatable shaft which passes through said plug and has an annular row of cam-teeth on its inner end, a collar surrounding the upper end of the hammer and having on its upper end an annular row of cam-teeth, a pin for preventing the relative revolution of the hammer and sleeve, and a spring which thrusts said sleeve upward to cause the engagement of the cam-teeth on its upper end with the cam-teeth on the inner end of the shaft, substantially as specified.

**No. 59,937. Liquid Straining Wheel.**  
(*Roue-passoire pour liquides.*)

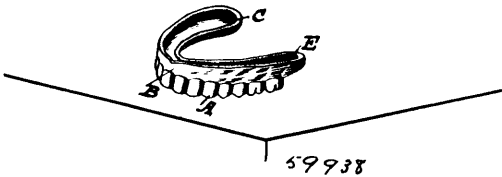


Charles Storey Wheelwright, Providence, Rhode Island, U.S.A., 9th May, 1898; 6 years. (Filed 28th January, 1898.)

*Claim.*—1st. A hollow straining wheel for liquids and matters held in liquid, narrow at the rim and increasing in radial cross-section or width from rim to hub or from rim to near its centre of rotation with perforated sides and lifting buckets between said sides, substantially as described. 2nd. A hollow straining wheel for liquids and matters held in liquid, narrow at the rim and of increasing width in radial cross-section from rim to hub with perforated sides and lifting buckets between said sides, the said lifting buckets conforming in longitudinal cross-section to the radial cross-section of the wheel, substantially as described. 3rd. A hollow straining wheel for liquids and matters held in liquid, narrow at the rim and of increasing width in radial cross-section from rim to hub, with perforated sides and lifting buckets between said sides, the said lifting buckets conforming in longitudinal cross-section to the radial cross-section of the wheel and

having inclined or sloping sides, substantially as described. 4th. A hollow straining wheel for liquids and matters held in liquid, narrow at the rim and of increasing width in radial cross-section from rim to hub, with two sets of spokes diverging, one set from the other, from rim to hub, and provided with wire gauze upon each side, and lifting buckets within between said sides, substantially as described. 5th. A hollow straining wheel for liquids and matters held in liquid, narrow at the rim and of increasing width in radial cross-section from rim to hub, with two sets of spokes diverging, one set from the other, from rim to hub, and provided with wire gauze upon each side, and lifting buckets within, a portion of the said spokes in each said set being bent or twisted, substantially as described. 6th. The combination with a hollow discharge pipe, of a hollow straining wheel for liquids and matters held in liquids adapted to revolve about said discharge pipe, the said wheel being narrow at the rim and of increasing width in radial cross-section from rim to hub, and provided with hollow sides and lifting buckets between said sides, and the said discharging pipe being provided with a slot adapted to receive the contents of said buckets as said wheel revolves about said discharge pipe, substantially as described. 7th. The combination with a single hollow discharge pipe, of a number of hollow straining wheels for liquids and matters held in liquid, adapted to revolve together about said discharge pipe, the said wheels being each narrow at the rim and of increasing width in radial cross-section from rim to hub and provided with perforated sides, and lifting buckets between them, the said discharge pipe being provided with slots adapted to receive the contents of said buckets as said wheels revolve around it, substantially as described.

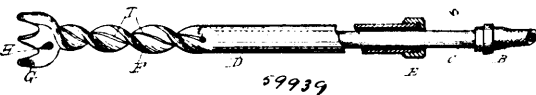
**No. 59,938. Denture. (Denture.)**



Charles A. Matthews, Johnstown, Pennsylvania, U.S.A., 9th May, 1898; 6 years. (Filed 4th February, 1898.)

*Claim.*—1st. A denture for upper teeth provided in its upper surface with a groove or gutter to fit over the gum, said groove or gutter extending from end to end of the denture and being enclosed at its rear ends by closely extending around the rearmost gums, substantially as described. 2nd. A denture for false teeth provided with a groove or trough in its upper surface adapted to fit over the gum, and a lining of soft and flexible material within said groove, substantially as described. 3rd. A denture for false teeth consisting of a suitable plate fitted to the gums only, provided on its upper surface with a trough or gutter fitted to the gums, extending from end to end of the denture and enclosed at its rear end by walls embracing the rear gums, and a lining or soft coating in said trough consisting of a flexible material, substantially as described. 4th. A denture for false teeth consisting of a plate having a trough or groove to fit the gums and provided with an interior lining of soft rubber, substantially as described.

**No. 59,939. Earth Auger. (Sonde à trépan.)**



George Wetherby, Vancouver, British Columbia, Canada, 9th April, 1898; 6 years. (Filed 4th February, 1898.)

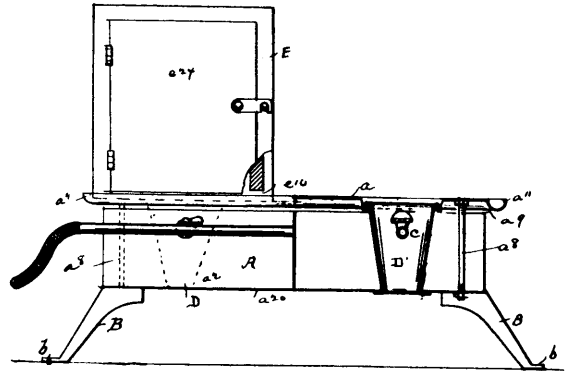
*Claim.*—1st. An earth auger, having a cylindered shank and a depending worm, a bit point with lateral projecting corners, an aperture through the shank and the worm sections, and exterior connections with such apertures through the lower portion of the worm, a tube C slidably arranged within the shank D, a cap E secured to the open end of said shank, and arranged to snugly fit the cylindered exterior of the pipe or tube C, as and for the purposes set forth. 2nd. An earth auger, for the purposes set forth, having a shank and a worm section with an aperture therethrough and a tube C slidably arranged therein, apertures i arranged at the base of the shank and connecting with the aperture in such shank, spiral grooves I, following the opposite sides of the worm to the bit or cutting point of the auger, as set forth.

**No. 59,940. Stove. (Poêle.)**

William Harrison Albach, New York City, U.S.A., 9th May, 1896; 6 years. (Filed 5th April, 1898.)

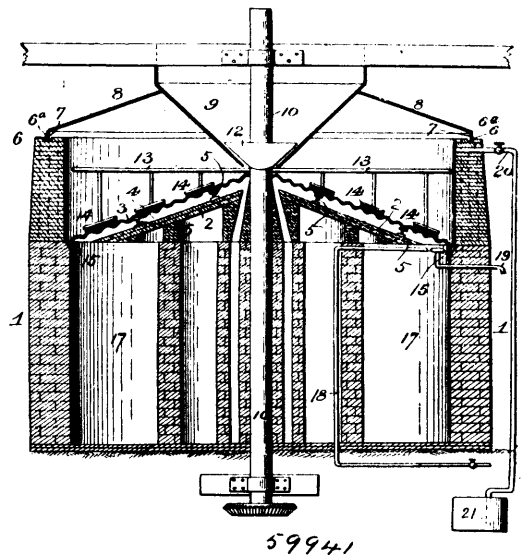
*Claim.*—1st. In a stove, the top place provided with curved flange, and unconnected with the base of said stove, substantially as described. 2nd. In a stove, having unconnected curved flange top

plate the circular conical mixers placed therein, as shown and for the purpose set forth. 3rd. In a stove, having unconnected curved



flange top plate, and circular conical mixers placed as shown and for purposes set forth, the oven placed on top plate as shown and described, said oven having asbestos lining placed in wall of same as shown in figures 2 and 8, and substantially for the purpose set forth. 4th. In a stove having unconnected top plate, and conical mixer as described, the heater, placed on top of same and substantially for the purpose set forth. 5th. In an oven, having asbestos lining, and placed on a stove as shown, the combined window and ventilator, as shown and described. 6th. In a stove, having unconnected top plate and conical mixers, the spider or lid, containing asbestos protecting parts for preventing the transmission of heat from lid to top plate, substantially as set forth. 7th. In a stove, having circular mixers the oven placed beneath the same and containing separate heating chamber, substantially as and for the purpose set forth. 8th. The bracing, the connecting points of the separate parts of a stove, oven or heater, so as to prevent the transmission of heat therefrom or from one part to another, substantially for the purpose set forth.

**No. 59,941. Artificial Fuel Making Machine. (Machine à combustible artificiel.)**

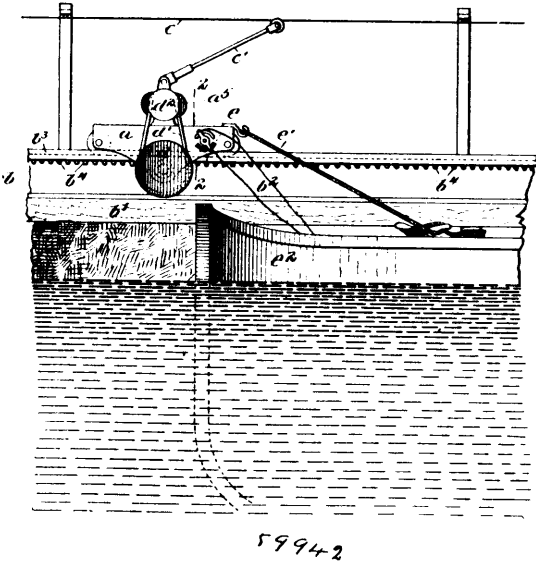


Charles Warren Smith, Moline, Illinois, U.S.A., 9th May, 1898; 6 years. (Filed 19th April, 1898.)

*Claim.*—1st. In an apparatus for manufacturing artificial fuel, consisting of a furnace having a surrounding wall provided with a groove or gutter in the upper end, a convex top, an interior cooling chamber, a convex corrugated hearth located above said top and forming a fire box therebetween and chutes adjacent to the lower end of the hearth and leading to the cooling chamber, a central vertical rotatable shaft provided with radial arms, brushes in said arms, a hopper at the upper end of said shaft, a feeder secured to said shaft, a cover seated in said groove or gutter and the air and gas pipes communicating with the fire box, substantially as described. 2nd. In an apparatus for manufacturing artificial fuel, consisting of a furnace having a surrounding wall, a convex top, an interior cool-

ing chamber, a convex corrugated hearth located above said top and forming a fire box therebetween, and chutes adjacent to the lower end of the hearth and leading to the cooling chamber, a central vertical rotatable shaft provided with radial arms, brushes on said arms, a hopper at the upper end of said shaft, a cover seated on said surrounding wall and the air and gas pipes communicating with the fire box, substantially as described.

**No. 59,942. Electric Towing Apparatus.**  
(Appareil de remorquage électrique.)



Adam Emil Schatz, Mount Veron, New York, U.S.A., 9th May, 1898; 6 years. (Filed 30th November, 1897.)

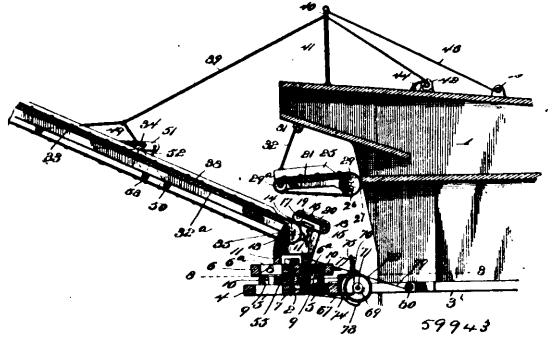
*Claim.*—1st. The combination with a boat, of a carriage movable along a suitable support adjacent to a waterway, an electrical propelling motor on said carriage, circuit connections, means for connecting the carriage and boat, whereby the latter will be propelled by the former, and connections, including a switch, between the motor and boat, whereby the motor current may be controlled by a person on board the boat. 2nd. The combination with a fixed tooth rail located along the bank of a waterway, of an electric locomotive having a spur gear meshing with said toothed rail, circuit connections, a boat, means for connecting the carriage of the locomotive with the boat whereby the latter will be propelled by the former, and connections, including a switch, between the locomotive and boat, whereby the motor current may be controlled by a person on board the boat. 3rd. In an electrical device for towing vehicles, the combination with a fixed rail, of a carriage, sustaining an electric motor and geared to the rail, a coupling or drag-rope attached to the carriage, a switch-lever for directing the electric current to the motor, and a pull-rope for actuating said switch-lever, substantially as set forth. 4th. In an electrical device for towing vehicles, the combination with a fixed rail, of a carriage, sustaining an electric motor and geared to the same, a coupling or drag-rope attached to the carriage, an electric conductor parallel with the rail, a trolley-wheel with spring-arm pivoted upon the carriage to make contact with such conductor, a switch with lever for leading the current from the trolley to the motor, and a pull-rope for actuating such lever, substantially as set forth. 5th. The combination with the rail *b*, having vertical portion *b*<sup>2</sup> and the horizontal plate *b*<sup>3</sup>, provided with a grooved upper surface and a rack *b*<sup>4</sup> on its under side, of the motor and its frame or truck *a* having hooks *c* and the wheels *a*<sup>1</sup> fitted to the grooved upper surface of the rail and the pinion *a*<sup>2</sup> meshing with the rack *b*<sup>4</sup>, and means for connecting the motor with a canal boat, substantially as and for the purpose set forth.

**No. 59,943. Straw Stacker.** (Appareil de mise en meule.)

Robert Moy, Mondovi, Wisconsin, U.S.A., 9th May, 1898; 6 years. (Filed 22nd April, 1898.)

*Claim.*—1st. In a straw stacker, the combination with a swinging frame and a power shaft, of an actuating shaft, an intermediate shaft between the power and actuating shafts, clutch mechanism and connections between said power and intermediate shafts to drive the latter shaft in reverse directions alternately from the power shaft, a yieldable trip operatively connected with said clutch, detents on the swinging frame to contact alternately with said yieldable trip, and connections between the actuating shaft, the intermediate shaft and the swinging frame, substantially as described. 2nd. In a straw stacker, the combination with a base frame, a swinging frame pivoted on a fixed king bolt or arbour

and carrying a conveyer driving-shaft, and a double master-gear mounted loosely on said arbour and operatively connected with



the conveyer driving shaft, of a power shaft geared to said master-gear and provided with two pulleys, an intermediate shaft having loose pulleys, operatively connected by belts with said pulleys of the power shaft, a clutch between the loose pulleys of the intermediate shaft, a spring-controlled trip mounted in the path of the swinging frame, means connecting said clutch and trip, and an actuating shaft operatively connected with the intermediate shaft and said swinging frame, substantially as described. 3rd. The combination with a swinging stacker carrying frame and a supporting frame, of an actuating shaft, cables coiled reversely on the actuating shaft and attached to the swinging frame, a power shaft, an intermediate shaft geared to the actuating shaft, the pulleys mounted on the intermediate shaft, belts fitted to said power shaft and the pulleys to drive the latter in opposite directions, a clutch mechanism to make the pulleys fast with the intermediate shaft alternately, and a trip mechanism actuated by the swinging frame to control the clutch mechanism, substantially as described. 4th. The combination with a swinging stacker carrying frame, a power shaft, and an actuating shaft connected with said frame, of an intermediate shaft, the pulleys mounted on said intermediate shaft, the straight and crossed bolts between the power shaft and said pulleys, the clutch between said pulleys, the spring connected with said clutch, and the spaced detents carried by the swinging frame and arranged to alternately strike the trip, substantially as described. 5th. The combination with a swinging stacker carrying frame, and a power shaft, of an actuating shaft, cables attached to the swinging frame and coiled in reverse directions on the actuating shaft, an intermediate shaft geared to the actuating shaft, pulleys mounted loosely on the intermediate shaft and geared to the power shaft to be driven thereby in opposite directions, a slidable clutch between said pulleys, a shipper rod, a trip connected to the shipper rod, and detents carried by the swinging frame and arranged to alternately strike the trip, as and for the purposes described. 6th. The combination with a main supporting frame, a swinging stacker carrying frame pivotally attached to the supporting frame, and a stacker-conveyor driven by a shaft 13, on said stacker-frame, of a power shaft, a countershaft geared to the shaft 13, a master-gear loose on the pivotal connection of the swinging frame and geared with the power shaft and the shaft 13, an actuating shaft having flexible connections with the swinging frame, an intermediate shaft geared to the actuator shaft, a shifting mechanism including a clutch and operatively connecting the intermediate shaft with the power shaft, and a trip-controlled tripper actuated by the swinging frame and connected with the clutch, for the purposes described, substantially as set forth. 7th. The combination with a swinging frame and a sectional foldable stacker mounted thereon, of a stacker-adjusting shaft having cables which are branched and attached to the sections of the stacker frame, a guide-bail through which the stacker cables are passed, an adjusting shaft having a flexible cable connected with the guide bail, and an adjusting shaft carried by one section of the stacker frame and having cables connected with the other section of said stacker frame, as and for the purposes described.

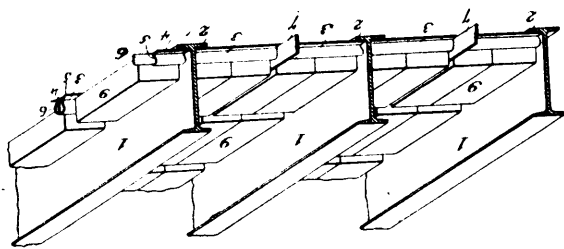
**No. 59,944. Floor Construction.**

(Construction de planchers.)

John W. Rapp, New York City, U.S.A., 9th May, 1898; 6 years. (Filed 20th April, 1898.)

*Claim.*—1st. In a floor construction, the combination of I beams, cross T pieces extending between the beams and resting on them, spacing ties fitting over the cross T pieces and extending between them, blocks resting on the flanges of the cross T pieces, and flooring material placed upon the blocks, substantially as specified. 2nd. In a floor construction, the combination of I beams suitably supported, cross Ts intermediate said beams and supported by their ends on the flanges of said beams, said cross Ts being made from sheet metal bent to an approximate T form, comprising integral web and flange portions, said web being of a loop or yoke, and blocks supported on the flanges of said T bars, substantially as described. 3rd. In a floor construction, the combination of I beams suitably

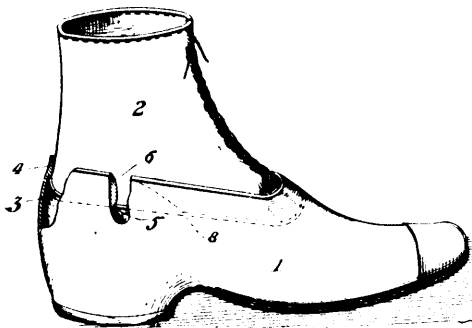
supported, cross Ts intermediate said beams and supported by their ends on the flanges of said beams, said cross Ts being made from



59944

sheet metal bent to an approximate T form comprising integral web and flange portions, said web being of a loop or yoke, a stiffening strip within the loop or yoke, and blocks supported on the flanges of said T bars, substantially as described. 4th. In a floor construction, the combination of I beams, suitably supported cross Ts intermediate said beams, spacing ties for said cross Ts for holding them in position relatively to each other, said spacing ties formed from strips of sheet metal and provided with suitable recesses for fitting over the cross T pieces, substantially as specified.

**No. 59,945. Overshoe. (Galoches.)**

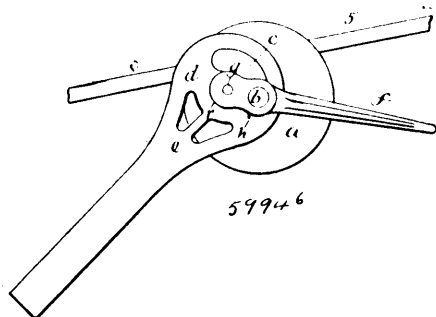


59945

Lute E. Campbell, Arkansas City, Kansas, U.S.A., 9th May, 1898; 6 years. (Filed 20th April, 1898.)

*Claim.*—1st. An overshoe having a reinforcement on the inner face of its heel portion provided with a shoulder extending from end to end thereof and thickened, convex portions at each end, said reinforcement gradually decreasing in thickness from the shoulder to its upper edge where it is merged in the body of the overshoe, substantially as described. An overshoe having a reinforcement on the inner face of its heel portion provided with a shoulder extending from end to end thereof intermediate its upper and lower edges, said reinforcement gradually decreasing in thickness from the shoulder to its upper and lower edges and merging at its edges in the body of the overshoe, the space between the inner face of the sole of the overshoe and the shoulder being greater at the rear end of the shoe than it is at the ends of the shoulder, substantially as described.

**No. 59,946. Trolley Wheel. (Roue de trolley.)**



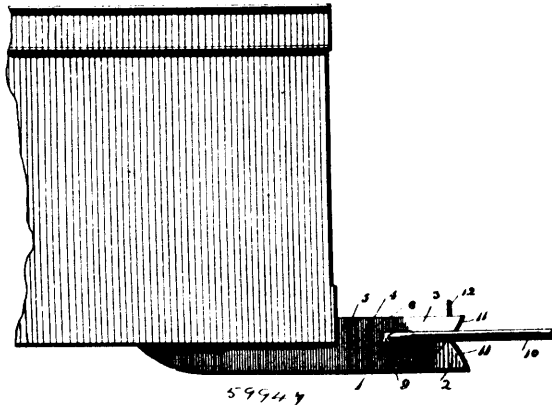
59946

George Washington Duryea, and Thomas Wellington Thompson, both of Brooklyn, New York, U.S.A., 9th May, 1898; 6 years. (Filed 7th October, 1897.)

*Claim.*—The combination of the forked carrier, studs carried thereby and having a series of radially-arranged slots, guiding-arms

mounted thereon having housings at their lower ends, flat coiled springs arranged in said housings and having one end fitting in the radial slots of the studs and the other ends bearing against the said arms, said shaft being movable within arc-shaped slots in the arms of said fork, and a trolley-wheel mounted on said shaft.

**No. 59,947. Car Coupler. (Attelage de chars.)**

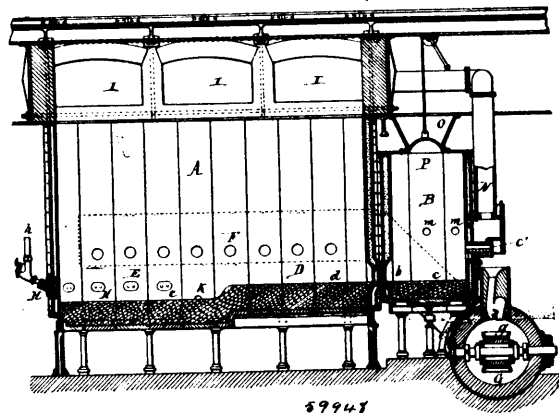


59947

Daniel A. McKay, South Bar, Nova Scotia, Canada, 9th May, 1898; 6 years. (Filed 25th April, 1898.)

*Claim.*—1st. In a car coupling, a draw-head comprising stationary and pivoted jaws, and means for securely retaining the coupling link within said jaws, substantially as described. 2nd. In a car coupling, a draw head comprising a stationary jaw formed integral with the draw-bar, a movable jaw pivotally secured to said stationary jaw and means for securely retaining the coupling link within said jaws, substantially as described. 3rd. In a car coupling, a draw-head comprising a stationary jaw formed integral with the draw-bar, an elongated opening formed in said draw-head, a movable jaw pivoted to a lug formed on said stationary jaw and a depending lug formed on the under side of said pivoted jaw, said lug being adapted to be received within the opening of the stationary jaw and securely retain the coupling link, both of said jaws being bevelled upon their outer ends, substantially as described.

**No. 59,948. Method of and Apparatus for Matte or Pyritic Smelting. (Méthode et appareil pour la fonte de la matte ou pyrites.)**



59948

Oliver Stephens Garretson, Buffalo, New York, U.S.A., 10th May, 1898; 6 years. (Filed 26th August, 1867.)

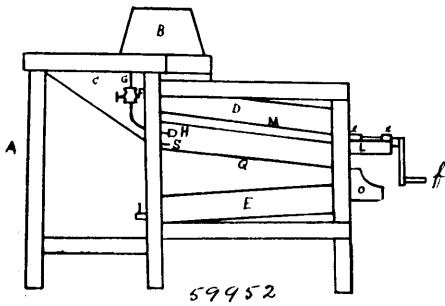
*Claim.*—1st. The herein described method of matte or pyritic smelting which consists in conducting the operations of producing molten matte and converting or bessemerizing the same side by side, maintaining a flow of matte from the matte forming region to the connecting or bessemerizing region, forming a fluid slag by the addition of flux in the converting or bessemerizing region, and compelling such slag to flow through the matte forming region on its way to the slag outlet, thereby subjecting the slag to the action of the sulphur and sulphids in the matte forming region, whereby the values contained in the slag are intercepted and returned to the matte, substantially as set forth. 2nd. The herein described method of matte or pyritic smelting which consists in conducting the operations of producing molten matte and converting or bessemerizing the same side by side in the same furnace and charging the matte forming region with a preponderance of ore and the converting or



*Claim.*—1st. The combination, in a trap, of a trigger-plate, a tilting-board for closing exit from the trigger compartment, tripping-mechanism operated by the trigger-plate, and a gaol compartment to which the tilting-board leads when closed. 2nd. The combination, in a trap, of a trigger-plate, an overhead tilting-board for closing exit from the trigger compartment, tripping-mechanism operated by the trigger-plate, a counter balance for restoring said tripping-mechanism, a gangway and automatically-closing gate leading from the tilting-board compartment, and a gaol compartment to which said gangway opens. 3rd. The combination, in a trap, of a pivoted trigger-plate, a live bait compartment, a tilting-board or gate for closing exit from the trigger compartment, and tripping mechanism actuated by the trigger-plate to operate said tilting-board. 4th. The combination of the trigger compartment, the trigger-plate, the live bait compartment, the tilting-board, the gangway and gate, the gaol compartment and the trip. 5th. The combination of the trigger compartment, the live bait compartment, the door to said latter compartment, the tilting-board, the gangway and gate, the gaol compartment, the gate therefrom, and the hinged lid opening to the trigger-plate and live bait compartments.

**No. 59,952. Wheat Pickling Machine.**

(Appareil à nettoyer le blé.)

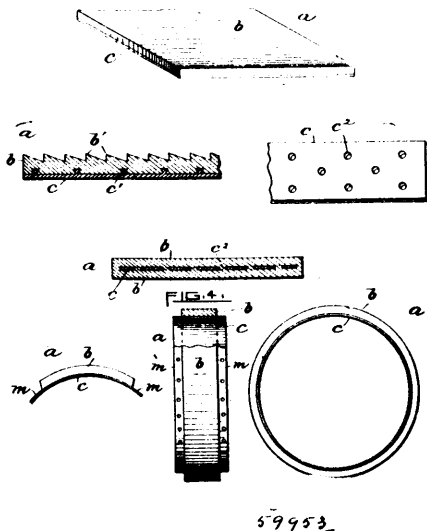


Alexander T. Minty, Ferndale District, Assiniboia, North West Territories, Canada, 10th May, 1898; 6 years. (Filed 9th December, 1897.)

*Claim.*—In an apparatus for treating seed wheat, the combination with a suitable standard of a tank or container for the treating solution, a perforated drum below said tank mounted at a slight angle to the horizontal line, means for rotating said drum, a pipe connected to said tank and conveying liquor to the interior of said drum, a spraying rosette connected to said pipe, a hopper mounted adjacent to the upper end of said drum, having means for feeding the wheat into said drum, a trough underneath said drum for receiving the surplus liquid, means for emptying said trough and a bag holder mounted on said standard, substantially as and for the purpose set forth.

**No. 59,953. Gold Collecting Compound.**

(Composé pour recueillir l'or.)



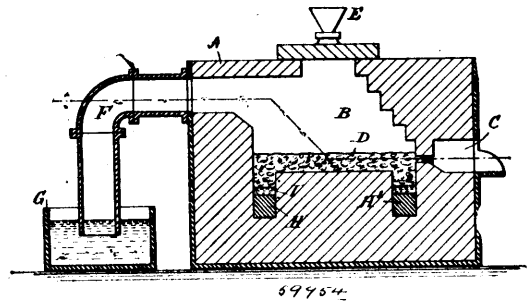
Charles Edward Greene, Providence, Rhode Island, U.S.A., 10th May, 1898; 6 years. (Filed 26th January, 1898.)

*Claim.*—1st. The herein described new composition of matter for gold collecting plates, the same being composed essentially of zinc,

quicksilver and a suitable fluxing agent, all combined in a molten state but which hardens when cold, as distinguished from amalgam plates in which successive layers or washes of mercury composition in a soft or plastic state is applied to the surface of the plates. 2nd. As a new composition of matter, a compound consisting of quicksilver and a small quantity of sodium added thereto, to prevent the quicksilver from separating into balls or globules, thus forming an amalgam, combined with an amount of zinc equal to about four times the weight of said amalgam, the whole being fused together and forming when cast a hard and solid composition capable of attracting or having an affinity for gold, substantially as described. 3rd. The combination with the composition of matter hereinbefore described, composed essentially of zinc, quicksilver and sodium, of a strengthening or base plate united to said composition while the latter is in a molten state, the resulting product forming a hard and solid homogeneous gold-collecting plate in which the exposed or working surface thereof possesses an equal affinity for gold throughout its mass, substantially as described. 4th. The combination with the new composition of matter hereinbefore described, composed essentially of zinc and suitably treated quicksilver, of a metallic strengthening or base plate united or fused to said composition while the latter is in a molten state, substantially as described. 5th. The process of producing the gold-collecting plate hereinbefore described, the same consisting in thoroughly incorporating into a mass of molten zinc a suitable quantity of prepared quicksilver, then pouring the mixture into a heated mould containing a piece of metal as c, adapted to form a strengthening plate, thereby welding or uniting the composition to the plate, and finally cooling and removing the casting from the mould. 6th. As a new article of manufacture, a cast metallic gold-collecting plate having quicksilver fused into the composition and incorporated throughout its mass, substantially as hereinbefore described, whereby the working surface of the plate is kept continuously in a moist or lubricated state, as distinguished from the usual amalgam plates or even porous plates charged with quicksilver. 7th. The gold-collecting plate hereinbefore described, the same consisting of a composition of zinc, quicksilver and sodium, combined when in a molten state but which becomes hard and solid when cold, and a suitable strengthening or base plate united or otherwise secured to said composition, the said base plate possessing little or no affinity for the quicksilver.

**No. 59,954. Process of and Apparatus for Treating Arsenic Ores.**

(Procédé et appareil pour le traitement de minerais arsénieux.)

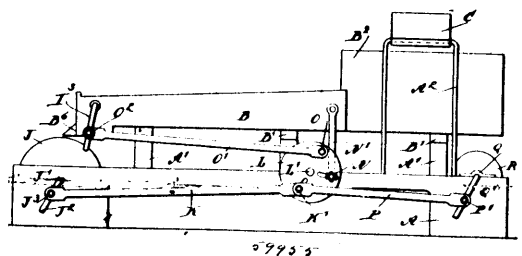


Gustaf Muritz Westman, New York City, U.S.A., 10th May, 1898; 6 years. (Filed 22nd January, 1898.)

*Claim.*—The herein described dual process of treating arsenic ores for obtaining therefrom the metallic arsenic and separating and saving the precious metals contained therein, which consist in melting such ores by means of an electric current, and second retaining the arsenical vapors given off from the ores while being melted, as specified.

**No. 59,955. Ore Concentrator.**

(Concentrateur de minerai.)



Wm. H. Rockfellow, Portland, Oregon, U.S.A., 10th May, 1898; 6 years. (Filed 3rd January, 1898.)

*Claim.*—1st. A concentrator, comprising a table formed at one end with a head having an elevated copper plate and a screen over

the same, a mercury box at the end of the copper plate and below the same, and a funnel held in the said mercury box and receiving the material from the said copper plate, the lower end of the funnel extending within a short distance of the bottom of the mercury box, substantially as shown and described. 2nd. A concentrator, comprising a table formed at one end with a head having an elevated copper plate and a screen over the same, a mercury box at the end of the copper plate and below the same, a funnel held in the said mercury box and receiving the material from the said copper plate, the lower end of the funnel extending within a short distance of the bottom of the mercury box, and means, substantially as described, for raising and lowering the said mercury box and its funnel in the said head, as set forth. 3rd. A concentrator, comprising a table formed at one end with a head having an elevated copper plate and a screen over the same, a mercury box at the end of the copper plate and below the same, a funnel held in the said mercury box and receiving the material from the said copper plate, the lower end of the funnel extending within a short distance of the bottom of the mercury box, and a discharge plate extending from the said mercury box above the lower end of the funnel, for carrying off the gold, sand and water on the table, substantially as shown and described. 4th. A concentrator, provided with a table mounted to rock, a settling box in the lower end of the said table, and provided with an overflow or discharge spout, and an agitator having rocking wings extending into the said box, substantially as shown and described. 5th. A concentrator, comprising a table mounted to rock sidewise upon a longitudinal subjacent axis, and provided with screening and amalgamating devices, an end discharge, a water wheel journaled beneath the end discharge upon an axis at a right-angle to that of the rocking table, and having a crank at its end provided with a wrist pin, a pitman connected with the said wrist pin, a crank disc mounted to rock, and connected with the said pitman, and a pitman connection between the said crank disc and the said table, for imparting a rocking motion thereto when the wheel is actuated from the discharge of the table, substantially as shown and described. 6th. A concentrator, comprising a table mounted to rock sidewise upon a longitudinal subjacent axis, and provided with screening and amalgamating devices, and end discharge, a water wheel journaled beneath the end discharge upon an axis at a right angle to that of the rocking table, and having a crank at its end provided with a wrist pin, a pitman connected with the said wrist pin, a crank disc mounted to rock, and connected with the said pitman, a pitman connection between the said crank disc and the said table, for imparting a rocking motion thereto when the wheel is actuated from the discharge of the table, and an agitator in a settling tank at the lower end of the said table, the agitator being connected with the said crank disc for receiving its motion therefrom, substantially as shown and described.

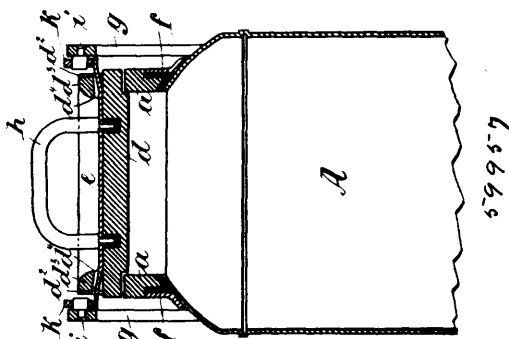
**No. 59,956. Beverage. (Brewage.)**

Robert H. Guthrie, South Dumfries, Ontario, Canada. 10th May, 1898; 6 years (Filed 4th March, 1898.)

*Claim.*—1st. A cereal for beverage purposes consisting of crushed roasted rye, molasses, and bran mixed together in the proportion of three cups of rye, three tablespoonfuls of molasses, and one cup of bran, substantially as specified. 2nd. The hereinbefore described process for preparing a cereal for beverage purposes, which consists of putting three cupfuls of rye into the cylinder of the roaster, then placing the roaster on a stove heated by a smart fire and turning the cylinder slowly about twenty minutes more or less, or until the escaping vapour is of a rich brown colour, then removing the grain when thoroughly roasted, and crushing or grinding it quite fine, then adding one tablespoonful of water to three tablespoonfuls of molasses, which are mixed together and boiled, then mixing the diluted molasses with one cup of bran and adding the crushed roasted grain, then roasting the mixture until it gives off a rich brown vapour, and then cooling the mixture, substantially as specified.

**No. 59,957. Device for Closing Sheet Metal Vessels.**

(Appareil à fermer les boîtes métallique.)



Josef Fliegel, Mallnitz, Selesia, Empire of Germany, 10th May, 1898; 6 years. (Filed 9th February, 1898.)

*Claim.*—An improved device for closing sheet metal vessels consisting of a ring of ceramic material firmly and impermeably attached to the neck of the metallic vessel so as to form the mouth thereof and having a flat and even ground joint face and a cover made of similar material and having its joint face also ground flat and even and firmly pressed upon the mouth ring, so as to cause an air-tight joint between the said joint faces, substantially as set forth.

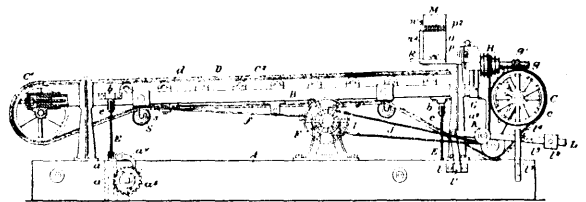
**No. 59,958. Process for Extracting Metals From Sulphuretted Ores. (Procédé pour extraire les métaux des minerais souffrés.)**

Christopher James, Swansea, England, 10th May, 1898; 6 years. (Filed 16th August, 1897.)

*Claim.*—1st. A process for the production of metallic copper, refined or otherwise in a marketable form from raw sulphuretted copper ores in one smelting as regards at least two-fifths of the smelting charge, by addition to the said raw sulphuretted ore of three-fifths of the charge in the form of a calcined concentrated copper matte of 75 per cent of copper with proportional variations of calcined and raw ore, according to the oxidation and sulphurization of the matte and ore respectively, substantially as described. 2nd. A process for the production of an alloy of copper and the precious metals from argentiferous and auriferous sulphuretted copper ores or their mattes with no loss under assay value of the gold and silver originally contained, consisting of a preparation of part of the charge before smelting so that it contains oxygen in a solid form, the uniform distribution of such oxidized portion throughout and mixture with a raw sulphuretted portion of the original ore or of its matte in such relative proportion as will enable the contained oxygen to uniformly and simultaneously react upon and completely combine with the whole of the sulphur of the raw ore or matte, and a final smelting to produce an alloy of copper and the precious metals contained in the original charge without loss below assay value of original ore. 3rd. A process for the production of an alloy of copper and the precious metals from argentiferous and auriferous sulphuretted ores, with no loss under assay value of the gold and silver originally contained, consisting of a preparation of part of the charge by concentration to a matte of 70 to 75 per cent copper, a calcining of such concentrated portion of matte to an oxidized condition and intimate and thorough mixture of such calcined and concentrated portion of matte with a part of the raw ore in the proportion of 2 parts of calcinated matte to 1 part of raw ore (such as bratsberg), and a final smelting together, substantially as and for the purposes described. 4th. A modification of the process claimed in claim 2nd, consisting of the mixture of equal parts of calcined concentrated matte and raw or uncalcined concentrated matte of the same percentage of copper for the final smelting, substantially as and for the purposes described. 5th. In a process for the reduction of argentiferous and auriferous sulphuretted ores containing lead, the addition to the charge when smelting of sufficient silica to absorb the oxidised lead into a leady slag, free from the precious metals and with little copper, the removal of the lead from the leady slag by known means, and the utilization of the highly oxidised slag free from lead in the earlier stages of concentration of further ore, substantially as described.

**No. 59,959. Ore Concentrator.**

(Concentrateur de minerai.)



Amos C. Springer, San Francisco, California, U.S.A., 10th May, 1898; 6 years. (Filed 4th December, 1897.)

*Claim.*—1st. In an ore concentrator, and in combination with the bed frame and shaking belt frame thereof, the supporting standards having their extremities convex or half round, bearings upon the bed frame and shaking belt frame having concaved recesses in which the convex extremities of the standards fit and rock, and a means for vertically adjusting one pair of said supporting standards, to vary the inclination of the shaking belt frame, consisting of the vertically disposed guides on the inner sides of the base frame, bearing movable in said guides, and having depending racks, and the rotatable shaft in the bed frame having pinions engaging with said racks. 2nd. In an ore concentrator, and in combination with the bed frame and shaking belt frame thereof, the supporting standards having end castings with their extremities convex or half round, bearings upon the bed frame and shaking belt frame having concaved recesses in which the convex extremities of the standards

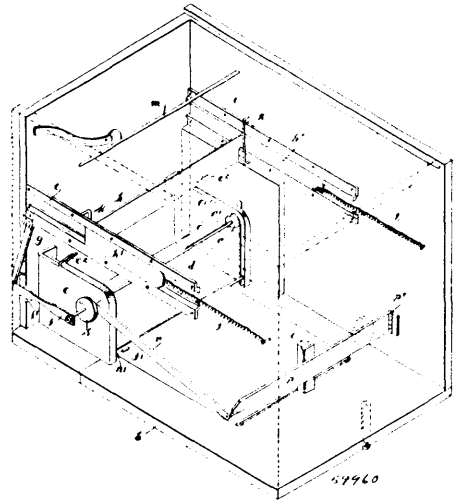
fit and rock, and a means for vertically adjusting one pair of said supporting standards, to vary the inclination of the shaking bolt frame, consisting of the vertically disposed guides on the inner sides of the base frame, bearings movable in said guides, and having depending racks, the rotatable shaft in the bed frame having pinions engaging with said racks, and a pawl and ratchet for holding the shaft where adjusted. 3rd. In an ore concentrator, having a fixed bed frame and a shaking belt-carrying frame provided with a head drum for causing the travel of the belt, the means for rotating said drum, consisting of a shaft mounted upon the shaking belt frame and having a worm engaging with a gear on the drum, a series of pulleys of different diameters on said worm shaft, a driving shaft on the fixed bed frame and a series of pulleys of different diameters on said shaft, a flexible driving belt extending between said pulleys, and means for tightening said belt and holding it in proper position, consisting of tightener pulleys, a weighted lever carrying said pulleys between its ends and pivotally connected, at one extremity, by a link with the bed-frame, and means for holding the lever in position where adjusted. 4th. In an ore concentrator, having a fixed bed frame and a shaking belt carrying frame provided with a head drum for causing the travel of the belt, the means for rotating said drum consisting of a shaft mounted upon the shaking belt frame, and having a worm engaging with a gear on the drum, a series of pulleys of different diameters on said worm shaft, a driving shaft on the fixed bed frame and a series of pulleys of different diameters on said shaft, a flexible driving belt extending between said pulleys, and means for tightening said belt and holding it in proper position, consisting of tightener pulleys, a weighted lever carrying said pulleys between its ends and pivotally connected at one extremity, by a link with the bed frame, a removable pin adapted to fit in any series of holes in said lever, and a fixed vertically disposed bar forming a stop against which said pin bears, whereby the lever may be moved and held where adjusted. 5th. In an ore concentrator, a concentrating belt, independent side strips fastened removably by lines of stitching to said belt, and side flanges of rubber vulcanized to said side strips. 6th. In an ore concentrator, a concentrating belt having independent side strips of canvas or like strips removably secured thereto by lines of stitching, and rubber flanges vulcanized to said side strips. 7th. In an ore concentrator, a concentrating belt and rubber flanges vulcanized directly upon the edges of said belt. 8th. In an ore concentrator, a concentrating belt made of canvas or like fabric and having independent side strips of canvas or like fabric removably secured thereto and rubber side flanges vulcanized to said side strips. 9th. In an ore concentrator, a pulp distributor therefor consisting of a centrally located hopper, oppositely extending inclined chutes with which said hopper communicates, longitudinal partitions of varying lengths dividing said chutes into parallel longitudinal runs of different lengths, gates for controlling the communication between the hopper and said runs, openings in the chutes at the ends of said runs, an underlying box or casing provided with parallel cross-runs adapted to receive the material from the chutes, discharge holes from each of said cross-runs, and a distributor lying over the belt and communicating with said holes. 10th. In an ore concentrator, a pulp distributor therefor, consisting of a centrally located hopper, a receiving chamber under said hopper, oppositely extending inclined chutes communicating with said chamber over the tops of its end walls, longitudinal runs of different lengths in said chutes, gates controlling said runs and openings at the ends of the runs, an underlying box with parallel cross-runs adopted to receive the material from said chute-openings and having discharge holes in the front walls of the box, a distributing table lying over the belt and communicating with said holes, front passages communicating with the front of the central chamber, gates controlling said passages and openings by which the passages discharge upon the table. 11th. In an ore concentrator and in combination with a concentrating belt having end gudgeons and the independently rotatable tapering end pieces abutting against said roller ends and having hollow stems fitting freely upon said gudgeons, said side flanges of the belt adapted to engage the rotatable end pieces, substantially as herein described.

**No. 50,960. Magazine Camera. (Camera.)**

Kerry Ellsworth Conley and Frederick Victor Conley, both of Spring Valley, Minnesota, U.S.A., 10th May, 1898; 6 years. (Filed 10th December, 1897.)

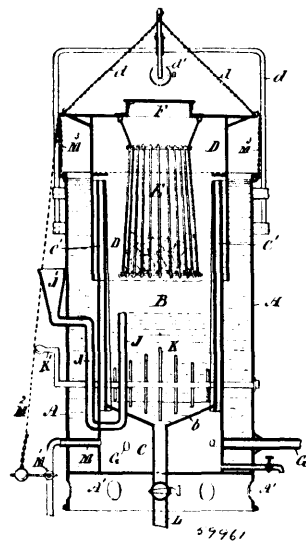
*Claim.*—1st. In a camera, guideways for receiving plate holders having laterally projecting guides, a spring follower and a rest for holding the plates in position of exposure, a rotary shaft for discharging the plates, a buffer in the bottom of the camera, a pivoted bar to which such buffer is fixed, a disc on said shaft, and a rod connecting the free end of the said bar with said disc, substantially as described. 2nd. In a camera, guideways for receiving plate holders having laterally projecting guides, a spring follower and a rest for holding the plates in position of exposure, a rotary shaft and notched discs thereon for discharging the plates, a fender, a connection extending from said fender to the rotary shaft and a spring latch for holding the shaft and its connections in position, substantially as described. 3rd. A magazine camera, having guideways adapted to receive plate holders having laterally projecting guides, a follower, a latch to hold the follower in position to facilitate the loading of the camera with plates in plate holders, springs to draw

the follower up against the stack of plate holders when it is released from its latch, a rest bar for holding the plate holders in position for



exposure, means to discharge the plates and plate holders, one at a time, from such position, and means to hold the discharged plate or plates and their holders against accidental displacement, substantially as described.

**No. 59,961. Acetylene Gas Generator. (Générateur à gaz acétylène.)**



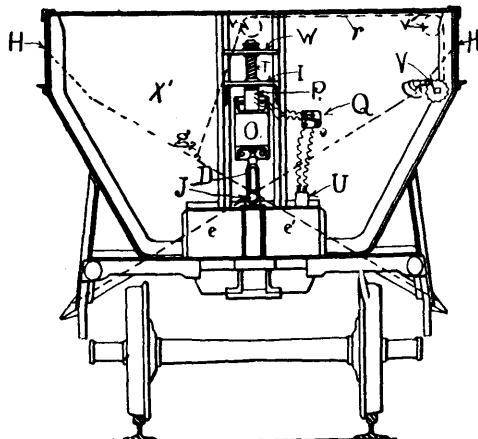
William Henry Evans Whiting, London, Ontario, Canada, 10th May, 1898; 6 years. (Filed 11th February, 1898.)

*Claim.*—1st. The combination with the shell A, gas generating chamber B, concentrically within the same, and a gasometer D telescoping intermediately, of a gas condensing or cooling chamber C, below said generating chamber, and the chambers connected by gas cooling channels or ducts C', as set forth. 2nd. The combination with the shell A, and gas generating and condensing chamber B and C, of the gasometer D, telescoping into shell A and outside said gas generator, to make a water seal, as set forth. 3rd. The combination with the gas generating chamber B, having a waste outlet through the bottom, of a rotary brush K, sweeping said bottom and raking the carbide cage, as set forth. 4th. The combination with the gas generating chamber B, and shell A, of the U-shaped feed water pipe J, having a funnel or bowl shaped inlet J', to indicate the corresponding level of water in said chamber, as set forth. 5th. The combination with the gasometer D, shell A, and condensing chamber C, of the chains M<sup>1</sup>, and the outlet pipe M having a valve M<sup>1</sup>, connected to said gasometer by a chain M<sup>2</sup>, to



automatically act to prevent explosion. 6th. The combination of the lever *d*<sup>1</sup> tilting on a frame *d*<sup>2</sup>, secured to shell A, and connected to the gasometer by chains *d*, said lever provided with a sliding weight *d*<sup>3</sup> to counterbalance the gasometer and regulate the gas pressure, as set forth.

**No. 59,962. Dumping Vehicle. (Vehicule à bascule.)**



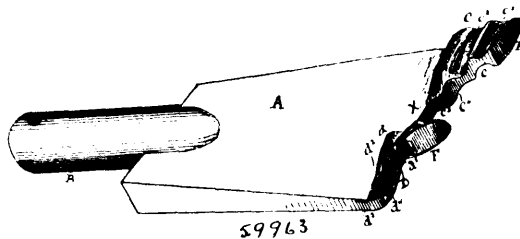
59962

John M. Goodwin, New York City, New York, U.S.A., 10th May, 1898; 6 years. (Filed 14th April, 1898.)

*Claim.*—1st. A dumping vehicle, comprising a valve in its bottom portion, a shaft upon which said valve is mounted to swing, struts on the lower side of said valve, rotary shafts below the valve, detents on said shafts to engage with the struts and support the valve, a lever loosely mounted on said shaft, means for locking the lever to the shaft, a vertically movable piston, a cylinder in which the piston operates, and a connection between said piston and the lever, substantially as specified. 2nd. In a dumping vehicle, comprising valves in its bottom portion, the said valve being mounted to swing, one independently of the other, shafts arranged below the valves, detents on said shafts, struts on the valves having rollers to engage with said detents, levers loosely mounted on the shafts, means for locking the levers to the shafts, means for locking the shafts from rotation, a cylinder, a piston operating in said cylinder, and a connection between the piston and levers, substantially as specified. 3rd. A mechanism for operating the valves of a dumping vehicle, comprising a cylinder, a piston operating in said cylinder, a connection between said piston and devices for supporting the valves, a stem extended upward from the piston, an exteriorly screw threaded sleeve provided with opposite longitudinal slots, a collar movable on the sleeve and having connection with the stem, and a hand wheel having an exteriorly threaded hub engaging with the thread of the sleeve, substantially as specified. 4th. A dumping vehicle having valves in its bottom, shafts extended longitudinally of the vehicle below the valves, struts on the valves detents on the shafts for engaging with said struts, levers loosely mounted on the shafts, means for locking the levers to the shafts, pivoted dogs for locking the shafts from rotation, swinging doors on the casing in which said levers and dogs are located, lugs on the doors for holding the dogs in their locking position, and means for moving the levers vertically, substantially as specified. 5th. A dumping vehicle having swinging valves in its bottom, shafts arranged longitudinally of the vehicle below the valves, detents carried by the shafts, struts on the lower sides of the valves having rollers for engaging with said detents, levers mounted to swing on the shafts, lugs on the shafts, means for locking the lugs to the levers, and means for raising and lowering the levers, substantially as specified. 6th. A dumping vehicle having swinging valves in its bottom, struts on said valves, shafts extending longitudinally of the vehicle below the valves, detents on the shafts for engaging with the struts and supporting the valves, levers loosely mounted on the shafts, lugs rigidly secured to the shafts, means for locking the lugs to the levers, pivoted dogs for engaging with the lugs and locking the shafts from rotation, and means for raising and lowering the levers, substantially as specified. 7th. A dumping vehicle having swinging valves in its bottom, struts on said valves, shafts extended longitudinally of the vehicle, detents on the shafts for engaging with the struts to support the valves, a cylinder, a piston operating in the cylinder, electrical connections whereby the piston may be operated in the cylinder, and connections between said piston and the shafts, whereby the valves may be lowered, substantially as specified. 8th. In a dumping vehicle, the combination with centre valves, of swinging side valves, links movable in said side valves, hooks for engaging with said links, rollers on the hooks, and means for raising and lowering the hooks with the said side valves, substantially as specified. 9th. In a dumping vehicle, a valve mounted to swing in its lower portion, struts on the lower side of the said valve, a rotary shaft below the

valve, detents on said shaft to engage with the struts and support the valve, a lever loosely mounted on the shaft, means for locking the lever to the shaft, and means for raising said lever to rock the shaft, substantially as specified.

**No. 59,963. Clip for Wire-Rope Ways. (Tenaille pour fils de fer.)**

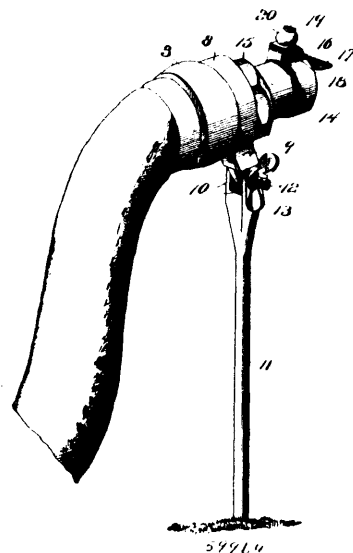


59963

Arthur Painter, British Columbia, Canada, 11th May, 1898; 6 years. (Filed 17th February, 1898.)

*Claim.*—1st. A clip for wire-rope ways, consisting of a body portion provided with grooved hooks separated from each other and adapted to engage with different strands in the cable, substantially as set forth. 2nd. A clip for wire-rope ways, consisting of a body portion having at one end an arm to receive a hanger and at its opposite end a pair of hooks separated from each other and adapted to engage with different strands of a rope and having grooves on their opposite sides, substantially as set forth. 3rd. A clip for wire-rope ways, consisting of a body portion provided at one end with a suspending arm and at its opposite end with a pair of hooks separated from each other, spirally grooved on opposite sides and having at their front end flanges, substantially as set forth.

**No. 59,964. Spray Nozzle. (Lance de boyaux.)**



59964

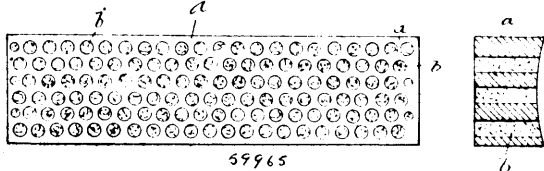
John Emer Armitstead, Provo, Utah, U.S.A., 11th May, 1898; 6 years. (Filed 15th February, 1898.)

*Claim.*—1st. The combination with a nozzle having a cylindrical portion and shoulders or stops at the ends thereof, of a collar loosely mounted upon the cylindrical portion and between the said shoulders or stops of the nozzle, a supporting pin, and means for adjustably connecting the said collar with the supporting pin, substantially as and for the purpose set forth. 2nd. In combination, a nozzle having a cylindrical portion and a shoulder at one end of the cylindrical portion, a collar having detachable or screw-thread connection with the nozzle and forming a shoulder at the opposite end of the said cylindrical portion, a second collar mounted to turn freely upon the cylindrical portion of the nozzle between the afore described shoulders and having an off-standing lug, a supporting pin having ears at its upper end between which is fitted the aforesaid lug, and a clamp bolt passing through transversely alining openings in the lug and spaced ears to hold the nozzle in the adjusted position, substantially as described. 3rd. In combination, a nozzle, a collar or like part applied to the nozzle and having an off-standing portion formed with a curved edge, a sprayer pivotally connected with the said off-standing portion, and clamping means applied to the sprayer and acting jointly with the curved edge of the afore described off-standing portion to secure the sprayer in an adjusted

position, substantially as described for the purpose specified. 4th. The combination with a nozzle, of a collar supported on the discharge end of the nozzle to turn thereon and having spaced ears, a sprayer pivoted between said ears with its outer end adjustable to overhang the discharge end of the nozzle, and means to lock the sprayer in position, substantially as described. 5th. The combination with a nozzle, of a collar mounted on the discharge ends of the nozzle to turn thereon and having spaced ears, a sprayer pivoted between said ears with its outer end adjustable to overhang the discharge end of the nozzle, the edges of the ears being curved eccentrically to the pivot of the sprayer, a threaded pin projecting from the sprayer between the ears at a right angle to the pivot, and a thumb nut on the threaded pin, substantially as described. 6th. The combination with a nozzle having a reduced end portion of a collar fitted loosely over the nozzle intermediate its ends, a supporting pin to which said collar is adjustably pivoted, a nut screwed on the nozzle to engage said collar, a collar fitted loosely over the reduced end portion of the nozzle and having a swiveled connection with the nut, a sprayer pivoted to the last named collar with its upper end adjustable to overhang the discharge end of the nozzle, and means to lock the sprayer in position, substantially as described.

**No. 59,965. Paper Pulp Manufacturing Engine.**

(Machine à fabriquer la pulpe de papier.)

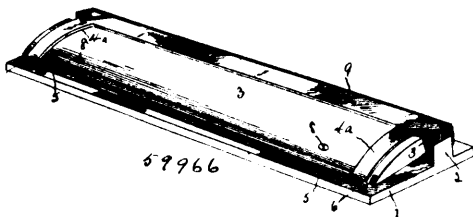


Edward Partington, Glossop, Derby, England, 11th May, 1898; 6 years. (Filed 12th February, 1898.)

*Claim.*—In rag engines and other heating engines used in the manufacture of paper pulp, the use of composite blocks, slabs, or discs formed of steel or other hard metal, cast or otherwise, formed with perforations or recesses filled in with hard wood, metal borings, or other suitable material or composition or with a metal softer than that of which the blocks, slabs, or disc, are made, substantially as and for the purposes hereinafter referred to.

**No. 59,966. Threshold and Weather Strip.**

(Seuil et bourrelet de porte.)

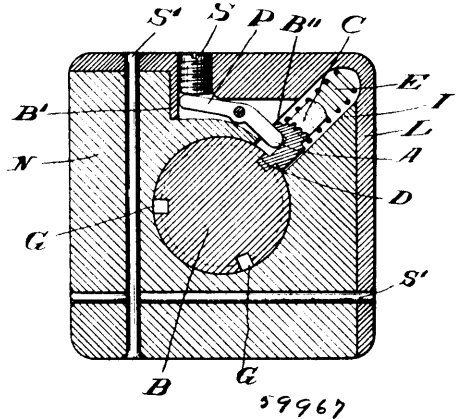


William M. Barger, Hebron, Nebraska, U.S.A., 11th May, 1898; 6 years. (Filed 27th April, 1898.)

*Claim.* 1st. A combined threshold and weather strip comprising a bed piece having an upwardly-projecting rail, a strip having curved upper surfaces and hinged to the bed piece by means of a plate which is slit near each end so that the intermediate portion may be passed under the strips and over the pintle of the hinge, while the outer portions pass upward at each side of the curved surface, the said plate being extended to form a flange which is bent over a guide-rail of the bed piece a spring interposed between the flange and rail, and set-screws for limiting the upward movement of the hinged strip, substantially as shown and for the purposes set forth. 2nd. In a combined threshold and weather strip, the combination with a bed piece, of a metallic carrier-plate provided with transverse tongues or bands, a hinge-rod attached to the bed piece and to the free ends of said bands or tongues, a threshold strip seated upon the metallic carrier plate and confined between the same and its bands or tongues, and a spring which acts against the metallic carrier-plate to normally fit the same, substantially as and for the purposes described. 3rd. In a combined threshold and weather strip, the combination of a bed piece having a guide-rail 2, projecting upwardly therefrom, a carrier plate, 4, hinged at one edge to the bed piece and provided at its free edge with the offset which extends upwardly, horizontally and downwardly from the carrier plate and is adapted to embrace the guide-rail, a threshold strip attached to the carrier-plate to abut against, and lie flush, with the offset, and a spring to normally lift the carrier-plate, substantially as and for the purposes described. 4th. In a combined threshold and weather strip, a metallic carrier-plate provided at one edge with a downwardly-opening offset and with the transverse bands or tongues in combination with a bed piece

having a guide-rail arranged to fit in the offset of said carrier-plate, a hinge-rod attached to the bands or tongues of the carrier-plate and mounted on the bed piece to pivotally attach the carrier-plate thereto, a threshold-strip mounted on the carrier-plate and confined between the latter and its transverse bands or tongues, a lifting spring acting against the carrier-plate at one side of the hinged connection thereof to the bed piece, and means for limiting the upward movement of said carrier-plate, substantially as and for the purpose described. 5th. In a combined threshold and weather strip, the combination with a bed piece having a guide-rail, of a carrier-plate hinged to said bed piece and provided at its free edge with the offset 9, arranged to embrace the guide-rail, the threshold strip fastened removably to the carrier-plate and having its upper face flush with the offset 9, a spring which tends to normally lift the carrier-plate, and means to limit the upward movement of the carrier-plate, substantially as described.

**No. 59,967. Nut-Lock. (Arrête-écrou.)**



George Radel, Napoleon, Ohio, U.S.A., 11th May, 1898; 6 years. (Filed 27th April, 1898.)

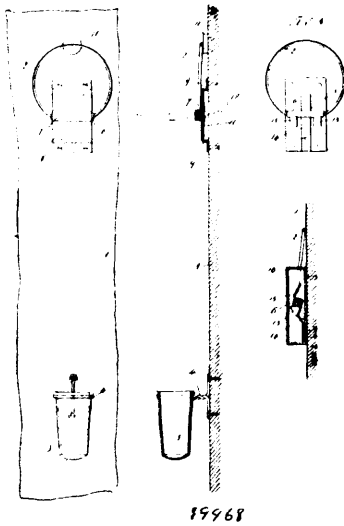
*Claim.*—1st. In a nut-lock, the combination with the bolt having a longitudinal groove, and the nut having a substantially radial channel from its bolt-opening outward, of an angular member removably secured upon the nut and closing the outer end of said channel, a spring-pressed catch within the channel and carrying a dog at its inner end normally entering the groove in the bolt, and a pivoted pawl for retracting the catch, as and for the purpose set forth. 2nd. In a nut-lock, the combination with a bolt having a longitudinal groove, and a nut having a channel extending from its bolt-opening outward, of a catch within the channel having a dog to enter the groove in the bolt, a detachable member upon the nut, a bracket carried thereby, and a pawl pivoted in the bracket with one extremity engaging said catch, as and for the purpose set forth. 3rd. In a nut-lock, the combination with a bolt having a longitudinal groove, and a nut having a channel opening from its bolt-opening, of a plate removably attached to the nut and closing said channel at its outer end, a bracket carried by said plate, a pawl pivoted between its ends within the bracket, a screw passing through the plate and bracket and bearing upon one end of said pawl, a spring in the channel beneath said plate, a catch borne inward by the spring and having an aperture receiving the tip of the pawl, and a dog on the head of the catch entering the groove in the bolt, as and for the purpose set forth. 4th. In a nut-lock, the combination with the bolt, the nut having a channel leading from its bolt-opening outward, and a substantially L-shaped member detachably secured upon the nut and closing the outer end of the channel therein, of a bracket carried by said member and having an inclined wall forming one side of the channel, a pawl pivoted within the bracket, a screw through the member against one end of the pawl, an expansive spring within the channel, and a catch forced by this spring towards the bolt and having an aperture in its head for the reception of the other end of pawl, as and for the purpose set forth.

**No. 59,968. Umbrella Holder. (Porte-parapluie.)**

James Henry Barkelow, Jersey City, New Jersey, U.S.A., 11th May, 1898; 6 years. (Filed 17th February, 1898.)

*Claim.* 1st. A device of the kind specified, comprising a lower receptacle or support, and a pivoted upper loop support, substantially as set forth. 2nd. A device of the kind specified, comprising a lower receptacle or support, and a pivoted upper loop support having yielding devices for holding it in upright and approximately horizontal position, substantially as set forth. 3rd. A device of the kind specified, comprising a lower receptacle or support, an upper loop support having a flat sided pivot, a plate having a socket to receive said pivot, and a spring plate for holding said pivot in said socket, substantially as set forth. 4. A device of the kind specified, comprising a lower receptacle or support, and upper loop support having a flat sided pivot, a yielding socket for said pivot, and a

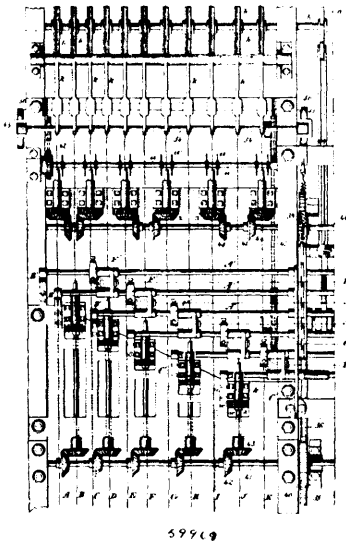
plate for holding the pivot in said socket, substantially as set forth. 5th. A device of the kind specified, comprising a lower receptacle or



support, an upper loop support having a flat sided pivot, a plate having a yielding socket in which said pivot is situated, and a spring plate secured to said plate and bearing against said pivot, substantially as set forth. 6th. A device of the kind specified, comprising a lower receptacle or support, an upper loop support having a flat sided pivot, a projection on said pivot, a plate having a socket to receive said pivot, and a spring plate bearing against said pivot, substantially as set forth.

**No. 59,969. Machine for Making Wire Fencing.**

(Machine pour clôtures en fil de fer.)

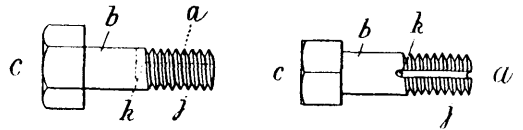


John W. Griswold and Abel G. Goldthwait, both of Troy, New York, U.S.A., 11th May, 1898; 6 years. (Filed 26th April, 1898.)

*Claim.*—1st. A machine for applying short transverse pieces of wire to longitudinal wire strands having mechanism for feeding a series of said strands, mechanism for feeding a series of parallel transverse wires, mechanism for cutting said transverse wires to definite lengths and mechanism for securing each section of transverse wire between its ends to one of said strand wires, substantially as and for the purpose set forth. 2nd. The construction and arrangement of the mechanism herein set forth, whereby a series of parallel transverse wires lying in the same plane are fed transversely over a series of strand wires so that each strand wire is overlapped by a transverse wire for a determinate distance, in combination with mechanism for cutting said transverse wires into sections of

definite length and with mechanism for wrapping or twisting each section between its ends around one of the strand wires, substantially as and for the purpose set forth. 3rd. In a machine for making wire fencing mechanism for longitudinally feeding three strand wires, mechanism for moving a transverse wire across said strand wires, mechanism for securing said transverse wire between its ends to the middle strand wire and mechanism for securing the ends of said transverse wire respectively to the other strand wire, substantially as and for the purpose set forth. 4th. In a wire fence-making machine, mechanism for moving three strand wires H, I, J, in a longitudinal direction, the said strand wires H, J, being provided with transverse wires secured to them and having ends *r, q* alternately crossing the middle strand wire I, and mechanism for securing said ends to said strand wire I, substantially as described. 5th. The combination in a wire fence making machine, with mechanism for moving two series of strand wires simultaneously in a longitudinal direction, the wires of one series as D, E, H, J alternating with the wires of the other series, as F, G, I, of the twisting devices as *b* disposed in series diagonally with reference to the direction of movement of said wires, through which twisting devices said wires D, F, H, J pass, a second series of twisting devices, as *a*, staggered in position with reference to said first series through which second series said wires E, G, I pass, mechanism for feeding a series of transverse wires simultaneously across said strand wires D, F, H, J and to said first series of twisting devices and a series of cutting devices disposed diagonally and similarly to said first series of twisting devices and acting upon said transverse wires respectively, the aforesaid parts being constructed and timed so that a transverse wire shall be fed simultaneously over each strand wire D, F, H, J, then twisted at its middle by a twisting device as *b* around its associate strand wire, then cut to definite length by a cutting device, and then carried onward by said strand wire until its ends meet two twisting devices as *a, i* of the second series whereby its said ends *p, q* are twisted around the adjacent strand wires G, I, substantially as described. 6th. In a machine for making wire fencing, a plurality of twisting devices through which the strand wires of the fence are fed, mechanism for simultaneously feeding the transverse wires to said twisting devices, mechanism for cutting said transverse wires into lengths to extend from the strand wires whereon they are twisted to adjacent strand wires, and mechanism for producing crimps or bends in the strand wires at the junction of said strand and transverse wires, substantially as described. 7th. In a wire fence making machine, mechanism for moving two strand wires in a longitudinal direction, one of said wires being provided with a transverse wire projecting across said other strand wire, a twisting device through which said second strand wire passes, and operating to twist said transverse wire at one end about said second strand, and means for forcing the end of said transverse wire into close engagement with said twisting device, substantially as described.

