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## RECORD





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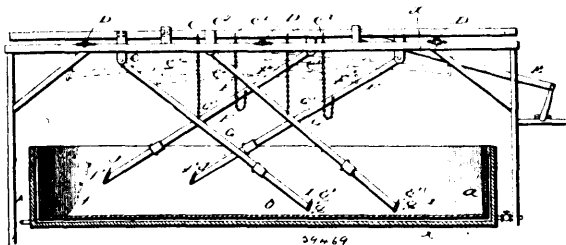
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### INVENTIONS PATENTED.

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#### No. 59,469. Curd Agitator. (Moulin à caïle.)

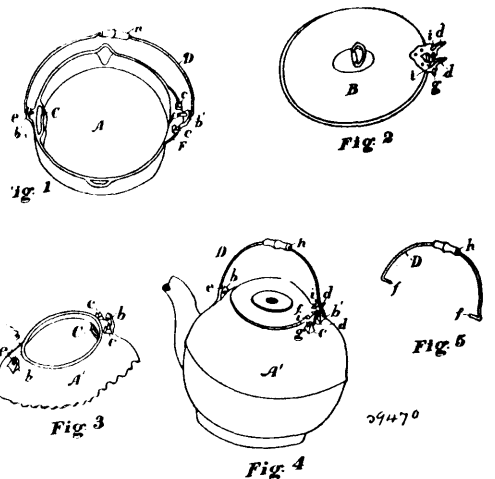


Alfred Robinson, Abercorn, Quebec, Canada, 1st April, 1898; 6 years. (Filed 10th January, 1898.)

*Claim.*—1st. In a curd agitator, the combination with a series of curd breakers, of means for moving them alternately in elliptical paths, in different horizontal planes, substantially as set forth. 2nd. In a curd breaker, the combination of two series of agitators with means for moving them in different paths which are reciprocally interchanged, substantially as set forth. 3rd. In a curd agitator, the combination with a vat and a carrier, which is reciprocated in a horizontal plane, of two series of curd breakers which are pivoted to the carrier and project downward into the vat, and flexible suspension-stops which limit the downward movement of the breakers but permit them to rise freely, substantially as set forth. 4th. In a curd agitator, the combination with a series of curd breakers of means for moving part of them forward in a path near the bottom of the vat while part of them are moving in a path at a greater distance from the bottom of the vat, and means for reversing the direction of travel of the breakers and also their positions relative to the bottom of the vat, substantially as set forth. 5th. In a curd agitator, the combination with a series of rake-shanks and rake-heads, of devices whereby as the rake-heads are moved to and fro their angles relative to vertical lines are changed, substantially as set forth. 6th. In a curd agitator, the combination of the vat, the reciprocating carrier mounted upon a framework above the vat, and breakers pivoted to the carrier with their free ends depending into the vat and adapted to rise and to fall by gravity in the curd independently of each other, the shanks of the breakers being reversely inclined, whereby, when the machine is in operation, part of the breakers are simultaneously pulled upward in the curd, substantially as set forth. 7th. In a curd agitator, the combination of the vat, the reciprocating-carrier mounted upon a framework

above the vat, two series of reversely-inclined rake-shanks pivoted at their upper ends to the carrier, a series of rake-heads attached to one series of shanks and depending into one end of the vat, and another series of rake-heads attached to the other series of shanks and depending into the opposite end of the vat, the two series of heads being adapted to rise and fall independently of each other, substantially as set forth. 8th. In a curd agitator, the combination of a movable carrier, a series of curd breakers suspended from the carrier and adapted to be folded close below said carrier, with means for hanging the breakers from the carrier and above the vat, substantially as set forth. 9th. In a curd agitator, the combination with a series of vertically-movable curd breakers, means for thrusting said breakers forward and downward, and stops for limiting their downward movement, substantially as set forth.

#### No. 59,470. Bail and Cover Attachments for Hollow Ware. (Attache de couvercles et anses pour objets creux.)

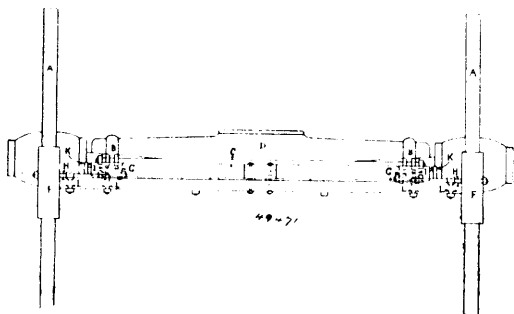


John Loring Clark, Bangor, Maine, U.S.A., 1st April, 1898; 6 years. (Filed 24th February, 1898.)

*Claim.*—1st. The cover and bail attachment for covered dishes consisting of the combination of bail-ears and studs with cross-grooves rising from said dish or article, with a bail having inwardly turned extremities, and a cover with projecting prongs and transverse hinge-bar adapted to hinge upon said studs, for the purpose described and substantially as set forth. 2nd. A bail and cover connection for covered dishes, consisting of a curved bail with inwardly turned ends facing each other, bail ears having bail-holes and a vertical groove extending upward from said hole, studs with cross-grooves, each side of a bail-ear, a cover with outwardly extending prongs at one edge, and a hinge-bar passing through said prongs in the manner described and substantially as set forth. 3rd. A bail and cover connection for covered dishes, consisting of the combination of a dish with protruding bail-ears and a vertical groove from the bail-hole in one or both ears, upwardly extending studs near one ear, with cross-grooves in their extremities, for the purpose described, a cover with a projection beyond its edge and transverse hinge-bar

on said projection, a bail with inwardly turned ends adapted to extend through the bail-ears, and one of its ends extend over the hinge-bar, and a prong extending from the cover in position to come in contact with the bail for the purpose described and substantially as shown and set forth. 4th. The combination of a dish with a ledge protruding from its upper edge, a bail-ear and studs with grooved ends rising from said ledge, and a diametrically opposite bail-ear with vertical groove extending from its bail-hole to the top of the ear, with a cover with hinge-attachment consisting of parallel prongs extending upward and outward secured to its edge, with a transverse or hinge-bar connecting the base of said prongs and projecting from the outer sides of the latter, and a bail adapted to enter the bail-ears and have one extremity extend over the hinge-bar for the purpose described, and all substantially as shown and set forth. 5th. The combination of a pan with vent-flue extending through its bottom, of a rim protruding below the latter outside on said flue, bail-ears near the upper edge of said pan with vertical groove extending upward from the bail hole in one ear, upwardly protruding studs having cross-grooves for the purpose described, a cover with one or more prongs protruding from its edge, a hinge-bar connecting the base of said prongs, and grooves upon the upper sides of the latter, and a locking-bail having its extremities enter the bail-ears and one end extending over the hinge-bar, substantially as shown and described.

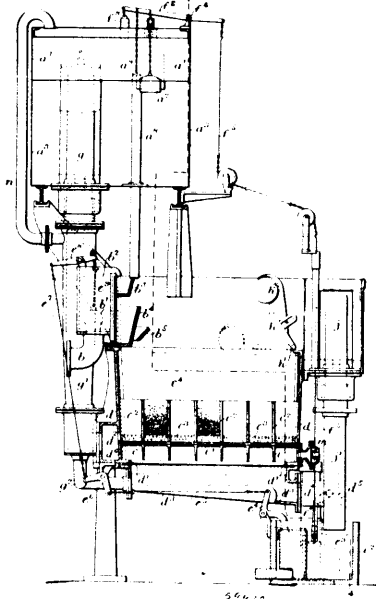
**No. 59,471. Waggon Brake (Frein de wagon.)**



John T. Hillman, Bay View, Prince Edward Island, Canada, 1st April, 1898; 6 years. (Filed 5th February, 1898.)

*Claim.*—1st. The combination of the ends of the shafts or a tongue E, E, and the cranks of the cranked rod C, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the ends of the shafts, or a tongue E, E, and the cranks of the cranked rod C, of the crank rods H, H, and stops K, K, substantially as and for the purpose hereinbefore set forth.

**No. 59,472. Filter. (Filtre.)**



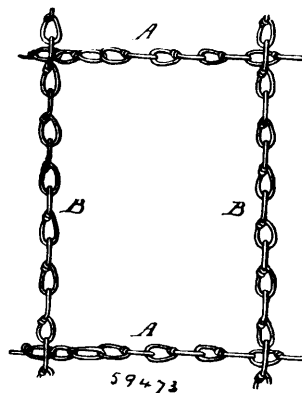
James Wilson, Wandsworth, Surrey, England, 1st April, 1898; 6 years. (Filed 1st March, 1898.)

*Claim.*—1st. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be

filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, and means for supplying washing liquid beneath the cells. 2nd. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, means for supplying washing liquid beneath the cells, perforated pipes traversing the cells beneath the filter bed, and means for supplying washing liquid to the pipes. 3rd. The combination of a filter-bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, means for supplying washing liquid beneath its underside and a screen above it allowing the washing liquid to pass but retaining the filtering material. 4th. The combination of a filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, and means for emptying the tanks. 5th. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, and means for emptying the tanks. 6th. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, means for supplying washing liquid beneath its underside and a screen above it allowing the washing liquid to pass, but retaining the filtering material. 7th. The combination of a filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, screen above the filter bed and between it and the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, and means for emptying the tanks. 8th. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a screen above the filter and between it and the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, and means for emptying the tanks. 9th. The combination of a filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, means for emptying the tanks, a second syphon at a higher level than the first discharging liquid from above the filter bed into the second tank, an overflow from the second tank, and syphons in the tanks at such a height relatively to the overflow that they come into operation only when the second syphon discharges. 10th. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, means for emptying the tanks, a second syphon at a higher level than the first discharging liquid from above the filter bed into the second tank, an overflow from the second tank, and syphons in the tanks at such a height relatively to the overflow that they come into operation only when the second syphon discharges. 11th. The combination of a filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a screen above the filter bed and between it and

the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, means for supplying the tanks, a second syphon at a higher level than the first discharging liquid from above the filter bed into the second tank, an overflow from the second tank, and syphons in the tanks at such a height relatively to the overflow that they come into operation only when the second syphon discharges. 12th. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a screen above the filter and between it and the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the filter bed, means for emptying the tanks, a second syphon at a higher level than the first discharging liquid from above the filter bed into the second tank, an overflow from the second tank, and syphons in the tanks at such a height relatively to the overflow that they come into operation only when the second syphon discharges. 13th. The combination of a series of cells, a filter bed occupying the top portion of the cells, perforated pipes traversing the cells beneath the filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the cells and to the perforated pipes, and means for emptying the tanks. 14th. The combination of a series of cells, a filter bed occupying the top portion of the cells, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, means for supplying washing liquid beneath the cells, perforated pipes traversing the cells beneath the filter bed, means for supplying washing liquid to the pipes, and a screen above the filter bed allowing the washing liquid to pass but retaining the filtering material. 15th. The combination of a series of cells, a filter bed occupying the top portion of the cells, perforated pipes traversing the cells beneath the filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a screen above the filter and between it and the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the cells and to the perforated pipes, and means for emptying the tanks. 16th. The combination of a series of cells, a filter bed occupying the top portion of the cells, perforated pipes traversing the cells beneath the filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a screen above the filter and between it and the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the cells and to the perforated pipes, and means for emptying the tanks. 17th. The combination of a series of cells, a filter bed occupying the top portion of the cells, perforated pipes traversing the cells beneath the filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a screen above the filter and between it and the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the cells and to the perforated pipes, means for emptying the tanks, a second syphon at a higher level than the first discharging liquid from above the filter bed into the second tank, an overflow from the second tank, and syphons in the tanks at such a height relatively to the overflow that they come into operation only when the second syphon discharges. 18th. The combination of a series of cells, a filter bed occupying the top portion of the cells, perforated pipes traversing the cells beneath the filter bed, means for supplying liquid to be filtered to the upper side thereof, means for withdrawing the filtered liquid from its underside, a tank beneath the filter bed, an automatic syphon which discharges liquid when it accumulates above the filter bed into the tank, a screen above the filter and between it and the syphon, a float in the tank, means operated by the float for cutting off the supply of unfiltered liquid, a second tank beneath the filter bed, an overflow from the first tank leading into the second, a float in the second tank, means operated by this float for supplying washing liquid to the underside of the cells and to the perforated pipes, means for emptying the tanks, a second syphon at a higher level than the first discharging liquid from above the filter bed into the second tank, an overflow from the second tank, and syphons in the tanks at such a height relatively to the overflow that they come into operation only when the second syphon discharges.

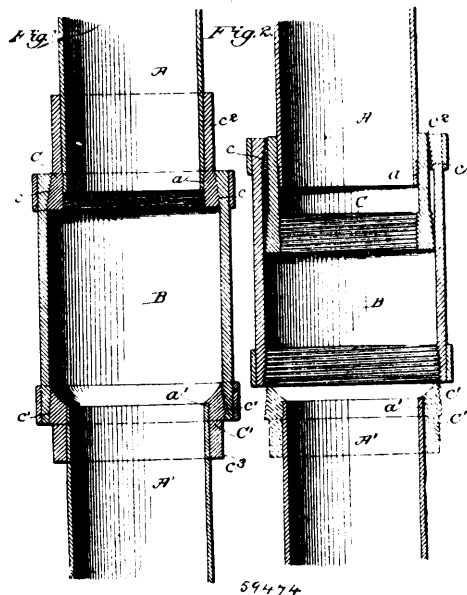
**No. 59,473. Construction of Chain Netting for Gates, etc.** (*Construction de filets de chaînes pour barrières, etc.*)



Horace William Bayliss, Wolverhampton, Stafford, England, 1st April, 1898; 6 years. (Filed 28th February, 1898.)

*Claim.*—1st. Chain-netting for gates and other purposes, constructed with lengths of chain which run in one direction passing right through links of lengths of chain which cross them, the lengths of chain which pass through other lengths being prevented by suitable means from being drawn therethrough, substantially as described. 2nd. Chain-netting for gates and other purposes, constructed with links of some of the lengths of chain passing through links of other lengths of chain, and the links through which other links pass closed in to prevent the chains which pass therethrough being drawn therethrough, substantially as described with reference to figure 1 of the drawings herewith. 3rd. Chain-netting for gates and other purposes, constructed with S hooks, or the like, which pass through links of lengths of chain and themselves connect together also short lengths of chain, substantially as described with reference to figure 2 of the drawings herewith.

**No. 59,474. Pipe Coupler.** (*Joint de tuyau.*)



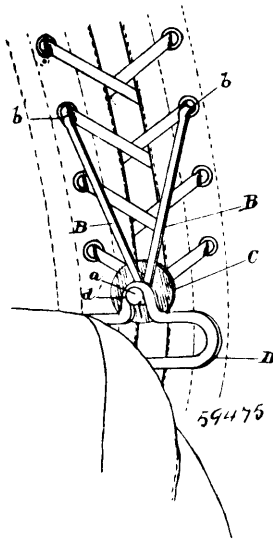
John Thompson and Frank Arlo Phillips, both of New York, U.S.A., 1st April, 1898; 6 years. (Filed 4th March, 1898.)

*Claim.*—1st. In a pipe-coupling, the combination with the pipes to be joined, relatively fixed at a certain distance apart, of a sleeve, longer than the distance between the pipes to be joined but of larger diameter than the pipes, and two bushings engaging respectively, by screw threads, with the two pipe ends and with the two ends of said sleeve, each of said bushings being shorter than the distance between the pipes, substantially as set forth. 2nd. The combination, with two fixed pipes, of a pipe-coupling consisting of a sleeve longer than the distance between the pipes but of a diameter



sufficiently larger than the pipes to enable it to be introduced cantwise between and over the same, and two bushings shorter than the distance between the pipes, and engaging respectively, by internal screw threads, with the two pipe ends, and by external screw threads with the two ends of the aforesaid sleeve, substantially as set forth. 3rd. The combination, with two pipes, of a coupling for the same, consisting of two bushings screwed respectively on to the ends of said pipes, and a sleeve engaging with both of said bushings by internal screw threads tapered in the same direction, substantially as and for the purpose set forth. 4th. The combination with two pipes relatively fixed at a certain distance apart, of a coupling for the same consisting of two bushings screwed respectively on to the ends of said pipes, the combined length of the bushings being less than the distance between the pipes, and a sleeve longer than the distance between the pipes, engaging with both of said bushings by internal screw threads, substantially as and for the purpose set forth. 5th. The combination with two pipes relatively fixed at a certain distance apart, of a coupling for the same consisting of two bushings screwed respectively on the ends of the pipes, each of said bushings being shorter than the distance between the end of the other bushing when screwed home and the end of the opposite pipe, and a sleeve longer than the distance between the pipes and screwed on to both of said bushings. 6th. The combination with two pipes relatively fixed at a certain distance apart, of a coupling for the same consisting of two bushings screwed respectively on the ends of the pipes, one of said bushings being shorter than the distance between the end of the other bushing when screwed home and the end of the opposite pipe, and a sleeve longer than the distance between the pipes and screwed on to both of said bushings.

**No. 59,475. Garment Support. (Support de vêtement.)**



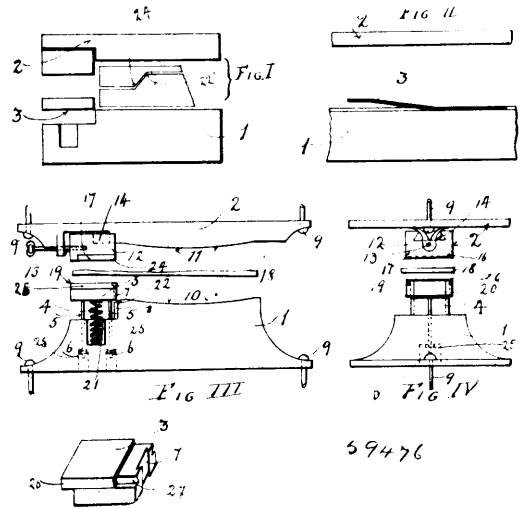
George McKnight, Toronto, Ontario, Canada, 1st April, 1898; 6 years. (Filed 7th March, 1898.)

*Claim.*—1st. A garment supporter embracing in its construction a stud, two arms connected to the stud and arranged to be attached to the corset, and a loop to be held by the stud, adapted to be attached to the waist-band of the skirt, substantially as specified. 2nd. A garment supporter embracing in its construction a stud, two arms pivotally connected to the stud, having hook-shaped ends to engage the eyelets of the corset, and a loop to be attached to the waist-band of the skirt and held by the stud, substantially as specified. 3rd. A garment supporter embracing in its construction a stud, two arms pivotally connected to the stud having hook-shaped ends to engage the eyelets of the corset, a washer mounted on the end of the shank of the stud to overlap the edge of the corset sections, and a loop to be attached to the waist-band of the skirt and held by the stud, substantially as specified. 4th. A garment supporter embracing in its construction a stud, two arms pivotally connected to the stud having hook-shaped ends to engage the eyelets of the corset, a washer mounted on the end of the shank of the stud to overlap the edge of the corset sections, a loop to be attached to the waist-band of the skirt and held by the stud, embracing in its construction a substantially rectangular-shaped body, having a projection provided with a slot, of a narrower width than the head of the stud, communicating with the slot through the body of the loop, substantially as specified.

**No. 59,476. Sole Press for Boots and Shoes. (Presse à semelles pour chaussures.)**

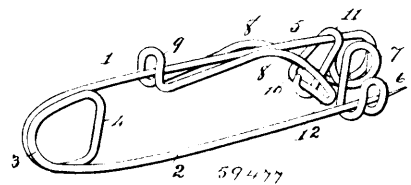
Joseph H. Pullerin, Montreal, Quebec, Canada, 1st April, 1898; 6 years. (Filed 7th September, 1897.)

*Claim.*—1st. A sole press for boots and shoes, comprising a matrix having a yielding and an unyielding portion, and a platen adapted



to contact with said matrix, the contact being made first between said platen and said yielding portion. 2nd. A sole press for boots and shoes, comprising a matrix, having a yielding and an unyielding portion, said yielding portion normally resting on a platen above said unyielding portion, and a platen adapted to contact with said matrix, the contact being made first between said platen and said yielding portion. 3rd. A sole press for boots and shoes, having a portion of its matrix unyielding and a portion yielding, the distance between the yielding portion and the platen being normally less than the distance between the unyielding portion and said platen, in combination with an unyielding platen having a block adjustably secured thereto over the yielding portion of the matrix, substantially as described. 4th. A sole press for boots and shoes, having a portion of its matrix unyielding, and a portion yielding, the top of the latter portion being provided with a removable plate whose surface is normally on a higher level than the top of the unyielding portion, in combination with an unyielding platen having a block adjustably secured thereto over the yielding portion of the matrix, substantially as described. 5th. A sole press for boots and shoes, comprising a matrix, a block slidably mounted at the rear end thereof, a heel block removably connected to said block and means for normally holding said heel block on a plane above the plane of said matrix, a platen adapted to contact with said matrix, a block adjustably connected to said platen at the rear end thereof, and a plate removably connected to said platen block, said plate and said heel block forming the initial contact between said platen and said matrix. 6th. A machine for shaping shoe soles, comprising a matrix, a platen, and means for varying the position of a portion of said platen whereby materials of various thickness may be shaped. 7th. In a machine for shaping shoe soles, the combination with a matrix, and a platen of interchangeable heel blocks adapted to be secured to said platen matrix, and interchangeable plates adapted to be secured to said platen, whereby the distance between the planes of said material may be varied.

**No. 59,477. Safety-pin. (Epingle de sûreté.)**

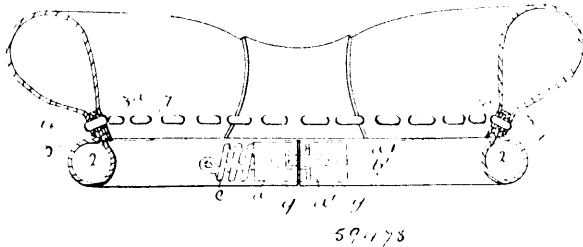


Willie E. Michael, Enterprise, West Virginia, U.S.A., 1st April, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—1st. A safety-pin formed from a single piece of wire, and comprising a body portion, a pin proper, a keeper, a spring actuated arm having a lateral projection normally lying across the pin to hold the latter in its keeper, said projection being movable vertically and laterally out of the path of travel of the pin, substantially as described. 2nd. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the forward end of the body portion, a coil located above said keeper, rearwardly extending arms leading from said coil, one of said arms being bent at its forward end to form a stop having a downwardly and outwardly inclined portion and a horizontally disposed portion extending across above

the pin to hold it in its keeper, said stop being movable vertically with the arms and laterally by the engagement of the pin with the inclined portion of the stop, substantially as described. 3rd. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the forward end of the body portion, a coil located above said keeper, rearwardly extending arms leading from said coil and lying on opposite sides of the body portion, one of said arms being bent at its forward end to form a stop having a downwardly and outwardly inclined portion, and a horizontally-disposed portion extending across above the pin to hold it in its keeper, and then being bent to form a spring loop to straddle the other arm and the body portion, said stop being movable vertically with the arms against the spring action of the coil and laterally against the spring action of the loop by the engagement of the pin with the inclined portion of the stop, substantially as described. 4th. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the forward end of said body portion, a coil located above said keeper, rearwardly extending arms leading from said coil, and a stop at the forward end of one of said arms. 5th. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the forward end of said body portion a coil located above said keeper, rearwardly extending arms leading from said coil located one on each side of the strand constituting the main portion of the body part, and having a flange constituting a finger-engaging portion, one of the said arms being bent at an angle at its forward end, forming a stop, the spring pressure exerted by said coil serving to hold said arms in their normal position.

**No. 59,478. Horse Collar. (Collier à cheval.)**



Henry Laurence Gulline, Granby, Quebec, Canada, 1st April, 1898; 6 years. (Filed 10th March, 1898.)

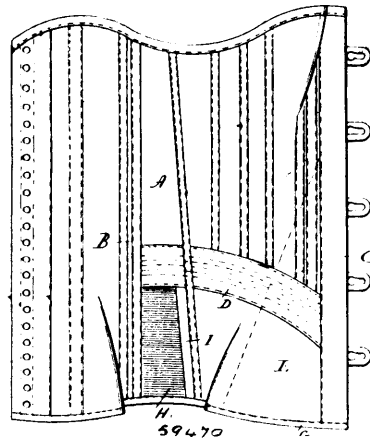
*Claim.*—1st. A horse collar rim made of metal and having a hollow body portion and a three-ply closed and perforated flange extending the full length of the rim, as set forth. 2nd. A horse collar rim made of metal and having a hollow body portion and a perforated flange projecting tangentially therefrom, as set forth. 3rd. A horse collar rim made of metal and having a hollow body portion and a perforated flange projecting therefrom, the base of the flange being located toward the inner side of such body portion, as shown and described. 4th. A horse collar rim composed of two like halves united at the throat portion by a spring hinge connection, as set forth. 5th. A horse collar rim made of metal and having hollow body halves connected together by a spring hinge connection at the throat portion. 6th. A horse collar rim composed of two like hollow metal halves united at the throat portion by a spring hinge connection comprising block pieces set in the ends of the rim halves and united by a knuckle joint, and a spiral spring with one end bearing in one block piece and a portion of its length passed through the block pieces so that its other end may bear upon the other block piece, the block pieces being hollowed and slotted to accommodate such spring, as set forth.