**No. 59,970. Nut-Lock. (Arrête-écrou.)**



Archibald Keir Leitch, Great Valley, Deltotte, Ceylon, 11th May, 1898; 6 years. (Filed 26th April, 1898.)

*Claim.*—1st. The combination of a bolt having a longitudinal slot extending along the threaded part thereof and terminating in a hole, a nut having one or more slots in its upper face, and a wire the body and one end of which are adapted to lie in the said groove and engage in the said hole in the bolt respectively while the other end of the said wire is adapted to be bent down into the said slot or one of the said slots in the nut, substantially as and for the purpose set forth. 2nd. In means for locking a nut on a bolt, the combination with the said nut and bolt of a groove such as *a*, terminating in a hole such as *k* in the bolt, slots such as *f* in the nut and a wire such as *d* adapted to lie in the groove *a*, the said wire having one end *i* bent at right angles thereto and adapted to engage in the hole *k*, while the other end *b* thereof is adapted to be bent at an angle thereto and engage with one of a number of slots *f* formed in the nut *c*, substantially as set forth. 3rd. A bolt provided with a longitudinal groove such as *a*, and a hole such as *k*, for the purpose set forth. 4th. A nut provided with one or more slots such as *f*, for the purpose set forth. 5th. A wire provided with a bent end such as *i*, and a bendable end such as *k*, for the purpose set forth.

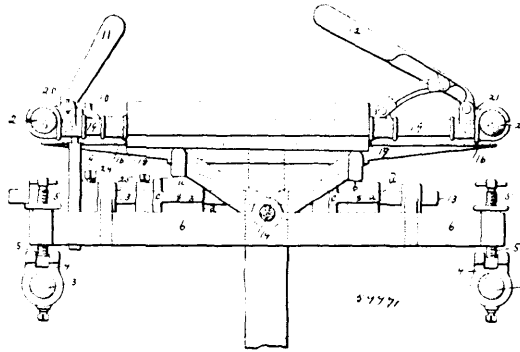
**No. 59,971. Shingle Sawing Machine.**

(Machine à scier le bardeau.)

George Fox Steedman, St. Louis, Missouri, U.S.A., 11th May, 1896; 6 years. (Filed 26th April, 1896.)

*Claim.*—1st. In a shingle sawing machine, the combination with a suitable frame, of a slidable carriage mounted therein, a saw, a

tilt table, mechanism for tilting the table, means for operating said mechanism, and a laterally extending handle on said carriage



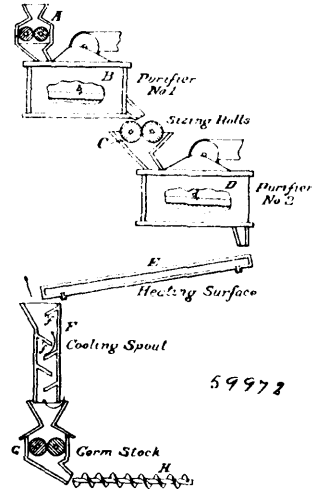
immovable in the direction of movement of the carriage, said handle being movable at an angle to the line of movement of the carriage, and the handle thus moved operating to throw the means for operating the table tilting mechanism into operative, or inoperative position, substantially as described. 2nd. In a shingle sawing machine, the combination with a suitable frame, of a carriage mounted therein, a tilt table, a supporting frame therefor, a shaft provided with fixed longitudinally inclined cams co-operating with said tilt table when said shaft is rotated, means for rotating said shaft upon the movement of the carriage, and suitable devices for adjusting said shaft and its cams relative to the tilt table, substantially as described. 3rd. In a shingle sawing machine, the combination with a suitable frame, of a sliding carriage mounted therein, a tilt table, longitudinally inclined cams for co-operating with said tilt table, a shaft on which said cams are fixed, means for adjusting said shaft and its fixed cams relative to said tilt table and for locking said shaft in its adjusted position, a star wheel mounted on said shaft and provided with devices for locking the same to said shaft and preventing independent rotary movement on the shaft, a pawl on the carriage for operating said star wheel, and a pivoted handle on the carriage having connections with said star wheel pawl, substantially as described. 4th. In a shingle sawing machine, the combination with a suitable frame, of a carriage mounted therein, a tilt table, a supporting frame therefor, a shaft mounted in said supporting frame and provided with longitudinally inclined fixed cams co-operating with said tilt table when said shaft is rotated, a star wheel arranged on said shaft for rotating the same upon the movement of the carriage, suitable devices for lengthwise adjusting said shaft and its cams relative to the tilt table, without destroying the register between the star wheel and its operating medium, and means for throwing said operating medium into or out of operative position relative to the star wheel at will, substantially as described. 5th. In a shingle sawing machine, the combination with a suitable frame, of a carriage mounted therein, a tilt table, a supporting frame therefor, longitudinally inclined ways on which said supporting frame is mounted, means for moving said frame and its carried tilt table along said ways to effect a vertical adjustment of said moving parts, a shaft mounted in said supporting frame and provided with longitudinally disposed fixed cams co-operating with said tilt table when said shaft is rotated, a star wheel arranged on said shaft for rotating the same upon the movement of the carriage, suitable devices for lengthwise adjusting said shaft and its cams relative to the tilt table without destroying the register between the star wheel and its operating medium, and means for throwing said operating medium into or out of operative relation to the star wheel at will, substantially as described. 6th. In a shingle sawing machine, the combination with a suitable frame, of a movable carriage mounted therein, a saw, a tilt table, means for tilting said table, a frame in which said tilt table is mounted, screws arranged at the corners of said frame for adjusting said frame and its carried tilt table vertically, means co-operating with said screws for vertically raising or lowering said frame and its carried tilt table, a lever located outside the main framing of the machine for actuating said raising or lowering mechanism, and means for adjusting a connection between said lever and said tilt frame, substantially as described.

**No. 59,972. Process of and Apparatus for Manufacturing Flour.** (*Appareil pour la fabrication de la fleur.*)

Charles Orville Wright, Bluefield, West Virginia, U.S.A., 11th May, 1898: 18 years. (Filed 28th February, 1898.)

*Claim.*—1st. As a new article of manufacture, a food product containing all of the berry to be treated except its outer coating and including all the albuminoids and phosphates, together with the germ in a finely-divided condition. 2nd. The herein-described method of making a dry, fine flour, possessing good keeping qualities, from soft oily germs of grain which consists in first separating the germ from the flour particles, then heating the germ

and thereby evaporating oleaginous substance therefrom, then cooling the heated germs and thereby developing brittleness and friability



and then grinding. 3rd. The herein-described method of making a dry fine flour, possessing good keeping qualities, from the germs of grain, which consists in first flattening the soft oily germs, then separating the flattened germs from the flour particles then heating the flattened germs and thereby evaporating oleaginous substances therefrom, then subjecting the hot germs to a current of cool air and thereby developing brittleness and friability, then grinding. 4th. The herein-described method of making germ flour, which consists in, first separating the germs from the wheat, then heating the germs, then rapidly cooling the heated germs, and then passing through grinding-rolls with an admixture of flour-stock. 5th. The herein-described method of pulverizing the germs of wheat which consists in, first separating the germs from the wheat, then flattening the germs and heating them, then cooling the heated germs, then passing the same through grinding-rolls with an admixture of flour particles. 6th. The herein-described method of making flour containing all the constituents of the berry except its outer covering which consists in first crushing the grain, then purifying the same, then passing the tailings containing the germs through sizing-rolls to flatten the germs, and then heating said flattened germs and separating them from the remainder of the tailings, then cooling said germs and pulverizing the same and adding the germ-flour to the remainder of the flour. 7th. The combination with a duplex purifying apparatus, of an inclosed heating device within the same, means for passing the tailings of the second purifier over the heater apart from the purified flour, and a cooling device arranged to receive the tailings of the heater. 8th. The combination of a middlings-purifier, a pair of sizing-rolls adapted to receive the tailings therefrom, a second purifier fed from the sizing-rolls, an inclosed heater arranged to receive the tailings from the second purifier, a cooling and separating chute adapted to receive the tailings from the heater and a pair of crushing-rolls arranged to receive the coiled product from the chute. 9th. The combination with a duplex purifying apparatus, of a pair of sizing-rolls between the sieves, a heater for heating the tailings from the second sieve, a cooling device arranged to receive the material from the heater, and suitable grinding mechanism.

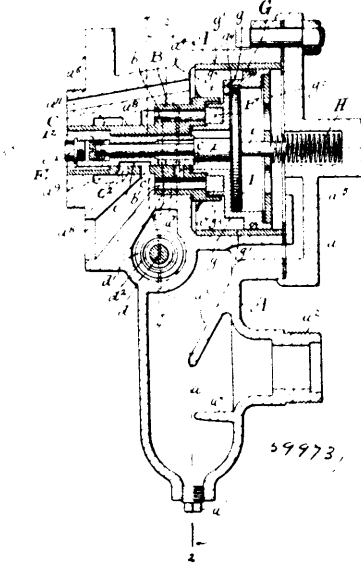
**No. 59,973. Valve for Air Brakes.**

(*Soupape pour freins à air.*)

Niels Anton Christensen, Milwaukee, Wisconsin, U.S.A., 11th May, 1898; 6 years. (Filed 18th April, 1898.)

*Claim.*—1st. In a triple valve for air brakes the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, a main valve controlling communication between the auxiliary reservoir and brake cylinder and between said cylinder and the exhaust, a main piston for operating said valve, exposed on one side to auxiliary reservoir pressure and on the other to train pipe pressure, an auxiliary valve controlling communication between the train pipe and brake cylinder, and also between the auxiliary reservoir and brake cylinder independently of the main valve, and an auxiliary piston arranged to operate said auxiliary valve also exposed on one side to auxiliary reservoir pressure and on the other to train pipe pressure, substantially as and for the purposes set forth. 2nd. In a triple valve for air brakes, the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, and a waste or exhaust opening, a main valve controlling communication between the auxiliary reservoir and brake cylinder connections and between the brake cylinder connection and exhaust opening, an auxiliary valve controlling communication between the train pipe and brake cylinder, the main valve being movable independently of the auxiliary valve, and main and auxiliary pistons

one arranged to work within and independently of the other and connected respectively with the main and auxiliary valves, said



pistons being exposed on one side to train pipe pressure and on the other to auxiliary reservoir pressure, substantially as and for the purposes set forth. 3rd. In a triple valve for air brakes the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, a main valve chamber, a main valve controlling communication through said chamber between the brake cylinder and auxiliary reservoir and between said brake cylinder and the atmosphere, a by-pass around said valve chamber for establishing direct communication between the brake cylinder and train pipe independently of the main valve, an auxiliary valve controlling said by-pass, and pistons connected with said valves and both exposed on one side to train pipe pressure and on the other to auxiliary reservoir pressure, substantially as and for the purposes set forth. 4th. In a triple valve for air brakes the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, a main valve chamber having ports communicating with the auxiliary reservoir and brake cylinder, a main valve controlling the admission and release of air through said chamber to and from the brake cylinder, a main piston connected with and movable a limited distance independently of said valve and provided with a graduating valve which controls communication between the auxiliary reservoir and brake cylinder, an emergency valve controlling a by-pass around the main valve between the train pipe and brake cylinder, and a piston connected with said emergency valve and arranged to operate the same independently of the main valve, said pistons being constantly exposed on one side to train pipe pressure and on the other to auxiliary reservoir pressure, substantially as and for the purposes set forth. 5th. In a triple valve for air brakes the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, an auxiliary valve chamber having ports in communication with the train pipe and auxiliary reservoir, a main valve chamber open at one end into said auxiliary valve chamber and having ports communicating with the brake cylinder and atmosphere, and by-passes having ports opening into the auxiliary valve chamber and communicating respectively with the train pipe and brake cylinder, an auxiliary valve normally closing the ports of said by-passes and having an opening registering with the open end of the main valve chamber, a main valve controlling the admission and release of air through the main valve chamber to and from the brake cylinder, a piston connected with and movable a limited distance independently of the main valve and provided with a graduating valve which controls communication between the auxiliary reservoir and the supply port of the main valve, and a piston connected with said auxiliary valve, said pistons being arranged in the auxiliary valve chamber and constantly exposed on one side to train pipe pressure and on the other to auxiliary reservoir pressure, substantially as and for the purposes set forth. 6th. In a triple valve for air brakes the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, an auxiliary valve chamber having ports communicating with the train pipe and auxiliary reservoir, a main valve chamber opening at one end into said auxiliary valve chamber and having ports communicating with the brake cylinder and with the atmosphere, by-passes having ports opening into the auxiliary valve chamber and communicating respectively with the train pipe and brake cylinder, an auxiliary valve normally closing the ports of said by-passes and having a port or opening registering with the opening in the end of the main valve chamber, a main valve controlling the admission and

release of air through the main valve chamber to and from the brake cylinder, a piston connected with and movable a limited distance independently of said main valve and provided with a graduating valve which controls communication between the auxiliary reservoir and the supply port of the main valve, and an auxiliary piston attached to the auxiliary valve and provided with a cylindrical extension in which the main piston is fitted, said pistons being arranged one within the other between the train pipe and auxiliary reservoir ports of the auxiliary valve chamber, substantially as and for the purposes set forth. 7th. In a triple valve for air brakes the combination of a valve casing having train pipe, auxiliary reservoir and brake cylinder connections, an auxiliary valve chamber having ports communicating with the train pipe and auxiliary reservoir, a main valve chamber opening at one end into said auxiliary valve chamber and having ports communicating with the brake cylinder and with the atmosphere, by-passes having ports opening into the auxiliary valve chamber and communicating respectively with the train pipe and brake cylinder, a check valve in the by-pass between the train pipe and auxiliary valve chamber, an auxiliary valve normally closing the ports of said by-passes, a main valve controlling the admission and release of air through the main valve chamber to and from the brake cylinder, pistons arranged in the auxiliary valve chamber between the train pipe and auxiliary reservoir ports, and connected respectively with the main and auxiliary valves, and a spring acting upon the auxiliary valve piston in opposition to auxiliary reservoir pressure, the main piston being movable independently of the auxiliary piston, substantially as and for the purposes set forth. 8th. In a triple valve for air brakes the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, an auxiliary valve chamber having ports in communication with the train pipe and auxiliary reservoir, a main valve chamber opening at one end into said auxiliary valve chamber, and having ports communicating with the brake cylinder and with the atmosphere, by-passes communicating respectively with the train pipe and brake cylinder and having ports communicating through a restricted opening with the auxiliary reservoir, an auxiliary valve normally closing the ports of said by-passes, a main valve controlling the admission and release of air through the main valve chamber to and from the brake cylinder, and pistons connected with said valves respectively and movable independently of each other in the auxiliary valve chamber between its train pipe and auxiliary reservoir connections, substantially as and for the purposes set forth. 9th. In a triple valve for air brakes, the combination of a valve case having train pipe, auxiliary reservoir and brake cylinder connections, an auxiliary valve chamber communicating with the train pipe and auxiliary reservoir, a main valve chamber opening at one end in communication with the auxiliary valve chamber, and having ports communicating with the brake cylinder and with the atmosphere, by-passes around or outside of the main valve chamber having ports opening into the auxiliary valve chamber and communicating respectively with the train pipe and brake cylinder, an auxiliary valve normally closing the ports of said by-passes, a main valve controlling communication through the main valve chamber between the brake cylinder and auxiliary reservoir, and between the brake cylinder and the atmosphere, and pistons arranged in the auxiliary valve chamber between the train pipe and auxiliary reservoir connections and connected respectively with the main and auxiliary valves, substantially as and for the purposes set forth. 10th. In a triple valve for air brakes, the combination of a main valve controlling communication between the auxiliary reservoir and brake cylinder and between the brake cylinder and atmosphere, an auxiliary valve controlling communication between the train pipe and brake cylinder, and two pistons connected with the main and auxiliary valves respectively, and constantly exposed on one side to train pipe pressure and on the other to auxiliary reservoir pressure, the main piston being movable independently of the emergency piston to effect a service application of the brakes upon a certain reduction of train pipe pressure, the emergency piston being movable independently of the operation of the main valve and piston to effect an emergency application of the brakes upon a greater reduction of train pipe pressure, and the two pistons and valves being so constructed and arranged that the movement of the emergency piston in opening the emergency valve will cause a like movement of the main valve to close the exhaust port in case the main piston falls to operate, substantially as and for the purposes set forth.

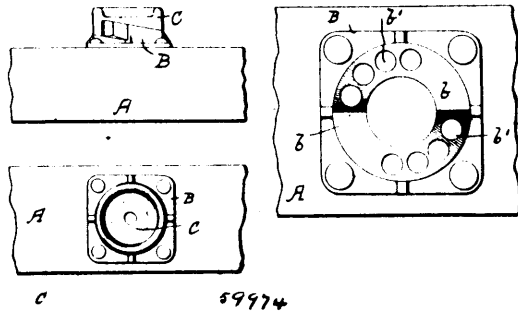
#### No. 59,974. Centre Bearings for Car Trucks.

(*Coussinet de centre pour camions.*)

Peter Henry Murphy, East St. Louis, Illinois, U.S.A., 11th May, 1898; 6 years. (Filed 26th April, 1898.)

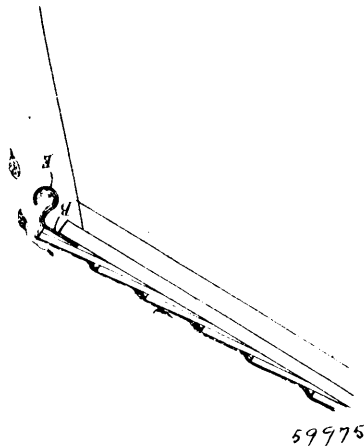
*Claim.*—1st. The combination with a bolster, of concentrically arranged projections rising therefrom, said projections being formed with inclined faces, and a centre bearing formed with corresponding projections having correspondingly inclined faces to match said bolster projections, substantially as described. 2nd. The combination with bolster, of a centre bearing, and means for adjusting said centre bearing vertically, and revolvably, relative to said bolster, substantially as described. 3rd. The combination with a bolster, of a center bearing which is vertically and revolvably adjustable relative thereto, and means for locking said center bearing in its adjusted position, substantially as described. 4th. The combination

with a bolster, said bolster having inclined lugs, of a centre bearing having matching lugs, and interlocking devices between said lugs, sub-



stantially as described. 5th. The combination with a bolster, provided with concentrically arranged inclined lugs formed with projections or openings, of a centre bearing provided with concentrically arranged inclined lugs to match said bolster lugs, and converse parts on the inclined faces of the centre bearing lugs to engage the projections or openings of the bolster lugs, substantially as described. 6th. The combination with a bolster, of a bolster plate B formed with projections b, said projections having openings b', arranged therein, a centre bearing C formed with projections c, and lugs c', on said projections to engage the openings b' of the projections b, substantially as described. 7th. The combination with a bolster, of a centre bearing, and a wedge operating between said bolster and centre bearing, substantially as described.

**No. 59,975. Eaves Trough. (Auge de larmiers.)**



Benjamin F. Nye, Quincy, Michigan, U.S.A., 11th May, 1898; 6 years. (Filed 30th March, 1898.)

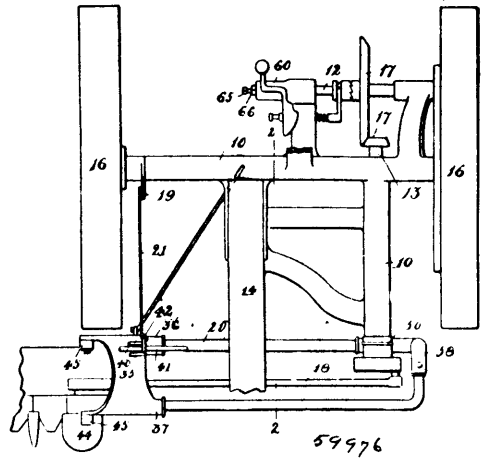
*Claim.*—1st. In an eaves trough, the reversely curved strip having its lower part curved forward and upward, and means for attaching said strip to the eaves of a building, for the purpose set forth. 2nd. As an article of manufacture, the eaves-trough herein shown and described, consisting of a bulged wall 1 and the receptacle or gutter thereunder said wall, projecting beyond the edge of said gutter, substantially as set forth. 3rd. An eaves-trough, consisting of a wall adapted to form a continuation of the lower edge of the roof, the longitudinal receptacle under said wall, the outer edge of said receptacle curved upward, and means for attaching said wall to the eaves of the building, substantially as set forth.

**No. 59,976. Mowing Machine. (Fauçeuze.)**

Frank Whitecomb, Smith's Falls, Ontario, Canada, 11th May, 1898; 6 years. (Filed 18th April, 1898.)

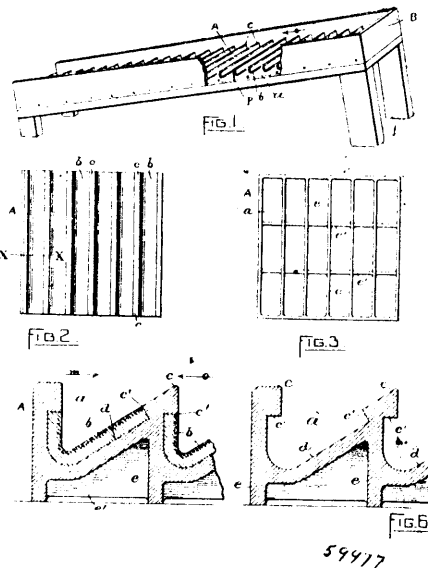
*Claim.*—1st. In a mowing machine, a casting forming the end of the tilting cutter bar frame and to which the cutter bar is hinged, the said casting consisting of a curved plate having down turned ends on which trunnions are formed, both of which are perforated longitudinally, lugs and other provision being made for attaching the bars of the said frame and for the connections operating said frame and cutter bar, substantially as set forth. 2nd. In a mowing machine, a casting forming the hinge by means of which the cutter bar frame is hinged to the main frame, the said casting consisting of two hollow cylinders open at their ends and formed integrally, having their axes at almost right angles to each other, a projecting circumferential jaw formed on the lower face of the upper cylinder, the said jaw only extending a part of the way around the said cylinder, substantially as set forth. 3rd. In a mowing machine, the combination

with the hand lever 25 and casting 23 forming a part of the said lever, hooks 27 and 28, and chamber 31 formed on said casting and



spring 29 secured to one of the hooks and the main frame, a lifting chain secured to the other hook, the said lever being pivoted to a casting secured to the tongue and provided with a spring detent, of the foot lever 34 pivoted to the tongue, a rod 33, connecting the said lever to a link 32, and the link 32 pivoted in the chamber 31, substantially as shown and described. 4th. In a mowing machine, the combination with the end of the tubular frame forming the bearing for the crank shaft, a ridge 56 formed near the end of this frame, the said ridge extending only partially around the underside of the said frame, of a casting adapted to be journaled on the said end of the tubular frame and an annular projection 53 having a turned up edge 54 forming a jaw adapted to engage the said ridge 56, substantially as set forth. 5th. In a mowing machine, a casting 58 adapted to receive and be secured on the frame 20, and forming a shoulder for one side of the casting 50, and turned at a right angle to form a support for the pitman fender, substantially as set forth. 6th. In a mowing machine, the combination with the end of a gear shaft having an annular groove formed at its end, of a thrust block having a similar groove in its adjacent end, a ball adapted to run in said grooves, and an adjusting screw and set screw, substantially as set forth and shown.

**No. 59,977. Rifle Plate. (Plaque rayée.)**



Charles Edward Greene, Providence, Rhode Island, U.S.A., 11th May, 1898; 6 years. (Filed 21st February, 1898.)

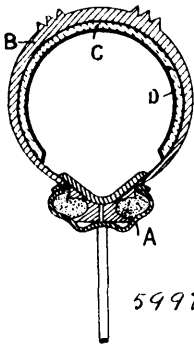
*Claim.*—1st. As an improved article of manufacture, a gold-collecting rifle plate for sluice-boxes, the same consisting of a cast or other suitably formed integral metallic base-member provided with a series of transversely arranged raised parallel ribs or ruffles separated from each other longitudinally of the base-member or base-plate and forming grooves or channels between them, and a corresponding series of gold-collecting or amalgam shells b, of less



as specified. 3rd. A pocket guard, comprising a plate, a resilient lining for the plate and a pivoted fastening pin, for the purpose specified. 4th. A pocket guard, comprising a plate having curved ends, a resilient lining for the plate provided with integral projections, and an attaching pin, for the purpose specified. 5th. A pocket guard, comprising a notch plate, a resilient lining having integral projections and one or more pivoted attaching pins, adapted to engage an under-cut notch of said plate. 6th. The combination with a notched plate, of a resilient lining partially covering the notch, and a pivoted attaching pin, as specified. 7th. A pocket provided with a safety device, consisting of the holder composed of a frame, having at its ends rearwardly-curved portions, and provided at its extremities with barbs or tongues projecting through the rear wall of the pocket, the binding-piece fitting in said frame and having elastic teeth extending toward and co-operating with the rear wall of the pocket, and the back plate arranged on the inner side of the rear wall of the pocket and engaged by the prongs or tongues of the holder-frame all substantially as shown and described. 8th. In a pocket substantially as described, a safety device, comprising a frame-plate curved at its ends and provided at its extremities with fastening means and a binding piece consisting of a plate of rubber secured to the inner face of the frame-plate, and having inwardly-projecting elastic teeth, substantially as shown and described. 9th. A pocket having outer and rear walls, and having the safety device composed of the holder having a frame-plate, having at its extremities barbs or tongues projecting through the rear wall at points between and separate from the side edge or edges of the pocket, whereby the front wall of such pocket will be unstrained, the binding-piece secured to the rear face of said holder-frame, and having elastic teeth co-operating with the back wall of said pocket and the back plate fitted against the rear wall of said pocket, and engaged by the barbs or tongues of the holder-plate, all substantially as and for the purpose set forth.

**No. 59,982. Pneumatic Tire Puncture Closer.**

(*Fermeture pour piqûres de bandage pneumatique*.)



59982

William Henry Humphreys, Wavertree, Lancaster, England, 12th May, 1898; 6 years. (Filed 12th April, 1898.)

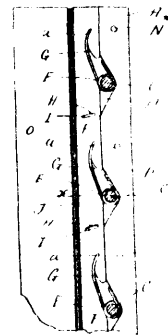
*Claim.*—1st. As a new article of manufacture, a pneumatic tire or cushion coated internally with flake india-rubber. 2nd. As a new article of manufacture, a pneumatic tire or cushion coated internally with flake india-rubber and a fibrous or other non-sticky coating on the surface of the flake india-rubber. 3rd. The process of making pneumatic tires or cushions practically unpuncturable which consists in lining them on the inside with a semi-fluid plastic and elastic material such as flake india-rubber. 4th. The improvement in the process of making tires or other pneumatic cushions elastic which consists in dissolving out flake india-rubber from its impurities by a solvent, evaporating that solvent and coating the inner surface of a pneumatic cushion or tire with such material. 5th. The improvement in the process of making tires or other pneumatic cushion, elastic which consists in dissolving out flake india-rubber from its impurities by a solvent, evaporating that solvent and coating the inner surface of a pneumatic cushion or tire with such material and coating the surface of the flake india-rubber with a non-sticky material such as described.

**No. 59,983. Weather Strip.** (*Bourrelet de porte.*)

Eugene A. Partelow, Auburn, New York, U.S.A., 12th April, 1898; 6 years. (Filed 27th April, 1898.)

*Claim.*—In an automatic weather-strip the combination of the hood A, having posts C, C, C, and angular recesses D, D, D, formed thereon at regular intervals, and having the rabbit B, formed throughout its length, in which the mobile weather-strip F, moves, and also having the screw-holes N, N, N, and the guide-pins I, I, the springs E, E, E, carried on said posts in said angular recesses, having feet a, a, a, the mobile weather strip F, having curved slots or seat G, G, G, which engage with the said feet a, a, a, of the said spring E, E, E, for its support in the said rabbit B, of said hood A, and also having slots H, H, which engage with the guide-pins I, I, to regulate its movement, and further having a portion of one end

thereof cut away and provided with the pin L, with the plug-lever K, for actuating the mobile weather-strip F, and filling the cut-away

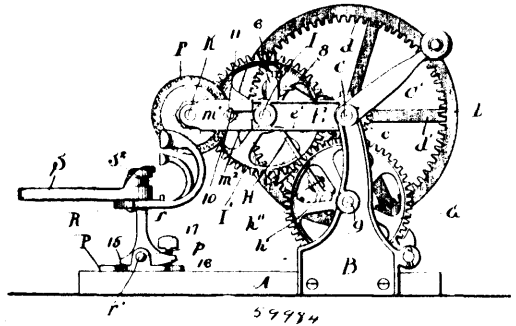


59983

portion referred to and looped about the said pin L, at one end, and having the outer end bent at right angles into the lug M, substantially constructed and arranged in the manner for the purpose herein specified and described.

**No. 59,984. Grinding Machine.**

(*Machine à broyer.*)



59984

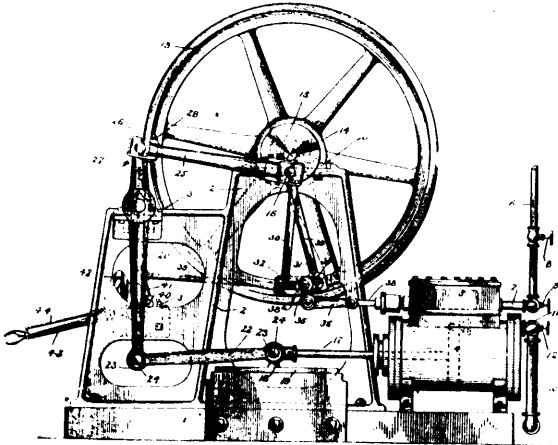
Ad-ibert R. Clizbe, Chicago, Illinois, U.S.A., 12th May, 1898; 6 years. (Filed 26th February, 1898.)

*Claim.*—1st. In a grinding machine, the combination with suitable supports or standards, of a drive shaft, a swinging frame carrying a grinding wheel, means for revolving said grinding wheel, a crank shaft extending between said standards and in gear with said drive shaft and a suitable bar pivotally connected at one end to the swinging frame and at its opposite end connected to said crank shaft, substantially as described. 2nd. In a grinding machine, the combination with suitable supports or standards, of a drive shaft, a swinging frame carrying a grinding wheel, means for revolving said grinding wheel, a crank shaft in gear with said drive shaft and an adjustable connector between said swinging frame and said crank shaft whereby the extent of movement of the swinging frame can be determined, substantially as described. 3rd. In a grinding machine the combination with suitable supports or standards, of a drive shaft, a swinging frame carrying a grinding wheel, means for revolving said grinding wheel, a crank shaft in gear with said drive shaft and a connecting bar between said swinging frame and said crank shaft having adjustably connected to its rear end a yoke or coupling that engages with the crank or the crank shaft, substantially as described. 4th. In a grinding machine, the combination with suitable supports or standards, of a drive shaft, a swinging frame carrying a grinding wheel, a crank shaft in gear with said drive shaft, a shaft extending between the side arms of the swinging frame, a sleeve mounted upon said shaft and provided with an upright arm and a bar or connector having its lower end pivotally joined to the crank shaft and having its upper end adjustably connected to the upright arm of said pivoted sleeve, substantially as described. 5th. In a grinding machine, the combination with suitable supports or standards, of a swinging frame carrying a grinding wheel, a drive shaft in gear with the shaft of the grinding wheel, a shaft for oscillating said swinging frame, a gear wheel mounted upon said last mentioned shaft, a shiftable pinion longitudinally movable upon the drive shaft, and a movable lock or dog for engaging said gear wheel in order to hold the swinging frame in fixed position, substantially as described. 6th. In a grinding machine of the character described, the combination with a swinging frame and with a grinding wheel and its shaft carried by said frame, of journal arms for said grinding wheel shaft connected to the forward ends of the swinging frame and adjustable lengthwise thereof, substantially as described. 7th. In a grinding machine of the character described, the combination with a swinging



frame and with a grinding wheel and its shaft carried by said frame of a journal arms for said grinding wheel shaft, said journal arms having their rear ends formed with open slots and bolts passing through said slots and connecting said arms to the swinging frame, substantially as described. 8th. In a grinding machine, the combination, with a main drive shaft, of a swinging frame having its rear end mounted upon said drive shaft, a grinding wheel shaft journaled in the front end of said swinging frame and provided with a pinion, a gear wheel journaled at one side of said swinging frame and meshing with the pinion on the grinding wheel shaft, and a pinion connected with said gear wheel and meshing with the teeth of the main drive wheel, said main drive wheel being of such size that said pinion will remain in engagement therewith as the swinging frame is oscillated, substantially as described. 9th. In a grinding machine, the combination of a main drive shaft, a gear wheel having its rim provided upon its interior with teeth, a swinging frame carrying a pinion that meshes with the teeth of the main drive wheel, a grinding wheel shaft carried by the swinging frame and provided with a pinion and a gear wheel meshing with the pinion of the drive wheel shaft and connected with the pinion that meshes with the main drive wheel, substantially as described. 10th. In a grinding machine, a knife holder comprising a pivoted body R, provided with a clamp handle S, the face of which is furnished with upper and lower bearing surfaces and an intermediate space, the body of the knife holder being provided with suitable lugs at its rear edge, substantially as described. 11th. In a grinding machine, the combination with the knife holder pivoted to rock in forward and backward direction, of a set-screw for limiting the backward movement of the knife-holder, substantially as described. 12th. In a grinding machine, a knife holder having its rear edge provided with curved arms or horns R', the arm or horn at the right-hand end of the knife holder being enlarged to permit the passage of the eye-holding bar of the harvester knife, substantially as described.

**No. 59,985. Engine. (Machine à vapeur.)**



59985

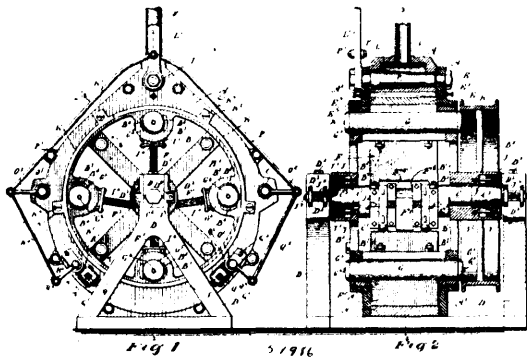
Josiah Powitt, San Francisco, California, U.S.A., 12th May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.* 1st. In an engine, the combination with a base and frame consisting of side plates or standards, of horizontally disposed cylinders mounted on said base and arranged on opposite sides of the standards, pistons moving within said cylinders, valves directly over and controlling the supply of steam to said cylinders, piston rods connected to the pistons, a vertical walking-beam mounted on a stub shaft on the exterior side of each standard, side rods connecting the lower ends of said beams with the piston rods, a horizontal shaft mounted in bearings in the upper ends of the standards and located between the said cylinders and beams, a fly-wheel mounted on said shaft between the standards, connecting-rods attached to the upper ends of the walking beams and to the said horizontal shaft and adapted to rotate said fly-wheel, and valve operating mechanism connected to the opposite ends of the said horizontal shaft for operating both of said steam controlling valves simultaneously, substantially as described. 2nd. In an engine of the type described, the combination of a base and frame consisting of two side plates or standards rising therefrom, horizontally disposed cylinders mounted on said base at opposite sides of the standards, pistons reciprocating within said cylinders, rods attached to said pistons, a vertical walking-beam mounted on a stub shaft on the exterior side of each standard and having arms of unequal length, side rods connected to the lower ends of the longer arms of the said walking beams and to the piston rods, a horizontal shaft located between the cylinders and beams and mounted in bearings in the upper ends of the standards and carrying intermediate of its length between said standards a fly-wheel, a crank disc secured upon each end of the shaft and provided with

crank pins, and connecting rods between the crank discs and the upper ends of the short arms of the walking beam, said crank discs and connecting rods being arranged exteriorly of each standard, substantially as described. 3rd. In an engine of the type described, the combination of a base and a frame comprising two side standards rising therefrom, a pair of horizontally disposed cylinders mounted on said base at opposite sides of the standards, cross heads carried by the piston rods, horizontally disposed cross head guides in which the said cross heads operate, a pair of vertical walking beams attached at opposite sides of the base and mounted on stub shaft projecting from exterior sides of the frame standards, valves controlling the steam supply to said cylinders, side rods connecting said cross heads and the lower ends of the walking beams, a horizontal shaft mounted in the upper ends of said standards between the cylinders and beams, a fly-wheel on the said shaft between the standards, crank discs on the opposite end of the said shaft, rods connecting the upper ends of the walking beams with said crank discs, eccentrics mounted on the horizontal shaft inside the standards, a fly-wheel on the said shaft between the eccentrics, and means operatively connecting the said eccentrics and controlling the valves, substantially as described. 4th. In an engine of the type described, the combination of a base and frame consisting of two side standards rising therefrom, a pair of horizontally disposed cylinders mounted on said base at opposite sides of the standards, each cylinder being provided with a steam chest, steam supply pipes connecting the steam supply chest with a common steam supply, a piston in said cylinders provided with piston rods, a valve operating within each steam supply chest and adapted to control the supply of steam to the cylinders, said valves being provided with exteriorly projecting stems or rods, cross heads attached to the rods and moving in cross head guides, a pair of vertically disposed walking beams having arms of unequal length and mounted on stub shafts projecting from the opposite exterior sides of said standards, side rods connecting the longer lower arms of said beams and the cross heads, a horizontal shaft rotatably mounted in bearings in the upper ends of said standards and located between the beams and cylinders, crank discs attached to the ends of the shaft and arranged on the exterior sides of the standards, rods connecting said discs to the shorter upper arms of the walking beams, a fly-wheel mounted on the horizontal shaft between said standards, a pair of eccentrics also mounted on said shaft between the frame and standards on opposite sides of the fly-wheel, a pair of depending eccentric rods attached to each pair of eccentrics, links carried at the lower ends of said eccentric rods, and connecting between said links and valve stems or rods, substantially as specified. 5th. In an engine of the type described, the combination of a base, a frame consisting of two standards rising therefrom, a pair of horizontal cylinders mounted on said base at opposite sides of the frame, each cylinder being provided with a steam chest, valves in said steam chests provided with exteriorly projecting valve rods, a piston in each cylinder provided with a piston rod carrying a cross head movable in cross head guides on the frame, a pair of vertical walking beams having arms of unequal length and mounted on stub shafts projecting from the exterior sides of the frame standards, side rods connecting the lower or longer arms of said walking beams with the cross heads, a horizontal shaft mounted in bearings in the upper ends of the frame standards and located between the cylinders and beams, crank discs secured to the outer ends of said shaft, rods connecting said discs with the upper shorter arms of said walking beams, a pair of eccentrics attached to said shaft between the frame standards and provided with depending arms or rods arranged in pairs, a single link located on the exterior side of the frame standards and connected to the lower ends of the arms or rods depending from the eccentrics, a link block held to slide within each of said links, a rock shaft mounted in the frame standards and provided with bell crank, rocker arms secured to the valve stems, and means located between said standards for shifting said links, substantially as described. 6th. In an engine of the type described, the combination of a base, a frame consisting of two side standards rising therefrom, a pair of horizontally disposed cylinders mounted on said base at opposite sides of the standards, said cylinders each being provided with a steam chest and valves therein for controlling the supply of steam, a piston in each cylinder provided with a piston rod, a cross head secured to each piston rod and operating in cross head guides on the frame, a pair of vertical walking beams at opposite sides of the engine and mounted on stub shafts projecting from the exterior sides of each frame standard, side rods connecting the lower arm of each walking beam with the adjoining cross head, a horizontal shaft rotatably mounted in bearings in the upper ends of said standards and located within the cylinders and said beams, cranks secured to the outer projecting ends of said shaft, rods connecting said crank discs with the upper ends of said walking beams, eccentrics mounted on the shaft between the said frame standards and provided with depending eccentric arms or rods arranged in pairs in opposite sides, a single link located on the exterior side of each frame and connected to the lower ends of each pair of eccentric arms or rods, link blocks sliding in said links, a rock shaft arranged between the frame standards and provided with rocker arms rotatable thereon, radius rods connecting the rocker arms to said valves tumbling shaft provided with a plurality of rocker arms, saddles carried by said links, rods connecting said saddles to the rocker arms upon the tumbling shaft, a lever connected with said shaft between the frame standards, and means for locking the lever for

regulating the cut-off of the valves, substantially as described. 7th. In an engine of the type described, the combination of a base, a frame consisting of a side standards rising therefrom, a pair of horizontally disposed cylinders mounted on said base at opposite sides of the standards, each cylinder being provided with a steam chest and controlling valve operating therein and also with a valve stem, pistons operating in said cylinders and provided with rods connected to cross-heads movable in cross-head guides on the frame, a pair of vertical walking beams having arms of unequal length, said beams being mounted on stub shafts projecting from the exterior side of each frame standard, side rods connecting the lower longer arms of the beams to said cross-heads, a horizontal shaft rotatably mounted in bearings in the upper ends of said frame standards between the cylinders and said beams, crank discs attached to the projecting end of said shaft, rods connecting said crank discs with the upper shorter arms of the walking beams, a fly-wheel mounted on said horizontal shaft between the frame standards, a pair of eccentrics also mounted on said shaft end on each side of the fly-wheel and between the same and the standards, crank discs secured to the outer projecting ends of said walking beams, eccentrics mounted on the shaft between the said frame standards and provided with depending pairs of eccentric arms or rods having a single link connected to the lower ends of each pair, link blocks sliding in said links, a rock shaft mounted between said standards and provided with rocker arms, radius rods connecting said rocker arms and valve stems, a tumbling shaft also provided with rocker arms, saddles carried by the links, rods connecting said saddles with the rocker arms of the tumbling shaft, a lever adapted to rotate said rocker shaft and arranged between said frame standards, a segmental rack carried by one of said standards, and a pawl or latch carried by the lever adapted to engage with the teeth of said rack and thus regulate the cut-off valves, substantially as described.

**No. 59,986. Rotary Engine. (Machine rotatoire.)**



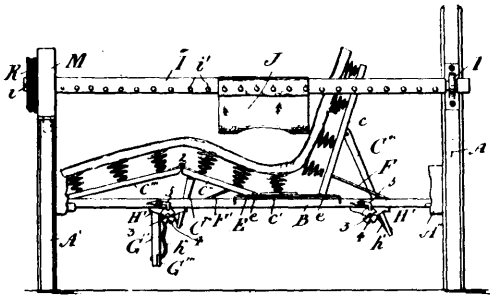
Reuben Palmer Jarvis, Smith Centre, Kansas, U.S.A., 12th May, 1898; 6 years. (Filed 13th April, 1898.)

*Claim.*—1st. In a rotary engine, the combination with a cylinder of a fixed shaft having a crank arm in the cylinder, a piston eccentrically mounted in the cylinder and turning loosely on the said shaft, said piston having its rim slotted, rocking bearings or trunnions carried by the said piston, and piston heads sliding in the said bearings and having their inner heads pivotally connected with the crank arm of the said shaft, substantially as shown and described. 2nd. In a rotary engine, the combination with a cylinder, of a fixed shaft having a crank arm in the cylinder, a piston eccentrically mounted in the cylinder and turning loosely on the said shaft, said piston having its rim slotted, rocking bearings or trunnions carried by the said piston, piston heads sliding in the said bearings and having their inner ends pivotally connected with the crank arm of the said shaft, and packings carried by the said bearing or trunnion to engage the piston head, substantially as shown and described. 3rd. In a rotary engine, the combination with a cylinder, of a fixed shaft having a crank arm in the cylinder, a piston eccentrically mounted in the cylinder and turning loosely on said shaft, said piston having its rim slotted, rocking bearings or trunnions carried by the said piston, piston heads sliding in the said bearings and having their inner ends pivotally connected with the crank arm of the said shaft, a reversing valve for directing the motive agent to either side of the cylinder, exhaust valves operating with the reversing valves, and intermediate or auxiliary exhaust valves intermediate of the inlet and exhaust valves, substantially as described. 4th. In a rotary engine, the combination with a cylinder, of a fixed shaft having a crank arm in the cylinder, a piston eccentrically mounted in the cylinder and turning loosely on said shaft, said piston having its rim slotted, rocking bearings or trunnions carried by said piston, piston heads sliding in said bearings, and having their inner ends pivotally connected with the crank arm of said shaft, a reversing valve for directing the motive agent to either side of the cylinder, exhaust valves operating with the reversing valves, intermediate or auxiliary exhaust valves intermediate of the inlet and exhaust valves, and means for connecting the intermediate valves with the exhaust valves, to permit of shifting the

several valves simultaneously, substantially as shown and described. 5th. A rotary engine, comprising a cylinder having an inlet port and two open exhaust ports, a fixed shaft having a crank arm extending in said cylinder, a piston eccentrically mounted in the cylinder and turning loosely on said shaft, rocking trunnions on said piston, and piston heads fitted to slide in said trunnions in slots in the piston rim, the inner ends of said piston heads being pivotally connected with the crank arm of the said fixed shaft, said heads being adapted to successively pass said ports so that live steam is taken at the inlet port, a portion of the steam being exhausted at the first exhaust port and the remainder at the last exhaust port, substantially as shown and described. 6th. A rotary engine, comprising a cylinder having an inlet port and two open exhaust ports, a fixed shaft having a crank arm extending in said cylinder, a piston eccentrically mounted in the cylinder and turning loosely on said shaft, rocking trunnions on said piston, piston heads fitted to slide in said trunnions in slots in the piston rim, the inner ends of said piston heads being pivotally connected with the crank arm of said fixed shaft, said heads being adapted to successively pass said ports so that live steam is taken at the inlet port, a portion of the steam being exhausted at the first exhaust port and the remainder at the last exhaust port, and a low pressure cylinder into which passes the steam from the first exhaust port, said cylinder being provided with inlet and exhaust ports and connecting a piston and piston heads similar to the one in the first-named cylinder, substantially as shown and described. 7th. A rotary engine provided with a cylinder, a piston mounted to turn eccentrically therein and formed on the sides of its rim with external annular heads, and packing rings mounted yieldingly in a longitudinal direction on the cylinder heads and formed with external bevels fitting on the piston bevels, substantially as shown and described. 8th. A rotary engine provided with a cylinder, a piston mounted to turn eccentrically therein and formed on the sides of its rim with external annular heads, packing rings mounted yieldingly in a longitudinal direction on the cylinder heads and formed with external bevels fitting on the piston bevels, each packing ring being provided with boxes or pockets, a bolt secured to the cylinder head, and forming a guide for the pocket, and a spring coiled on the bolt within the box, one end of said spring resting on the inner end of the pocket, the other end abutting against the under side of the bolt head, substantially as shown and described. 9th. In a rotary engine provided with a movable piston head, a trunnion through which passes said head, packings for the edges of said head, and comprising two packing plates having wedges fitted to slide upon one another, to move the packing plates apart, one of the plates being guided in the other, and means for adjusting one of the plates longitudinally on the other, substantially as shown and described. 10th. A rotary engine provided with a trunnion, a piston head fitted to slide therein, and a spring-pressed packing wedges interposed between the faces of the piston head and the walls of the trunnion opening through which passes the said head, substantially as shown and described. 11th. A rotary engine, provided with a rocking trunnion, a piston head fitted to slide therein, spring-pressed packing wedges interposed between the faces of the piston head and the walls of the trunnion opening through which passes the said head, and dust caps secured to the ends of the trunnions to protect the trunnion opening and wedges against dust, substantially as shown and described. 12th. A rotary engine, provided with a rocking trunnion, a piston fitted to slide therein, and a packing for the inner end of the said head and carried externally by said trunnion, substantially as shown and described. 13th. A rotary engine, provided with a rocking trunnion, a piston head fitted to slide therein, a packing for the inner end of the said head and carried externally by said trunnion, said packing comprising a box having an opening in its bottom for the passage of said head, fixed and slidable wedges in said box, the slidable wedges being spring-pressed and engaging the faces of said head, and retaining plates removably carried by said box, and engaging said wedges to hold the same in the box, substantially as shown and described. 14th. A rotary engine, provided with a movable piston head having its end provided with a detachable frame, boxes held to slide in the frame, and keys for adjusting said boxes, substantially as shown and described. 15th. A rotary engine, provided with a fixed shaft having conical bearing portions, and a piston mounted to turn on the shaft, and having its hubs provided with longitudinally yielding bearings fitted on the said conical bearing portions, substantially as shown and described. 16th. A rotary engine, provided with a fixed shaft having conical bearing portions, a piston mounted to turn on the shaft, and having its hubs provided with longitudinally yielding bearings fitted on the said conical bearing portions, and a spring-pressed sectional dust ring engaging the outer end of said bearing, and fitted to slide in stationary bearings on the engine frame or standard, substantially as shown and described. 17th. A rotary engine, provided with a fixed shaft having conical bearing portions, a piston mounted to turn on the shaft, and having its

hubs provided with longitudinally yielding bearings fitted on the said conical bearing portions, a spring-pressed sectional dust ring engaging the outer end of said bearing, and fitted to slide in stationary bearings on the engine frame or standard, and means for adjusting the tension of the springs for the said dust ring, substantially as shown and described.

**No. 59,987. Invalid's Bed. (Lit d'invalides.)**

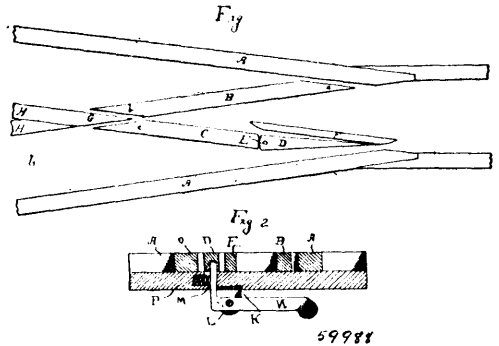


Elmer C. Scribner, Neversink, New York, U.S.A., and William Arnold Gilbert, Ottawa, Ontario, Canada, 12th May, 1898; 6 years. (Filed 27th April, 1898.)

*Claim.*—1st. In an invalid bed, the combination of a main frame consisting of sides, ends and two central longitudinal rails, a jointed spring frame supported upon said main frame and consisting of head section, central section secured upon the main frame and hinged double foot section, guide bars secured to the main frame sides and central section and engaged slidably by edges or staples on the adjacent ends of the head and foot sections, links connecting the main frame sides with the sides of the head and foot sections adjacent to the central section, downwardly projecting struts pivoted to the cross bars of the head and foot sections, a lifting frame pivoted to the longitudinal rails of the main frame near the inner end of the double foot section and provided with a downwardly projecting pivoted strut frame, and shaft or axles journaled to the underside of the main frame in proximity of the lifting struts and carrying winding drums and cords connected with said struts and provided with projecting square ends and notched discs and dogs, substantially as set forth. 2nd. In an invalid bed, the combination of a main frame consisting of sides ends and two central longitudinal rails, a jointed spring frame supported upon said main frame and consisting of a fixed central section secured to the main frame, a head section adjoining at one end and a hinged double foot section adjoining at the other, lifted struts pivoted to the head and foot sections upon the main frame, an axle carrying a winding drum journaled to the under side of the main frame in proximity to each of said lifting struts, a cord or rope connecting each drum with the adjacent lifting strut and means for operating and stopping said axles, substantially as set forth. 3rd. In an invalid bed, the combination of a main frame, consisting of sides, ends and central longitudinal rails, a jointed spring frame supported upon said main frame and consisting of a fixed central section secured upon said main frame, a head section adjoining at one end and a hinged double foot section adjoining at the other, means of retaining the inner ends of the head and foot sections upon the main frame, a lifting frame co-extensive with the double foot section and pivoted at its inner end to the central longitudinal rails of the main frame, a strut pivoted to said lifting frame, an axle pivoted to the underside of the main frame in proximity of said strut and carrying a winding drum, a cord or rope connecting said drum with said strut, and means of turning and stopping said axle, substantially as set forth. 4th. In an invalid bed, the combination with the head, foot, sides and laths of a bedstead, of a main frame, consisting of sides, ends and central longitudinal rails supported upon the bed laths, a jointed spring frame supported upon said main frame and consisting of a fixed central section secured upon said main frame, a head section adjoining at one end and a hinged double foot section adjoining at the other, means of retaining the inner ends of the head and foot sections upon the main frame, a lifting frame co-extensive with the double foot section and pivoted at its inner end to the central longitudinal rails of the main frame, lifting struts pivoted to the head and foot sections and lifting frame, axles carrying winding drums journaled to the main frame, cords or ropes connecting said drums with said struts, and means of said axles, substantially as set forth. 5th. In an invalid bed, the combination with the head, foot and sides of a bedstead, of a shaft or axle on each side journaled to the bed posts or extensions of the same, means of rotating and stopping said shaft or axle and a sheet, strap or bandage attachable to and adapted to be coiled upon said shaft or axle, substantially as set forth. 6th. In an invalid bed, the combination with the head, foot and sides of a bedstead, a shaft or axle on each side journaled to the bed head at one end, an upward extension of the foot of the bed removably secured thereto

and provided with bearings for the other ends of said shafts, a winding drum or pulley journaled to said extension provided with means of rotating and stopping the same, a wheel or pulley secured to the adjacent end of each shaft, cord or rope connection between said wheel or pulley and winding drum, pins or buttons on said shaft or axle and a sheet strap or bandage hooked to said pins or buttons, substantially as set forth. 7th. In an invalid bed, the combination with the sides of the bedstead, of a table with shouldered legs setting upon said sides, substantially as set forth.

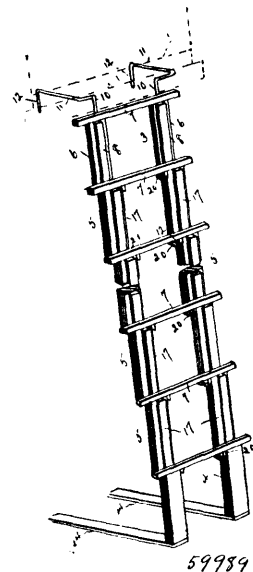
**No. 59,988. Switch. (Aiguille.)**



Orrin Anson Bissell, New Milford, Ohio, U.S.A., 12th May, 1898; 6 years. (Filed 27th April, 1898.)

*Claim.*—1st. The combination with a support having a vertical slot therethrough, of a switch-point pivotally mounted and having a socket in its under face, an angle-arm mounted upon the pivot disposed at right angles to that of the switch-point and having a vertical portion passing through the slot of said support and into the socket of the switch-point, and means for returning said angle-arm to its normal position, all substantially as herein shown and described. 2nd. The combination with a suitable support, of a switch-point pivoted thereto, an angle-arm provided with a weighted end and with a vertically-extending end passing through a slot in said plate and having connection with the switch-point, and a spring retained in a socket in the plate and bearing against the vertical extension of the arm, substantially as specified. 3rd. The combination with a support having a vertical slot therethrough, and a horizontally-disposed socket adjacent to said slot, of a switch-point pivotally mounted and having a socket in its under face, an angle-arm mounted on the pivot at right angles to that of the switch-point and weighted at one end, with its other end disposed vertically and passing through the slot of the support and into the socket of the switch-point, and a horizontally-disposed spring located in the socket of the support and acting upon the vertical portion of the arm to assist the same in its return to its normal position, substantially as shown and described.

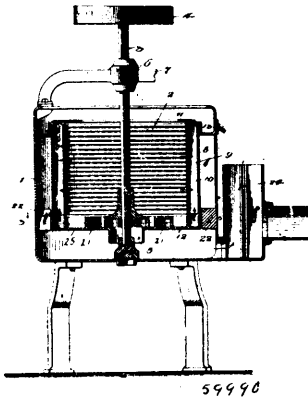
**No. 59,989. Fire Escape. (Echelle de sauvetage.)**



William Fischer, Watertown, New York, U.S.A., 12th May, 1898; 6 years. (Filed 27th April, 1898.)

*Claim.*—1st. In a fire-escape, the combination of a series of extensible-sections provided with tongue-and-groove connections and movable on one another, and each section also provided at top and bottom with stop devices adapted to abut against corresponding stop devices on the adjoining sections to limit the movement thereof, base-block on the lower section adapted to rest upon the ground and grapple-irons swivelled in keepers on the upper section and having their upper ends bent to form grapples adapted to rest upon the window-sill and their lower end provided with hooks forming stops adapted to abut against the keepers, substantially as described. 2nd. In fire-escapes, the combination of top and bottom sections, the former being provided at the rear side thereof with pivoted grappling-irons adapted to engage the window sill and the latter having at its lower ends base blocks adapted to rest upon the ground when the device is extended and a series of intermediate extensible sections each provided at one side with prongs and at the opposite side with grooves, said tongues and grooves being adapted to engage with corresponding grooves and prongs on the adjoining sections, and each section being provided with stop-blocks and stop-plates at the lower end of their grooved guideways, substantially as described.

**No. 59,990. Paper Pulp Screen.** (*Tamis à pulpe.*)



Edward W. Goodrick, Appleton, Wisconsin, U.S.A., 12th May, 1898; 6 years. (Filed 28th August, 1897.)

*Claim.*—1st. In a pulp screen, a revoluble, centrifugal agitator provided with outwardly extending channels through which the pulp is discharged, in combination with devices for intermittently closing the channels to produce a pulsating movement in the pulp, substantially as described. 2nd. A cylindrical pulp screen provided with adjustable meshes, substantially as described. 3rd. A pulp screen composed of adjustable sections whereby the sizes of the meshes can be adjusted, substantially as described. 4th. A cylindrical pulp screen composed of a series of rings or annular sections, in combination with intervening blocks for holding them apart, substantially as described. 5th. A cylindrical pulp screen composed of a series of annular sections placed one upon the other with intervening meshes through which the pulp is adapted to flow, substantially as described. 6th. A cylindrical pulp screen composed of separable sections placed one upon the other, substantially as described. 7th. In a pulp screen, a centrifugal agitator having an intermittent discharge, in combination with the screen, substantially as described. 8th. In a pulp screen, a centrifugal agitator having a vertical axis and provided with devices for giving it an intermittent discharge, in combination with a vertical, cylindrical screen discharging outwardly, substantially as described. 9th. In a pulp screen, a centrifugal agitator provided with curved channels, in combination with cut-off devices spaced apart around the periphery of the agitator to intermittently check the flow of the pulp, and a screen, substantially as described. 10th. In a machine for straining paper pulp, a vat or enclosure provided with a centrifugal screen, substantially as described. 11th. A centrifugal screen, in combination with an agitator, substantially as described. 12th. A centrifugal screen, in combination with a centrifugal agitator, substantially as described. 13th. A centrifugal screen, in combination with a centrifugal agitator having an intermittent discharge, substantially as described.

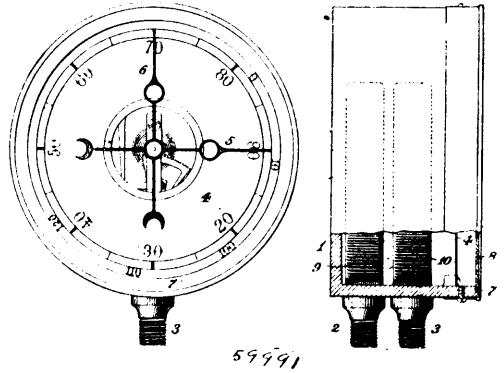
**No. 59,991. Indicator for Air Brakes.**

(*Indicateur de freins atmosphériques.*)

Frederick Marion Nellis, New York City, and Samuel Daniel Hutchins, Columbus, Ohio, all in the U.S.A., 12th May, 1898; 6 years. (Filed 28th April, 1898.)

*Claim.*—1st. In a pressure-indicator for automatic air-brake apparatus, the combination of a dial provided with division-marks on substantially one-half of its circumference, for the representation of a range of pressures from that which is normal in the train-pipe on a full application of the brakes to that which is normal in the main air-reservoir in running condition, and two indexes actuated by pressure-gauges connected with the train-pipe and with a main

air-reservoir respectively, and fitted to traverse concentrically on said dial, substantially as set forth. 2nd. In a pressure-indicator



for automatic air-brake apparatus, the combination of a dial provided with division-marks on substantially one-half of its circumference, for the representation of a range of pressures from that which is normal in the train-pipe on a full application of the brakes to that which is normal in the main air-reservoir in running condition, and two indexes actuated by pressure-gauges connected with the train-pipe and with a main air-reservoir respectively, and standing, in normal running condition, substantially at right-angles one to the other, said indexes being fitted to traverse concentrically on said dial, substantially as set forth.

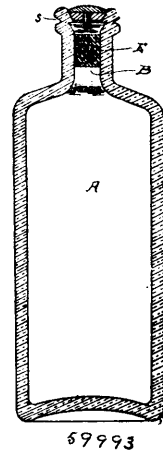
**No. 59,992. Food Compound.** (*Produit alimentaire.*)

Charles Ovide Fortier and Pierre Amédée Morin, both of Montreal, Quebec, Canada, 12th May, 1898; 6 years. (Filed 27th April, 1898.)

*Résumé.*—Une composition alimentaire formé de malt, de blé, d'avoine et d'essence de café, dans les proportions et pour les fins décrites.

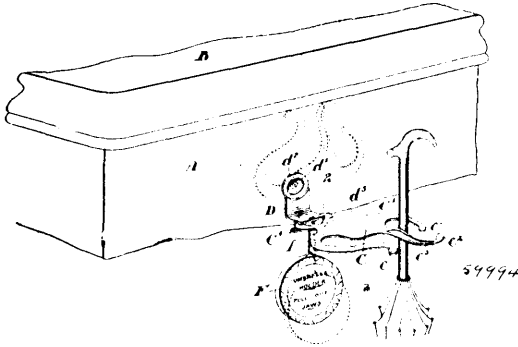
**No. 59,993. Non-Refillable Bottle.**

(*Bouteille non réemplissable.*)



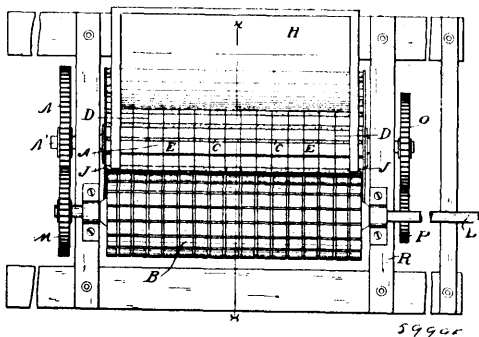
Severin Erstad, Bisbee, Arizona, U.S.A., 13th May, 1898; 6 years. (Filed 16th April, 1898.)

*Claim.*—1st. In a non-refillable bottle, the combination with the neck of said bottle of an automatic locking stopper, said neck being so constructed that a portion may be readily broken away, whereby said stopper may be removed, substantially as described. 2nd. In a non-refillable bottle, the combination with the neck of said bottle, having a groove formed in the inner surface thereof, of a stopper adapted to fit within the top of said neck, and springs secured in said stopper adapted to engage in said groove, substantially as described. 3rd. In a non-refillable bottle, the combination with the neck of said bottle, having its upper inner edge bevelled, a V-shaped groove cut upon the inner surface beneath said bevel, and a similar groove cut in the outer surface in a plane with said first-named groove, of a stopper composed of a top plate, either cork or rubber washer, springs, and means for holding said springs in position, adapted to engage with said first-named groove, whereby said stopper is held in position until a portion of the neck is broken away, substantially as described.

**No. 59,994. Umbrella Holder. (Porte-parapline.)**

Isabel Harper Holmes, Toronto, Ontario, Canada, 13th May, 1898; 6 years. (Filed 29th April, 1898.)

*Claim.*—1st. An umbrella holder, comprising a plate provided with a suitable jaw to hold the umbrella, a bracket forming a pivotal support for the rear end of the jaw plate and a suitable over-balancing weight connected to the rear end of the jaw plate, as and for the purpose specified. 2nd. An umbrella holder comprising a plate provided with a suitable jaw to hold the umbrella, a rear opening, a bracket having one end extending through the opening and so formed as to form a pivotal support therefor and a weight suitably connected to the rear of the pivot point so as to cause the jaw plate to recede, as and for the purpose specified. 3rd. An umbrella holder comprising a plate provided with a suitable jaw to hold the umbrella, a rear opening, a bracket having one end extending through the opening and so formed as to form a pivotal support therefor, a weight suitably connected to the rear of the pivot point so as to cause the jaw plate to recede and a weight connected by a chain to the rear end of the jaw plate, as and for the purpose specified. 4th. In an umbrella holder, the combination with the jaw plate, circular opening at the rear end thereof provided with diametrically situated notches and the weight connected by a chain to the rear end of the jaw plate, of the angle bracket designed to fit into the notches and provided an angled outer end, the extreme end of which forms a cross-bar extending underneath the plate beyond the edge of the notches, as and for the purpose specified. 5th. In an umbrella holder, the combination with the jaw plate circular opening at the rear end thereof provided with diametrically situated notches and the weight connected by a chain to the rear end of the jaw plate, of the angle bracket designed to fit into the notches and provided with an angled outer end, the extreme end of which forms a cross-bar extending underneath the plate beyond the edge of the notches and the circular boss-shaped opposite end of the bracket provided with the central hole and screw to secure such end in position, as and for the purpose specified. 6th. In an umbrella holder, the combination with the jaw plate provided with a circular opening and laterally extending eye-lug, of the bracket provided with circular bosses upon which the circular opening at the rear end of the jaw is designed to swing, a circular hold and screw extending through such hole into the centre to hold the bracket in position, a eye formed in the bracket, a chain connected to the eye-lug and extending through the eye and through a hole in the end of the bracket, and a weight suitably connected to the end of the chain, as and for the purpose specified. 7th. In an umbrella holder, a jaw plate comprising curvular fingers  $c^1$  and  $c^2$ , so constructed as to form jaws of substantially equal width between the members, the central finger  $c^1$  being a spring finger, as shown and for the purpose specified.

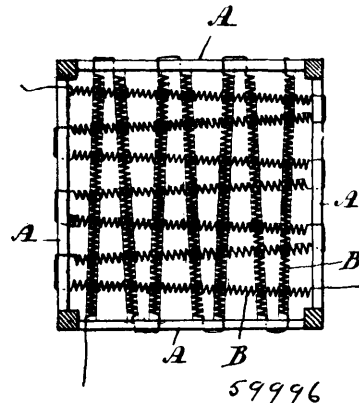
**No. 59,995. Milk Curds Cutting Machine. (Ménoles de fromagerie.)**

Philip H. Kasper and Fred J. Schepke, both of Bear Creek, Wisconsin, U.S.A., 13th May, 1898; 6 years. (Filed 19th April, 1898.)

*Claim.*—1st. In a machine for cutting milk curds, the combination of a rotary cutting cylinder mounted upon a supporting shaft, a parallel feed of pressure cylinder, adapted to rotate in contact with the surface of said cutting cylinder and force the curd between the cutting knives into the interior of said cutting cylinder, a discharge opening for removing the curd from said cutting cylinder, and means for communicating motion from the driving shaft to said feed and cutting cylinders, substantially as and for the purpose set forth. 2nd. In a machine for cutting milk curds, the combination of a rotary cutting cylinder, a supporting shaft for said cylinder, a parallel feed or pressure cylinder adapted to rotate in contact with the surface of said cutting cylinder and force the curds between and against the cutting knives of such cylinder into its interior, discharge openings formed in the enclosing walls of said cutting cylinder, a bearing cylinder provided with projecting pins adapted to register with and mesh into the spaces between the knives of the cutting cylinder and disengage the curd suspended therein, and means for communicating motion from said primary driving shaft to the several cylinders, substantially as and for the purpose set forth. 3rd. In a machine for cutting milk curds, the combination of a rotary cutting cylinder, consisting of series of horizontal and circular blades arranged at right angles to each other, and secured together in separate stationary and swinging sections, a parallel feed or pressure cylinder adapted to rotate in contact with the surface of said cutting cylinder and force the curds against and between the cutting knives of such cylinder, into its interior, a hopper for supporting and conveying the curd of said cutting and feed cylinders, a bearing cylinder provided with projecting pins adapted to register with and mesh into the spaces between the blades of the cutting cylinder and disengage the cut curd suspended thereon, a main driving shaft supporting one of said cylinders, and means for communicating motion from said driving shaft to the supporting shafts of the other two cylinders, all substantially as and for the purpose set forth.

**No. 59,996. Electric Heater. (Appareil de chauffage électrique.)**

(Appareil de chauffage électrique.)



John Davidson, Smith's Falls, Ontario, Canada, 13th May, 1898; 6 years. (Filed 31st August, 1896.)

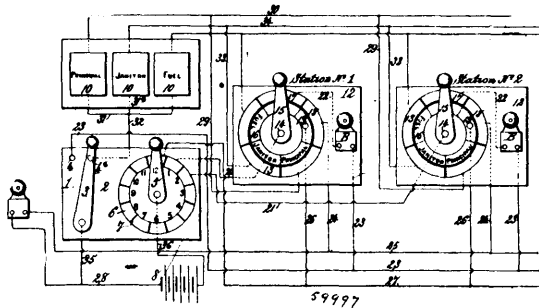
*Claim.*—1st. An electric heater, comprising a series of spiral resistance coils B, arranged in tiers, crossing in different planes, and an insulated frame A, supporting the ends of said coils and insulated therefrom, as set forth. 2nd. An electric heater, comprising a frame A, and a series of resistance coils B, crossing at different planes, the ends of said coils secured to said frame and insulated therefrom, and connected in series or multiple series, as set forth.

**No. 59,997. Electric Signal and Circuit (Signal et circuit électrique.)**

Edward Hopson Owen, Charles N. Williams, and Fred Donaldson, all of Garvanza, California, U.S.A., 13th May, 1898; 6 years. (Filed 20th September, 1897.)

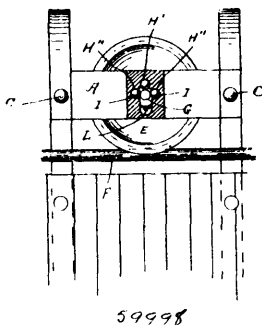
*Claim.*—1st. An electric signalling apparatus having at a central station a call-bell, a battery, annunciators at a distant point, a series of circularly arranged contacts at the central station, a switch-arm co-operating with said circularly arranged contacts, a series of circularly arranged contacts at the distant point, a switch arm co-operating with the contacts at the distant point, another switch arm at the distant point, contact points for the last mentioned switch arm, and electric connections, as described and shown, between the battery, the call bell, all the switch arms, the annunciators and the sets of circularly arranged contacts, substantially as shown and set forth. 2nd. An electric signalling apparatus, consisting of apparatus at a central station comprising a call-bell, a battery having one pole connected to the bell coil and to a switch-arm, two contact-points for said arm, one connected to an annunciator and to a wire having branch connections to other

annunciators and the second contact to a line wire, having branches to all the line-stations, a series of circularly arranged numbered con-



tacts, an arm to sweep the same, a like series of contacts at each line station, the first connected through a line wire and through a bell-coil at a line station to one of the contact points at the main station, the second through a separate line and bell coil at main station to one pole of the battery and the remainder to line wires leading to the annunciators, a switch-arm to sweep said contacts, its pivot being connected to a corresponding numbered contact at the main station and a contact post in line with the second contact at each line station connected by a line wire to one pole of the battery, substantially as described. 3rd. The combination with a battery, and bell-coil, of a wire from one pole of the former to one terminal of the latter, a line wire from the second terminal, a series of line stations having each a series of contacts the second thereof connected by branch wires to said line wire, a contact-post in line with said contact, a separate line wire connected to said post at each line station and to the second pole of the battery, a switch to sweep said contacts, a series of annunciator drops at the main station, having different communications, line wires connected by branches to the similarly designated contacts at the line stations, a series of numbered contacts at the main station connected to the switch-arms at the line stations, a switch-arm for said contacts connected to the line wire from the second pole of the battery, a bell for each line station having its coil connected to the first contact and to a line wire, a contact point at the main station connected to said line wire, a second contact point connected to all the annunciator drops and a switch-arm connected to the bell-coil and battery, substantially as described. 4th. In an electric signalling mechanism, a call-receiving apparatus for a main station, comprising two independent switch-arms, the first having two contact-points, one of which is connected to a line wire having branch-wires to call-bells at the line-stations, and the other to a series of annunciators having messages on their drops, a circular series of numbered contact plates each of which save one is connected to a switch-arm at one of the line-stations, and a battery having one pole connected to the second switch-arm which sweeps said contact-plates, and its other pole to a line wire which includes a call-bell at the main station, and to the first switch-arm, said line wire having branch wires to contact posts at the line-stations. 5th. In an electric signalling mechanism, a call-sending apparatus consisting of a series of contact-plates arranged in a circle, the first plate wired through a branch line, line wire and local call-bell to a contact-post at a main station, the second through a separate branch, line-wire and call-bell at the main station to one pole of a battery, a contact post in line with the second contact plate and connected through a third branch and line wire to the other pole of said battery, the remaining plates having calls and connected through branch and line wires to annunciators having like calls on their drops, and a switch-arm to sweep said contact-plates having connection through a branch and line wire to one of a series of numbered contact plates at the main station, substantially as described.

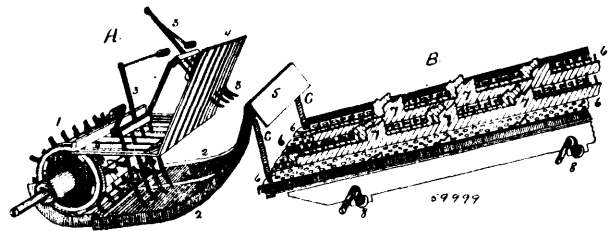
**No. 59,998. Door Hanger. (Ferrure de porte.)**



Joseph A. Hagerman, Findlay, Ohio, U.S.A., 13th May, 1898 ; 6 years. (Filed 27th April, 1898.)

*Claim.*—1st. An improved door-hanger, comprising a frame having separated sides formed with alined journal-openings and the top and side openings H<sup>1</sup>, H<sup>11</sup>, respectively communicating with said journal openings, the friction having its journal bearing in said journal openings, and the friction-rollers fitting loosely in openings H<sup>1</sup>, H<sup>11</sup>, and capable of vertical and lateral displacement respectively, the journal loosely fitting in the frame openings and bearing at its top and sides upon the friction rollers, substantially as shown and described. 2nd. In a track for a door hanger, a hollow pipe, rounded at its upper side, and plugs fitting tightly into the openings of said pipe, so as to form a smooth joint, substantially as described.

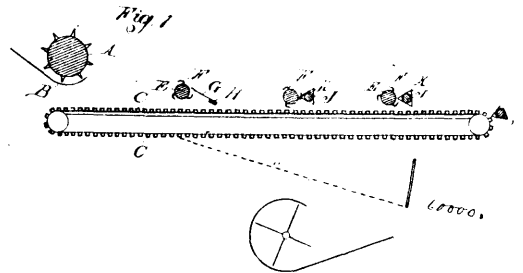
**No. 59,999. Machine for Threshing and Separating Grain. (Machine à battre.)**



Absalom Merner, Waterloo, Ontario, Canada, 14th May, 1898 ; 6 years. (Filed 26th April, 1898.)

*Claim.*—1st. The combination of the parts A and B, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the parts A and B and the spiral spring C, substantially as and for the purpose hereinbefore set forth.

**No. 60,000. Threshing Machine. (Machine à battre.)**



John A. Beam, Baden, Ontario, Canada, 13th May, 1898 ; 6 years. (Filed 20th April, 1898.)

*Claim.*—1st. In a threshing machine, the combination with a perforated carrier, of a rotary cylinder, such as E, having teeth thereon, such as F, and a slotted cleaning plate or bar beside the cylinder through which the teeth pass in their revolution. 2nd. In a threshing machine, the combination with the carrier upon which the grain is delivered from the threshing cylinder, of a rotary separating cylinder, such as E, arranged transversely across the carrier and having teeth thereon, such as F, of an oppositely rotating, polygonal bar beside the same having projecting portions in the path of the teeth on the cylinder and slot in such projecting portions through which the teeth pass, substantially as described. 3rd. In a threshing machine, the combination with the carrier, of the rotary cylinder E, having the hooked shaped backwardly curved teeth F, and a slotted cleaning plate beside the cylinder through which the said teeth engage, substantially as described.

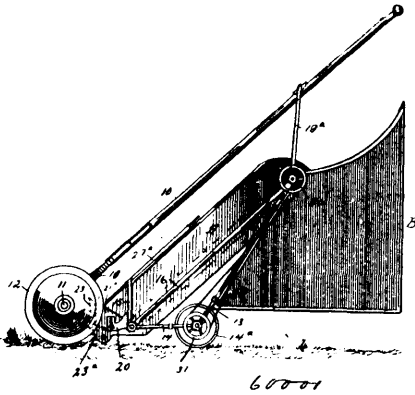
**No. 60,001. Lawn Mower Elevator.**

(Tablet pour faucheuses de pelouses.)

Charles E. Kreider, Logansport, Indiana, U.S.A., 13th May, 1898 ; 6 years. (Filed 13th April, 1898.)

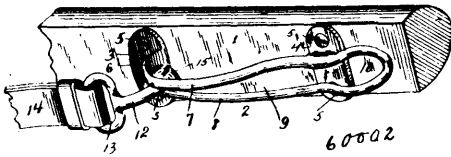
*Claim.*—1st. The combination with a lawn-mower, of a frame supported from the handle or pole thereof at its upper end and having a wheel-support at its lower end, an elevator secured in said frame at the rear of the knives or cutters, a cover located at the upper forward portion of the elevator-frame above its carrying-belt, the said cover being held to slide in suitable ways, stops for limiting the downward movement of the cover, a receptacle for the cut grass located at the rear of the elevator and a driving mechanism for the elevator-belt, as and for the purpose set forth. 2nd. In an elevator, an elevator-belt having its material gathered up to form transverse ribs, and means substantially as described, for securing the ribs at an angle to the body of the belt, as and for the purpose specified.

3rd. In an elevator, a conveying-belt having its material gathered up to form a series of transverse ribs upon one face, the ribbed



material being stitched at its connection with the body of the belt, whereby retaining-surfaces are formed upon the belt without adding to its weight, substantially as described.

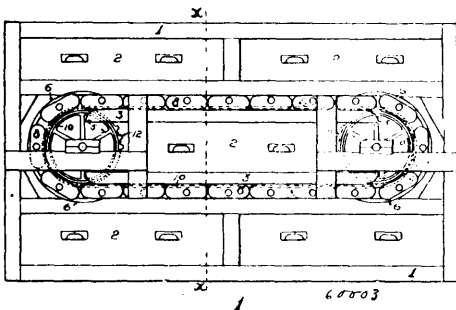
**No. 60,002 Holdback Fastener. (Attache d'entrave.)**



Cornelius E. Waters, Muskegon, Michigan, U.S.A., 13th May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. As an improved article, a holdback-fastener adapted to be connected to the right and left thills of vehicle-shafts, consisting of the lugs, the rear one of which is provided with an outwardly extending arm or portion, the curved arms connected therewith with a passage way therebetween, one of which arms extends outwardly and then inwardly and is connected with the front lug, while the other arm extends upwardly and then horizontally past said front lug and is formed or bent into a loop joined to said lug, substantially as described. 2nd. In a holdback for vehicles, the combination with the fastener adapted to be secured to the thills or shafts, comprising the lugs, the outwardly extending portion formed with the rear lug, the irregularly curved arms connected therewith, with a passage-way therebetween, one of said arms being connected with the front lug while the other extends past said lug and is formed into a looped joint to the lug of the curved rod or belt adapted to be connected with a breeching-strap and the enlarged head thereof, substantially as described.

**No. 60,003. Bolting Machine. (Blutoir.)**



Riley A. Stubbs and James Saunders, both of Dayton, Ohio, U.S.A., 13th May, 1898; 6 years. (Filed 2nd April, 1898.)

*Claim.*—1st. In a bolting or separating machine, the combination with a supporting-frame, of a bolting or separating cloth secured to said frame, a series of travelling wheels enclosing the longitudinal edges of said cloth, and means for moving said wheels to form a series of changing or travelling flutes in said cloth, substantially as shown and described. 2nd. In a bolting or separating machine, the combination with a supporting-frame, of a bolting or separating cloth secured thereto, a series of travelling wheels on each side of said frame, and straps enclosed between said wheels to which the longitudinal edges of said cloth are secured, and means for moving

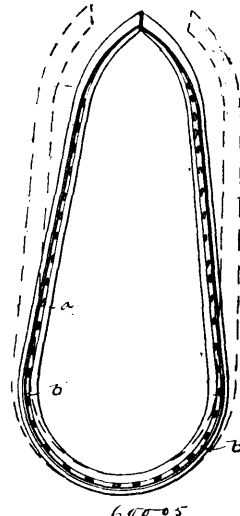
said wheels whereby a series of travelling flutes is formed in said cloth, substantially as shown and described. 3rd. In a bolting or separating machine, the combination with a supporting-frame, of a bolting or separating cloth having an attachment to said frame, straps secured to the longitudinal edges of said cloth, trains of travelling blocks movable in guideways in said frame, wheels mounted on said blocks adapted in their travel to alternately enclose the upper and lower sides of said straps, and thereby create a series of changing flutes in the bolting cloth, and means for moving said trains of blocks, substantially as shown and described. 4th. In a bolting or separating machine, the combination with a supporting-frame, having guideways therein as described, of a series of travelling blocks each of which consists of two pivotal parts, a sprocket-chain attached to one of said parts, and wheels mounted on the other of said parts, straps passing under and over each alternate wheel, and a bolting or separating cloth attached to said straps which is subjected to a series of travelling flutes by the movement of said wheels. 5th. In a bolting or separating machine, the combination with a supporting-frame having guideways therein, of two series of travelling blocks adapted to travel in said guideways, each of said blocks being composed of two parts 8 and 9 pivotally connected, whereby the said parts are permitted to assume positions on angles to each other at a point of their travel, sprocket-chains to which one of said parts is attached, wheels mounted on the other part of said blocks, straps enclosed by said wheels, a bolting cloth having its longitudinal edges attached to said straps, and means for driving said sprocket-chains, whereby motion is imparted to the travelling blocks, and wheels, and a series of travelling flutes is formed thereby in said bolting-cloth, substantially as shown and described. 6th. In a bolting or separating machine, the combination with a supporting-frame having guideways therein, of travelling blocks adapted to move in said guideways, each of said blocks being pivotally connected as described and adapted to assume varying positions during a certain point of their travel, sprocket-chains, and wheels attached to said blocks, straps enclosed by said wheels, a series of transverse ribs to maintain said straps in position, and a bolting-cloth to the longitudinal edges of which the said straps are attached, substantially as shown and described. 7th. In a bolting or separating machine, the combination with a frame provided with horizontal, curved and vertical guideways, of two series of travelling blocks adapted to move in said guideways, each of said blocks having a pivotal part that alone is guided in said vertical guideway, wheels mounted on said pivotal parts, straps enclosed by said wheels, a bolting-cloth having its longitudinal edges secured to said straps, and extending across the machine, substantially as shown and described.

**No. 60,004. Electric Incandescent Lamp Filament. (Filament pour lampes électriques à incandescence.)**

Frank E. W. Bowen, Selwood, Mount Avenue, Ealing, Middlesex, England, 13th May, 1898; 6 years. (Filed 18th August, 1897.)

*Claim.*—1st. The improved filament for incandescent lamps, in the body of which are incorporated metallic borates, substantially as described. 2nd. The method hereinbefore described of incorporating metallic borates in the filaments, such method consisting in soaking the cellulose of which the filaments are formed in solutions of the nitrate or other soluble salt of the metal, and of boric acid, and in causing the same to react, so as to produce the borate as set forth.

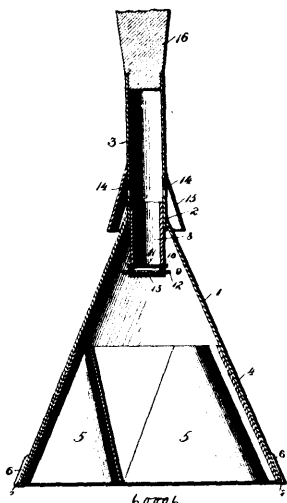
**No. 60,005. Horse Collar. (Collier de cheval.)**



Henry Lawrence Gulline, Granby, Quebec, 13th May, 1898; 6 years. (Filed 15th April, 1898.)

*Claim.*—1st. As a new article of manufacture, a horse collar rim formed of a single piece of metal and of tubular form with a flange extending the full length thereof, as set forth. 2nd. As a new article of manufacture, a horse collar rim formed of a single piece of metal and a tubular form and such resiliency as to allow of the opening and closing of same at its peak, as set forth. 3rd. As a new article of manufacture, a horse collar rim formed of a single piece of metal and of tubular form with a tangential flange extending the full length thereof and the rim being of such resiliency as to allow of the opening and closing of same at its peak, as set forth.

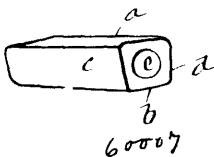
**No. 60,006. (Clothes Pounder. (Pilon à linge.)**



Clarence Vaughan Wood, Port Philip, Nova Scotia, Canada, 13th May, 1898; 6 years. (Filed 27th April, 1898.)

*Claim.*—1st. A clothes pounder, comprising a conical body portion, and a tubular handle socket, a supplemental portion removably secured within said body portion, and a clap valve removably secured within said tubular handle socket, substantially as described. 2nd. A clothes pounder, comprising a conical body portion and a tubular handle socket, a supplemental portion removably secured within said body portion, a plurality of conical-shaped compartments formed within said supplemental portion, by securing to the inner periphery of said supplemental portion a series of half funnels and a clap valve removably secured within said tubular handle socket, substantially as described. 3rd. A clothes pounder, comprising a conical body portion and a tubular handle socket, a supplemental portion removably secured within said body portion, by means of spring catches, said catches being secured to the outer periphery of the body portion and adapted to operate in notches formed in the lower edges of said body and supplemental portions, and a clap valve removably secured within said tubular handle socket, substantially as described. 4th. A clothes pounder, comprising a conical body portion and a tubular handle socket, a supplemental portion secured within said body portion, and a clap valve adapted to fit snugly within the lower end of said handle socket, said valve comprising a tubular stem having a rectangular apertured plate secured to the bottom of said stem, and a clapper loosely secured beneath the apertured plate, by means of depending cross-bars, substantially as described. 5th. A clothes pounder, comprising a conical body portion and a tubular handle socket, said socket being provided with apertures adapted to admit air to the pounder, shields secured over said apertures to protect them and strengthen said pounder, a supplemental portion removably secured within said body portion, and a clap valve removably secured within said tubular handle socket, substantially as described.

**No. 60,007. Conduit. (Conduit.)**

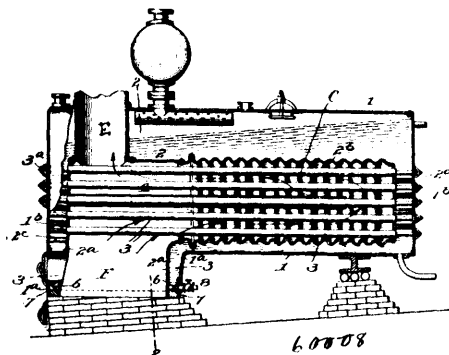


Lewis Skaife, Montreal, Quebec, Canada, 13th May, 1898; 6 years. (Filed 7th June, 1897.)

*Claim.*—1st. As a new article of manufacture, a tile conduit length of oblong form having parallel flat top and bottom, inclined sides, and a centrally located longitudinal circular passage, the sides being at such angles as to make them radial from a given

centre, substantially as and for the purpose set forth. 2nd. As a new article of manufacture, a tile conduit length of oblong form having a centrally located longitudinal circular passage therethrough, parallel flat top and bottom and inclined sides, the latter at such angles as to make them radial from a given centre, substantially as and for the purpose set forth.

**No. 60,008. Steam Boiler. (Chaudière à vapeur.)**



John Eaton, Pittsburg, Pennsylvania, and John Jay Tonkin, Oswego, New York, all in the U.S.A., 14th May, 1898; 18 years. (Filed 9th April, 1898.)

*Claim.*—1st. In a steam-boiler, the combination with an outer shell having a downward extension and an exit-flue located above the same, of an inner shell of like form, said inner shell constituting an included fire-chamber and combustion-chamber, a series of water-tubes which traverse the combustion-chamber and connect the heads of the inner shell, a horizontal rearwardly-extending deflecting-partition composed of a series of brick or tile whose cross-sectional area corresponds substantially with the space included by a group of water-tubes, and hand holes in the outer shell and in line with the water-tubes, substantially as and for the purposes specified. 2nd. In a steam-boiler, the combination with a water-leg, of an inclined perforate plate arranged to form a mud-chamber in said water-leg, and a blow-off cock beneath the plate, substantially as and for the purposes specified. 3rd. In a steam-boiler, the combination with a water-leg and a blow-off cock, of an interposed perforated plate forming a mud-chamber, the aggregate area of the perforations of said plate being less than the area of the blow-off cock, substantially as and for the purposes specified.

**No. 60,009. Annunciator. (Annonciateur.)**



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Joseph Steiner, Brooklyn, New York, U.S.A., 14th May, 1898; 6 years. (Filed 5th November, 1896.)

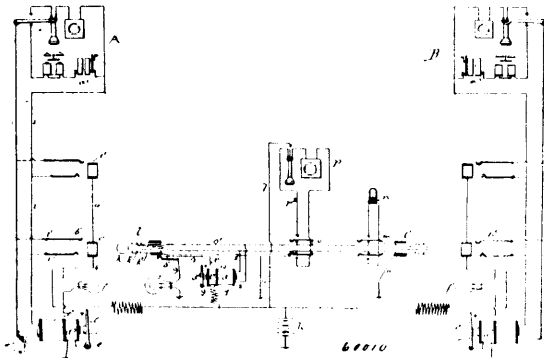
*Claim.*—1st. The combination with the supporting plate, of the cores of the restoring electro-magnet secured thereto by means of screws passing through the retaining plate and into the ends of said cores, a drop provided with pins adapted to fit into slots provided in the ends of said cores and screws passing into the ends of said cores to maintain said pins within the slots, substantially as described. 2nd. The combination with the supporting plate, of the cores of the restoring electro-magnet mounted thereon, coils provided upon said cores, an annunciator drop pivoted upon the ends of said cores and provided with a retaining arm, an insulating block mounted upon said cores and carrying a contact anvil, and a contact spring mounted upon said retaining plate and adapted to engage said contact anvil, said spring being raised out of engagement with the contact anvil by means of said retaining arm, substantially as described. 3rd. The combination with the cores mounted upon the retaining plate, of the annunciator drop journaled in the ends thereof and comprising the armature  $c^3$ , target  $c^4$ , plate  $c^1$ , and the screw  $c^7$  securing the several parts of the annunciator drop together, substantially as described. 4th. The combination with the supporting plate  $a$ , of the cores  $d$ ,  $d$ , mounted thereon, coils  $f$ ,  $f$ , and insulating block  $e$  mounted upon the cores, the annunciator drop  $c$  carrying pins adapted to enter slots provided in the end of said cores, said annunciator  $c$  comprising the armature  $c^3$ , target  $c^4$ , retaining plate  $c^1$ , washer  $c^6$ , and screws  $c^7$  and the screws  $d^3$ ,  $d^3$ , passing into the ends of the cores  $d$ ,  $d$ , and maintaining the pins on the annunciator target in position, substantially as described. 5th. In combination in a self restoring annunciator, an electro-magnet having extended pole-pieces, an



armature pivoted at one extremity to the ends of said pole-pieces, a target carried by the armature, another electro-magnet, an armature therefor, and a catch controlled thereby adapted to engage the target when the said first-mentioned armature is attracted by its magnet, substantially as described. 6th. In a self-restoring annunciator, the combination with an electro-magnet having polar extension, of an armature mounted on said polar extensions adapted to be rotated thereby to move approximately into their plane when the electro-magnet is energized, a target or signal actuated by said armature, a second electro-magnet, an armature therefor, and a catch controlled by said armature adapted to withhold the target normally from its position of display, substantially as described. 7th. In a self-restoring annunciator, a rotatably mounted armature and a target actuated thereby in combination with a retaining lever adapted normally to withhold said target from its position of display, an electro magnet, an armature therefor actuating said lever to release the target when the electro-magnet is energized, and a restoring electro-magnet provided with extended pole-pieces between which the first named armature is rotatably mounted, whereby the target is moved from its displayed position when said restoring electro-magnet is energized, substantially as described.

**No. 60,010. Telephone Switchboard.**

(Echange de téléphone.)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles F. Scribner, Chicago, Illinois, U.S.A., 14th May, 1898; 6 years. (Filed 20th October, 1896.)

*Claim.*—1st. The combination with a telephone line, of means for producing a signalling current in the the line, and a relay in the circuit responding to such current, a local circuit including a subsidiary line signal controlled by the relay, an auxiliary helix on the relay in the local circuit, means for establishing connection with the line, and switch contacts actuated in the establishment of such connection adapted to interrupt the current through the said auxiliary helix, substantially as described. 2nd. The combination with a telephone line, and means for producing signaling current therein, of a relay in the line circuit, a local circuit including a subsidiary line signal and a source of current, controlled by the relay, an auxiliary magnet helix on the relay in the local circuit, spring jacks and connecting plugs for making connection with the line, and a normally open short circuit about the auxiliary helix and the subsidiary line signal, and co-operating contacts in the plug and springjack adapted to close the short circuit, substantially as described. 3rd. The combination with a telephone line and means for producing signaling current therein, of a relay in the line circuit, a local circuit including a subsidiary line signal control by the relay, an auxiliary magnet helix on the relay, included in the local circuit, springjacks connected with the line and a connecting plug adapted to be inserted therein, and a normally open short circuit about the subsidiary signal and the auxiliary magnet helix terminating in registering contacts in the spring jack and connecting plug. 4th. The combination with a plug circuit adapted to be temporarily connected with the telephone line, of a relay having a line magnet connected with the plug circuit, a local circuit including a subsidiary signal controlled by the relay, an auxiliary magnet helix on the relay included in the local circuit, and a plug-seat-switch for one of the connecting plugs adapted to open the local circuit while the plug is in its seat, substantially as described.

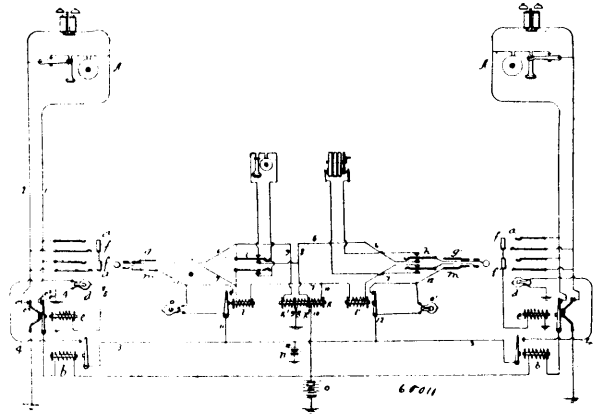
**No. 60,011. Telephone Switchboard.**

(Echange de téléphone.)

The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 14th May, 1898; 6 years. (Filed 2nd May, 1897.)

*Claim.*—1st. The combination with a telephone line, means for making connection therewith, an electromagnet associated with the telephone line, and mechanism actuated by the electro-magnet, of a local circuit including the electro-magnet together with a supervisory signal, a relay responsive to currents in the line and a shunt of the said signal controlled by the relay, substantially as described. 2nd. The combination with a telephone line, a line signal associated

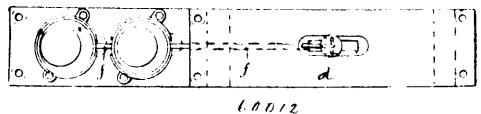
therewith, an electro magnet controlling the display of the line signal, means for making connection with the line, a supervisory sig-



nal associated with the line, said supervisory signal and said electro-magnet being included in a local circuit, a relay responsive to currents in the line and a shunt about the supervisory signal controlled by the relay, said local circuit being closed in registering contacts brought together in making connection with the line, substantially as described. 3rd. The combination with a telephone line having means for producing current in the line during the use of the telephone, spring jacks connected with the line, a relay responsive to currents in the line and a subsidiary line signal controlled thereby, of a second relay adapted to interrupt the current through the line-signal, a plug for making connection with the spring-jack, a supervisory signal associated with the plug, a local circuit including the said second-mentioned relay and the said supervisory signal closed in registering contacts of the spring-jack and plug, a relay responsive to currents in the line, and a shunt of the supervisory signal controlled by the said relay, substantially as described. 4th. The combination with a telephone line and spring-jacks thereof in a multiple switch-board, of a signal associated with the plug, a local battery-circuit including the signal, and registering contacts of the plug and spring-jack to close the local circuit, said contact pieces of the spring-jacks being adapted to serve as test-contacts, a shunt about the signal, and a switch adapted to interrupt the shunt, whereby the electrical condition of the test-contacts remains substantially unchanged during the operation of the signal, as described. 5th. The combination with a telephone line having a switch at its substation to close the line, during the use of the telephone, a source of current at the central office connected with the line, a relay in the line responsive to current therein, and a line-signal controlled by the relay, spring-jacks for the line of different sections of a multiple switchboard and test-contacts in the spring-jacks, a plug for making connection with the spring-jacks and a plug-circuit thereof, a source of current in a bridge of the plug-circuit, a signal controlling relay in the plug-circuit and a supervisory signal associated with the plug, of a cut-off relay adapted to break the connection of the line with the relay controlling the line-signal, a local circuit including the magnet of the cut-off relay together with the supervisory signal and closed in a contact-piece of the plug registering with a test-ring in the spring-jack, a shunt about the supervisory signal controlled by the relay in the plug-circuit, a testing instrument and means for bringing it into a shunt of the magnet of the cut-off relay, substantially as described.

**No. 60,012. Telephone Switchboard Signal.**

(Signal pour échange de téléphone.)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 14th May, 1898; 6 years. (Filed 5th January, 1898.)

*Claim.*—1st. The combination with a telephone circuit, a magnet therein, a target or indicator controlled by the magnet and adapted to be moved from its normal to its other position when the current in the line is changed, a key controlling the connection of the operator's telephone with the line, of a mechanical connection between the key and indicator to control the signal independently of the current in line, as described. 2nd. The combination with a plug circuit, an operator's key for controlling the connection of an appliance with the plug-circuit, and supervisory signals adapted to be concealed through the action of current in the plug circuit, of a mechanical connection between the key and the indicator, adapted to conceal the indicators of the supervisory signals, as described.

3rd. The combination with an operator's plug-circuit, a listening key and the supervisory signals having signal-controlling magnets included in the plug-circuit adapted to conceal the indicators of the signals when excited, of a mechanical device connecting the key with the indicator actuated by the key in connecting the telephone to the plug-circuit, adapted to conceal the indicators of the supervisory signals, as described. 4th. The combination with a plug-circuit for uniting telephone-lines, and means for causing current to flow in the plug-circuit while the lines are in use, an operator's listening-key for the plug-circuit, and a supervisory signal having a magnet connected with the plug-circuit, the signal being arranged to be displayed when the magnet is inert, of mechanism actuated by the listening-key when in position to connect the operator's telephone to the plug-circuit, adapted to conceal the indicator of the supervisory signal, as described.

**No. 60,013. Dish Washing Apparatus.**  
(*Laveuse de vaisselle.*)



Isaac David Smead, Toledo, Ohio, U.S.A., and John Neilson Lake Hamilton, Ontario, Canada, 14th May, 1898; 6 years. (Filed 22nd April, 1898.)

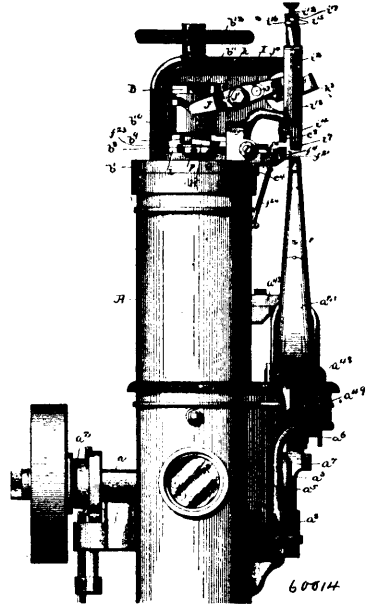
*Claim.*—1st. A nozzle provided with an enlarged chamber adapted to receive and hold a piece of soap, and having at its delivery end a series of perforations, substantially as and for the purpose set forth. 2nd. In combination with a two part nozzle constructed substantially as shown and described, a perforated removable disc arranged to fit therein, as and for the purpose herein set forth. 3rd. A nozzle composed of two conical sections, united at their larger ends by a screw thread, and provided with ears *c* or equivalent means for readily uniting and disuniting the same. 4th. For use in connection with the nozzle, a tray provided with a perforated button and a removable rack constructed as described, whereby the dishes are held in the desired position to enable the nozzle to apply the water thereto in the most effective manner, and permit the same to pass immediately away from the dishes and the tray, as set forth. 5th. The tray *D* having the upper portion *I* of its walls curved or inclined inward, and one of its inclined walls *L* hinged so it can be opened and closed substantially as and for the purpose set forth.

**60,014. Shoe Soling Machine.**  
(*Machine à semeler les chaussures.*)

The Carey Wire Sewing Machine Co., Montreal, Quebec, Canada, assignee of Enoch Normancut, of Montreal aforesaid, 14th May, 1898; 6 years. (Filed 18th April, 1898.)

*Claim.*—1st. A machine for uniting the soles and uppers of boots and shoes, comprising a pivotally mounted work table, an upright needle having movement therein, a pressure bar, a side needle having a movement at right angles to the movement of said upright needle, and means for feeding the work when the pressure is released. 2nd. A machine for uniting the soles and uppers of boots and shoes, comprising a pivotally mounted work table, an upright needle having vertical movement therein, an automatically regulated pressure bar, a side needle having a horizontal movement across the path of movement of said upright needle, and means for feeding the work when the pressure is released. 3rd. A machine for uniting the soles and uppers of boots and shoes, comprising a pivotally mounted work table, an upright needle having a vertical movement therein, a side needle having a movement across the path of movement of said upright needle, an automatically regulated pressure bar adapted to contact with and hold the work during the operation of said side needle, and means for feeding the work forward when the pressure is released. 4th. A machine for uniting the soles and uppers of boots and shoes, comprising a work table, an upright needle having a vertical movement therein, a side needle movable across the path of movement of said upright needle,

a pressure bar, means, operated by said pressure bar for regulating the movement of said upright needle and means for feeding the work



forward when the pressure is released. 5th. A machine for uniting the soles and uppers of boots and shoes, comprising a pivotally mounted work table, an upright needle vertically movable therein, a side needle movable across the path of movement of said upright needle, a pressure bar, means for moving said pressure bar into contact with the work being operated upon, the pressure of said contact being automatically regulated, and means for feeding the work forward when the pressure is released. 6th. A machine for uniting the soles and uppers of boots and shoes, comprising a pivotally mounted work table, an upright needle movable across the path of movement of said upright needle, a pressure bar, means for moving said pressure bar into and out of contact with the work being operated upon, the pressure of said contact being automatically regulated, means operated by the movement of said pressure bar, for regulating the movement of said upright needle, and means for feeding the work when the pressure is released. 7th. A machine for uniting the soles and uppers of boots and shoes, comprising a pivotally mounted work table, an upright needle vertically movable therein, a pressure bar, for regulating the movement of said upright needle, a side needle movable across the path of movement of said upright needle, means for automatically placing the said side needle in proper position relative to the position assumed by said upright needle, and means for feeding the work when the pressure is released. 8th. A shoe horn for shoe sole sewing machines, comprising a casing closed against the entry of foreign substances, said casing being pivotally connected to the body of the machine, and adapted to contain mechanism for holding a needle in fixed position during its pivotal movements. 9th. A shoe horn for shoe sole sewing machines, comprising a casing closed against the entry of foreign substances, said casing being pivotally connected to the body of the machine, and adapted to contain mechanism for holding a needle in fixed position during its pivotal movement, and also being adapted to contain an upright needle and its operating parts. 10th. In a shoe sole sewing machine, the combination with the needle bar, provided with sliding bearings, of a shoe horn, having similar bearings against which the needle bar slide bearings are adapted to operate, and means mounted within said shoe horn for imparting a vertical movement to said needle bar. 11th. In a shoe sole sewing machine, the combination with a needle bar having sliding bearings, of a pivotally mounted shoe horn, having similar bearings against which the needle bar sliding bearings are adapted to operate, an upright needle removably located in said needle bar, and mechanism actuated by the movement of said shoe horn for holding said needle in a fixed position, but movable in said needle bar. 12th. The combination with a needle bar having a direct vertical movement within a shoe horn, said needle bar being provided with a screw-threaded opening, of an upright needle, having a screw-threaded shank adapted to be removably located and have pivotal movement within the screw-threaded opening. 13th. The combination with a needle bar having a direct vertical movement within a shoe horn, said needle bar being provided with a screw-threaded opening, of an upright needle, having a screw-threaded shank adapted to be removably located and have pivotal movement within the screw-threaded opening, said upright needle extending upward centrally from said shank. 14th. The combination with a needle bar having a direct vertical movement within a shoe horn, said needle bar being provided with a screw-threaded opening, of an upright needle, having a screw-threaded shank adapted to be removably located and have pivotal movement within the screw-threaded opening, said upright needle extending upward centrally from said shank. 15th. An upright needle for shoe sole sewing machines, comprising a screw-threaded shank portion, a needle portion extending upward centrally therefrom, and an opening formed in and extending through said shank portion. 16th. An upright needle for shoe sole

sewing machines, comprising a screw-threaded shank portion, a needle portion extending upward centrally from said shank portion, a groove formed on diametrically opposite sides and the top of said needle portion, and an opening formed in and extending through said shank portion, said opening having operative communication with the groove on one side of said needle portion. 17th. An upright needle for shoe sole sewing machines comprising a screw-threaded shank portion, a needle portion extending upward centrally therefrom, a groove formed on diametrically opposite sides and the top of said needle portion, and a flared opening formed in and extending through said shank portion, the smaller end of said flared opening having operative communication with the groove formed on one side of said needle portion. 18th. In combination with a shoe horn pivotally connected to a shoe sole sewing machine, of a level gear mounted therein, adapted to have operative connection with a stationary gear mounted on said machine, said level gear, through intermediate gearing, being adapted to actuate a small gear, located at the apex of the horn, in a direction opposite to and at the same rate of movement of the horn, said small gear being adapted to receive an upright needle, whereby said needle will be held in a stationary position while said horn is being rotated. 19th. The combination with a vertical plunger having a central opening, of a whirl mounted therein, a rack gear adapted to actuate said whirl, and connections between said whirl and said plunger whereby said whirl will be moved vertically in said plunger when said rack is reciprocated. 20th. The combination with a vertical plunger having a central opening, of a whirl operatively mounted in said opening to have vertical movement, said whirl having a flange, a rack adapted to actuate said whirl, a rocking frame mounted in juxtaposition to said whirl said rocking frame being actuated by said plunger and said whirl, and a needle bar mounted at the free end of said rocking frame, said needle bar being adapted to receive a regulated vertical movement by the movements of said plunger and said whirl. 21st. In a shoe sole sewing machine, the combination with a vertical plunger, of a whirl mounted in said plunger, a rack gear adapted to actuate said whirl, connections between said whirl and said plunger, whereby said whirl will be moved vertically in said plunger when said rack is reciprocated, and means, actuated by the pressure bars in said machine, for reciprocating said rack gear. 22nd. In a shoe sole sewing machine, the combination with a vertical plunger, of a whirl mounted in said plunger, a rack gear adapted to actuate said whirl, connections between said whirl and said plunger, whereby said whirl will be moved vertically in said plunger when said rack is reciprocated, and means, actuated by the movement of the pressure bar in said machine, for reciprocating said rack gear to an automatically regulated distance. 23rd. In a shoe sole sewing machine, the combination with a vertical plunger, of a whirl mounted in said plunger, a rack gear adapted to actuate said whirl, connections between said whirl and said plunger whereby said whirl will be moved vertically in said plunger when said rack is reciprocated, means actuated by the movement of the pressure bar in said machine for reciprocating said rack gear, and a needle bar adapted to be actuated by the movement of said whirl and said plunger. 24th. In a shoe sole sewing machine, the combination with a vertical plunger, of a whirl mounted in said plunger, a rack gear adapted to actuate said whirl, connections between said whirl and said plunger whereby said whirl will move vertically in said plunger when said rack is reciprocated, and a needle bar adapted to be actuated by the movement of said whirl and said plunger. 25th. In a shoe sole sewing machine, the combination with a vertical plunger, of a whirl mounted in said plunger, a rack gear adapted to actuate said whirl, connections between said whirl and said plunger whereby said whirl will be moved vertically in said plunger when said rack is reciprocated, means actuated by the movement of the pressure bar in said machine for reciprocating said gear to an automatically regulated distance, and a needle bar adapted to be actuated by the movement of said whirl and said plunger. 26th. In a shoe sole sewing machine, the combination with a pivotally mounted work table, an upright needle having a vertical movement therein, a lever bar plate mounted in the head of said machine, a side needle mounted in said lever bar plate and adapted to have a reciprocating movement therein, said side needle being adapted to move across the path of said upright needle. 27th. In a shoe sole sewing machine, the combination with a pivotally mounted work table, an upright needle mounted therein and adapted to have a vertical movement, of a lever bar plate mounted in the head of said machine, a side needle carrier mounted in said lever bar plate and adapted to have a movement across the path of movement of said upright needle, and means for varying the position of said side needle carrier during its period of movement. 28th. In a shoe sole sewing machine, the combination with a lever bar plate mounted in the head of said machine, a side needle carrier slidably mounted in said lever bar plate, means for moving said lever bar plate to a regulated position during the movement of said side needle carrier, and an upright needle mounted to have a regulated vertical movement in front of said lever bar plate. 29th. In a shoe sole sewing machine, the combination with a lever bar plate mounted in the head of said machine, a side needle carrier mounted to have a reciprocating movement therein, a shooter frame mounted in the path of movement of said machine and adapted to move said lever bar plate into a varied position, and an upright needle mounted to have a vertical movement in front of said lever bar plate. 30th. A shooter

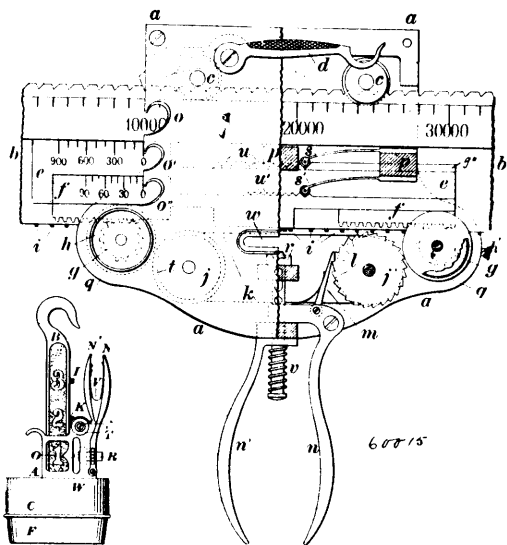
frame for shoe sole sewing machines, comprising a series of plates fixedly connected together, pins mounted on the upper face of the top plate, and means for varying the position of said frame within the body of the machine. 31st. A shooter frame for shoe sole sewing machines, comprising a series of plates fixedly connected together, pins mounted on the upper face of the top plate, a cam face mounted to have movement with the driving power of said machine, means connected to said frame and actuated by said cam face for moving said frame in one direction, and auxiliary means for moving said frame in the opposite direction. 32nd. A shooter frame for shoe sole sewing machines, comprising a series of plates fixedly connected together, pins mounted on the upper face of the top plate, a cam face mounted to have movement with the driving power of said machine, means connected to said frame and actuated by said cam face for moving said frame in one direction, and auxiliary means mounted in the body of the machine for moving said frame in the opposite direction. 33rd. A shooter frame for shoe sole sewing machines, comprising a series of plates fixedly connected together, pins mounted on the upper face of the top plate, a cam face mounted to have movement with the driving power of said machine, a contact roller mounted in said frame and actuated to ride against said cam face for moving said frame in one direction, and auxiliary means mounted in the body of the machine for moving said frame in the opposite direction. 34th. A shooter frame for shoe sole sewing machines, comprising a series of plates fixedly connected together, pins mounted on the upper face of the top plate, a cam face mounted to have movement with the driving power of said machine, a contact roller mounted in said frame and adapted to ride against said cam face for moving said frame in one direction, and spring actuated pins mounted in the body of said machine for moving said frame in the opposite direction. 35th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate mounted therein and adapted to have a longitudinal movement during a portion of the period of operation of said machine. 36th. In a shoe sole sewing machine, the combination with the head, of a lever plate mounted therein, and means actuated by the movement of the operating shaft of said machine for imparting a longitudinal movement to said lever bar plate. 37th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate mounted in said head and adapted to have a longitudinal and a vertical movement during a portion of the operation of said machine. 38th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate mounted therein, means for imparting a longitudinal movement to said plate, and means for imparting a vertical movement to said plate, said longitudinal and vertical movements being imparted at approximately the same time. 39th. In a shoe sole sewing machine, the combination with a lever bar plate, a side needle carrier mounted therein, and means for imparting a reciprocating motion to said side needle carrier. 40th. In a shoe sole sewing machine, the combination with a lever bar plate, a side needle carrier mounted therein, a cam face mounted on the operating shaft of said machine, and connections between said side needle carrier and said cam face for imparting a reciprocating movement to said side needle carrier. 41st. In a shoe sole sewing machine, the combination with a lever bar plate, a side needle carrier mounted therein, a face cam mounted on the operating shaft of said machine, said face cam being provided with an actuated groove, a roller mounted to have movement in said groove, and connections between said roller and said side needle carrier whereby said side needle carrier will be reciprocated in said lever bar plate. 42nd. In a shoe sole sewing machine, the combination with a lever bar plate, a side needle carrier mounted therein, said side needle carrier having an extension, a link pivotally connected to said side needle carrier, a cam face mounted on the operating shaft of said machine, and a roller mounted on said link and having an operative connection with said face and cam whereby said link and said side needle carrier will have a reciprocating movement in said lever bar plate. 43th. In a shoe sole sewing machine, the combination with a head, of a lever bar plate mounted therein, means for imparting a longitudinal movement to said lever bar plate, and means for regulating the longitudinal movement in one direction. 44th. In a shoe sole sewing machine, the combination with a cap plate, of a slide plate mounted to have a longitudinal movement therein, and a lever bar plate removably secured to said slide plate. 45th. In a shoe sole sewing machine, the combination with a cap plate mounted therein, means for imparting a longitudinal movement to said slide plate, and a lever bar plate removably secured to said slide plate and having a pivotal connection with said slide plate. 46th. In a shoe sole sewing machine, the combination with a cap plate, of a slide plate mounted therein, a lever bar plate removably secured to said slide plate, means for imparting a longitudinal movement to said slide plate, and means for regulating the movement of said slide plate in one direction. 47th. In a shoe sole sewing machine, the combination with a cap plate, of a lever bar plate removably secured to said slide plate, a cam face mounted on the operating shaft of said machine, adapted to impart a longitudinal movement to said slide plate, means for regulating the movement of said slide plate in one direction, and a bearing spring forming one of the faces against which said cam rides. 48th. In a shoe sole sewing machine, the combination with the head of a lever bar plate mounted to have a longitudinal movement therein, a series of corrugated feeding rollers pivotally connected to said lever bar plate, and means connected to said plate for rotating said rollers step by step. 49th. In a shoe sole

sewing machine, the combination with the head of a lever plate mounted to have a longitudinal movement therein, a ratchet wheel mounted on said plate, a series of corrugated feed rollers pivotally connected to said ratchet wheel, and means for rotating said ratchet wheel. 50th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate mounted therein, a ratchet wheel pivotally connected to said plate, a series of corrugated feed rollers having a fixed connection with said ratchet wheel, a wire feed operating lever pivotally connected to said lever bar plate, said operating lever being actuated by a cam mounted on the operating shaft, and a spring actuated pin mounted on one end of said lever, said pin being adapted to rotate said ratchet wheel step by step. 51st. In a shoe sole sewing machine, the combination with the head of a lever bar plate mounted to have a longitudinal movement therein, a feed bar pivotally mounted on said lever bar plate, and means for imparting a longitudinal movement to said feed bar. 52nd. In a shoe sole sewing machine, the combination with the head, of a lever bar plate mounted to have a longitudinal movement therein, a feed bar pivotally mounted on said bar plate, and means for imparting a longitudinal and a transverse movement to said feed bar. 53rd. In a shoe sole sewing machine, the combination with the head, of a lever bar plate mounted to have a longitudinal movement therein, a feed bar pivotally mounted on said lever bar plate, a cam fence mounted on the operating shaft adapted to impart a longitudinal movement to said feed bar in one direction, means connected to said feed bar and to said lever bar plate for imparting a longitudinal movement in the opposite direction, and means for imparting a transverse movement to said feed bar. 54th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate, a feed bar plate pivotally mounted thereon, a cam mounted on the operating shaft of said machine adapted to impart a longitudinal movement to said feed bar in one direction, a spring actuated pin adapted to move said feed bar in the opposite longitudinal direction and means for imparting a transverse movement to said feed bar. 55th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate, a feed bar pivotally mounted thereon adapted to have longitudinal movement, and means for imparting a transverse movement to said feed bar when said feed bar is at its limit of longitudinal movement. 56th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate, a feed bar pivotally mounted thereon adapted to have longitudinal movement, and a feed bar operating lever pivotally mounted on said lever bar plate and connected to said feed bar, adapted to impart a transverse movement to said feed bar. 57th. In a shoe sole sewing machine, the combination with the head, of a lever bar plate, a feed bar pivotally mounted thereon, a cam face adapted to impart a longitudinal movement to said feed bar in one direction, a spring actuated pin adapted to impart a longitudinal movement to said feed bar in the opposite direction, and a feed bar operating lever pivotally connected to said lever bar plate and said feed bar, said feed bar operating lever being adapted to impart a transverse movement to said feed bar when said feed bar has been placed in its opposite longitudinal positions. 58th. In a shoe sole sewing machine, the combination with a cap plate and a head removably connected therewith, of a slide plate mounted in said cap plate and adapted to have a longitudinal movement therein, a lever bar plate removably connected to said slide plate, and a feed bar pivotally mounted on said lever bar plate and adapted to have a longitudinal and transverse movement on said lever bar plate. 59th. In a shoe sole sewing machine, the combination with a cap plate, of a slide plate mounted therein to have a regulated longitudinal movement, a lever bar plate removably connected to said slide plate, a feed bar pivotally mounted on said lever bar plate, means for moving said feed bar longitudinally on said lever bar plate, and a feed bar operating lever adapted to move said feed bar transversely of said lever bar plate when said feed bar is at its limit of longitudinal movements. 60th. In a shoe sole sewing machine, the combination with a cap plate, of a slide plate mounted therein to have a regulated movement, a slide block removably connected to said slide plate, and a lever bar plate pivotally connected to said slide block. 61st. In a shoe sewing machine, the combination with a cap plate, of a slide plate mounted therein to have a regulated longitudinal movement, a slide block removably connected thereto, a lever bar plate pivotally connected to said slide block, a side needle carried mounted in said lever bar plate, and means for reciprocating said side needle carrier longitudinally in said lever bar plate. 62nd. In a shoe sole sewing machine, the combination with a cap plate, of a slide plate mounted therein to have a regulated longitudinal movement, a lever bar plate removably secured to said slide plate, and means for varying the vertical position of said lever bar plate and said slide plate when said slide plate has been moved to the end of its longitudinal movement. 63rd. In a shoe sole sewing machine, the combination with a cap plate, of a slide plate mounted therein to have a regulated longitudinal movement, a lever bar plate removably connected thereto, and a shooter frame actuated by the movement of the operating shaft of said machine adapted to vary the position of said lever bar plate and slide plate when said slide plate has been moved to the end of its longitudinal movements. 64th. In a shoe sole sewing machine, the combination with a cap plate, of a slide plate mounted therein to have a regulated longitudinal movement, a slide block removably secured thereto, a lever bar plate pivotally connected to said slide block, and means for raising and lowering said lever bar plate and said slide plate, the front end of said lever bar plate being raised to a greater height than its

rear end. 65th. In a shoe sole sewing machine, the combination with a cap plate, of a lever bar plate mounted to have a regulated longitudinal movement therein, a side needle carrier mounted to be reciprocated in said lever bar plate, and a wire cutter adapted to plate a wire burr in a position in the path of movement of said side needle. 66th. In a shoe sole sewing machine, the combination with a cap plate, of a lever bar plate mounted to have a regulated longitudinal movement therein, a side needle carrier slidably mounted in said lever bar plate, a cutter mounted in said lever bar plate to have a transverse movement across the path of said needle, and means for reciprocating said cutter. 67th. In a shoe sole sewing machine, the combination with a cap plate, of a lever bar plate mounted to have a regulated longitudinal movement therein, a side needle carrier mounted in said lever bar plate and adapted to have a reciprocating motion therein, a cutter mounted in said lever bar plate and adapted to move across the path of movement of said side needle, and means for feeding the wire to said cutter at a predetermined point of its movement. 68th. In a shoe sole sewing machine, the combination with a cap plate, of a lever bar plate mounted to have a regulated longitudinal movement therein, a side needle carrier mounted in said lever bar plate and adapted to have a reciprocating motion therein, a cutter mounted in said lever bar plate and adapted to move across the path of movement of said side needle, wire feeding mechanism removably connected to said lever bar plate and adapted to feed the wire to said cutter, and means connected to said lever bar plate for actuating said wire feeding mechanism at a predetermined point in the movement of said cutter. 69th. In a shoe sole sewing machine, the combination with a cap plate of a lever bar plate mounted to have a regulated longitudinal movement therein, said lever bar plate being normally held in its lower position, means for raising said lever bar plate, and means for automatically regulating the position to which said lever bar plate is raised. 70th. In a shoe sole sewing machine, the combination with a cap plate of a lever bar plate mounted to have a longitudinal movement therein, said lever bar plate being normally held in its lower position, means for raising said lever bar plate, and an automatically regulated stop for limiting the movement of said lever bar plate. 71st. In a shoe sole sewing machine, the combination with a cap plate, of a head removably connected thereto, of a lever bar plate mounted to have a regulated longitudinal movement in said cap plate, said lever bar plate being normally held in its lower position, a pressure bar mounted in said head and adapted to have a regulated movement therein, means for raising said lever bar plate from its normal position, and means connected to said pressure bar for automatically limiting the upward movement of the lever bar plate. 72nd. In a shoe sole sewing machine, the combination with a cap plate of a head removably connected thereto, of a lever bar plate mounted to have a regulated longitudinal movement in said cap plate, said lever bar plate being normally held in its lower position, a pressure bar mounted in said head and adapted to have a regulated movement therein, means for raising said lever bar plate from its normal position, and a set screw mounted adjustably on said pressure bar for limiting the upward movement of said lever bar plate. 73rd. In a shoe sole sewing machine, the combination with a cap plate of a lever bar plate mounted to have a longitudinal movement in said cap plate, said lever bar plate being held normally in its lower position, means for raising said lever bar plate, and means connected with said head and with the body of said machine for returning said lever bar plate to its normal position. 74th. A feed bar for shoe sole sewing machines, comprising a feed bar plate having its front end bifurcated, and a feed nose mounted in said bifurcated end adapted to be adjustable longitudinally thereof. 75th. A feed bar for shoe sole sewing machines, comprising a feed bar plate having its front end bifurcated, a feed nose slidably mounted in said bifurcated end, and a set screw mounted in said feed nose and said bifurcated end, adapted to adjust the position of said feed nose. 76th. A feed bar for shoe sole sewing machines, comprising a feed bar plate having its front end bifurcated, a feed nose mounted in said bifurcated end, an elongated slot formed in said feed nose adapted to receive a pin formed in said bifurcated end, and a set screw connected with said feed nose and with said bifurcated end and adapted to adjust the position of said feed nose. 77th. In a shoe sole sewing machine, the combination with a lever having its rear end bifurcated, a recess formed in each of said bifurcated ends, a cam acting face pivotally mounted in said recesses, and adjusting screws mounted to act against said cam acting faces, whereby the movement of said lever will be regulated. 78th. In a shoe sole sewing machine, the combination with a lever having a bifurcated rear end, and a recess formed in one of said bifurcated ends, of a cam acting face pivotally mounted in said recesses, an adjusting screw adapted to bear against the rear face of said cam acting face, and a bearing spring connected to said lever and extending rearward in juxtaposition to the opposite bifurcated end of said lever. 79th. A side needle carrier for shoe sole sewing machine, comprising a lower portion and an upper portion adjustably mounted thereon, said lower and upper portions being slidably mounted in a lever bar plate, set screws connected to said upper and lower portions, a channel formed between said upper and lower portions, and extending through said set screws, and nuts secured to said set screws and adapted to force said upper and lower portions together. 80th. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted in said head and adapted to have a vertical movement therein, means for limiting the movement of said pres-

sure bar, and means for reciprocating said pressure bar. 81st. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have a vertical movement therein, means for adjusting the position of said pressure bar, means for reciprocating said pressure bar, and means for regulating the amount of pressure placed on said pressure bar. 82nd. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have a vertical movement therein, means for reciprocating said pressure bar, and means for locking said pressure bar in position after being reciprocated. 83rd. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have a vertical movement therein, means for adjusting the position of said pressure bar, means for reciprocating said pressure bar, and means for automatically locking said pressure bar in fixed position after the same has been reciprocated. 84th. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have a vertical movement therein, an adjustment slide adjustably mounted in said pressure bar, means for reciprocating said pressure bar and said adjustment slide, and means for locking said pressure bar and said adjustment slide in fixed position after having been reciprocated. 85th. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have vertical movement therein, an adjustment slide adjustably mounted in said pressure bar, a rocking lever pivotally connected to said head and adapted to reciprocate said adjustment slide and said pressure bar, and means for locking said rocking lever in fixed position in said adjustment slide. 86th. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have a vertical movement therein, an adjustment slide mounted in said pressure bar, said adjustment slide being provided with an opening, a rocking lever pivotally connected to said head and having its forward end movable in said slotted opening, and means for locking the movement of said rocking lever. 87th. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have a vertical movement therein, an adjustment slide mounted in said pressure bar, an adjusting screw connected to said adjustment slide and to said pressure bar for adjusting the position of said slide in said pressure bar, a rocking lever pivotally connected to said head and adapted to reciprocate said pressure bar and said adjustment slide, and means for locking said adjustment slide to prevent vertical movement therein. 88th. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have vertical movement therein, a rocking lever having a fixed movement on said head adapted to reciprocate said pressure bar, and means, connected to said rocking lever, for automatically regulating the pressure applied to said pressure bar by said rocking lever. 89th. In a shoe sole sewing machine, the combination with a head, of a pressure bar mounted to have a vertical movement therein, a rocking lever having a fixed movement on said head adapted to reciprocate said pressure bar, and a frictional pressure regulating mechanism mounted in said rocking lever, whereby the pressure of said pressure bar will be automatically regulated.

**No. 60,015. Printing Register for Weighing Scales.**  
(*Régistre imprimant pour balances.*)



E. and F. Fairbanks & Co., assignee of Henry Fairbanks, all of St. Johnsbury, Vermont, U.S.A., 14th May, 1898; 6 years. (Filed 7th April, 1898.)

*Claim.*—1st. In a printing register for weighing scales, a scale beam carrying a series of printing numerals upon its lower side, corresponding to its graduation, and adapted to indicate the decimally higher figures of the record of weight, in combination with a moving poise sealed to the said graduation, and provided

with a recess to receive the ticket, upon which the record is to be made, one or more poise slides arranged to move in the said poise parallel with the beam, having printing numerals upon their lower side, suitable to indicate the decimally lower figures of the record, for each poise-slide a milled knob standing out from the front of the poise, and adapted to turn a pinion which engages a rack on this slide, whereby the load upon the scale is most conveniently weighed, and at the same time the numerals indicating its weight are brought into line in decimal relation to print correctly, and a lever arranged to press the same against the said line of printing numerals, as herein set forth. 2nd. In a printing register for weighing scales, a scale beam carrying a sliding poise, printing numerals upon the lower side of this scale-beam, a poise slide carried by the poise, provided with a rack and arranged to move parallel with the beam, printing numerals on the lower side of this poise slide, adapted to print the decimally lower figures of the recorded weight, notches in the scale-beam corresponding to its graduation, and a spring latch in the poise engaging those notches, in combination with notches in the said poise slide into which a small roller is pressed by a spring, whereby this poise slide, while free to move, always rests at points where its printing numerals are in line with those upon the scale beam, and a shaft in the poise and provided with a pinion engaging the said rack to operate this slide, substantially as set forth. 3rd. In a printing register for weighing scales, a scale beam having a series of printing numerals corresponding to the graduations for weight, a sliding poise provided with a device for pressing a suitable ticket against the said printing numerals, and a recess into which the ticket slides, of the proper form and depth to bring the printed figures to the predetermined position on the ticket, and in combination with these, a counterpoise adapted to receive additional weights, printing numerals on the stem of the counterpoise, a weight follower sliding on this stem and resting on the weights that it carries, this weight follower provided with a device for pressing the same ticket aforesaid against the printing numerals on the said stem, and with a recess for this ticket of such depth in relation to the corresponding recess in the sliding poise that the counterpoise figures are impressed at the left of the poise figures, in position to give them their proper decimal force when the two sets are read together, as herein set forth. 4th. The combination with a scale beam graduated and correspondingly notched, to indicate the larger divisions of weight, of a sliding poise carried by said beam, sealed to said graduation and provided with a spring latch engaging the beam notches to hold it in its adjusted position, a notched poise slide carried by the poise parallel with the beam, graduated to indicate the smaller divisions of weight, and provided with a rack, a pinion engaging said rack, and provided with an operating knob, and a spring provided with a friction roller working in said slide notches, said notches corresponding to the weight graduation, substantially as and for the purpose set forth. 5th. The combination with the sliding poise of the scale beam of the parallel poise slides, each provided (at opposite ends to each other) with a rack, transverse arbors mounted in the poise, and provided with pinions engaging the respective racks, and with anti-friction rollers upon which the two sides are fully supported, and means for rotating the said arbors, substantially as herein set forth. 6th. In a registering or recording scale, the scale beam, the main poise sliding thereon, a poise slide supported and guided by the main poise independent of the beam, and a second poise slide, also supported and guided by the main poise, and having a part or projection lying beneath, and backing against the first slide, whereby a compact structure is formed, and the shock of printing against both slides is taken up by the main poise, substantially as set forth. 7th. The combination with a counterpoise adapted to receive additional weights, and provided on its stem with printing numerals, of a weight-follower, movable vertically on the stem, and provided with a ticket recess, and with means for pressing the ticket against the said numerals, substantially as described. 8th. The combination with the counterpoise adapted to receive additional weights, and provided with printing numerals on its stem, and an inking ribbon crossing said numerals, of a weight-follower movable vertically on the stem, and provided with a ticket recess, and a platen for pressing the ticket against the ribbon over the numerals, substantially as herein set forth. 9th. The combination with the counterpoise adapted to receive additional weights, and having its stem provided with printing numerals on one end, and with corresponding indicator numerals on one side, of the sliding weight-follower on said stem, and provided with a ticket recess to register with the printing numerals, and with a reading opening to register with the indicating numerals, and a platen mechanism carried by the follower to press the ticket toward the printing numerals, substantially as described. 10th. The combination with the counterpoise adapted to receive additional weights, and having its stem provided with printing numerals, and an inking ribbon covering said printing numerals, of the vertically sliding weight follower mounted on said stem, and provided with a ticket recess to register with said numerals, a platen for forcing the said ticket toward the numerals and an inking roller carried by said follower, and engaging the ribbon to ink it whenever the follower is moved along the stem, substantially as described. 11th. In a printing register for weighing scales, a scale beam carrying a series of numerals upon its lower side, a poise movable upon said beam, a poise slide supported by said poise, moving through it parallel to the scale beam, and provided with printing numerals on its under side, a pinion engaging a rack on the poise



and means for operating said levers, substantially as shown and described. 4th. A machine for binding books, comprising a main frame, levers pivotally connected with the sides thereof and projecting forwardly of the frame, said levers being provided at their rear ends with inwardly directed arms or extensions, vertically movable plates or supports connected with said arms or extensions, and provided at their lower ends with forwardly directed extensions, a book carrying frame connected with said vertically movable plates or supports, a glue box mounted in the main frame below said book carrying frame, transversely movable table plates mounted on the main frame, upright levers connected with the outer ends thereof, and pivotally connected with the sides of the main frame rods pivotally connected with the lower ends of said last-named levers, and extending inwardly, and in operative connection with the inwardly directed extensions of said plates or supports, hangers connected with the inner ends of the transversely movable table plates, revolvable flue plates connected with said hangers and devices for operating said parts, substantially as shown and described. 5th. A machine for binding books, comprising a main frame, levers pivotally connected with the sides thereof and projecting forwardly of the frame, said levers being provided at their rear ends with inwardly directed arms or extensions, vertically movable plates or supports connected with said arms or extensions and provided at their lower ends with forwardly directed extensions, a book carrying frame connected with said vertically movable plates or supports, a glue box mounted in the main frame below said book carrying frame, transversely movable table plates mounted on the main frame, upright levers connected with the outer ends thereof, and pivotally connected with the sides of the main frame, rods pivotally connected with the lower ends of said last-named levers, and extending inwardly, and in operative connection with the inwardly directed extensions of said plates or supports, hangers connected with the inner ends of the transversely movable table plates, revolvable glue plates connected with said hangers and devices for operating said parts, the inwardly directed extensions at the lower ends of said vertically movable plates or supports being provided with a supplemental plate or arm with which said upright levers are connected and said supplemental plate or arm being also in operative connection with a treadle lever, substantially as shown and described. 6th. A machine for binding books, comprising a suitable frame, a glue or paste pot mounted thereon, a book carrying frame provided with a horizontal support which projects over the glue or paste pot, and from which the book is suspended, and operative devices for applying the glue or paste to the sides of the book, substantially as shown and described. 7th. In a machine for binding books, a vertically movable book carrying frame, and transversely movable table plates, said table plates being provided at their inner ends with hangers with which are connected revolvable glue plates, a glue box mounted in the main frame of the machine in which said revolvable plates are suspended and means for raising and lowering said book carrying frame and revolving said glue plates, substantially as shown and described. 8th. A machine for binding books constructed as herein described and consisting of a main frame, a glue box mounted therein, vertically movable plates or supports, a vertically movable book carrying frame connected with said plates or supports, transversely movable table plates mounted on the main frame, hangers connected with said table plates and adapted to move therewith, glue plates revolvably connected with said hangers and suspended in said glue box, ratchet-wheels connected with the shafts of the glue plates, operative devices connected with the vertically movable book carrying frame, and with said ratchet-wheels, and means for operating said vertically movable plates or supports and said transversely movable table plates, substantially as shown and described. 9th. A machine for binding books constructed as herein described, consisting of a main frame, levers pivotally connected with the sides of the main frame and projecting forwardly thereof, a treadle connected with the forward ends of said levers, vertically movable plates or supports connected with the rear ends of said levers and provided at their lower ends with forwardly directed extensions, transversely movable table plates mounted on the main frame and in operative connection with the extensions at the bottom of said vertically movable plates or supports, a glue box mounted in the main frame, hangers connected with the inner ends of said transversely movable table plates, revolvable plates connected with said hangers, a vertically movable wood carrying frame connected with said vertical plates or supports, ratchet-wheels connected with said glue plates and devices connected with the book carrying frame for operating said ratchet-wheels, substantially as shown and described. 10th. A machine for binding books, comprising a main frame, a glue box mounted therein, transversely movable table plates mounted on said main frame, and provided with hangers at their inner ends, revolvable glue plates connected with said hangers and suspended in the glue box, a vertically movable book carrying frame supported above the main frame of the machine and means for raising and lowering said book carrying frame, and for operating said transversely movable table plates and for revolving said glue plates, substantially as shown and described. 11th. A machine for binding books, comprising a main frame, a glue box mounted therein, transversely movable table plates mounted on the main frame over said glue box, hangers connected with the inner ends of said table plates, revolvable glue plates connected with said hangers and suspended in the glue box, a vertically movable book carrying frame supported above the main frame of the machine, and adapted to be lowered between said glue plates, operative devices

connecting said book carrying frame and said glue plates, means for operating said book carrying frame, and said transversely movable table plates, substantially as shown and described.