**No. 59,479. Corset. (Corset.)**

Franklin Kellogg Hickok, New Haven, Connecticut, U.S.A., 1st April, 1898; 6 years. (Filed 14th March, 1898.)

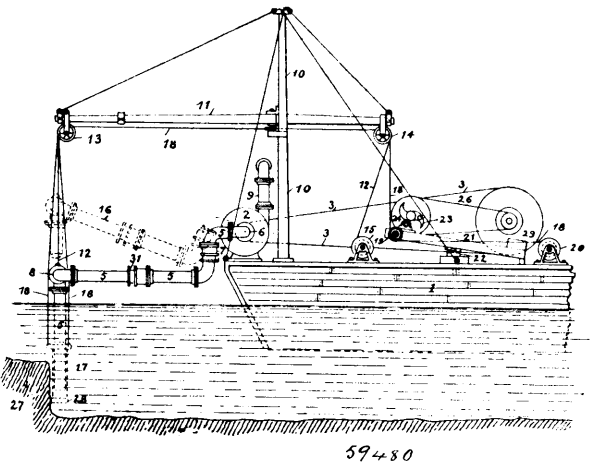
*Claim.*—1st. The herein described corset having a triangular boned auxiliary section secured at its front edge to the front edge of the inner face of the corset proper, and at its lower edge to the lower edge of the corset proper, between which lines of attachment said section is free from the body of the corset, the bones of the said section extending parallel with the free edge thereof, substantially as described. 2nd. The herein described corset, having a front section and a side stay, said front section comprising the upper boned portion and a lower unboned portion connected by a curved strip extending forward and downward from said side stay, and an auxiliary boned stay extending from the forward edge of the corset rearward and downward over its inner face to the lower edge thereof, and so that the bones of the auxiliary stay cross the bones of the front section angularly at substantially the waist line, substantially as described. 3rd. The herein described corset having a front section and a side stay, said front section comprising an upper boned portion and a lower unboned portion connected by a curved strip extending downward and forward from the said side stay, an elastic section connected at its rear edge with the forward edge of said side

stay, and at its forward edge to a short boned stay which extends downward from the lower edge of the curved strip to the lower edge



of the corset, which short stay is secured to the lower unboned portion of the front section, substantially as described.

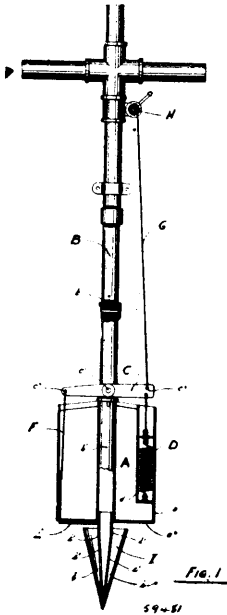
**No. 59,480. Dredging Machinery. (Machine à draguer.)**



Ferdinand W. Krogh, San Francisco, California, U.S.A., 1st April, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—1st. In suction dredging machinery, a pump, a jointed or flexible suction pipe and a vertically reciprocating barrel or cylinder surrounding and moving parallel to the suction pipe at its outer or intake end, substantially as specified. 2nd. In suction dredging machinery, a pump and a jointed or flexible suction pipe, means to suspend or swing the latter, a reciprocating cutting or disintegrating cylinder, surrounding, sliding upon and extending beyond the pipe, substantially as specified. 3rd. In suction dredging machinery, a supporting barge or pontoon, a suction pipe mounted thereon or therein, and provided with a jointed suction pipe, means to raise, lower and swing the same, and a reciprocating cutting or disintegrating cylinder surrounding the end of the suction pipe and acting in alignment therewith, means to suspend the cutting cylinder independent of the suction pipe and adjust it vertically in relation thereto, substantially as specified. 4th. In suction dredging machinery, a movable supporting barge or pontoon, a suction pump mounted thereon, a jointed suction pipe adapted to swing in the arc of a circle and means to suspend and move the same, an independently suspended cutting cylinder or excavator, surrounding and sliding upon the outer or lower end of the suction pipe, and means to adjust and reciprocate the cutting cylinder, substantially as specified. 5th. In suction dredging machinery, a pump and a jointed suction pipe, a suspended reciprocating cutting cylinder surrounding and moving on the outer or lower end of the suction pipe, a rope or chain to suspend and adjust the cutting cylinder, and reciprocating mechanism acting in the bight of the suspending rope or chain, by means of which the cylinder is given a reciprocating movement independent of its vertical adjustment, and in respect to the such pipe on which it moves, substantially as specified.

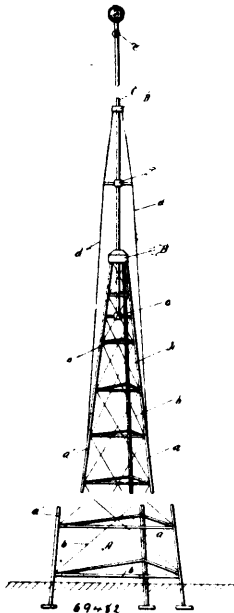
**No. 59,481. Earth Boring Auger. (Sonde à trepan.)**



Joseph Allard, La Conception Station, Quebec, Canada, 1st April, 1898; 6 years. (Filed 15th January, 1898.)

*Claim.*—1st. An earth boring auger with an adjustable cutter on its under side, substantially as described and for the purposes set forth. 2nd. In an earth boring auger, the combination of an adjustable cutter on its under side, with a hollow centre bit projecting below it and provided with perforations for the exit of steam or hot water to thaw out frozen earth, substantially as described and for the purpose set forth.

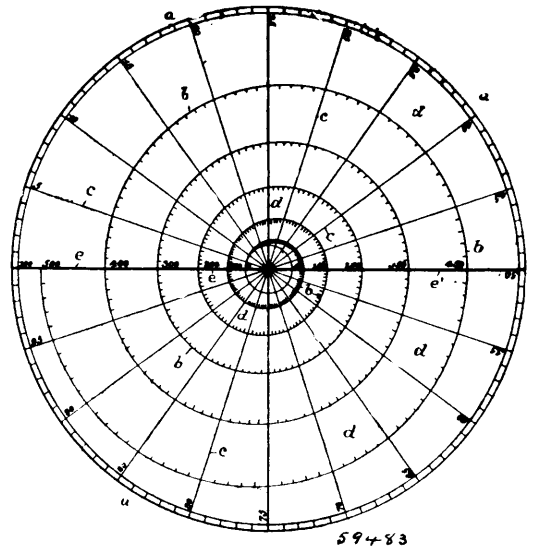
**No. 59,482. Flag Pole. (Mât de pavillon.)**



John Muir, Brantford, Ontario, Canada, 1st April, 1898; 6 years. (Filed 26th August, 1897.)

*Claim.*—In a device for holding flags at a great height, the combination with a skeleton tower, of a tubular metallic flag pole having its lower end secured within said tower, and having a series of openings formed therein, a collar located on said pole intermediate of its ends, a truss frame connected to said tower and said collar, and a series of removable steps adapted to be removably placed in said openings alternatively, substantially as described.

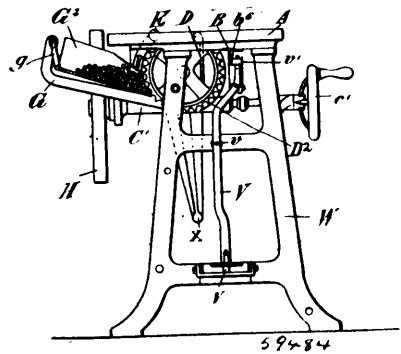
**No. 59,483 Chronological Skeleton Chart. (Monture de carte chronologique.)**



Jacob Black, Portland, Oregon, U.S.A., 1st April, 1898; 6 years. (Filed 11th September, 1897.)

*Claim.*—A chronological skeleton chart, comprising a sheet of paper or like material, having thereon a circular area traversed by a spiral line *b* and the radial lines *c*, subdividing such area into the spaces *d*, beginning at the centre, and gradually increasing in size, the peripheral lines being decimally graduated throughout, substantially as described.

**No. 59,484. Machine for Rolling and Filling Cigarettes. (Machine à cigarettes.)**

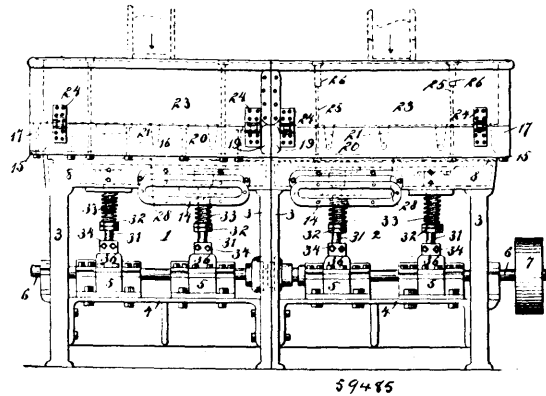


Emil Georgii, Stuttgart, Germany, 1st April, 1898; 6 years. (Filed 7th December, 1897.)

*Claim.*—1st. In a cigarette machine, a discharging device, a platform arranged to receive a box below the said discharging device, a rack secured to the platform, a cog-wheel engaging the same, a ratchet-wheel connected to the cog-wheel, a vibrating lever, provided with a pawl engaging said ratchet-wheel, a reciprocating slide on the machine, and means carried by the slide for operating the vibrating lever, whereby the box is fed along the cigarettes dropped side by side. 2nd. In a cigarette machine, the combination, with a supporting-sleeve, of a spring-lever, provided with means for clamping the wrapper to the supporting-sleeve, an arm connected to said spring-lever, a track-block and a cam-block arranged to operate the arm, and means for moving said track-block and cam-block, substantially as set forth. 3rd. In a cigarette machine, the combination, with a supporting-sleeve and means for pushing a paper-wrapper onto said supporting-sleeve, of a spring-lever, means carried thereby for clamping the wrapper to the sleeve, an arm connected to said spring-lever, a roller carried by the arm, a track-block and a cam-block arranged in the path of the roller and placed with a gap between them, a latch-piece arranged yieldingly to close the said gap, and means for operating the track and cam-blocks, substantially as set

4th. In a cigarette machine, the combination, with a supporting sleeve, of a pusher-rod arranged to push the paper-wrapper onto the supporting-sleeve, a standard by which the pusher is carried, a sliding-head movable in ways in the machine-frame, a horizontally-arranged bell-crank provided with a slotted end engaging a pin on the sliding-head, a spring normally pressing the bell-crank in one direction, a reciprocating slide provided with a laterally arranged notch, and means carried by the bell-crank and arranged to enter the notch in the slide and to be forced out of the same, whereby the pusher-rod is reciprocated, substantially as set forth. 5th. In a cigarette machine, the combination, with a rotary drum having longitudinal grooves in its periphery to receive the paper-wrappers, a ratchet-wheel connected to said drum, a pawl-rod for rotating the ratchet-wheel and means for operating the pawl-rod, of a rotary brush device above the drum and arranged to brush back the excess of paper-wrappers, a pulley connected to the brush, a pulley connected to the drum and a belt passing around both pulleys, whereby the brush is driven positively upon the rotation of the drum, substantially as set forth. 6th. In a cigarette machine, the combination, with a plate a lid hinged thereto, and a lever arranged to be operated on the closing of said lid, of a driving mechanism arranged to operate the machine, and means actuated by said lever for coupling the driving mechanism to drive the machine, substantially as set forth. 7th. In a cigarette machine, the combination, with a hand operating device and a power operating device, of an automatic clutch mechanism intermediate the two operating devices, whereby the hand operating device may be employed while the device is out of action, substantially as set forth. 8th. In a cigarette machine, the combination, with a plate and a lid hinged thereto, of a power-operating device, and means actuated by the movement of the lid for coupling said power-operating device with the cigarette-making mechanism, substantially as set forth. 9th. In a cigarette machine, the combination with a driving-shaft, a pulley loosely mounted thereon, a ratchet-wheel fixed to said pulley, a disc fixed on the driving-shaft, and a bell-crank pivoted to the disc, said bell-crank having a pawl and an outward-extending arm, of a spring tending to press the pawl into engagement with the ratchet-wheel, and means arranged to be brought into the path of the outward-extending arm of the bell-crank, whereby the pawl is reloaded from the ratchet-wheel, substantially as set forth. 10th. In a cigarette machine, the combination, with a driving-shaft, a pulley loosely mounted thereon, a ratchet-wheel fixed to the pulley, a disc fixed to the driving-shaft and provided with a notch, and a bell-crank pivoted to the disc and arranged to engage the ratchet-wheel, said bell-crank having a pawl and an outward-extending arm, of a spring tending to press the pawl into engagement with the ratchet-wheel and a lever arranged to engage the outward-extending arm of bell-crank, and provided with a nose arranged to enter the notch in the disc, whereby the machinery is stopped at a predetermined point, substantially as set forth. 11th. In a cigarette machine, the combination, with a drum having grooves arranged to receive the cigarettes, a ratchet-wheel connected to the drum, and a pawl arranged to operate the drum, of a reciprocating slide provided with a notch, means connected to the pawl and arranged to contact with the slide, and a spring arranged to draw said means into the notch to retract the pawl, whereby the drum is positively rotated by the slide and the pawl is moved back by the spring, substantially as set forth. 12th. The combination, with a revoluble feed-roll, a filling-rod at one side of said roll and a wrapper-clamp between the feed-roll and filling-rod, of a reciprocating slide actuating said feed-roll, filling-rod and wrapper-clamp, substantially as described. 13th. The combination, with a feed-drum having a series of longitudinal grooves in its periphery, a plate and a lid, each having a recess, the said recesses together forming a chamber in line with one of the grooves in the feed-drum, and a filling-rod arranged to move in said chamber, of a slide, means for reciprocating the slide, and mechanism intermediate the feed-drum and filling-rod, whereby the former is intermittently rotated to bring the grooves successively opposite the chamber, and the filling-rod is moved in the said chamber, substantially as described and for the purpose set forth. 14th. The combination, with a sleeve arranged to receive the cigarette wrapper, and a clamp, of a slide, and mechanism intermediate the slide and clamp whereby the latter is moved toward and from the sleeve by the movement of the slide, substantially as described and for the purpose set forth. 15th. The combination, with a feed-roll adapted to receive cigarette wrappers and means for supplying such wrappers to said feed-roll, of a rotary brush arranged to hold back the surplus tubes, substantially as described. 16th. The combination, with a feed-roll adapted to receive cigarette wrappers and a trough for supplying cigarette wrappers to the feed-roll, of a rotary brush mounted above the feed-trough, and means for simultaneously operating the feed-roll and brush, substantially as described and for the purpose set forth. 17th. In a cigarette machine, the combination, with a feed-trough, and links secured to each corner and arranged to support the trough and permit it to oscillate, of mechanism for reciprocating said feed-trough, substantially as set forth. 18th. In a cigarette machine, the combination, with a movable feed-trough, a rotary drum arranged to remove the cigarettes from the feed-trough, a ratchet-wheel connected to the drum, and a pawl for operating the ratchet-wheel, of a counter-pawl engaging said ratchet-wheel and moved thereby, said counter-pawl being connected to the feed-trough, whereby the latter is vibrated, substantially as set forth.

**No. 59,485. Paper Pulp-Strainers.**  
(*Passoire pour pâte à papier*)



John W. Smith, Sandy Hill, New York, U.S.A., 1st April, 1898 ; 6 years. (Filed 3rd January, 1898.)

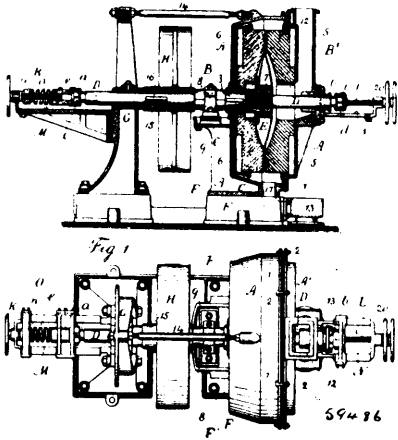
**Claim.**—1st. A pulp screen or strainer, comprising a screen-box composed of two sections detachably connected together, a screen-plate held between the sections by the detachable connections between said sections and capable of being removed when the sections are separated, means to supply pulp to said box on one side of the screen, means to discharge the pulp from the box on the other side of the screen, and means to draw the pulp through the screen, substantially as set forth. 2nd. A pulp screen or strainer, comprising an open-top lower box-section having its side bars correspondingly notched along their inner sides, cross-bars extending transversely across the lower section and with their lower ends held removable in said notches in the side bars, a removable screen-plate extending across the open top of the lower section and fitting flush on the edges of the same, the central portion of said screen being supported on the upper surfaces of said cross-bars, and upper section having an open bottom fitting flush on the screen plate, said upper section being detachably connected to the lower section and having its connections arranged to hold the screen-plate against removal from the screen box when the sections are closed together, means to supply pulp to the upper section, means to withdraw pulp from the lower section, and means to draw the pulp through said screen-plate, substantially as set forth. 3rd. In a pulp screen or strainer, the combination of a table having a hollow upper face and having a partition formed vertically in and extending longitudinally along the hollow at one side of the table, whereby a passage is formed in the table along one side of the main portion of the hollow therein and forming an outlet for the pulp, a diaphragm vertically movable in the main portion of the hollow, means for actuating diaphragm, a flexible gasket extending across the spaces between the edges of the diaphragm and the walls of the hollow in the table, a lower box section having its bottom and top open, said section being arranged on the top of the table and having its bottom formed by the diaphragm and its interior in communication with the passage along the side of the hollow in the table, a removable screen-plate extending across the open top of said lower section and supported at its edges upon the edges thereof, and an upper box-section having an open bottom and provided with means for supplying pulp to it, said upper section being arranged with its lower edges resting upon the edges of the screen-plate and detachably connected to the edges of the lower box-section, substantially as shown and described. 4th. A pulp screen or strainer having two screen-boxes provided with screen-plates and diaphragms and arranged end to end, said screen-boxes each being composed of two sections and having the adjacent ends of their lower sections formed by removable cross-bars, each box having means for closing the end of its upper section adjacent to the other box, whereby when one box is open the other may be in operation, substantially as set forth.

**No. 59,486. Paper Stock Refiner.**  
(*Machine à épurer la pulpe.*)

James H. Baker, George F. Shevlin and Frederick H. Baker, all of Saratoga Springs, New York, U.S.A., 1st April, 1898 ; 6 years. (Filed 4th January, 1898.)

**Claim.**—1st. In a paper stock refining machine, the combination with a horizontal shaft and bearings for supporting the same, of a runner stone and a holder for the same secured upon the shaft, a stationary stone and a two part case surrounding the stones and to one part of which the stationary stone is secured, there being a central opening to the stationary stone and a supply pipe for the paper stock, bearings at the ends of the horizontal shaft and a spring for pressing the runner stone towards the stationary stone and a screw for limiting the movement, substantially as set forth. 2nd. In a paper stock refining machine, the combination with a horizontal shaft and bearings for supporting the same, of a runner stone and a holder for the same secured upon the shaft, a stationary stone and a

two part case surrounding the stones and to one part of which the stationary stone is secured, there being a central opening to the sta-

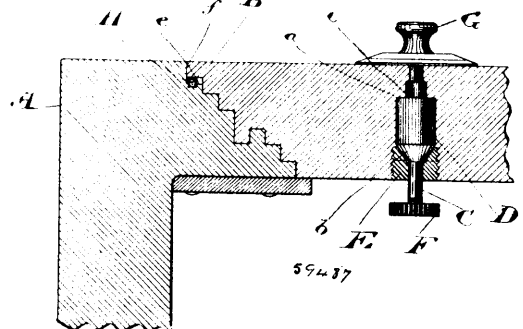


tionary stone and a supply pipe for the paper stock, bearings at the ends of the horizontal shaft and a spring for pressing the runner stone towards the stationary stone and a screw for limiting the movement, the stones having concave recesses in their central portions and a centrifugal propeller connected with the shaft and acting to force the pulp outward between the stones, substantially as set forth. 3rd. In a paper stock refining machine, the combination with a horizontal shaft and bearing for supporting the same, of a runner stone and a holder for the same secured upon the shaft, a stationary stone and a two part case surrounding the stones and to one part of which the stationary stone is secured, there being a central opening to the stationary stone and a supply pipe for the paper stock, bearings at the ends of the horizontal shaft and a spring for pressing the runner stone towards the stationary stone and a screw for limiting the movement, a driving pulley with a hub surrounding the horizontal shaft between its two bearings and having a key connection that allows the shaft to be moved endwise through the hub of the pulley as the runner stone may yield, substantially as set forth. 4th. In a paper stock refining machine, the combination with a horizontal shaft and bearings for supporting the same, of a runner stone and a holder for the same secured upon the shaft, a stationary stone and a two part case surrounding the stones and to one part of which the stationary stone is secured, there being a central opening to the stationary stone and a supply pipe for the paper stock, bearings at the ends of the horizontal shaft and a spring for pressing the runner stone towards the stationary stone and a screw for limiting the movement, an adjustable tie-rod connecting the two part case with the frame or bearing stand of the machine for supporting the case and the stationary stone and for ensuring the proper alignment of the stationary stone with the runner stone, substantially as set forth. 5th. In a paper stock refining machine, the combination with a horizontal shaft and bearings for supporting the same, of a runner stone and a holder for the same secured upon the shaft, a stationary stone and a two-part case surrounding the stones and to one part of which the stationary stone is secured, there being a central opening to the stationary stone and a supply pipe for the paper stock, bearings at the ends of the horizontal shaft and a spring for pressing the runner stone towards the stationary stone and a screw for limiting the movement, and a screw for adjusting the pressure of the spring, substantially as set forth. 6th. The combination with the frame and its bearings, of a shaft supported in the bearings, a holder and runner stone upon such shaft, a stationary case surrounding the stones, a stationary stone supported by the removable portion of the case and a supply pipe on said removable portion of the stationary stone for supplying the material to be ground or refined, troughs projecting from the frame below the respective ends of the shafts, collars sliding upon the edges of the troughs a screw acting in one direction to limit the approach of the runner to the stationary stone, a spring for pressing such runner towards the stationary stone and a screw and cross piece for adjusting the pressure of the spring, substantially as set forth. 7th. The combination with the frame and its bearings, of a shaft supported in the bearings, a holder and runner stone upon such shaft, a stationary case surrounding the stones, a stationary stone supported by the removable portion of the case and a supply pipe on said removable portion of the case opening through the eye of the stationary stone for supplying the material to be ground or refined, troughs projecting from the frame below the respective ends of the shaft, collars sliding upon the edges of the troughs, a screw acting in one direction to limit the approach of the runner to the stationary stone, a spring for pressing such runner towards the stationary stone and a screw and cross piece for adjusting the pressure of the spring, hard metal bearings at the ends of the shaft, the troughs containing lubricating material for such bearings, substantially as set forth. 8th. In a paper stock grinder or refiner, the combination with the stationary

stone, of a shaft, a holder fitting a tapering portion of the shaft, and a stone secured in such holder, a nut screwed upon the shaft and securing the hub upon the tapering portion of such shaft, and a propeller having a hub surrounding the cylindrical nut and secured thereto, substantially as specified.

**No. 59,487. Burglar-Proof Safe.**

(*Coffre-fort à l'épreuve des voleurs.*)



Thomas West, Toronto, Ontario, Canada, 1st April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. In a safe, a jamb with rabbeted edges and a door correspondingly rabbeted to fit the jamb, in combination with a strip of hollow rubber packing secured to the bottom of the first rabbets from the surface of the safe, substantially as and for the purpose specified. 2nd. In a safe, a jamb with rabbeted edges and a door correspondingly rabbeted to fit the jamb, in combination with a strip of hollow rubber packing secured to the bottom of the first rabbets from the surface of the safe, and placed close to the side of the rabbet so as to be pressed into contact therewith by the closing of the door, substantially as and for the purpose specified. 3rd. In a safe, a door suitably bored, in combination with a spindle shouldered to prevent its withdrawal, and a nut adapted to retain the spindle in place, the nut and spindle being so shaped that force applied to drive the spindle inwards tends to expand the nut, substantially as and for the purpose specified. 4th. In a safe, a door suitably bored to receive a spindle, in combination with a spindle provided with an enlarged portion and tapered towards the inside of the door, and a nut screwed into the door on the inside and bored with a taper to bear against the tapered portion of the spindle, substantially as and for the purpose specified. 5th. In a safe, a door suitably bored to receive a spindle, in combination with a spindle provided with an enlarged portion and tapered towards the inside of the door, and a nut screwed into the door on the inside, bored with a taper to bear against the tapered portion of the spindle, the angle of the taper being less than the angle of the taper of the spindle, substantially as and for the purpose specified. 6th. In a safe, a door suitably bored to receive a spindle, in combination with a spindle provided with an enlarged portion and tapered towards the inside of the door, and a nut screwed into the door on the inside, bored with a taper to bear against the tapered portion of the spindle, and partly split at the inner end, substantially as and for the purpose specified. 7th. In a safe, the door B, suitably bored to receive a spindle and nut in combination with the spindle C, provided with a portion *c* closely fitting the bore in the door, the enlarged portion D, forming a shoulder *a* closely fitting a similar shoulder in the bore, the tapered portion *b*, and the nut E, tapered to bear against the tapered portion of the spindle, substantially as and for the purpose specified. 8th. In a safe, the door B suitably bored to receive a spindle and nut in combination with the spindle C, provided with a portion *c* closely fitting the bore in the door, the enlarged portion D, forming a shoulder *a* closely fitting a similar shoulder in the bore, and the tapered portion *b*, and the nut E tapered to bear against the tapered portion of the spindle, the angle of the taper being less than the angle of the taper of the spindle, substantially as and for the purpose specified.

**No. 59,488. Anti-friction Bearing.**

(*Coussinet de tourillon sans friction.*)

James E. Lawrence, Farnham, Quebec, Canada, 1st April, 1898; 6 years. (Filed 10th March, 1898.)

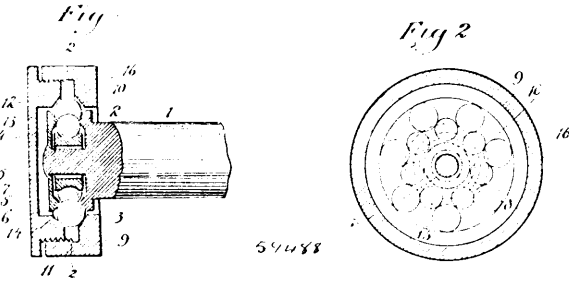
*Claim.*—1st. An anti-friction bearing, comprising a shaft, an annulus surrounding a portion of said shaft, but not engaging therewith, a series of rolling anti-friction devices supported on the annulus, and a flange or lateral extension on a disc, ring or sleeve upon the shaft, and provided with an internal bearing surface for the anti-friction devices, substantially as specified. 2nd. A anti-friction bearing comprising a shaft, an annulus surrounding a portion of said shaft, but not engaging therewith, a series of rolling anti-friction devices supported on the annulus, and a flange or flanges upon the shaft, provided with internal bearings for the anti-friction devices, a series of outer rolling anti-friction devices engaging with

the first named anti-friction devices, and a casing bearing on the last named anti-friction devices, substantially as specified. 3rd. An

plunger connected therewith or adapted to operate thereon, on the opposite side and extending through the casing, and another spring operated plunger extending through said casing, at right angles to the valve plunger, and adapted to hold the valve open, said valve plunger being provided with an annular groove or recess, and the plunger at right angles thereto with a shank adapted to enter the same, substantially as shown and described.

**No. 59,490. Carriage Washer.**

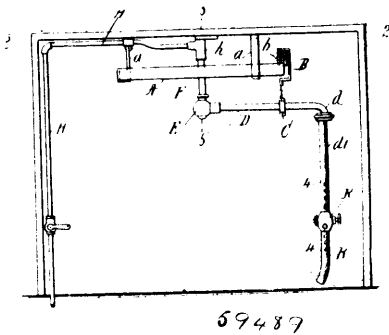
(Appareil à laver les voitures.)



anti-friction bearing comprising a shaft, an annulus surrounding a portion of said shaft, but not engaging therewith, said annulus being formed of one piece or pieces adjustably threaded together longitudinally of the shaft which it surrounds, balls engaging on said annulus, an outer series of balls engaging with the inner balls, a ring surrounding the shaft and having a bearing for the outer balls, and a cap connected to said ring and also having a bearing for the outer balls, substantially as specified. 4th. An anti-friction bearing comprising a shaft, an outwardly extending flange on said shaft having exterior and interior bearing surfaces for balls, a disc supported on the shaft, and having bearing surfaces corresponding to those of the flange for said balls, an annulus surrounding the shaft between the flange and disc, balls engaging with and supported by said annulus and the interior bearing surfaces of the flange and disc, outer balls engaging with the first named balls and with the exterior bearing surfaces of the flange and disc, and a casing engaging with said outer balls, substantially as specified. 5th. An anti-friction bearing comprising a shaft or axle, an outwardly extending flange on said shaft or axle, a disc on the portion of the shaft or axle, there being a space between the flange and disc, a grooved annulus in said space but free from the shaft or axle, balls engaging in the grooves of the annulus, the balls being within the space mentioned, an outer series of balls engaging with the first named series and with the peripheries of the flange and disc, a ring surrounding the shaft or axle, but free therefrom, the said ring having a raceway or bearing surface for the outer balls, and a cap adjustable relatively to the ring, said cap also having a raceway or bearing for the outer balls, substantially as specified.

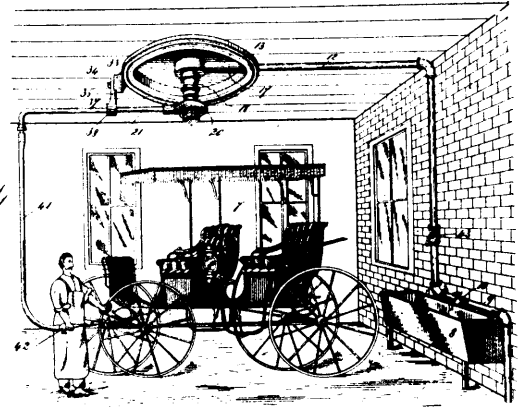
**No. 59,489. Carriage Washer.**

(Appareil à laver les voitures.)



Edwin Ferris, Mont Clair, New Jersey, assignee of Henry Nicholsburg, New York, all in the U.S.A., 2nd April, 1898; 6 years. (Filed 5th March, 1898.)

*Claim.*—1st. In a water supply apparatus, the combination with a ring suitably suspended, of a carriage adapted to travel thereon, a water supply pipe suspended through said ring, a revoluble hollow head mounted on the said pipe in communication therewith, and a pipe connected with said head, and supported by said carriage, and a flexible tube connected with said last named pipe, and provided with a water supply regulator or cock, consisting of a casing having an enlarged central portion provided with a partition, having a central port or opening, a spring operated valve adapted to close said opening, and a plunger extending through the side of the casing adapted to operate said valve, said casing being also provided with a spring operated plunger at right angles to the valve plunger by which the latter is held in the position in which the valve is open, substantially as shown and described. 2nd. In a water supply apparatus, the combination therewith, of a water supply regulator or cock, comprising a casing having a partition therein, part of which is arranged longitudinally thereof, and provided with a central opening, a spring operated valve on one side of said opening, a



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Edwin Ferris, Mont Clair, New Jersey, assignee of Henry Nicholsburg, New York, all in the U.S.A., 2nd April, 1898; 6 years. (Filed 5th March, 1898.)

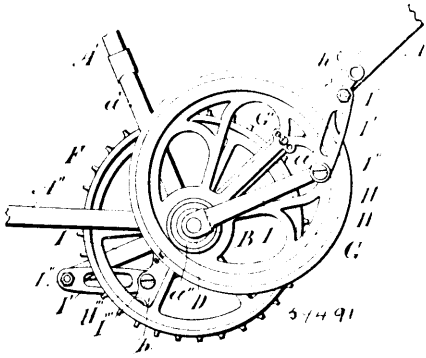
*Claim.*—1st. In an apparatus for the purpose herein described, a circular casing which is adapted to be secured to a ceiling or other support, said casing being provided at the lower edge thereof with an annular outwardly directed flange, a revoluble ring mounted on said flange, a pipe suspended about the centre of said casing, a water-pipe which passes into said casing and is in communication with said suspended pipe, a casing mounted on the lower end of said suspended pipe and in communication therewith, and adapted to turn thereon, and a pipe connected with said casing and with a hanger suspended from said revoluble ring, substantially as shown and described. 2nd. In an apparatus for the purpose herein described, a circular casing which is adapted to be secured to a ceiling or other support, said casing being provided at the lower edge thereof with an annular outwardly directed flange, a revoluble ring mounted on said flange, a pipe suspended from the centre of said casing, a water-pipe which passes into said casing and is in communication with said suspended pipe, a casing mounted on the lower end of said suspended pipe and in communication therewith, a pipe in communication with said last-named casing and passing through a support connected with said revoluble ring, and a flexible tube which is adapted to be connected with said last-named pipe, substantially as shown and described.

**No. 59,491. Velocipede. (Vélocipède.)**

Isaac P. Patton and James Arthur Seybold, both of Ottawa, Ontario, Canada, 2nd April, 1898; 6 years. (Filed 26th February, 1898.)

*Claim.*—1st. In a velocipede gear, the combination with a driving shaft or axle of the rear fork and forked frame bars formed into hubs adapted to carry bearings for the axle, bearings formed with said axle and in said hubs, a sprocket wheel rigidly mounted upon said axles, a circular disc or eccentric secured rigidly and adjustably to the outside of each hub eccentrically to the axle so that its longest axis is forward of said axle and approximately at a right angle to the downward movement of the treadle action of the foot of the rider, an eccentric strap adapted to rotate upon said disc or eccentric and provided with an arm adapted to carry a pedal, a crank mounted and secured upon each outer end of the axle and a link connecting said crank arm with the pedal arm, substantially as

set forth. 2nd. In a velocipede gear, the combination of a driving shaft or axle, crank arms secured to the ends of said axle projecting

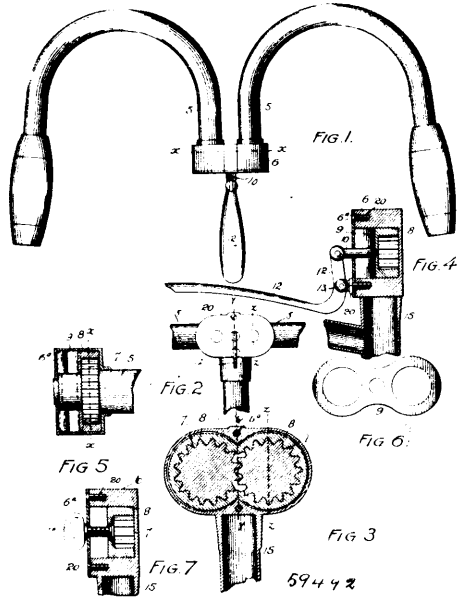


from its bearings, a link pivoted to the end of each of said cranks, a pivot bolt fixed in said link and turning on balls in the crank, a pedal arm forming part of an eccentric strap, a pivot pin in said arm rotating upon balls and fixed in the other end of said link and an eccentric through which said axle projects and upon which said strap is mounted rotatively, substantially as set forth. 3rd. In a velocipede gear, the combination with the driving shaft or axle, of the rear fork and forked frame bars formed into hubs adapted to carry bearings for said axle, bearings in the eyes of said hubs supporting said axle, a sprocket wheel mounted and secured upon said axle between said bearings, an eccentric secured to the outer part of each hub having its geometric centre formed to and upward of said axle, a strap mounted rotatively upon said eccentric balls between the bearing surfaces of said eccentric and strap, a pedal arm formed on said strap, a pedal on said arm, a crank secured to each of said axles projecting through said eccentric and a link connecting the end of said crank to said pedal arm, substantially as set forth. 4th. In a velocipede gear, the combination of a circular disc secured to the frame eccentrically to the axle and the latter passing through the former, a V groove in the face of said eccentric, a strap or rim adapted to be mounted upon said eccentric and being internally screw-threaded, a pair of rings externally screw-threaded and screwed into said rim and having their inner corners bevelled off to form a V groove corresponding to the V groove in the eccentric, a side flange on each ring and a corresponding check or rabbet on each side of the disc rim receiving said flange rotatively, balls in said V groove, a transverse key bed in the outer rim, a gib of soft metal in said key bed and a set screw in said rim adapted to press said gib into the threads of the rings and secure the same against displacement, substantially as set forth. 5th. In a velocipede gear, the combination with the driving shaft or axle, of the front brace and seat column both formed into wide arched forks and the two times of the two pieces on each side formed with the corresponding bar of the rear fork into a hub with lateral outward projection forming a continuation or extension thereof and adapted to have a large eye for the reception of the axle and journal, a journal within each of said eyes supporting said axle and a circular disc mounted eccentrically upon each of said lateral hub extensions, substantially as set forth. 6th. In a velocipede gear, the combination with the driving shaft or axle, of the rear fork and forked frame bars formed into hubs each having a large eye, V grooved cones upon said axle within said eyes, V grooved cupscrewed into said eyes each consisting of two rings having their inner corners bevelled and their inner faces clearing, a clutch consisting of a flanged nut with circular barrel screwed upon said axle with its barrel face tight against the inner face of one of said cones and its face provided with lugs, a sprocket wheel mounted upon said axis and having circular slots adapted to engage said lugs, and a nut screwed upon said axle against the inner face of said sprocket-wheel, substantially as set forth. 7th. In a velocipede gear, the combination with the driving shaft or axle, of the front brace and seat column both formed into a wide arched forks each having one time further from the centre of the main piece than the other and the two times of the two pieces on each side formed with the corresponding bar of the rear fork into a hub adapted to have a large eye for the reception of the axle journal therein, bearings for said axle in said hub and a sprocket wheel mounted and secured upon said axle between the two bearings, substantially as set forth. 8th. In a velocipede gear, the combination with the driving shaft or axle, of the rear fork and forked frame bars formed into hubs adapted to carry ball bearings for said axle, ball bearings formed with grooved cones carrying balls upon the axle and grooved cups in two sections screwed into said hubs, a transverse slot or key bed in each hub, a gib of soft metal in said key bed and a set screw passing through said hub and impinging upon said gib to secure said cup, substantially as set forth. 9th. In a velocipede gear, the combination with the driving shaft of the rear fork and forked frame bars formed into hubs adapted to carry ball bearings formed with grooved cones carrying balls upon the axle and grooved cups in two sections screwed into said hubs to flush and finish their outer

faces, and set screws passing through said washers and binding on the cups, substantially as set forth. 10th. In a velocipede gear, the combination with the driving shaft or axle, of the rear fork and forked frame bars formed into hubs adapted to carry bearings for said hubs supporting said axle, a sprocket wheel mounted and secured upon said axle between said bearings, a circular disc secured to the outer part of each hub eccentrically to said axle and with its long axis forward and upward, a V groove in the face of said disc or eccentric, a strap mounted rotatively upon balls in the groove of said eccentric and consisting of an internally threaded rim having externally threaded rings screwed into it which form a V groove between them, a pedal arm formed on said rim adapted to carry a treadle having a path of rotation concentric with said eccentric disc and eccentric to said axle, substantially as set forth.

**No. 59,492. Bicycle Handle Bar.**

(Barre de poignée de bicyclette.)



Amos V. Green, John G. Morgan and Lyman B. H. Brown, all of Denver, Colorado, U.S.A., 2nd April, 1898; 6 years. (Filed 4th March, 1898.)

*Claim.*—1st. The combination with a suitable casing attached to a depending stem adapted to be connected with the post of a bicycle fork, of the two distinct handle bars journaled in said casing, the said bars being provided with meshing pinions, a movable locking rack located within the casing and forming a housing for the pinions, said rack being interiorly cogged to engage the cogs on the peripheries of the meshing pinions, and suitable means for actuating said rack. 2nd. The combination with a suitable casing, of two distinct handle bars journaled therein, and provided with meshing pinions, a spring held movable locking rack located in said casing and forming a housing for the pinions, said rack being interiorly cogged to fit the peripheries of the pinions which are normally engaged by the rack, and suitable means for shifting the rack sufficiently to unlock the pinions. 3rd. The combination with a suitable casing, of two distinct handle bars journaled in said casing and carrying meshing pinions, a movable spring held locking rack forming a housing for the pinions and interiorly cogged to fit their peripheries, which are normally engaged by the rack, and a lever fulcrumed on the casing and connected with the rack for lifting the ladder. 4th. The combination with a suitable casing, of two distinct handle bars journaled in said casing and carrying meshing pinions, a movable rack located in said casing and shaped like the figure eight, said rack forming a housing for the pinions and being interiorly cogged, whereby it is adapted to fit the cogged peripheries of the two meshing pinions, and suitable means for actuating said rack.

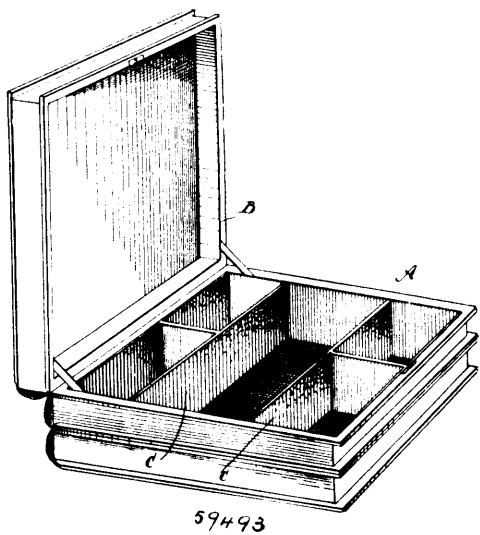
**No. 59,493. Case. (Caisse.)**

James M. Davis, assignee of Adalbert Ellsworth Foutch, both of New York City, U.S.A., 2nd April, 1898; 6 years. (Filed 9th March, 1898.)

*Claim.*—1st. The herein described case, consisting of a body and a cover, each in the shape of a book or books, the plane of division between the cover and the body coinciding with the plane of divi-

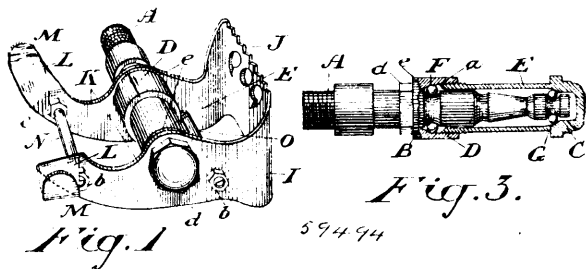


sion between two books, substantially as set forth. 2nd. The herein described case, consisting of a body and a cover, each in the shape of



a book or books, the plane of division between two books, and the cover being hinged to the body at the back of the books, substantially as set forth.

**No. 59,494. Pedal and Bearing. (Pedale et coussinet.)**



Marmaduke Matthews, Alexander Jardine and Agnes Jardine, all of Bracondale, Ontario, Canada, 2nd April, 1898; 6 years. (Filed 17th February, 1898.)

*Claim.*—1st. In a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, two outwardly-turned foot-rests at the forward ends of the sides, and a flange at the side of each foot-rest, substantially as and for the purpose specified. 2nd. In a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, two outwardly-turned foot-rests at the forward ends of the sides, and a flange at the side of each foot-rest, which flanges are inclined inwardly to grip the sides of the rider's shoe, substantially as and for the purpose specified. 3rd. In a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, two outwardly-turned foot-rests at the forward ends of the sides, and a flange at the side of each foot-rest, in combination with a cross-bar secured to each side of the pedal near the front, substantially as and for the purpose specified. 4th. In a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, two outwardly-turned foot-rests at the forward ends of the sides, and a flange at the side of each foot-rest, which flanges are inclined inwardly to grip the sides of the rider's shoe, in combination with a cross-bar secured to each side of the pedal near the front, substantially as and for the purpose specified. 5th. As a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, and forward flanges to engage the sides of a rider's shoe, in combination with a cross-bar secured to each side of the pedal just below the said flanges, a piece

of rubber tube upon the said cross-bar and a piece of rubber secured to the rearward flange, substantially as and for the purpose specified. 7th. In a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, two outwardly-turned foot-rests at the forward ends of the sides and a flange at the side of each foot rest, in combination with a cross-bar extending from side to side of the pedal and provided with nuts whereby the sides of the pedal may be adjusted closer together or further apart, substantially as and for the purpose specified. 8th. In a pedal, a plate bent to form a rearward flange, two side for attachment to a casing, two outwardly-turned foot-rests at the forward ends of the sides, and a flange at the side of each foot rest, which flanges are inclined inwardly to grip the sides of the rider's shoe, in combination with a cross-bar extending from side to side of the pedal and provided with nuts whereby the sides of the pedal may be adjusted closer together or further apart, substantially as and for the purpose specified. 9th. As a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, and forward flanges to engage the sides of a rider's shoe, in combination with a cross-bar secured to each side of the pedal just below the said flanges, in combination with a cross-bar extending from side to side of the pedal and provided with nuts whereby the sides of the pedal may be adjusted closer together or further apart, substantially as and for the purpose specified. 10th. In a pedal, a plate bent to form a rearward flange, two sides for attachment to a casing, two outwardly-turned foot-rests at the forward ends of the sides, and a flange at the side of each foot rest, in combination with a cross-bar secured to each side of the pedal near the front, and a cross-bar secured to each side of the pedal towards the rear, substantially as and for the purpose specified. 11th. As a pedal, a plate bent to form a rearward flange, two sides connected to a casing and shaped at their forward ends to engage a rider's shoe, the pedal being supported on the casing at such a point and the parts so proportioned that the forward ends of the sides are further from the centre of the casing than the rearward flange and so that the greatest amount of metal in the pedal is below the same centre, substantially as and for the purpose specified. 12th. In a pedal, a spindle, a casing formed in two parts screwed together, ball bearings located between each part of the casing and the spindle, so that by screwing or unscrewing the said parts, the bearings may be adjusted, in combination with a pedal frame adapted to engage the two parts of the casing to hold them from rotating, substantially as and for the purpose specified. 13th. In a pedal, a spindle, a casing formed in two parts screwed together, and ball bearings located between each part of the casing and the spindle, so that by screwing or unscrewing the said parts, the bearings may be adjusted, in combination with a pedal comprising a rearward flange or cross-bar and two side pieces provided with holes adapted to fit removably upon portions of the halves of the aforesaid casing, the parts being shaped to engage with one another in a number of different positions, substantially as and for the purpose specified. 14th. In a pedal, a spindle, a casing formed in two parts screwed together, and ball bearings located between each part of the casing and the spindle, so that by screwing or unscrewing the said parts, the bearings may be adjusted, in combination with a pedal comprising a rearward flange or cross-bar and two side pieces provided with holes adapted to fit removably upon portions of the halves of the aforesaid casing, the parts being shaped to engage with one another in a number of different positions, and a removable or releasing cross-bar connecting the said sides, substantially as and for the purpose specified. 15th. In a pedal, a spindle, a casing formed in two parts and screwed together, and each provided with a portion adapted to engage a suitably-shaped hole in the side of the pedal, and backed by a shoulder, and ball bearings between each part of the casing and the spindle, in combination with a pedal comprising a rearward flange or cross-bar and two side-pieces provided with holes adapted to engage the portions of the halves of the aforesaid casing in a number of different positions, and a removable or releasable cross-bar connecting the said sides, substantially as and for the purpose specified. 16th. In a pedal, a spindle provided with two cones facing the ends of the spindle, in combination with a casing formed in two parts screwed together, each part being formed with a cup to complete with the said cones, races for two sets of balls, substantially as and for the purpose specified. 17th. In a pedal, a spindle provided with two cones facing the ends of the spindle, in combination with a casing formed in two parts screwed together, each part being formed with a cup to complete with the said cones races for two sets of balls, the least inside diameter of the crank-side part of the casing being greater than the greatest diameter of either of the cones or the body of the spindle so that it may be placed in position from the outer end of the spindle, and slid past the inner cone for the insertion of the balls, substantially as and for the purpose specified.

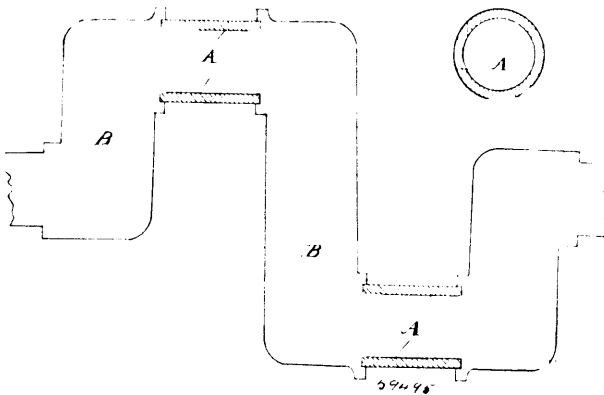
**No. 59,495. Crank and Shaft Bearing.**

(*Coussinet de bielle et essieur.*)

Absalom Merner, assignee of Jonas Herrgott, both of Waterloo, Ontario, 2nd April, 1898; 6 years. (Filed 24th February, 1898.)