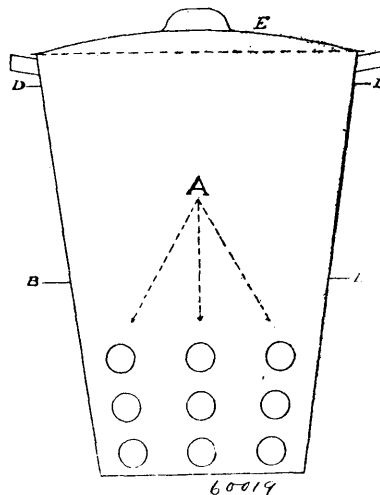
#### No. 60,018. Gold Extracting Compound.

(Composé pour extraire l'or.)

Albert G. Stephens, and Edward C. Davis, both of Colorado Springs, Colorado, U.S.A., 16th May, 1898; 18 years. (Filed 15th January, 1898.)

*Claim.*—The herein described composition of matter to be used to extract gold from refractory ores, causing the gold to become dissolved and forming the chloride of gold from which the gold in bullion can be readily and economically obtained by any suitable means, consisting of water, chloride of lime, bromide of potassium, nitric acid, and muriatic acid, combined substantially in the proportions set forth.

#### No. 60,019. Culinary Utensil. (Ustensile de cuisine.)



John L. Bray and Charles T. Bailey, both of St. John, New Brunswick, Canada, 16th May, 1898; 6 years. (Filed 20th December, 1897.)

*Claim.*—1st. In a double boiler, the combination of an outer pot and an inner pot fitted thereto by its collar near the top and having holes in the sides of the inner pot, as well as its bottom, as and for the purpose described. 2nd. In a steaming pot the combination of an outer pot, an inner pot supported by a collar (fitting closely round it part way down its side) in the upper part of the outer pot, and having holes in the lower part of the sides of the inner pot below the position of said collar, as well as its bottom, as and for the purpose described. 3rd. In a double boiler the combination of an outer pot, an inner pot fitted thereto with collar near the top and with holes in its side below said collar, as and for the purpose described. 4th. In a steaming pot the combination of an outer pot, an inner pot supported by a close fitting collar, in the upper part of the outer pot, and having holes in the lower part of its sides, below said collar, as and for the purpose described. 5th. In a double boiler and steamer combined the outer pot, the inner pot with collar near its top, the detachable collar fitting the inner pot part way down its side, fitting also the top of the outer pot, and the inner pot having holes in its side below where the lower detachable collar fits and with or without holes in its bottom, all as and for the purpose described.

#### No. 60,020. Smokeless Powder. (Poudre sans fumée.)

Francis A. Halsey and William C. Savage, both of San Rafael, California, U.S.A., 16th May, 1898; 6 years. (Filed 18th August, 1897.)

*Claim.*—1st. A compound, consisting of an alkaline metal chromate, an alkaline earth metal nitrate, ammonium picrate, and an alkaline metal permanganate, substantially in the proportions specified. 2nd. A compound, consisting of an alkaline metal chromate, an alkaline earth metal nitrate, ammonium picrate, an alkaline metal permanganate, and an alkaline metal silicate or equivalent coating, substantially in the proportions specified.

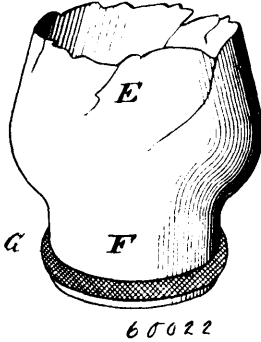
#### No. 60,021. Extraction of Gold and Silver.

(Procédé pour extraire l'or et l'argent.)

The Anglo-Continental Gold Syndicate, No. 22 Austin Friars, London, England, assignee of James Park, Auckland, and Edward Hanbury Whitaker, Thames, both in the Colony of New Zealand, 16th May, 1898; 6 years. (Filed 2nd February, 1897.)

*Claim.*—The herein described process for the extraction of gold and silver from cupriferos ores, by roasting the ore with salt, thereby converting the silver and copper into chlorides, leaching out the soluble copper chloride, treating the residue with cyanide solution, and recovering the precious metals from their cyanides.

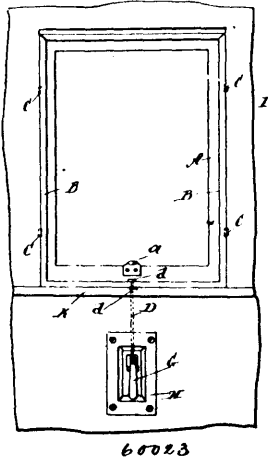
**No. 60,022. Lamp Chimney.** (*Cheminée de lampe.*)



John F. McHenry and Newbury E. Hawley, both of Hollister, California, U.S.A., 16th May, 1898; 6 years. (Filed 12th February, 1898.)

*Claim.*—1st. A lamp chimney, provided with the usual cylindrical base, having an annular rib on the outside thereof, below the point where the spring holding arms come in contact with the base of the chimney, substantially as described. 2nd. A lamp chimney, provided with the usual cylindrical base, having an annular rib on the outside thereof, below the point where the spring supporting arms come in contact with the base of the chimney, said rib being formed during the process of manufacture, substantially as described. 3rd. A lamp chimney, provided with the usual cylindrical base, having an annular rib on the outside thereof, at a point below where the spring supporting arms come in contact with the chimney, said rib being corrugated on its outer surface, substantially as described. 4th. A lamp chimney, provided with the usual cylindrical base, having an annular rib substantially semi-circular in cross-section on the outside of the base at a point below where the spring supporting arms come in contact with the base of the chimney, whereby said rib may be passed downward or upward between the spring supporting arms in placing or removing it, the curved outer surface facilitating said movements, and the spring supporting arms having a bearing against the upper surface of said rib when the chimney is in place, substantially as described.

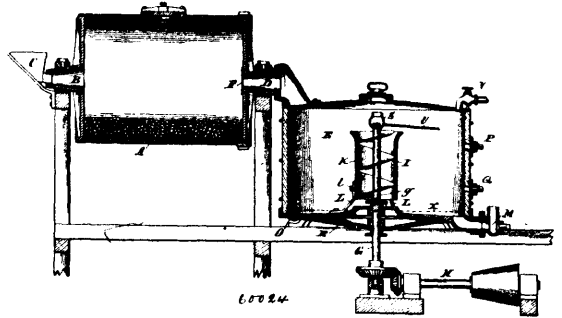
**No. 60,023. Sash Holder.** (*Arrête-croisée.*)



Lewis Howard Bowman and John K. Wilson, both of Walla Walla and Richard McGahey, also of Walla Walla, Washington, U.S.A., 16th May, 1898; 6 years. (Filed 22nd April, 1898.)

*Claim.*—A sash holding device, comprising a frame fitting within the window casing against the face of the sash and forming an inner stop therefor, links pivoted to the frame and casing by which the frame may be swung upward and away from the sash, a link connected to the end of the frame, a lever connected to said link whereby the frame may be swung up and down and having its opposite end slotted, and a pivoted cam lever recessed below the surface of the wall for operating the same, having a pin fastened through the slot in the other lever, substantially as described.

**No. 60,024. Process of and Apparatus for the Treatment of Gold and Silver Ores** (*Procédé et appareil pour le traitement des minerais d'or et d'argent.*)



The Miner Exploitation Company, Denver, Colorado, assignee of John Glenville Murphy, Middletown, Connecticut, U.S.A., 16th May, 1898; 6 years. (Filed 24th January, 1898.)

*Claim.*—1st. The process of extracting the precious metals from ore, which consists in pulverizing the ore, placing the pulverized ore in the condition of a paste formed by the use of water upon a surface of mercury and causing a circulating motion of the mass so as to bring all parts successively into contact with the mercury, substantially as described. 2nd. The process of extracting the precious metals from ore, which consists in pulverizing the ore, placing the pulverized ore, in the condition of paste formed by the use of water, upon a surface of mercury and causing the paste at one or more points in the mass to continuously ascend and that at other points of the mass to continuously descend, thus bringing all parts of the paste successively into contact with the surface of the mercury, substantially as described. 3rd. The process of extracting the precious metals from ore, which consists in pulverizing the ore, placing the pulverized ore, in the condition of a paste formed by the use of water, upon the surface of mercury, and causing the paste at the centre of the mass to continuously ascend and that the circumference to continuously descend, thus bringing all portions of the mass into contact with the surface of the mercury, substantially as described. 4th. The process of extracting the precious metals from ore which consists in reducing, without compressive grinding, hammering or pounding, the ore to an impalpable powder by the gentle attrition of the mass in a revolving cylinder, placing the pulverized ore, in the condition of a paste formed by use of water, upon a surface of mercury, and causing a circulating motion in the mass so as to bring all parts thereof successively into contact with the surface of the mercury, substantially as described. 5th. The process of extracting the precious metals from ore which consists in reducing without compressive grinding, hammering or pounding, the ore to an impalpable powder by the gentle attrition of the mass in a revolving cylinder, placing the pulverized ore, in the condition of a paste formed by the use of water, upon the surface of mercury, and causing the paste at one or more points of the mass to continuously ascend and that at other points of the mass to continuously descend, thus bringing all portions of the mass successively into contact with the surface of the mercury, substantially as described. 6th. The process of extracting the precious metals from ore, which consists in pulverizing the ore, placing the pulverized ore, in the condition of a paste formed by the use of water, upon a surface of mercury and causing a circulating motion of the mass so as to bring all parts successively into contact with the surface of the mercury until the ore is amalgamated, introducing water in such quantity as to thin the paste sufficiently to permit settling, permitting the mass to stand while subjected to a slow circulating movement until settling is effected, and drawing off the tailings, substantially as described. 7th. The process of extracting the precious metals from ore, which consists in pulverizing the ore, placing the pulverized ore, in the condition of a paste formed by the use of water, upon a surface of mercury and causing the paste at one or more points in the mass to continuously ascend and that at other points in the mass to continuously descend, thus bringing all parts of the paste successively into contact with the surface of the mercury until the ore is amalgamated, introducing water in such quantity as to thin the paste sufficiently to permit settling, permitting the mass to stand while subjected to a slow circulating movement until settling is effected, and drawing off the tailings, substantially as described. 8th. The process of extracting the precious metals from ore which consists in reducing, without compressive grinding, hammering or pounding, the ore to an impalpable powder by the gentle attrition of the mass in a revolving cylinder, placing the pulverized ore, in the condition of a paste formed by the use of water, upon a surface mercury, and causing a circulating motion in the mass so as to bring all parts thereof successively into contact with the surface of the mercury until the ore is amalgamated, introducing water in such quantity as to thin the paste sufficiently to permit settling, permitting the mass to stand while subjected to a slow circulating movement until settling is effected, and drawing



off the tailings, substantially as described. 9th. The combination of an ore pulverizer, a pan for receiving the pulverized ore constructed to hold mercury in the bottom thereof, and means for causing a continuous rotary movement of the pulverized ore from the upper to the lower portion of the pan, substantially as described. 10th. The combination of an ore pulverizer, a pan for receiving the pulverized ore, a mercury surface in the bottom of the pan, and means for causing a continuous rotary movement of the pulverized ore from the upper to the lower pan, substantially as described. 11th. The combination of an ore pulverizer, a pan for receiving the pulverized ore provided with a mercury well at the bottom thereof, and means for causing a continuous rotary movement of the pulverized ore from the upper to the lower portion of the pan, substantially as described. 12th. The combination of an ore pulverizer, a pan for receiving the pulverized ore constructed to hold mercury in the bottom thereof, and one or more elevators in the pan for causing a continuous ascending motion at one or more points of the mass and a continuous descending motion at other points of the mass, substantially as described. 13th. The combination of an ore pulverizer, a pan for receiving the pulverized ore constructed to hold mercury in the bottom thereof, and an elevator at the centre of the pan for causing a continuous ascending motion at the centre of the mass and a continuous descending motion at the circumference thereof, substantially as described. 14th. The combination of an ore pulverizer, a pan for receiving the pulverized ore constructed to hold mercury in the bottom thereof, and a screw elevator at the centre of the pan for causing a continuous ascending motion at the centre of the mass and a continuous descending motion at the circumference thereof, substantially as described. 15th. The combination of an ore pulverizer, a pan for receiving the pulverized ore constructed to hold mercury at the bottom thereof, a screw elevator at the centre of the pan causing a continuous ascending motion at the centre of the mass and a continuous descending motion at the circumference thereof, and a vertical tube enclosing the screw, substantially as described. 16th. The combination of a pan adapted for receiving pulverized ore and constructed to hold mercury in the bottom thereof, with means for causing a rotatory motion of the contents of the pan from the upper to the lower portion thereof, substantially as described. 17th. The combination of a pan adapted for receiving pulverized ore and provided with a mercury well in the bottom thereof, with means for causing a rotatory motion of the contents of the pan from the upper to the lower portion thereof, substantially as described. 18th. The combination of a pan adapted for receiving pulverized ore and constructed to hold mercury in the bottom thereof, with an elevator in the pan for causing continuous ascending motion of the contents of the pan at a point therein, substantially as described. 19th. The combination of a pan for receiving pulverized ore and constructed to hold mercury in the bottom thereof, with a screw elevator at the centre of the pan for causing continuous ascending motion of the contents of the pan at the centre thereof, substantially as described. 20th. The combination of a pan adapted for receiving pulverized ore and constructed to hold a mercury in the bottom thereof, with an elevator in the pan for causing continuous ascending motion of the contents of the pan at a point therein, and means for regulating the effective speed of the elevator, substantially as described. 21st. The combination of a pan adapted for receiving pulverized ore and constructed to hold mercury in the bottom thereof, with a screw elevator in the pan for causing the continuous ascending motion of the contents of the pan at a point therein, and a tube enclosing the elevator, substantially as described. 22nd. The combination of a pan adapted for receiving pulverized ore and constructed to hold mercury in the bottom thereof, with a screw elevator in the pan for causing continuous ascending motion of the contents of the pan, a tube enclosing the elevator, and means for adjusting the size of the opening through which the tube communicates at the bottom with the interior of the pan, substantially as described. 23rd. The combination of a pan adapted for receiving pulverized ore and constructed to hold mercury in the bottom thereof, with an elevator in the pan for causing continuous ascending motion of the contents of the pan at a point therein, and a tap or taps for drawing off tailings from the pan, substantially as described. 24th. The combination with a pan, of a receptacle for mercury mounted near its top, a perforated arm extending therefrom, and means for rotating the receptacle, substantially as described.

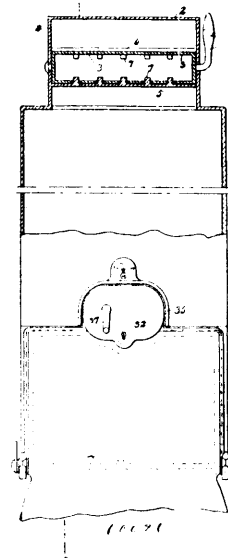
**No. 60,025. Process of Enamelling Sheet-Metal Ware.** (*Procédé pour émailler la fonte en feuille.*)

The McClary Manufacturing Co., assignee of Frank Pohn, all of London, Ontario, Canada, 16th May, 1898; 6 years. (Filed 17th February, 1896.)

*Claim.*—1st. In the process of enamelling sheet metal ware, the application to a coating of enamel, after it has been dried, of a solution of nickel salts, carbonate of soda and water, substantially as and for the purpose set forth. 2nd. In the process of enamelling sheet metal ware, the application to the second or subsequent coating of enamel after it has been dried, of a solution of nickel salts, carbonate of soda and water, substantially as and for the purpose set forth. 3rd. The process of enamelling sheet metal ware, consisting of first applying to said articles a ground or foundation coat of enamel, and burning it in, then applying to said articles a second

coating of enamel and drying the same, then applying to said second coating of enamel, after it has been dried, of a solution of nickel salts, carbonate of soda and water, then burning in said second coating of enamel, substantially as and for the purpose set forth. 4th. The process of enamelling sheet metal ware, consisting of first applying to said articles a ground or foundation coat of enamel, and burning it in, then applying to said articles a second coating of enamel and drying the same, then applying to said second coating of enamel, after it has been dried, of a solution of nickel salts, carbonate of soda and water, then burning in said second coating of enamel, then applying to said articles, a transparent coating of enamel, substantially as and for the purpose set forth.

**No. 60,026. Post Depositing and Collecting Receptacles and Locking and Releasing Mechanism Therefor.** (*Boîte pour la malle.*)



The Di Brazza Postal Device and Lock Co., assignee of Detalmo di Brazza Savorgnan, all of Rome, Italy, 16th May, 1898; 6 years. (Filed 8th January, 1898.)

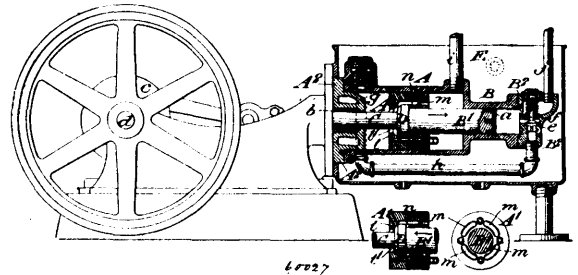
*Claim.*—1st. A depositing receptacle for mail matter, comprising a box having a cylindrical portion at its upper end, the said cylindrical portion having an outward opening, a chute mounted to rotate in said cylindrical portion, the said chute being open at its sides, and a curved plate carried by the chute to close an opening, substantially as specified. 2nd. A depositing receptacle for mail matter, comprising a box having a cylindrical portion at its upper end, an open-sided chute mounted to rotate in said cylindrical portion, an inwardly-extended flange in the said cylindrical portion with which the lower side of said chute is designed to engage, an inwardly-extended flange in said cylindrical portion with which the upper side of said chute is designed to engage, and a curved plate on the chute movable through a slot in the top wall of the box, substantially as specified. 3rd. A depositing receptacle for mail matter, comprising a box having a cylindrical portion at its upper end provided with an outward opening, an open-sided chute mounted to rotate in said cylindrical portion and against which the front under side of the chute is designed to rest, and a series of transverse ribs on said flange adapted to pass through slot openings in the wall of the chute and to project into said chute, substantially as specified. 4th. A depositing receptacle for mail matter comprising a box having a cylindrical portion at its upper end provided with an outward opening, an open-sided chute mounted to rotate in said cylindrical portion, a hand piece for rotating said chute a flange extended inward within said cylindrical portion, and upon which the lower side of the chute is designed to engage, transverse ribs on said flange designed to pass through slot openings in the lower wall of the chute, another inwardly-extended flange in said cylindrical portion, transverse ribs thereon adapted to pass through slot openings in the upper wall of the chute, and a rib on the lower wall of the chute adapted to move against the inner edge of the first named flange, substantially as specified. 5th. A depositing receptacle for mail matter, comprising a box having a cylindrical portion at its upper end provided with an outward opening, an open-sided chute mounted to rotate in said cylindrical portion, means for supporting said chute at a normally horizontal position, and a transversely curved plate on said chute, movable through a slot opening in the upper side of the box and adapted to close the outward opening of the cylindrical portion, substantially as specified. 6th. A depositing receptacle for mail matter, comprising a box, a wall portion thereof being adapted to be moved relatively to the box, a re-

ceiving receptacle having hinged jaw frames adapted for connection with said box, a shaft on which the jaw frames are hinged, a hand piece on the shaft, a lock mechanism on the box, and a lock mechanism on the receiving receptacle adapted for co-action with the lock section on the box, substantially as specified. 7th. A mail collecting device, comprising a depositing receptacle having a bottom wall adapted to open a collecting receptacle having hinged jaw portions, a lock section on the depositing box for locking the bottom closure thereof, a lock section on the receiving receptacle, for locking the jaws thereof, the said two locking sections being adapted to co-act one with the other, and means consisting of a rotary shaft carrying the jaws for simultaneously opening the bottom closure of the depositing receptacle and the jaws of the receiving receptacle after operating the locking mechanism, substantially as specified. 8th. A lock, comprising two separable casings, rotary parts in each casing comprising ring shaped flanges, the rotary parts in one casing being dependent on the rotary parts in the other casing, differentiating gear wheels for operating the several rotary parts at different rates of speed, and locking devices operated by the rotary parts in each casing substantially as specified. 9th. A lock comprising two separable casings, rotary parts in each casing, the rotary parts in one casing being dependent on the rotary parts in the other casing, differentiating gear wheels carried by the rotary parts for operating said rotary parts at different rates of speed one relatively to another, rotary cams and swinging levers for locking the rotary parts should one rotary part be moved independently, and locking devices operated by the rotary parts in each casing, substantially as specified. 10th. A lock, comprising two separable casings, rotary parts in each casing, the rotary parts in one casing being dependent for operation on the rotary parts in the other casing, means for operating the rotary parts together at different rates of speed, cams carried by certain of said rotary parts, swinging tumbler levers adapted to engage with opposite cams, and locking plates operated by said rotary parts, substantially as specified. 11th. A lock, comprising two separable casings, rotary parts in each of said casings, the rotary parts in one casing being dependent for operation upon the rotary parts in the other casing, means for operating said rotary parts together at different rates of speed, locking plates movable by said rotary parts, a consecutively numbered ratchet wheel, a spring-pressed dog carried by one of the locking plates and adapted to impart a step-by-step motion to said ratchet wheel, and means for automatically locking said ratchet wheel after it shall have made a complete rotation, substantially as specified. 12th. A lock comprising two sections consisting of rotary parts, the rotary parts of one section being dependent for operation upon the rotary parts of the other section, means for operating the several rotary parts together and at different rates of speed, locking plates operated by the rotary parts, a toothed wheel having a series of figures on its outer side, a dog carried by one of said locking plates and adapted for engagement with a tooth of said wheel, a pawl for holding said wheel from backward rotation, a notched disc carried by said wheel, and a pivoted angle lever adapted for engagement with said notch upon a complete rotation of the wheel, substantially as specified. 13th. A lock, comprising two separable casings, rotary parts in each of said casings, the rotary parts in one casing being dependent for operation upon the rotary parts in the other casing, means for operating said rotary parts together, locking plates operated by said rotary parts, a disc mounted to rotate in one of the casings and having on outwardly extended pin near its periphery, a ratchet wheel on the shaft of said disc, means carried by one of the locking plates, for imparting a step-by-step motion to said ratchet wheel, and a locking device for said ratchet wheel operated in one direction by a movement of the locking plate, substantially as specified. 14th. A lock, comprising two separable sections, rotary parts in each of said sections, the rotary parts of one section being provided with projections to engage in openings in the rotary parts in the other section, and means operated by one of the rotary parts for locking said sections together, substantially as specified. 15th. A lock, comprising two casings, rotary parts in each of said casings, the operation of the rotary parts in one casing being dependent upon the operation of the rotary parts in the other casing, locking plates operated by the rotary parts in each casing, a lever pivoted in one of the casings, an arm extended therefrom and adapted to engage with a portion of the other casing, and a disc on one of the rotary parts for controlling the movements of said lever and locking arm, substantially as specified. 16th. A depositing receptacle for mail matter, comprising a casing, a swinging bottom closure therefor, a link connected to said bottom closure, a lock section on said receptacle having locking plates for engagement with said link, a collecting receptacle adapted for engagement with the depositing receptacle, a lock section on said collecting receptacle, locking plates for securing together the jaws of said collecting receptacle, and means for simultaneously operating the two locking devices, substantially as specified. 17th. A lock, comprising two casings, rotary parts in each casing, the said rotary parts of each casing being mounted to rotate one upon another, and the rotary parts in one section being dependent for operation upon the rotary parts in the other casing by an interlocking engagement of the parts in one casing with those of the other, substantially as specified. 18th. A locking device, comprising two separable casings or sections, rotary movable parts in each of said casings or sections, said movable parts being movable only when the two casings or sections are in connection, the rotary parts of a section having intermediate gear wheels, and locking

plates or devices movable only when the two sections or casings are in connection, substantially as specified. 19th. A depositing receptacle for letters or the like, having a door-closed opening and a door therefor consisting of one portion having a swinging connection with the receptacle, another section having a swinging connection with the first named section, a receiving receptacle having jaws and means for connecting one of said jaws for movement with the door of the depositing receptacle, substantially as specified. 20th. A depositing receptacle for letters or the like, having a door-closed opening and a door therefor consisting of one portion having a swinging connection with the receptacle another section having a swinging connection with the first named section, a receiving receptacle having jaws, means for connecting one of said jaws for movement with the door of the depositing receptacle, and side walls or leaves depending from the depositing receptacle to prevent access to either of the receptacles when open, substantially as specified. 21st. A series of depositing receptacles, a receiving receptacle adapted for engagement with each one of the series of depositing receptacles, locking devices on the receptacles, a movable part on the receiving receptacle and operated by the locking mechanism thereof, and means for providing a pin and slot engagement between the movable part and the depositing receptacle, substantially as specified. 22nd. A mail box, having a central partition forming two compartments, side pieces extended upward from the box, a curved plate connecting the side pieces at the top, segmental flanges at the tops of the compartments, the space between the flanges providing communication with the compartments, a chute open at both its sides, and curved plates on the lower side of said chute, both adapted to close the communicating openings of both compartments, substantially as specified. 23rd. A small bag having a top frame consisting of hinged sections adapted to fold together in parallelism, and a lock having a swinging connection with one of the sections and adapted to engage with the other sections, substantially as specified.

**No. 60,027. Compressor for Air, etc.**

(Compresseur pour l'air, etc.)



The Ingersoll-Sergeant Drill Company, New York City, assignee of Henry Clark Sergeant, Westfield, New Jersey, all in the U.S.A., 16th May, 1898; 6 years. (Filed 21st April, 1898.)

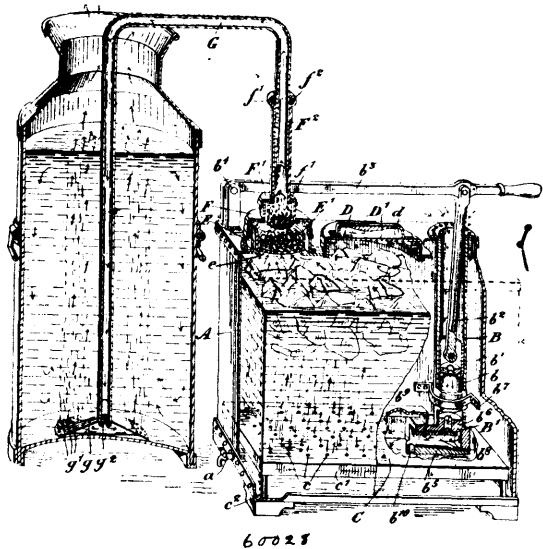
*Claim.*—1st. In a compressor, the combination with two compression cylinders and corresponding pistons of unequal calibre arranged in line, of a valve affixed to the smaller piston for opening and closing passages through the larger one by a limited movement of the smaller one relatively to the larger one, substantially as herein described. 2nd. In a compound compressor, the combination with two compression cylinders of unequal calibre arranged in line with each other, of two pistons on one rod fitted to said cylinders, respectively, the piston of smaller calibre being affixed to the said rod, and the piston of larger calibre having passages through it and containing a valve seat and being so attached to the smaller piston as to permit an independent movement of the one relatively to the other, a valve affixed to said rod and smaller piston and adapted to said valve seat for opening and closing the passages through the larger piston by the movement of the smaller one, substantially as herein described. 3rd. The combination with a low pressure piston having passages through it and containing a valve seat and a stop facing said seat, of the high pressure piston passing freely through said low pressure piston and having affixed to it a valve located between said seat and stop and serving to open and close said passages and also to transmit motion from the high pressure piston in opposite directions to the low pressure piston, substantially as herein described.

**No. 60,028. Apparatus for Aerating and Cooling Liquids.** (Appareil pour aérer et rafraichir les liquides.)

John McMurrie, Montreal, Quebec, Canada, 16th May, 1898; 6 years. (Filed 9th February, 1898.)

*Claim.*—1st. The method of aerating and cooling liquid by passing through it air which is previously passed through a cooling and purifying liquid. 2nd. An apparatus of the class described, comprising an air-confining tank partially filled with cooling liquid, an air duct leading from the upper part of such tank and adapted to open out beneath the surface of the liquid to be aerated and cooled,

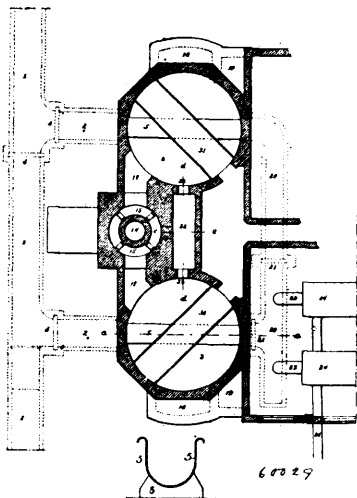
and means for causing air to pass through such liquid, as and for the purpose specified. 3rd. An apparatus of the class described,



comprising an air-confining tank partially filled with cooling liquid, an air duct leading therefrom adapted to open out beneath the surface of liquid to be aerated and cooled, sandstone or other suitable moisture condensing material interposed in the pass of the cooled air, and means for causing air to pass through such liquid and drying material, as and for the purpose specified. 4th. In an apparatus of the class described, the combination of the tank A partially filled with cooling liquid, the air pump B, the air distributing diaphragm C, the air duct G adapted to open out beneath the liquid designed to be aerated and cooled, all substantially as specified. 5th. In an apparatus of the class described, the combination with an air confining tank partially filled with cooling liquid, of the chamber E opening out from the upper part thereof, the pan E' having a perforated bottom and adapted to contain broken sandstone or other suitable moisture-congealing material, the superimposed sponge or other fibrous material, the air duct C leading therefrom and adapted to open out beneath the surface of the liquid designed to be aerated and cooled, and means for causing air to pass through, as and for the purpose specified. 6th. In an apparatus for aerating liquid, an air duct adapted to open out beneath the surface of liquor designed to be aerated and having at its lower extremity an air-valve and a downwardly extending mouthpiece closed horizontally to a lower level than the valve, and means for causing air to flow through, as and for the purpose specified.

**No. 60,029. Purification System.**

(*Système de purification.*)



John Jerome Deery, Philadelphia, Pennsylvania, U.S.A., 16th June, 1898; 6 years. (Filed 28th February, 1898.)

*Claim.*—1st. A purification system, comprising a main receiving station, receptacles for the matter to be treated, devices for separating the matter held in suspension and solid matters from the

liquid, and for aerating said liquid, a filtering station in communication with the receiving station, and beds of filtering material for passage of said liquid and for providing for the aeration of said liquids. 2nd. A purification system, comprising a main receiving station, receptacles for the matter to be treated, devices for separating the matter held in suspension and solid matters from the liquid, and for aerating said liquid, a filtering station in communication with the receiving station, and oxygenizing beds of filtering material for the habitation and cultivation of healthy active bacilli or micro-organisms, so that they may properly destroy or remove all organic matters and disease germs or microbes from the liquid which is in contact, thereby producing a chemical and bacteriological purification. 3rd. That improvement in the art or process of purifying liquids, which consists in first aerating and oxygenizing and then filtering said liquid. 4th. The herein described process of purifying liquids, said process consisting in, first, aerating said liquids; second, filtering the same; third, again aerating said liquids and subjecting them to a second filtration. 5th. In combination with a filtering bed, a distributor, comprising a vessel having its edges arranged above said filter bed, the liquid to be filtered pouring down over the sides of the distributor in a thin, even, regular stream, and being oxygenized in its passage. 6th. In a filtration plant, an elevated filter bed, a second lower filter bed, there being between the two beds an open air space through which the liquid must fall in passing from the upper to the lower filter. 7th. A double filter bed, comprising two bodies of filtering material arranged one above the other in such manner as to form an intervening air space. 8th. In combination, a filter bed, a pipe leading thereto, and a series of open-top troughs extending over and above the filtering bed to provide for the even and regular distribution of the liquid to be filtered. 9th. The combination, in an enclosed structure, of the reservoir, a screening floor therein, a supply pipe or sewer leading to said reservoirs at a point above the level of the screening floor, and a distributor in communication with said pipe or sewer and forming a sedimentation trough for the collection of the heavier solid matters in the sewage. 10th. The combination of the reservoir, a screening floor therein, a pipe or sewer leading to the reservoir and communicating therewith at a point above the screening floor, a liquid distributor comprising an open top receptacle in communication with and adapted to receive the sewage, said distributor having curved top edges over which the liquid portion of the sewage may flow to the screening floor, substantially as specified. 11th. The combination of the reservoir, a series of supporting girders therein, a screening floor carried by said girders, a fresh air duct and an air vent formed in the walls of the reservoir for inducing the flow of a current of the air through and across the reservoir in the path of the falling sewage. 12th. The combination of a receiving reservoir, a screening floor therein, a liquid supply pipe communicating with the reservoir at a point above the screening floor and a distributing trough in communication with the liquid pipe, substantially as specified. 13th. The combination of the reservoir, a screening floor therein, a liquid supply pipe communicating with the reservoir at a point above the screening floor, a distributor in communication with the liquid supply, fresh air ducts provided at points above and below the screening floor, and foul air vents provided at points above and below the screening floor for introducing the flow of currents of air through and across the reservoir and through the screening floor, substantially as specified. 14th. The combination of the reservoir a series of cross girders therein, and a screening floor supported upon said girders, said screening floor comprising upper and lower gratings and an intermediate layer of filtering material between said gratings, a distributor about the screening floor, and a liquid supply pipe in communication with said distributor above the screening floor, and a liquid supply pipe in communication with said distributor, substantially as specified. 15th. The combination in an enclosed structure, of the reservoir, a skylight for admitting the rays for purification purposes, a screening floor formed of upper and lower gratings, and an intermediate layer of filtering material provided in said reservoir, a liquid supply in communication with the reservoir at a point above the screening floor, a distributor adapted to receive the liquid and to discharge the same in an even and regular manner on the screening floor, fresh and foul air ducts formed in the walls of the reservoir at points above and below the screening floor, for the induction of currents of fresh air, substantially as specified. 16th. The combination of the reservoir, a grating supported therein, a filtering material supported by said grating, a removable screen or cover on said filtering material, and adapted to receive the liquid to be filtered. 17th. The combination of the reservoir, a grating supported therein, a filtering material provided upon said grating, a sectional screening floor 10, covering said filtering material, and an open top distributor provided above said sectional screen for the purpose of receiving and distributing the liquid to be filtered, substantially as specified. 18th. The herein described process which consists in passing a body of liquid to be purified through a mass of coke or other material, permitting such coke, or material to absorb and retard the passage of grease or oily matters in the liquid, removing said coke or material and subjecting the same to the action of heat for the purpose of extracting the grease from the coke, substantially as specified. 19th. The combination in an oven for the treatment of coke or similar material, of a receiving basket formed of a series of steam pipes in which the coke is placed, a wire netting

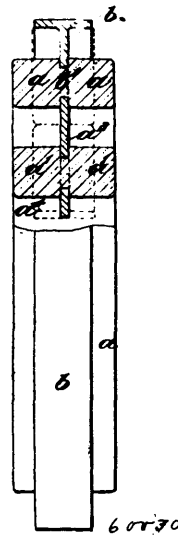
or grating forming a false bottom in said oven for the retention of the coke, and to permit the passage of and the accumulation of the extracted grease from the bottom of the oven. 20th. The combination in a grease oven, of the outer walls having supply and discharge doors, a false bottom formed of wire netting or grating, and steam pipes provided within said oven to supply the heat necessary for the extraction of the grease from the material being treated, substantially as specified. 21st. The combination in a grease oven of the outer walls having supply and discharge doors, a foul air vent, a screening floor forming a false bottom for the support of the material under treatment, a series of steam pipes provided within the oven for the supply of the heat necessary for the extraction of the grease, and a cock or tap at the bottom of the oven for withdrawal of the extracted grease, substantially as specified. 22nd. The combination with a filter bed elevated above the surface of the ground, of a supply pipe and a series of distributing troughs leading from said supply pipe and extending over the surface of the filter bed for the even regular distribution to such bed of the liquid to be purified. 23rd. In combination a filter bed elevated above the surface of the ground, a liquid supply pipe provided above the filter bed, a series of troughs each having an open top and a closed end in communication with said supply pipe, said troughs being placed at equi-distant intervals above the surface of the filter bed and adapted to distribute in an even and regular manner to such filter bed the liquid to be filtered. 24th. A distributor for a filtering bed, comprising a supply pipe having an open end normally closed by a removable cap or cover, and a series of equi-distant distributing troughs carried by and in communication with said distributing pipe, each of said troughs having an open top and a closed end. 25th. The combination in an elevated bed, of the supporting girders, a series of parallel pipes or supports carried by said girders, and forming a lower support for the filtering medium, a filtering medium carried by said supports and upper screening floor situated on top of the filtering medium, and a liquid supply above the screening floor, substantially as specified. 26th. In a filtering system, the combination with a liquid supply pipe, of a series of separate beds of filtering material, a series of pipes extending from the main supply pipe over such separate beds of filtering material, and valves on said pipes for governing the flow of liquid to each separate bed of filtering material, substantially as specified. 27th. In a filter, the combination of a series of open pipes, having foraminous tops arranged to form a drainage system, air outlets provided at the highest point of said pipes and a bed of filtering material provided above said pipes, substantially as specified. 28th. In a filter, a series of drainage pipes inclined from the centre of the filter bed to the discharge end, vertical vent pipes provided at the highest points of said drainage pipes, and a bed of filtering material provided above said drainage pipes, substantially as specified. 29th. A purification system comprising a main receiving station, a reservoir, a screening floor therein, a distributor arranged above the screening floor and adapted to receive and distribute the matter to be treated, a filtering plant in communication with said receiving station, with upper and lower filter beds having an intervening air space, and distributing trough arranged above the upper filter bed and adapted to distribute the liquid in an even and regular manner. 30th. The combination of the receiving reservoir, a screening floor therein, a distributor in combination with the supply pipe or sewer, a lower screening bed having effluent drains, an elevated screening floor arranged above the lower filter bed, a distributor, and the reservoir.

**No. 60,030. Buffer Spring. (Tampon à ressort.)**

Alfred George Spencer, London, Middlesex, England, 16th May, 1898; 6 years. (Filed 3rd May, 1898.)

*Claim.*—1st. A buffer or other spring, comprising two or more india rubber rings eccentrically arranged one within the other a short distance apart and moulded into them, a metal plate or ring formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at a suitable distance apart, for the purpose specified. 2nd. A buffer or other spring, comprising two or more india rubber rings eccentrically arranged one within the other a short distance apart and moulded into them, a metal plate or ring that extends radially beyond the respective india rubber rings and is formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at a suitable distance apart, for the purpose specified. 3rd. A buffer or other spring, comprising two or more india rubber rings concentrically arranged one within the other a short distance apart and moulded into them, a metal cup, plate or ring that extends radially beyond the inner and outer surfaces of the respective india rubber rings and is formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at a suitable distance apart, for the purpose specified. 4th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged one within the other a short distance apart and moulded into them, a metal nozzle plate or ring formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at a suitable distance apart, for the purpose specified. 5th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged

one within the other a short distance apart and moulded into them, a double flanged metal cup and nozzle plate or ring that extends



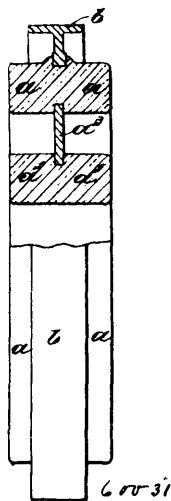
radially beyond the inner and outer surface of the respective india rubber rings and is formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at suitable distance apart, for the purpose specified. 6th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged one within the other a short distance apart and moulded into them, a couple of doubly flanged cup and nozzle plates or rings having between them a layer of india rubber integral with the concentric rings and each of which extends radially beyond the inner and outer surfaces of the respective india rubber rings and is formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at a suitable distance apart, for the purpose specified. 7th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged one within the other a short distance apart and moulded into them, one or more cupped metal plates or rings formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at a suitable distance apart, and dividing plates with interposed india rubber washers arranged at the ends of the india rubber rings, substantially as described. 8th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged one within the other a short distance apart and moulded into them, a couple of doubly flanged cup and nozzle plates or rings having between them a layer of india rubber integral with the concentric rings and having moulded in it perforated supporting plates, each of said cup and nozzle and supporting plates extending radially beyond the inner and outer surfaces of the respective india rubber rings and being formed with perforations through which portions of the india rubber rings extend, the said metal plate serving to connect and maintain the india rubber rings at a suitable distance apart, for the purpose specified.

**No. 60,031. Buffer Spring. (Tampon à ressort.)**

Alfred George Spencer, London, Middlesex, England, 16th May, 1898; 6 years. (Filed 3rd May, 1898.)

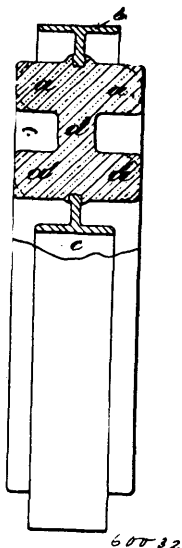
*Claim.*—1st. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, and, between the two or each two such rings an interposed ring of metal extending a short distance into and moulded into each of such two india rubber rings so as to form between them a connecting annulus whereby the india rubber rings are maintained a short distance apart in such a manner as to afford space between the two, or each two of them sufficient to prevent (when the spring is in compression) the outer or lateral portions of the india rubber rings exerting undue pressure against one another, as set forth. 2nd. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, and, between the two or each two such rings two or each two such rings two or more interposed rings of metal having between each two a layer of india rubber, said rings of metal extending a short distance into and moulded into each of such two india rubber rings so as to form between them a connecting annulus as set forth. 3rd. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, and, between the two or each two such rings an interposed ring or rings of metal extending a short distance into and moulded into each of such two india rubber rings so as to form

between them a connecting annulus or annuli and one or more confining or cup rings, as set forth. 4th. A buffer or other spring



comprising two or more india rubber rings concentrically arranged, one within the other, and, between the two or each two such rings an interposed ring or rings of metal extending a short distance into and moulded into each of such two india rubber rings so as to form between them a connecting annulus or annuli and one or more nozzle rings, as set forth. 5th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, and, between the two or each two such rings an interposed ring or rings of metal extending a short distance into and moulded into each of such two india rubber rings so as to form between them a connecting annulus or annuli one or more confining rings, and one or more nozzle rings, as set forth. 6th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, and, between the two or each two such rings an interposed ring or rings of metal extending a short distance into and moulded into each of such two india rubber rings so as to form between them a connecting annulus or annuli confining rings some of which are cupped, and nozzle rings, some of which may be cupped, and a layer of india rubber arranged between each two interposed rings so as to serve as a supplementary spring, as set forth.

**No. 60,032. Buffer Spring. (Tampon à ressort.)**

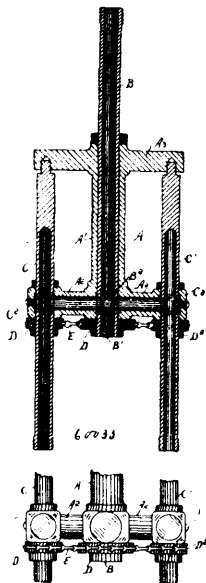


Alfred George Spencer, London, Middlesex, England, 16th May, 1898; 6 years. (Filed 3rd May, 1898.)

*Claim.*—1st. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other a

short distance apart and integral therewith, an annulus of india rubber between the two or each two india rubber rings, the arrangement being such as to afford space between the said two, or each two rings sufficient to prevent, when the spring is in compression, their outer or lateral portions exerting undue pressure against one another, as set forth. 2nd. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart, and integral therewith, an annulus of india rubber between the two or each two india rubber rings, and a confining ring or rings, as set forth. 3rd. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and integral therewith, an annulus of india rubber between the two or each two india rubber rings, and a nozzle ring or rings, as set forth. 4th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart, and integral therewith, an annulus of india rubber between the two or each two rubber rings, a confining ring or rings and a nozzle ring or rings, as set forth. 5th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and integral therewith, an annulus of india rubber between the two or each two rubber rings, a confining ring and a couple of nozzle rings having between them a layer of india, as set forth. 6th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and integral therewith, an annulus of india rubber between the two or each two india rubber rings, said india rubber rings being located between end cup plates, as set forth. 7th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and integral therewith, an annulus of india rubber between the two or each two india rubber rings, said india rubber rings being located between end cup plates having holes therein into which portions of the outer ends of the india rubber rings extend, as set forth. 8th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and integral therewith, an annulus of india rubber between the two or each two india rubber rings, said india rubber rings being located between end cup plates between each of which and another plate outside of it is placed an india rubber washer, as set forth. 9th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and integral therewith, an annulus of india rubber between the two of each rubber rings, and confining ring or rings, said india rubber rings being located between end cup plates as set forth. 10th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and, integral therewith, an annulus of india rubber between the two or each two india rubber rings and a confining ring, said india rubber rings being located between end cup plates between each of which and another plate outside of it is placed an india rubber washer, as set forth. 11th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and, integral therewith, annulus of india rubber between the two or each two india rubber rings and a compound confining ring consisting of two cup rings arranged back to back with an interposed india rubber spring between them, as set forth. 12th. A buffer or other spring, comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and, integral therewith, an annulus of india rubber between the two or each two india rubber rings, and a compound confining ring consisting of two cup rings arranged back to back with an interposed india rubber spring between them, said interposed india rubber spring having intermediate metal rings therein as set forth. 13th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and, integral therewith, an annulus of india rubber between the two or each two india rubber rings, and a compound nozzle consisting of two flanged rings arranged back to back with an india rubber spring between them as set forth. 14th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and, integral therewith, an annulus of india rubber between the two or each two india rubber rings, a compound confining ring and a nozzle as set forth. 15th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and, integral therewith, an annulus of india rubber between the two or each two india rubber rings, a compound confining ring with intermediate plates, and a compound nozzle with intermediate plates, as set forth. 16th. A buffer or other spring comprising two or more india rubber rings concentrically arranged, one within the other, a short distance apart and, integral therewith, an annulus of india rubber between the two or each two india rubber rings, said india rubber body being formed with a central annular flange and having metal hoops moulded in it and metal hoops or rings surrounding or encircling it, as set forth.

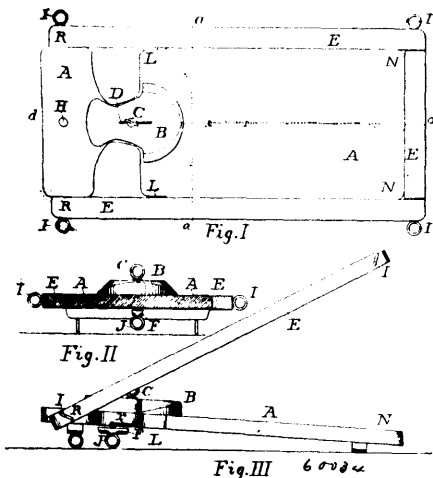
No. 60,033. Glassware Manufacture. (Fabrication de verrerie.)



John Marshall Humphreys, Trenton, Nova Scotia, Canada, 16th May, 1898; 6 years. (Filed 23rd March, 1898.)

Claim.—1st. An apparatus for the manufacture of glassware comprising a plurality of rotatable blow pipes for gathering and blowing the molten glass, a rotating air supply pipe and means for connecting the said blow pipes with the said air supply pipe and supplying the same with air and also a means for rotating the said blow pipes, substantially as shown and described. 2nd. An apparatus for the manufacture of glassware comprising a frame, a rotatable air supply pipe mounted to turn in the said frame a plurality of blow pipes journaled in the said frame and connected by hollow arms with the said supply pipe, so that air can pass from the latter to the blow pipes, and means for rotating the said blow pipes from the said air supply pipe, substantially as shown and described.

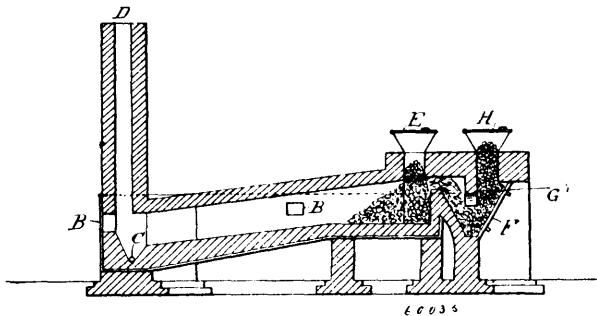
No. 60,034. Shirt Ironing Board. (Planche à repasser les chemises.)



William Helson, Stratford, Ontario, Canada, 16th May, 1898; 6 years. (Filed 7th April, 1898.)

Claim.—1st. A shirt bosom board having the general form and proportions of the board A, as represented in the drawings. 2nd. In connection with a shirt bosom board, a clamp for maintaining the bosom of the shirt smooth and tense during the operation of ironing, and constructed and arranged substantially similar to the clamp E. 3rd. In connection with a shirt bosom board, a retaining device similar to the catch or button F, for securing the ends of the neckband of the shirt at the back or under side of the board. 4th. In connection with a shirt bosom board, an adjustable neck block B, each substantially as described and shown and for the purposes described.

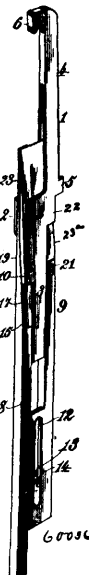
No. 60,035. Ore Treating Process and Furnace. (Procédé et fournaise pour le traitement des minerais.)



John Armstrong, Springfield Park, Acton, London, England, 16th May, 1898; 6 years. (Filed 21st April, 1897.)

Claim.—1st. The process of treating refractory sulphide ores or mattes containing zinc which consists in exposing them in a comminuted condition at a red heat to the action of nascent alkali metal, substantially as described. 2nd. The process of treating refractory sulphide ores or mattes which consists in heating them to a red heat with a mixture of carbon, an alkaline salt such as described and lime in about the proportions used to form alkali metal and tapping out the metal. 3rd. The cycle of operations in the metallurgy of refractory or complex sulphide ores or mattes containing zinc which consists in treating them at a red heat with carbonated alkali, carbon and a lime flux, tapping out the metal, separating the zinc, lixiviating the slag and converting the alkaline sulphide into alkaline carbonate for use in the first operation of the cycle. 4th. The process of treating refractory or complex sulphide ores or mattes containing zinc, which consists in heating the same to a red heat with soda, carbon and lime in a reducing flame till most of the metals separate, then separating the zinc from the slag, substantially as described. 5th. In the process of treating refractory or complex sulphide ores or mattes containing zinc and other metals, reducing the major part of the metals contained therein and treating the slag with metallic copper. 6th. In the process of treating refractory or complex sulphide ores or mattes containing zinc, first reducing the other metals and some of the zinc by means of carbon, an alkaline salt such as described and calcareous matter such as described at a red heat, then distilling off the zinc at a higher heat. 7th. The mode of separating zinc from slag containing the same which consists in treating the slag in a highly heated state with metallic copper. 8th. In a furnace for treating refractory or complex sulphide ores or mattes containing zinc, the combination of a carbonic oxide generating chamber, a furnace bed, a duct between them and an admission near this duct for the charge, whereby the charge is exposed only to a strong reducing flame, substantially as described.

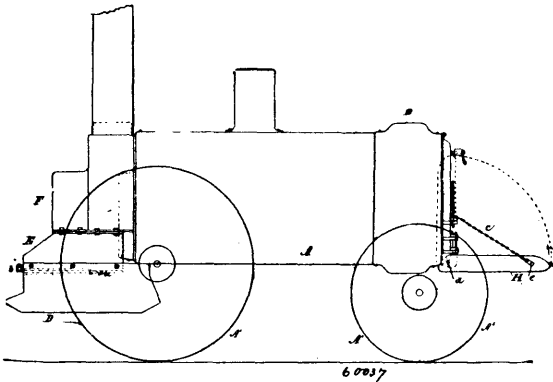
No. 60,036. Space Bars for Line Casting Machines. (Barre interligne pour machines à couler les lignes.)



Adam W. Hanigan, Baltimore, Maryland, U.S.A., and George Henry Yardley, Montreal, Quebec, Canada, 16th May, 1898; 6 years. (Filed 7th March, 1898.)

*Claim.*—1st. An expansible spacer, consisting of a body or main section having resilient cheek pieces, and two independent expander sections interposed between said cheek pieces, one expander section serving to secure the maximum expansion of the cheek pieces, and two independent expander sections interposed between said cheek pieces, one expander section serving to secure the maximum expansion of the cheek pieces after the initial expansion thereof is effected, substantially as described. 2nd. An expansible spacer, consisting of resilient cheek pieces, an expander section having triple tapering surfaces, two at one side and the third at the opposite side, and an auxiliary expander section having duplex opposing tapering surfaces, substantially as described. 3rd. An expansible spacer, consisting of resilient cheek pieces, an expander section having triple opposing tapering surfaces, two of different length, and an auxiliary expander section having duplex tapering surfaces running different distances opposite sides thereof, substantially as described. 4th. An expansible spacer, consisting of resilient cheek pieces, and two independently movable expander sections having tapering surfaces arranged side by side, one section being of less length than the other to obtain by its movement the initial expansion of the cheek pieces, the subsequent expansion being effected by the simultaneous motion of both expander sections, substantially as described. 5th. In a spacer for a line-casting machine, the combination with cheek pieces having tapered inner surfaces and parallel outer surfaces, and an expander section between the cheek pieces, of an auxiliary expander section having tapered portions arranged at one side of the other expander section and between the latter and one of the cheek pieces, said auxiliary expander section being of greater length than the other expander section, substantially as described.

**No. 60,037. Engine and Boiler. (Machine et chaudière.)**

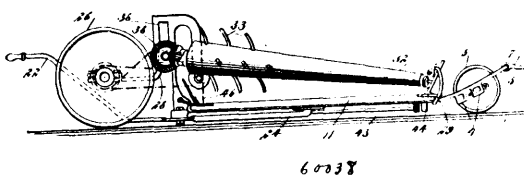


George Kirkland and Robert Christie, both of Hamilton, Ontario, Canada, 16th May, 1896; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. In a portable engine and boiler, the combination of the ordinary ash pan E, the supplementary cinder or ash quenching pan D, attached thereto, and the movable bottom or slide b, to open and close the opening between them, all constructed substantially as and for the purpose specified. 2nd. In combination with a portable engine and boiler, of a cinder quenching ash pan C, hinged to the boiler, and held in horizontal position to receive cinders from the combustion chamber, and capable of being folded up in a vertical position when not in use, substantially as and for the purpose specified. 3rd. In combination with a portable engine and boiler, a supplementary quenching water pan attached to the boiler in addition to the ordinary ash pan at one end and a quenching pan attached to the opposite end of the boiler, substantially as specified.

**No. 60,038. Potato Bug Destroyer.**

(Destructeur de mouches à patates)

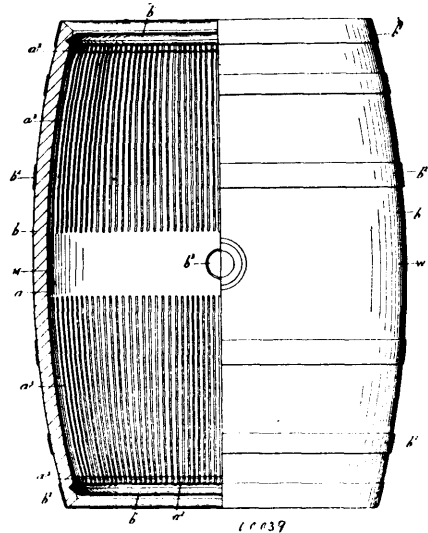


Christian Nelson and Henry F. S. Justeson, both of Port Arthur, Texas, U.S.A., 16th May, 1898; 6 years. (Filed 30th April, 1898.)

*Claim.*—1st. A machine for gathering and destroying bugs on vines, comprising a platform having laterally movable side sections, pivoted handles for moving said side sections, wheels upon which the platform is mounted, gathering rollers at the sides of the platform and above the same, and crushing rollers underneath the platform, substantially as specified. 2nd. A machine for gathering and

destroying bugs on vines, comprising a platform mounted on wheels, laterally movable sections on said platform, pivoted handles having connection with said movable sections for moving them in one direction, and springs for moving the sections in the other direction, substantially as specified. 3rd. A machine for gathering and destroying bugs on vines, comprising a platform having laterally sliding sections curved upward at the outer edge, means for moving said sections in both directions, longitudinally tapered gathering rollers at the sides of the platform, laterally extended arms at the front of the platform and having holes to receive the front trunnions of the gathering rollers and whereby the front ends of said rollers may be adjusted outward and inward, means for rotating said rollers, crushing rollers extended along a slot longitudinally formed in the platform, and means for rotating said crushing rollers, substantially as specified.

**No. 60,039. Metallic Barrel, (Baril métallique.)**



William Hockin, London, Ontario, Canada, 16th May, 1898; 6 years. (Filed 7th August, 1897.)

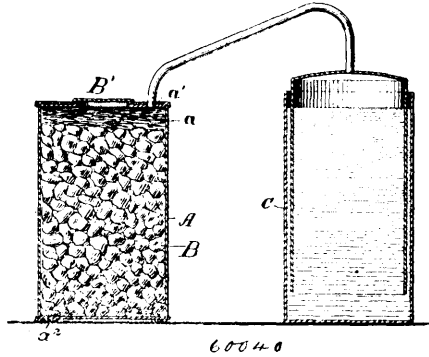
*Claim.*—1st. A metallic barrel M, in combination with a protecting wood cover or casing W, and means for clamping the latter closely against the former, substantially as and for the purpose set forth. 2nd. A metallic barrel M, in which the corrugations a<sup>1</sup> are formed, in combination with a protecting wood cover or casing W, and means for clamping the latter closely against the former, substantially as and for the purpose set forth. 3rd. A metallic barrel M, provided with a flange a<sup>2</sup>, in combination with a protecting wood cover or casing W, in which a groove or recess b<sup>3</sup> is formed to receive said flange a<sup>2</sup>, and means for clamping said wood cover or casing on said metallic barrel, substantially as and for the purpose set forth. 4th. A metallic barrel M, in combination with the protecting wood cover or casing W, the bushing B, and the collar C, substantially as and for the purpose set forth. 5th. A metallic barrel M, in which corrugations a<sup>1</sup> are formed and provided with a flange a<sup>2</sup>, in combination with the protecting wood cover or casing W, in which a groove or recess b<sup>3</sup> is formed and means for clamping said wood cover or casing on said barrel, substantially as and for the purpose set forth. 6th. The metallic barrel M, consisting of the corrugated or indented body a, the ends a<sup>1</sup>, and flanges a<sup>2</sup>, in combination with the protecting wood cover or casing W, consisting of the body b, ends b<sup>1</sup>, and the grooves or recesses b<sup>3</sup>, formed in the latter and the hoops b<sup>2</sup>, substantially as and for the purpose set forth.

**No. 60,040. Process of Preserving Carbides in Shipment. (Procédé pour la préservation des carbures dans le chargement.)**

Isaiah Lewis Roberts, New York, U.S.A., 16th May, 1898; 18 years. (Filed 2nd March, 1898.)

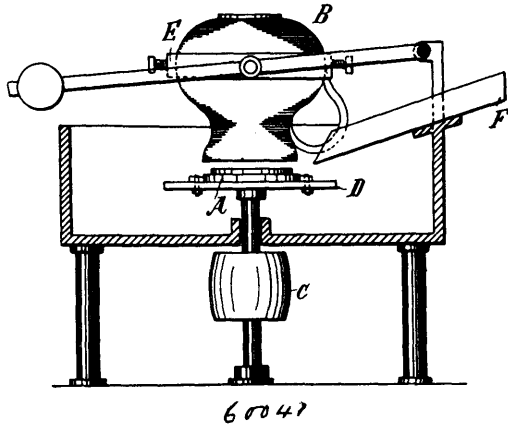
*Claim.*—1st. The process of preventing explosions in vessels containing materials capable of generating gas, explosive when mingled with air, and of generating a spark for firing such gas by friction among themselves, which consists in filling the interspace between the fragments of such material with a dehydrated dividing agent, which performs the double function of preventing the formation of the gas and of the holding the fragments firmly so as to prevent the formation of an exploding spark, substantially as described. 2nd. The process of preventing explosions in vessels containing carbides in shipment, which consists in filling the interstices between the fragments of carbide with a dehydrated dividing agent, and in charging the vessel with a gas which when combined with the acetylene generated from the carbide by any moisture in the vessel forms a non-explosive mixture, substantially as described. 3rd.

The process of preventing explosions in vessels containing materials capable of generating gas, explosive when mingled with



air, and of generating a spark for firing such gas by friction among themselves, which consists in filling the interspace between the fragments of such material with dehydrated wheat chaff, serving as a dividing agent, which performs the double function of preventing the formation of the gas and of holding the fragments firmly so as to prevent the formation of an exploding spark, substantially as described. 4th. The process of preventing explosion in vessels containing materials capable of generating gas, explosive when mingled with air, and of generating a spark for firing such gas by friction among themselves, which consists in filling the interspace between the fragments of such material with dehydrated wheat chaff serving as a dividing agent, which performs the double function of preventing the formation of the gas and of holding the fragments firmly so as to prevent the formation of an exploding spark, and then hermetically sealing the vessel, substantially as described. 5th. The process of preventing explosions in vessels containing carbides in shipment, which consists in surrounding the carbide in the vessel with dehydrated wheat chaff which serves as a dividing agent and prevents the spread of an explosion through the vessel, in then filling the interstices of the wheat chaff with a gas which does not form an explosive mixture when mingled with the acetylene in the vessel, and in finally hermetically sealing the vessel, substantially as described.

**No. 60,041. Closing Device for Porcelain Vessels, etc.**  
(Appareil de fermeture pour vaisseaux en porcelaine, etc.)



Joseph Fleigel Mallnitz, Prussia, 16th May, 1898; 6 years. (Filed 30th April, 1898.)

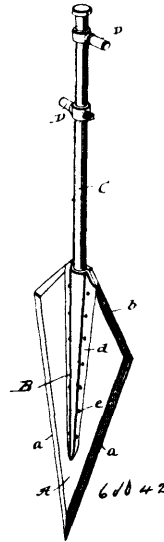
*Claim.*—An air-tight easily opened closing device for vessels made of porcelain, stoneware, earthenware or the like intended to contain liquids without the employment of a packing ring, the distinguishing figure of which is that the cover is ground on to the neck of the vessel, without any previous preparation, by means of suitable grinding apparatus, as herein described and set forth.

**No. 60,042. Hay Knife. (Couteau à foin.)**

James S. Telfer, Portage la Prairie, Manitoba, Canada, 16th May, 1898; 6 years. (Filed 2nd May, 1898.)

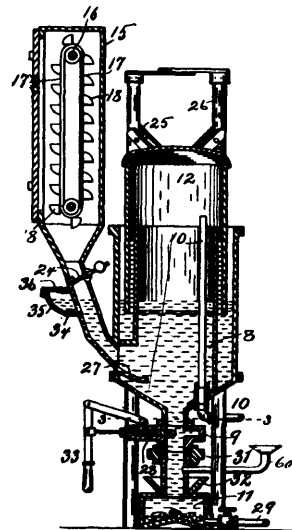
*Claim.*—1st. The herein described hay knife comprising the blade having the lower, sharpened cutting edges *a*, describing an acute angle, the apex of which is at the lowermost point of the blade, and the upper sharpened edges *b*, inclined downwardly from the longitudinal centre of the blade and merging into the edges *a*, and a handle connected to said blade, substantially as specified. 2nd. The herein described hay knife comprising the blade, the socket piece disposed

at one side of the blade and having the intermediate portion of curvilinear form in cross section tapered to a point at its lower end, and



flanges at either side of the curvilinear portion, said flanges being connected to the blade, and the handle having its lower portion placed in the socket and also having such lower portion bevelled and the bevelled side arranged contiguous to the blade whereby the handle is caused to stand at an angle to the blade, substantially as specified. 3rd. The herein described hay knife comprising the blade having the lower, sharpened cutting edges *a*, describing an acute angle, the apex of which is at the lowermost point of the blade, and the upper sharpened edges *b*, inclined downwardly from the longitudinal centre of the blade and the socket piece disposed at one side of the blade and having the intermediate portion of curvilinear form in cross section tapered to a point at its lower end, and flanges at either side of the curvilinear portion, said flanges being connected to the blade, the handle having its lower portion placed in the socket and also having such lower portion bevelled and the bevelled side arranged contiguous to the blade, and hand grasps adjustably connected to the handle and standing at right angles thereto, substantially as specified.

**No. 60,043. Acetylene Gas Generator. (Générateur de gaz acétylène.)**



David L. Baumgarten, Cincinnati, Ohio, U.S.A., 17th May, 1898; 6 years. (Filed 5th March, 1898.)

*Claim.*—1st. The combination of an acetylene gas generator consisting substantially of a vessel adapted to contain water, a gasometer



which receives the gas, a feed-device consisting of a series of buckets to contain the carbide, and means controlled by the movement of the gasometer which cause the feed device to supply the generator by dumping the contents of its buckets one at a time. 2nd. The combination of an acetylene gas generator consisting substantially of a vessel, adapted to contain water, a gasometer which receives the gas, a feed-device consisting of a series of buckets to contain carbide, a belt on which they are supported, guide pulleys for the belt and means controlled by the movement of the gasometer which cause the belt with the buckets to move intermittently for the purpose of supplying the generator by dumping the contents of its buckets one at a time. 3rd. The combination of an acetylene gas generator consisting substantially of a vessel adapted to contain water, a gasometer which receives the gas, a feed-device consisting of a series of buckets to contain carbide, a belt on which they are supported, guide pulleys for supporting the belt in an upright position, the buckets on one side of the belt only to contain the carbide, whereby the latter receives a normal tendency to move, and locking mechanism controlled by the movements of the gasometer whereby the movement of the belt is normally arrested. 4th. The combination of an acetylene gas generator consisting substantially of a vessel adapted to contain water, a gasometer which receives the gas, a feed-device consisting of a series of buckets to contain carbide, a belt on which they are supported, guide pulleys for supporting the belt in an upright position, the buckets on one side of the belt only to contain carbide, whereby the latter receives a normal tendency to move, a notched wheel 21 on one of the spindle of one of the guide-pulleys of the belt, a detent 22 to prevent it from rotating and a projection 23 on the gasometer adapted to disengage the detent from the locking-wheel, all as shown and described. 5th. The combination of an acetylene gas generator consisting substantially of a vessel adapted to contain water, a gasometer which receives the gas, a feed-device for supplying the generator at intervals with carbide, a chute 13 which connects the feed-device with the generator and a valve 24 within chute 13 adapted to be opened by weight of the entering carbide, but normally closing the chute to prevent the escape of gas and rising of moisture from the generator. 6th. The combination of an acetylene gas generator consisting substantially of a vessel adapted to contain water, a gasometer which receives the gas, a feed device for supplying the generator at intervals with carbide, a chute 13 which connects the feed-device with the generator and a deflector 27 at the lower end of the chute to prevent the rising gas from entering the latter. 7th. The combination of an acetylene gas generator consisting substantially of a vessel adapted to contain water, a gasometer which receives the gas, a feed-device for supplying the generator at intervals with carbide, a chute 13 which connects the feed-device with the generator and an opening 34 in chute 13 to admit water, a permanent funnel 34 formed around this opening and a lid for closing it. 8th. In an acetylene gas generator, the combination of a tank 8 forming the lower part of a gasometer, a box 11 below it, the two adapted to contain water, a contracted passage between them, means to supply carbide to box 11, and a valve whereby communication between it and tank 8 is prevented. 9th. In an acetylene gas generator, the combination of a tank to contain water, a receptacle below it to receive the carbide, the two normally in communication, and a cut-off device between them to permit the contents of the carbide receptacle to be drawn off without disturbing the parts above. 10th. In an acetylene gas generator, the combination of a gasometer, a water-containing receptacle below, a receiver for the carbide below the latter, a passage connecting it therewith, and a cut-off device therein for the purpose of interrupting communication between the two. 11th. In an acetylene gas generator, the combination of a gasometer, a water-containing receptacle below, a receiver for the carbide below the latter, a neck connecting it with the water-containing receptacle above, a cut-off valve in the former, said neck being in two parts, connected by a coupling, to permit separation of the neck and removal of the carbide receiver. 12th. In an acetylene gas generator, the carbide receiver 11, and provided with a discharge outlet. 13th. In an acetylene gas generator, the removably connected carbide receiver 11, and means whereby it may be attached and put in communication with the other parts. 14th. In an acetylene gas generator, the combination with a carbide receptacle or box and a generating tank, of a chute connecting the box and tank, a water supply funnel opening into the chute, and a valve in the chute normally closing the latter, and opened by the falling carbide from said box, as set forth. 15th. In an acetylene gas generator, the combination with a carbide receptacle and a generating tank, of a chute connecting the receptacle and tank, a water supply funnel in communication with the chute, a valve in the chute, above the said point of communication, and adapted to be operated by the falling carbide, and a lid or cover hinged to the funnel, as set forth. 16th. In an acetylene gas generator, provided with an automatic feed arranged to be governed or controlled by the supply of gas, a series of conveyors or a conveyor divided into a series of compartments, travelling on a horizontal track and moved forward by weight or any suitable means, in combination with an intermediate track carrying rollers pressing upward against the bottom of the conveyors, said track so arranged as to automatically release said bottoms and discharge the contents of the conveyor at a predetermined point, substantially as and for the purpose described. 17th. In an acetylene gas generator, provided with an automatic feeding device, a conveyor propelled on a horizontal track

by a weight or any constant force, in combination with a catch which holds said conveyor stationary but which releases said conveyor automatically when the supply of gas in the gasometer is diminished to a predetermined point, substantially as described. 18th. In an acetylene gas generator, a feeding device consisting of a horizontal track and a series of conveyors or a conveyor with a series of compartments, each compartment having an independent hinged bottom, in combination with means for moving forward said conveyor by a constant force when released from the catch automatically controlled, by the movements of the gasometer, substantially as and for the purpose described. 19th. In an acetylene gas generator, a feeding mechanism consisting of a series of conveyors moving on a horizontal track, provided with independent hinged bottom, said conveyors under a constant propelling force which moves them forward when automatically released by the movement of the gasometer, in combination with means for automatically releasing the bottom of a conveyor or compartment and discharging its contents when the compartment reaches a predetermined point, substantially as and in the manner described. 20th. In combination with an acetylene gas generator, an automatic feed consisting of a series of conveyors connected together and carrying the carbide of calcium, said conveyors moved forward by a pawl and ratchet controlled by the quantity of gas in the gasometer. 21st. In combination with an acetylene gas generator, an automatic feeding device consisting of a series of conveyors having hinged bottoms, said conveyors moved forward by a pawl and ratchet governed by the movements of the gasometer, in combination with a tripping mechanism arranged to release the bottom of each conveyor and discharge its contents when it reaches a predetermined point, substantially as shown and described. 22nd. In combination with an acetylene gas generator, an automatic feeding device consisting of a circular conveyor extending around or embracing the generator and moved forward by a pawl and ratchet controlled by the quantity of gas in the gasometer, in combination with a trip for automatically discharging the contents of each compartment of the conveyor when it has reached a predetermined point, substantially as and in the manner described. 23rd. In a feeding device for automatically supplying an acetylene gas generator, a movable conveyor propelled forward by a pawl and ratchet, in combination with a bell crank operating the pawl, said bell crank being governed by the supply of gas in the generator or gasometer, substantially as and for the purpose described. 24th. In an automatic feeding device, for an acetylene gas generator a series of compartments having hinged bottoms provided with pins or extensions to engage with a catch on a vertical spring plate when said bottoms are closed, substantially as shown and described. 25th. In an automatic feeding device for an acetylene gas generator, a series of compartments having hinged bottoms provided with pins or extensions to engage with a catch on a vertical spring plate when said bottoms are closed, in combination with a tripping mechanism for disengaging the spring, substantially as and for the purpose described. 26th. In an automatic feeding device for an acetylene gas generator, a series of conveyors provided with hinged bottoms having a pin or latch extending longitudinally across the bottoms and a sufficient distance beyond to engage with a spring catch when the bottom is closed, in combination with a spring extending transversely across the bottom between said bottom and the latch, substantially as shown and described. 27th. In an acetylene gas machine, an automatic feeding device connected with the gasometer consisting of a toothed shaft moving vertically and parallel with the gasometer meshing with a pinion which revolves a shaft carrying another pinion which meshes with the teeth on the feed conveyor and propels the same, substantially as and for the purpose described. 28th. In connection with an acetylene gas generator, an automatic feeding device consisting of a vertical movable shaft attached to and moving with the gasometer as the supply of gas increases or diminishes, said shaft provided with teeth which revolve a pinion loosely journalled on a shaft but provided with pawl and ratchet to revolve the shaft when moved in one direction only, said shaft carrying a separate pinion which meshes with the teeth on the conveyor, substantially as and for the purpose described. 29th. In connection with an acetylene gas generator, an automatic feeding device consisting of a vertical arm passing through a horizontal connection with the gasometer and adjustable by set screw, said arm provided with teeth engaging with a pinion, in combination with a second pinion on the same shaft arranged to move as it revolves a sliding carriage to which is attached a pivoted pawl, engaging with the teeth on the feed conveyor, substantially as and for the purpose described.

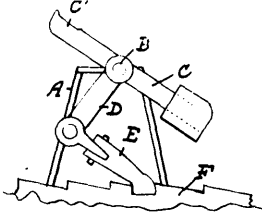
#### No. 60,044. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

David L. Baumgarten, Cincinnati, Ohio, U.S.A., 17th May, 1898; 6 years. (Filed 14th May, 1898.)

*Claim.*—1st. The combination of an acetylene gas generator and an exhaust pipe, consisting of the pipe K, provided with holes K1, and the pipe L sliding inside it, as shown and described. 2nd. In an acetylene gas generator, a condensation trap box N, connected with the service pipes M, an exhaust pipe L, and provided with an outlet O, as shown and described. 3rd. In an acetylene gas generator, the box S, provided with a hand-hole and a detachable plug adapted to admit water for flushing as shown and described. 4th. In an acetylene gas generator, an automatic feeding device consisting

in a weighted lever tacked to one end of a spindle, and a crank attached to the other end, and a pawl pivotally attached to the



60044

crank, and projecting pin adjustably attached to the gasometer, said pin actuating the lever and thereby the pawl which operates the ratchet of the feed carrier as described. 5th. In an acetylene gas generator, a ventilating pipe leading from the feed-hopper above the surface of the water, and beneath the trap valve as shown and described.

**No. 60,045. Aluminium Strengthening Process.**

(*Procédé pour renforcer l'aluminium.*)

Henry Griffith, Jr., Warstone Lane, Birmingham, England, and Victor Coppée, 6 Rue de Dequingand, Levallois-Perrett, and Arthur Edward Kemplen, 61 Rue de la Sabbière, Bécon-les-Bryères, France, 17th May, 1898; 6 years. (Filed 4th October, 1897.)

*Claim.*—1st. Means as set forth for strengthening aluminium, which consists in melting aluminium in a crucible in such manner that the flame will not come in contact with the aluminium, and then adding thereto a small quantity of powdered grey wolfram or ore of tungsten mixed with a little borax, the proportions of the wolfram to the aluminium varying substantially as specified. 2nd. An alloy consisting of aluminium fused with a small quantity of wolfram or ore of tungsten in the presence of borax, the proportions of the wolfram to the aluminium varying, substantially as specified.

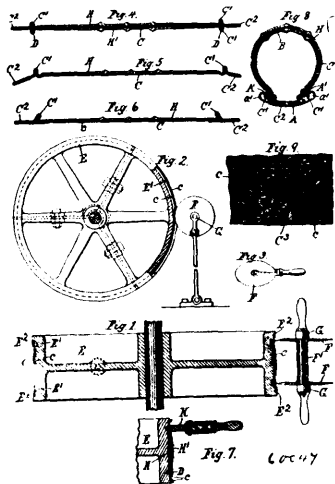
**No. 60,046. Aluminium Brazing Process.**

(*Procédé pour braser l'aluminium.*)

Henry Griffith, jr., Warstone Lane, Birmingham, England, and Victor Coppée, 6 Rue de Dequingand, Levallois-Perrett, and Arthur Edward Kempler, 61 Rue de la Sabbière, Bécon-les-Bryères, France, 17th May, 1898; 6 years. (Filed 4th October, 1897.)

*Claim.*—1st. Means as set forth for uniting pieces of aluminium which consists of a brazing alloy or solder, formed from fifty parts of zinc and ten parts of zinc tin or bismuth, the two metals being united by fusion and treated substantially as specified. 2nd. An electro-plated brazing alloy for aluminium which consists of a brazing alloy formed from fifty parts of zinc and ten parts of tin or bismuth, the metals being united by fusion, and then cast, rolled, electro-plated and hammered or compressed as set forth.

**No. 60,047. Pneumatic Tire. (Bandage pneumatique.)**



60047

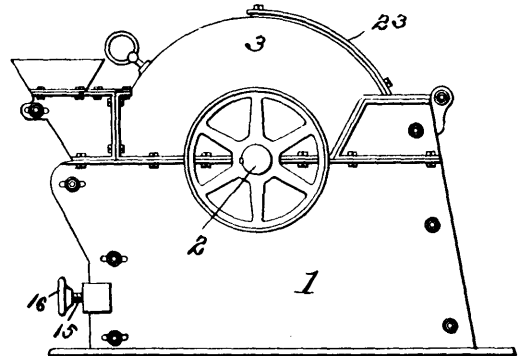
Thos. B. Jeffery, Chicago, Illinois, U.S.A., 17th May, 1898; 6 years. (Filed 29th January, 1894.)

*Claim.*—1st. A tire cover for inflatable tire, consisting of a band or short cylinder made of bias fabric provided with parallel heads or

ridges near its edges respectively. 2nd. A tire cover in the form of an endless band or short cylinder having near the lateral edges ribs or beads, and formed between such ribs or beads of fabric which is transversely extensible, whereby it is adapted to be folded in the form of a tubular annulus open at the inner circumference, substantially as set forth. 3rd. A tire cover having a plurality of layers of bias fabric, such fabric having the threads in one direction closely placed and those in the other direction sparse, adjacent layers of such fabric being cut or placed opposite ways of the bias of the fabric, substantially as set forth. 4th. A tire cover in the form of an endless belt or short cylinder made of a plurality of layers of bias fabric with a layer of rubber or like material interposed between them, substantially as set forth. 5th. Forming a tire cover by creasing near the lateral edges an endless band of rubber-saturated bias fabric, and vulcanizing the same to render permanent the beads produced by the creasing, substantially as set forth. 6th. Forming a tire cover by creasing near the lateral edges an endless band of fabric and applying adhesive strips across the crease to render permanent the beads or ridges formed by such creasing, substantially as set forth. 7th. Forming a tire cover by winding strips of rubber-saturated bias fabric upon a drum or pulley provided with peripheral grooves, and creasing the fabric into the grooves and vulcanizing the same before removal from the wheel or drum

**No. 60,048. Pulverizing Machine.**

(*Machine à Pulvériser.*)



60048

Milton Franklin Williams, St. Louis, Missouri, U.S.A., 17th May, 1898; 6 years. (Filed 18th September, 1897.)

*Claim.*—1st. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of a radially adjustable grinding surface co-operating with said hammers, and means for adjusting said grinding surface toward or from the axis of rotation of said hammers, substantially as described. 2nd. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of a sectional grinding surface formed with eccentrically disposed runners on each section, said surface co-operating with said hammers, and means for adjusting said sections relative to the striking points of said hammers, substantially as described. 3rd. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of a grinding surface for co-operating with said hammers, and a spring bearing against the rear under side of the grinding surface for holding the grinding surface against the action of the hammers, substantially as described. 4th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, and the means for adjusting the striking points of said hammers, of a dead-plate upon which the material is primarily crushed by the hammers, a concentrically disposed grinding surface formed a continuation of said dead-plate, and means for adjusting said dead-plate to compensate for wear, substantially as described. 5th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, with means for adjusting the radial position of the striking points of said hammers, and an adjustable dead-plate co-operating with said hammers, substantially as described. 6th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of a dead-plate arranged at the feed end of the machine, and a valve pivoted above the said dead-plate, said valve, when raised, acting as a deflecting lip to direct the circulating current of air within the machine, inwardly, substantially as described. 7th. In a breaking, crushing, and pulverizing machine, the combination with suitable hammer supports, of hammer shanks straddling said supports and pivotally mounted thereon, and hammer heads carried between said shanks at their outer ends, substantially as described. 8th. In a breaking, crushing, and pulverizing machine, the combination with hammer supports in the form of discs said discs, being provided with eccentrically disposed series of openings, and hammers whose pivotal supports are mounted in said openings, said pivotal supports being capable of being introduced into any of said eccentrically disposed series of openings to adjust the striking points of the hammers, substantially as described. 9th. In a breaking, crushing, and pulveriz-

ing machine, the combination with a shaft, of hammer supports strung thereon, said supports being formed with projections, the projections of one support being staggered relative to the next adjacent supports, so that the projections of every other support align, through-bolts which pass through said projections, and hammers on through-bolts and between the projections, said hammers being in line with the body portion of the support for the next adjacent hammer, substantially as described. 10th. In a breaking, crushing, and pulverizing machine, the combination with a frame, of a shaft journaled therein, hammers carried by said shaft, a concentric cage partially surrounding said hammers, a dead-plate arranged at the feed end of the machine, a hopper above said dead-plate, and an turned lip arranged on the cover above the dead-plate for deflecting the air and circulating material inwardly, whereby a suction is formed to draw in the material from the dead-plate, substantially as described. 11th. In a breaking, crushing, and pulverizing machine, the combination with a suitable frame, of a hopper arranged thereon at its front end, a dead-plate arranged beneath the hopper, a shaft journaled in the frame, rows of pivoted hammers carried by the shaft which co-operate with the dead-plate to primarily crush the refractory material as it enters the machine, a concentric cage mounted beneath the hammers and having to front end abutting against the dead-plate, and a cover against which the other end of the cage abuts, substantially as described. 12th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of an adjustable breaker-plate, and fingers arranged below said breaker-plate and projecting into between the hammers, substantially as described. 13th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of an adjustable breaker-plate, and adjustable fingers projecting below said breaker-plate between the hammers, substantially as described. 14th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of bars co-operating with said hammers, said bars being formed with thickened portions, substantially as described. 15th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of bars of fingers projecting between the path of the hammers and engaging the hammer supports, substantially as described. 16th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of revolving supports therefor, said supports being formed with peripheral grooves, and fingers which extend between said hammers, said fingers being formed with tongues fitting into the grooves on the hammer supports, substantially as described. 17th. In a breaking, crushing, and pulverizing machine, the combination with bars 36, of a slide 37 for stopping the passage of materials between said bars 36, substantially as described. 18th. In a breaking, crushing, and pulverizing machine, the combination with pivoted, revolving hammers, of a breaker-plate, an imperforate concave arranged below said breaker-plate, transversely disposed serrations on the working face of said imperforate concave, and bars, all of said parts co-operating with the said pivoted, revolving hammers, substantially as described.

**No. 60,049. Friction Surface for Matches.** (*Surface à friction pour allumettes.*)

Juan Craveri, Buenos Ayres, Argentine Republic, South America, 17th May, 1898; 6 years. (Filed 7th December, 1897.)

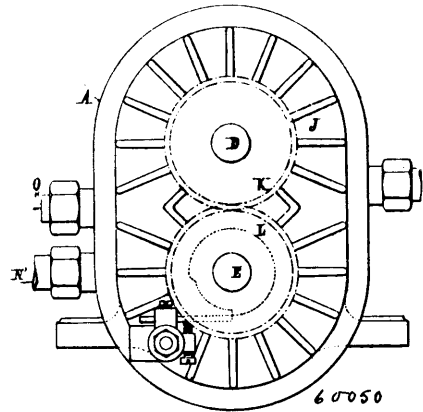
*Claim.*—1st. The process of making a material for a friction surface for safety matches, by forming a soluble matrix and mixing therewith the compounds of sulpho-cyanogen or its isomerics and its polymeric, and sulphide of antimony, substantially in the proportions and manner specified. 2nd. The process of making a material for a friction surface for safety matches by forming a soluble matrix and mixing therewith the compounds of sulpho-cyanogen or its isomerics and its polymeric, sulphide of antimony and xanthate of potassium, substantially in the proportions and manner specified. 3rd. A compound to form a paste for a friction surface for safety matches, composed of a mixture and a soluble matrix of the compounds of sulpho-cyanogen or its isomerics and its polymeric, and sulphide of antimony, substantially in the proportions and for the purposes set forth. 4th. A compound to form a paste for a friction surface for safety matches, composed of a mixture with a soluble matrix, of the compounds of sulpho-cyanogen or its isomerics and its polymeric, sulphide of antimony, and xanthate of potassium, substantially in the proportions and for the purposes set forth.

**No. 60,050. Rotary Motor.** (*Moteur rotatoire.*)

Henri Chaudun, 93 Rue Richelieu, Paris, France, 17th May, 1898; 6 years. (Filed 5th January, 1898.)

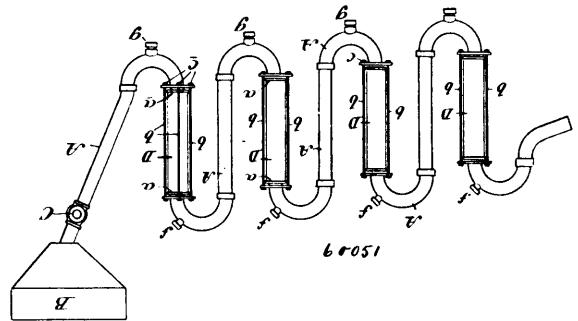
*Claim.*—1st. A rotary motor in which explosive charges are introduced, compressed and ignited, comprising a casing, oppositely-rotatable intersecting sectors therein forming with the casing two cylinders, one of said cylinders constituting a charging and compressing cylinder having an inlet-passage for the explosive charge, an intermediate chamber communicating with the cylinders and adapted to receive the compressed charge from the charging and compressing cylinder, and an exhaust passage for the other cylinder, the said sectors being constructed to cover and uncover the passages formed in the charging and compressing cylinder to effect the drawing in, compression and ignition of the charge and exhaust of the

spent gases. 2nd. A rotary motor in which explosive charge are introduced, compressed and ignited, comprising a casing, rotatable



sectors F, G, arranged therein as described and being geared together to rotate at equal speeds and forming with the casing two cylinders B, C, a flange P on sector F and having a recess P<sup>1</sup>, an intermediate explosion-chamber having passages O<sup>1</sup>, O<sup>11</sup> placing said intermediate chamber in communication with the cylinders B, C, and said casing having inlet and exhaust passages, all arranged for co-operation, substantially as described for the purposes specified. 3rd. The combination with a casing having inlet and exhaust ports, of two rotatable sectors arranged in said casing, the paths of which intersect as described and forming cylinders with the casing, parallel supporting axles or shafts, sleeves upon the shafts around which sleeves the sectors rotate, said sleeves being cut-away or recessed at points opposite each other and with the circular walls of which recesses the circumferential walls of the sectors are adapted to make contact as described, and an intermediate or explosive chamber communicating with the cylinders, all co-operating, in the manner for the purposes specified.

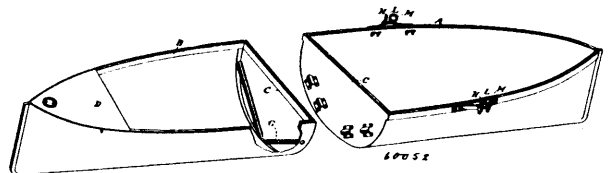
**No. 60,051. Amalgamator.** (*Amalgamateur.*)



Alonzo M. Cross, Toronto, Ontario, Canada, 17th May, 1898; 6 years. (Filed 10th January, 1898.)

*Claim.*—1st. An amalgamator, comprising a series of connected bent tubes or sections A, standing vertically, each section at the upturn having a perforated plate F, one or more of said tubes or sections provided with a glass observing section D, and a feed-hopper B, and regulating feed-valve C, substantially as set forth. 2nd. An amalgamator, comprising a series of U-bent tubes or sections, connected to form a downward and upward conduit, a hopper at the upper end or inlet of said conduit, an observing glass section in one or more of said connected tubes, a perforated plate or open partition in each series at the commencement of the upturn, and a feed-regulating valve below the hopper, substantially as and for the purpose set forth.

**No. 60,052. Metal Boat.** (*Bateau en métal.*)

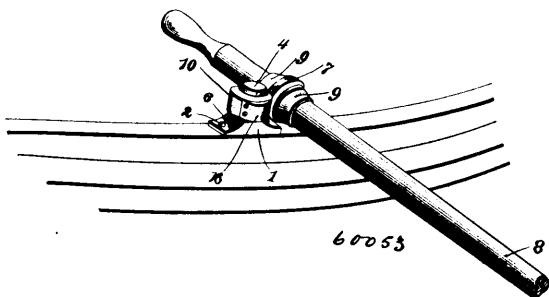


William Florence DeSanno, Vallejo, California, U.S.A., 17th May, 1898; 6 years. (Filed 14th January, 1898.)

*Claim.*—1st. A boat consisting of two sections, each composed of a single continuous sheet of metal bent to form a shape of one-half

the boat, having one end adapted to form the outer end of the boat, the other end closed by a transverse continuous diaphragm, one of said sections being slightly less in length and contour than the other, whereby the two may be nested together when separated, and means whereby the two sections can be secured with the transverse partitions abutting, so as to form a complete and water-tight boat. 2nd. A boat, consisting of continuous sheets of metal, so that each forms one-half of a boat, one end of which forms the outer end of a completed boat, and the other having a transverse partition, one of said sections being made with length and contour slightly less than the other, whereby the two may be inverted and folded one over the other to form an enclosure and protection for provisions, means whereby the abutting ends may be secured together with water-tight connections to form a complete boat, a closed compartment formed in the end of one of said sections with a closable opening thereto, and brackets secured centrally to the vertical side thereof to support a mast. 3rd. As an article of manufacture, a boat, consisting of continuous sheets of metal so shaped that each forms one half of a boat with transverse diaphragms in the abutting ends of each, one of said sections being of smaller outline than the other, whereby it may be nested therein, or the larger one inverted over the smaller to form a protecting cover for it and its contents, means for uniting the sections together to form a complete and continuous body with water-tight joints at the union, a compartment with closable opening thereto formed in one end of one of the sections, brackets for a mast, and movable outriggers having row-locks and pins permanently fixed thereto.

**No. 60,053. Oar Lock. (Toiletère.)**

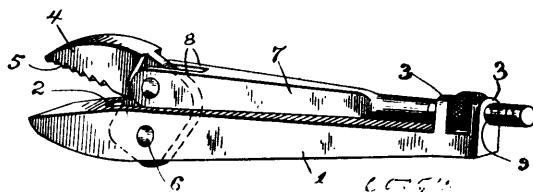


Alfred Lanstram, Hope, British Columbia, Canada, 17th May, 1898; 6 years. (Filed 15th January, 1898.)

*Claim.*—1st. An oar lock, comprising an oar lock proper, a pintle upon which said lock proper is mounted, said pintle being provided with a groove, and a catch carried by the lock proper, said catch being adapted to enter said groove to retain the lock proper upon a pintle, substantially as described. 2nd. An oar lock, comprising an oar lock proper, a bearing sleeve carried thereby, a pintle upon which said sleeve is mounted, said pintle being provided with a groove, and a catch carried by the sleeve and adapted to enter the groove for locking the sleeve into engagement with the pintle, substantially as described. 3rd. An oar lock, comprising an oar lock proper, a cleat, and a pintle connected to said cleat and capable of rocking thereon, said oar lock proper being mounted upon said pintle and also capable of swinging thereon, substantially as described. 4th. An oar lock, comprising an oar lock proper, a cleat, a pintle connected to said cleat capable of rocking thereon, said oar lock proper being mounted upon said pintle and also capable of swinging thereon, and means for retaining the lock proper upon said pintle, substantially as described. 5th. An oar lock, comprising an oar lock proper, a cleat, a pintle connected to said cleat and capable of rocking thereon, said oar lock proper being mounted upon said pintle and also capable of swinging thereon, and a catch for retaining the lock proper upon said pintle, substantially as described. 6th. An oar lock, comprising an oar lock proper, a pintle upon which said oar lock proper is mounted, said pintle being provided with a transversely extending groove, and a catch carried by the oar lock proper for retaining the latter upon the pintle, said catch being adapted to engage said groove when the oar lock proper is in its normal position, but to be disengaged therefrom when said lock proper is swung at substantially right angles to such position, whereby the oar lock proper may be separated from the pintle, substantially as described. 7th. An oar lock, comprising an oar lock proper, a bearing sleeve carried thereby and provided with an opening, a pintle upon which said sleeve is mounted, said pintle being provided with a groove, a casing carried by the bearing sleeve, and a catch arranged within said casing and normally extending through the opening of the sleeve, said catch being adapted to enter the groove of the pintle for locking the bearing sleeve in engagement therewith, substantially as described. 8th. An oar lock, comprising an oar lock proper, a cleat, a pintle mounted upon said cleat and having its lower end reduced to form a neck, said neck being secured within said cleat, whereby the pintle is capable of rocking thereon, said pintle being also provided with a groove, a bearing sleeve carried by the oar lock proper and provided with an opening, a casing carried by said sleeve, and a spring pressed locking catch

arranged within said casing and comprising a body portion and an engaging point, the latter normally extending through the opening of the bearing sleeve and adapted to engage the groove of the pintle, whereby the oar lock is retained upon said pintle, but be disengaged from said groove when the oar lock proper is swung at substantially right angles to its normal position, substantially as and for the purpose described.

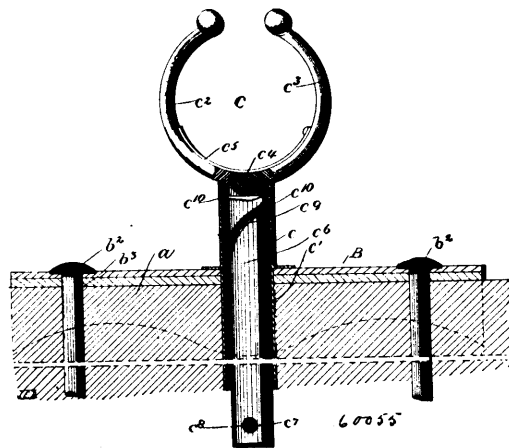
**No. 60,054. Wrench. (Clé à écrou.)**



John P. Forsberg, Thief River Falls, Minnesota, U.S.A., 17th May, 1898; 6 years. (Filed 21st January, 1898.)

*Claim.*—A wrench, comprising a bar constituting a stationary jaw and a part of the handle, provided with a laterally extending slot or opening therein and having a pair of laterally-extending parallel lugs at its extreme rear end which are formed with aligned openings, a movable jaw having a contracted laterally projecting arm or extension thereon, which fits within said slot and is pivoted to the bar in which said slot is formed, an operating rod or bar for said movable jaw having bifurcated forward ends between which the contracted portion of said movable jaw fits and to which said movable jaw is pivoted, and having a screw-threaded rear end which projects through the aligned openings in said lugs, and a nut fitting between said lugs formed with a central threaded aperture within which the rear end of said operating-bar fits, the said operating rod or bar serving as a part of the handle of said wrench, substantially as and for the purpose described.

**No. 60,055. Oar Lock. (Toiletère.)**



Aurèle Noël, Rimouski, Quebec, Canada, 17th May, 1898; 6 years. (Filed 2nd February, 1898.)

*Claim.*—1st. An oar lock, comprising a thole pin, and segmental portions, pivotally connected together and also pivotally connected to said thole pin. 2nd. An oar lock, comprising a thole pin, segmental portions pivotally connected together and also pivotally connected to said thole pin, and means for holding said segmental portions in an open position. 3rd. An oar lock, comprising a casing, a thole pin mounted in said casing, segmental portions pivotally connected together and to said thole pin, said segmental sections being held in closed position by said casing, and means for passing said segmental portions to an open position. 4th. An oar lock, comprising a casing, a thole pin mounted in said casing, segmental portions pivotally connected together and to said thole pin, said segmental sections being held in closed position by said casing, inclined ways formed on said thole pins, and indentations formed in said casing and adapted to ride in said inclined ways.

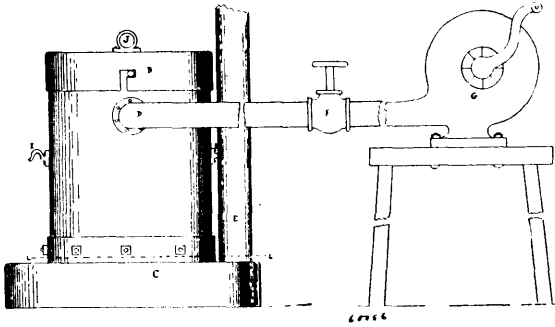
**No. 60,056. Stove for Thawing Frozen Earth.**

(Poêle pour dégeler la terre.)

Thomas Elliott Waller and Archibald Findlay McMillan, both of Victoria, British Columbia, Canada, 17th May, 1898; 6 years. (Filed 3rd February, 1898.)

*Claim.*—As an article of manufacture, a sheet metal stove or furnace for generating heat to extract frost from the ground, comprising a collar F bolted to the body of the stove, and having an opening and thimble for an ordinary stove pipe, body A having an open-

ing M for admitting air to the fire, lugs G bolted to the inside to support the grate, hooks I on the outside and lugs D to hold the



cover, cover B having slots C in the rim to engage lugs D, and ring I or handle in the top, grate E resting on lugs G, all formed, arranged and united as and for the purpose hereinbefore set forth.

**No. 60,057. Metal Plating Process.**

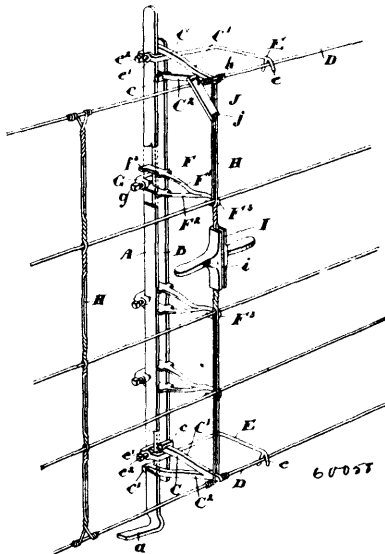
(*Procédé pour le placage des métaux.*)

Heinrich Wachwitz, Nuernberg, Parkstrasse 14, Bavaria, German Empire, 17th May, 1898; 6 years. (Filed 4th February, 1898.)

*Claim.*—1st. Method for coating aluminium, zinc and their alloys sheets with thin layers of other metal by laying thin metal sheets on aluminium, zinc, etc., sheets of corresponding size, heating them between red hot plates, then uniting them closely by rolling and stretching them equally. 2nd. Method for coating aluminium, zinc, etc., cylinders or bars with thin layers of other metals by completely covering the aluminium, zinc, etc., bodies with pipes of sheets of copper, silver or of another suitable metal, heating them between red hot forms, then uniting them closely by rolling in profile rollers and stretching them equally by drawing.

**No. 60,058. Wire Fencing Machine.**

(*Machine à clôture en fil de fer.*)

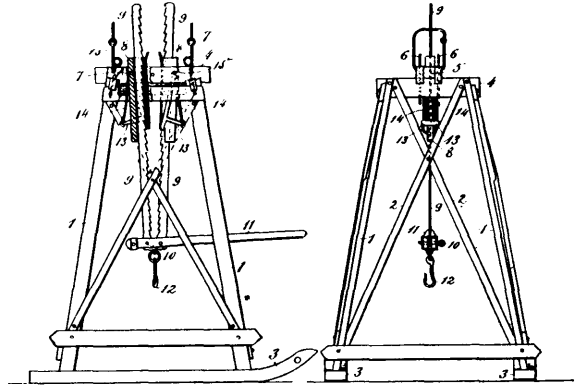


Adolphus Henry Cook, Almira, Ontario, Canada, 18th May, 1898; 6 years. (Filed 3rd May, 1898.)

*Claim.*—1st. The combination with the vertical bars and brackets held between same and provided with end loops, of the clamps for securing the brackets and bars firmly in position, as and for the purpose specified. 2nd. The combination with a vertical bar provided with a foot, and a parallel bar, of the upper double branch brackets provided with inner retaining lugs extending to the front and to the rear of the edge of the bars and suitable clamping device for securing the bars and brackets in position, as and for the purpose specified. 3rd. The combination with a vertical bar provided with a foot, and a parallel bar, of the upper double branch brackets provided with inner retaining lugs extending to the front and to the rear of the edge of the bars and L-shaped guiding arms at the top and bottom provided with forked outer ends and a looped inner end provided with a set screw for clamping the ends of the bars together, as and for the purpose specified. 4th. The combination with the vertical-parallel bars of the machine, of the brackets provided with looped

outer ends and double branches and front laterally extending lugs on the branches extending in front of the edge of the bars and rear lugs abutting the rear of the edge of the bars and the clamps for securing the bars and brackets securely together, as and for the purpose specified. 5th. The combination with the upper supporting bars and brackets, with the arm I, provided with a central groove, as and for the purpose specified. 6th. The combination with the bars and supporting brackets for the upper and lower longitudinal wires, of the twisting block provided with suitable eyes to receive the ends of the wires, as and for the purpose specified.

**No. 60,059. Hoisting Device. (Ascenseur.)**

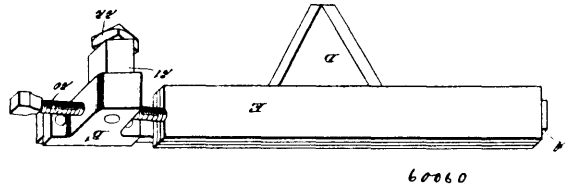


Jeremiah Cline, Oppenheim, New York, U.S.A., 18th May, 1898; 6 years. (Filed 22nd December, 1897.)

*Claim.*—1st. The combination in a hoisting device of a head, a pair of reciprocating racks, a lever to which the ends of the racks are secured by contiguous pivots, rack guide-boxes pivoted to the head, and suspended catches pivoted at the same point as the guide-boxes, substantially as set forth. 2nd. The combination in a hoisting device of a head 5, rack guide-boxes 88 independently pivoted in the head, the racks 9 extending through the boxes, the catches 13 and the operating lever 11 to which the lower ends of the racks are pivoted, substantially as set forth.

**No. 60,060. Cutter Bar for Reapers and Mowers.**

(*Souche de lames pour faucheuses et moissonneuses.*)



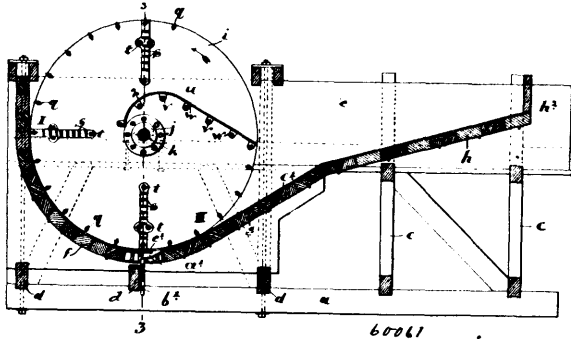
Charles Edgar Frye, Wilton, New Hampshire, U.S.A., 18th May, 1898; 6 years. (Filed 30th April, 1898.)

*Claim.*—1st. A cutter bar provided with projections upon its upper face at predetermined intervals apart, the inner end of each of the projections being provided with a lip and an undercut longitudinal recess in its front and rear faces, the outer end of each of the said projections being of reduced width, knives or blades having T-shanks the shank portions being arranged to enter spaces between opposing blocks, and the heads of the shanks and the rear ends of the blades to enter the undercut recesses in the said blocks, and a cap fitted for locking engagement with the blocks on the cutter bar, for the purpose set forth. 2nd. A cutter bar provided with a series of projections or blocks upon its upper face the said projections being spaced apart a predetermined distance, one end of each of the projections or blocks being provided in its sides with undercut recesses, a knife or blade secured in each of the spaces between the blocks, a portion of the knife being arranged to engage the said side recesses and a cap arranged for locking engagement with all of the projections or blocks, substantially as described. 3rd. The combination, with a cutter bar provided with a series of blocks or projections upon its upper face, one end of each block being provided with a lip and having undercut recesses in its front and rear faces and knives or blades secured in the spaces between the blocks and having portions arranged to engage the recesses in the said blocks, of a cap provided with chambers adapted to receive the blocks of the cutter bar, each chamber having an end recess to receive the lips of said blocks, the cap being adapted for end movement, and a locking device for the said cap, substantially as described. 4th. The combination, with a cutter bar provided with a series of blocks or projections upon its upper face, one end of each block being wider than its opposite end, the

wider end of each block being provided with a lip and its sides with undercut recesses, of blades or knives provided with T-shanks, the shanks being adapted to enter the spaces between opposing blocks and likewise to enter the side recesses of the blocks and that portion beneath the lips of the blocks, a cap provided with chambers adapted to receive the blocks of the cutter bar, each chamber being provided with an end recess to receive the lips of said blocks, and a locking device whereby the cap may be held locked upon the said bar, for the purpose specified. 5th. The combination, with a cutter bar provided with a head at its inner end, of a pin secured in the said head and having an enlarged outer end and a polygonal block loosely mounted on the pin between the enlarged end of the pin and the head of the cutter bar, the polygonal block being adapted to receive a driving pitman, substantially as described.

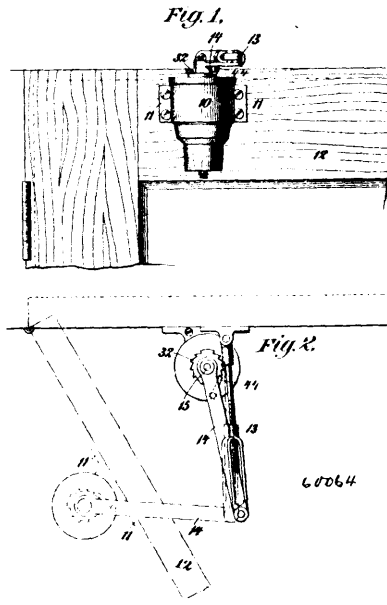
**No. 60,061. Ore Amalgamator.**

(*Amalgamateur de minerais.*)



*Claim.*—1st. In a bicycle stand, a ball and socket joint, consisting of a ball, a socket in which said ball is loosely mounted, and means to hold said ball in a fixed position in said socket, consisting of a set-screw, the end of which is adapted to engage the ball and abrade the same, substantially as herein specified. 2nd. In a bicycle stand, a holding frame, T-shaped in form, having a longitudinal slot 19 formed in each of the free ends thereof, a clamp-hook mounted in each of said slots, and means to hold each of said clamp-hooks at any fixed point, substantially as herein specified. 3rd. A bicycle stand, comprising a support, a holding frame pivotally connected therewith, said pivotal connection consisting of a ball and socket joint, and means to hold the holding frame in any relative position, consisting of a set-screw mounted in the socket of said ball and socket joint, the end of which is adapted to abrade the surface of said ball and hold the same by the recess formed by said abrasion in conjunction with the frictional contact of the ball and opposite wall of the socket, substantially as herein specified. 4th. A bicycle stand, comprising a support, a spherical socket mounted in the upper end thereof, a ball mounted therein, a set-screw adapted to abrade said ball, said ball being provided with a cylindrical standard which extends through a slot formed in the upper side of said socket, a holding frame secured to said standard, said frame being T-shaped in form, and adjustable clamping devices mounted on the free ends of said holding frame, substantially as herein specified. 5th. A bicycle stand, comprising a support, a spherical socket mounted in the upper end thereof, a ball mounted loosely in said socket and provided with a cylindrical standard adapted to pass through said slot, a T-shaped holding frame mounted on said standard and provided with a longitudinal slot in each of the free ends thereof, and a clamp adjustably mounted in each of said slots, and a set-screw mounted in said socket, the end thereof being adapted to engage the surface of said ball and abrade the same, substantially as herein specified.

**No. 60,064. Door Check. (Arrête-porte.)**

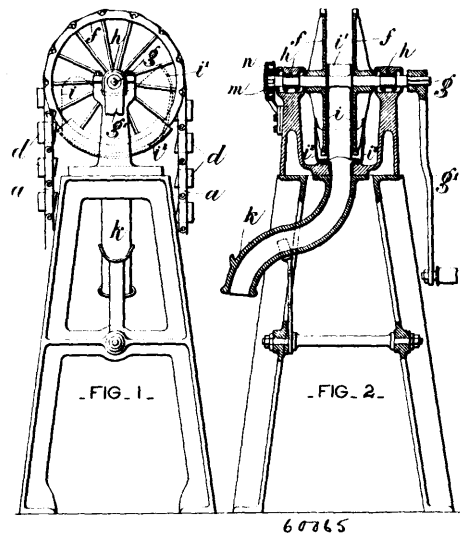


Frederick Hawkins Ogden, New York City, U.S.A., 18th May, 1898; 6 years. (Filed 18th April, 1898.)

*Claim.*—1st. In a door check, the combination, with a casing containing a spring chamber and a working chamber below the spring chamber and adapted to contain a moving piston, and mechanism for operating the same, suitable passages and valves, and a piston within the working chamber, of a plate separating the spring and working chambers, a horizontal shaft within said working chamber and suspended from said plate, mechanism operated by the revolution of said shaft for operating the piston, a vertical shaft projecting through said plate into the working chamber and connected by gearing to said horizontal shaft, means for connecting said vertical shaft and the door, whereby as the door opens and closes said shaft rotates, and a spring for closing the door, substantially as described. 2nd. In a door check, the combination, with a casing containing a spring chamber and a working chamber below the spring chamber and adapted to contain a moving piston and mechanism for operating the same, suitable passages and valves, and a piston within the working chamber, of a plate separating the spring and working chambers, a cam shaft within said working chamber and suspended from said plate, a cam upon said shaft acting upon the piston and adapted to reciprocate the same, an operating shaft projecting through said plate into the working chamber and connected by gearing to said cam shaft, means for connecting said operating shaft and the door, whereby as the door opens and closes said shaft rotates, and a spring

for closing the door, substantially as described. 3rd. In a door check, the combination with a casing containing a working chamber, and a piston therein, of a plate closing said chamber, a shaft within said chamber and suspended from said plate, mechanism operated by the revolution of said shaft for operating said piston, and a vertical operating shaft connected by gearing to said first-mentioned shaft, substantially as described. 4th. In a door check, the combination with a working chamber, and a piston therein having a piston rod carrying a projecting cam piece or stud, of a revolvably mounted cam having shoulders, one of which is adapted to engage the stud and move the piston outward, and the other of which is arranged to bear against the end of the piston rod for pressing the piston inward, said cam and cam piece being so shaped that they disengage when the cam is in a position corresponding to a partly open position of the door, and means for rotating said cam when the door opens and closes, substantially as described. 5th. In a door check, the combination, with a working chamber, of a piston within said chamber having a piston rod working along and guided by a guide rib projecting from the side of said working chamber and having a plane guide face, the corresponding face of the piston rod where it comes in contact with said guide rib being also plane, whereby rotation of the piston in the working chamber is prevented, substantially as described. 6th. In a door check, the combination, with a working chamber, a piston therein, and means for reciprocating the same, of a check valve adapted to permit free passage of a liquid or other fluid from one side of the piston to the other, a valve plug in said piston adapted to restrict a passage therein through which reverse flow of the fluid may take place, an operating rod projecting through the wall of the working chamber, and gearing connecting said valve-plug and operating rod, by which said valve-plug may be adjusted, substantially as described. 7th. In a door check, the combination, with a working chamber, a piston therein, and means for reciprocating the same, of a check valve adapted to permit free passage of a liquid or other fluid from one side of the piston to the other, a screw in said piston adapted to restrict a passage therein through which reverse flow of the fluid may take place, a gear wheel upon the end of said screw, and an operating rod projecting through the wall of the working chamber, and provided with teeth adapted to mesh with the teeth of said gear wheel, by which said screw may be adjusted, substantially as described.

**No. 60,065. Hydraulic Chain. (Chaîne hydraulique)**

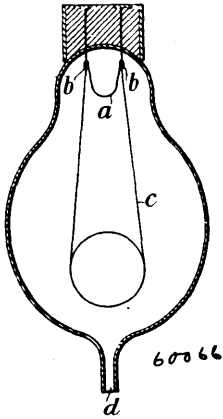


Henri F. M. Lemaire, Paris, France, 18 mai 1898; 6 ans. (Déposée le 20 janvier 1898.)

*Résumé.*—1°. Dans un chapelet hydraulique pour entraîner la chaîne à augets, des plateaux devenus pleins *f f* s'opposant à l'échappement latéral de l'eau des augets et entre lesquels est disposée une cuvette *i<sup>2</sup>* en communication avec un tuyau *k* deversement de l'eau et muni d'un fond *i<sup>1</sup>* destiné à arrêter l'eau qui est projetée par la force centrifuge, des jones extérieures *i<sup>2</sup>* *i<sup>2</sup>* solidaires de cette cuvette entourant les bords inférieurs des plateaux *f f* pour recueillir l'eau qui pourrait s'échapper entre ceux-ci et les parois de la cuvette. 2°. Dans un chapelet hydraulique une chaîne à godets dont chaque maillon a des jones latérales le consolidant et portant les articulations de l'auget *d* muni d'appendices à encoches *d<sup>1</sup>* qui limitent son mouvement de bascule en butant contre une barette transversale inférieure du maillon sur laquelle repose le fond *d<sup>1</sup>* de l'auget avant son versement, les tourillons *h* qui réunissent les maillons traversant les jones latérales et étant retenus par des sorts *c* fixés sur les maillons et engagés dans une gorge ou évidement

du tourillon. 3°. Dans un chapelet hydraulique la disposition à l'une des extrémités de l'arbre de commande *g* d'un rochet *m* pouvant tourner dans un seul sens à l'intérieur d'une cuvette cylindrique concentrique, étant arrêté dans l'autre sens par des rouleau *o* disposés dans les dents du rochet et coïncant entre l'une des faces de ces dents et la paroi circulaire intérieure de la cuvette, pour former frein, le tout comme décrit cidessus en reference du dessin annexé et dans les buts spécifiés.

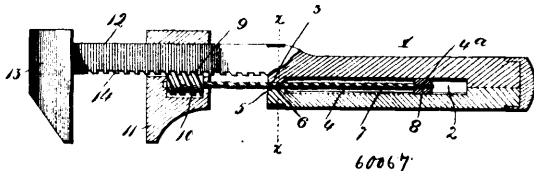
**No. 60,066. Electric Lamp. (Lampe électrique.)**



Samuel P. Eastick and Egerton Sayer, both of London, England 18th May, 1898; 6 years. (Filed 10th May, 1897.)

*Claim.*—1st. An incandescent electric lamp, consisting of the, ordinary filament, and a secondary filament or lesser resistance in circuit with the current to the ordinary filament, and adapted to be rendered incandescent and consumed when the electric current is passed through it to eliminate the combustion supporting oxygen, substantially as specified. 2nd. An incandescent electric lamp, consisting of the lamp terminals, an ordinary filament in circuit with these terminals, a secondary filament in circuit with the terminals of the ordinary filament or with additional terminals, and adapted to be rendered incandescent and consumed when the electric current is passed through it to eliminate the combustion supporting oxygen, substantially as specified.

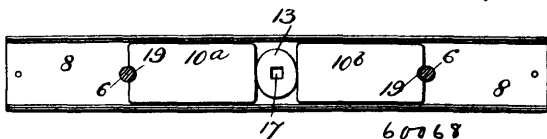
**No. 60,067. Wrench. (Clé à écrou.)**



William V. Chisholm, Ashdale, Nova Scotia, Canada, 18th May, 1898; 6 years. (Filed 12th February, 1898.)

*Claim.*—1st. A wrench comprising a fixed jaw having a shank, said shank being provided with transverse teeth, a movable jaw, a worm revolvably mounted in said movable jaw, said worm engaging said teeth, a spirally grooved actuating rod mounted in said fixed jaw and connect- d to said worm, an operating nut pivotally mounted in said rod and having a slidable movement in said fixed jaw, said worm, rod and operating nut being so arranged that pressure longitudinally applied to said operating nut will rotate said worm in said teeth, substantially as described.

**No. 60,068. Temporary Binder. (Reliure temporaire.)**

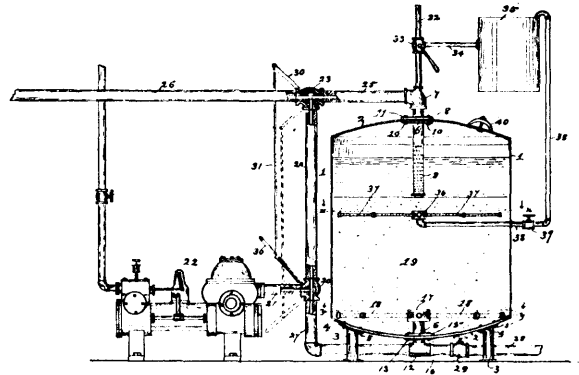


James S. McDonald, Chicago, Illinois, U.S.A., 18th May, 1898; 6 years. (Filed 26th August, 1897.)

*Claim.*—1st. A temporary binder having in combination two covers, one provided with impaling pins projecting through the other, a casing through which said impaling pins pass, a pair of loose jaws located between said impaling pins and within said casing, a loose cam located within the said casing between the ends of said jaws and being held in place by the upper and lower sides of said casing and the ends of said jaws, said cam being provided with a slot extending longitudinally of said casing, substantially as set forth. 2nd. A temporary binder having in combination two covers,

one provided with impaling pins projecting through the other, a casing through which said impaling pins pass, a pair of jaws embracing said impaling pins respectively and having their inner ends arranged at a distance apart with a space between them, a rotary cam located in said space between the ends of said jaws and having a cam surface duplicated on opposite sides and each of said surfaces bearing against one of said jaws for forcing the same in opposite directions, whereby the cam will actuate the jaws and be self locking, said cam being located within said casing and provided with a key opposite the key hole in the casing for the admission of an operating key, substantially as set forth.

**No. 60,069. Filter. (Filtre.)**



Charles Brent, Niles, Michigan, U.S.A., 18th May, 1898; 6 years. (Filed 22nd March, 1898.)

*Claim.*—1st. In a filter, the combination with the casing, the filtering material contained therein, a water supply-pipe, a perforated pipe connected to the supply-pipe and extending into the casing at its upper end above the filtering material, a branch pipe having a valve connection to the supply-pipe, a series of radiating perforated pipes seated in the filtering material near the bottom of the casing, a discharge-pipe for the filtered water, with which the series of radiating perforated pipes communicate, a pipe leading from the discharge-pipe, and having a valve connection with the supply-pipe, and means to operate the valves to reverse the normal flow of water and cause it to enter the filter through the discharge-pipe, and pass therefrom with impurities from the filtering material through the perforated pipe, the supply-pipe and the branch pipe connected to the supply pipe, substantially as described. 2nd. In a filter, the combination with the casing and the filtering material contained therein, of a storage tank for compressed air, a series of radiating perforated pipes seated in the filtering material near its upper surface, a hollow head from which said pipes radiate, and a valved pipe connection between the air-tank and the hollow head, whereby the compressed air may be discharged into the filtering material to agitate it, substantially as described. 3rd. In a filtering apparatus, the combination with the casing, the filtering material contained therein, and the supply-pipe through which the water is conveyed to the filter of a pump connected to the supply-pipe, a valved opening in the suction-pipe in close proximity to the pump-chamber for the admission of air, a compressed-air reservoir, a valved pipe leading from the water supply-pipe to the said reservoir, a series of radiating perforated pipes seated in the filtering material near its upper surface, a hollow head from which said pipes radiate, and a valved pipe connecting the air-reservoir and the hollow head, substantially as described. 4th. In a filter, the combination of the casing, the filtering material contained therein, inlet and outlet-pipes at the opposite ends of said casing, a supply-pipe, pipe connections between the supply-pipe and said inlet and outlet-pipes, a discharge-pipe connected to the inlet-pipe at the upper end of the casing, and through which the impurities in the filtering material are discharged when the latter is cleansed, controlling valves interposed in the pipe-connection between the supply-pipe and said inlet, outlet and discharge-pipes, levers on the valve-plug, and a rod connecting said levers, substantially as described.

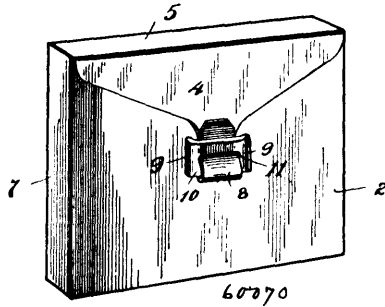
**No. 60,070. Envelope. (Enveloppe.)**

Joseph Cadioux, Montreal, Quebec, Canada, 18th May, 1898; 6 years. (Filed 7th September, 1897.)

*Claim.*—1st. An envelope, comprising a body, a closing flap therefor, a fastening tongue carried by said flap, and a locking strip carried by said body and provided with a slot adapted to receive said tongue for securing said flap in closed position, substantially as described. 2nd. An envelope, comprising a body provided with a series of slots, a closing flap for said body, a fastening tongue carried by said flap, and a locking strip carried by said body and having its ends disposed within said slots, said strip being provided with a slot adapted to receive said tongue for securing said flap in closed position, substantially as described. 3rd. An envelope, comprising

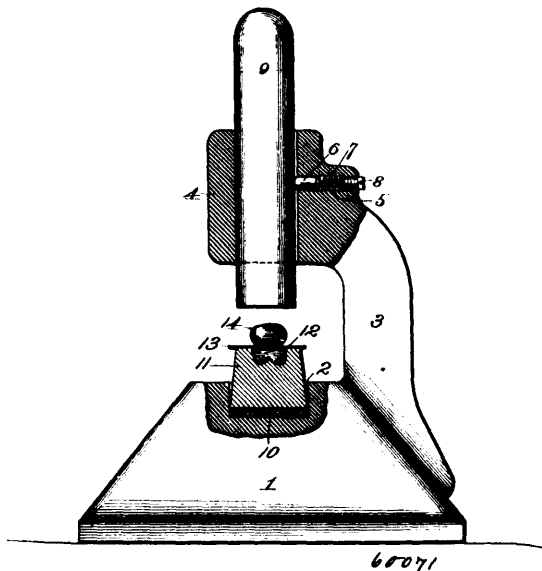


a body provided with a series of parallel spaced transverse slots, a closing flap for said body, a fastening tongue carried by said flap,



and a locking strip carried by said body and having its ends disposed within said slots, said strip being provided with a longitudinally elongated slot adapted to receive said tongue for securing said flap in closed position, substantially as described. 4th. An envelope, comprising a body, a side flap, a connecting strip interposed between said body and side flap, a closing flap carried by the body, and sealing strips arranged at the ends of the body and side flap and adapted to be sealed upon each other, substantially as described. 5th. An envelope, comprising a body, a side flap, a connecting strip interposed between said body and side flap, a closing flap carried by the body, a fastening tongue carried by said closing flap, sealing strips arranged at the ends of the body and side flap and adapted to be sealed upon each other, substantially as described. 6th. An envelope, comprising a body, a side flap, a connecting strip interposed between said body and side flap, a closing flap carried by the body, a fastening tongue carried by said closing flap, sealing strips arranged at the ends of the body and side flap and adapted to be sealed upon each other, and a locking strip carried by the side flap and adapted to be engaged by the fastening tongue, substantially as described. 7th. An envelope, comprising a body, a side flap provided with a series of transverse slots, a connecting strip interposed between said body and side flap, a closing flap carried by the body, a fastening tongue carried by said closing flap, sealing strips arranged at the ends of the body and side flap and adapted to be sealed upon each other, sealing tabs formed on the strips of the body and adapted to be folded and secured within the envelope, sealing tabs also arranged at the ends of the connecting strip, said tabs being interposed between the sealing strips of the side flap and the strips of the body, and an independent locking strip provided with a slot, said strip having its ends passing through the slots of the side flap and secured to the inner side of the latter, the fastening tongue being adapted to pass between the locking strip and the outer side of the side flap and having its extremity turned back and inserted within the slot of the locking strip, substantially as and for the purpose described.

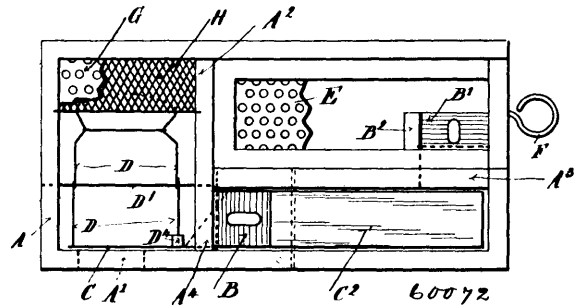
**No. 60,071. Metal Crown Dies for Making Teeth.**  
(*Matrice en couronne de metal pour faire les dents*)



Howard S. Lowry, Kansas City, Missouri, U.S.A., 8th May, 1898; 6 years. (Filed 7th February, 1898.)

*Claim.*—1st. In a dental appliance, the combination of a base or anvil, a female die thereon, a vertical reciprocatory plunger arranged over the die cavity, and a ball of lead arranged vertically below the plunger, unenclosed by walls and resting loosely upon the plate to be swaged, and vertically over the cavity of the die, for the purpose set forth. 2nd. A dental appliance, comprising a metallic base provided with a recess in its upper side, an arm projecting upwardly from said base and provided with a vertical guide-sleeve, which overhangs said recess, a plunger in said sleeve, a lead plate in said recess, an intaglio-impression die within said recess and seated upon said lead plate, and upon which die the crown forming plate is placed, a compressible ball upon said crown-forming plate, and a spring actuated pin bearing frictionally against the plunger to hold it at any desired point of adjustment, substantially as described.

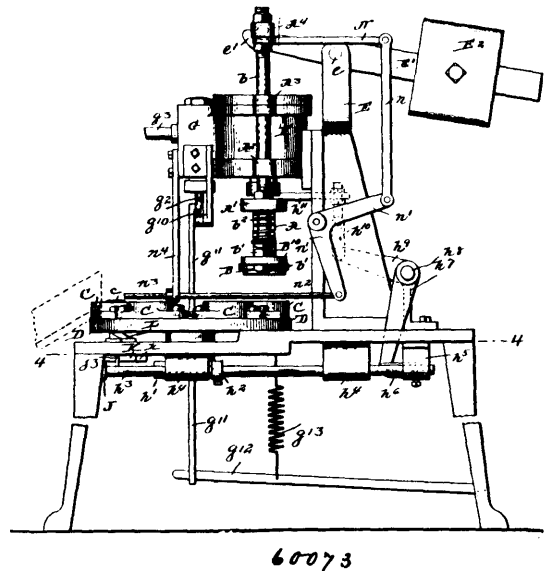
**No. 60,072. Animal Trap. (Piège.)**



Frederick William Roe, Stonehenge, Tasmania, 18th May, 1898; 6 years. (Filed 18th February, 1898.)

*Claim.*—The improved trap for vermin, consisting of two compartments located one within the other and having openings to the compartments, the entrance to the outer being closed when the rat or the like is attempting to secure the bait by means of the pivoted frame D, a part of which D<sup>2</sup>, supports the door until released by the weight of the rat, and a plate C<sup>2</sup>, secure to the door which when depressed by the rat whilst attempting to escape from the trap causes the outer door to be raised, resetting the trap, and suitable doors B, B', arranged as shown, all constructed and operating substantially in the manner herein described and shown by the appended drawings.

**No. 60,073. Glass Press. (Presse à verre.)**

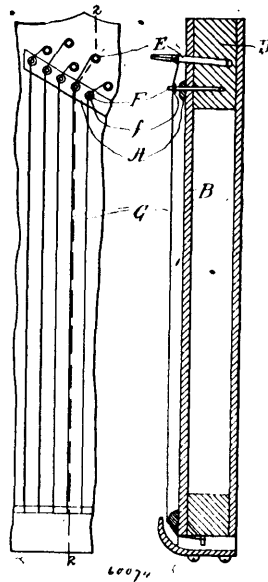


Salmon B. Rowley, assignee of Randolph P. Lippincott, both of Philadelphia, Pennsylvania, U.S.A., 20th May, 1898; 6 years. (Filed 26th February, 1898.)