*Claim.*—The method of making bearings on cast-metal shafts and cranks by making a ferrule or band which is to form the bearing, already turned or dressed ready for use, and specially hardened or tempered if desired, of the size designed for the bearing or to fit the

bearing box, and casting the shaft or crank within such ferule or band, firmly uniting them together, and producing a complete shaft



or crank ready for use when removed from the mould, substantially as set forth.

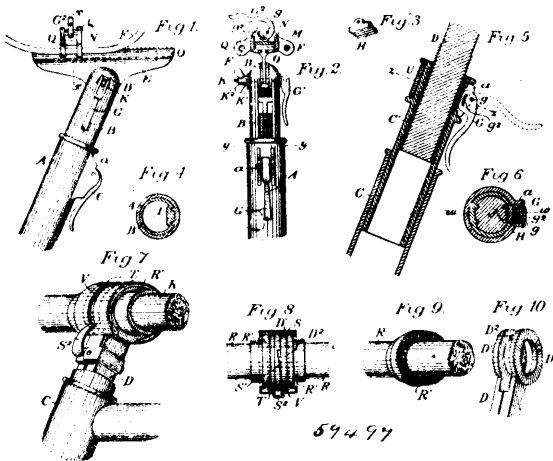
No. 59,496. Insecticide. (Insecticide.)

The Tobacco Warehousing and Trading Company, Danville, Virginia, assignee of James Arthur Palethorpe, Liverpool, England, 2nd April, 1898; 6 years. (Filed 1st March, 1898.)

Claim.—As a new article of manufacture, an insecticide consisting of powdered kieselguhr or an equivalent inert absorbent and refractory power, impregnated with a decoction of nicotine, in substantially the manner explained.

No. 59,497. Cycle Seat and Handle Bar.

(Siège et barre de poignée de cycles.)



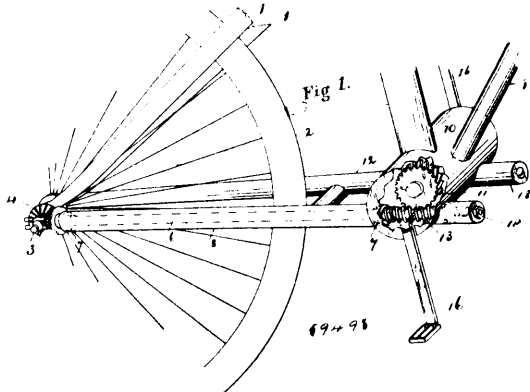
Edward Henry Chappuis, Marysville, California, assignee of Matthew Judge, Gibsonville, California, all in the U.S.A., 2nd April, 1898; 6 years. (Filed 9th February, 1898.)

Claim.—1st. The combination with the adjustable posts of a bicycle, of movable blocks, interlocking surfaces formed upon said blocks and upon the movable posts adapted to engage with each other, and fulcrumed cams whereby said blocks are moved into or out of engagement with the posts. 2nd. The combination with the movable posts of a bicycle, of cams and actuating levers integral therewith, fulcrumed to the socket posts, cam blocks having pins loosely engaging with the slotted ends of the cams and having faces formed to interlock with corresponding faces upon the movable parts whereby the turning of the cam levers in one direction will disengage the parts, the turning of them in the opposite direction will lock the parts together. 3rd. The combination with the movable and adjustable seat and handle bar posts of a bicycle of cam levers fulcrumed with relation to the sockets in which the posts are movable, cam blocks pivoted to and movable by the cams and having interlocking faces upon one side, corresponding interlocking faces formed upon the movable posts, with grooves or channels upon each side thereof and flanges projecting from the cam blocks and entering said channels to serve as guides and locks to prevent the turning of the posts within the sockets. 4th. The combination with a bicycle of an adjustable seat post having a head slotted vertically in the line of travel of the machine, radial interlocking corrugations formed on the inner

faces of the head, a seat-supporting bar having a correspondingly corrugated circular head adapted to fit between the sides of the seat post head, a shaft extending through the seat post head and the corresponding part of the seat supporting-bar, and a cam lever fulcrumed to the end of the shaft and adapted to close and lock the corrugated meeting faces. 5th. The combination with a seat post of a bicycle vertically adjustable, having a slotted head at the upper end, the sides of which are capable of moving to and from each other, of a seat-supporting-bar having a circular projection fitting between the sides of the seat post head and correspondingly corrugated so as to engage the corrugations on the inner faces of said head, a shaft passing centrally through the head and the interior disc, said shaft having a rectangular portion at one end to prevent its turning within the socket, the opposite end being screw-threaded and adapted to receive a nut and washer, whereby the adjustment of the parts is effected and a cam fulcrumed in the opposite end adapted to close the parts of the seat post head and clamp them against the corrugated disc of the seat support, substantially as described. 6th. In a bicycle, a vertically adjustable seat post, a seat-supporting bar with means for adjustably clamping it in the top of the seat post, said bar having corrugations upon the surface, and channels or grooves upon each side parallel with the upper surface, a block fitting and slidable within said grooves or channels and having a cam lever fulcrumed in the upper part thereof, a cam block having a face corrugated to engage with the face of the supporting-bar and loosely connected with the cam lever so that by the movement of the cam lever the block is locked in engagement with the supporting-bar. 7th. In a bicycle, a seat-supporting bar adjustably mounted upon the vertically movable seat-post with means for locking the bar to the seat-post and the seat-post to the seat-post socket, a saddle block slidable longitudinally upon the seat-supporting bar, a cam block with interlocking faces whereby said block may be engaged with and locked upon the supporting bar, holes made through the opposite sides of said block for the reception of the seat springs, and cam levers fulcrumed transversely adapted to engage and lock said seat springs at any desired point. 8th. In a bicycle, the vertically slidable seat and handle bar posts having one or more transversely corrugated surfaces, cam blocks having corresponding surfaces adopted to engage with those of the movable posts, cams fulcrumed in the sockets in which the posts are slidable, and loosely connected with the cam blocks, whereby the latter are engaged with or disengaged from the posts, guide flanges projecting from the sides of the cam blocks and corresponding channels formed upon each side of the corrugations of the posts with which said flanges engage whereby the posts are maintained in proper alignment with relation to the machine. 9th. In a bicycle, the vertically movable handle bar post with corrugations, locking cam and cam block, a two-part elastic head formed of discs with corrugated exterior faces, corresponding corrugated discs fitting upon the handle bar, a cam turnable upon the handle bar between the two parts of the head of the handle bar post whereby the parts may be separated and caused to engage with the discs upon the handle bar and lock the latter in any desired position. 10th. The handle bar post of a bicycle vertically slidable, having corrugated faces upon front and back, a cam lever journaled in a sleeve turnable upon the socket of the handle bar post, a cam block with which said lever is loosely connected, movable through a slot in the socket of the post, a guide at the front of said socket in which one of the corrugated surfaces is movable while the other is in position to be engaged by the cam block and locked thereby, so that the post may be turned around a half revolution and the position of the handle bar reversed with relation to the machine. 11th. An adjusting and clamping device for handle bars of bicycles, consisting of discs fitting the central portion of the handle bar having their inner faces radially corrugated, a correspondingly shaped head for the handle bar post having a slot formed in the upper end in line with the frame of the machine, through which head the handle bar is adapted to pass with its corrugated discs exterior to the circular head discs of the post, a cam fitting the channel in the head of the post and turnable about the handle bar which passes therethrough, a lever b by which the cam is actuated projecting rearwardly, and lugs with which the cam engages when turned, whereby the channelled post head is separated and its outer faces interlocked with those of the discs upon the handle bar, and the latter is locked in any desired position. 12th. The steering post of a bicycle having a slotted head, the parts of which are movable to and from each other and which have radially corrugated outer surfaces, as shown, central openings through which the handle bar passes through said head, a cam fitting between the two parts turnable upon the handle bar, and lugs with which the cam engages to separate the discs forming the head of the post or allow them to approach each other, circular discs fitted upon the handle bar exterior to the discs forming the post head, and correspondingly corrugated so as to be engaged thereby when the head is spread by the action of the cam, a cylindrical hood or collar enclosing the parts and adapted to enclose the discs which are fixed to the handle bar, whereby they are maintained in position and protected from dust. 13th. In a handle bar adjustment of the character described, the circular rotary cam with its projecting lever, a collar or casing surrounding and enclosing the interlocking discs of the handle bar and the steering post head, said collar having a channel or slot in the line of travel of the movable cam lever, and a gate fixed to the cam lever and slidable therewith to open the channel when the lever is moved to disengage the locking

mechanism and to close the channel when the lever is moved to again interlock the parts. 14th. The combination, with the adjustable posts of a bicycle, of movable blocks, inter-locking surfaces formed upon said blocks and upon the movable posts, fulcrumed cams with levers by which they are turnable, said cams having slots formed in them, lugs projecting from the blocks, and pins passing through said lugs and the slots of the cams. 15th. In an adjusting and locking mechanism for the reciprocating posts of a bicycle of the character described, pivoted cams having curved slots made therethrough, locking blocks with lugs, and pins passing through said lugs and the slots in the cams whereby the cams are turnable about their pivot points so as to compress the locking blocks against the parts to be secured or retract them therefrom, said cams having flattened faces which rest against the blocks in both the locked and the unlocked positions thereof.

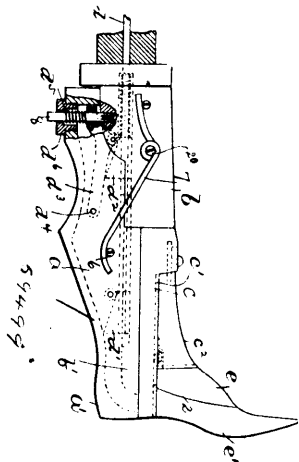
**No. 59,498. Bicycle. (Bicycle.)**



George Charles Bateman and Samuel M. Brookfield, both of Halifax, Nova Scotia, Canada, 2nd April, 1898; 6 years. (Filed 10th February, 1898.)

*Claim.*—1st. The combination with a bicycle having a bevel gear wheel on the rear axle, of a driving shaft having a bevel gear wheel meshing therewith, and an endless screw or worm near the opposite end, a worm wheel on the pedal shaft gearing with said screw worm a tube connecting the rear part of the bicycle frame with the bracket or gear casing in which said pedal shaft is mounted on ball bearings, said driving shaft mounted on ball bearings in said tube, as set forth. 2nd. A bicycle having an endless screw driving shaft and worm wheel on the pedal shaft, and a bevel gear wheel connecting said shaft and the rear axle, as set forth. The combination with the pedal crank bracket or box, of the pedal shaft having a worm wheel and a driving shaft having an endless screw or worm meshing with said wheel and gearing with the axle of the rear wheel of the bicycle, as set forth.

**No. 59,499. Boot and Shoe Treeing and Shaping Machine. (Machine à emboucher et former les chaussures.)**



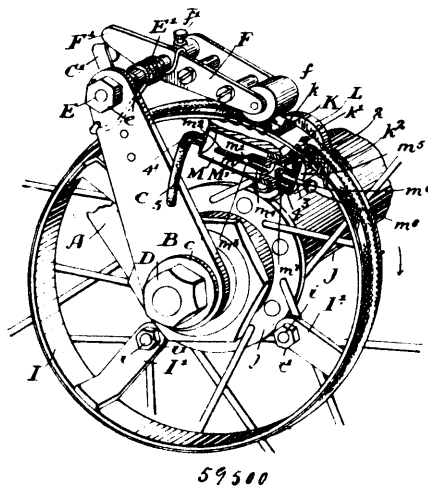
George Henry Clark, Boston, Massachusetts, U.S.A., 2nd April, 1898; 6 years. (Filed 7th March, 1898.)

*Claim.*—1st. A shoe shaping or treeing form composed essentially of a back part and a fore part, the latter having its shank portion movable to reduce its instep measurement to the ankle measurement

of the shoe, said back part and fore part being movable one with relation to the other to reduce the heel measurement of the form to the ankle measurement of the shoe, and an expanding device for separating said essential parts of the form, substantially as described. 2nd. A shoe shaping or treeing form composed essentially of a back part and a fore part, the latter having a sliding shank portion whereby its instep measurement may be reduced to the ankle measurement of the shoe, said essential parts being movable one with relation to the other to reduce the heel measurement of the form to said ankle measurement of the shoe and an expanding device for separating said essential parts of the form, substantially as described. A shoe shaping or treeing form composed essentially of a back part and a fore part, the latter having its shank portion movable to reduce its instep measurement to the ankle measurement of the form, one of said essential parts sliding longitudinally with relation to the other to reduce the heel measurement of the form to said ankle measurement of the shoe, and an expanding device for separating said essential parts of the form, substantially as described. 4th. A shoe shaping or treeing form, composed essentially of a back part and a fore-part, the latter having a sliding shank portion, whereby its instep measurement may be reduced to the ankle measurement of the shoe, one of said essential parts sliding longitudinally with relation to the other to reduce the heel measurement of the form to the ankle measurement of the shoe, and an expanding device for separating said essential parts of the form, substantially as described. 5th. A shoe shaping or treeing form, composed essentially of a back leg portion having a heel, and a front leg portion having a detachable fore-part provided with a shank portion movable to reduce its instep measurement to the ankle measurement of the shoe, said fore-part sliding in and out with relation to the heel to reduce the heel measurement of the form to said ankle measurement of the shoe, and an expanding device for separating the essential parts of the form, substantially as described. 6th. A shoe shaping or treeing form, composed essentially of a back leg portion having a heel and a front leg portion carrying a slide and a fore-part detachably connected to said slide, having its shank portion movable to reduce its instep measurement to the ankle measurement of the shoe, said fore-part sliding in and out with relation to the heel to reduce the heel measurement of the form to said ankle measurement of the shoe, and an expanding device for separating the essential parts of the form, substantially as described. 7th. An expansible shoe shaping or treeing form having a sliding fore-part with a movable shank portion, all the circumferential measurements of said form being reducible to the ankle measurement of the shoe, substantially as described. 8th. In a machine for shaping or treeing boots and shoes, a form having a bodily movable back leg portion, a guide pin therefor, an expanding rod having thereon two wedges, an arm pivotally connected to said back leg part which is engaged by the uppermost wedge, a spring for said arm, and an adjusting device for said spring, substantially as described. 9th. In a machine for shaping or treeing boots and shoes, a form having a front part with a pin<sup>8</sup>, back leg part having a hole through it for said pin, an expanding wedge, a pivoted arm <sup>d</sup> on the back leg part engaged by said wedge, a spring for said arm, and an adjusting nut for said spring, substantially as described.

**No. 59,500. Pump for Pneumatic Tires.**

(*Pompe pour bandages pneumatiques.*)

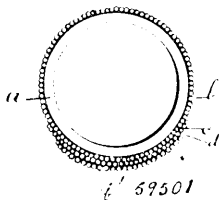


James Harry Keigley McCollum, Remigins Elmsley and William Henry Brouse, all of Toronto, Ontario, Canada, 2nd April, 1898; 6 years. (Filed 10th December, 1897.)

*Claim.*—1st. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the ring, a roller suitably supported and designed to

press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire, as and for the purpose specified. 2nd. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the periphery of the ring, a roller suitably supported and designed to press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire and a cam projection secured to the ring and bridging the space between the opened and closed ends of the air tube on the ring, as and for the purpose specified. 3rd. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the periphery of the ring, a spring-pressed arm suitably supported on the frame, a roller pivotally held in the end and designed to press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire, as and for the purpose specified. 4th. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the periphery of the ring, a spring-pressed arm, a spindle extending through one end of the same, an arm secured in the end of the axle in the end of which such spindle is held and a roller pivotally held in the end and designed to press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire, as and for the purpose specified. 5th. In an automatic pumping attachment for bicycles, in combination, the concentric ring, the arms secured to same and to the wheel in proximity to the hub, the compressible tube on the periphery of the ring, the arm extending from the axle and secured to the same, the spindle held in the end of the arm, the double arm pivotally held in the end of the spindle and the roller in the end of the double arm and the spiral spring encircling the spindle and hooked at one end on the arm attached to the axle and hooked at the other end to the double arm, so as to maintain a downward pressure upon the roller, as and for the purpose specified. 6th. In an automatic pumping attachment for bicycles in combination the concentric ring, the arms secured to the same and to the wheel in proximity to the hub, the compressible tube on the periphery of the ring, the arm extending from the axle and secured to same, the spindle held in the end of the arm, the double arm pivotally held in the end of the spindle and the roller in the end of the double arm and the spiral spring encircling the spindle and hooked at one end on the arm attached to the axle and hooked at the other end to the double arm, so as to maintain a downward pressure upon the roller, the extension on the double arm and the co-acting spring hook catch secured to the end of the arm attached to the axle, as and for the purpose specified. 7th. In combination, the concentric ring, the tube held to the periphery of the same, the roller and suitable pressure means for maintaining it to press upon the tube on the ring, the valve comprising the inner and outer casing with rubber end having flat abutting sides, the central passage-way, the cap and notched casing and screw pin extending through the cap and the tube extending into the collar inside the cap, and the tube extending from the opposite end of the valve to the air tube of the tire, as and for the purpose specified.

**No. 59,501. Bicycle Tire. (Bandage de bicyclee.)**



James Frederick Preston, Boston, Henry R. Perkins, and William H. Lawrence, Newburyport, all of Massachusetts, U.S.A., 2nd April, 1898; 6 years. (Filed 23rd December, 1897.)

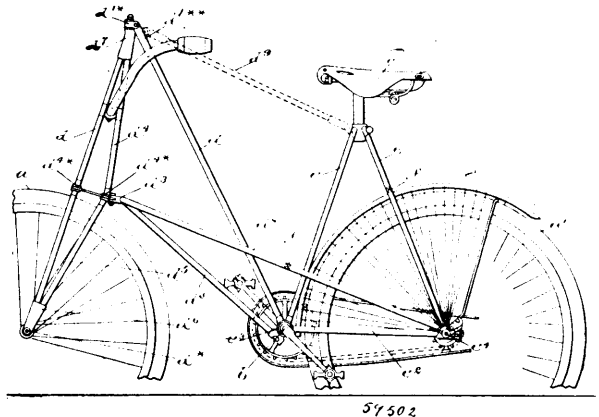
*Claim.*—A knitted, braided, or woven bicycle tire, made of a single series of threads, except the tread or outer part thereof, which is composed of fabric made of two or more series of threads, so arranged that the second and third series of threads cover respectively the interstices in the series lying inside of it, substantially as, and for the purpose above described.

**No. 59,502. Velocipede. (Vélocipède.)**

Norris Fowler Willott, 28 Shaftsbury Avenue, and Oliver Barnett, 22 Sloane Street, all in the County of Middlesex, England, 2nd April, 1898; 6 years. (Filed 10th January, 1898.)

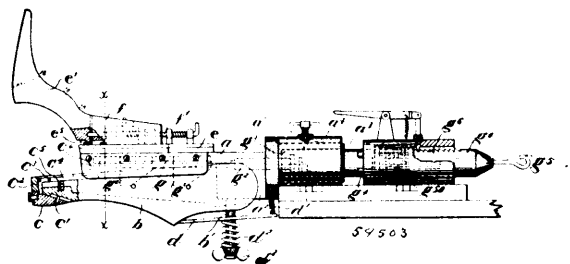
*Claim.*—1st. A velocipede frame comprising two triangles formed by the parts  $d$ ,  $d^1$  and  $e$ ,  $e^1$ , the part  $d^1$  being upwardly

inclined and fixed with a fitting  $d^3$  pivotally connected with the fork frame above the wheel  $a$  the triangles at their apices being con-



ected by a rigid bar  $d^2$ , whilst at their bases they are united by a bracket carrying the pedal axle, the whole device being tied together and stiffened by a main stay  $d^4$  extending in a single span from the fitting  $d^3$  to a fitting  $e^4$  at the rear extremity of the base of the rear triangle, substantially as herein shown and described and for the purpose stated. 2nd. A velocipede frame comprising two triangles formed by the parts  $d$ ,  $d^1$  and  $e$ ,  $e^1$ , the part  $d^1$  being upwardly inclined and fixed with a fitting  $d^3$  pivotally connected with the fork frame above the wheel  $a$ , whilst the triangles are unconnected at their apices but are united at their bases by a bracket carrying the pedal axle, the whole device being tied together and stiffened by a main stay  $d^4$  extending in a single span from the fitting  $d^3$  to a fitting  $e^4$  at the rear extremity of the base of the rear triangle, substantially as herein shown and described, and for the purpose stated. 3rd. A velocipede frame provided with a main stay  $d^4$  extending in a single span from the bearing for the rear axle to the forward extremity of the frame, substantially as shown and described and for the purpose stated. 4th. The peculiar construction and arrangement of parts constituting a velocipede frame, substantially as herein shown and described.

**No. 59,503. Boot and Shoe Treeing and Shaping Machine. (Machine à emboucher et former les chaussures.)**

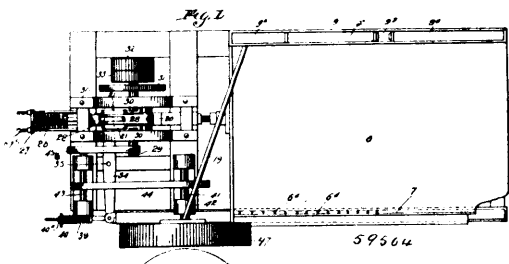


George Henry Clark, Boston, Massachusetts, U.S.A., 4th April, 1898; 6 years. (Filed 7th March, 1898.)

*Claim.*—1st. A shoe shaping or treeing form composed essentially of a back part, and a fore-part, movable one with relation to the other to extend the form, comprising means whereby all the circumferential measurements of said form below the ankle being reducible to the ankle measurement of the shoe when the parts of said form are extended, substantially as described. 2nd. A shoe shaping or treeing form consisting essentially of a back part and a fore-part constructed to slide longitudinally one with relation to the other, and having all the measurements below the ankle less than the ankle measurement of the shoe when the parts of said form are extended to draw on and off the shoe, and an expanding device for spreading the parts of said form, substantially as described. 3rd. An expansible shoe shaping or treeing form adapted for shaping a shoe having its ankle and ball measurements approximately equal, said form comprising means for reducing it whereby said shoe, with its top or ankle portion closed may be drawn off said form, substantially as described. 4th. In a shaping or treeing machine for boots and shoes, the combination of a back part and a fore-part, the shank of which adjacent the heel is removed, reducing the instep measurement of said fore-part to the ankle measurement of the shoe, one of said parts being movable in and out with relation to the other part to reduce the heel measurement of the form to said ankle measurement of the shoe, substantially as described. 5th. In a shaping or treeing machine for boots and shoes, the combination of a back part and a fore-part, the instep measurement of

which is not greater than the ankle measurement of the shoe, said parts being movable one with relation to the other to reduce the heel measurement of the form to said ankle measurement of the shoe, substantially as described. 6th. A shoe shaping or treeing form adapted for shaping a shoe, the ankle measurement of which is less than its heel or instep measurement, said form having means for expanding it whereby the shoe is shaped, and having means for reducing it, whereby said shoe, with its top or ankle portion closed may be drawn off said form, substantially as described. 7th. A shoe shaping or treeing form composing essentially of a back part and a fore-part, the instep measurement of which is not greater than the ankle measurement of the shoe said parts being movable toward and from each other, and also in and out with relation to each other, the heel measurement of the form reduced to the ankle measurement of the shoe when the parts thereof are closed together and extended. 8th. In a shaping machine for boots and shoes, a form having a heel, and a fore part, the shank of which adjacent the heel is removed, one of said parts being movable with relation to the other, to reduce the heel measurement of the form to the ankle measurement of the shoe, and means for expanding said form, substantially as described. 9th. In a shaping machine for boots and shoes, the combination of a back leg portion having a heel, and a sliding fore part the shank of which adjacent the heel is cut off obliquely, thereby diminishing the thickness of the instep, substantially as described. 10th. In a shaping machine for boots and shoes, the combination of a back leg portion having a heel, and a sliding fore part the shank of which adjacent the heel is cut off obliquely, thereby diminishing the thickness of the instep, substantially as described. 11th. In a shaping machine for boots and shoes, the combination of a back leg portion having a heel, a fore part, the shank of which adjacent the heel is removed, and a slide to which said fore part is detachably connected, substantially as described. 12th. In a shaping machine for boots and shoes, the combination of a back leg portion having a heel, and a sliding fore part the shank of which adjacent the heel is removed, said heel and fore part gradually approaching each other as the boot or shoe is withdrawn, substantially as described. 13th. In a shaping machine for boots and shoes, the combination of a back leg portion having a sliding heel piece, and a sliding fore part the shank of which adjacent the heel is removed, substantially as described. 14th. In a shaping machine for boots and shoes, the combination of a back leg portion having a sliding heel piece, and a forepart the shank of which adjacent the heel is removed, a slide to which it is connected, and a shin piece connected with said slide, substantially as described. 15th. In a shaping machine for boots and shoes, the combination of a back leg portion having an oblique sliding heel piece and a sliding fore part, the shank of which adjacent the heel is removed, substantially as described. 16th. In a shaping machine for boots and shoes, the combination of a back leg portion having an oblique sliding heel piece, a frame having a slide, a shin piece detachably connected thereto, and a fore part connected to said shin piece, the shank of which is removed adjacent the heel, substantially as described. 17th. In a shaping machine for boots and shoes, the combination of a back leg portion having a heel, a sliding forepart, the shank of which adjacent the heel is removed, a support for said sliding fore part, and an expanding device for spreading the parts, substantially as described. 18th. In a shaping machine for boots and shoes, the combination of a back leg portion having an oblique sliding heel piece, a frame carrying a slide, a detachable shin piece connected thereto, a fore part connected to said shin piece, the shank of which is removed adjacent the heel, and an expanding device for spreading the parts, substantially as described.

**No. 59,504. Ore Concentrator. (Concentrateur de minerai.)**



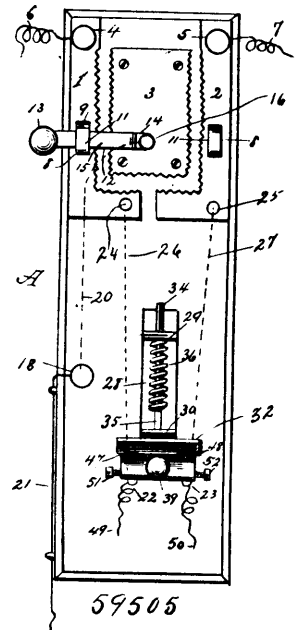
Arthur R. Willfley, Denver, Colorado, U.S.A., 4th April, 1898; 6 years. (Filed 16th March, 1897.)

*Claim.*—The combination with a suitable frame, of a transversely inclined table movably mounted thereon and having apertures in the lower edge, a narrow tapering strip attached to the table below said apertures, a trough located below the lower edge of the table and adapted to catch the material which passes through said apertures, an inclined flange attached to the lower edge of the table over which the gauge passes, said flange extending nearly to the tail of table, the unflanged part of which allows the material to pass into the trough, a toggle mechanism for imparting a reciprocating movement to the table, and a lever connection between the

table, and a trough for actuating the latter, the arrangement being such that when the table is moving in one direction, the trough is moving in the opposite direction, as and for the purpose set forth.

**No. 59,505. Telegraph Switch.**

(*Aiguillere pour telegraphes.*)



James S. Allen, Halsey, Nebraska, U.S.A., 4th April, 1898; 6 years. (Filed 16th August, 1897.)

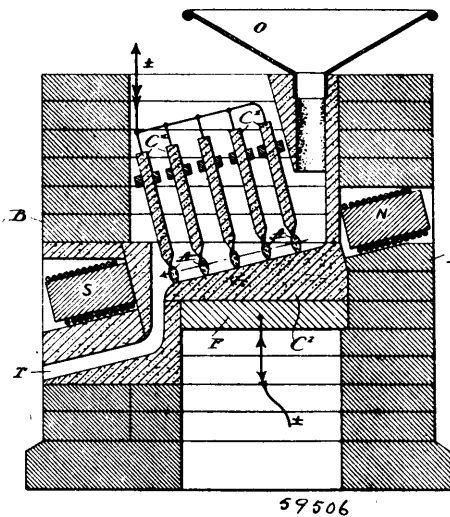
*Claim.*—1st. In a telegraph switch, the combination with contact pins, of guide arms, a plunger having a cylindrical portion working in one of the guide-arms, and a flat portion working in the other guide-arm, of a coil-spring for urging the plunger downward, and a contact-plate carried on the end of said plunger and adapted to normally establish electrical connection between the contact-pins. 2nd. In a telegraph switch, the combination with contact pins electrically connected to the line wires of a spring-actuated plate, and a removable cut-out plug provided with separated contact-strips which are electrically connected to the instrument wires, said plug being adapted for insertion between the plate and the pins, said plate serving to retain the plug and keep the contact-strips bearing against the contact-pins. 3rd. In a telegraph switch, the combination with contact pins, of a spring-pressed plate, and a cut-out plug having centrally grooved contact-strips, said plug being adapted for insertion between the spring pressed plate and the pins, and said plate serving to retain the plug and hold it so that the pins will lie in the grooves of the contact-strips. 4th. In a telegraph switch, the combination with contact pins connected to the line-wires, of a spring-pressed plate normally adapted to contact with said pins having a portion inclined in relation to the contact-pins, and a cut-out plug having a bevelled lower edge adapted to ride on the inclined portion of the spring-pressed plate, said cut-out plug being provided with contact-strips, and said spring-pressed plate being adapted to press the cut-out plug against the contact-pins so that the contact strips will be in electrical connection with said contact-pins. 5th. In a telegraph switch, the combination with a lightning arrester having respective plates connected to the line-wires and provided with ground-plate, of contact-springs having parallel lips and located on the respective line-plates, and a pivoted spring switch-arm adapted to be inserted between the lips of the contact-spring. 6th. In a telegraph switch, the combination with a lightning arrester consisting of plates connected to the line-wires and another plate connected to the ground-wire, and a pivoted switch-arm adapted for manipulation to electrically connect the ground-plate with either line-plate, of contact-pins electrically connected to the line-plates of the lightningarrester, and a cut out plug having contact-strips electrically connected to the instruments, said contact-springs being adapted for electrical connection with the contact-pins.

**No. 59,506. Electric Furnace. (Fournaise électrique.)**

Francis Jarvis Patten, New York, State of New York, U.S.A., 4th April, 1898; 6 years. (Filed 15th April, 1897.)

*Claim.*—1st. The method of operating an electric furnace which consists in passing the material to be operated upon between electrodes, subjecting the arc to the influence of a magnetic field whose lines of force are substantially transverse to the direction of the arc, and reversing or alternating either the current in the arc or the

magnetic field, whereby the arc is reciprocated transversely to the path of the material, substantially as described. 2nd. The method



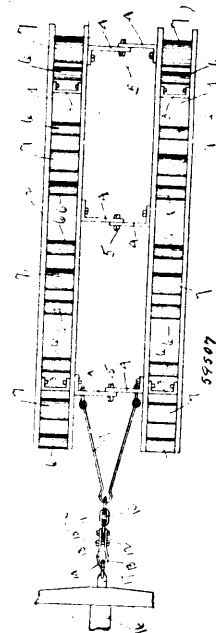
of operating an electrical furnace which consists in passing the material to be operated on between electrodes, subjecting the arc to the influence of a magnetic field whose lines of force are substantially transverse to the direction of the arc, passing a direct current through the electrodes, and reciprocating the arc by reversing or alternating the magnetic field, substantially as described. 3rd. In an electric furnace, a lower electrode, and an upper electrode consisting of a plate, an electro-magnet having its poles so arranged that the lines of force pass through the arc and are normal to the upper electrode, and means for reversing or alternating either the arc producing current or the magnet exciting current, whereby the arc reciprocates along the lower edge of the plate, substantially as described. 4th. In an electric furnace, electrodes consisting of a block and a plate above said block having its edge at arcing distance therefrom, an electro-magnet having its poles so arranged that the lines of force pass through the arc and are normal to the upper electrode, means for passing a direct current through the electrodes, and means for reversing or alternating the magnet current, substantially as described. 5th. In an electric furnace, the combination with a lower electrode, a plate electrode having its lower edge at arcing distance above said lower electrode, means for feeding material between the electrodes, means for creating a magnetic field having its lines of force passing through the arcing space, and means for alternating or reversing said field, whereby the arc is reciprocated transversely to the path of the material, substantially as described. 6th. In an electric furnace having for a lower electrode an inclined block or slab over which the material is fed and for its upper electrode a series of plates having their lower edges transverse to the movement of said material, means for passing a direct current through said electrodes, said means for creating a reversing magnetic field having its lines of force transverse to the upper electrode, whereby the arcs produced are caused to reciprocate across the material being operated on, substantially as described. 7th. The method of imparting a reciprocating movement to an arc between electrodes which consists in causing the arc to transverse a magnet field in which the lines of force are substantially transverse to the direction of the arc, and reversing or alternating either the arc producing current or the magnetic field, substantially as described. 9th. The combination with means for producing a magnetic field, of electrodes arranged to produce an arc across said field, and means for reversing or alternating either the arc-producing current or the magnetic field, whereby the arc between the electrodes will be reciprocated, substantially as described.

**No. 59,507. Truck for Sleighs. (Châssis de traîneau.)**

Joseph J. Forcier, Bay City, Michigan, U.S.A., 4th April, 1898; 6 years. (Filed 22nd January, 1898.)

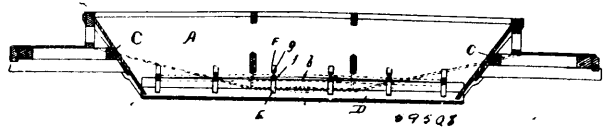
*Claim.*—1st. In a truck for sleighs, the combination of the frames each provided with a lower series of rolls for carrying the trucks, and with an upper series of rolls for carrying the sleighs, and means, as a grip, for connecting the front end of said trucks with the sleigh, and for releasing the same at a fixed point, substantially as set forth. 2nd. In a truck for sleighs, the combination of two truck frames each provided with a lower series of rolls for carrying the frames, and with an upper series of rolls for carrying the sleigh, the link rods secured by their rear ends to the front ends of the truck frames, and by their forward ends to a grip device, and means,

as a hook, for connecting said grip device with the sleigh tongue, substantially as set forth. 3rd. In a truck for sleighs, the combin-



ation of two frames standing parallel to each other and provided with transverse bars for holding the frames in position in relation to each other, a series of lower rolls for supporting said frames above the floor, and a series of upper rolls journaled upon the frames for supporting the sleigh, the draft rods connected to the front ends of the frames, the grip provided with forwardly extending spring arms terminating with opposing jaws, and with its rear end secured to the front end of the draft rods, a rearwardly extending hook secured to the sleigh tongue and adapted for passing between said opposing jaws and a stop secured to the floor for stopping the trucks and releasing the grip, substantially as set forth. 4th. In a truck for sleighs, the combination of the frames provided with lower rolls for supporting the frames, and with an upper series of rolls for supporting the sleighs, with a grip device composed of two parallel arms having their rear ends connected with the front end of the trucks by draft rods, and provided on their front ends with opposing jaws, a hook secured to the front end of the sleigh tongue and engaged with said jaws, and a stop secured to the floor for receiving the ends of said trucks to stop the trucks and release the jaws from the hook without stopping the forward movement of the sleigh or team, substantially as set forth.

**No. 59,508. Dumping Car. (Char à bascule.)**



Eli S. Hart, Chicago, Illinois, U.S.A., 4th April, 1898; 6 years. (Filed 16th March, 1896.)

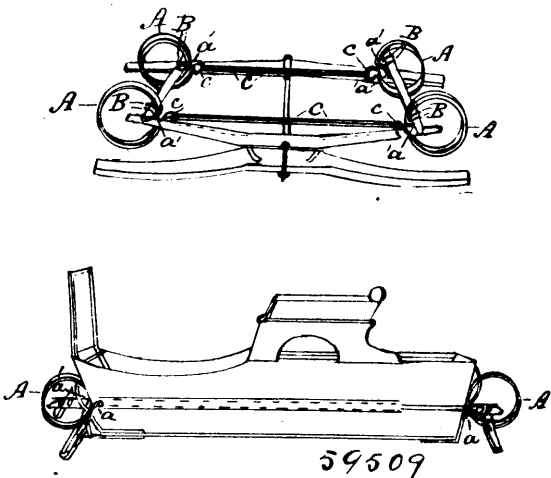
*Claim.*—1st. The combination with a dumping car and a discharge door arranged longitudinally of the car and at an angle to the body, of a series of hinges constructed to move apart without disengagement essentially as set forth, whereby the deflection of the center of the car body is accommodated by the hinges and binding is obviated, substantially as specified. 2nd. The combination with a dumping car and a discharge door arranged longitudinally of the car at an angle to the body, of a series of hinges, one leaf of each of which has an elongated eye for the pintle, whereby the deflection of the center of the car body is accommodated by the hinges and binding is obviated, substantially as specified.

**No. 59,509. Vehicle Spring. (Ressort de voiture.)**

John C. Shepherd, Tilsonburg, Ontario, Canada, 4th April, 1898; 6 years. (Filed 7th March, 1898.)

*Claim.*—1st. A vehicle spring constructed of a single piece of steel and formed into a perfect circle comprising a single coil, the ends of which are formed with attaching means, the portions of the spring adjoining the attaching means being brought approximately together equidistant from the centre of the circle, the attaching means on one end of the spring extending outside of the circum-

ference of the spring, and the attaching means on the other end of the spring extending within the circumference of the spring the con-



struction and arrangement being such that the bars of a vehicle are adapted to be secured to the attaching means on the outside of the circumference of the spring and the attaching means on the inside of the circumference of the spring to be secured to the running gear of the vehicle, substantially as described. 2nd. A vehicle spring constructed of a single piece of steel, and formed into a perfect circle comprising a single coil, one of the ends of which is formed with an attaching eye which extends outside of the circumference of the spring, and the other end formed with a tongue which extends within the circumference of the spring, the portions of the spring adjoining the attaching means being brought approximately together equidistant from the centre of the circle, the construction and arrangement being such that the bars of a vehicle are adapted to be secured to the attaching eye and the attaching tongue to be secured to the running gear of the vehicle, substantially as described. 3rd. A vehicle provided with wheels and a suitable running gear and four ring springs, each spring comprising a single piece of steel formed into a perfect circle and having one of its ends bent into an attaching means which is outside the circumference of the circle and formed into an attaching means, bars connecting the attaching means on the outside of the circumference of the spring rings to the body of the vehicle, the attaching means on the inside of the circumference of the spring rings being attached to the running gear of the vehicle, substantially as described. 4th. A vehicle provided with wheels and a suitable running gear and four ring springs, each spring comprising a single piece of steel, formed into a perfect circle and having one of its ends bent into an attaching-eye which is outside the circumference of the circle, and its other end extended inward within the circumference of the circle and formed into a tongue, connecting bars or straps secured at one end to the eye-attaching portions by a hinged connection, and secured at their other ends to the body of the vehicle, the tongue attaching portions of the springs being suitably secured to the running of the vehicle, substantially as described.

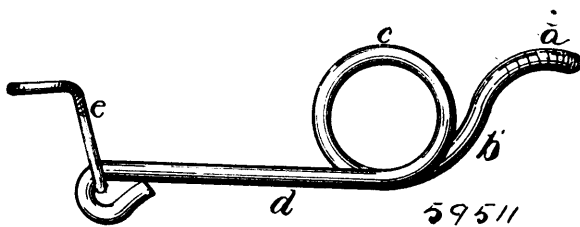
**No. 59,510. Dress Stays. (Renfort de robe.)**

George Beacock, Brockville, Ontario, Canada, 4th April, 1898; 6 years. (Filed 19th March, 1898.)

*Claim.*—1st. The process of preparing raw-hide for the manufacture of dress stays, which consists in dehairing the hide by applying sodium in solution, then cleaning the hide by washing and scraping, then applying a solution of borax to toughen the hide, and remove the sodium, then splitting the hide to the thinness desired, and if preferred, staining the splits of a desired colour then stretching the splits to dry and when dried saturating them with benzine or naphtha to remove natural and other odours, and applying a petrifying or waterproofing liquid to harden the hide splits, substantially as set forth. 2nd. The process of manufacturing dress stays from raw-hide which consists in dehairing the hide by applying a solution of sodium and cleaning the same by washing and scraping, then applying a solution of borax to toughen the hide and remove the sodium, then splitting the hide to the thinness desired, staining the splits if preferred and stretching the splits to dry and when dried saturating them with benzine or naphtha to remove natural odours, then applying a petrifying or waterproofing liquid to harden the hide splits or material, then cutting the same into strips, and passing the strips between rollers having an abrasive surface and finally buffing and waxing the strips to give a finished appearance, as set forth.

**No. 59,511. Anti-Rattler for Thill Couplers. (Compensateur pour armons de limonieres.)**

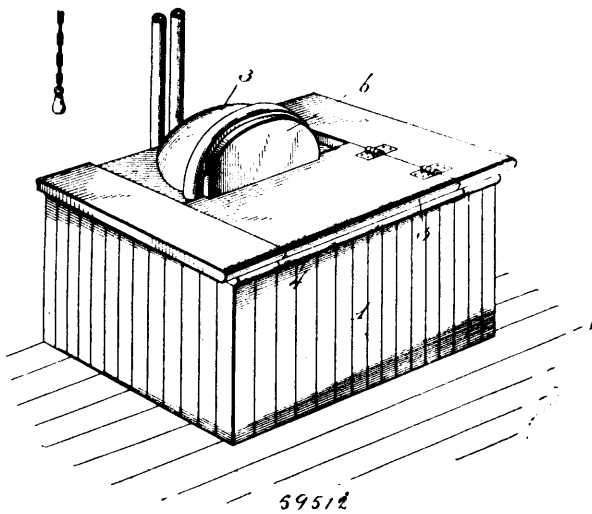
(Compensateur pour armons de limonieres.)



George Henry Fernwald, North East, Pennsylvania, U.S.A., 4th April, 1898; 6 years. (Filed 19th March, 1898.)

*Claim.*—1st. An anti-rattler for a thill coupling comprising a piece of wire bent upon itself to produce a loop, thence bent downwardly and coiled upon itself one or more times, and provided with means at its rear end to hold said loop in engagement with the thill eye. 2nd. An anti-rattler for a thill coupling comprising a piece of wire bent upon itself to form a loop which comprises the forward end of the anti-rattler, thence bent downwardly and coiled upon itself one or more times, the rear end of said wire being provided with eyes and a stirrup constructed of wire secured to said eyes, substantially as described for the purpose set forth.

**No. 59,512. Sanitary Bowl. (Latrine sanitaire.)**



Herbert R. Hall, Brooklyn, New York, U.S.A., 4th April, 1898; 6 years. (Filed 15th March, 1898.)

*Claim.*—1st. In a sanitary closet, the combination of a bowl provided at its upper rear portion with a hood or cover, a seat for said closet having an opening therein adjacent to the opening in the hood, and a cover hinged to swing laterally and adapted to close the mouth of the bowl. 2nd. In a sanitary closet, the combination of a bowl, having an angular mouth, one side of which is vertical and the other horizontal, a seat extending across the horizontal side and having its opening facing the vertical, the said bowl extending above the seat upon its rear side and forming a forwardly projecting hood, and a cover hinged to swing laterally and provided with a segmental projection adapted to close the mouth of the bowl.

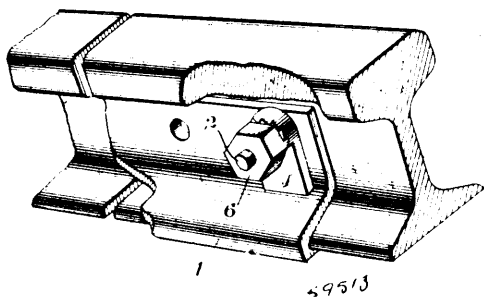
**No. 59,513. Nut Lock. (Arrête-écrou.)**

William Scherer, South Chicago, Illinois, U.S.A., 4th April, 1898; 6 years. (Filed 15th March, 1898.)

*Claim.*—The herein described nut lock for rail joints, comprising a bolt, a washer, which receives the bolt and is provided with a

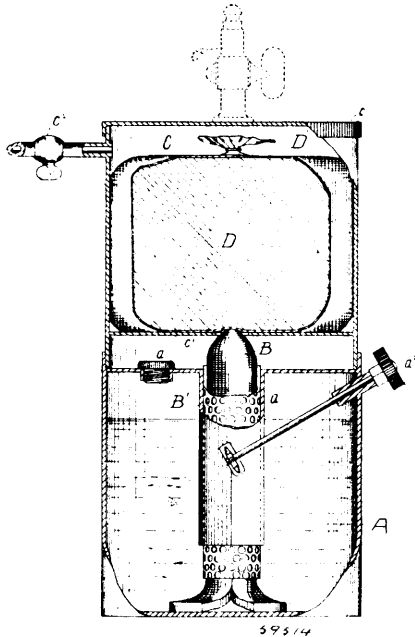


straight edge adapted to engage with the fish plate, said washer having radiating teeth on its face, and a nut having its face formed



with a single circularly extending cam incline and a locking shoulder adapted to engage with the teeth of the washer.

**No. 59,514. Lamp. (Lampe.)**



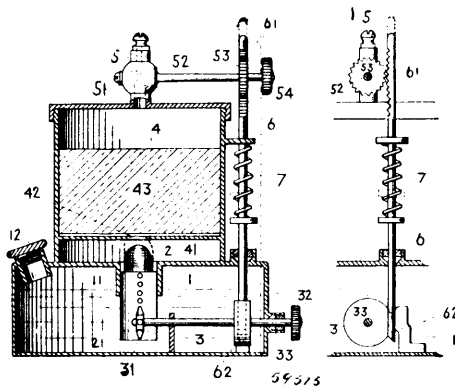
Frank Rhind and the Bridgeport Brass Company, both of Bridgeport, Connecticut, U.S.A., 4th April, 1898; 6 years. (Filed 30th August, 1897.)

*Claim.*—1st. In a lamp or other gas generating apparatus in combination, a liquid containing chamber, means for retaining in position a consumable mass and a wick in contact with said mass and adapted to carry liquid thereto, substantially as described. 2nd. In a lamp or other gas generating apparatus, in combination, a liquid containing chamber, means for retaining in position a consumable mass, a wick normally in contact with said mass and adapted to carry liquid thereto, and means for regulating the volume of liquid so carried, substantially as described. 3rd. In a lamp or other gas generating apparatus in combination, a liquid containing chamber, means for retaining in position a consumable mass, a wick normally in contact with said mass and adapted to carry liquid thereto, and means for increasing or diminishing the contact of said wick with said mass, substantially as described. 4th. In a lamp or other gas generating apparatus in combination, a liquid containing chamber, a solid containing chamber adjacent thereto, an aperture in said section chamber, a wick in said first chamber having its free end normally at or near said aperture and means for adjusting said second chamber and said wick relatively to each other, substantially as described. 5th. In a lamp or other gas generating apparatus, in combination, a liquid containing chamber, a solid containing chamber adjacent thereto, an aperture in said second chamber, a wick in said first chamber having its free end at or near said aperture and means for adjusting said wick to or from said aperture, substantially as described. 6th. In a lamp in combination, means substantially as described for producing a gas from the action of a liquid on a solid body, a gas chamber, a dome or plate in said chamber adapted to condense moisture from said gas, and a trap in said chamber adapted to receive the drip from said dome. 7th. In a

lamp, in combination, means substantially as described for producing a gas from the action of a liquid on a solid body, a gas chamber, a dome or plate in said chamber adapted to condense moisture from said gas, a trap in said chamber adapted to receive the drip from said dome and a conduit from said trap to a liquid containing chamber.

**No. 59,515. Gas Generating Lamp.**

(Générateur de lampe à gaz.)



Frank Rhind and The Bridgeport Brass Company, both of Bridgeport, Connecticut, U.S.A., 4th April, 1898; 6 years. (Filed 30th August, 1897.)