*Claim.*—1st. In a glass pressing machine, in combination with a fixed die, of a movable die co-acting therewith, a power driven plunger acting upon said movable die and adapted to automatically yield when the glass has been forced into the mould by the plunger. 2nd. In a glass pressing machine, in combination with a

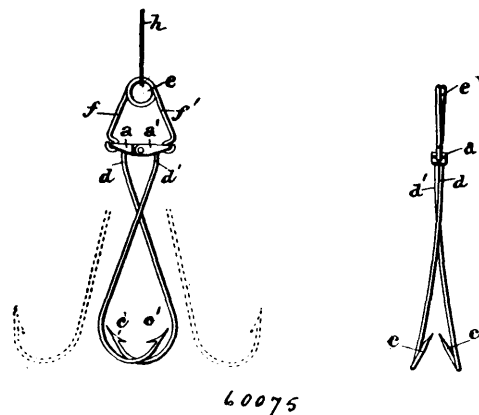
fixed die, of a power driven plunger co-acting therewith, and means to vary the extent of stroke by the amount of glass acted on. 3rd. In a glass pressing machine, in combination with a fixed die, of a plunger co-acting therewith, a piston connected with said plunger, a source of power, and connection between said piston and the source of the power. 4th. In a glass pressing machine, in combination with a fixed die, of a plunger co-acting therewith, a piston connected with said plunger, an air supply under pressure, and connection between said air supply and the piston. 5th. In a glass pressing machine, in combination with a fixed die, of a plunger co-acting therewith, a piston connected with said plunger, a source of power, connection between said piston and source of power, a valve interposed between the source of power and the piston, adapted in its movement to control the admission of power to opposite sides of the piston. 6th. In a glass pressing machine, in combination with a fixed die, of a plunger co-acting therewith, a piston connected with said plunger, an air supply under pressure, connection between said air supply and the piston, a valve interposed between the air supply and the piston, adapted in its movement to control the admission of air to opposite sides of the piston. 7th. In a glass-pressing machine, in combination with a fixed die, of a plunger co-acting therewith, a piston connected with said plunger, a source of power, connection between said piston and source of power, a valve interposed between the source of power and the piston, adapted in its movement to control the admission of power to opposite sides of the piston, and a contracted exhaust for said piston. 8th. In a glass-pressing machine, in combination with a fixed die, of a plunger, co-acting therewith, a piston connected with said plunger, an air supply under pressure, connection between said air supply and the piston, a valve interposed between the air supply and the piston adapted in its movement to control the admission of air to opposite sides of the piston, and a contracted exhaust for said piston. 9th. In a glass-pressing machine, in combination with a series of fixed dies, supported so as to be revolvable, a reciprocating plunger adapted to co-act with said dies, and means controlled by the plunger in its movement for bringing the fixed dies successively in the path of the plunger. 10th. In a glass-pressing machine, in combination with a series of fixed dies, a revoluble shaft to which said dies are connected, a ratchet upon said shaft, a pawl co-acting with said ratchet, a reciprocating plunger adapted to co-act with said dies, and intermediate connection between said plunger and said pawl whereby in the movement of the plunger away from the dies the pawl acts upon the ratchet to move the dies successively in the path of the plunger and is advanced one tooth in the reverse movement of the plunger. 11th. In a glass pressing machine, in a combination with a series of fixed dies, a revoluble shaft to which said dies are connected, a ratchet secured to and rotating with the shaft, a pawl co-acting with said ratchet, a shifting rod to which said pawl is connected, a crank, a link connecting said crank and sliding block, a rock shaft to which said crank is connected, a second crank connected to the opposite end of said shaft, a reciprocating plunger co-acting with said dies, and connection between said last mentioned crank and the plunger, whereby in the movement of the plunger away from the dies the pawl acts upon the ratchet to move the dies successively in the path of the plunger, and is advanced one tooth in the reverse movement of the plunger. 12th. In a glass pressing machine, in combination with a series of fixed dies, a revoluble shaft to which said fixed dies are connected, a ratchet upon said shaft, a pawl co-acting with said ratchet, a reciprocating plunger adapted to co-act with said dies, and intermediate connection between said plunger and said pawl whereby in the movement of said plunger away from the dies the pawl acts upon the ratchet to move the dies successively in the path of the plunger and is advanced one tooth in the reverse movement of the plunger, and a holding device adapted in the movement of the pawl operating mechanism to cause the pawl to act on the ratchet to release the ratchet, and after said pawl has acted to lock said ratchet. 13th. In a glass pressing machine, in combination, a rotatable fixed die having a movable core or plug and a fixed cam having an inclined surface adapted to be struck by the plug or core and to move said core or plug. 14th. In a glass pressing machine, in combination, a series of fixed dies supported so as to be rotatable, each die having a movable core or plug, and a fixed cam having an inclined surface in line of rotation of said dies and adapted to be struck by said dies and cause said plug or core to move. 15th. In a glass pressing machine, in combination, a rotatable fixed die having a movable plug or core, a fixed cam having an inclined surface adapted to be struck by the plug or core and to move said plug or core, and a rod reciprocating across said die and adapted to strike and eject the article when the movable plug is moved. 16th. In a glass pressing machine, in combination, a rotatable fixed die having a movable plug or core, a fixed cam having an inclined surface adapted to be struck by the plunger core and to move said plug or core, and a rod adapted to reciprocate across the fixed die in alignment with the cam, a reciprocating plunger and connection between said plunger and said rod whereby said rod is reciprocated in the reciprocation of said plunger, and moved across said die when the movable plug is moved whereby the article carried by said die is struck by said rod and ejected from the mould.

Claim.—In a string instrument, the pin bridge above described made up of shouldered pins and a bridge, the pins extending through



the bridge and sounding board and into the pin block, the shoulder of the pins supporting the strings and the heads of the pins staying the strings, all substantially as set forth.

**No. 60,075. Fish Hook. (Hamecon.)**



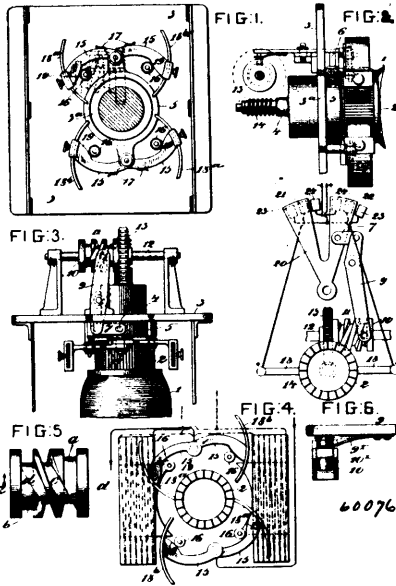
William Franklin Evans, of 1533 Ramsay Street, and Frank M. Blaney, both of Baltimore, Maryland, U.S.A., 20th May, 1898; 6 years. (Filed 19th February, 1898.)

Claim.—1st. A twin fish-hook having in combination a toggle with two jointed sections, two hooks each one of which has the extremity of its shank attached rigidly to a different section of the toggle, and a spring separate from the hooks which acts directly on the two toggle-sections and allows the hooks to be set in either of two positions, so as to move apart when sprung, or to close toward each other when sprung, as set forth. 2nd. A twin-fish hook having in combination a toggle with two jointed sections, a hook attached rigidly to each section, and a spring having a coil for the attachment of a line and from which two prongs project, each prong being loosely jointed to the end of a different toggle-section, as set forth. 3rd. A twin-hook having in combination a toggle with two jointed sections, two hooks each of which has its shank attached to a different section of the toggle and nearest opposite sides thereof, whereby in setting the hooks they may be crossed on each other the reverse way and there will be a binding or friction effect where they are in contact, and a spring having two prongs which connect directly with the toggle-sections, as set forth. 4th. A twin fish-hook having in combination a toggle with two jointed sections, two bait hooks each being attached to a different section of the toggle and capable of being set in either of two positions in one of which the hooks move apart when sprung, and a spring separate from the hooks, whereby either one of the hooks when taken in the mouth of a fish will act as a trigger to throw the other hook.

**No. 60,074. Bridge for Stringed Musical Instruments. (Chevalet pour instruments à cordes.)**

James E. Maynard, Taunton, Massachusetts, U.S.A., assignee of Geo. A. Fullerton, of Boston, Massachusetts, U.S.A., 20th May, 1898; 6 years. (Filed 21st February, 1898.)

**No. 60,076. Pole Changing Mechanism for Generators.**  
(*Mécanisme de changement de pôle pour générateur électrique.*)



The American Railway Electric Light Company, New York City, assignee of Patrick Kennedy, Brooklyn, all of New York State, U.S.A., 20th May, 1898; 6 years. (Filed 2nd December, 1897.)

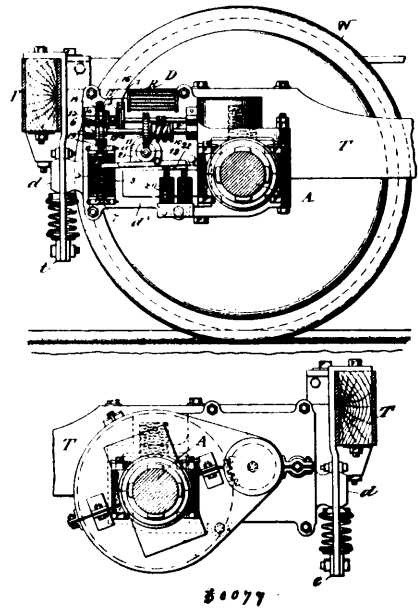
*Claim.*—1st. The combination with a dynamo, of a shifting helix, having two relatively shallow circumferential grooves and a deeper, spiral groove, connecting said two circumferential grooves and forming deflecting shoulders at the points of intersection therewith, a shifting lever, having a stud which engages a groove in said helix, gearing between the armature of the dynamo and said helix, whereby the former rotates the latter, and a pole-changer connected with and adapted to be operated by said shifting lever when the direction of rotation of the dynamo is reversed. 2nd. The combination with a dynamo, having a rotating armature and a commutator, or a shifting helix having two relatively shallow circumferential grooves and a deeper spiral groove connecting said circumferential grooves, substantially as described, gearing between the armature and said helix whereby the former rotates the latter, a shifting lever provided with a stud which engages a groove in said helix, two pairs of movably mounted commutator brushes, either pair of which may be put in contact with the commutator at will, and connections between said brushes and said shifting lever, whereby the latter shifts the brushes when the direction of rotation of the armature is changed. 3rd. The combination with a dynamo having a rotating armature and a commutator, of the movable ring or sleeve 5, the brush-holders 15, pivotally mounted on said sleeve and having each a cam 19, the studs 16, over which said cams are drawn when said sleeve is moved rotatively, the brushes carried by the respective holders, the springs which serve to keep the brushes pressed up toward the commutator, and shifting mechanism between said sleeve 5, and the armature adapted to shift the brushes by a rotative movement of said sleeve when the direction of rotation of the armature is changed. 4th. In a pole-changing mechanism, the combination with the shifting helix 11, having circumferential groove *a* and *b*, a deeper spiral groove *c*, connecting the said circumferential grooves, and deflecting shoulders *d, d*, as described, of the shifting lever 9, having a fixed stud 10, a sliding sleeve 10<sup>x</sup>, on said stud, and a spring 9<sup>x</sup>, bearing on said sleeve, said sleeve and stud engaging a groove in said helix, substantially as and for the purpose set forth.

**No. 60,077. Electric Current Controlling Device.**  
(*Appareil contrôleur de courant électrique.*)

The American Railway Electric Light Co., New York City, assignee of Patrick Kennedy, Brooklyn, all in the State of New York, U.S.A., 20th May, 1898; 6 years. (Filed 2nd December, 1897.)

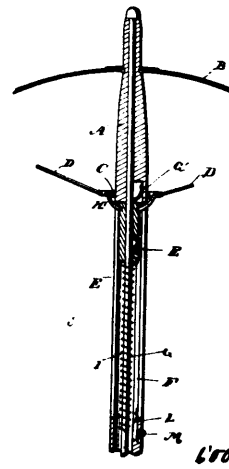
*Claim.*—1st. In a device for controlling electric currents, the combination with a dynamo, an external circuit fed by said dynamo, a rheostat in the field-magnet circuit of the dynamo, and a solenoid in the said external circuit, said solenoid having a movable core and a spring connected therewith, of the said spring and core, the latter provided with pawl-operating branches 16 and 16<sup>x</sup>, the rotatively mounted shaft 2, the contact-finger 3, carried by said shaft and adapted to move over the coil terminals of the rheostat, the ratchet-wheels 15 and 15<sup>x</sup>, fixed on said shaft 2, the crank-shaft 10, driven from the armature of the dynamo, the rocking pawl-carrier 13, rocked by said crank-shaft, and the spring-pawls 14 and 14<sup>x</sup>, carried by said pawl-carrier and adapted to engage the respective ratchet-

wheels 15 and 15<sup>x</sup>, the branches 16 and 16<sup>x</sup>, on the core of the



solenoid being adapted to shift said pawls, respectively, into and out of engagement by the movement of the solenoid core, substantially as set forth. 2nd. In a device for controlling electric currents, the combination with a dynamo, an external circuit fed by said dynamo, a solenoid in said external circuit, the movable core of said solenoid and its spring, a rheostat in the field-magnet circuit of the dynamo, and mechanism, substantially as described, whereby the movements of the solenoid-core controls the resistance in the said field-magnet coils, of a branch circuit from the main exterior circuit, means for breaking said branch circuit, an electro-magnet 20 in said branch circuit, an armature lever, one arm of which is coupled to the spring of the solenoid-core and the other provided with an armature in the field of force of said electro-magnet 20, and said armature, whereby, when said branch circuit is broken the tension of said spring is reduced, substantially as and for the purpose set forth. 3rd. In a device for controlling electric currents, the combination with a dynamo, an external circuit fed by said dynamo, a solenoid in said external circuit, the movable core of said solenoid and its spring, a rheostat in the field-magnet circuit of the dynamo, and mechanism, substantially as described, whereby the movements of the solenoid-core controls the resistance in the said field-magnet coils, of a branch circuit from the main circuit, lamps in said branch circuit, means for breaking said lamp-circuit, an electro-magnet in said lamp-circuit, and means between said electro-magnet and the core-spring of the solenoid, whereby the tension of said spring is increased when said electro-magnet is excited, substantially as set forth.

**No. 60,078. Umbrella. (Parapluie.)**

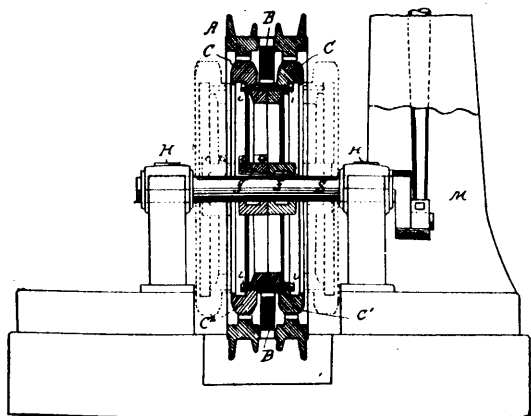


Royal V. Hill and Joseph King, both of Moose Lake, Minnesota, U.S.A., 20th May, 1898; 6 years. (Filed 12th February, 1898.)

*Claim.*—1st. In an umbrella, the combination of the tube or hollow rod, the collar to which the stretchers are connected, sliding

on said tube, a sleeve or plunger connected with said collar and sliding within the tube, a spring, also located within said tube and adapted to be compressed when the sleeve is forced down to close the umbrella, suitable means for forcing the sleeve down and holding it, and suitable means for automatically releasing the sleeve or plunger, substantially as shown and described. 2nd. In an umbrella, the combination of the tube or hollow rod, the collar to which the stretchers are connected, sliding on said rod, a sleeve or plunger connected to said collar and sliding within said tube, a spring, located within said tube and adapted to be compressed when the plunger is forced down, a rod, located within said tube and adapted to slide out of the same for a portion of its length, whereby the plunger can be depressed, a spring, secured to the tube and adapted to engage a notch in the rod for limiting its movement in one direction, substantially as shown and described. 3rd. In an umbrella, the combination of a tube or hollow rod, a collar, sliding in said tube or rod and having the stretchers secured thereto, a plunger, working within the tube and connecting with said collar, a spring, located within the tube and normally holding said plunger at the upper end of the tube, suitable means for forcing said sleeve down to compress the spring, a catch carried by the sleeve and adapted to be engaged by suitable means for holding the sleeve in its lower position, and suitable means for disengaging said catch from the spring, substantially as shown and described. 4th. In an umbrella, the combination of the tube or hollow rod, a collar, sliding on said tube, and having the stretchers connected thereto, a plunger or sleeve, sliding within the tube and connected with said collar, a spring for normally holding said sleeve in its upper position, a sliding rod for forcing said sleeve down to compress the spring, a catch, carried by said sleeve and adapted to be engaged by a spring secured to the tube, for holding the sleeve in its lower position, and a button carried by the tube for engaging said catch to disengage it from the spring, substantially as shown and described.

**No. 60,079. Inductor Generator. (Générateur inducteur.)**



60079

The Stanley Laboratory Company, assignee of Pomeroy W. Power, all of Pittsfield, Massachusetts, U.S.A., 20th May, 1898; 6 years. (Filed 25th January, 1898.)

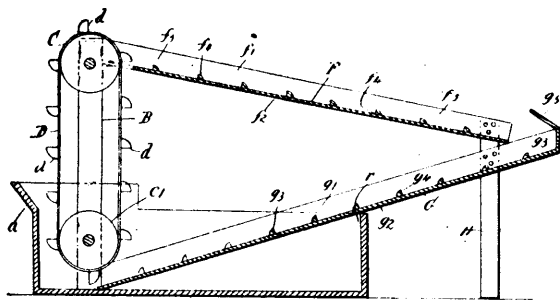
*Claim.*—1st. In an inductor-generator, the combination of a shaft, an inductor carried thereby, consisting of two parts separately mounted thereon, the plane of division being at right angles to said shaft, either of said parts being laterally movable of said shaft, and journal-boxes supporting said shaft at a considerable distance from said movable parts when the same are in operative position, substantially as described. 2nd. In an inductor-generator, having two crowns of induced coils on the interior of a cylindrical armature, the combination of a shaft, two inductor portions movably mounted thereon, and bearings for said shaft, the space between either of said parts and the bearing nearest thereto being substantially equal to the length of said induced coils, substantially as described.

**No. 60,080. Ore Washing Apparatus. (Appareil à laver l'or.)**

Edwin Orestese Pease, Newark, and Seth B. Sprague, Jersey City, both in the State of New Jersey, U.S.A., 20th May, 1898; 6 years. (Filed 31st December, 1897.)

*Claim.*—1st. An improved ore washing apparatus, comprising, in combination with a tank adapted to contain the ore and water, an elevator mechanism adapted to carry the ore and water from the tank, an inclined chute upon which the ore and water is delivered by the elevator mechanism, and a supplementary inclined chute upon which the ore and water is deposited from the first chute, said supplementary chute leading back into the tank, substantially as and for the purpose set forth. 2nd. An improved ore washing apparatus, comprising, in combination with a tank, a vertical elevator mechanism adapted to carry the ore and water from the

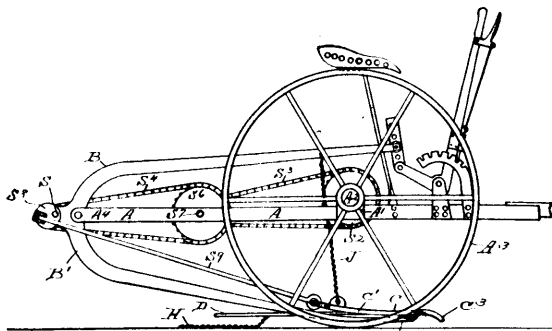
tank, an inclined chute extending downwardly and rearwardly from the top of the elevator mechanism, said chute being adapted



60080

to receive the ore and water from the elevator mechanism, and a supplementary lower inclined chute extending from the lower rear end of the top chute downwardly and forwardly into the tank, said supplementary chute being adapted to receive the ore and water from the top chute and return the same into the tank, substantially as and for the purpose set forth. 3rd. An improved ore washing apparatus, comprising, in combination with a tank adapted to contain the ore and water, a vertical elevator mechanism extending from within the tank and adapted to carry the ore and water therefrom, an inclined chute extending from said elevator mechanism and adapted to receive the ore and water therefrom, and a return chute adapted to receive the ore and water from the previous chute and extending from the same into the tank and to a point adjacent to the lower end of the elevator mechanism, substantially as and for the purpose set forth. 4th. An improved ore washing apparatus, comprising the tank adapted to contain the ore and water, a vertical elevator belt mechanism vertically mounted with respect to the tank and extending from within the same and adapted to elevate the ore and water therefrom, an inclined chute extending from the top of said elevator belt and adapted to receive the ore and water therefrom, said inclined chute being provided with transverse ribs upon its bottom to retard the flow of the ore and water through the chute, and a return chute adapted to receive the ore and water from the previous chute and extending back into the tank, said return chute being provided upon its bottom with transverse ribs adapted to retard the flow of the ore and water back into the tank, substantially as and for the purpose set forth. 5th. In an improved ore washing apparatus, the combination with a tank adapted to contain the ore and water, of an operative mechanism embodying an elevator adapted to carry the ore and water from the tank, and an inclined chute mechanism adapted to receive the ore and water from the elevator, said inclined chute mechanism extending from the top end of the elevator and back into the tank, the various parts of the operative mechanism being connected together so that said mechanism is separable or detachable from the tank and may be in its entirety set in operative position with relation thereto, substantially as and for the purpose set forth. 6th. An improved ore washing apparatus, comprising, in combination with a tank adapted to contain the ore and water, an elevator mechanism arranged to carry the ore and water from the tank, and inclined chutes extending from said elevator mechanism and returning to the tank, the elevator mechanism being adapted to deposit the ore and water to said return chute mechanism, whereby the ore and water is passed in successive movements from the tank and through the operative mechanism and returned to the tank, substantially as set forth.

**No. 60,081. Potato Digger. (Arrache-patates.)**



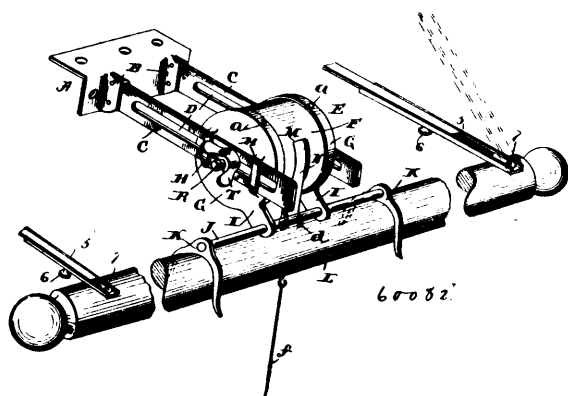
60081

James A. Buck, Crescent, and Le Roy Vermilyea, Cohoes, New York, U.S.A., 20th May, 1898; 6 years. (Filed 30th April, 1898.)

*Claim.*—1st. In a potato-digger, the combination with a truck and truck-supported plough-beam, of a two-winged plough super-

imposed upon and pivoted to the beam upon a vertical axis located intermediately of, and in approximately the same horizontal plane with the wings, and a crank-and-pitman connection between the truck-wheels and each wing of the plough, whereby positive oscillating movements will be communicated to the pivoted plough, substantially as described. 2nd. In a potato-digger, the combination with a truck and truck-supported plough-beam, of a two-winged plough super-imposed upon and pivoted to the beam upon a vertical axis intermediately of and in approximately the same horizontal plane with the plough-wings, operating connections between the truck-wheels and the plough for oscillating the wings, and a series of rearwardly projecting tines secured at their forward ends to the plough, substantially as described. 3rd. In a potato-digger, the combination with a truck and truck-supported plough-beam, of a plough pivoted upon a vertical axis, means for oscillating the plough upon its pivot, and supporting swing-connections between the upper end of the plough-beam and the plough located approximately at the centre of gravity of the plough, substantially as described. 4th. In a potato-digger, the combination with a truck and truck-supported plough-beam, of a plough pivoted upon a vertical axis and comprising a tusk projecting forwardly of the pivot, a pair of diverging wings or shares projecting rearwardly of the pivot on opposite sides, and a plurality of rearwardly projecting tines, supporting swing-connections attached to the wings rearwardly of the pivot, a crank-operated pitman secured to each wing, and operating connections between the crank and the truck-wheels, substantially as described.

**No. 60,082. Curtain Pole. (Porte-rideaux.)**



Ella E. Boland and Charles H. Lloyd, assignee of Joseph Boland, all of Pittsburg, Pennsylvania, U.S.A., 20th April, 1898; 6 years. (Filed 27th April, 1898.)

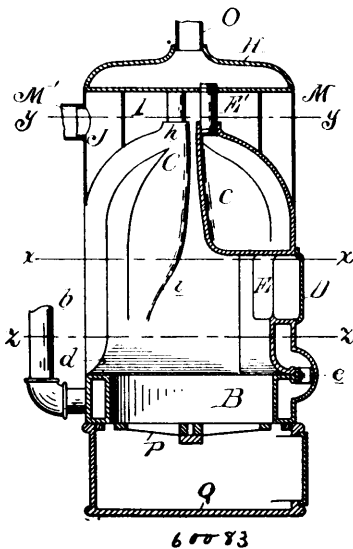
*Claim.*—1st. A curtain pole fixture, substantially as herein shown and described. 2nd. An improved curtain fixture, comprising an outwardly extending support adapted to be secured centrally to the top of a window frame, a vertically extensible pole supporting device sustained by the centrally positioned support, and an elongated pole embracing member extending transverse the support for holding the pole against vertical tilting when in raised position, substantially as shown and described. 3rd. A curtain pole fixture, comprising a bracket, a casing carried thereby containing a spring actuated drum, the casing having an elongated seat for the pole, and a tape wound upon the drum and at its outer extremity secured to the pole, substantially as shown and described. 4th. A curtain pole fixture, comprising a bracket carrying a spring actuated drum, an inverted socket for the pole, a tape having one end secured to the drum and its opposite end to the pole, and inwardly extending arms carried by the pole for the purpose described. 5th. A curtain pole fixture comprising a bracket having parallel arms, a casing between and adjustable on the arms, the casing carrying an inverted pole socket, a spring actuated drum in the casing, and a tape connected at one end to the drum and at its opposite end to the pole, substantially as shown and described. 6th. A curtain pole fixture comprising a bracket carrying a cylinder, a spring actuated drum within the cylinder, an inverted pole socket, a curtain pole, a tape having one end connected to the spring actuated drum and the other end to the pole, and a depending cord attached to the pole, substantially as shown and described. 7th. A curtain pole fixture, comprising a bracket, a cylinder carried thereby, a spring actuated drum within the cylinder, an inverted pole socket, a pole, a tape having one end connected to the drum and the other end to the pole, the tape having an opening, and a projection on the cylinder adapted to engage the tape opening and lock the tape against the action of the spring actuated drum, substantially as described.

**No. 60,083. Water Heater. (Calorifère.)**

The United States Heater Company, assignee of John A. Rathbone, all of Detroit, Michigan, U.S.A., 20th May, 1898; 6 years. (Filed 20th April, 1898.)

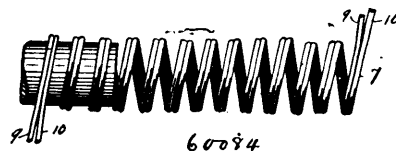
*Claim.*—1st. A water-heater composed of a series of vertical sections, each section comprising a segmental water shell having con-

verging walls whereby it contracts towards the top, lobes overhanging the fire on the inner face of the shell and having free communica-



tion with the interior of the shell, the shell and lobes converging to a common point, up-take pipes from this point, this arrangement of shell and lobes forming corresponding converging smoke flues whereby the heat is concentrated at the point of greatest speed of the circulation of the heater and the products of combustion move along with the direction of the circulation. 2nd. In a water heater, a series of vertical segmental sections, each comprising a water shell contracting and overhanging at the top separated at the inner ends to form a smoke flue or flues, a series of lobes springing (with inclined lower walls) from the shell sections and merging into a discharge common to the discharge from the contracted end of the shell sections, thereby forming a series of contracting flues between the lobes, a series of up-take pipes from the upper inner ends of the sections, a common dome, or chamber into which they connect, and a smoke chamber between this dome and the heater body. 3rd. In a water heater comprising sections each segmental ring-shaped, contracting into a dome shape at the top, the inner wall of the section having the curved faces *c, d* at the sides and bottom to the outside wall, the central lobes *C*, having the lower inclined walls and the extensions *h* into which the contracting ends of the shell sections merge, and the exit pipes *E'* from these extensions. 4th. In a water heater, the combination of sections forming segments curved inward at the top both outside and in, and with converging sides inwardly projecting lobes at the upper part of each section terminating at the inner edge of the top of the section, the water exit for the sections at the top of the lobes and smoke flues formed through the tops of the sections between and beside the lobes.

**No. 60,084. Wire Spring. (Ressort en fil de fer.)**



Joseph Dewtch and Albert T. Mitchell, both of Cleveland, Ohio, U.S.A., 20th May, 1898; 6 years. (Filed 27th April, 1898.)

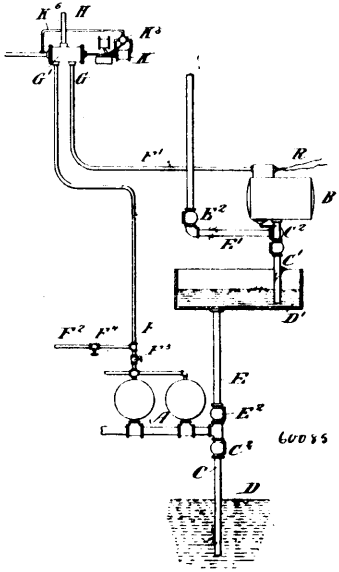
*Claim.*—The spring described, consisting of two sets of spirally-wound wires, each set having a plurality of wires coiled together in the same direction and interlocked with each other, and the two sets formed into a single roll or coil, one of said sets coiled to the right and the other coiled to the left, and said roll or coil pressed flat and forming a flat spring, substantially as described.

**No. 60,085. Pump. (Pompe.)**

The Pneumatic Engineering Company, New York City, assignee of Elmo G. Harris, Rolla, Missouri, all in the U.S.A., 20th May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. In a pneumatic water-elevating device, the combination of two closed pumping chambers or vessels having pipe connections at their bottoms for admitting and discharging air, and an air-compressor, with a shifting valve or switch forming part of the connections from both the inlet and discharge pipes of the air-com-

pressor to the pumping-chambers, and an operating mechanism for said shifting valve, consisting of a movable piston, operating con-



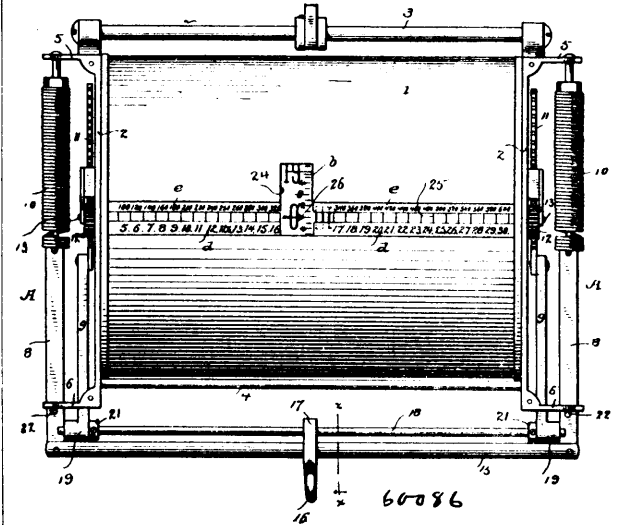
nections between the piston and the shifting valve, and a reversible connection from the inlet side of the air-compressor to side of the said piston and from the opposite side of the piston to the free air, substantially as shown and described. 2nd. A valve-shifting mechanism for pneumatic pumping devices, consisting of a valve placed to control the inlet and discharge pipes of the air-compressor and capable of crossing the same, in combination with an operating mechanism therefor, consisting of a cylinder and a piston connected at one end of the air-compressor suction and at the other end to the atmospheric air and a weight movable at right angles to the motion of the piston and connected to said piston by a link, whereby it will resist the motion of the piston during the first half of its travel and assist it during the latter half of its travel, substantially as shown and described. 3rd. A valve-shifting mechanism for pneumatic pumping devices, consisting of a valve placed to control the inlet and discharge pipes of the air-compressor and capable of crossing the same, in combination with an operating mechanism therefor, consisting of a cylinder and a piston connected at one end to the air-compressor suction and at the other end to the atmospheric air, a valve by which said connections may be reversed, and connections from said valve to the piston, with means for shifting the valve and crossing the pipes, operated by atmospheric air on one side and a reduction below atmospheric air in one of the pumping-chambers on the other side, and a weight movable at right angles to the motion of the piston and connected to said piston by a link, whereby it will resist the motion of the piston during the first half of its travel and assist it during the latter half of its travel, substantially as shown and described. 4th. A pump, consisting of two vessels each having at its bottom a pipe connection for admitting and discharging water and each having at its top a pipe connection for admitting and discharging air, a switch connecting the air-pipes of said vessels with two other pipes leading to the inlet and discharge, respectively, of an air-compressor, said switch being adapted to reverse the connections of said air-pipes with said pipes leading to the inlet and discharge of an air-compressor, and an engine for automatically operating the said switch through the medium of atmospheric pressure in conjunction with a partial vacuum created in the intake-pipe of the compressor, said engine comprising a cylinder, a piston and piston-rod, a valve arranged to admit free air to propel the piston and to allow the opposing air to escape into the intake-pipe of the compressor, said valve being operated by a rod connected at one end to the said piston-rod and at the other end to a crank or valve-stem arranged to actuate the valve, and an adjustable weight mounted between vertical guides above said piston rod and connected thereto by a link which in its extreme positions is inclined so that said weight must be lifted as the piston moves from either end of its cylinder, substantially as shown and described.

**No. 60,086. Recording Scales. (Balance.)**

The Boston Computing Scales Co., Boston, Massachusetts, assignee of Albert Upson Smith, Saugatuck, Connecticut, all in the U.S.A., 20th May, 1898; 6 years. (Filed 12th April, 1898.)

*Claim.*—1st. In a scale of the character described, the combination with a casing having openings 23 and 24 in opposite sides thereof, said openings being covered with transparent material having stationary pointers thereon, of a drum adapted to rotate in said casing, racks and springs substantially as specified, for rotating said drum, the said drum being provided with two independent columns

of figures to indicate pounds and ounces, said columns of figures reading in opposite directions and being visible at openings 23 and

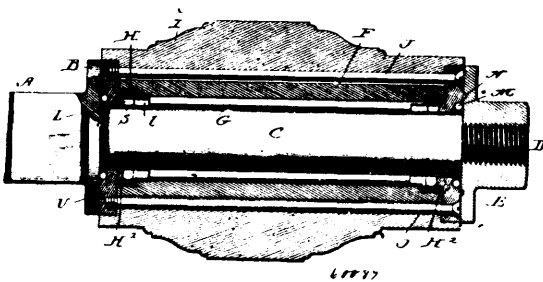


24, respectively, and each of said openings being adapted to permit the reading of the figures in one column only, the pointers on the transparent coverings being so arranged that when one weight is indicated by the pointer at opening 23, the said weight is also indicated by the pointer at opening 24, whereby the two indications correspond with each other. 2nd. In a scale of the character described, the combination with a casing having openings in opposite sides but not opposite each other, of a revoluble drum provided with a series of columns of figures representing dollars and cents, and two independent columns of figures representing weights in pounds and ounces, one column of the latter being arranged to be read from the same side of the casing as the figures representing dollars and cents, and the other column of weight-figures being arranged to be read solely through the opening in the opposite side of the casing, the figures representing dollars and cents not being visible from said opposite side, the openings in the opposite sides of the casing being covered with transparent material having stationary pointers thereon adapted to correspond with each other in their indications of figures, so that when the pointer on one side indicates one figure in one column, the other pointer on the other side will indicate exactly the same figure in the other column. 3rd. In a scale of the character described, the combination with the draft-bars and the rack-bars, of an evener pivoted to the draft-bars and carrying an eye 17 and a cross-rod 18 connected to the rack-bars and passing loosely through the eye, a casing having openings 23 and 24 in opposite sides thereof, a drum having pinions engaging said rack-bars and adapted to rotate in said casing and provided with two independent columns of figures to indicate pounds and ounces, said columns of figures reading in opposite directions and being visible at openings 23 and 24 respectively. 4th. In a scale of the character described, the combination with the draft-bars and the rack-bars, of an evener pivoted to the draft-bars and carrying an eye 17 and a cross-rod 18 connected to the rack-bars and passing loosely through the eye, a casing having openings 23, 24 and 25, a drum having pinions engaging said rack-bars and adapted to rotate within the casing and provided with columns of figures to indicate amounts of money which are adapted to register with opening 25 and with two independent columns of figures to indicate pounds and ounces, said two columns of figures reading in opposite directions and one of said columns being visible at opening 23 and the other at opening 24. 5th. In a scale of the character described, the combination with the draft-bars and the rack-bars, of an evener pivoted to the draft-bars and carrying an eye 17, and a cross-rod 18 connected to the rack-bars and passing loosely through the eye, a casing having openings 23 and 24 on opposite sides thereof, a drum having pinions engaging the said rack-bars and provided with two independent columns of figures to indicate pounds and ounces, pounds in said columns being indicated by relatively large figures and ounces by relatively small figures, said columns of figures reading in opposite directions and being visible at openings 23 and 24 respectively. 6th. In a scale of the character described, the combination with the draft-bars and the rack-bars, of an evener pivoted to the draft-bars and carrying an eye 17, and a cross-rod 18 connected to the rack-bars and passing loosely through the eye, a casing having openings 23 and 24 and below opening 25 a line of figures indicating prices per pound for purchases, and above opening 25 a line of figures indicating amounts to be charged for a predetermined number of pounds of merchandise, a drum having pinions engaging said rack-bars and adapted to rotate within the casing, and provided with columns of figures visible at opening 25 to indicate amounts to be charged for merchandise between one pound and the predetermined number of pounds, and with independent columns of figures visible at openings

23 and 24, respectively, to indicate pounds and ounces. 7th. In a scale of the character described, the combination with the draft-bars and the rack-bars, of an evener pivoted to the draft-bars and carrying an eye 17 and a cross-rod 18 connected to the rack-bars and passing loosely through the eye, whereby cramping of the parts is prevented should the evener be tilted out of parallel with the cross-rod. 8th. The combination with the draft-bars and the rack-bars, having sleeves 19, of an evener pivoted to the draft-bars and carrying at its centre an eye 17 and a cross-rod 18 which passes through the sleeves and bears upon the draft-bars, and the centre of which passes loosely through the eye upon the evener, so that cramping of the parts will be prevented and the pull upon the rack-bars will be even at all times. 9th. In a scale of the character described, the combination with brackets 6, having slots 7, and the draft-bars and rack-bars which pass through said slots, of the evener and spring cross-rod 18 by which the draft-bars and the rack-bars are respectively connected, means for connecting said evener and spring cross-rod, and stop-pins 22 in the draft-bars which are adapted to engage the brackets to limit the upward movement of the draft-bars and rack-bars and stop the backward rotation of the drum. 10th. In a scale of the character described, the combination with a frame, the draft-bars having stop-pins 22 adapted to engage the frame and the rack-bars, of an evener pivoted to the draft-bars and a spring cross-rod connected to the evener and to the rack-bars, said spring cross-rod being adapted to yield when the stop-pins engage the frame, and thereby prevent shock to the drum. 11th. The combination with the frame, the drum, the rack-bars, and the draft-bars, having stop-pins 22, of an evener pivoted to the draft-bars and carrying an eye, and a spring cross rod which passes through the eye and is connected to the rack-bars, whereby when the upward movement of the draft-bars is stopped by the engagement of the stop-pins with the frame the backward rotation of the drum is stopped yieldingly.

**No. 60,087. Anti-Friction Bearing.**

(*Coussinet de tourillon sans friction*)

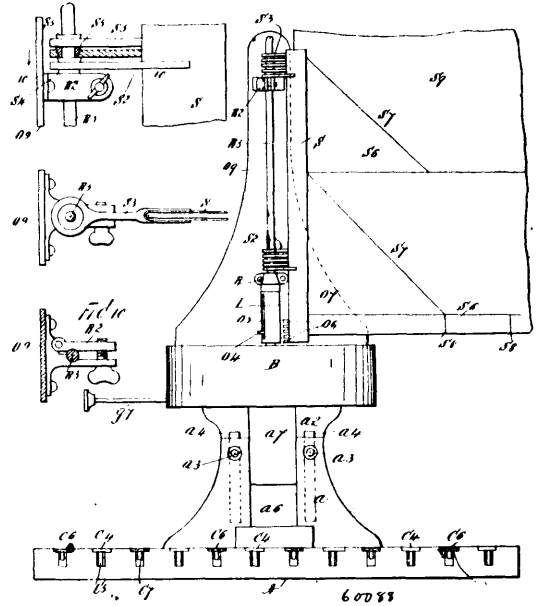


The Standard Roller Bearing Co., Philadelphia, Pennsylvania, assignee of Charles Bingley Hobron, of Boerne, Texas, all in the U.S.A., 20th May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. An anti-friction bearing comprising a series of rollers, roller supports at opposite ends only thereof and having inwardly projecting lugs formed with roller sockets between them, a ring removably secured to one of the roller supports and closing the ends of the roller sockets to prevent endwise displacement of the rollers, means for closing the sockets in the other roller support, a shaft or journal against which the rollers bear throughout their entire lengths and a casing against which the rollers bear throughout the greater portion of their lengths. 2nd. The combination of the rollers, a roller support having individual sockets for the rollers, and balls arranged in said individual roller sockets at the ends of the rollers. 3rd. The combination of the rollers, roller supports formed with a series of roller sockets, devices for closing the ends of the sockets, and balls extending partially through the openings in said closing devices and bearing against the ends of the rollers. 4th. An anti-friction bearing comprising a series of rollers, roller supports at opposite ends thereof and having inwardly projecting lugs formed with roller sockets between them which are open at their inner and outer ends to permit the rollers to bear against the journal and also against the case, and are open at opposite ends to permit endwise movement of the rollers, a ring movably secured to one of the roller supports and closing the ends of the roller sockets to prevent endwise displacement of the rollers, means for closing the sockets in the other roller support, a shaft or journal against which the rollers bear throughout their entire lengths, and a casing against which the rollers bear throughout the greater portion of their lengths.

**No. 60,088. Music Leaf Turner.**

(*Tourne-feuille de musique.*)



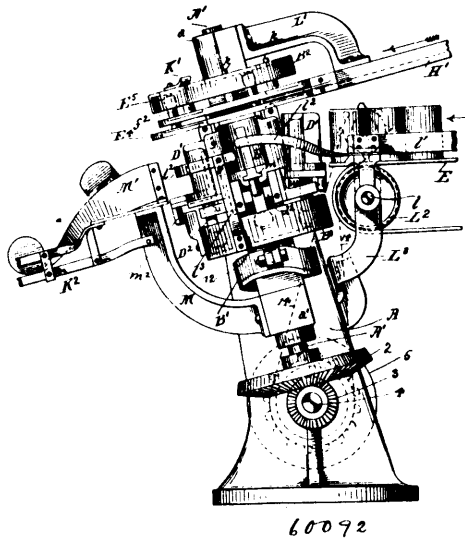
Emra Webster Funk, Two Harbors, Minnesota, U.S.A., 21st May 1898; 6 years. (Filed 12th May, 1898.)

*Claim.*—1st. A music leaf turner, comprising a base box or casing, a supplemental box or casing mounted thereover, music frames revolvably supported above said supplemental box or casing, a tubular and revoluble cylinder supported above said supplemental box or casing, and provided with a slot in one side thereof, and an extension which projects downwardly into said supplemental box or casing, a screw which passes upwardly through said extension and through said cylinder, and on which is mounted a block which is provided with an arm which projects through said slot, and which is adapted to operate in connection with lugs or projections formed on said music frames, substantially as shown and described. 2nd. In a music turner, a base box or casing provided with two spring operated shafts, each of which is provided with keys, a supplemental box or casing mounted above said base box or casing, a shaft mounted above said supplemental box or casing and provided with music supports which are revolvably mounted thereon, a revoluble cylinder mounted below said shaft and provided with an extension which projects into the supplemental box or casing, a screw which passes upwardly through said extension and through said cylinder, a movable block mounted on said screw and provided with an arm which projects through a vertical slot formed in said cylinder, a spring drum mounted in said supplemental box or casing and operative devices connected with said parts whereby the music supports may be turned by operating the shafts in the base box or casing, substantially as shown and described. 3rd. In a music turner, a base box or casing, provided with two spring operated shafts, each of which is provided with keys, a supplemental box or casing mounted above said box or casing, a shaft mounted above said supplemental box or casing, and provided with music supports which are revolvably mounted thereon, a revoluble cylinder mounted below said shaft and provided with an extension which projects into the supplemental box or casing, a screw which passes upwardly through said extension and through said cylinder, a movable block mounted on said screw and provided with an arm which projects through a vertical slot formed in said cylinder, a spring drum mounted in said supplemental box or casing, and operative devices connected with said parts whereby the music holders may be turned by operating the shafts in the base box or casing, a supplemental box or casing being vertically adjustable, substantially as shown and described. 4th. A music turner comprising a base box or casing, spring operated shafts mounted therein, each of which is provided with keys, a supplemental box or casing mounted above said base box or casing and connected therewith, operative shafts connected with the shafts in the base box or casing, and projecting upwardly into said supplemental box or casing, a shaft supported above said supplemental box or casing and provided with music supports which are revolvably mounted thereon, a revoluble cylinder mounted below said shaft, and provided with a slot in one side thereof, and an extension which projects downwardly into the supplemental box or casing, a screw which passes upwardly through said extension and through said cylinder, a block mounted on said screw within said cylinder and provided with an arm which projects through said slot and which is adapted to operate in connection with said music supports, a spring drum mounted in said supplemental box or casing, and operative devices whereby the music holders may be operated by means of said spring





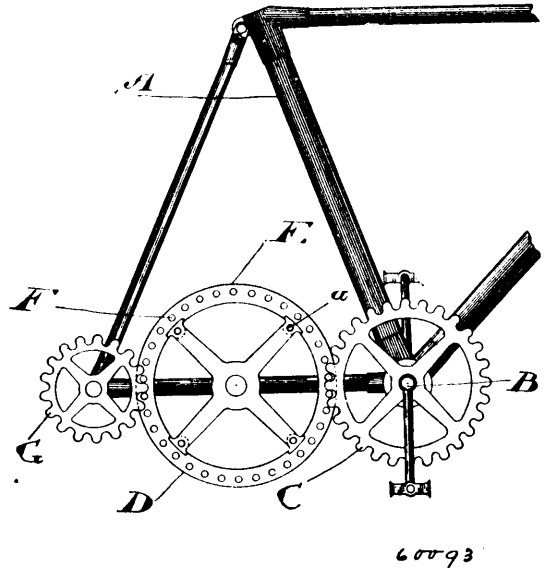
3rd. In a machine for heading cans, the combination with the rotary shaft, of the can-head holders connected therewith, the vertically-



movable slide-plates carried by the rotary shaft, the can-holders fulcrumed to the slide-plates, devices for imparting a vertical movement to the slide-plates to raise and lower the can-holders, and of the device for forcing the headed or ended can from within the can-holders. 4th. In a machine for heading cans, the combination with the rotary shaft, of the can-holders connected to and carried by said shaft, the movable face-plate hinged to the stationary section of the can-head holder, devices for raising and lowering the movable face-plate, and of the plunger-rod for forcing the headed can-body from within the can-head holder. 5th. In a machine for heading cans, the combination with the vertically-movable slide-plates, of the can-holders fulcrumed thereto, the can-head holders, of mechanism for moving the slide-plates toward and from the can-head holders, and of devices for throwing the can-holders from an inclined to a vertical position. 6th. In a machine for heading cans, the combination with the vertically-movable slide-plates, of the can-holders fulcrumed at one end to the slide-plates, the can-head holders, mechanism for moving the slide-plates toward and from the can-head holders and moving the can-holders from an inclined to a vertical position, and of devices for forcing the headed can from within the can-holder. 7th. In a heading machine for cans, the combination with the rotary shaft, of a series of cam-rings, each having an eccentric groove therein, the hub fastened upon the rotating shaft, vertically-movable slide-plates working within a guide channel formed in the hub of the rotatiag-shaft, a roll connected to the side-plates, the can-holder fulcrumed at one end of the side-plates, a roll secured to an arm projecting from the can-holder, the roll of the can-holder and slide-plate working in eccentric grooves, the can-head holder connected to the rotating shaft, the movable face-plate secured thereto, the roll secured to an arm projecting from the movable face-plate, a cam-ring having an eccentric groove therein within which the said roll works, and of devices for forcing the headed end of the can from within the can-head holder and the can from within the can-holder. 8th. The combination with the fulcrumed can-holders, of a can-extracting device working therein, and of devices for moving the extracting device in and out of the can-holder. 9th. The combination with the rotating shaft, of the can-head holders carried thereby, the movable can-holders, mechanism for imparting rotary motion to the said shaft, the can-conveyer or feed-belt which delivers filled cans to the holders, mechanism for driving the conveyer or feed-belt at a higher speed than the rotating shaft, and of devices for moving the can holder toward and from the can-head holders. 10th. The combination with the rotating shaft, of the can-head holders secured thereto, the fulcrumed can-holders, devices for imparting vertical movement to the can-holders, mechanism for delivering filled cans to the can-holders in a vertical position, and of devices for retaining the cans in the can-holders during the heading operation. 11th. In a machine for ending or heading cans, the combination with the rotating shaft, of the vertical can-holders secured to and carried thereby, the can-head holders carried by the shaft, devices for moving the can-holders toward and from the can-head holders, the can-conveyer or feed-belt which delivers filled cans to the can-holders during the rotary travel thereof, and of mechanism for imparting greater speed to the conveyer or feed-belt than to the rotary shaft carrying the can and can-head holders. 12th. In a machine for ending or heading cans, the combination with the rotary travelling mechanism carrying can-holders, of the can-conveyer or feed-belt for delivering the filled cans to the can-

holders in a vertical position, said conveyer or feed-belt travelling at a greater speed than that of the can-holders. 13th. In a machine for assembling can-bodies and heads and applying the heads to the can-body, the combination with the can-body holder, of the can-head holders, and of mechanism for forcing the end of the can-body into the flange of the can-head by a tilting movement.

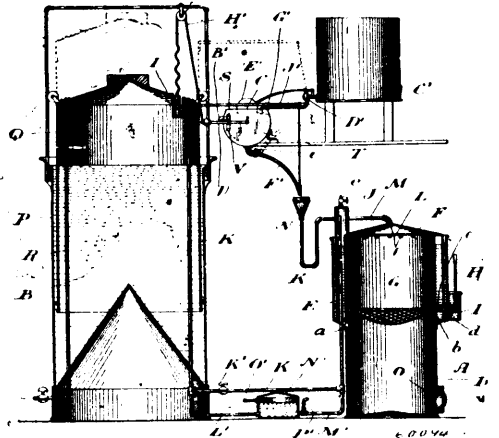
**No. 60,093. Bicycle Gear. (Engrenage de bicycles.)**



William Thompson, Woodstock, Ontario, Canada, 21st May, 1898; 6 years. (Filed 24th December, 1897.)

*Claim.*—1st. In a bicycle, the combination of a gear-wheel with rounded teeth or cogs secured to the crank axle, a similar gear pinion adapted to revolve the rear wheel, and an intermediate wheel journalled upon the frame and provided with a double rim and cross-pins with which the teeth of the gears engage, substantially as and for the purpose specified. 2nd. In a bicycle, the combination of a gear-wheel with rounded teeth or cogs secured to the crank axle, a similar gear pinion adapted to revolve the rear wheel, and an intermediate wheel journalled upon the frame and provided with a double rim and barrel-shaped cross-pins with which the teeth of the gears engage, substantially as and for the purpose specified. 3rd. In a bicycle, a gear-wheel having a double rim formed in two parts bolted to the ends of the spokes, and provided with cross-pins in which the teeth of the gear may engage, substantially as and for the purpose specified. 4th. In a bicycle, a gear-wheel having a double rim formed in two parts bolted to the ends of the spokes, and provided with barrel-shaped cross-pins in which the teeth of the gear may engage, substantially as and for the purpose specified.

**No. 60,094. Acetylene Gas Producing and Storing Apparatus. (Appareil pour la production et l'emmagasinage du gaz acetylene.)**

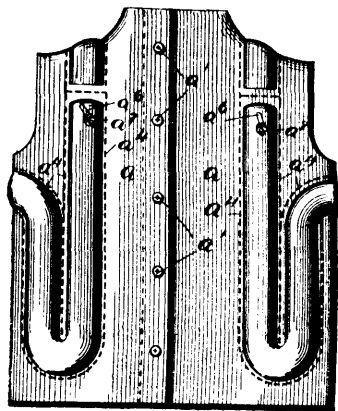


Richard Frederick Carter, Niagara Falls, Ontario, Canada, 21st May, 1898; 6 years. (Filed 16th July, 1897.)

*Claim.*—1st. In an acetylene gas machine, a source of water supply, a generator and a water channel between the source of water supply and the generator having as a member a journalled tip tank adapted when tipped to discharge a portion of its contents into the lower part of the channel, in combination with a float within the tank adapted to control the water supply to the upper part of the said channel, mechanism controlled by the gas supply for tipping the said tank, and a stop to limit the gas supply for tipping the said tank, and a stop to limit the amount of tip, substantially as and for the purpose specified. 2nd. In an acetylene gas machine, a source of water supply, a generator, a gas holder, a gas pipe connecting the holder and generator, and a water channel between the source of water supply and the generator having as a member a journalled tip tank adapted when tipped to discharge a portion of its contents into the lower part of the channel, in combination with a float within the tank adapted to control the water supply to the upper part of the said channel, mechanism operated by the fall of the dome of the gas holder for tipping the said tank and a stop to limit the amount of tip, substantially as and for the purpose specified. 3rd. In an acetylene gas machine, a source of water supply, a generator, a suitably journalled tip tank, a pipe adapted to carry water from the source of supply to the tip tank, and a valve in said pipe, in combination with a float within the tank adapted to control the said valve, mechanism controlled by the gas supply for tipping the said tank, and a water channel adapted to receive the water tipped from the tank and convey it to the generator, substantially as and for the purpose specified. 4th. In an acetylene gas machine, a source of water supply, a generator, a suitably journalled tip tank, a pipe adapted to convey water from the source of supply to the tip tank, and a valve in said pipe, in combination with a float within the tank adapted to control the said valve, mechanism controlled by the gas supply for tipping the said tank, a stop to limit the amount of tip, and a water channel adapted to receive the water tipped from the tank and convey it to the generator, substantially as and for the purpose specified. 5th. In an acetylene gas machine, a source of water supply, a generator, a gas holder, a gas pipe connecting the holder and generator and a water channel between the source of water supply and the generator, having as a member a journalled tip tank adapted when tipped to discharge a portion of its contents into the lower part of the channel, in combination with a float within the tank adapted to control the water supply to the upper part of the said channel, mechanism operated by the fall of the dome of the gas holder for tipping the said tank, a stop to limit the amount of tip, and an overflow spout for the tank located below the normal level of the discharge point of the tank and adapted to convey surplus water to waste, substantially as and for the purpose specified. 6th. In an acetylene gas machine, a source of water supply, a generator, a suitably journalled tip tank, a pipe adapted to convey water from a source of supply to the tip tank, and a valve in said pipe, in combination with a float within the tank adapted to control the said valve, mechanism controlled by the gas supply for tipping the said tank, a water channel adapted to receive the water tipped from the tank and convey it to the generator, and an overflow spout for the tank located below the normal level of the discharge point of the tank and adapted to convey surplus water to waste, substantially as and for the purpose specified. 7th. In an acetylene gas machine, a source of water supply, a generator, a gas holder, a gas pipe connecting the holder and generator, a tip tank, an outer tank in which the said tip tank is journalled, a pipe adapted to convey water from the source of supply to the tip tank, and a valve in said pipe in combination with a float within the tank adapted to control the said valve, a lever arm connected to the tip tank, an adjustable stop to limit the movement of the said lever, a cord connected to the lever passing round a suitable guide or guides to the gas dome of the holder, and a pipe connecting the outer tank with the water inlet of the generator, substantially as and for the purpose specified. 8th. In an acetylene gas machine, a generator, the water supply pipe thereof provided with a suitable funnel or opening, a gas holder and a pipe connecting the generator with the holder in combination with a source of water supply, a passage way for water between the said source and the funnel or opening provided with a hinged member which may be moved to discharge the water into the said funnel or opening or moved to allow the water to escape at the hinge, and means for so moving the said member by the rise and fall of the gas dome, substantially as and for the purpose specified. 9th. In an acetylene gas machine, a generator, and the water supply pipe thereof, provided with a suitable funnel or opening, in combination with a source of water supply, a passage way for water between said source and the funnel or opening, provided with a hinged member which may be moved to discharge the water into said funnel or opening or moved to allow the water to escape at the hinge, and automatic means for so moving the said member, substantially as and for the purpose specified. 10th. In an acetylene gas machine, a generator, and the water supply pipe thereof, provided with a suitable funnel or opening, a gas holder and a pipe connecting the generator with the holder, in combination with a source of water supply, a divided hinged water pipe connected with said water supply and adapted normally to discharge into the said funnel, and a cord connected to the gas dome and adapted, when the dome rises, to lift the hinged pipe and allow surplus water to flow from the hinged joint, substantially as and for the purpose specified. 11th. In an acetylene gas machine, the combination of a generator and gas holder having a gas exit pipe connecting them, a stop-cock

inserted in said pipe between said generator and holder and arranged to close communication between them, pipes connected with said gas exit pipe, one on each side of said stop-cock, and a water chamber in which each of the last-mentioned pipes enter, substantially as and for the purpose specified. 12th. In an acetylene gas machine, the combination of a generator and gas holder having a gas exit pipe connecting them, a stop-cock inserted in said pipe between said generator and holder and arranged to close communication between them, pipes connected with said gas exit pipe, one on each side of said stop-cock, and a closed water chamber provided with a gas outlet pipe near its upper end, each of the said last-mentioned pipes entering the lower part of the said water chamber, substantially as and for the purpose specified. 13th. In an acetylene gas machine, the combination with a generator and gas holder having a gas exit pipe connecting them, a stop-cock inserted in said pipe between said generator and holder and arranged to close communication between them, a closed water chamber provided with a gas outlet pipe near its upper end, pipes connected to the said water chamber near its bottom and to said gas exit pipe, one on each side of said stop-cock, and an overflow pipe connected with the water space of the said chamber and open at its upper end below the level of the gas outlet pipe of the water chamber, substantially as and for the purpose specified.

**No. 60,095. Swimming and Life-Preserving Suit. (Habit de sauvetage.)**

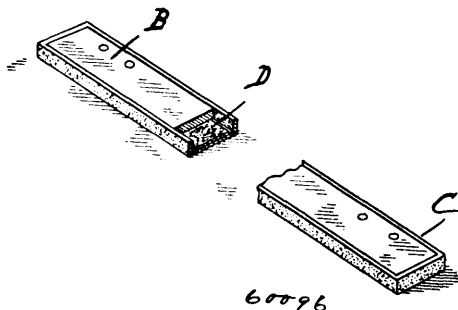


60095

Robert B. Stevenson, Massey Station, Ontario, Canada, 21st May, 1898; 6 years. (Filed 12th March, 1898.)

*Claim.*—1st. A swimming and life preserving suit, comprising a sectional vest, each of said sections being provided with inflatable tubes, and each tube being provided with an inflating tube. 2nd. A swimming and life preserving suit, comprising a sectional vest adjustably connected together, each of said sections being provided with an inflatable tube, and each tube being provided with an inflated tube connected therewith. 3rd. A swimming and life preserving suit, comprising a vest formed in sections, a channel formed within each of said sections, an inflatable tube mounted in each of said channels, an inflating tube connected to each of said inflatable tubes, and valves for said inflating tubes. 4th. A swimming and life preserving suit, comprising a vest, channel formed therein, an inflatable tube mounted in said channels, and an inflating tube having operative connection with said inflatable tube.

**No. 60,096. Temporary Binder. (Lien temporaire.)**



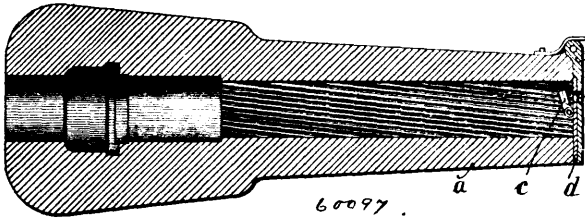
60096

Robert J. Copeland and Albert E. Chatterton, both of Toronto, Ontario, Canada, 21st May, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—1st. In a binder, a back bar and the cover thereof, in combination with a case adapted to form a pad between the bar and

the cover, substantially as and for the purpose specified. 2nd. In a binder, a back bar and the cover thereof, in combination with a soft, flexible case adapted to cover the edges and one side of the back bar to form a pad between the bar and the cover, substantially as and for the purpose specified. 3rd. In a binder, a back bar and the cover thereof, in combination with a soft, flexible case adapted to cover the edges and one side of the back bar to form a pad between the bar and the cover, and a strip of straw board between the bar and the bottom of the case, substantially as and for the purpose specified. 4th. In a binder, a back bar and the cover thereof, in combination with a soft, flexible case adapted to cover the edges and one side of the back bar to form a pad between the bar and the cover and a strip of straw board of less width than the bar, placed between the bar and the bottom of the case, substantially as and for the purpose specified.

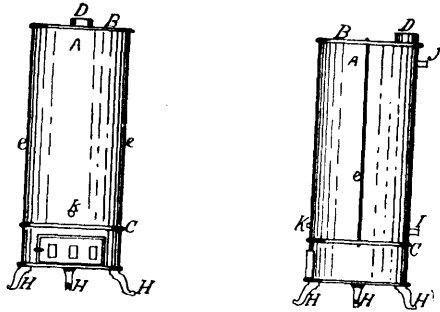
**No. 60,097. Device for Preventing the Report of Guns.** (*Appareil pour empêcher la détonation des armes à feu.*)



Gottfried Scheuber, Berlin, Prussia, 21st May, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—A device for preventing the report and recoil of guns, consisting in the arrangement at the muzzle of the barrel, of a spring flap *b* opening outwardly and provided with an automatic valve *c* opening inwardly, for the purpose of closing the muzzle of the barrel immediately after discharge of the shot, and by means of the valve *c*, permitting only a gradual entry of air into the bore, substantially as described.

**No. 60,098. Water Heater.** (*Calorifère.*)



Robert Rushton, St. Thomas, Ontario, Canada, 21st May, 1898; 6 years. (Filed 4th March, 1898.)

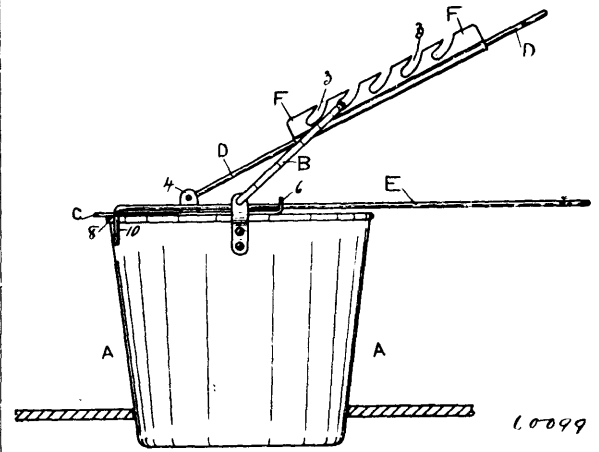
*Claim.*—1st. The combination with the outer shell *A* and inner cylinder *F* of the top and bottom plates *B* and *C* and the rods *e e e*, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the outer shell and inner cylinder having a water space interposed and the top and bottom plates having annular grooves to receive the ends of the shell and cylinder, substantially as and for the purpose hereinbefore set forth.

**No. 60,099. Strainer.** (*Passoire.*)

Charles Yeager, Hamilton, Ontario, Canada, 21st May, 1898; 6 years. (Filed 3rd May, 1898.)

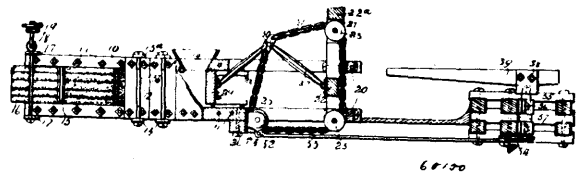
*Claim.*—1st. A strainer of the character described, comprising an apertured plate to cover the pouring out part of the pot, an upper handle pivoted to lugs a distance apart and in line on said plate a series of curved openings in the plate attached to the upper side of the handle for entrance of the bail of the pot, and a lower handle the rods of which pass through a rear and upper flange of said plate and underneath the pivotal ends of the upper handle, and extending through the upper part of said plate to hold the pot when straining, as described. 2nd. A strainer consisting of an apertured plate with rear and upper flange and capable of resting on the pouring out part of the pot, a rear projecting and lower handle the forward ends of which pass through said rear flange and on the plate and a distance apart widening out to the fore part thereof and extending through

the plate at right angles thereto as holder for the pot, an upper handle pivoted to lugs formed on a central part of the plate and in



line and on the inner sides of the rigid rods of lower handle and in close proximity thereto, the pivotal ends of the upper handle bent outwards and extending over and in close position to the rods of lower handle, and the upper handle having a series of curved openings for admission of the bail of pot, as described. 3rd. In a pot strainer, a plate having apertures and a rear upper flange formed therefrom and covering the fore straining part of a pot, rods of a rigid handle a distance apart through said flange and widening out to the fore part of the plate and bent downwards through said plate sufficiently to engage the outer side of pot, an upper handle, the widened out ends of which are bent outwards over said rigid rods of lower handle, and pivoted to lugs punched out of and bent upwards on said plate, the middle part of said upper handle brought together and held by means of a plate folded around the rods thereof and extended upward in the middle and formed with a series of curved openings to hold the bail of the pot, as described.

**No. 60,100. Hay Press.** (*Presse à foin.*)

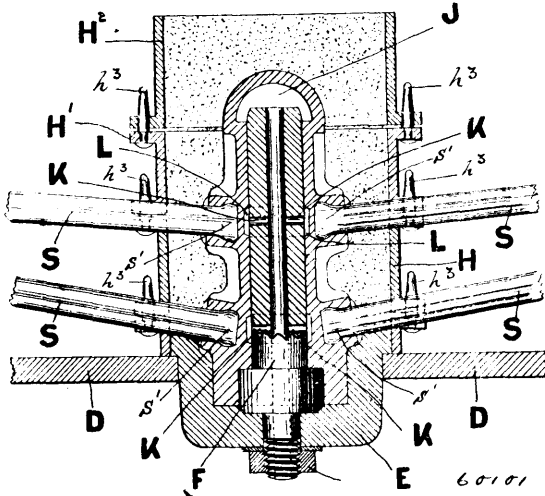


Roderick McLeod, Eburne, administrator of the Estate of Ewen McLeod, in his life time of Sea Island, all in British Columbia, Canada, 21st May, 1898; 6 years. (Filed 26th April, 1898.)

*Claim.*—1st. In a press of the class described having a follower therein, the combination of an opening for the passage of hay or the like, a toggle formed by the arms 27 and 28 engaging the follower and a fixed frame arranged in alignment with the opening for the passage for the matter to be pressed, sheaves 23 and 25 arranged in alignment with the said toggle, a chain passing round such sheaves a rod 33 connecting with such chain and a crank 34 secured to a vertically fixed shaft 35, and means for causing such shaft to turn whereby the chain will travel back and forth, and the toggle will force the arm 28 forward, as and for the purpose set forth. 2nd. In a hay press having a passage for hay and a follower therein, a frame 21 arranged at the rear of the opening for the matter to be pressed, sheaves 23 secured near the top and bottom of the said frame 21, a sheave 25 fixed in line with the first sheaves towards the opening in the press, below the plane of the opening therein, a chain 31 passing over the said sheaves, a toggle connecting with the chain between the sheave 25 and the upper sheave 23, one end of the toggle arms pivoted to a rigid frame and the other arm pivoted to a follower in the opening of the press, and means for moving the chain forward and back around the sheaves, whereby the follower will be caused to oscillate in the opening in the press. 3rd. In a hay press having a frame and a passage therethrough for matter to be pressed, in combination with a vertically fixed frame 21 secured to the rear part of the press, sheaves 23 and 25 placed at right angle triangles to each other in the frame 21 and a reinforced part of the bottom part of the main press frame, a toggle arranged on a plane between the upper sheave 23 and the sheave 25, a chain passing round such sheaves and connecting with the joint of the toggle, and means for causing the chain to travel back and forth over the said sheaves, as set forth. 34th. In a press for hay having a frame and a passage therethrough, the combination of clamps 17, with rods 16 binding the same together, on the extreme forward end of the main press frame, eyes 16<sup>a</sup> on the

upper projecting ends of the rod 16, curved levers 18 attached to the said eyes and projecting inwardly and upwardly, a bolt 19 having a screw thread passing upwardly through and at the centre of the upper clamp 17, a washer 19<sup>a</sup> taking over the said bolt and lying on the upwardly projecting ends of the levers 18, and a wheel or nut arranged to engage the thread of the bolt 19, whereby the levers 18 may be depressed and the distance decreased between the upper and lower frames 10, as and for the purpose set forth.

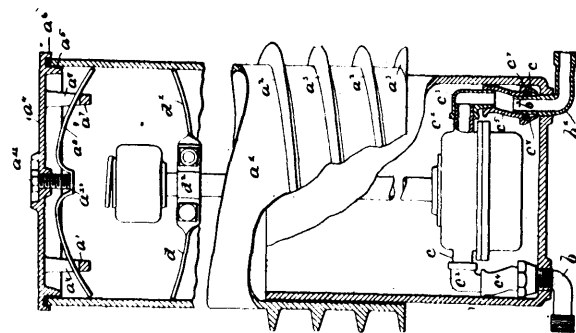
**No. 60,101. Means of and Apparatus for Manufacturing Metallic Wheels. (Moyen et appareil pour la fabrication des roues métalliques.)**



J. Southwick, Glascote Road, Tamworth, Stafford, England, 21st May, 1898; 6 years. (Filed 19th October, 1897.)

*Claim.*—1st. The method of casting the metallic boss or axle onto the arms or spokes of a wheel, which consists in first forming the central metallic core and fixing the same axially in the mould, the said metallic core being provided with a central bore or air vent and then locating the inner ends of the arms or spokes in the mould, in the manner substantially as described and shewn. 2nd. In the method of casting the metallic boss or axle onto the arms or spokes of a wheel, forming the central metallic core with a central bore or air vent and the side bores or air vents communicating with the central air vent in the manner and for the purpose substantially as herein set forth and shewn. 3rd. The cast metal boss, having the closed end and the end space J and annular recesses L formed in the manner substantially as herein set forth and shewn.

**No. 60,102. Box for Water Meters. (Boîte pour compteurs d'eau.)**



John J. Hoppes, Springfield, Ohio, U.S.A., 21st May, 1898; 6 years. (Filed 26th March, 1898.)

*Claim.*—1st. In a box for water meters, an outer casing, outlet and inlet pipes or conduits extending from the outside to the inside of said box, said outlet and inlet pipes terminating in parallel nipples whose axes are parallel to the axis of the meter box, said nipples being adapted to form, with the outlet and inlet openings of a meter, slip connections by which the meter may be attached or detached by a longitudinal movement of said box or casing, substantially as specified. 2nd. The combination with an outer box or casing, of a meter support arranged in said box, said meter support being provided with pipes or conduits adapted to form outlet and inlet openings, said outlet and inlet openings having on the outside of said box or casing connections for the pipes leading to and from said meter and terminating in said box or casing in parallel nipples,

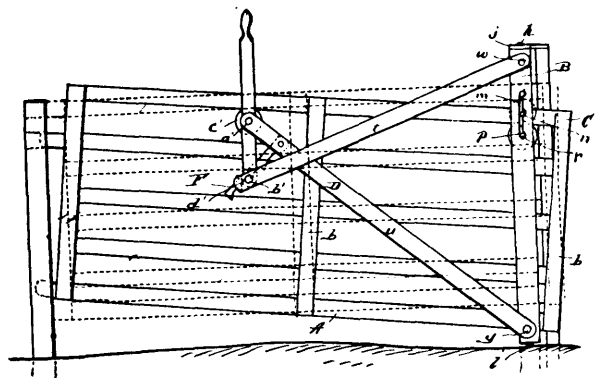
having plain peripheries and each of which projects into said box or casing in line with the axis of said box or casing and adapted to form with the outlet and inlet openings of a meter slip connections by which said meter may be attached or detached, substantially as specified. 3rd. The combination with the outer box or casing, of a meter support therein having L-shaped pipes or conduits to form outlet and inlet openings, one end of each of said pipes or conduits being extended to the outside of said box, the remaining ends terminating in parallel nipples extending above said meter support with their axes parallel to the axis of the meter box, in combination with a meter having slip connections to fit the said nipples, substantially as and for the purpose specified. 4th. The combination with the outer casing and a meter support, said meter support being provided with L-shaped pipes which terminate in said box in projecting nipples parallel to each other and in line with or parallel to the axis of said box or casing, in combination with a meter having sleeves with yielding packing rings fitted to the outlet and inlet openings thereof, which sleeves and rings are adapted to fit over said nipples, a dial support removably secured in said casing above said meter support, and a removable cover for said casing, substantially as and for the purpose specified. 5th. A box or casing for meters, or similar devices, substantially as described, having an upper telescoping part with spiral flange on its outer periphery, a cover for said casing, and a curved bar on the inside of said cover and supported thereby, and means for deflecting said bar so that the ends thereof will be caused to impinge with the sides of said casing, substantially as specified. 6th. In a box for meters, the combination with an outer casing of inlet and outlet pipes extending into said casing and terminating in parallel nipples having plain peripheries, and couplers having offset portions, as described, adapted to fit over said nipples, substantially as specified. 7th. In a box for water meters, or similar devices, the combination with an outer casing of a cover for said casing having depending supports, a yielding bar longer than the diameter of the casing, and a screw in said cover adapted to press on said bar to cause the ends thereof to impinge with the sides of the casing, substantially as specified. 8th. In a box for water meters, or similar devices, the combination with an outer casing formed of two parts, one part adapted to telescope on the other and having spiral flanges formed on the outer periphery of the upper part, of an inlet and outlet pipe extending through and into said casing, said pipes having plain parallel ends slightly tapered to form nipples, couplers, each having their respective ends in different parallel planes, and yielding packing rings within said couplers adapted to fit over said nipples, substantially as specified. 9th. An outer telescoping casing, having pipes which terminate therein in projecting parallel nipples, in combination with a meter having downwardly-projecting sleeves secured thereto, offset couplers forming adjustable connections between said nipples and the sleeves of said meter, and a removable dial support adapted to be held in place by the impingement of its ends with the sides of said casing, substantially as specified. 10th. A two-part box or casing for meters or similar devices, the lower part being formed with a plain cylindrical outside near its top, the upper part being formed with a plain cylindrical inside near its bottom and adapted to telescope over the lower part, projecting flanges on the outside of the upper part, said flanges being inclined or helically arranged on the periphery of the box or casing, substantially as specified. 11th. In a box for meters or similar devices, the combination with a casing, and a cover to fit said casing, a yielding bar supported on the inside of said cover, and means for deflecting said bar to cause the ends to impinge on said casing and lock the cover, substantially as specified. 12th. The combination with a case or support having an outlet and inlet pipe extending from the bottom thereof, a meter having outlet and inlet openings, and two-part adjustable couplers forming connections between the outlet and inlet openings in said support, and the corresponding openings in said meter, said couplers having offset portions to form adjustable connecting devices, substantially as specified. 13th. The combination with a meter casing or support having outlet and inlet pipes, coupling devices having slip connections adapted to be joined to or detached from said outlet and inlet pipes, said coupling devices having offset portions to form adjustable connections with said outlet and inlet pipes, substantially as specified. 14th. The combination with a meter case or support having outlet and inlet pipes, of coupling devices, substantially as described, adapted to connect with said outlet and inlet pipes, said coupling devices so formed that by moving the same on the said pipes the opposite ends thereof may be adjusted to a greater or less distance apart, substantially as and for the purpose specified.

**No. 60,103. Gate. (Barrière.)**

John Pratt, Chatham, Ontario, Canada, 23rd May, 1898; 6 years. (Filed 8th January, 1898.)

*Claim.*—1st. In a combined sliding and swinging gate, the combination with said gate of a crane composed of two members arranged to extend forward from the upper and lower ends of the gate-post, and having their forward end crossing each other and pivoted to the lever, a roller supported at the outer end of one of said members adapted to form a support and guide for the forward end of said gate, said members and lever being so arranged with relation to each other as to cause the forward end of said gate to be raised or lowered as said lever is operated, and means for securing said parts in a fixed rela-

tion, whereby the forward end of said gate may be held in any plane desired, substantially as described. 2nd. In a farm gate, the com-

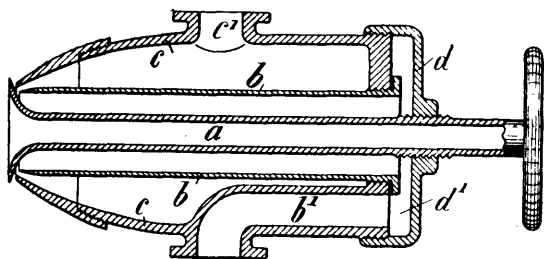


60103.

bination of a slotted post adapted to receive said gate, and provided with journals at its upper and lower ends whereby said gate may be either swung or slid open, a supporting guide-wheel journalled in said post, means for adjusting said wheel vertically whereby the rear end of the said gate may be elevated, and adjustable crane extending forward from said post, a supporting wheel journalled at the forward end of said crane, said crane consisting of two members pivoted to a lever at their forward ends, whereby said crane is adjusted to raise and lower the forward end of said gate, and means for securing said crane in its position, substantially as described. 3rd. In a farm gate, the combination of the gate proper A, the slotted post B adapted to receive the rear end of said gate, a wheel journalled at the upper end of said post, journal notches provided in said post whereby said wheel may be adjusted to any place, journal pins at the upper and lower ends of said post, a fixed post located at an angle to said slotted post, having a holder secured to the top thereof within which the upper end of said slotted post is journalled, a short post at the lower end within the ground adapted to form a bearing for the lower journal, the crane D consisting of the members t, u. pivoted at the upper and lower ends of said slotted post and having their forward ends arranged to cross each other, a lever E pivoted to the forward ends of said members, supporting a guide-wheel c' journalled upon the extended pivot a', a locking-dog f pivoted to the member u and having its teeth arranged to engage with the pivot at the lower end of the lever E, and means for engaging the forward end of said cap, substantially as described.

No. 60,104. Liquid Fuel Burner.

(Bruleur pour liquides combustibles.)



60104.

Paul Emil Thurow, No. 1 Sandweg, Hamburg, German Empire, 23rd May, 1898; 6 years. (Filed 27th January, 1898.)

Claim.—A spraying nozzle for liquid fuels consisting of the combination of three tubes or nozzles a, b and c, substantially as and for the purpose specified.

No. 60,105. Method of Utilizing Liquid Fuel.

(Methode d'utiliser les liquides combustibles.)

Paul Emil Thurow, No. 1 Sandweg, Hamburg, German Empire, 23rd May, 1898; 6 years. (Filed 11th May, 1898.)

Claim.—The improved method of atomizing or spraying liquid fuels by means of gas obtained by vaporizing a suitable combustible, substantially as and for the purpose set forth.

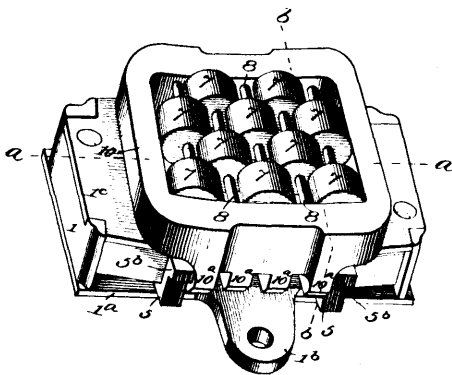
No. 60,106. Railway Car Side Bearing.

(Coussinet de coté pour chars.)

John Clark Wands, St. Louis, Missouri, U.S.A., 23rd May, 1898; 18 years. (Filed 7th May, 1898.)

Claim.—1st. In a side bearing for railway cars the combination with an anti-friction-bearing, of resilient means for restoring the

bearing to its central position when relieved of its load, said means arranged parallel with the line of travel of the bearing, substantially



60106

as and for the purposes specified. 2nd. In a side bearing for railway cars, the combination with a travelling anti-friction-bearing, of resilient means for restoring the bearing to its central position, said means arranged below and parallel with the line of travel of the bearing, substantially as and for the purposes specified. 3rd. In a side bearing for railway cars, the combination with a suitable frame provided with anti-friction-rollers, of centering-springs arranged parallel with the plane of the carriage, substantially as and for the purposes specified. 4th. In a side bearing for railway cars, the combination with a movable anti-friction-roller bearing, of centering-springs arranged parallel with the travel of the bearing, and interposed yokes for connecting the springs with the movable bearing, substantially as and for the purposes specified. 5th. In a side bearing for railway cars, the combination with a movable anti-friction-roller bearing, of a base or housing on which the bearing travels, and centering-springs arranged in the housing and connected with the movable bearing, substantially as and for the purposes specified. 6th. In a side bearing for railway cars, the combination with an anti-friction-roller bearing, of a base or housing on which the bearing travels, centering-springs inclosed in the base or housing, and yokes, for connecting the springs with the movable anti-friction-roller bearing, substantially as and for the purposes specified. 7th. In a side bearing for railway cars, the combination with a base or housing provided with a cover which constitutes the track-plate of the movable bearing, of an anti-friction-roller bearing having a frame provided with lugs which take under and confine the bearing to the track-plate, and resilient centering means inclosed within the base or housing and connected with the frame of the movable anti-friction-roller bearing, substantially as and for the purposes specified.

No. 60,107. Shirt Sleeve and Drawer Leg.

(Manche de chemises, etc.)



60107

William Flemen Williams, Bishop, California, U.S.A., 23rd May, 1898; 6 years. (Filed 2nd January, 1897.)

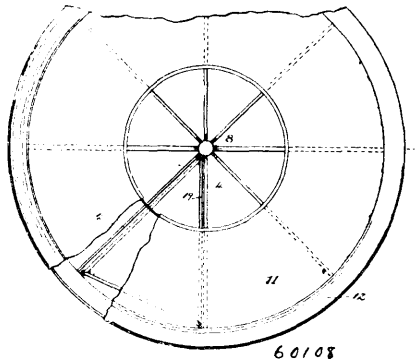
Claim.—1st. As a new article of manufacture, the shirt sleeve formed of a single piece of material, with its scandline on the under face thereof and substantially at a central point between the inner and outer edges thereof, the plies of the material forming the sleeve being secured together at and along the outer edge of the cuff portion and having buttonholes in such part, and the cuff portion of said sleeve having buttons arranged on the seam line, substantially as set forth. 2nd. As a new article of manufacture, the shirt sleeve formed of a single piece of material, with its seam line on the under face thereof and substantially at a central point between its inner and outer edges, the plies of the material forming the sleeve being secured together at and along the outer edge of the cuff portion of said sleeve and having buttonholes in such part, and the cuff portion of said sleeve having buttons arranged on the seam line, the material along said seam line being lapped and overlaid by a strengthening-piece and the shanks of said buttons passing therethrough, substantially as set forth.

No. 60,108. Sorting Table. (Table à classer.)

Edmond F. B. Bourne, Vancouver, British Columbia, Canada, 23rd May, 1898; 6 years. (Filed 2nd March, 1898.)

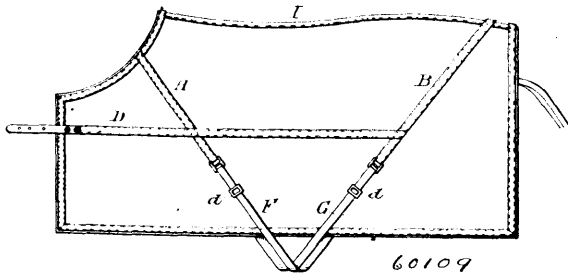
Claim.—1st. An apparatus for sorting letters and other articles, comprising a series of radially disposed walls or divisions, a top con-

necting the upper parts of said divisions, an upwardly extended peripheral flange surrounding the top, a central opening in the top,



and boxes or receptacles adapted for insertion between the division, the parts being rigidly assembled, substantially as and for the purposes set forth. 2nd. An apparatus for sorting letters and other articles, comprising a ring shaped top having inward and outward upwardly extended flanges, a number of radially disposed supporting walls, and means for removably securing the inner edges of said walls together, substantially as described. 3rd. An apparatus for sorting letters and other articles, comprising a top having an upwardly extended peripheral flange and a central opening, and a number of radially disposed supporting walls, each consisting of a metal or light frame and a cover of textile fabric, the lower ends of the inner and outer side pieces of the frame being extended below the bottom rod for engagement in sockets, substantially as described. 4th. An apparatus for sorting letters and other articles, comprising a ring shaped top and having inner and outer upwardly extending flanges, radially disposed supporting walls, each, comprising a frame having projections at its lower end to engage in sockets, a securing device for the upper inner ends of the walls, textile material secured to the frames, and receiving boxes, substantially as described.

**No. 60,109. Horse Blanket. (Couverture de cheval.)**

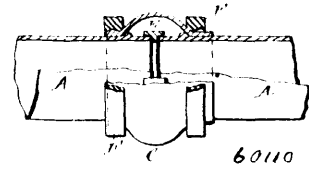


William Graham Ayres, Philadelphia, Pennsylvania, U.S.A., 23rd May, 1898; 6 years. (Filed 6th May, 1898.)

*Claim.*—1st. A horse blanket having straps or stays extending diagonally downward and forward from the rump on each side of the blanket, straps or stays extending diagonally downward and rearward from the opposite sides of the neck, and a strap or straps serving to connect the rump strap on the right hand side of the blanket to the neck strap on the left hand side of the same, and the rump strap on the left hand side of the blanket to the neck strap on the right hand side of the same, substantially as specified. 2nd. A horse blanket having straps or stays extending diagonally downward and forward from the rump on each side of the blanket, and straps or stays extending diagonally downward and rearward from the opposite sides of the neck, said straps or stays being secured to the fabric of the blanket throughout their length, and a strap or straps serving to connect the rump strap on the right hand side of the blanket to the neck strap on the left hand side of the same, and the rump strap on the left hand side of the blanket to the neck strap on the right hand side of the same, substantially as specified. 3rd. A horse blanket having straps or stays extending diagonally downward and forward from the rump on each side of the blanket, straps or stays extending diagonally downward and rearward from the opposite sides of the neck, longitudinal straps or stays extending from the rump straps forwardly across the neck straps and to the front edges of the blanket below the neck, and a strap or straps serving to secure the rump strap on the right hand side of the blanket to the neck strap on the left hand side of the same, and the rump strap on the left hand side of the blanket to the neck strap on the right hand side of the same, substantially as specified. 4th. A horse blanket having straps or stays extending diagonally downward and forward from the rump on each side of the blanket, straps or stays extending diagonally downward and rearward from the

opposite sides of the neck, and independent belly straps, each serving to connect a neck strap on one side of the blanket to a rump strap on the opposite side of the same, substantially as specified.

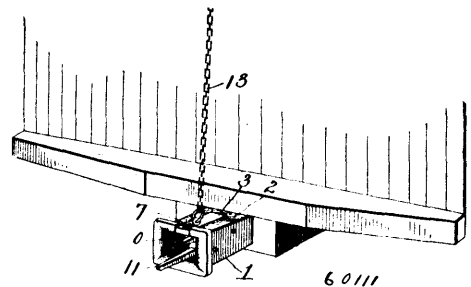
**No. 60,110. Pipe Joint. (Joint de tuyaux.)**



James C. Bayles, East Orange, New Jersey, U.S.A., 23rd May, 1898; 6 years. (Filed 6th May, 1898.)

*Claim.*—1st. In combination with a rigid section of pipe, a flexible section of pipe of larger diameter than the outside diameter of the rigid section, composed of ductile or compressible material, and mechanism for compressing and sealing the uniting end of the flexible section to the rigid section, substantially as set forth. 1a. In combination with a rigid section of pipe, a bulbous flexible section of pipe of larger diameter than the outside diameter of the rigid section, composed of ductile or compressible material, and mechanism for compressing and sealing the uniting end of the flexible section to the rigid section, substantially as set forth. 2nd. In combination with a rigid pipe-section having a bevelled annular shoulder or bead near its end, a flexible pipe-section of greater diameter, and a bevelled coupling-ring adapted to compress and seal the end of the flexible section against the said shoulder of the rigid section. 3rd. In combination with a rigid pipe-section having a bevelled annular shoulder or bead near its end, a connecting section of ductile or compressive metal of substantially bulbous form, and a bevelled coupling-ring adapted to co-operate with said shoulder to compress and seal the end of said connecting section on said rigid section. 4th. In combination with a rigid pipe-section having a bevelled annular shoulder or bead near its end, a compressible or ductile metallic sleeve-section inclosing said end behind said shoulder, and a bevelled coupling-ring inclosing the end of said sleeve and acting with said shoulder to compress and seal the end of said sleeve upon the said section, and also being provided with the calking-socket I. 5th. In combination in a pipe-line, a series of rigid pipe-sections carrying annular bevelled shoulders or ribs at their ends, and alternating flexible coupling-sections or connections composed of yielding or ductile material, and a series of bevelled coupling-rings acting to compress and seal the ends of the said flexible connections upon the said rigid sections and against the shoulders thereof. 6th. In combination in a pipe-line, a series of rigid pipe-sections carrying annular bevelled shoulders or ribs at their ends, and alternating bulbous sections or connections, substantially as set forth, composed of yielding or ductile material, and a series of bevelled coupling-rings acting to compress and seal the ends of the said connections upon the said rigid sections and against the shoulders thereof. 7th. In combination with two rigid pipe-sections, means for holding their ends in articulate or flexible relation, an annular bevelled shoulder or similar part on the end of each of said sections, a coupling-sleeve of ductile or compressible metal inclosing said ends and extending to behind said shoulders, and two bevelled coupling-rings acting with said shoulders to engage the ends of the sleeve and to compress and hold the same sealed. 8th. In combination with two pipe-sections, each bearing near its end a projecting and bevelled rib or bead, a coupling-sleeve of ductile or compressible metal inclosing said ends and extending to behind said ribs, and two coupling-rings bevelled or inclined as to their inner faces and adapted to engage the ends of the said sleeve to compress the same upon the sections against said ribs, and an articulate collar E for holding the ends of the sections in flexible relation, for the purpose set forth.

**No. 60,111. Car Coupler. (Attelage de chars.)**

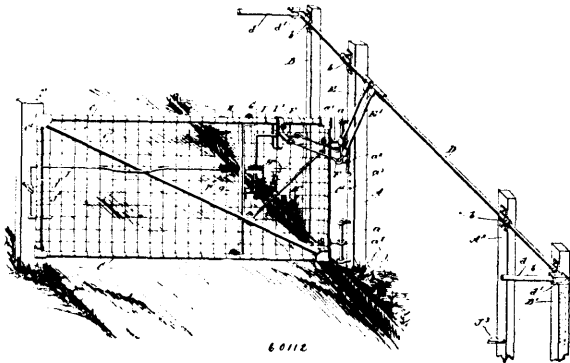


Aloy M. Larue, Downey, Iowa, U.S.A., 23rd May, 1898; 6 years. (Filed 6th May, 1898.)

*Claim.*—1st. In a car coupler, the combination of a draw-head, a gravity detent pivoted therein and formed with an arm-receiving

recess, a pivoted locking-dog in the draw-head below the detent and formed with an eccentric head and a link-retaining arm, and a link adapted to contact with the eccentric portion of the locking-dog and cause the link-retaining arm to pass up within the link to raise the detent and enter the arm-retaining recess in the detent, substantially as described. 2nd. In a car coupler, the combination of a draw-head, a gravity detent pivoted therein and formed with an arm-receiving recess, a pivoted locking-dog below the detent and formed with an eccentric head and a link-retaining arm, the upper side of said arm being inclined upward to a point above the centre of the pivot of the locking-dog, and a link adapted to ride up said inclined surface and operate coupling devices, substantially as described. 3rd. In a car-coupler, the combination of a draw-head, a gravity detent pivoted therein and formed with an arm-receiving recess, a pivoted locking-dog below the detent and formed with the eccentric head 9, the arm 11 and shoulders 12, and a link adapted to operate the coupling devices and to be held on the shoulders 12 by the detent when in its coupled position, substantially as described. 4th. In a car coupler, the combination of a draw-head, a gravity detent pivoted therein and formed with an arm-receiving recess, a locking-dog pivoted below the detent and formed with an eccentric head 9, arms 10 and 11 as described, and shoulders 12, and a link adapted to operate the locking-dog and to be held on the shoulders 12 by the detent when in its coupled position, substantially as described.

**No. 69,112. Gate. (Barrière.)**



Theodore Sawyer, Towanda, Illinois, U.S.A., 23rd May, 1898; 6 years. (Filed 5th May, 1898.)

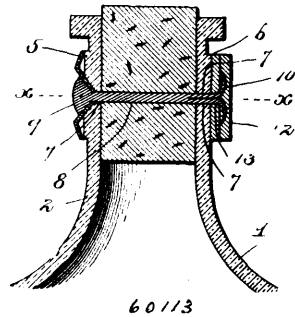
*Claim.*—1st. A gate, having a spring-closed latch mounted to slide longitudinally upon the gate, an eye attached to said latch, a bent lever composed of a vertical and a horizontal member pivoted by the lower end of the vertical member below said latch, the vertical member of said lever passing through the eye, a yoke fixed to the frame and embracing the upper horizontal member to form a guide therefor, a shaft mounted horizontally above the gate and extending at right angles to the gate when in its closed position, a crank arm upon the shaft near the gate pivot, and a link connecting the said crank arm with the upper end of the latch-operating lever on the gate, substantially as described. 2nd. A gate, having a spring-closed latch mounted to slide longitudinally upon the gate, an eye attached to said latch, a bent lever pivoted by its lower end below said latch, the vertical member of said lever passing through the eye, a yoke fixed to the frame and embracing the upper horizontal member to form a guide therefor, a shaft mounted horizontally above the gate and extending at right angles to the gate when in its closed position, a crank arm upon the shaft near the gate pivot, a link connecting the said crank arm with the upper end of the latch-operating lever on the gate, a crank arm mounted loosely on the shaft outside the fixed crank arm, and a link connecting the end of said crank arm with the gate outside the connection of the other link thereto, the same acting as a guard for the first crank arm and crank, substantially as described. 3rd. A gate having a spring-closed latch mounted to slide longitudinally upon the gate, an eye attached to said latch, a bent lever composed of a vertical and a horizontal member pivoted to the lower end of the vertical member below said latch, the vertical member of said lever passing through the eye, a yoke fixed to the frame and embracing the upper horizontal member to form a guide therefor, a shaft mounted horizontally above the gate and extending at right angles to the gate when in its closed position, operating arms pivoted to the ends of said shaft so as to swing in a plane which includes the shaft, a crank arm upon the shaft near the gate pivot, and a link connecting said crank arm with the upper end of the bent latch-operating lever on the gate, substantially as described.

**No. 60,113. Bottle Seal. (Seau de bouteille.)**

Amy L. Elder, Aspen, Colorado, U.S.A., 23rd May, 1898; 6 years. (Filed 5th May, 1898.)

*Claim.*—1st. In a non-refillable bottle, the combination with a neck having two diametrically disposed openings therein, with seats

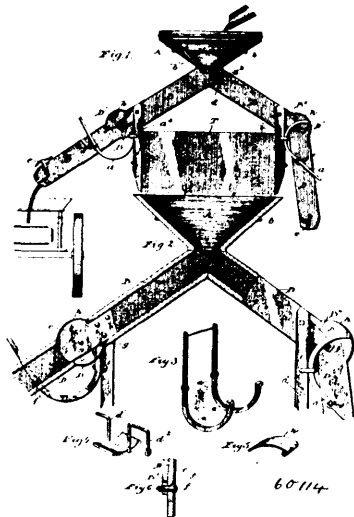
surrounding the same, of a wire adapted to pass through said openings, and having one end formed of separable parts adapted to be



up-set, and a seal to receive and cover the up-set parts of said wire, substantially as described. 2nd. In a non-refillable bottle, the combination with a neck having diametrically disposed openings therethrough, of a flange formed around the said neck, a frangible portion formed below said flange, seats surrounding said openings, a headed split pin adapted to pass through said openings, and means for securing said pin in said openings, substantially as described. 3rd. In a non-refillable bottle, the combination with a neck having diametrically disposed openings therethrough, of a flange formed around said neck, a frangible portion formed below said flange, seats surrounding said openings, a headed split pin adapted to pass through said openings, and a soft metal seal adapted to secure the split end of said pin, substantially as described. 4th. In a non-refillable bottle, the combination with a neck having two diametrically disposed openings therethrough and a breaking groove, seats formed around said openings, a pin provided with a split end adapted to pass through said openings, a head formed upon said pin provided with an extended strip having an opening near the end thereof, and a seal comprising two similar portions one of which has a central opening adapted to fit the split end of said pin, substantially as described.

**No. 60,114. Grain Loading Machine.**

(Appareil à charger le grain.)

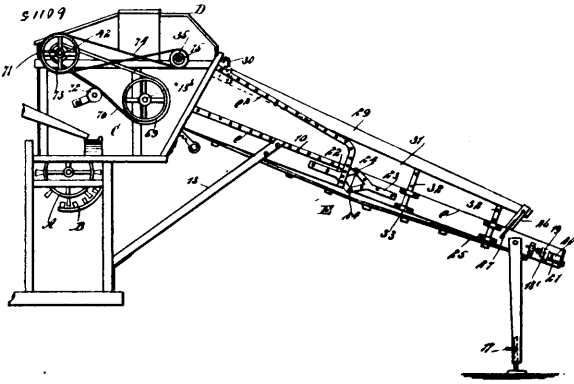


John Heyrock, Cavalier, North Dakota, U.S.A., 23rd May, 1898; 6 years. (Filed 5th May, 1898.)

*Claim.*—1st. In a grain loader, the combination of the reservoir, the diverging chutes connected thereto, and the spouts hinged to the lower ends of said chutes, with the hinged plates closing the spaces between the bottoms and tops of the chutes and spouts, respectively for the purpose and substantially as described. 2nd. In a grain loader, the combination with a thrasher or separator, of a reservoir, and the opposite chutes connected thereto, all adapted to be supported upon the top of the thrasher, so that the chutes lead to opposite sides thereof, and a valve for directing grain from the reservoir into either chute, with adjustable swinging spouts attached to the lower end of said chutes, and means for holding said spouts in the position to which they may be adjusted, for the purpose and substantially as described. 3rd. The combination in a grain loader, of a swinging spout, with the adjustable curved supporting levers pivoted to the sides of the spout, for the purposes and substantially as described. 4th. In a grain loader, the combination of a reservoir,

the opposite chutes connected thereto and adapted to be supported upon the top of a thrasher and lead to opposite sides thereof, and a valve for directing grain from the reservoir into either chute, with the swinging spouts hinged to the lower ends of said chutes, the curved levers for holding said spouts in the positions to which they are adjusted and the valves for closing said spouts, for the purpose and substantially as described. 5th. In a grain loader adapted to be mounted on a thrasher or separator, the combination of a reservoir, diverging chutes communicating at their upper ends with said reservoir, the valve for directing grain from the reservoir into either chute, the plates attached to the lower ends of the chutes and projecting therefrom, and the spouts pivoted to said plates, with the plates hinged to the lower end of the chutes, closing the space between the bottoms of the chutes and spouts, the curved plates hinged to the lower end of the chutes and closing the opening between the tops of the chutes and spouts, and the curved supporting levers pivoted to the spouts, for the purpose and substantially as described.

**No. 60,115. Band Cutter and Feeder.**  
(*Coupe-hart et alimentateur.*)

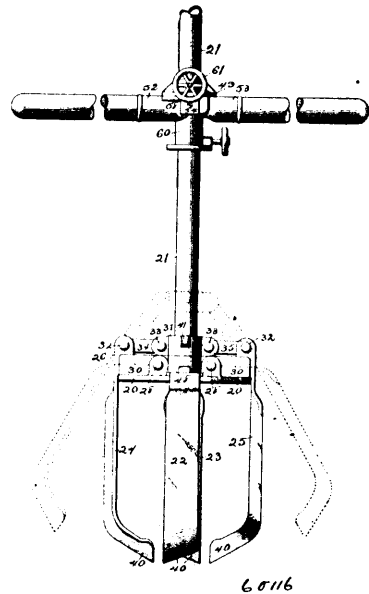


John Erickson and James McCallenan Edmonson, both of Gardner, North Dakota, U.S.A., 23rd May, 1898; 6 years. (Filed 4th May, 1898.)

*Claim.*—1st. In a band cutter, feeder and cylinder, band cutters and a grain carrier located between the cylinder and cutters, the inner end of the grain carrier being so placed that the material will drop from the carrier upon the cylinder. 2nd. In a band cutter, a feeder and cylinder, a band cutter above the cylinder, a grain carrier below the band cutter, the delivery end of the carrier being slightly above and in front of the cylinder, and a retarding device for the grain between the cylinder and the delivery portion of the carrier, substantially as set forth. 3rd. In a band cutter, a feeder and cylinder, a band cutter above the cylinder, a grain carrier below the band cutter, the delivery end of the carrier being slightly above and in front of the cylinder, and a stop arranged to rotate, the said stop being located over the cylinder and in front of the delivery end of the carrier, substantially as set forth. 4th. In a grain band cutter and feeder, the combination with a cylinder and band cutters above the cylinder, of a carrier the delivery end whereof is located between the band cutter and the cylinder, a retarding device located between the carrier and the cylinder, an apron mounted to revolve over the cylinder and opposite the delivery end of the carrier, substantially as described. 5th. In a grain band cutter and feeder, the combination with a cylinder and band cutters above the cylinder, of a carrier the delivery end whereof is located between the band cutter and the cylinder, a retarding device located between the carrier and the cylinder, an apron mounted to revolve over the cylinder and opposite the delivery end of the carrier, means for adjusting the said apron to and from the carrier, and a shield for the retarding device, the inner face whereof is inclined in direction of the concave of the cylinder, for the purpose set forth. 6th. In a band cutter and feeder, the combination with the cylinder and concave, and a straw carrier having its delivery end over the cylinder, of a shield located between the delivery end of the cylinder and the concave, and retarding wheels mounted to revolve in the said shield and extend outward beyond the face of the shield opposite the cylinder, for the purpose set forth. 7th. In a band cutter and feeder, the combination with a cylinder and concave, and a straw carrier having its delivery end above the cylinder, of a pivoted shield provided with an interior chamber and slots in its face opposite the cylinder, the chamber of the shield being provided with an outlet at its lower end leading to the concave of the cylinder, and retarding wheels mounted to revolve in the chamber of the shield and extending out through the slots in the shield, the said retarding wheels each consisting of a hub and a series of hook-like spokes, substantially as shown and described. 8th. In a band cutter and feeder, the combination, with a cylinder and a concave, and a straw carrier having its delivery end above the cylinder, of a pivoted shield provided with an interior chamber and slots in its face opposite the cylinder, the chamber of the shield being provided with an outlet at its

lower end leading to the concave of the cylinder, and retarding wheels mounted to revolve in the chamber of the shield and extending out through the slots in the shield, each of said retarding wheels consisting of a hub and a series of hook-like spokes, a latch device carried by the shield and arranged for locking engagement with the concave, and means for locking the shield in a position which will expose the concave and cylinder, for the purpose set forth. 9th. In a band cutter and feeder, the combination, with a carrier and cylinder, of a frame adjustably suspended opposite the delivery end of the carrier and over the cylinder, and an endless belt carried by the said frame, for the purpose set forth. 10th. In a band cutter and feeder, a band cutter consisting of a body section constructed of longitudinal sections, the edges of one section projecting beyond the corresponding edges of an opposing section, and toothed disc cutters secured to the said body, for the purpose set forth. 11th. In a band cutter and feeder, a band cutter consisting of a body section constructed of longitudinal sections, the side edges of one section projecting beyond the corresponding edges of an opposing section, and toothed disc cutters secured to the said body, the said toothed cutters being constructed in sections and each section independently secured a member of the body, as and for the purpose specified. 12th. In a band cutter and feeder, a carrier, legs secured to the carrier, and feet adjustably attached to the legs. 13th. In a band cutter and feeder, a carrier constructed in sections, and forked plates attached to the said sections at their abutting ends, the members of the bifurcated end of the forks of one section meeting corresponding parts of the forks of the opposite carrier section, and pivots removably passed through the contacting members of opposing forks, for the purpose specified. 14th. In a band cutter and feeder, a carrier, and a tail board located at the receiving end of the said carrier, as and for the purpose set forth. 15th. In a band cutter and feeder, a carrier constructed in sections arranged to fold one upon the other, and a tail board pivotally attached to one section of the carrier, the said board being provided with a support for the division board of the carrier, as and for the purpose specified.

**No. 60,116. Earth Auger.** (*Sonde à trépan.*)



James G. Jordan, Des Moines, Iowa, U.S.A., 23rd May, 1898; 6 years. (Filed 4th May, 1898.)

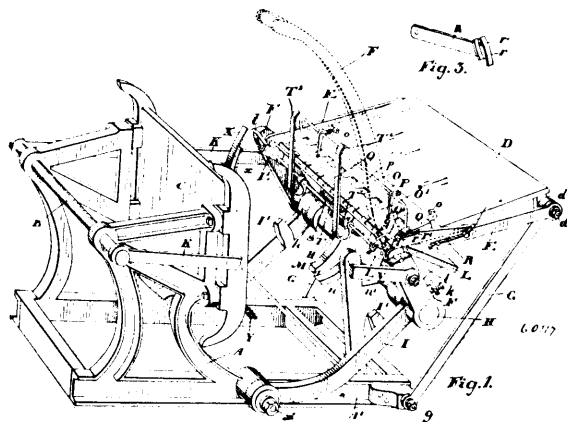
*Claim.*—1st. An earth auger, consisting of a stem, means for rotating said stem, a head attached to said stem, four blades attached to said head, two of said blades being radially adjustable and diametrically opposite each other, and two other blades non-adjustable radially, also opposite each other but secured to hinged sections pivotally connected to the said head, means for locking said hinged blades in operative position, each of said four blades consisting of a straight body portion, a head portion bent at right angles to said body portion, the bending being across the short dimension of the cross-section of the body portion, and a broad flattened point portion on the opposite end of the body portion from the head, but on the same side, said point portion being wider than the body portion and bent to an angle of from thirty to forty-five degrees from the body portion, the said point portion being twisted to an approximately helical form, each said blade sharpened across the end of its broad flattened point portion and on the forward edge of said helically-bent point portion and the corresponding edge of the a straight body portion. 2nd. An earth auger comprising a stem, means for rotating said stem, a head attached to said stem with four blades attached thereto, two of said blades being radially adjustable and diametrically opposite each



other, and the two other blades non-adjustable radially also opposite each other but pivotally connected to said head, each of said four blades consisting of a straight body portion, a head portion bent at right angles thereto across its short dimension of cross-section, a broad flattened point portion at the opposite end but on the same side of the body as the head portion, said point portion being wider than the body portion, and helically bent at an angle of from thirty to forty-five degrees from the body portion and forming the segment of the thread of a hollow interrupted screw, each said blade sharpened across its end and on the forward edge of said helically-bent point portion and the corresponding edge of said body portion, and automatic means for locking said pivotally-connected blades in position for boring, comprising hinge-pieces to which the heads of said blades are secured, links connecting the outer free ends of said hinge-pieces to a locking-sleeve on the auger-stem, said links normally held at right angles to the axis of said stem. 3rd. An earth-auger comprising a stem, a head portion attached to said stem, means for rotating said stem, and four blades attached to said head substantially at quadrants to each other, two of said blades being secured to hinged sections pivotally connected to the head of the auger, said blades being diametrically opposite each other equi-distantly from the axis of the auger, the remaining two of said blades also diametrically opposite each other and equi-distant from the said axis as regards themselves, but at a different distance from the axis of the auger than the first-named pair of blades. 4th. An earth-auger comprising a stem, means for rotating said stem, a head attached to said stem, and four blades attached to said head substantially at quadrants to each other, two of said blades being hinged to said head and non-adjustable relative to the axis of the auger and equi-distant therefrom, said blades having automatic locking devices to hold them in said position, said locking devices comprising links joining the free outer ends of the hinge pieces to which said blades are attached and a locking sleeve on the stem, said links normally held at right angles to the axis of said stem, and two other blades opposite each other and equidistant from the axis of the auger, but at a greater distance from the axis of the auger than the first named pair of blades, each of said four blades comprising a straight body portion, a head portion bent at right angles thereto across its short dimension of cross-section, a broad flattened point portion at the opposite end but on the same side of the body as the head portion, said point portion being helically bent at an angle of from thirty to forty-five degrees from the body portion and forming a segment of the thread of a hollow interrupted screw, and each blade sharpened across its end and on its forward edge, the point portion of each said blade being of greater width than the body portion thereof, the whole comprising an auger to bore holes of large diameter, the points of the two inner blades so formed as to cut the earth in the central bottom portion of the bore and sustaining same within the auger as the latter is lifted from the bore and the said points of the two outer blades cutting the earth at the outer bottom portions of the bore, and the straight body portions of the outer pair of blades so formed as to ream the bore into a smooth cylindrical excavation, and conjunctively with their helical point portions and the said inner pair of blades pack the earth against the head and support the earth core in the operation of lifting the auger from the bore. 5th. In combination in an earth auger, a stem, a head secured to said stem, a plurality of blades secured to said head, a handle for rotating said head and connected parts, said handle as a whole consisting of a perforated plate adapted to normally slide along the length of the said stem with handles provided with bits or dies pivoted to said plate and carrying discs adapted to intermittently bite into said stem and give same a rotation substantially through the same arc as the said handles are swung through, and means for securing the said handles as a whole to the stem at any point thereof. 6th. A blade for an earth auger, consisting of a straight body portion, a head portion bent at right angles to said body portion, the said bending being across the short dimension of cross-section of the body portion, and a broad flattened point portion formed on the opposite end of the body portion from the head, but on the same side, said point portion being bent to an angle of from thirty to forty-five degrees from the body portion and said point portion twisted into an approximately helical form, said blade being wider in its twisted point portion than the said body portion, and the end and forward edge of said point portion and the forward edge of said body portion being sharpened to a cutting edge. 7th. In an earth auger, the combination of an auger head having a section pivotally connected thereto, a cutting blade secured to said section, a stem secured to said head, a sleeve constructed to normally rest on said head and slide freely on the stem, and a link pivotally connected to said section and sleeve and adapted to lie in substantially the same horizontal plane to lock said pivoted section at a right angle to the stem of the auger. 8th. An earth-auger comprising a solid disc, a stem secured to said disc, a handle secured to said stem, four cutting blades radially mounted on said disc, two of said blades being hinged to said disc, and means for oscillating said hinged blades, the points of all the blades being torsionally bent. 9th. An earth-auger, comprising a stem, a disc secured to one end of said stem, a ratchet handle mounted on said stem, cutting blades mounted on said disc, some of which blades are hinged to the disc, and means for operating said hinged blades. 10th. In an earth auger, the combination of a disc, means for rotating the same, and blades fixed to said disc, each of said blades comprising a longitudinally-straight body portion in a vertical plane, a head fixed to the body portion at right angles

thereto, said body portion being torsionally bent at its juncture with said head portion, and a point formed on the end of the body portion opposite to said head and bent torsionally relative to the body portion, thereby positioning said point at an angle of from thirty to forty-five degrees to the body portion when the auger is employed in a vertical bore, each of said blades being provided with a cutting edge on the forward side of said point portion and the corresponding side of said body portion, the several blades when assembled having axial lines of their body portions parallel to the principal axis of the auger. 11th. In an earth-auger, a blade comprising longitudinally-straight body portion, a head portion bent at right angles to said body portion, said body portion being torsionally bent at its juncture with said head portion, and a point portion formed on the end of said body portion opposite to said head portion but on the same side thereof, said point portion being helically bent at an angle of approximately thirty to forty-five degrees, and the forward side of said point portion and the corresponding side of said body portion having a cutting edge.

**No. 60,117. Platen Press. (Presse en platine.)**

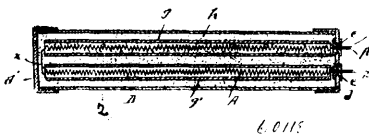


Frederick John Harbridge, Gravenhurst, Ontario, Canada, 23rd May, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. In a platen printing press, in combination the type plate or form, the platen, means for bringing the platen forwards and backwards to and from the type form, the feeding table supported with its delivery and normally above the platen, and means for transferring the sheet from the feeding table on to the platen, whereby it may be held thereon and carried forward, as and for the purpose specified. 2nd. In a platen printing press, in combination the type plate or form, the platen, the cross shaft and bracket supporting the platen upon the shaft, the arms suitably pivoted at the bottom on the frame and through which the cross shaft extends, the upwardly extending arms from the cross shaft and the links connected to the rear cross shaft of the frame and to the arms above the moving cross shaft, one of such arms being extended into the form of a lever for the purpose of manipulation, as and for the purpose specified. 3rd. In a platen printing press, in combination the type plate or form, the platen, the cross shaft, and bracket supporting the platen upon the shaft, the arms suitably pivoted at the bottom on the frame and through which the cross shaft extends, the upwardly extending arms from the cross shaft, the links connected to the rear cross shaft of the frame and to the arms above the moving cross shaft, one of such arms being extended into the form of a lever for the purpose of manipulation, the feeding table supported with its delivery end normally above the platen, and means for transferring the sheet from the feeding table on to the platen, whereby it may be held thereon and carried forward, as and for the purpose specified. 4th. In a platen printing press, in combination the type plate or form, the platen, the cross shaft and bracket supporting the platen upon the shaft, the arms suitably pivoted at the bottom on the frame and through which the cross shaft extends, the upwardly extending arms from the cross shaft, the links connected to the rear cross shaft of the frame and to the arms above the moving cross shaft, one of such being extended into the form of a lever for the purpose of manipulation, the feeding table provided with depending front jaws, the side bars pivotally connected at the forward end to the arms secured on the end of the movable cross shaft and provided with a supporting block for the feeding table, the supporting bars pivotally connected to the front ends of the side bars and to the bottom of the frame, the top connecting bolts of the side bars and supporting bars forming a support for the depending jaws of the table, and means for transferring the sheet from the feeding table on to the platen, whereby it may be held thereon and carried forward, as and for the purpose specified. 5th. In a platen printing press, in combination the type plate or form, the platen, the cross shaft and bracket supporting the platen upon the shaft, the arms suitably pivoted at the bottom on the frame and through which the cross shaft extends, and means for imparting

a tilting movement to the platen so as to throw its face parallel to the face of the type form as it is being carried forward on the end of the arms, as and for the purpose specified. 6th. In a platen printing press, in combination the type plate or form, the platen, the cross shaft and bracket supporting the platen upon the shaft, the arm suitably pivoted at the bottom on the frame and through which the cross shaft extends, means for carrying the cross shaft on the arc of the circle of the arms towards the type form and depending curvular jaws secured to the bottom of the platen and a pin secured on a suitable arm of the frame and extending through the jaw, as and for the purpose specified. 7th. In a platen printing press, in combination the type plate or form, the platen, the cross shaft and bracket supporting the platen upon the shaft, the arm suitably pivoted at the bottom on the frame and through which the cross shaft extends, means for carrying the cross shaft on the arc of the circle on the arms towards the type form and an arm secured to the frame and provided with an extension rest for the cross shaft, as and for the purpose specified. 8th. In a platen printing press, the combination the type plate or form, the platen and means for manipulating same, the feeding table suitably supported with the rear or feeding end normally above the platen, the arms secured at the bottom of the platen at the rear end thereof, the nipper rod and nippers secured thereto, means for bringing the feeding table close to the platen table as it is being caused to move towards the type form, and means for imparting a swinging movement to the nippers over the front of the feeding table, as and for the purpose specified. 9th. In a platen printing press, in combination the type plate or form, the platen, the cross shaft and bracket supporting the platen upon the shaft, the arms suitably pivoted at the bottom on the frame and through which the cross shaft extends, the upwardly extending arms from the cross shaft and the links connected to the rear cross shaft of the frame and to the arms above the moving cross shaft, the feeding table, the side bars thereof, pivotally supported to the front and pivotally connected at the rear to the upwardly extending arms secured on the end of the movable cross shaft, the arm pivoted on one side bar and provided with inner curvular ribs, the arms secured in the lower end of the platen, the nipper arm and nippers and crank arm on the end of the nippers designed to co-act with the inner ribs on the end of the arm pivoted on the side bar and the spring connected to the arm of the rod and to a suitable portion of the platen frame, as and for the purpose specified. 10th. In combination the platen and means for operating the same, the nipper rod journaled in arms at the bottom of the platen and the nippers secured to or forming part of the rod, means for raising and lowering the nippers, the feeding table located normally above the platen and the teeth formed on the rear feeding end of the table, as and for purpose specified. 11th. In combination the platen and means for operating the same, the nipper rod journaled in arms at the bottom of the platen and the nippers secured to or forming part of the rod, means for raising and lowering the nippers, the feeding table located normally above the platen, the rear flap suitably supported and provided with gauges at its forward end, and the teeth formed on the free edge of the flap, as and for the purpose specified. 12th. The combination with the platen and means for throwing the same forward against the type form and tilting it as it moves forward, of the gripping rod journaled in arms at the bottom of the platen, the grippers and means for throwing the grippers down over the platen as it is passing forward to assume a vertical position to make the impression, as and for the purpose specified. 13th. The combination the platen and means for throwing the same forward against the type form and tilting it as it moves forward, of the gripping rod journaled in arms at the bottom of the platen, the grippers, the crank end formed on the rod, the grooved bar pivotally supported on the frame and spring-held and designed to come in contact with the crank end of the gripping rod as the platen is caused to move forward towards the type form whereby the grippers are thrown upon the platen to maintain the sheet in place as and for the purpose specified.

**No. 60,118. Electric Heater. (Chauffeur électrique.)**



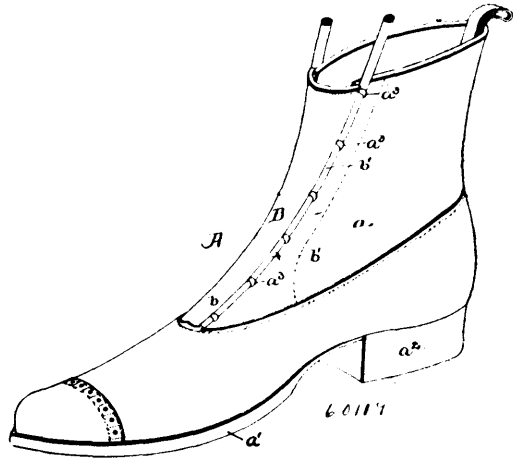
George H. Whittingham, Baltimore, Maryland, U.S.A., 25th May, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—In an electric heater, the combination of the tubular casing, means for closing both ends thereof, a plurality of glass tubes shorter than the interior of the casing and situated therein, a resistance wire entering one end of the casing, extending through one of the glass tubes and returning through another of the tubes and passing out of the casing at the same end at which it enters, and a suitable granulated filler placed in the spaces in and around the glass tubes.

**No. 60,119. Shoe. (Chaussure.)**

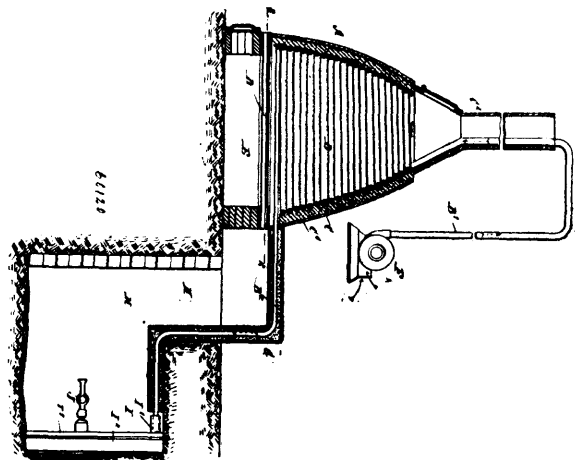
Edmond Heroux, Yamachiche, Quebec, Canada, 25th May, 1898; 6 years. (Filed 16th December, 1897.)

*Claim.*—1st. The combination with a shoe, of a removable tongue adjustably mounted thereon, substantially as described. 2nd. The



combination with a shoe having an open front of a tongue mounted thereon in juxtaposition to said open front and having a sliding movement over said open front, substantially as described. 3rd. The combination with a shoe having an open front, and also having studs mounted on opposite sides of said open front, of a tongue mounted in said studs, substantially as described. 4th. The combination with a shoe having an open front, and also having studs mounted on opposite sides of said open front, of a tongue mounted in said studs and having an up and down movement therein, substantially as described. 5th. The combination with a shoe, of a tongue adjustably mounted thereon, said tongue having its ends of different widths, substantially as described. 6th. The combination with a shoe having an open front, and also having studs mounted on opposite sides of said open front, of a tongue mounted in said studs, said tongue having its ends of different widths, substantially as described. 7th. The combination with a shoe having an open front, and also having studs mounted on opposite sides of said open front, of a tongue mounted in said studs, and having an up and down movement therein, said tongue having its ends of different widths, substantially as described. 8th. The combination with a shoe having an open front, of means, carried by said shoe, for simultaneously moving the edges on each side of said open front one position to another, substantially as described. 9th. The combination with a shoe, of a tongue having enlarged sides, substantially as described. 10th. The combination with a shoe, of a tongue provided with upwardly extending portions, substantially as described. 11th. The combination with a shoe, of a tongue adjustably mounted thereon, said tongue being provided with upwardly extending portions, normally located above the top of the shoe, substantially as described. 12th. A shoe stud comprising a cylindrical band, a central cylindrical opening within said band, an opening formed in said band of less width than the diameter of the central opening, and means for securing said stud to the shoe, substantially as described.

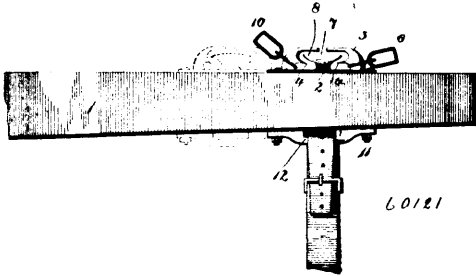
**No. 60,120. Thawing Apparatus. (Appareil à dégeler.)**



William E. Harris, Chicago, Cook County, Illinois, U.S.A., 25th May, 1898; 6 years. (Filed 16th February, 1898.)

*Claim.*—1st. A thawing apparatus provided with a shield, comprising a hollow frame connected with a hot air supply, and a hollow door hung on the said frame and in communication with the said door, to allow the heated air to pass from the frame into the door, substantially as shown and described. 2nd. A thawing apparatus provided with a shield, comprising a hollow frame connected with a hot air supply, and a hollow door hung on the said frame and in communication with the said frame, to allow the heated air to pass from the frame into the door, said door being provided at its inner facing with apertures for the exit of the heated air to the ground against which the shield rests, substantially as shown and described.

**No. 60,121. Shaft Attachment.** (*Attache de timon.*)

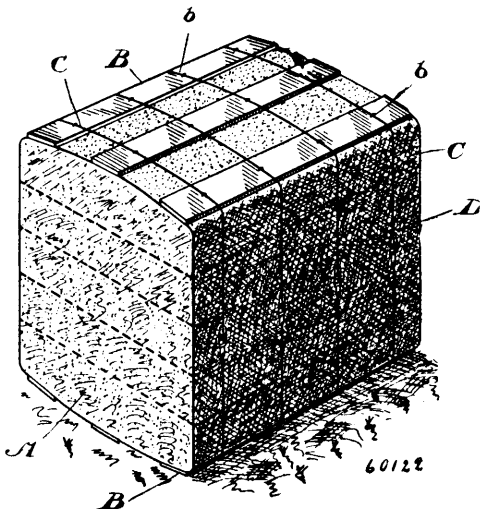


Nelson Green, Radnor, Quebec, Canada, 25th May, 1898; 6 years. (Filed 31st March, 1898.)

*Claim.*—1st. A shaft attachment, comprising a base, provided with inwardly bent hooks, lugs or lips formed upon said hooks, a stop so arranged as to prevent accidental displacement of links, said links being adapted to connect the hame tug and hold back to said hooks, and means for securing the attachment to the shaft, substantially as described. 2nd. A shaft attachment, comprising a base, provided with inwardly bent hooks, said hooks having lugs or lips formed upon their inner sides, a stop located between said links, comprising a reduced neck and tapering ends, said ends extending within a sufficient distance of the inner sides of said hooks to permit of the free passage of the links, said links being adapted to connect the hame tug and hold back to said hooks, and means for securing the attachment to the shaft, substantially as described. 3rd. A shaft attachment, comprising a base, provided with inwardly bent hooks, said hooks having lugs or lips formed upon their inner sides, a stop located between said hooks, comprising a reduced neck and tapering ends, said ends extending to within a sufficient distance of the inner sides of said hooks to permit of the free passage of links, said links being adapted to connect the hame tug and hold back to said hooks, and a casting secured upon the under side of the shaft, having a centrally reduced rounded portion, said castings serving to prevent wear upon the shaft, substantially as described.

**No. 60,122. Baled Cattle Food.**

(*Ballot pour nourriture d'animaux.*)

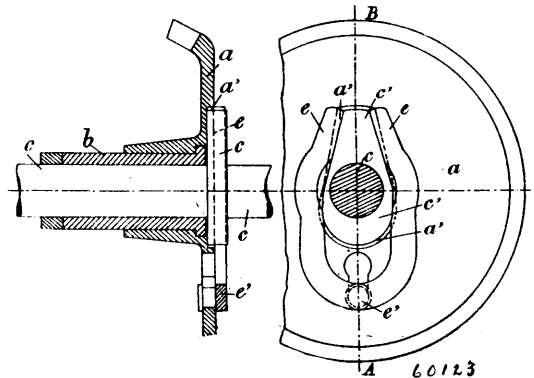


David Russell Ker, Victoria, British Columbia, Canada, 25th May, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. As a portable cattle feed, a mixture of substantially fifty per cent. finely cut hay, and fifty per cent. ground grain incorporated into a solid mass by heavy pressure, and bound by wires and slats, substantially as and for the purpose specified. 2nd.

In a bale of cattle feed, the combination with the food of a series of slats placed about the bale, two or more wires sliding freely through eyes or guides on the slats and two or more fasteners, to which one end of each wire is securely fastened, the other ends of the wires being detachably connected to the said fasteners, substantially as and for the purpose specified. 3rd. In a bale of cattle feed, the combination with the food, of the slats B, eyes *b*, secured thereto, wires C, passing through the said eyes, and fasteners D, to which one end of each wire is securely fastened and in each of which are formed the holes E and G, through which a wire may be passed and held, substantially as and for the purpose specified. 4th. In a bale of cattle feed, the combination with the food, of the slats B, eyes *b*, secured thereto, wires C, passing through the said eyes, fasteners D, to which one end of each wire is securely fastened, and in each of which are formed the holes E and G, through which a wire may be passed and held, and a bridge F, formed on each fastener intermediate of the holes and notched to receive the wire, substantially as and for the purpose specified. 5th. In a bale of cattle feed, the combination with a number of separable feeds of a series of slats placed about the bale, two or more wires sliding freely through eyes or guides on the slats and two or more fasteners, to which one end of each wire is securely fastened, the other ends of the wires being detachably connected to the said fasteners, substantially as and for the purpose specified. 6th. In a bale of cattle feed the combination with the food of one or more wires C, passing around it, and fasteners D, to which one end of each wire is securely fastened and in each of which are formed the holes E and G, through which a wire may be passed and held, substantially as and for the purpose specified.

**No. 60,123. Velocipede Gear.** (*Engrenage de velocipedes.*)



Julius Alexander Nicolaj Rasmussen and Charles Benton Hart Rasmussen, both of Copenhagen, Denmark, 25th May, 1898; 6 years. (Filed 14th April, 1898.)

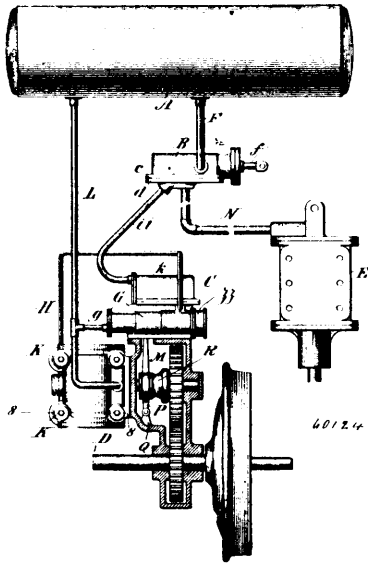
*Claim.*—1st. An arrangement for producing elastic pedalling in chainless cycles, in which the motive power is transmitted by means of a cog-wheel, such arrangement consisting of an elastic connection in the shape of a block of india-rubber, a spring, or a similar body, inserted in the driving-gear, and which by attaining different degrees of tension may neutralize sudden changes in the resistance to the motion, substantially as described. 2nd. An elastic connection for the purpose set forth, consisting of a spring *c* fixed to the driving-wheel *a*, which is turnable only to a certain extent round the crank-axle *e*, the said spring *a* being straightened by an arm *c'* fixed to the crank-axle, substantially as described. 3rd. An elastic connection, as for the purpose set forth, consisting of two india-rubber blocks *g* placed in two hollows or recesses *f* fixed to the driving-wheel *a*, the blocks being acted upon by an arm *h* protruding from the crank-axle, which is rotatable only to a certain extent in relation to the driving-wheel, substantially as described. 4th. An elastic connection, for the purpose set forth, consisting of a flat or a spiral spring *p*, the ends of which are fixed to two arms *l* and *n* on the driving-wheel *a* and the crank-axle *e* respectively, substantially as described.

**No. 60,124. Air Brake.** (*Frein à air.*)

John Jacob Nef, New York City, U.S.A., 25th May, 1898; 6 years. (Filed 2nd May, 1898.)

*Claim.*—1st. In an air brake system, the combination with an air reservoir, a pump and pump operating mechanism, a pump governor and brake cylinder, of a service valve through which the brake cylinder is controlled, and means for throwing the pump into operation by the exhaust from the brake cylinder when the brakes are released, substantially as described. 2nd. In an air brake system, the combination with an air reservoir, a pump and pump operating mechanism, a pump governor and brake cylinder, of a service valve through which the brake cylinder is controlled, means for throwing the pump into operation by the exhaust from the brake cylinder when the brakes are released, and means for automatically throwing the pump out of operation by the pressure of air in the

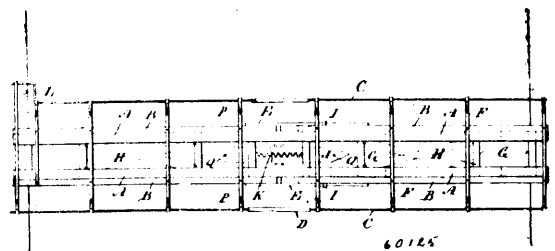
reservoir, substantially as described. 3rd. In an air brake system, the combination with an air reservoir, a pump and pump operating



mechanism, a pump governor and brake cylinder, of a service valve, means whereby upon the movement of the service valve in one direction air may be admitted to the brake cylinder, and means whereby upon the movement of the service valve in the opposite direction the air may be exhausted from said brake cylinder to the governor and cause the same to throw the pump into operation, substantially as described. 4th. In an air brake system, the combination with an air reservoir, a pump and pump operating mechanism, a pump governor and brake cylinder, of a service valve communicating with said air reservoir, a port leading from said service valve to the brake cylinder, an exhaust port leading from said service valve to the pump governor through which air may be exhausted from said brake cylinder to said pump governor and cause the same to throw the pump into operation, substantially as described. 5th. In an air brake system, the combination with an air reservoir, a brake cylinder, a pump and pump operating mechanism, an automatic governor having a valve, said valve being impelled in one direction by air under pressure and in the opposite direction by a spring, of a service valve communicating with said air reservoir having a port leading to the brake cylinder, an exhaust port leading to the valve chamber of the governor, and a valve arranged within the service valve chamber adapted upon its movement in one direction to admit air to the brake cylinder, and in its opposite direction to exhaust such air from the brake cylinder to the valve chamber of the pump governor whereby the air pressure opposing the spring in said valve chamber is counterbalanced and the action of the spring is permitted to operate the valve in said valve chamber, substantially as described. 6th. In an air brake system the combination with an air reservoir, a brake cylinder, a pump and pump operating mechanism, an automatic governor having a valve, said valve being impelled in one direction by air under pressure and in an opposite direction by a spring, of a service valve communicating with said air reservoir and having a port leading to the brake cylinder, an exhaust port leading to the valve chamber of the governor, and a valve arranged within the service valve chamber adapted upon its movement in one direction to admit air to the brake cylinder and in its opposite direction to exhaust such air from the brake cylinder to the valve chamber of the pump governor whereby the air pressure opposing the spring in said valve chamber is counterbalanced and the action of the spring is permitted to operate the valve in said valve chamber and at the same time open an exhaust port and permit the air from the brake cylinder to exhaust the atmosphere, substantially as described. 7th. In an air brake system the combination with an air reservoir, a pump and pump operating mechanism, a brake cylinder and service valve controlling said brake cylinder of an automatic pump governor having a piston adapted to throw the pump into and out of operation and connections with said brake cylinder through which air is exhausted from said brake cylinder to actuate said piston to throw the pump into operation, and mechanism for automatically actuating said piston to throw the pump out of action when the pressure in the reservoir has reached a predetermined point, substantially as described. 8th. The combination in an air brake system of a pump and pump operating mechanism of a compound air cylinder comprising two cylinders of different diameters, a piston within said compound cylinder having heads of different diameters corresponding with the bores of said compound cylinder, a valve chamber in open communication with the smaller cylinder and having a port communicating with the larger cylinder and an exhaust port, a valve in said valve chamber, and means acting under variations in air pressure for operating said valve to alternately

open and close said larger cylinder to the valve chamber and the exhaust, substantially as described. 9th. The combination in an air brake system of a pump and pump operating mechanism of a compound air cylinder comprising two cylinders of different diameters, a piston within said compound cylinder having heads of different diameters corresponding with bores of said compound cylinder, a valve chamber having open communication with the smaller of said cylinders, and having a port connecting with the larger of said cylinders, an exhaust port, and a valve controlling said ports whereby air is admitted to the larger cylinder to move the piston in one direction and exhausted therefrom to move it in the opposite direction, substantially as described. 10th. The combination in an air brake system of a pump and pump operating mechanism, a compound air cylinder comprising two cylinders of different diameters, a piston within said compound cylinder having heads of different diameters corresponding with the bores of said compound cylinder, a valve chamber having open communication with the smaller of said cylinders and having a port connecting with the larger of said cylinders, an exhaust port and means for controlling said ports whereby air is exhausted from the larger cylinder to allow the piston to move in one direction, and is admitted to said cylinder to move the piston in the opposite direction, substantially as described. 11th. In an air brake system, the combination with an air reservoir, a pump and its operating mechanism a pump governor connecting and disconnecting said pump operating mechanism and the pump of means whereby the compression chamber of the pump is opened to the atmosphere while said pump operating mechanism is being connected with said pump, substantially as described. 12th. In an air brake system, the combination with an air reservoir, a pump and its operating mechanism, a pump governor connecting and disconnecting said pump operating mechanism and said pump of means whereby the suction of said pump governor, substantially as described. 13th. In an air brake system, the combination with an air reservoir, a pump and its operating mechanism a pump governor connecting and disconnecting said pump operating mechanism and the pump of an auxiliary chamber and means whereby when the pump is stopped said auxiliary chamber is supplied with air under pressure, and the pump is started, said air supply is shut-off and the air in said auxiliary chamber is caused to actuate a valve on the pump to open communication between the compression chamber of the pump and the atmosphere. 14th. In an air brake system, the combination with an air reservoir, a pump and its operating mechanism, a pump governor connecting and disconnecting said pump operating mechanism and said pump of an auxiliary chamber having communication with the valve chamber of said pump governor under the control of the valve therein, mechanism whereby the suction valve of said pump may be controlled and a communication between said auxiliary air chamber and said suction valve controlling mechanism, substantially as described. 15th. In an air brake system, the combination with an air reservoir, a pump and its operating mechanism, a pump governor connecting and disconnecting said pump operating mechanism and the pump of an auxiliary chamber, a communication from said auxiliary chamber to a port in the valve chamber of the pump governor, said communication being operated by the movement of the valve in the valve chamber which throws the pump out of action and closed by the reverse movement, a communication between the auxiliary chamber and the suction valve of the pump, whereby when the valve in the valve chamber is moved to start the pump communication is opened between the auxiliary chamber and the said suction valve of the pump causing said suction valve to open and whereby a movement of the valve in the valve chamber of the pump governor in the opposite direction closes said port in said auxiliary chamber. 16th. The combination in a service valve with a valve chamber and a valve for controlling the passage of compressed air, of a piston connected with said valve and adapted to reciprocate in a cylinder in communication with said valve chamber, said piston being normally under air pressure exerted in one direction and means for mechanically moving the piston and valve in opposite the direction, substantially as described. 17th. The combination in a service valve with a valve chamber and a valve, of means for operating the said valve in one direction by the air pressure within the valve chamber and in the other direction by external mechanical means against the pressure of the air, substantially as described.