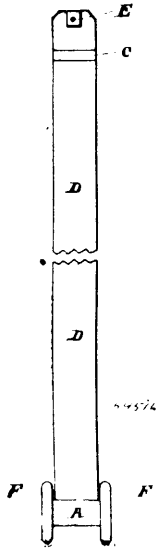
*Claim.*—1st. In a lamp or other gas generating apparatus in combination, a liquid chamber, means for retaining in position a consumable mass, a gas emission valve, manually operated means for causing and discontinuing the flow of liquid to said mass, and means for automatically retaining said valve in its open position during the flow of said liquid, substantially as described. 2nd. In a lamp or other gas generating apparatus in combination, a liquid chamber, means for retaining in position a consumable mass, a gas emission valve, manually operated means for causing and discontinuing the flow of liquid to said mass, and means for automatically preventing the causing of such flow of liquid except when said valve is in its open position, substantially as described. 3rd. In a lamp or other gas generating apparatus in combination, a liquid chamber, means for retaining in position a consumable mass, a gas emission valve, a wick adapted to convey liquid to said mass, manually operated means for causing and discontinuing the flow of liquid through said wick, and means for automatically retaining said valve in its open position during the flow of said liquid, substantially as described. 4th. In a lamp or other gas generating apparatus in combination, a liquid chamber, means for retaining in position a consumable mass, a gas emission valve, a wick adapted to convey liquid to said mass, manually operated means for causing and discontinuing the flow of liquid through said wick, and means for automatically preventing the causing of such flow of liquid except when said valve is in its open position, substantially as described. 5th. In a lamp or other gas generating apparatus in combination, a liquid chamber, means for retaining in position a consumable mass, a gas emission valve, a wick adapted to convey liquid to said mass, manually operated means for bringing said wick and said mass into and out of contact, and means for automatically retaining said valve in its open position during such contact, substantially as described. 6th. In a lamp or other gas generating apparatus in combination, a liquid chamber, means for retaining in position a consumable mass, a gas emission valve, a wick adapted to convey liquid to said mass, manually operated means for bringing said wick and said mass into and out of contact and means for automatically preventing the causing of such contact except when said valve is in its open position, substantially as described. 7th. In a lamp, in combination, a liquid chamber, a second chamber adapted to contain a consumable mass, a wick adapted to convey liquid to said mass, a shaft by which said wick is manually adjustable, a manually adjustable gas valve, and means for automatically retaining said valve in its open position when said wick is in contact with said mass, substantially as described. 8th. In a lamp, in combination, a liquid chamber, a second chamber adapted to contain a consumable mass, a wick adapted to convey liquid to said mass, a shaft by which said wick is manually adjustable, a gas valve and means for automatically preventing the bringing of said wick and said mass into contact except when said valve is in its open position, substantially as described.

**No. 59,516. Fly Paper. (Papier tue-mouches.)**

The O. and W. Thum Company, Grand Rapids, Michigan, U.S.A., 4th April, 1898; 6 years. (Filed 27th January, 1898.)

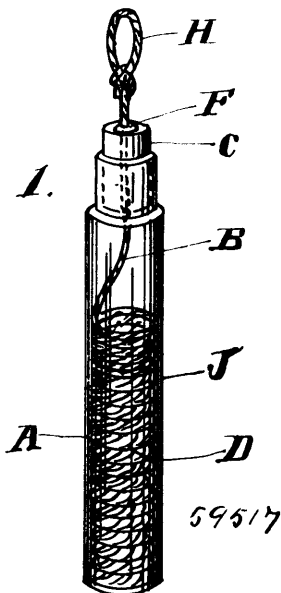
*Claim.*—1st. In combination with a core, a pair of discs, one at either end of the core, a web covered with fly catching compound wound upon said core and forming a roll having its ends in contact with the adjacent faces of said discs, each disc furnishing a seal for the ends of the said roll, and a suitable seal applied to the outer

layer of said roll so as to seal said outer layer at the points of contact with the discs, substantially as described. 2nd. In combination



with a pair of discs, a core at substantially right angles to the inner surface of said discs, a web provided with a sticky compound wound upon said core and forming a roll having its ends in contact with the adjacent faces of the discs, and a suitable sealing strip C transversely across the paper strip, and a suitable sealing at the points of intersection of the outer layer of web with the discs, substantially as described. 3rd. In combination with a core as A, a pair of sealing discs having their adjacent faces at right angles to the said core, a web, covered with fly catching compound wound upon said core forming a roll having its ends in contact with the adjacent surfaces of said discs, which discs furnish a sealing for the ends of said roll, a transverse sealing strip C, two rings of sealing material H, H, and a hole or opening E in a strengthening piece applied to the end of the paper for the purpose of sustaining the same when the paper is unrolled, substantially as described. 4th. In combination with a core, of two sealing discs having their adjacent faces arranged at right angles to said core, a web or strip covered with a sticky fly catching compound, wound upon and forming a roll upon said core, the ends of said roll being in contact with the adjacent faces of the discs, and two sealing rings H, H, composed of plastic material for preventing the sticky compound from escaping from the web or roll, said sealing rings being of such consistency as to allow the web or strip to be readily unrolled without removing said rings from the roll, substantially as described.

**No. 50,517. Fly Catching Device. (Attrape-mouche.)**



The O. and W. Thum Company, Grand Rapids, Michigan, U.S.A., 4th April, 1898; 6 years. (Filed 27th January, 1898.)

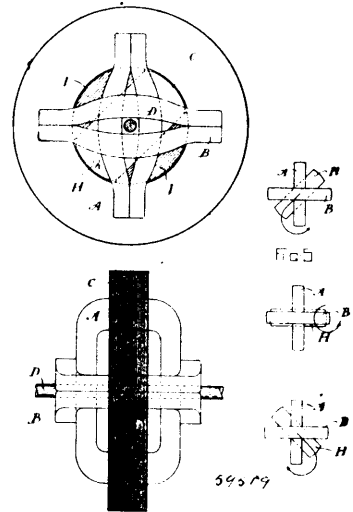
*Claim.*—In combination with a slender receptacle or holder, a web folded within the same, a stopper having an opening through which the web passes, said opening in said stopper being of sufficient size to remove all the surplus sticky compound before the web is withdrawn from the holder, and a seal for the opening in said stopper, said seal being of such consistency as to be readily removed by the drawing out of the web, substantially as described.

**No. 59,518. Rat Exterminating Compound. (Composé pour détruire les rats.)**

Frederick Witt, assignee of Friedrich Bardele, both of Milwaukee, Wisconsin, U.S.A., 4th April, 1898; 6 years. (Filed 9th August, 1897.)

*Claim.*—1st. A non-poisonous compound for exterminating rats, comprising a mixture of ground cork, with a thirst producing substance, such as salt or pepper, and a palatable plastic food adapted to attract the vermin, substantially as described.

**No. 59,519. Regulator for Altering Currents. (Régulateur pour courants alternatifs.)**

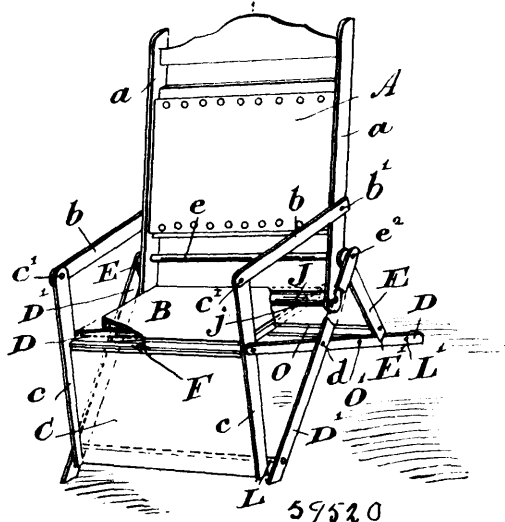


The Canadian General Electric Company, Toronto, Ontario, assignee of Charles P. Sternmetz, Schenectady, New York, 14th April, 1898; 6 years. (Filed 21st October, 1896.)

*Claim.*—1st. The method of regulating the electromotive force supplied to an alternating current system of distribution, which consists in varying the path of the magnetic lines of force passing between stationary coils in inductive relation, part of the coils in series in the main circuit, the remainder in shunt thereto, thereby causing more or less of the lines to cut the series coil in one or the other direction as desired, thus developing an electro-motive force therein either assisting or counteracting the main potential. 2nd. A feeder regulator for an alternating current system of distribution, comprising a secondary coil in series in the mains, a primary coil in shunt thereto, the coils being stationary and arranged at an angle of ninety degrees, and a magnetic structure surrounding the coils and provided with a rotatable member adapted to vary the path of the lines of force and thereby the inductive effect of one coil upon the other. 3rd. A feeder regulator for an alternating current system of distribution, composed of two stationary coils arranged at an angle to each other, a laminated iron magnetic structure furnishing a path for the lines of force between the coils, and a movable magnetic member arranged to vary the path of the lines of force, as set forth. 4th. A regular for an alternating current system of distribution, comprising a plurality of coils in induction relation, part in series in the main circuit, part in shunt thereto, a magnetic structure surrounding the coils, and a movable magnetic member inclosed by the coil and adapted to vary the path of the lines of force and thus the inductive effect of the coils; the movable magnetic member being composed of laminated iron occupying a part of the opening between the coils and a non-magnetic shield of good electric conductivity occupying substantially the remainder of the opening. 5th. A regulator for an alternating current system of distributing, comprising a plurality of coils, in inductive relation, part in series in the main circuit, part in shunt thereto, a magnetic structure surrounding the coils, and a movable magnetic member enclosed by the coils and adapted to vary the path of the lines of force and thus the inductive effect of the coils; the movable magnetic member being composed of laminated iron occupying a part of the opening between the coils and the non-magnetic shield attached to and moving with the iron occupying substantially the remainder of the opening. 6th. An alternating current apparatus, comprising a magnetic structure carrying coils in inductive relation,

part in series with the mains, and part in shunt thereto, and an element or bridge forming part of the magnetic circuit and movable relatively to the coils, the bridge varying by its changes of position the magnetic flux between the coils in direction and amount, and thereby regulating the electro-motive force maintained in the induced coil between maximum in one direction and maximum in the other direction, as set forth.

**No. 99,520. Chair. (Chaise.)**



David Benjamin Kennedy, Hull, Quebec, and Albert Hall, Ottawa, both in Canada, 4th April, 1898; 6 years. (Filed 17th March, 1898.)

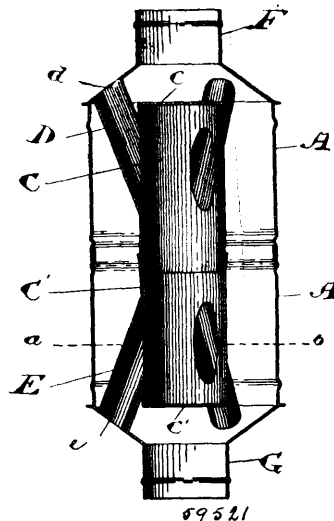
*Claim.*—1st. The combination with the back pivoted intermediately of the length on a suitable support and having a spindle extending between the lower ends thereof, of the front board provided with side bars pivoted intermediate of their length, said arms connecting the tops of the front side bars to the side bars of the back above its point and a suitable seat pivotally connected to the front side bars and designed to rest upon the lower spindle of the back, as and for the purpose specified. 2nd. In combination the back A, provided with a lower supporting spindle, the front F, having sides C, the cross pieces legs D, and D<sup>1</sup>, having pivotal supports at their upper ends, the supports E and spindle extending through the same, the sides of the back and the tops of the legs D<sup>1</sup>, and forming pivotal supports for the back intermediate of its length and the seat B detachably connected at the front to the side bars C and designed to rest formally on the spindle at the bottom of the back, as and for the purpose specified. 3rd. The combination with the adjustable back and adjustable front suitably connected and supported so as to move in unison during adjustment, of a seat pivoted at one end thereof and designed to be supported at the opposite end loosely between the bottom end of the back and the top and the end of the front, as and for the purpose specified.

**No. 59,521. Heating Drum for Stoves. (Poêle sourd.)**

Robert Wellington Biggar, Samuel J. Robertson, and James W. Bain, all of Toronto, Ontario, Canada, 5th April, 1898; 6 years. (Filed 16th March, 1898.)

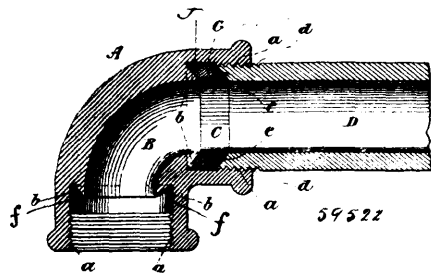
*Claim.*—1st. In a heating drum, the combination of a drum formed of two separable pieces and provided with collars to connect with the stove pipe, a heating cylinder formed of two separable pieces and closed at the top and bottom, held centrally within the drum so as to form a smoke chamber between its outer surface and the inner surface of the drum, one or more air inlet pipes or flues opening into the lower half of the heating cylinder and communicating with the outside air through holes formed in the bottom of the drum, and one or more air outlet pipes or flues opening into the upper half of the heating cylinder and discharging the heated air through holes formed in the top of the drum, substantially as specified. 2nd. A heating drum comprising the following elements, the upper half A, of the drum, the lower half A<sup>1</sup>, sleeved in the upper half and provided with collars F and G, and holes d and e respectively, the centrally-supported upper portion C, of the heating cylinder, the centrally-supported lower portion C<sup>1</sup>, sleeved on the upper half and closed at c and c<sup>1</sup> respectively, the outlet pipes or flues B, communicating between the upper portion of the heating cylinder and the holes d formed in the top of the drum, and the inlet pipes or flues E, communicating between the lower portion of the heating cylinder, and the holes e formed in the bottom of the drum, substantially as and for the purpose specified. 3rd. In a heating drum, the combination of a drum formed to connect with a stove pipe, a heating cylinder closed at the top and bottom and held centrally within the drum, one or more air inlet pipes or flues opening into the lower portion

of the heating cylinder and communicating with the outer air through holes formed in the drum at or near the bottom, and one or



more air outlet pipes or flues opening into the upper part of the heating cylinder and communicating with the outer air through holes formed in the drum at or near the top, substantially as and for the purpose specified.

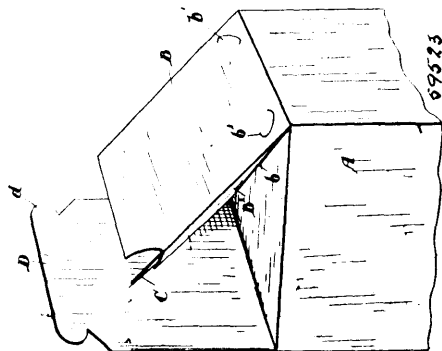
**No. 59,522. Pipe Coupling. (Joint de tuyaux.)**



John Francis Normoyle and Henry James Baack, both of the City of New York, U.S.A., 5th April, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—1st. The coupling sleeve A, having the threads a, band B, and inwardly bevelled shoulder b, combined with the washer C against said shoulder, and the pipe D having the bevelled end e for contact with said washer and corresponding with the bevel of said shoulder b, substantially as shown and described. 2nd. The coupling sleeve A having the threads a, band B, inwardly bevelled shoulders b, and recesses f, combined with the washers C in said recesses and against said shoulders, and the pipe D having the bevelled end e for contact with said washer and corresponding with the bevel of said shoulder b, substantially as shown and described.

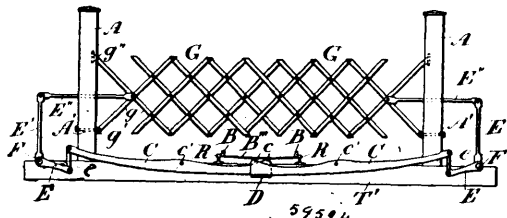
**No. 59,523. Folding Box. (Boite pliante.)**



Kilgour Brothers, assignees of Frederick George Alexander, all of Toronto, Ontario, Canada, 5th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. In a foldable paper box, the combination with the body of the box of the flaps B B', connected together by the corner fold and having a diagonal infold b in the flap B' and the flap C designed to be folded, so as to rest on top of the upper portion of the diagonally folded flap with the edge against the corner fold of the connected flaps and the flap D, and a suitable fastening for connecting it to the flap B, as and for the purpose specified. 2nd. In a foldable paper box, the combination with the body of the box of the connected flaps B B', the notch or hole in the corner fold, and the restraining flap C designed to extend substantially parallel to the end of the box when the commodity is being poured out, as and for the purpose specified.

**No. 59,524. Gate. (Barrière.)**



William Baillie and Robert Alexander Klock, both of Aylmer, Quebec, Canada, 5th April, 1898; 6 years. (Filed 22nd March, 1898.)

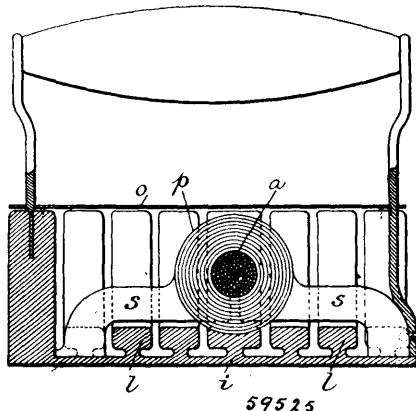
*Claim.*—1st. In an automatic railway gate, the combination with the rails of a railway track, of a depression frame adapted to be depressed by the flanges of the wheels, a pair of levers near each end of said depression frame placed transversely to the rails and having their inner ends in contact with the bottom of said frame, a link at the outer end of each lever, a gate post at each side of the track having a vertical retaining groove at its inner face, a shaft at the rear of each post parallel to the track, an arm at each end of said shaft engaged by said link, an upright arm upon each shaft at the rear of each gate post, a spring connecting said arm to the post and drawing the same towards the post, a rod pivoted to each of said upright arms passing through a slot in the gate post and to the first crossing joint of a lattice gate, two sections of a jointed folding lattice gate, each section having one lattice adjacent to the post pivoted at its foot to said post and the other adjacent lattice crossing it retained vertically sliding in the groove in said post, substantially as set forth. 2nd. In an automatic railway gate, the combination with the railway track, of a bar at each side close to the inner edge of the rail, cross ties connecting said bars into a frame, a bar similarly placed pivoted to each end of each of said bars at one end and held slidingly to the bottom of the track at the other, said end bars connected transversely by cross ties, a cross piece at the bottom near each end of the central bars, a pair of levers placed transversely to each side and having their inner ends curved upward and in contact with the bottom of said cross piece, and a spring operating to raise the inner ends of said levers and pressing them upwards, substantially as set forth. 3rd. In an automatic gate, the combination of two wings of a jointed folding lattice gate, a gate post at each side of the road, a bolt at the foot of each post, a vertical retaining groove in the upper part of the inner face of each of said posts, an adjacent lattice pivoted at its foot to said bolt, another adjacent lattice crossing it having a retaining head at its upper end adapted to slide in said retaining groove, a rod passing through a slot in each post and pivoted to the crossing joint of said adjacent lattices, and a lever operating said rod, substantially as set forth. 4th. In an automatic gate, the combination with the road, of a gate post at each side of the road, a shaft at the rear of each post parallel to the road, an upright lever or arm upon said shaft opposite each post, a horizontal arm at each end of each shaft, a lever fulcrumed under the road surface having one end coupled to said arm by a link and the other end extending to or near the centre of the road, a spring operating to lift the inner end of said lever, and a depression frame supported by the inner end of said lever, substantially as set forth.

**No. 59,525. Electric Heating Apparatus. (Appareil de chauffage électrique.)**

The American Electrical Heater Company, Detroit, Michigan, assignee of Richard A. L. Snyder and August F. Finnerholm, both of Pittsburg, Pennsylvania, all in the U.S.A., 5th April, 1898; 6 years. (Filed 24th September, 1896.)

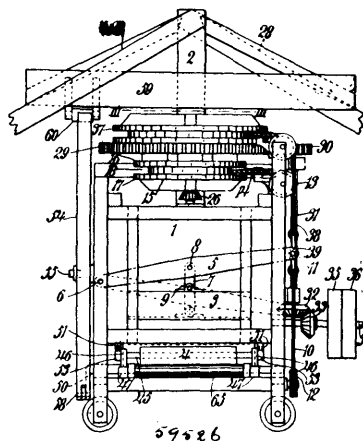
*Claim.*—1st. In an electric heating apparatus, an open magnetic core, a short circuited secondary entirely surrounding the said core, a primary coil wound on the outside of the said short circuited secondary, substantially as described. 2nd. In an electric heating apparatus, a short circuited divided secondary formed of the heavy parts of low resistance, and one or more plates or strips of comparatively high resistance provided with heat storing lugs, a soft iron core running through the heavy parts of said secondary circuit, a primary coil wound on the outside of the core and placed between

the heavy parts of the said secondary, but insulated therefrom, substantially as described. 3rd. In an electric heating apparatus, a



conductor, consisting of a plate or strips, provided with lugs or projections adapted to store up heat from said conductor and having connections therewith of slight electrical conductivity, substantially as described. 4th. In an electric heating apparatus, a short circuited secondary provided with a projection, the cross section of said secondary increasing in area as it approaches the projection, an iron core imbedded in said secondary, iron screws passing through the said projection to hold the core in place, a primary coil wound on and surrounding the secondary but insulated therefrom, substantially as described. 5th. In an electric heating apparatus, a short circuited secondary, the cross section of said secondary increasing in area towards the point to be heated, an iron core imbedded in said secondary, a primary coil, said primary coil wound on and surrounding the secondary, but insulated therefrom, substantially as described. 6th. In an electric heating apparatus, an iron plate, forming part of the magnetic circuit, a short circuited secondary, said secondary attached to said iron plate, a primary coil, said primary wound parallel to the said short circuited secondary, but separated therefrom by a non-heat conducting substance, a converter iron, said converter iron together with the said iron plate forming the magnetic circuit, substantially as described.

**No. 59,526. Brick-Making Machine. (Machine à faire la brique.)**

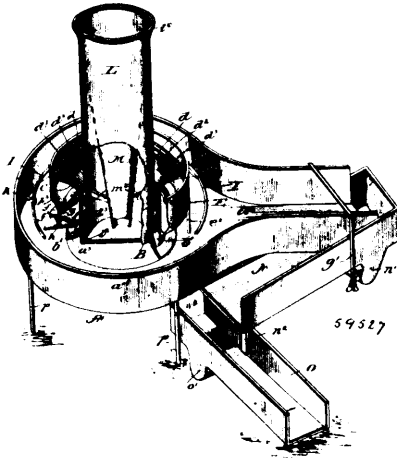


William Edgar Damon, Pomona, and Albert L. Bancroft, Walnut Creek, both in California, U.S.A., 5th April, 1898; 6 years. (Filed 9th December, 1897.)

*Claim.*—1st. In a brick machine, the combination of a clay-receiver, a plunger, a lever for raising the plunger, a wheel, means for operating the wheel, trip mechanism in connection with the wheel, a flexible connection between the trip mechanism and plunger for forcing the plunger downward, and a like wheel, trip mechanism and connection for raising and dropping the plunger, substantially as set forth. 2nd. In a brick machine, the combination of a clay-receiver, a plunger, a lever for raising the plunger, upper and lower wheels supported on the machine, trip mechanism in connection with said wheels, and a flexible connection between the trip mechanism and the lever, one of said wheels being of greater diameter than the other wheel, substantially as set forth. 3rd. In a brick machine, the combination of a clay-receiver, a

plunger, a lever for raising the plunger, upper and lower wheels supported on the machine, trip mechanism in connection with said wheels, and a flexible connection between the trip mechanism and the lever, said trip mechanism being operated at different periods in the revolution of the wheels to which they are connected, substantially as set forth. 4th. In a brick machine, the combination of a clay-receiver, a plunger, upper and lower trip-wheels, suitable trip mechanism, means for connecting the trip mechanism with the plunger, a master-wheel located on the same support as the trip-wheels, and suitable gearing in connection with the master-wheel for revolving the same, substantially as set forth.

**No. 59,527. Amalgamating Machine.**  
(Machine à amalgamer.)



Achilles Allen, Merrit Alderman Baker and William Henderson Bailey, all of Milton, Oregon, U.S.A., 5th April, 1898; 6 years. (Filed 29th December, 1897.)

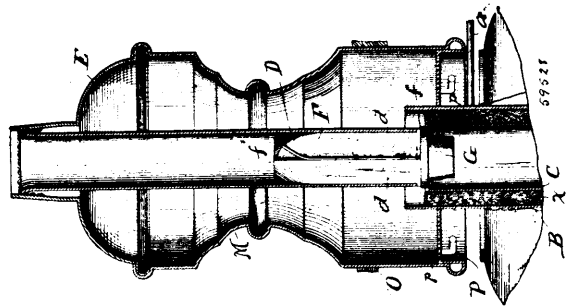
*Claim.*—1st. An amalgamating machine, consisting of a trough A, suitably supported, so as to be slightly inclined, and having an outlet  $a^2$ , a central opening in such trough with an upwardly projecting flange  $a^3$ , the trough or vat B mounted over the opening in trough A, the plate or riffle C, the trap E, the circular plates or collars  $f, f^2$ , the cylinder L, provided with a receiver M, and suitable sluices and supports therefor for carrying off the refuse, the parts being combined, substantially as set forth. 2nd. An amalgamating machine, consisting of a trough A, suitably supported so as to be slightly inclined and having an outlet  $a^2$ , a central opening in such trough with an upwardly projecting flange  $a^3$ , the trough or vat B mounted over the opening in the trough A, the plate or riffle C, the trap E, the circular plates or collars  $f, f^2$ , the cylinder L, provided with a receiver M, means for supporting a blanket around the trap E for the purposes described, and suitable sluices and supports therefor for carrying off the refuse, the parts being combined, substantially as set forth. 3rd. An amalgamating machine, comprising a trough A having an outlet  $a^2$ , a mercury vat B supported on said trough, a receiver discharging into said vat, a riffle or plate C arranged about the upper edge of said vat, and a trap E beneath and surrounding said riffle, substantially as described. 4th. An amalgamating machine, comprising a trough A having an outlet  $a^2$ , a mercury vat B supported on said trough, a receiver discharging into said vat, a riffle or plate C arranged about the upper edge of said vat, a trap E beneath and surrounding said riffle and supported independently of said receiver, and amalgamating plates beneath said trap on which the overflow from said trap will impinge, substantially as described. 5th. An amalgamating machine, comprising a trough A having an outlet  $a^2$ , a mercury vat B supported on said trough, a receiver discharging into said vat, a riffle or plate C arranged about the upper edge of said vat, a trap E beneath and surrounding said riffle, amalgamating plates beneath said trap, and a blanket suitably supported so as to surround said trap and descend to the trough and catch the float-gold, substantially as described.