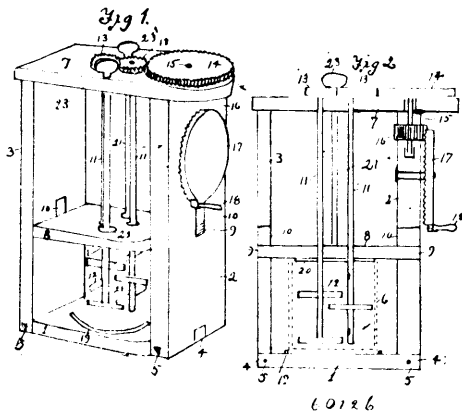
**No. 60,125. Freight Car Running Board and Guard Rails. (*Garde-fou pour chars à marchandises.*)**



John Carmichael, Pembroke, Ontario, Canada, 25th May, 1898; 6 years. (Filed 5th May, 1898.)

*Claim.*—1st. A continuous and automatic running-board or walk for the top of freight cars, substantially as and for the purposes hereinbefore set forth. 2nd. A continuous guard rail running the length of the running board less one inch at each end of the car, substantially as and for the purposes hereinbefore set forth.

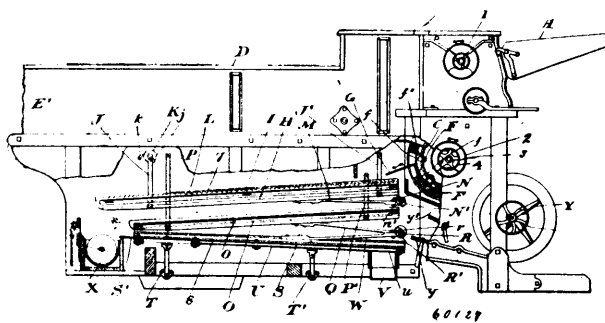
**No. 60,126. Churn. (Baratte.)**



Martin V. Olinger, Bull Run, Tennessee, U.S.A., 25th May, 1898; 6 years. (Filed 9th, May, 1898.)

*Claim.*—1st. In a churn, the combination of a base having a receptacle-seat, a frame, including connected uprights detachably secured at their lower ends to the base and adapted for vertical displacement, a receptacle lid or cover mounted for vertical adjustment upon the uprights, and adapted to bear upon the upper edge of a churn-receptacle to hold the latter in engagement with said seat upon the base, dashers, and operating mechanism mounted upon the frame, and means, consisting of feed-screws mounted upon the frame, for adjusting the lid or cover, the dashers being vertically removable from the receptacle when the frame is detached from the base, substantially as specified. 2nd. In a churn-motor, the combination of a base having a receptacle-seat, and provided with terminal extensions or tongues, a frame including connected uprights provided at their lower extremities with bifurcations to receive said extensions or tongues of the base, and adapted for vertical displacement, means for detachably securing the bifurcations in engagement with said extensions or tongues, a receptacle lid or cover mounted for vertical adjustment upon the uprights, and adapted to bear upon the upper edge of a churn-receptacle, dashers, and operating mechanism mounted upon the frame, and means, consisting of feed-screws mounted upon the frame, for adjusting the lid or cover, substantially as specified.

**No. 60,127. Clover Huller. (Appareil à vanner le trèfle.)**

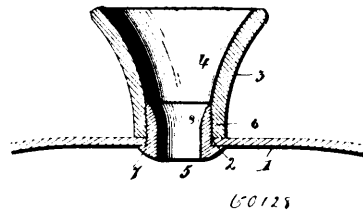


John Abell, Toronto, Ontario, Canada, 25th May, 1898; 6 years. (Filed 9th May, 1898.)

*Claim.*—1st. In a clover hulling machine, the combination of the upper screen H, perforated top I, serrated strips L, adjustable hangers J, hangers J<sup>1</sup>, and means for independently reciprocating the upper screen H, substantially as described and for the purpose specified. 2nd. In a clover hulling machine, the combination of the upper screen H, perforated top I, serrated strip L, hangers J, ratchet wheels K, eccentric pins j, pawls k, hangers J<sup>1</sup>, connecting rod M, eccentric N, with pin n<sup>1</sup>, and suitably driven shaft N<sup>1</sup>, substantially as described and for the purpose specified. 3rd. In a clover hulling machine, the combination of the upper screen H, perforated top I, serrated strips L, rubber strips l, discharge board G, hangers J, ratchet wheels K, eccentric pins j, pawls k, hangers J<sup>1</sup>, connecting rod M, eccentric N, with pin n<sup>1</sup>, and shaft M<sup>1</sup> substantially as described and for the purpose specified. 4th. In a clover hulling machine, the combination of the upper screen H, on to which the seed and seed pods are discharged from the hulling cylinder by

the discharge board G, perforated top I, serrated strips L, and rubber strips l, hangers J, ratchet wheels K, eccentric pins j, pawls k, hangers J<sup>1</sup>, connecting rod M, eccentric N, with a pin n<sup>1</sup>, shaft N<sup>1</sup>, middle-screen O, wire netting o, hangers P, P<sup>1</sup>, connecting rod Q, eccentric R, with pins r, shaft R<sup>1</sup>, lower screen S, wire netting s, rubber strip s<sup>1</sup>, ledge S<sup>1</sup>, pivoted supports T, T<sup>1</sup>, connecting rod W, table U, with opening u, chute V, conveyor X, fan Y, and air passages ways w, w<sup>1</sup>, the whole being operated, substantially as described and specified. 5th. In a clover hulling machine, and in combination with the threshing cylinder and separating screens thereof, an independently supported and driven upper screen on to which the threshing cylinder is arranged to discharge. 6th. In a clover hulling machine, and in combination with the threshing cylinder and separating screens thereof, and independently and adjustably supported and driven upper screen on to which the threshing cylinder is arranged to discharge.

**No. 60,128. Cover for Vessels. (Couvercle de vaisseau.)**

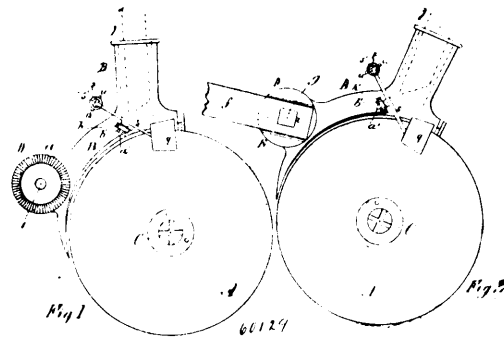


Elisé Bouchard, Kamouraska, Quebec, Canada, 25th May, 1898; 6 years. (Filed 7th May, 1898.)

*Claim.*—1st. A cover for cooking and other vessels, comprising a lid having a central opening for the passage and escape of steam, substantially as described. 2nd. A cover for cooking and other vessels, comprising a lid having a central opening and a cup secured over said opening, said cup having an opening communicating with said central opening to permit of the escape of steam from the vessel, substantially as described. 3rd. A cover for cooking and other vessels, comprising a lid having a central opening, a plug, having a stem and also having a central opening mounted in said opening in said lid, and a flared cup mounted on said lid and secured to said plug, said cup having a flared opening communicating with said opening in said plug, substantially as described.

**No. 60,129. Seed-Drill Disc-Shoe.**

(Sabot de disque pour semoir en ligne.)



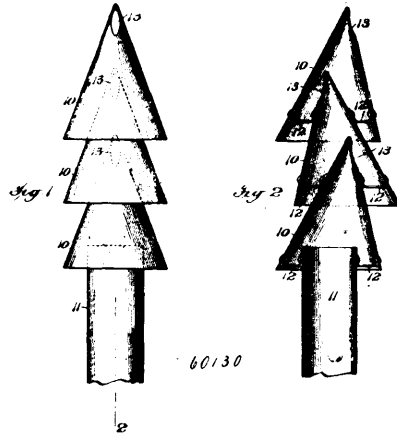
William Stephenson, Morris, Manitoba, Canada, 25th May, 1898; 6 years. (Filed 7th May, 1898.)

*Claim.*—1st. In combination with a seed-drill disc-shoe, a projection formed integral with or attached to a grain-spout or standard, constructed with corrugations on its sides, and castings or washers formed with corresponding corrugations to engage therewith on each side respectively, and projecting ribs on the outer side of said castings or washers to form a bed to receive the ends of draw-bars, all the parts to be secured together by a bolt made to pass through each part and tightened by a nut, all constructed and arranged substantially as and for the purpose specified. 2nd. The levers s s of the side scrapers are constructed with a pin m attached to the lower end of each lever to pivot t to the lugs r r of the scrapers q q, a central pivot pin a<sup>1</sup> to pivot the lever to the lugs h on the grain spout, a bent arm s on the upper end of one of the levers s constructed with projections u u to pass between the coils of a surrounding spring t, and the opposite lever s constructed with a flat point n to receive the other end of the spring t to hold it from turning, by which the tension of the spring on the levers may be adjusted at will by turning it to suit the pressure of the side-scrappers on the discs as desired, substantially as and for the purpose specified. 3rd. The projection D, formed on the grain-spout B or standard, and constructed with corrugations a on both sides, and a bolt opening c through it, and castings or washers E formed on the

inner side with corrugations *b* to engage with the corresponding ones *a* on the projection *D*, and on the outside with ribs *c c* to receive the ends of the draw-bars *f f*, bolt holes being in all the parts to receive and be held together with a bolt *g*, tightened by a nut *i*, all constructed substantially as and for the purpose specified.

**No. 60,130. Chimney Cowl.**

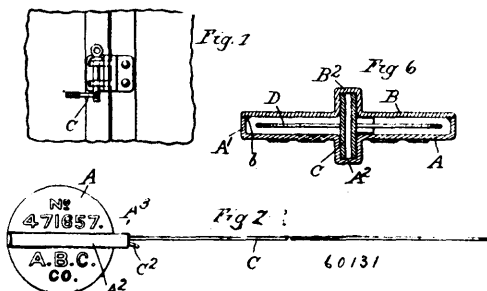
*C. uvercle de cheminée.*



Otto Kuphal, New York City, U.S.A., 25th May, 1898; 6 years. (Filed 10th May, 1898.)

*Claim.*—1st. A chimney cowl formed of a plurality of hollow cones arranged with the vertex of each cone except the top one extending into the cone above it, said cones having openings near their vertexes, substantially as described. 2nd. A chimney cowl formed of a plurality of hollow cones arranged with the axes of alternate cones set obliquely in opposite directions and with the vertex of each cone except the top one extending into the cone above it, and said cones having openings near their vertexes in the sides nearest parallel with the general axis of the series, substantially as described. 3rd. A chimney cowl formed of three hollow cones arranged with the axes of alternate cones set obliquely in opposite directions and with the vertex of each cone except the top one extending into the cone above it, and said cones having openings near their vertexes in the sides nearest parallel with the general axis of the series, substantially as described. 4th. A chimney cowl formed of a plurality of hollow cones arranged with the axes of alternate cones set obliquely in opposite directions and with the vertex of each cone except the top one extending into the cone above it, and said cones having openings near their vertexes in the sides nearest parallel with the general axis of the series, said top cone having its vertex cut off in a horizontal plane, substantially as described. 5th. A chimney cowl formed of a plurality of hollow cones arranged with the axes of alternate cones set obliquely in opposite directions and with the vertex of each cone except the top one extending into the cone above it, and said cones having openings near their vertexes, the openings in one or more of the cones being in the sides of the cones nearest parallel with the general axis of the series, substantially as described. 6th. A chimney cowl formed of a plurality of hollow oblique cones arranged with their bases parallel and their axes extending alternately in opposite directions and with the vertex of each cone except the top one extending into the cone above it, and said cones having openings near their vertexes, the openings in one or more of the cones being in the sides nearest parallel with the general axis of the series, substantially as described.

**No. 60,131. Seal.** (*Seau.*)

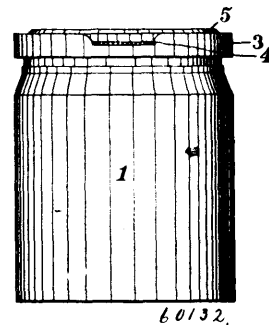


Emil Tyden, Chicago, Illinois, U.S.A., 25th May, 1898; 6 years. (Filed 10th May, 1898.)

*Claim.*—1st. The employment in a self-locking seal of an engaging device which is lodged unattached within the seal body and is completely enclosed therein and rendered inaccessible by the inser-

tion of the securing device. 2nd. The employment in a self-locking seal of and elastically operated catch lodged within the seal chamber adapted to react to effect the locking, and a detainer which holds the catch under tension ready to react upon being released therefrom, such detainer and catch being relatively movable and one of them being in position to be actuated by the insertion of the securing device to effect such release. 3. In a seal, in combination with a chambered body, a securing device adapted to be inserted therein, an elastically operating catch lodged within the chamber and adapted to react to effect the locking, a detainer which holds the catch under tension ready to react upon being released therefrom, the catch being extended into the path of the intruded securing device and adapted to be encountered thereby to release it from the detainer. 4th. In a seal, in combination with a chambered body, a securing device adapted to be inserted into the chamber and to fill the aperture through which it is thus inserted, and a spring which normally coils with its ends lapped-lodged within the chamber, and a device within the chamber which holds the ends of the spring separated to permit the inserted securing device to pass between them, the locking-device having an aperture back of its inserted end and adapted after entering between said ends to withdraw them from the separating device, whereby the spring may be coiled through said aperture. 5th. In a seal, in combination with a chambered body having a throatway constituting the only entrance into the chamber, a securing device adapted to be inserted through the throatway an substantially to occupy the same when thus inserted, a spring coiled so that normally its ends lap, the same being lodged unattached in the chamber and adapted to extend on both sides of the plane of the throatway, guards extending from the opposite sides of the throatway respectively adapted to hold the ends of the spring separated, the securing device having an aperture back of the inserted end substantially equal to the diameter of the spring, whereby upon its insertion, it passes between the separated ends of the spring and encounters the opposite side thereof, and forces it off the separating device, and is engaged by the ends of the spring lapped through said aperture. 6th. In a seal, in combination with a chambered body, a securing device consisting of a strap adapted to be inserted in such body and adapted to enclose the throat through which it is thus inserted, and having an aperture in the inserted portion, a spring normally coiled so that it ends lap lodged within the chamber, and a device which holds the ends of the spring separated to permit the inserted securing device to pass between them and afterward dislodge them to receive the lapped ends through its aperture, said spring, when spread to separate the ends, being in contact at opposite sides with the edge walls of the chamber.

**No. 60,132. Jar Closure.** (*Fermeture de jarres.*)



Charles Signey Alden, Rochester, New York, U.S.A., 25th May, 1898; 6 years. (Filed 9th May, 1898.)

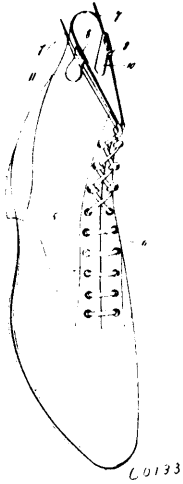
*Claim.*—1st. The combination with the jar or receptacle having the upwardly extending external flange and the substantially flat seat inside of and below the upper edge of the flange, the packing-ring resting upon the seat, and the cover having the central portion extending below the seat, the sharp downwardly-projecting annular shoulder or flange 7 resting upon and adapted to sink slightly into the packing-ring, the periphery of the cover being substantially the same thickness as the height of the flange of the jar, substantially as described. 2nd. The combination with the jar having the internal ledge or seat and the external flange extending above the same and cut away at one or more places down to the level of the seat, and the packing-ring, of the cover having the sharp shoulder 7 at the edge resting upon the packing ring, and the internal projecting portion, substantially as described.

**No. 60,133. Fastening Device.** (*Appareil d'attache.*)

Basil John Fisher, Ashboro, North Carolina, U.S.A., 26th May, 1898; 6 years. (Filed 12th May, 1898.)

*Claim.*—1st. A fastening device for the purpose herein described, said device being composed of a piece of spring metal bent at or adjacent to the middle thereof to form a front and a back, the front being bent inwardly so as to press upon the back, and the end thereof bent outwardly, substantially as described. 2nd. A fastening device for shoe laces, consisting of a strip of spring metal bent at

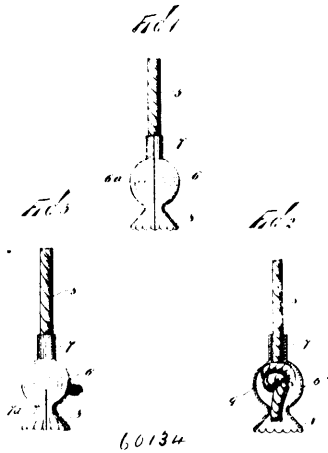
or near the middle thereof to form a loop and also a front and back, the front part thereof being bent inwardly so as to press upon the



back, and the extreme end of the front being bent outwardly, substantially as shown and described.

**No. 60,134. End Knob for Cords, Lines, Laces, etc.**

(*Neud pour cordages, etc.*)



Basil John Fisher, Ashboro, North Carolina, U.S.A., 26th May, 1898; 6 years. (Filed 12th May, 1898.)

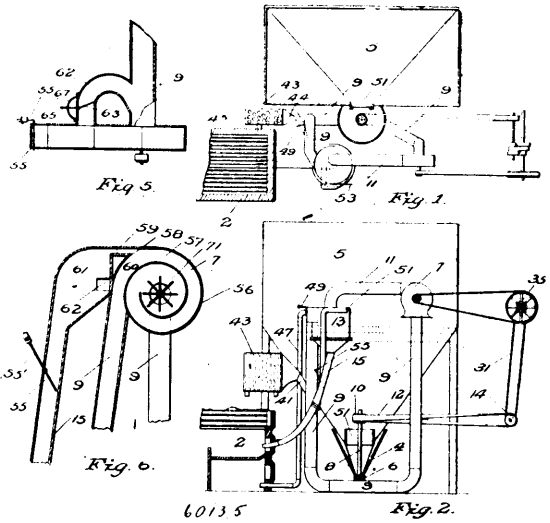
*Claim.*—1st. A knob or end piece for lines, cords and laces, consisting of a hollow body, one side of which is provided with a tubular extension which communicates with the interior thereof, and which is open at its outer end, said body being also provided on the side opposite said tubular extension with a hollow extension which is conical in form, the base thereof being directed outwardly, substantially as shown and described. 2nd. A knob or end piece for cords, lines and laces, consisting of a hollow spherical body provided at one side with a tubular extension which is open at both ends and at its opposite side with a larger conical extension, the base of which is directed outwardly, said last named conical extension being convoluted or fluted, substantially as shown and described. 3rd. A knob or end piece for lines, cords and laces, consisting of a hollow body, one side of which is provided with a tubular extension which communicates with the interior thereof, and which is open at both ends, said body being also open on the side opposite said extension, substantially as shown and described.

**No. 60,135. Fuel Feeder. (Alimentateur de combustible.)**

Henry Lawrench Day, Minneapolis, Minnesota, U.S.A., 26th May, 1898; 6 years. (Filed 11th May, 1898.)

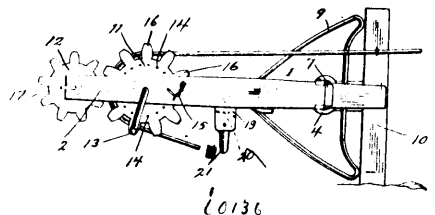
*Claim.*—1st. Means for feeding fuel to furnaces, comprising in combination, means for producing a continuous air-current or air-belt, means for directing the fuel into said air-current, and means for separating the fuel from said air-current and directing it into a suitable furnace. 2nd. Means for feeding fuel to furnaces, comprising in combination, mechanism for producing an air-belt or continuous air-current, means for feeding the fuel into said current, means for separating the fuel from said current and directing it into a suitable furnace, and means for supplying air to said air-belt to take

the place of the air which passes into the furnace with the fuel 3rd. Means for feeding fuel to furnaces, comprising in combination,



a fan or blower, a separator, pipes connecting said fan and separator, whereby a continuous air-current or air-belt may be produced, means for delivering fine fuel into one of said pipes, to be separated from said air-current by said separator, and means for conducting such fuel from said separator to said furnace. 4th. Means for feeding fuel to furnaces, comprising in combination, a suitable fan or blower, air-conductors connected to the inlet and outlet of the casing of said fan or blower and communicating with each other, means for directing fuel into said air-conductors, means located in said fan casing for separating the fuel from the air-current, and means for directing said fuel into a suitable furnace, for the purpose set forth. 5th. Means for feeding fuel to furnaces, comprising in combination, a suitable fan or blower, a fan casing provided with a spiral duct leading from its central portion and having an unbroken peripheral surface, a suitable wall dividing said duct into an inner and an outer part, a pipe on conductor connected to the inner part of said duct and communicating with a pipe or conductor leading to the inlet of the fan casing, means for feeding fuel into said conductors and means for directing the fuel from the outer part of said duct into a suitable furnace. 6th. The combination, with a fan, of the separator, the pipes connecting said fan and said separator, whereby a continuous air-current may be produced, a pipe extending from said separator to the furnace, and means for feeding the fuel into one of the pipes connecting the fan and separator, for the purpose specified. 7th. The combination, with the fan and separator, of the pipes connecting said fan and separator, means for supplying air to one of said pipes, a pipe connecting the separator with the furnace, and means for feeding the fuel into one of the pipes between the fan and separator. 8th. The combination, with the fan and separator, of pipes connecting said fan and separator, whereby a continuous air-current may be formed, means for feeding the fuel from the separator to the furnace, means for supplying heated air to the pipe between the separator and the fan, to compensate for that which passes through the pipe into the furnace, and means for feeding the fuel into one of the pipes between the fan and the separator.

**No. 60,136. Wire Stretcher. (Tendeur de fil de fer.)**

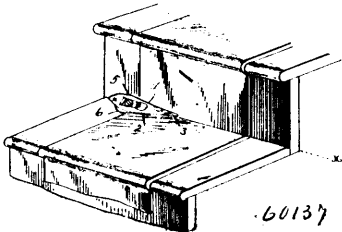


Samuel A. Grubb, Elmwood, Illinois, U.S.A., 26th May, 1898; 6 years. (Filed 11th May, 1898.)

*Claim.*—1st. In a wire stretcher, the combination with the frame thereof and means for clamping the same to a fence-post, of a pair of clamping wheels mounted to rotate in said frame and means for throwing said wheels out of gear with each other. 2nd. In a wire stretcher, the combination with the frame thereof and means for clamping the said frame to a frame post, of a pair of clamping gear-wheels mounted to rotate in said frame, one of said wheels being provided with forked teeth and the other adapted to mesh therewith having its shaft pivotally mounted in said frame, whereby said

wheels may be thrown into and out of gear with each other. 3rd. In a wire stretcher, the combination with the frame thereof made up of a beam having bifurcated outer ends, and a clamp for securing said beam to a fence-post, of a pair of clamping-gear-wheels mounted to rotate between the bifurcated ends of said beams, one of said wheels having forked teeth with milled or roughened outer edges and a series of notches or perforations in one side thereof adapted to be engaged by a pawl pivoted to the said beam, and the other of said wheels having its shaft pivoted to one of the ends of said beam, and adapted to be locked to the other end of said beam when the parts are in operative position, substantially as and for the purpose described.

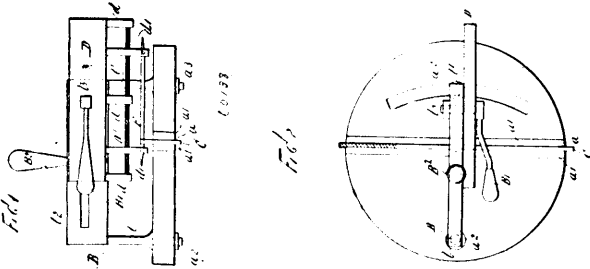
**No. 60,137. Carpet Fastener. (Attache de tapis.)**



George F. Murdock, Wellsville, Ohio, U.S.A., 26th May, 1898; 6 years. (Filed 11th May, 1898.)

*Claim.*—1st. A fastening device for carpets, consisting of a bar having an engaging prong upon the underside thereof, and a slot therein, said bar being provided with a diagonally-arranged face at a point adjacent to the outer end of said slot, against which the head of the securing-screw is adapted to bear when the latter is being seated, as and for the purpose set forth. 2nd. A fastening device for carpets, consisting of a bar having a prong upon the underside thereof and a keyhole-slot therein, said bar being provided with a diagonally-arranged face at a point adjacent to the contracted end of said slot against which the head of the securing screw is adapted to bear when the latter is being seated, as and for the purpose set forth. 3rd. A fastening device for carpets, consisting of a bar having an engaging prong upon the underside thereof, and a slot therein through which a securing screw is adapted to be passed, said bar being provided with a diagonally-arranged face at a point adjacent to the outer end of said slot, which lies at right angles to the shank of said screw, and against which the head of said screw is adapted to bear, and a plate slidingly mounted in said bar and adapted to cover the head of said screw, as and for the purpose set forth. 4th. In a device of the character set forth, the combination with a wear-plate secured to the step at an angle between the horizontal and vertical portions thereof, of a bar having a keyhole-slot therein, a prong at the inner end thereof adapted to engage the top surface of the carpet, and a diagonally arranged face adjacent to the contracted portion of said slot, and a screw passing through said wear-plate diagonally, whose head is adapted to bear against the diagonally arranged face of said bar, as and for the purpose set forth.

**No. 60,138. Saw Sharpener. (Machine à affûter les scies.)**

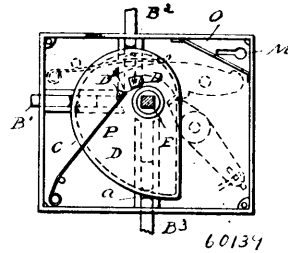


Frederick William Robertson, Newark, Nottingham, England, 26th May, 1898; 6 years. (Filed 12th May, 1898.)

*Claim.*—1st. In a saw sharpener, the combination with a slotted supporting plate and a frame mounted on said plate, of a file holder arranged upon said frame and adapted to reciprocate across the slot of the said plate, substantially as described. 2nd. In a saw sharpener, the combination with a plate provided with means for supporting a saw and having a curved slot upon one side thereof, a frame mounted upon said plate and adjustably secured at one end in said slot, of a file holder, mounted upon said frame so as to reciprocate the file across the teeth of the saw, substantially as and for the purpose set forth. 3rd. In a saw sharpener, the combination with a supporting plate having a slot for the saw and a curved slot arranged

at one side thereof, a frame mounted upon said plate and provided with a standard engaging said curved slot so as to be adjusted therein, said frame being provided with a longitudinal slot, of a file holder secured to said frame by means of a bolt passed through the slot of the said frame so as to reciprocate thereon, and means for clamping a file to said holder, substantially as described.

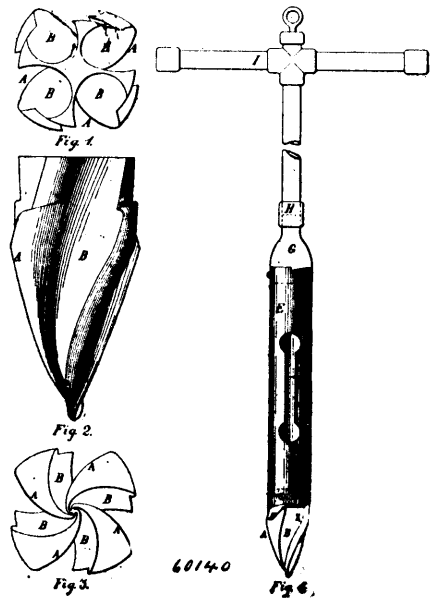
**No. 60,139. Door Lock. (Serrure de porte.)**



William Henry Huffman, New York City, U.S.A., 26th May, 1898; 6 years. (Filed 11th May, 1898.)

*Claim.*—1st. The combination with a lock casing, of a series of bolts guided to move in the direction of their length only and each composed of a single continuous piece, a rotative cam piece mounted to turn in said casing, and engaging the inner end of each bolt, a tumbler in the casing for engaging and locking the cam piece, a lever for shifting the tumbler and means for turning the cam piece, substantially as herein shown and described. 2nd. The combination with a lock casing, of a series of bolts guided to move in the direction of their length only and each composed of a single continuous piece, a cam piece mounted to turn in the casing and engaging the inner end of each bolt, a tumbler in the casing for engaging the cam piece, a lever for shifting the tumbler, a key guard below a key hole in the casing and means for turning the cam piece, substantially as herein shown and described.

**No. 60,140. Drill. (Fore.)**



Ernest Kuhne, New York City, U.S.A., 26th May, 1898; 6 years. (Filed 9th May, 1898.)

*Claim.*—A drill-head of conical shape with two, three or more spiral cutters and spiral grooves of semi-circular cross-section as set forth and described in the attached drawings and specifications.

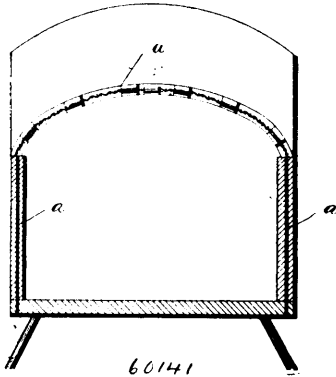
**No. 60,141. Cradle. (Berceau.)**

Charles Gay, Rockland, Ontario, Canada, 26th May, 1898; 6 years. (Filed 13th May, 1898.)

*Claim.*—1st. The combination with a cradle, of a slidably secured therein adapted to be moved into and out of an operative position over the top of the cradle. 2nd. The combination with a cradle, of a sectional cover normally resting within the sides of said cradle, and adapted to be drawn from its normal position into a position over the top of the cradle. 3rd. The combination with a cradle, of a sectional cover normally resting within the sides of

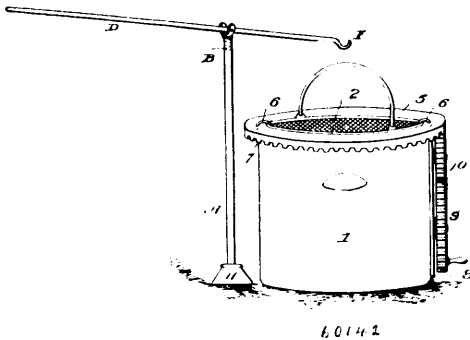


said cradle, said cover having its ends provided with a series of sliding guides movable in the head and tail boards of said cradle,



said cover being adapted to be moved into position over the top of said cradle and be secured in such position.

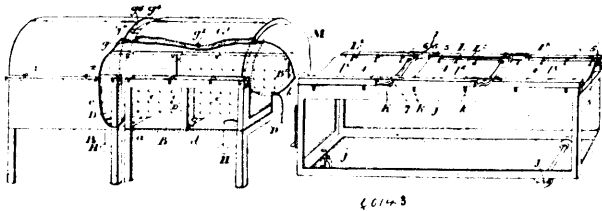
**No. 60,142. Dish Washer. (*Laveuse de vaisselle.*)**



Adellie Ricketts, Monte Vista, Colorado, U.S.A., 26th May, 1898; 6 years. (Filed 12th May, 1898.)

*Claim.*—In a dish washer, the combination with a water receptacle, of a dish cage supported in said water receptacle to have a rotary motion therein, a rim secured to the upper end of said dish cage and provided on its under side with gear teeth, gear wheels journaled to the side of the water receptacle, one of said gear wheels being in mesh with the teeth of the rim, substantially as set forth.

**No. 60,143. Hot-Air Bath, and Carriage therefor. (*Bain à air chaud, etc.*)**

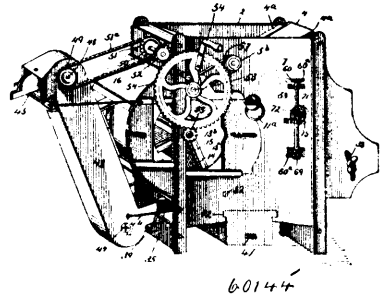


Henry John Wickham, Toronto, Ontario, Canada, 26th May, 1898; 6 years. (Filed 13th May, 1898.)

*Claim.*—1st. A hot-air bath, comprising a suitable frame, a double casing supported on the frame, suitable heat inlets at the bottom of the casing leading into the space between the walls, suitable perforations in the inner casing, a suitable top cover and end cover, a suitable cot support designed to fit upon the top of the lower double casing, and a suitable tubular apron having one edge extending around the opening at one end of the cot and the other designed to be bound around the patient, as and for the purpose specified. 2nd. A hot-air bath, comprising a suitable frame, a double casing supported on the frame, suitable heat inlets at the bottom of the casing leading into the space between the walls, suitable perforations in the inner casing, a suitable top cover and end cover, run-ways secured on the top of the sides of the double casing, a suitable tubular apron having one edge extending around the opening at one end of the cot and the other designed to be bound around the patient, a carriage having suitable run-ways, the sectional cot supported on the run-ways and designed, when the carriage is brought

to abut the bath, to be brought into the run-way in the bath, as and for the purpose specified. 3rd. The combination, with a casing provided with double walls and heat inlet at the bottom and suitable ends, of the carriage provided with suitable run-ways and a sectional cot, designed, when the ends of the run-ways of the carriage abut the ends of the run-ways of the bath, to be passed on to the run-ways of the carriage, as and for the purpose specified. 4th. In a hot air bath, in combination, the frame support and the rectangularly formed double walls and heat inlet funnels at the bottom, the perforations in the inner walls, means for supporting a portion of the body within the bath, a suitable end for one end of the bath, and a tubular apron secured around the opening at one end of the bath and designed to be secured around the body of the patient, as and for the purpose specified. 5th. In combination, the double walls having a space formed between them, the inlet funnels, the angle iron supports for the double walls, the U-shaped run-ways at the top provided with suitable rollers supported in bearings in the run-ways, and suitable top and end covers for the bath, as and for the purpose specified. 6th. In combination, the double walls, the inlet funnel at the bottom, the perforations at the sides of the inner walls, the top double cover suitably lined with asbestos, and the door for the same, and suitable end covers for the bath, as and for the purpose specified. 7th. In a device of the class described, a carriage provided with suitable run-ways, U-shaped in cross-section, and provided with suitable rollers, the cot made in sections comprising side bars and curved cross bars, the asbestos web supports, the ties connecting the same to the side bars, and the links connecting the sections together, as and for the purpose specified.

**No. 60,144. Fanning Mill. (*Tarrare cribleur.*)**

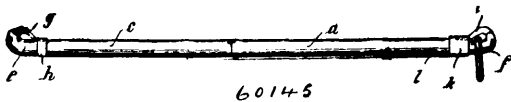
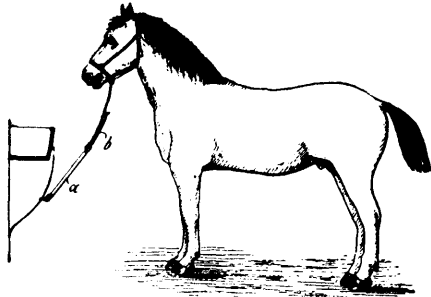


Emilien Rouse, Weston, Oregon, U.S.A., 26th May, 1898; 6 years. (Filed 13th May, 1898.)

*Claim.*—1st. In a fanning mill, the combination with a primary shoe and a fan of an upper screen or riddle arranged to deliver to said primary shoe, and a wind trunk connected with said fan casing and arranged to discharge a part of the blast therefrom over said upper screen or riddle, substantially as described. 2nd. In a fanning mill, the combination with a primary shoe and a fan or blower, of an upper screen arranged to deliver to said primary shoe, a chute situated below said upper screen to discharge through one side of the machine casing, and wind trunk connected with said fan to deliver a part of blast therefrom over the upper screen, substantially as described. 3rd. In a fanning mill, the combination with a hopper, a primary shoe and fan, of a chute situated adjacent to the primary shoe, a screen or riddle above said chute and arranged to discharge to the shaking shoe, an independent screen or riddle situated between the first named screen and the hopper and also deliver to the primary shoe, and a wind trunk connected to said fan to direct a part of the blast therefrom over the upper riddles or screens substantially as described. 4th. In a fanning mill, the combination with a shaking screen or riddle, of a clearer situated beneath said screen or riddle to sweep the lower side thereof, substantially as described. 5th. In a fanning mill, the combination with a primary shoe and a blast fan, of a transverse delivery chute adjacent to said screen, a clearer fixed above the delivery chute and provided with a series of bars, a vibrating screen mounted in said clearer to contact with the bars or slats thereof, a chaffing screen above the first named screen and delivering to said primary shoe, and a wind trunk connected with the fan to deliver a part of the blast therefrom over the screen and chaffing screen, substantially as described. 6th. In a fanning mill, the combination with a primary shoe, and a fan, of an upper screen or screens, and a wind trunk provided with a deflector and connected with said fan casing to direct a part of the blast therefrom over the screen, substantially as described. 7th. In a fanning mill, the combination with a primary shoe, and a blast fan, of a hopper provided with a positively driven feed roller a fixed transverse chute adjacent to the shoe and blow said hopper, a clearer above the chute, a vibrating screen mounted within said clearer, a chaffing screen connected at one end to the vibrating screen and independently suspended at its other end over the primary shoe, and a wind trunk connected with the fan to deliver a part of the blast therefrom over the screen and chaffing screen, substantially as described. 8th. In a fanning mill, the combination with a primary shoe and a blast fan, of a clearer frame situated below the shoe and

provided with a series of rollers, a screen mounted on said clearer frame to sweep against the rollers thereof, and means for actuating screen, substantially as described. 9th. In a fanning mill, the combination with a primary shoe and a blast fan, of a clearer frame pivoted to one end below the blast fan, and having its other end adjustably attached to the main frame or casing, a series of rollers mounted in said clearer frame, a screen or riddle seated on the clearer frame to sweep over the rollers therein and to partake of the adjustment of said clearer frame and means for vibrating the screen or riddle independently of any adjustment of the clearer frame, substantially as described. 10th. In a fanning mill, the combination with a primary shoe and a blast fan, of a relatively fixed frame, a vibrating screen or riddle, and a delivery spout connected with said screen or riddle to vibrate or play therewith, substantially as and for the purpose described. 11th. In a fanning mill, the combination with a primary shoe and a blast fan, of a clearer frame, a vibrating screen or riddle seated thereon, a delivery spout in alignment with said vibrating screen and supported by loose rollers or journals, and a coupling between the delivery spout and the screen or riddle, substantially as and for the purpose described. 12th. In a fanning mill, the combination with the main frame or casing, a shoe and a vibrating screen or riddle, of an elevator casing having its foot arranged adjacent to said screen or riddle, a delivery spout between the foot of the elevator casing and a screen or riddle and operatively connected with the latter to vibrate therewith, an elevator within said casing, a driving shaft, and connections between one elevator shaft and driving shaft, substantially as for the purpose described. 13. In a fanning mill, the combination with a crank shaft, of an upper screen or riddle, a lower screen or riddle, a primary shoe and a vertical rock shaft connected with said crank shaft and having independent connections with the riddles and the primary shoe, substantially as and for the purpose described. 14th. In a fanning mill, the combination with an upper screen or riddle a primary shoe, and a lower screen or riddle, of a crank shaft, horizontal rock shaft adjacent to the upper and lower screens or riddles, connections between each horizontal shaft, the vertical rock shaft, and one of said screens or riddles, and an independent connection between the vertical rock shaft and the primary shoe, substantially as described.

**No. 60,145. Halter Coupler. (Joint de licou.)**



Carl Schmah, Ahrensböck, No. 173 Furstentum, Lübeck, German Empire, 26th May, 1898; 6 years. (Filed 14th May, 1898.)

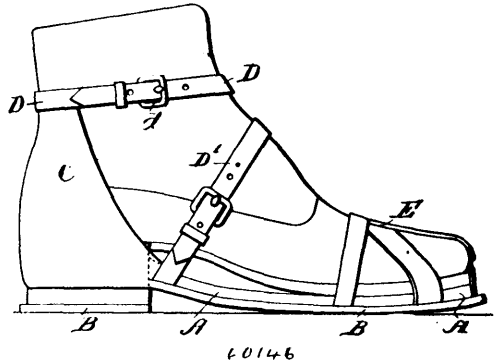
*Claim.*—1st. An uncoupling contrivance for animals, interposed between the halter and the manger, consisting of a rod formed in two parts *c, d* held together by joints, which rod is provided at its ends with hooks *e, f*, the pivoted locking noses which *g, i* can be secured in a locked position by the rods *c, d* and the movable rings *h, k*, constructed and arranged substantially as hereinbefore described. 2nd. In an uncoupling contrivance for animals, interposed between the halter and the manger, the arrangement of the rods *l, n, o* actuating the locking ring *k*, the rod *o* being connected to the rod *c* by means of a spring, so that on the breaking through of the rod *c, d* at the joint *r*, the ring *k* is drawn down from the locked nose *i*, whereby the hoof *f* is opened and the halter released, constructed and arranged substantially as hereinbefore described.

**No. 60,146. Ice Boot. (Chaussure à glace.)**

Henry William North, 33 Groydir Street, Cambridge, England, 26th May, 1898; 6 years. (Filed 31st March, 1898.)

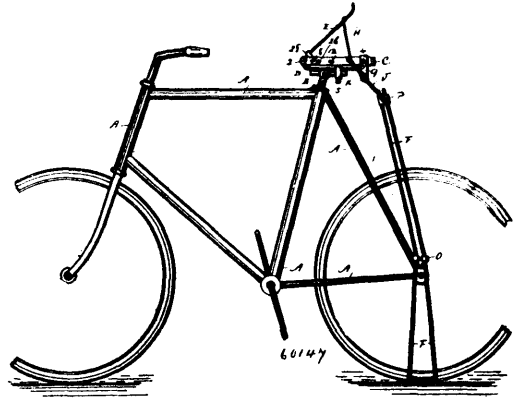
*Claim.*—1st. An improved device for use with boots and shoes, consisting of a detachable sole or sandal fitted to the boot by straps and a layer of rough wool-felt or the like on the underside of the said sole, substantially as described and for the purposes specified. 2nd. An improved ice grip device for use with boots and shoes consisting of a detachable sole, straps for the ankle and instep, a toe

piece fitting over the boot and a covering of rough wool-felt or the like on the lower side of the sole extending beyond the edge of said



sole, substantially as and for the purposes specified. 3rd. An improved ice grip device for boots and shoes, consisting of a sandal arrangement fitted detachably to the boot, and provided with a covering of rough wool-felt and the like, substantially as described and shown in the accompanying drawings, and for the purposes specified.

**No. 60,147. Bicycle Support and Lock. (Support et serrure de bicyclet.)**



William Wholton, Hamilton, Ontario, Canada, 26th May, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.*—1st. A locked steadying attachment for bicycles of the character described comprising side rods, connected to the bicycle frame bearing of rear ground wheel by means of arms, a lock-casing secured to the saddle bar and capable of horizontal adjustment by means of a clip connected to said bar and to horizontal and parallel bars underneath and secured to said casing, two upper shanks pivoted to forward part of said casing to receive the forward extended fork ends of the saddle support, side rods connected to said support and to the forward shorter end of the double side levers pivoted to the lower extended straps of the casing, rear ends of said double levers pivoted to the upper ends of the bicycle steadying side rods, which are capable of being raised from the ground when the saddle support is unlocked and brought to riding position, as described. 2nd. A locked steadying attachment for bicycles of the character described comprising side rods extended at the bottom and extended at lower rear end of frame by means of pivotal arms and the upper contracted ends pivoted to double side levers which are pivoted to side strap of a lock-casing secured to the saddle bar of the bicycle, horizontal bars located under said casing and secured thereto, for attachment to the saddle bar by means of a clip to afford horizontal adjustment to the lock casing, a saddle supporting frame pivoted to forward end of lock casing by means of raised shanks admitting the fork end of said supporting frame provided with side rods to connect with the forward ends of the said double side levers and a lock controlling device in said casing operated by a key to secure the saddle support in a raised position, hence the side steadying rods in a lowered position, as described. 3rd. A lock casing provided with lower horizontal parallel bars having upper turned ends secured to ferruled cross bars of said casing, forward pivotal upper shanks to receive the extended fork ends of the saddle support, an enlarged central part of said pivot having recess for forward end of the bolt to enter and lock the same by means of the spiral spring on the rear shank of the bolt, to press against the shoulder thereof, thus retaining the saddle support in its upper inclined position, hence the connected steadying side rods in their lowered position to hold the bicycle upright, as described. 4th. A lock casing provided with

lower horizontal parallel bars having upper turned end secured to ferruled cross bars secured to the sides of said casing, forward pivotal shanks the upper parts to receive the fork end of the saddle support, and enlarged central part of said pivot having recess to receive the forward end of the bolt to lock said pivot tension spring to forward and retain said bolt, hence the saddle support in upper inclined position and the steadying side rods connected thereto in lowered position and locked, the key capable of disengaging the upper spring from the notch in said bolt and forcing the same rearward from the recess in the said enlarged part of pivot, to unlock the saddle support and allow the rubber ferrule of the same to rest on the lock casing and to raise the side steadying rods a suitable distance from the ground and in proximity to the sides of the frame for riding purposes, as described. 5th. In a standing device for bicycles of the character described, a lock-casing secured to the saddle bar of a bicycle and capable of horizontal adjustment, a saddle support pivotally attached to the forward part of said casing by means of its forked ends extending through upper shanks of the saddle support pivot, having central enlargement with recess to receive a pin to engage with the lower shoulder formed by said recess to prevent the raising of the saddle support, hence the lowering of the side steadying rods by means of the mechanism described. 6th. A standing device for bicycles of the character described, consisting of double side rods widened out at the base and connected to the frame of a bicycle at the central part of the rear wheel by pivotal arms, capable of spreading said rods out at lowering and bringing the same in at raising, the upper part of the said side rods adjustably connected to double side levers, pivoted to a lower side extended strap of the lock casing, horizontally and adjustably connected to the saddle bar of a bicycle, the forward fork ends of a saddle support extending through and secured to the upper pivotal shanks at the forward part of said casing, side rods connected to the rear part of the saddle support and to the forward ends of the said double levers, and controlled and locked by mechanism in said casing, as described. 7th. A standing device for bicycles of the character described, comprising double side rods widened out at the base and connected to the frame of a bicycle at the central part of the rear wheel by pivotal arms, capable of spreading said rods out at lowering and bringing the same in at raising, the upper part of the said side rods adjustably connected to double side levers, pivoted to a lower side extended strap of the lock casing, horizontally and adjustably connected to the saddle bar of a bicycle, said casing having upper side projections, and cover having side flanges to conform with said projections to slide thereon, a saddle support with its forward fork ends extending through and secured to the upper pivotal shanks at the forward part of said casing, side rods connected to the rear part of the saddle support and to the forward ends of the said double levers, and controlled and locked by mechanism in said casing, as described. 8th. A standing device for bicycles, consisting of double side rods widened out at the base, and connected to the frame of a bicycle near the central part of the rear wheel by pivotal arms, clips at the upper ends of each rod to clip the same, the clips inserted in the openings of the double side levers, and capable of being tightened or loosened by means of a nut on each end of the bar, the inner side of said bar collars pressing against the clips to bind them to the rods, as described. 9th. A bicycle lock and stand support, consisting of double side rods widened out at the base and connected to the frame by means of double side arms, at the central part of the rear wheel, the upper ends of the rods connected to

double side levers by means of clips to clip the upper end of said rods by the inner side of the bar collars pressing against the clips by means of nuts and a cross bar, the levers pivoted to the lower end of the strap, side rods connected to the other end of levers and the saddle support, a cross bar or saddle support provided with a rubber ferrule to rest on the lock casing, pivotal shanks at the forward part of said casing, which the forward fork ends go through and are secured thereto, as described. 10th. A lock casing provided with lower horizontal parallel bars having upper turned ends secured to ferruled cross bars of said casing, forward pivotal upper shanks to receive the extended fork ends of the saddle support having a cross bar which is provided with a rubber ferrule for the saddle support to rest on the lock casing, the forward end of the bolt to enter in recess of the enlarged central part of said pivotal shanks, and lock the same, by means of the spiral spring on the rear shank of the bolt to press against the shoulder thereof, thus retaining the saddle support in its upper inclined position, hence the connected steadying side rods in their lowered position to hold the bicycle upright, as described. 11th. A lock casing and steadying device consisting of double side rods which are widened at the base, and connected to the frame, at central part of rear wheel by double side arms, the upper end of said rods to be adjusted by means of clips, which fasten in double side levers, side rods connected to rubber ferruled cross bar on saddle support and the other end of said levers at the forward part of the saddle support, to be secured to forward upper pivotal shanks as described. 12th. A lock-casing consisting of a forward pivot having upper shanks with sockets to receive forward part of the saddle support and secure thereto, said pivot having an enlarged central part with recess for a bolt to enter and be held in the recess by means of a spiral spring, holding the saddle part inclined position, means to withdraw the bolt from the recess, and allow the saddle support to rest on the casing, and a pin to engage with said recess, the lock casing provided with a cover which has flanges to engage with upper flanges at central part of the lock casing, as described. 13th. A lock steadying attachment consisting of double side rods widened at the base, connected to plates on the bicycle frame, at the central part of the rear wheel by means of double side arms which are bent around the cross bar of double side rods and around a part of said plates in opposite directions, clips at the ends of double side levers held by nuts to clip the upper ends of said rods, side rods connected to the other ends of side levers and the rubber ferruled cross bar on saddle support, which are bent around their connections in opposite directions, as described. 14th. A lock and stand comprising a lock casing having upper flanges to engage with the flanges of the cover to slide thereon, pivotal shanks with the forward part of the saddle support connected thereto, the shanks capable of holding the saddle support in inclined position by a bolt, or held horizontally on the casing by a pin, in order to lower and widen and also to raise and contract the double side rods by lever connections and double side arms, as described. 15th. In a standing device for bicycles having double side rods widened out at the base, their upper ends connected to the ends of double side levers pivoted at the lower ends of the strap, side rods connecting the saddle support and the outer ends of double side levers, the rod to be bent around their connections in opposite directions and clip the same, the double side rods connected to the frame by double side arms which fasten to cross bar of double side rods and to plates on the frame, said arms to be bent around their connections in opposite directions and clips the same, as described.

## TRADE-MARKS

Registered during the month of May, 1898, at the Department of Agriculture--  
Copyright and Trade-Mark Branch.

6481. EUGÈNE FOURGAULT, Courbevoie, Department of the Seine, France. Polish for Metals, 2nd May, 1898.
6482. LEOPOLD MILLER AND SONS, New York, N. Y., U. S. A. Paper Cigarettes, All Tobacco Cigarettes, Cigars, Cheroots, Stogies, and all kinds of tobacco, manufactured or raw, 2nd May, 1898.
6483. ) HORROCKSES, CREWDSON AND COMPANY, LIMITED, London  
6484. ) and Manchester, England. Cotton Piece Goods, 2nd May, 1898.
6485. THE TIP TOP KETCHUP COMPANY, Cincinnati, Ohio, U.S.A. Ketchup, 2nd May, 1898.
6486. THE JOLIETTE TOBACCO COMPANY, Joliette, Que. Cut and Plug Tobacco, 3rd May, 1898.
6487. ) MAURICE WERTHEIMER, New York, N.Y., U.S.A. Gloves, 4th May,  
6488. ) 1898.
6489. CHARLES ALBERT GRIFFITH, Toronto, Ont. Tobacco, 4th May, 1898.
6490. ELIZABETH SIMINGTON, Dickens, Iowa, U.S.A. A Medicinal Remedy for Blood Diseases, 4th May, 1898.
6491. THE ALLCOCK, LAIGHT AND WESTWOOD COMPANY, LIMITED, Toronto, Ont. Hammocks, 7th May, 1898.
6492. THE FARBENFABRIKEN, vormals FRIEDRICH BAYER AND COMPANY, Elberfeld, Prussia, Germany. Coal-tar products, raw and intermediary products, pharmaceutical preparations, mordants for dyeing and preparations for photographic purposes, 7th May, 1898.
6493. BURTON BROTHERS AND COMPANY, New York, N.Y., U.S.A. Cotton Goods, 9th May, 1898.
6494. JOSEPH TASSÉ, Montreal, Que. Cigars, Cigarettes and Tobaccos, 10th May, 1898.
6495. JOHN IRVINE DAVIDSON, President of THE DAVIDSON AND HAY, LIMITED, Toronto, Ont. Groceries, such as Tea, Coffee, Spices, Chicory, &c., 11th May, 1898.
6496. E. N. CUSSON ET COMPAGNIE, Montréal, Qué. Cigares, 13 mai, 1898.
6497. GEORGE FOSTER, Brantford, Ont. Teas, 14th May, 1898.
6498. CHARLES OVIDE FORTIER ET PIERRE AMÉDÉE MORIN, Montréal, Qué. Une composition alimentaire, 14 mai, 1898.
6499. THE POSTUM CEREAL COMPANY, LIMITED, Battle Creek, Michigan, U.S.A. Food Drinks, 18th May, 1898.
6500. EMIL PEWNY AND COMPANY, Grenoble, France. Gloves, 18th May, 1898.
6501. CHARLES BELANGER, Perkins, Que. Laundry Blue, 20th May, 1898.
6502. HENRY FISHER BRADING, Ottawa, Ont. Ale and Porter, 20th May, 1898.
6503. HERBERT THOMAS SHERWOOD, 12 London Wall, London, England, trading as H. SHERWOOD AND COMPANY, Corsets, 21st May, 1898.
6504. HENDERSON BROTHERS, Victoria, B.C. A Cough Medicine, 25th May, 1898.
6505. WILLIAM HENRY GILLARD, HENRY NORMAN KITTSON AND HENRY CHARLES BECKETT, Hamilton, Ont., trading as W. H. GILLARD AND COMPANY. Groceries, such as Tea, Coffee, Baking Powder, Spices and Dried Fruits, 25th May, 1898.
6506. WARDEN KING AND SON, Montreal, Que. Hot Water Heaters and Furnaces, 27th May, 1898.
6507. THE UNION BREWING COMPANY, Montreal, Que. Ale, Beer, Porter and the like, 28th May, 1898.
6508. THE AUER INCANDESCENT LIGHT MANUFACTURING COMPANY, LIMITED, Montreal, Que. Incandescent Gas Apparatus, 30th May, 1898.



# COPYRIGHTS

Entered during the month of May, 1898, at the Department of Agriculture—  
Copyright and Trade-Mark Branch.

9910. WYNDHAM'S DAUGHTER. A story of To-day. By Annie S. Swan. Wm. Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 2nd May, 1898.
9911. LA VIE DE JOSEPH FRANÇOIS PERRAULT. Surnommé Le Père de l'Éducation du Peuple Canadien. Ouvrage Illustré. P.-B. Casgrain, Québec, Qué., 2 mai, 1898.
9912. SPANISH-AMERICAN WAR MAP. George Bishop, Montreal, Que., 2nd May, 1898.
9913. "ROSSLAND MINER" MAP OF ROSSLAND, BRITISH COLUMBIA. John Henry Dempster Ferguson, Rossland, B.C., 2nd May, 1898.
9914. LIFE AND TIMES OF THE RIGHT HONOURABLE W. E. GLADSTONE, ON THE "SCAIFE SYSTEM." (Chart.) The Comparative Synoptical Chart Co. Ltd., Victoria, B.C., 3rd May, 1898.
9915. LA REVUE CANADIENNE. (Mai 1898.) Alphonse Leclaire, Montréal, Qué., 3 mai 1898.
9916. QUEBEC. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9917. QUEBEC. A. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9918. NIAGARA FALLS. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9919. NIAGARA FALLS. A." (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9920. MONTREAL. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9921. MONTREAL. A. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9922. MUSKOKA. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9923. MUSKOKA. A. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9924. OTTAWA. (Card.) The Toronto Lithographing Co., Toronto, Ont., 3rd May, 1898.
9925. RULES FOR PLAYING THE PUZZLE "WHEELS-IN-YOUR-HEAD." Albert C. Keedwell, Toronto, Ont., 3rd May, 1898.
9926. LE MOTEUR CENTRIPÈTE. (Livre.) Par Eraste d'Odet d'Orsonnens, Hull, Qué., 5 mai 1898.
9927. BEAUTIFUL MINAS BAY. Song and Chorus. Words and Music by C. F. Rathbone, Horton Landing, N.S., 5th May, 1898.
9928. THE CUBAN QUESTION ON THE "SCAIFE SYSTEM." (Chart.) The Comparative Synoptical Chart Company, (Ltd.), Victoria, B.C., 6th May, 1898.
9929. THE STENOGRAPHER'S AND TYPEWRITER'S COMPANION. Vol. I., No. 2, May, 1898. R. Goltman and A. Marks, Montreal, Que., 7th May, 1898.
9930. PAPERS READ BEFORE THE ENGINEERING SOCIETY OF THE SCHOOL OF PRACTICAL SCIENCE, TORONTO, NO. XI., 1897-98. (Book.) The Engineering Society of the School of Practical Science, Toronto, Ont., 7th May, 1898.
9931. THE TRANSLATION OF A SAVAGE. By Gilbert Parker, London, England, 7th May, 1898.
9932. INTRODUCTION, by James L. Hughes, to THE STUDY OF CHILDREN AND THEIR SCHOOL TRAINING. By Francis Warner, M.D. (Lond.) George N. Morang, Toronto, Ont., 7th May, 1898.
9933. NATIONAL UNITY. March for Piano. By Harry U. Layton. Whaley, Royce & Co., Toronto, Ont., 9th May, 1898.

9934. THE OLD ST. LAWRENCE. March or Two-Step. By F. H. Fulford. Whaley, Royce & Co., Toronto, Ont., 9th May, 1898.
9935. LE PÈRE LEFEBVRE ET L'ACADIE. Par Pascal Poirier, Shediac, N.B., 9 mai 1898.
9936. THE MAKING OF THE CANADIAN WEST. By Rev. R. G. MacBeth, M. A. Wm. Briggs (Book-Steward of the Methodist Book and Publishing House.) Toronto, Ont., 10th May, 1898.
9937. UNDERGROUND RAILROAD. Drama by B. F. Dorsey, Toronto, Ont., 10th May, 1898.
9938. THE CANADIAN ANNUAL DIGEST, (1897.) By Chas. H. Masters and Chas. Morse, LL.B., Ottawa, Ont., 10th May, 1898.
9939. CANADIAN COMMERCIAL ARITHMETIC. (Third Edition.) Compiled and Edited by Clarke Moses and R. C. Cheswright. C. A. Bengough, Toronto, Ont., 11th May, 1898.
9940. CYCLE OF PRAYER OF THE GENERAL MISSIONARY SOCIETY, THE WOMEN'S MISSIONARY SOCIETY, EPWORTH LEAGUES AND SUNDAY SCHOOLS OF THE METHODIST CHURCH, CANADA. (Leaflet.) Annie L. Ogden, Toronto, Ont., 11th May, 1898.
9941. JUBILEE HISTORY OF THOROLD. John H. Thompson, Thorold, Ont., 11th May, 1898.
9942. VISIT TO CANADA OF ENGLAND'S GREATEST MILITARY BAND UNDER THE LEADERSHIP OF LIEUT. DAN GODFREY, R.A.M. C. A. E. Harriss, Ottawa, Ont., 11th May, 1898.
9943. REVUE GÉNÉRALE DE MÉDECINE, DE PHARMACIE ET D'HYGIÈNE PRATIQUES. (Avril 1898.) Gaston de Werthemmer, Montreal, Qué., 12 mai 1898.
9944. THE DELINEATOR. (A journal of Fashion, Culture and Fine Arts, June, 1898.) The Butterick Publishing Co. (Ltd.), New-York, N.Y., U.S.A., 13th May, 1898.
9945. THE GLASS OF FASHION UP TO DATE. (June 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 13th May, 1898.
9946. METROPOLITAN FASHIONS. (June, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 13th May, 1898.
9947. A SOUVENIR OF MUSICAL TORONTO. (Second Annual Issue, 1898-1899.) H. H. Godfrey, Toronto, Ont., 13th May, 1898.
9948. MAP OF THE CITY OF MONTREAL. Bishop Engraving and Printing Co., Montreal, Qué., 16th May, 1898.
9949. MONSEIGNEUR PAUL BRUCHÉSI: ARCHEVÊQUE DE MONTRÉAL. (Photographic-buste.) Laprès et Lavergne, Montréal, Qué., 17 mai 1898.
9950. LE PAYS DE L'ÉRABLE. Chant National. Paroles et Musique de H. H. Godfrey. Traduit de l'Anglais par Ed. P. Couture. H. H. Godfrey, Toronto, Ont., 20th May, 1898.
9951. THE ROARING GAME. Words and Music by C. J. Wolfe, Rapid City, Man., 20th May, 1898.
9952. A HAPPY YOUNG FAMILY OF THREE. Words and Music by Wilfred Charles Traher, London, Ont., 20th May, 1898.
9953. WHEAT MAP OF THE PROVINCE OF MANITOBA, CANADA, 1897. The Tribune Publishing Co., Winnipeg, Man., 20th May, 1898.
9954. CANADIAN SUMMER RESORT GUIDE, 1898. (Fifth Edition.) Frederick Smily, Toronto, Ont., 20th May, 1898.
9955. LECTURE À HAUTE VOIX. (Cours Supérieur.) La Congrégation de Notre-Dame, Montréal, Qué., 21 mai 1898.
9956. THE ESMERALDA WALTZES. By Carl De Rossa. The Anglo-Canadian Music Publishers' Association, (Limited), London, England, 21st May, 1898.
9957. CANADA AND ITS CAPITAL. By Hon. J. D. Edgar, Q.C., M.P., Speaker, Commons of Canada. George N. Morang, Toronto, Ont., 21st May, 1898.
9958. BOOK OF THE VICTORIAN ERA BALL. GIVEN AT TORONTO ON THE TWENTY-EIGHTH OF DECEMBER, MDCCCXCVII. James Mavor, Toronto, Ont., 23rd May, 1898.
9959. YE ANCIENT COLONY. March. By L. Marie St. Aubyn. Miss Elizabeth M. Tobin, St. John's, Newfoundland, 23rd May, 1898.
9960. VICTORIA WALTZ. By L. Marie St. Aubyn. Miss Elizabeth M. Tobin, St. John's, Newfoundland, 23rd May, 1898.

9961. LE SCAPULAIRE DE NOTRE-DAME DU MONT-CARMEL. Par M. le Chanoine Savaria, Longue-Pointe, Qué., 25 mai 1898.
9962. THE DOMINION HOME COOK BOOK AND CYCLOPEDIA OF RECIPES. (Third Edition.) By Anne Clarke. J. L. Nichols & Co., Toronto, Ont., 25th May, 1898.
9963. MOTHER'S LAST WORDS; OR, YOU MUST NOT GO, JACK. Song. Words and Music. By William J. White. Whaley, Royce & Co., Toronto, Ont., 25th May, 1898.
9964. LITTLE DOLLY DAYDREAM. Words and Music by Leslie Stewart. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 26th May, 1898.
9965. TWILIGHT REVERIE. For Piano. By Hilda Ruse. Whaley, Royce & Co., Toronto, Ont., 28th May, 1898.
9966. MUSICAL RITUAL FOR USE IN LODGES OF ANCIENT FREE AND ACCEPTED MASONS. Dedicated to the M. W. Bro. Wm. Gibson, M.P., Grand Master; and Officers of the Grand Lodge of Canada. Arranged by Charles Philip Sparling. Toronto, Ont., 28th May, 1898.
9967. GOLD DUST; HOW TO FIND IT AND HOW TO MINE IT. James Arthur Thomson, Vancouver, B.C., 30th May, 1898.
9968. OFFICIAL BASEBALL SCHEDULE, EASTERN LEAGUE, 1898. Ed. Mack, Toronto, Ont., 31st May, 1898.
9969. CANADIAN CRIMINAL CASES ANNOTATED. Edited by W. J. Tremear. Vol. I. Part I. R. R. Cromarty, Toronto, Ont., 31st May, 1898.