**No. 59,528. Lamp.** (Lampe.)

The Standard Gas Company, Chicago, Illinois, assignee of Louis W. Carrol and Frank B. Wentworth, both of Sumner, Iowa, all in the U.S.A., 5th April, 1898; 6 years (Filed 24th December, 1897.)

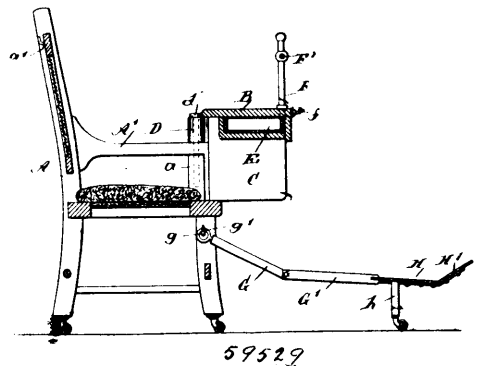
*Claim.*—1st. The combination with a single cylinder Bunsen burner tube having gas induction ports and vapor induction ports of a wick tube, the upper end of which terminates at the side of the Bunsen tube and in close proximity to its vapour ports, substantially as set forth. 2nd. The combination with a pair of concentric wick tubes, of a Bunsen burner tube rising from the upper end of the

inner wick tube and having vapor induction ports at its lower end, substantially as set forth. 3rd. The combination with a pair of con-



centric wick tubes, the outer tube rising above the inner tube, of a Bunsen tube rising from the inner wick tube and having vapour induction ports at its lower end, substantially as set forth. 4th. The combination with a pair of concentric wick tubes, the outer tube rising above the inner tube, of a Bunsen tube rising from the inner wick tube and having vapour induction ports at its lower end and air induction ports above the vapour ports, substantially as set forth. 5th. The combination with a pair of concentric wick tubes, of a Bunsen burner tube rising from the upper end of the inner wick tube and having vapour induction ports at its lower end, and an imperforate case inclosing the upper ends of the wick tubes and the ported portion of the vapour tube, and being open at its lower end, substantially as set forth. 6th. The combination with a Bunsen burner tube, of deflecting blades located within the tube between its ports and its discharge end, and being oblique to axis, substantially as set forth. 7th. The combination with a pair of concentric wick tubes, of a plug fitting the upper end of the inner tube, a plurality of radiating blades rising from the plug and having their upper ends oblique to the axis of radiation, and a Bunsen tube inclosing the blades and being of less diameter than the outer wick tube, and having a port at its lower end air induction ports between its lower end and the upper ends of the blades, substantially as set forth. 8th. In a vapour burner of the type described, the combination with a burner tube, of an imperforate gallery radiating from the tube, and an imperforate chimney rising from the gallery and making therewith a substantially air tight joint, substantially as set forth. 9th. In a lamp, the combination with a burner and its casing, of a chimney resting upon the casing, and spring arms secured to the burner casing and bearing the top of the chimney, substantially as set forth. 10th. In a lamp, the combination with a burner and its casing, of bow spring arms secured to the casing and extending upwardly, a metal chimney secured to the upper ends of such arms, and a glass chimney adapted to fit between the burner casing and the lower end of the metal chimney, and to be secured by the downward pressure of the latter due to the tension of the spring arms, substantially as set forth.

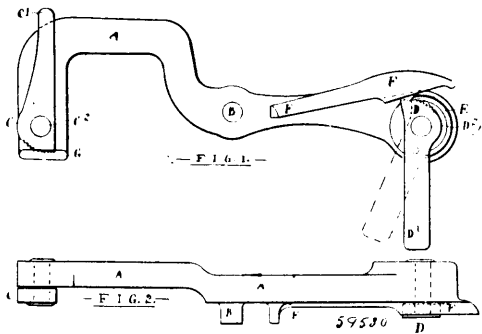
**No. 59,529. Invalid's Chair.** (Fauteuil d'invalides)



Juana Gonzalez de Yznaga, Brownville, Texas, U.S.A., 5th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—A chair having a seat and having arms projecting out forwardly over the seat, pillars rested on the seat and supporting the outer portions of the arms, a table having a top plate, and end plates fixed to the top plate and projecting downward therefrom, the end plates having their inner corners rested on the seat of the chair, eyes respectively secured to the end plates and respectively located above the outer ends of the arms of the chair, the arms and the pillars having passages therein registering with the eyes, and independently removable bolts passing downward through the eyes and through the passages in the arms and pillars.

**No. 59,530. Wire Strainer. (*Passoire de fil de fer.*)**

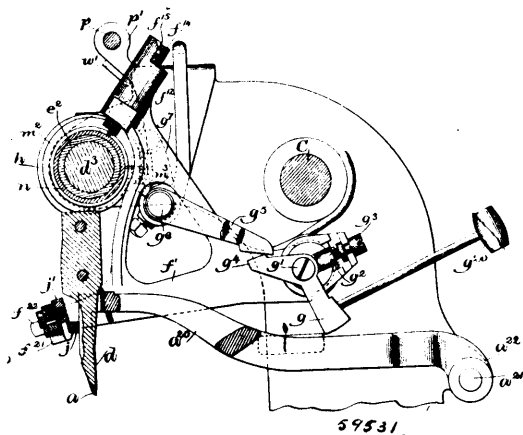


James Daniel Walsh, Commercial Chambers, Manse street, Dunedin, Otago, New Zealand, 5th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. In an improved wire strainer two revolvibly mounted cams such as C and D arranged upon a main casting, such casting being formed with a pin or fulcrum B, and the same cams being provided with handles such as Cl and D1, and set in such a position as will enable their jaws to come into close contact with the projecting lugs in the main casting such as F and G respectively, the whole appliance being arranged substantially as described and as illustrated. 2nd. In combination with a revolvibly mounted cam D above claimed, a controlling spring such as E for the purposes set forth. 3rd. In an improved wire strainer, a double-lever handle such as H and H<sup>2</sup>, arranged so as to constitute a cutter or shear, and the main part of the lever handle terminating in a cam jaw H<sup>3</sup>. 4th. In combination with the above claimed lever handle a pivotally mounted extension plate such as J having a recessed boss thereon such as J<sup>1</sup>, through which a hole J<sup>2</sup> is formed substantially as described and as illustrated. 5th. The herein specified wire strainer constructed and arranged substantially as described and illustrated as and for the purposes set forth as a combination of parts.

**No. 59,531. Sole Trimming and Chanelling Machine.**

(*Machine à dresser et échanrer les semelles.*)



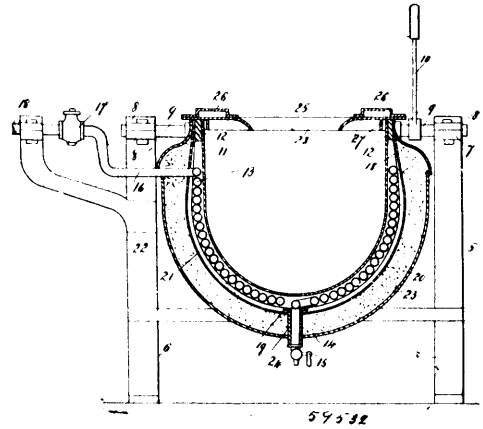
Zachary Taylor French and William Christian Meyers, both of Boston, Massachusetts, U.S.A., 5th April, 1898; 6 years. (Filed 7th March, 1898.)

*Claim.*—1st. In a machine for operating upon the soles of boots and shoes, a movable guide or support, acting along both the shank and fore-part, and a movable guiding device acting along the fore-part only, substantially as described. 2nd. In a machine for operating upon the soles of boots and shoes, a movable guide or support for the work, and a movable guiding device acting independently of or conjunctively with the aforesaid movable guide, substantially as described. 3rd. In a machine for operating upon the soles of boots and shoes, a movable guide or support acting along both the shank and fore-part, and a movable guiding device, normally held out of engagement with the boot or shoe, and means for moving it into engagement with said boot or shoe, substantially

as described. 4th. In a machine for operating upon the soles of boots and shoes, a movable guide or support acting along both the shank and fore-part, means for moving it to vary the position of the boot or shoe in passing from the shank to the fore-part, or the reverse, and a movable guiding device for the fore-part acting independently of or conjunctively with the aforesaid guide or support, substantially as described. 5th. In a machine for operating upon the soles of boots and shoes, a movable guide or support acting along both the shank and fore-part, and a movable guiding device acting along the fore-part only, in conjunction with and outside of the aforesaid guide, and means for moving said guiding device, substantially as described. 6th. In a machine for operating upon the soles of lasted boots and shoes, a movable guide or support operating along both the shank and the fore-part, shaped and adapted to enter the crease, and a movable guiding device operating along the fore-part only, shaped and adapted to bear against the last, substantially as described. 7th. In a machine for operating upon the soles of lasted boots and shoes, two movable guides or supports, one operating along both the shank portion and fore-part, and the other operating around the fore-part only, a treadle connected with one of said guides and means for operating the other guide controlled also by said treadle, substantially as described. 8th. In a machine for operating upon the soles of boots and shoes, a movable guide or support acting along both the shank and fore-part, means for moving it to vary the position of the boot or shoe in passing from the shank to the fore-part, or the reverse, and a guide for the fore-part carried by the means employed for moving the aforesaid guide support, substantially as described. 9th. In a machine for operating upon the soles of boots and shoes, a pivoted guide or support acting along both the shank and fore-part, and a pivoted guiding device for the fore-part, said guide or support and said guiding device turning on different centres, a connection between said guide or support and said guiding device, whereby the former is operated by the latter, and a treadle connected with the said guiding device for operating it, substantially as described. 10th. In a machine for operating upon the soles of lasted boots and shoes, two movable guides or supports, one operating continuously along the shank portion and fore-part, and the other operating along the fore-part only, a connection between said guides or supports whereby one operates the other, and a treadle connected with the operating guide or support, substantially as described. 11th. In a machine for operating upon the soles of boots and shoes, two movable guides or supports, one operating along both the shank portion and fore-part, and the other operating around the fore-part only, a pin projecting from one of the said guides or supports which lies in the path of movement of a projection on the other guide or support, whereby one operates the other, and a treadle connected with the operating guide or support, substantially as described. 12th. In a machine for operating upon the soles of boots and shoes, a movable guide or support, and an operating device therefor, made adjustable to vary the extent of movement produced by it, and a guide or support actuated by said operating device, substantially as described. 13th. In a machine for operating upon the soles of boots and shoes, two movable guides or supports, one operating along both the shank portion and fore-part, and the other operating around the fore-part only, and automatic means for automatically operating both of said guides or supports, substantially as described. 14th. In a machine for operating upon the soles of boots and shoes, a guide or work-support adapted to act all around that portion of the boot or shoe that is being operated upon, and an independent fore-part guide normally held out of engagement with the boot or shoe, and means for bringing it into engagement with the boot or shoe, and means for moving both said guide or work-support and said fore-part guide while they are both engaging and acting around the fore-part, substantially as described. 15th. In a machine for operating upon the soles of boots and shoes, a guide or work-support adapted to act all around that portion of the boot or shoe that is being operated upon, and an independent fore-part guide normally held out of engagement with the boot or shoe, and automatic means for moving both said guide or work-support, and said fore-part guide while they are engaging and acting around the fore-part, substantially as described. 16th. The combination with one or more knives adapted to act upon the soles of lasted boots and shoes of a movable guide or support operating along both the shank portion and fore-part, and a movable guiding device adapted to operate around the fore-part only, to vary the position of the boot or shoe with relation to said knives while they are in operation, substantially as described. 17th. The combination with one or more knives adapted to act upon the soles of lasted boots and shoes, of a movable guide or support acting along both the shank portion and fore-part and automatic means for automatically operating said guide or support to vary the position of the boot or shoe with relation to said knives while they are in active operation, substantially as described. 18th. In a machine for operating upon the soles of lasted boots and shoes, the combination of a continuously acting welt or work support at the welt side of the sole movable transversely to the progress of the work, a four motioned plate also acting upon the welt side of the sole, a vibrating sole support acting against the bottom of the sole and co-operating with the four motioned plate to feed along the shoe while held against said movable work support, substantially as described. 19th. In a machine for operating upon the soles of boots and shoes, a spring pressed vibrating sole support, a movable work support or guide acting along both the shank portion and fore-part, and an intermittently acting feeding plate, substantially as described.

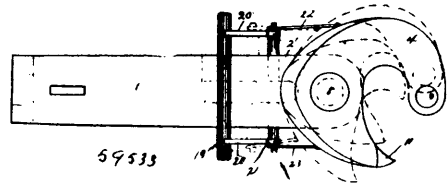
bed. 20th. In a machine for operating upon the soles of boots and shoes, a channel knife, and a guide or support for the work acting along both the shank and fore-part, and means for moving said guide or work support and said channeling knife toward and from each other, substantially as described. 21st. In a machine for operating upon the soles of boots and shoes, a channel knife, a pivoted guide or work-support adapted to act along both the shank and fore part, the pivoted arm  $f^1$  and means for moving it, a connection between said arm and said channel knife whereby the latter is moved by the former, and a connection between said arm and said guide or support, whereby the latter is also moved by the former, substantially as described. 22nd. In a channeling machine, a channel knife and a fore-part guide, movable toward and from each other, and adjusting devices for adjusting said channel knife toward and from said guide, connected with the means employed for moving said guide toward and from the channel knife, and another guide or support for the work acting along both the shank and fore part, also movable with relation to said channel knife, substantially as described. 23rd. In a channeling machine, a channel knife, and a fore part guide movable toward and from each other, an operating device for said guide for moving it toward and from the channel knife and adjusting devices for adjusting said channel knife toward and from the guide, connected with and operated by the means employed for moving said guide, and another guide or support for the work acting along both the shank and fore-part, also movable with relation to said channel knife and operated by the means employed for moving said fore-part, substantially as described. 24th. In a trimming and channeling machine, a trimming knife, a fore-part guide freely movable with relation to the trimming knife during the trimming operation, a channel knife, and adjusting devices therefor connected with the means employed for moving said fore-part guide, and another guide or support for the work acting along both the shank and fore-part, also movable with relation to said knives, and operated by the means employed for moving the fore-part guide, substantially as described. 25th. In a machine for operating upon the soles of boots and shoes, the combination of a continuously acting movable guide or welt-support against which the work is pressed bearing upon the welt side of the sole, a movable sole-support carrying a channeling knife, a plate at the welt-side of the sole acting in conjunction with said sole support to feed along the work, which also serves as a cutting block, and a vibrating trimming knife acting against said cutting block, and a limiting stop for said movable guide, substantially as described. 26th. In a machine for operating upon the soles of lasted boots and shoes, a guide or work-support acting along both the shank and fore-part, means for lowering it quickly when acting upon one shoe of a pair to vary the position of said shoe with relation to the operating tools and means for thereafter gradually raising it, substantially as described. 27th. In a machine for operating upon the soles of lasted boots and shoes, a guide or work-support acting along both the shank and fore-part, means for lowering it slowly when acting upon one shoe of a pair to vary the position of said shoe with relation to the operating tools, and means for thereafter quickly raising it, substantially as described. 28th. In a machine for operating upon the soles of lasted boots and shoes, a guide or work-support acting along both the shank and fore-part, two independent devices for operating it to vary the position of the shoe with relation to the operating tools, one causing or permitting a slow movement of said guide or work-support, and the other causing or permitting a quick movement thereof, substantially as described. 29th. In a machine for operating upon the soles of lasted boots and shoes, a guide or work-support acting along both the shank and fore-part treadle-controlled mechanism for operating it, and automatic means for automatically operating it, said operating devices working independently first one and then the other on the respective shoes of a pair. 30th. In a machine for operating upon the soles of lasted boots and shoes, a work-support acting along the shank and fore-part, means for lowering it, a fore-part guide, means for lowering it, and automatic mechanism for raising said work-support and fore-part guide conjunctively, substantially as described. 31st. The channel knife  $b$  projecting from a plate having a post  $b^2$ , friction roll  $b^3$  removably placed on said post  $b^2$ , a collar  $b^{50}$  removably placed on said post, and a locking device, substantially as described therefor. 32nd. In a machine for operating upon the soles of lasted boots and shoes, a movable guide or work-support acting along both the shank and fore-part, pivoted arm  $f^1$ , an actuating arm  $E$  operated by it for moving said guide or work-support, substantially as described. 33rd. In a machine for operating upon the soles of lasted boots and shoes, the combination of a pivoted spring-controlled arm  $a^{20}$ , guide attached thereto and pin  $i$  (the pivoted arm  $f^1$  and block  $i^1$  carried by it adapted to engage said pin  $i$  and thereby move said arm  $a^{20}$ , substantially as described.

a double casing enclosing the first-named casing, the inner wall of which is held at a pre-determined distance therefrom, a packing of



asbestos between the walls of said double casing, and means for revolving said kettle, substantially as and for the purpose described.

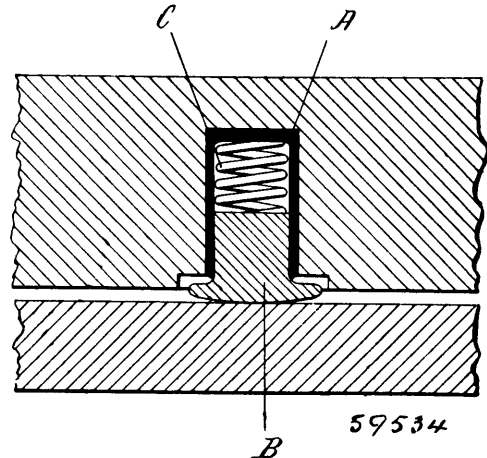
**No. 59,533. Car Coupler. (Attelage de chars.)**



Andrew Jackson Beard, Eastlake, Alabama, U.S.A., 5th April, 1898; 6 years. (Filed 19th March, 1898.)

*Claim.*—1st. In a draw-head, the combination with the shank having projecting lugs formed on the front end thereof, of the head having slots formed therein to receive the shank-lugs, the jaw engaged in slots formed in the head, the pin pivotally connecting all the parts together, and the sliding locking device to engage the recesses formed in the head and jaw, substantially as and for the purpose described. 2nd. In a car-coupling, the combination with the operating-rod having two downwardly-extending arms pivotally connected to a transverse bar attached to the locking device of a rod connecting the head to the lock-bar, and a rod connecting the side jaw to the lock-bar, substantially as described.

**No. 59,534. Method and Apparatus for Hanging Window Sashes. (Méthode et appareil pour suspendre les châssis.)**



William James Hoyle Richards, Lewisham, Sidney, Australia, 5th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. In an improved window-sash frictional buffer-grip and its attachment, the combination and arrangement consisting of a bush, such as A, in which is placed a spiral spring, a buffer, such as B, and a stud, such as D, substantially as set forth. 2nd. The combination and arrangement, with an ordinary window-sash, of a bush A, spiral spring C, stud D, and buffer B, of the nature and for the purpose hereinbefore fully described.

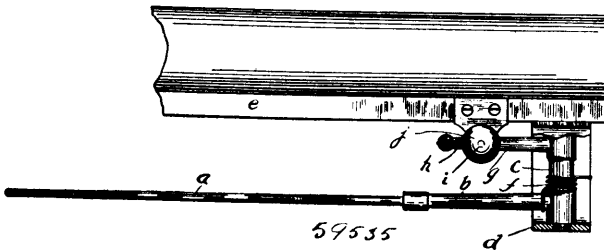
**No. 59,532. Kettle. (Chaudron.)**

John Cleave, Devonshire, England, 5th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—The herein described kettle, comprising a pivotally-mounted kettle, a continuous coil of pipe surrounding the same and being in contact therewith, a stem-pipe communicating with said coil through the universal joint, a discharge-spout connected with the lower end of said coil, a casing enclosing the same coil,



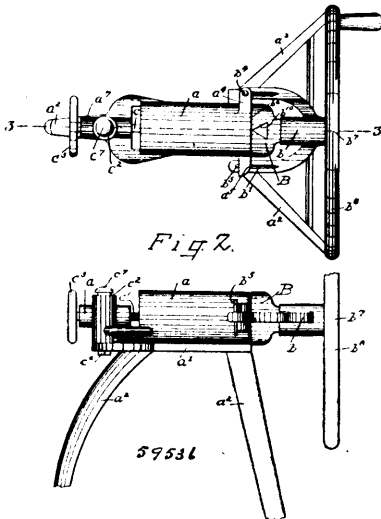
**No. 59,535. Hat Holder. (Porte-chapeau.)**



William Johnston, Somerville, Massachusetts, U.S.A., 5th April, 1898; 6 years. (Filed 19th March, 1898.)

*Claim.*—1st. A hat-holder, comprising in its construction the bracket *d*, adapted to be secured to the under side of a seat, combined with the standard *c*, journaled in the bracket, and provided with the holder-loop *a*, its shank *b* and the arm *g*, a spring *f* coiled about the standard and having one end secured thereto and the other end secured to a fixed part, the guide-eye *i*, and cord *h*, secured at one end to the arm and extending through the guide-eye, as set forth. 2nd. A hat-holder comprising in its construction the bracket *d*, adapted to be secured to the under side of a seat, combined with the standard *c*, journaled in the bracket and provided with the holder-loop *a*, its shank *b*, and the arm *g*, the standard being set on an incline in the bracket, whereby the holding-loop and its shank will normally, by their own gravity, be swung under the seat, the guide-eye *i* and cord *h* secured at one end to the arm *g* and extending through the guide-eye, as set forth.

**No. 59,536. Cutting Machine. (Coupoir.)**

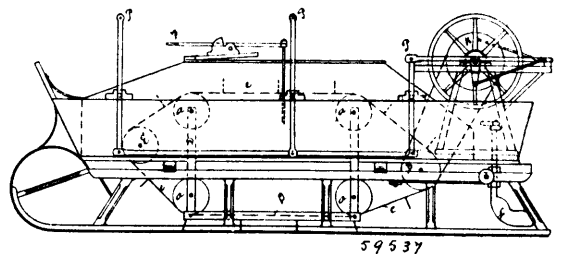


Milton Elliott Card, Cazenovia, New York, U.S.A., 5th April, 1898; 6 years (Filed 7th January, 1898.)

*Claim.*—1st. The combination of a frame, and a rotary cutter supported by the frame and provided with oppositely arranged cutting edges having their inner edges or adjacent ends separated and arranged on opposite sides of the axis of the cutter, substantially as and for the purpose specified. 2nd. The combination of a frame, a rotary cutter-head supported by the frame, and knives secured to the cutter-head and having their cutting edges extended outwardly from points arranged outside of the axis of the cutter-head, substantially as and for the purpose specified. 3rd. The combination of a frame, a rotary cutter-head supported by the frame, and oppositely arranged knives removably secured to the cutter-head and having their cutting edges arranged substantially parallel with each other on opposite sides of a line drawn through the axis of the cutter-head, the inner or adjacent ends of said cutting edges being separated from each other, substantially as and for the purpose specified. 4th. The combination of a frame, a rotary cutter-head supported by the frame, and formed with a substantially flat face arranged at substantially right-angles with the axis of the cutter-head, said face being provided with a diametrical inwardly extending groove, and oppositely arranged knives secured to the substantially flat face of the cutter-head, and having their cutting edges extended beyond opposite sides of the groove and arranged on opposite sides of a line drawn through the axis of the cutter-head, substantially as and for the purpose described. 5th. The combination of a frame provided with a receiving chamber having one end open, a rotary cutter supported by the frame and arranged adjacent to the open end of the receiving chamber, said cutter being provided with oppositely arranged cutting edges hav-

ing their inner or adjacent ends separated and arranged on opposite sides of the axis of the cutter, a plunger movable within the receiving chamber towards and away from the cutter, substantially as and for the purpose specified. 6th. The combination of a frame provided with a receiving chamber having one end open, an arm flexibly connected to the frame, a rotary cutter supported by the arm, and a plunger movable within the receiving chamber towards and away from the cutter, substantially as and for the purpose set forth. 7th. The combination of a frame provided with a receiving chamber having one end open, a substantially U-shaped arm projecting beyond the open end of the receiving chamber, one end of said arm being flexibly connected to the frame and its opposite end being detachably connected to said frame, a rotary cutter supported by the frame and arranged adjacent to the open end of the receiving chamber, said cutter being provided with oppositely arranged cutting edges having their inner or adjacent ends separated and arranged on opposite sides of the axis of the cutter, and a plunger movable within the receiving chamber towards and away from the cutter, substantially as and for the purpose set forth. 8th. The combination of a frame provided with journal-bearing and a receiving chamber having one end open, a rotary cutter supported by the frame and arranged adjacent to the open end of the receiving chamber, a plunger movable within the receiving chamber towards and away from the cutter and provided with a threaded rod or stem revoluble in the journal-bearing, and a non-revoluble nut having its threaded face movable into and out of engagement with the threaded rod or stem, substantially as and for the purpose specified. 9th. The combination of a frame provided with a journal-bearing and a receiving chamber having one end open, a rotary cutter supported by the frame, and having a substantially flat face arranged adjacent to the open end of the receiving chamber at substantially right angles with the axis of the cutter-head, said face being provided with a diametrical inwardly extending groove, oppositely arranged knives secured to the substantially flat face of the cutter-head and having their cutter edges extended beyond opposite sides of the groove and arranged on opposite sides of a line drawn through the axis of the cutter-head, a plunger movable within the receiving chamber towards and away from the substantially flat face of the cutter and provided with a threaded rod or stem revoluble in the journal-bearing, and a non-revoluble nut having its threaded face movable into and out of engagement with the threaded rod or stem, substantially as and for the purpose specified. 10th. The combination of a frame provided with a journal-bearing, having an inwardly extending socket, and with a receiving chamber having one end open, a rotary cutter arranged adjacent to the open end of the receiving chamber, a plunger movable within the receiving chamber towards and away from the cutter and provided with a threaded rod or stem revoluble in the journal-bearing, a non-revoluble nut having its threaded face movable into and out of engagement with the threaded rod or stem, and a spring for holding the non-revoluble nut in its operative position, substantially as and for the purpose specified. 11th. The combination of a frame provided with a journal-bearing having an inwardly extending socket, and with a receiving chamber having one end open, a rotary cutter adjacent to the open end of the receiving chamber, a plunger movable within the receiving chamber towards and away from the cutter provided with a threaded rod or stem revoluble in the journal-bearing, a reciprocating non-revoluble nut arranged in the socket and having its threaded face movable into and out of engagement with the threaded rod or stem, and a spring within the socket for forcing the nut into its operative position, substantially as and for the purpose specified. 12th. The combination of a frame provided with a journal bearing and a receiving chamber having one end open and its inner face formed with lengthwise ribs or shoulders, a rotary cutter supported by the frame and arranged adjacent to the open end of the receiving chamber, a plunger movable within the receiving chamber towards and away from the cutter and having grooves in its outer edge for receiving said lengthwise ribs, said plunger being provided with a threaded rod or stem revoluble in the journal-bearing, and a non-revoluble nut having its threaded face movable into or out of engagement with the threaded rod or stem, substantially as and for the purpose set forth.

**No. 59,537. Snow Locomotive. (Locomotive à neige.)**

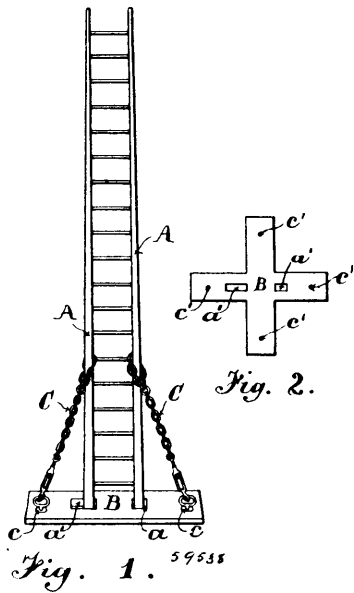


Sigurdur Anderson, Winnipeg, Manitoba, Canada, 5th April, 1898; 6 years. (Filed 7th February, 1898.)

*Claim.*—1st. The combination and construction of the propelling chain and beater C, with the mode of propelling same by aid of the

driving drum B, substantially as and for the purpose hereinbefore set forth. 2nd. The combination and construction of lever F, and frame D, for raising and lowering said chain, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of levers P, P, P, P, with the machinery for driving the propelling chain by manual power, substantially as and for the purpose hereinbefore set forth.

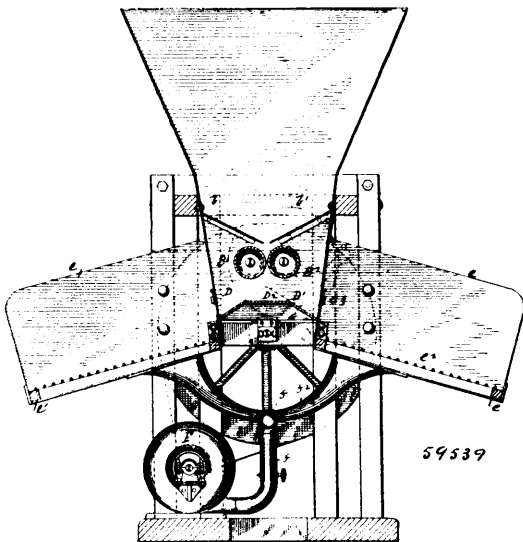
**No. 59,538. Ladder Support.** (*Support pour echelles.*)



Henry Victor Chandler, 11 Gorst Road, Wandsworth Common, Surrey, England, 5th April, 1898; 6 years. (Filed 12th February, 1898.)

*Claim.*—1st. A safety appliance for ladders and for like purposes, consisting essentially of a suitably shaped non-slipping stand or base B, in which is formed one or more recesses a, a', to receive the feet of the ladder A to prevent same slipping, substantially as described and shewn. 2nd. In combination with a safety appliance for ladders and for like purposes, consisting essentially of a suitably shaped stand or base B, in which is formed one or more recesses a, a', to receive the feet of the ladder A, one or more guys or lanyards C attached at one end to the base B, and at the other to the ladder A, substantially as described and shewn.

**No. 59,539. Ore Separator.** (*Separeur de minerai.*)

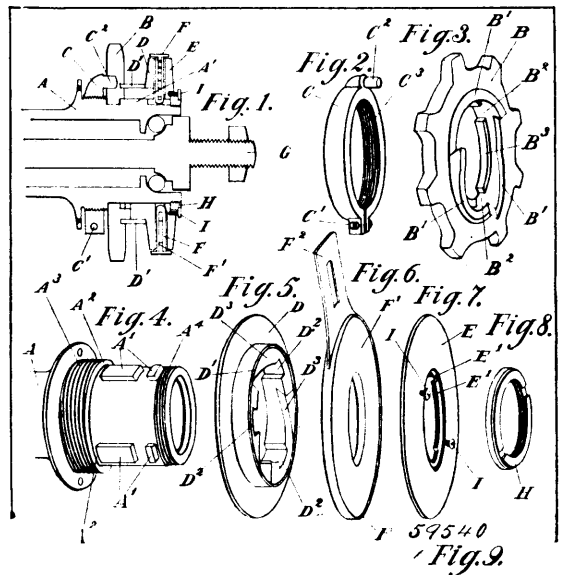


George H. Chappell, Westwood, New Jersey, U.S.A., 5th April, 1898; 6 years. (Filed 16th September, 1897.)

*Claim.*—1st. The process of separating or recovering metals, consisting in reducing their ores to a comminuted condition, then feeding the same on to the surface of a woven fabric and simultan-

cously forcing a current, or currents of air upward through the fabric, whereby the heavier metallic particles remain upon the fabric and the lighter particles of foreign material are carried upward and away, substantially as set forth. 2nd. In a separator, the combination of crushing surfaces, a fabric upon which the crushed material is fed, and means for creating an air current or currents upward through the fabric, substantially as specified. 3rd. In a portable separator, the combination of a hopper, a pair of crushing rollers at the lower portion thereof, deflecting plates delivering material to the space between the rolls, a fabric upon which the crushed material is fed, a blower for creating a current or currents upward through the fabric, and means for driving the pair of rolls and the blower, substantially as specified. 4th. The combination of a surface formed by a fabric, an adjustable support for changing the inclination of the surface, and a blower whose outlet has an adjustable connection with said support, substantially as specified. 5th. A portable separator, having, in combination, a blower with an outlet which may be regulated, a plurality of surfaces formed by fabrics of woven silk under which said blower discharges, and the inclination of which may be changed, crushing rolls delivering their comminuted material upon said surfaces, and means for guiding the material to the rolls, substantially as specified.

**No. 59,540. Bicycle Brake.** (*Frein de bicycles.*)



Percy Ernest Doolittle, Toronto, Ontario, Canada, 5th April, 1898; 6 years. (Filed 7th March, 1898.)

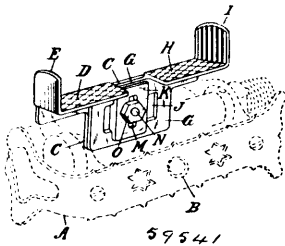
*Claim.*—1st. In a brake mechanism for bicycles and similar vehicles, in combination with the driving means a disc fixed against lateral movement, a lateral moving disc and a support for said discs, a non-rotating contact plate between said discs and fixed to the frame of the vehicle independently of said supports, and means to clamp said discs and plate together by backward movement of the driving means, substantially as described. 2nd. In a brake mechanism for bicycles and similar vehicles, in combination with sprocket wheel having a limited rotatory movement on the hub and operated by back pedalling or its equivalent, two or more rotating discs mounted non-rotative each to the other and an intermediate disc or discs fixed against rotation and means for clamping them together and releasing them, substantially as described. 3rd. In a brake mechanism for bicycles, motor carriages and other similar vehicles, a series of rotative and non-rotative brake discs mounted alternately on and around a revolving hub or shaft, the non-rotative discs being made hollow and means to force them into engagement and to release them from engagement, substantially as described. 4th. In brake mechanism for bicycles and similar vehicles, having a sprocket or driving wheel with limited rotatory motion under a controlled resistance, a controller consisting of a ring surrounding the hub or fixed part with a pin or lug engaging in the sprocket or wheel, such ring being fitted with a left hand thread to cause it to engage the sprocket or wheel laterally when the latter is in driving position, substantially as described. 5th. Brake mechanism for bicycles and similar vehicles as shown and illustrated in the sub-joined drawings, Figs. 1 to 9.

**No. 59,541. Bicycle Toe-Clip.**

(*Arrête de bout de pieds pour pédales de bicycles.*)

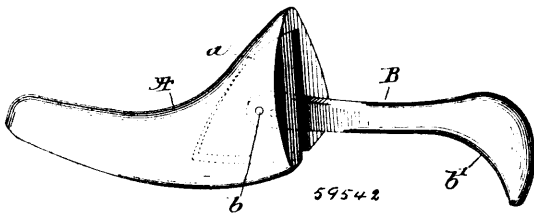
Alonzo Carley, Delaware Township, Ontario, Canada, 5th April, 1898; 6 years. (Filed 17th January, 1898.)

Claim—1st. The plates C and G, provided with the upwardly and inwardly-inclined overhanging flanges E and I respectively,



and in which a series of vertical elongated openings F and lateral elongated opening J is formed respectively, in combination with the plate or washer K in which the opening M is formed, and means for securing these parts together and to a bicycle pedal, substantially as and for the purpose set forth. 2nd. The plates C and G, provided with the upwardly and inwardly-inclined overhanging flanges E and I respectively, with the horizontal flanges D and H respectively, and with a series of elongated vertical openings F and a lateral elongated opening J respectively, in combination with the plate or washer K, provided with a raised portion K and the opening M, and means for securing these parts together and to a bicycle pedal, substantially as and for the purpose set forth.

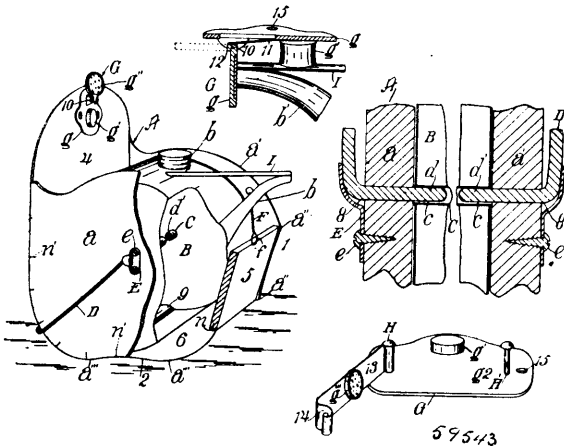
No. 59,542. Shoe Form. (Forme pour chaussures.)



James Henry Woodbury, Somerville, Massachusetts, U.S.A., 6th April, 1898; 6 years. (Filed 21st March, 1898.)

Claim.—1st. A shoe-holder, comprising a fore-part and a hand-piece, the former being adapted to fill out the forward part of a boot or shoe, the latter being centrally pivoted unyieldingly to the fore-part and having a depending portion at its rear end, said hand-piece having a solid portion between its pivot and end raised from the bottom of the shoe, when in place therein, to permit the fingers to grasp around it and constituting a rigid brace and a convenient handle, substantially as described.

No. 59,543. Oil-Can. (Bidon à huile.)

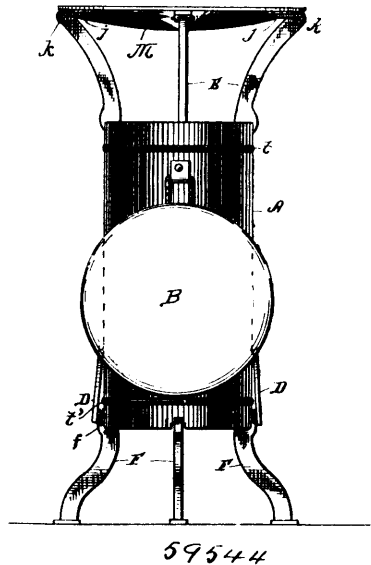


Samuel T. Merrill, Los Angeles, California, U.S.A., 6th April, 1898; 6 years. (Filed 17th March, 1898.)

Claim.—1st. An oil-can, comprising a case open at the front and having two bases arranged, one at the bottom and the other at the back of the case, in planes which are at an obtuse angle to each other, with a rounded portion between the two bases, a vessel provided with a filling opening in the top and a spout in the side projecting above the top of can, an axle having sockets in the ends and extending through the vessel and fastened to the opposite ends thereof, and the bail extending over the top of the case and having its ends bent inward and passed through the walls of the case and inserted into the sockets in the ends of the axle. 2nd. The case for holding pivoted vessels, which comprises a top-board and a bottom-board arranged oblique to each other, two side-boards fastened to

the ends of the top and bottom-boards and provided with feet arranged to form two support-bases, one at the bottom and the other at the back of the case, and a sheet-metal back fastened to the rear edges of the side-boards and projecting under the rear edge of the top-board. 3rd. The combination of the case, open at the front and provided in its sides with holes for receiving the ends of a bail, a vessel provided with an axle, the ends of which are socketed to receive the ends of the bail, and the bail extending over the top of the vessel and case and having its ends bent inward and inserted through the holes in the side of the case and into the sockets of the said axle. 4th. The combination of the case open at the front and provided in its sides with holes for receiving the ends of a bail, a vessel provided with an axle, the ends of which project beyond the side walls of the vessel and are socketed to receive the ends of the bail, and the bail extending over the top of the vessel and case, and having its ends bent inward and inserted through the holes in the side of the case and into the sockets of the axle. 5th. The combination of the case open at the front and having its side-pieces provided with feet arranged in two places, viz: at the bottom and back of the case, a vessel provided with spout and filling opening and pivoted between the side pieces of the case, and the bail extending and case having its ends inserted into the opposite sides of the case and vessel to pivot the vessel and case together. 6th. The case having the vessel pivoted between the side pieces of the case and having said side pieces arranged to form two bases adapted for supporting the case, and arranged in two planes which are at an angle to each other, and said side pieces being rounded at the angle between the planes of the bases. 7th. The counter-balanced vessel pivoted at its ends to a support, and provided at the side with a spout projecting tangentially and upward, and a handle pivoted to the spout to hang below the level of the spout outlet and in position to be grasped by the hand which holds the lamp which is being filled from the spout, so that a person filling the lamp is enabled to hold the lamp and to rotate the can with one hand. 8th. The case provided with two bases and open at the front, a hook at the bottom of the case, a vessel pivoted at its ends in the case and provided with a filling opening, and also provided at the side with a spout projecting tangentially and upward toward the plane of the filling opening, and a handle pivoted to the spout and provided with a loop to catch upon the hook at the bottom of the case. 9th. The lock and stopper comprising a plate provided with a buffer and adapted to be fastened to the case, and a spring-pressed stopper and latch pivoted to the plate for locking and stopping the spout. 10th. The combination of the case open at the front and provided in its sides with holes for receiving the ends of a bail, a vessel provided with an axle, the ends of which are socketed to receive the ends of the bail, a bail extending over the top of the vessel and case and having its ends bent inward and inserted through the holes in the side of the case and into the sockets of the said axle, and plates fastened to the case and arranged to project over the ends of the bail, substantially as set forth.

No. 59,544. Folding Seat. (Siège pliant.)

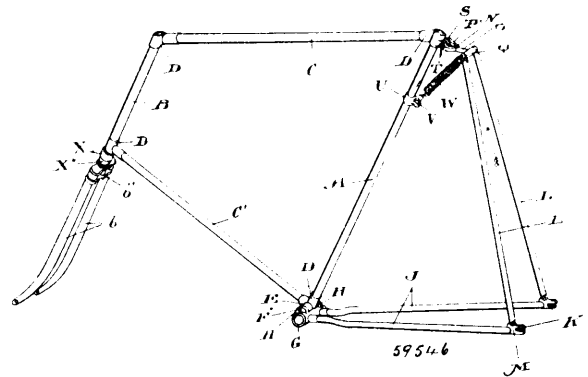


John Hearttagen, Allentown, Pennsylvania, U.S.A., 6th April, 1898; 6 years. (Filed 17th March, 1898.)

Claim.—1st. In a folding seat of the class described, the combination of the casing A, having the grooves *t*, *t'* and *v*, and provided with a cover B, and hinged doors D, with the seat supporting mechanism, consisting of the disc K, having guides *u*, locking bars J having pins *o'*, a circular plate I, having segmental slots *p*, a disc

G, having ears *s*, and notches *r*<sup>1</sup>, the key L, having a square shank, the arms E, pivoted between the ears *s*, and having projection portions *m*, and shoulders *l*, the plate H, the metal fasteners N, attached to the seat M, and having ears *k*, between which the upper ends of the arms E, are fastened, and the slots *j*, the strap *i*, having the buckle *h*, and the seat M, all substantially as shown and described. 2nd. In a folding seat of the class described, the combination of the casing A, having grooves *t*, *t*<sup>1</sup>, and *r*, and the seat supporting mechanism, with the leg operating mechanism, consisting of the disc G<sup>1</sup>, having guides *n*<sup>1</sup> and ears *s*<sup>1</sup>, the notched plate H<sup>1</sup>, having the key *g*, the sliding locking bars J<sup>1</sup>, having pins *o*<sup>1</sup>, and the legs F, having the projections *m*<sup>1</sup>, and notched shoulders *f*, substantially as shown and described. 3rd. In a portable seat, the combination of the casing A, having grooves *r*, *t* and *t*<sup>1</sup>, with the locking bars J, having pins *o*, the plain disc *k*, having guides *u*, the circular plate I, having segmental slots *p*, the sliding disc G, having notches *r*<sup>1</sup>, and ears *s*, the notched plate H, the seat supporting arms E, which support the seat M, the key L, operating the discs *k*, and G, the plates H, and I, and the bars J, the spring O, the sliding disc G<sup>1</sup>, having guides *n*<sup>1</sup>, and ears *s*<sup>1</sup>, to which are secured the legs F, the locking bars J<sup>1</sup>, the notched plate H<sup>1</sup>, having segmental slots, the key *g*, and the legs F, substantially as shown and described. 4th. In a folding seat, having an outer casing, the leg and seat operating mechanism comprising the circular plate I, the plain disc *k*, the sliding discs G and G<sup>1</sup>, the notched plates H and H<sup>1</sup>, the locking bars J and J<sup>1</sup>, adapted to be projected into circular grooves in said outer casing, the keys L and *g*, the seat supporting arms E, and the legs F, both adapted to be locked by said plates, discs and bars, in combination with the seat M, secured to said arms E by means of the fasteners N, attached thereto, substantially as set forth. 5th. The combination in a folding seat, of the outer casing A, having the grooves *r*, *t* and *t*<sup>1</sup>, the top cover B, hinged thereto, and the doors D secured to the bottom thereof, the seat M, secured to the arms E, by the fasteners N, the arms E, pivotally secured to the disc G, the notched plate H, adapted to rest upon the disc G, the circular plate I, beneath the disc G, and provided with the segmental slots *p*, the locking bars J, having the pins *o*, and adapted to enter the groove *t*, the plain disc *k*, securing said locking bars against the plate I, the key L, the spring O, the disc G<sup>1</sup>, at the lower end, having ears *s*<sup>1</sup>, the locking bars J<sup>1</sup>, having pins *o*<sup>1</sup>, the plate H<sup>1</sup>, having segmental slots to receive the pins *o*<sup>1</sup>, of the bars J<sup>1</sup>, the legs F, secured to the ears *s*<sup>1</sup>, of the disc G<sup>1</sup>, all as shown and described.

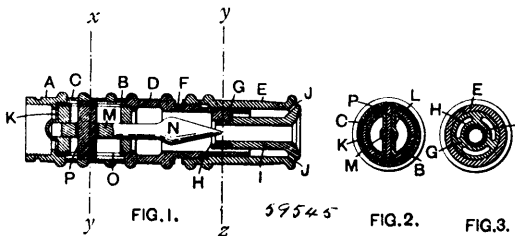
**No. 59,546. Bicycle Frame. (Monture de bicycles.)**



Joseph Hughes and Benjamin Ibbotson, both of Toronto, Ontario, Canada, 6th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. A bicycle frame, embracing in its construction the usual reach bars, head and standard rigidly united, a crank axle bracket pivotally connected to the standard, the lower side bars of the rear forks rigidly connected to the crank axle bracket, and the upper side bars of the rear forks pivotally connected to the lower side bars and to the standard, substantially as specified. 2nd. A bicycle frame embracing in its construction the usual reach bars, head and standard rigidly united, a crank axle bracket pivotally connected to the crank axle bracket, and the upper side bars of the rear forks pivotally connected to the lower side bars and to the standard by a link having a horizontal sleeve and a bifurcated end, the forks of which embrace a sleeve connected to the standard, and bolts passing through the forks of the link and sleeve, and through the upper side bars and sleeve of the link, substantially as specified. 3rd. A bicycle frame embracing in its construction the usual reach bars, head and standard rigidly united, a crank axle bracket pivotally connected to the standard, the lower side bars of the rear forks rigidly connected to the crank axle bracket, and the upper side bars of the rear forks pivotally connected to the lower side bars and to the standard by a link having a horizontal sleeve and a bifurcated end, the forks of which embrace a sleeve connected to the standard, bolts passing through the forks of the link and sleeve, and through the upper side bars and sleeve of the link, and a spring connected to the link and to the standard, substantially as specified. 4th. A bicycle frame embracing in its construction the usual reach bars, head and standard rigidly united, the rear forks consisting of two lower side bars pivotally connected to the lower end of the standard, and upper side bars pivotally connected to the lower side bars and to the upper end of the standard by a link, and a spring connected to the link and to the standard to hold the rear forks in their normal relative position, substantially as specified. 5th. A bicycle frame embracing in its construction a head, a sleeve member depending from the head, having an annular flange, a movable sleeve member within the fixed sleeve member having an annular shoulder intermediate the top and bottom, a bearing cup connected to the lower end of the movable sleeve member, the front forks, a standard for the front forks projecting through the head and sleeve members a ball cup connected to the crown of the front forks in juxtaposition to the ball cup of the movable sleeve, and anti-friction balls interposed between the ball cups, substantially as specified. 6th. A bicycle frame embracing in its construction the usual reach bars, head and standard rigidly united, a crank axle bracket pivotally connected to the standard, the lower side bars of the rear forks pivotally connected to the lower side bars and to the standard by a link having a horizontal sleeve and a bifurcated end, the forks of which embrace a sleeve connected to the standard, bolts passing through the forks of the link and sleeve, and through the upper side bars and sleeve of the link, a spring connected to the link and to the standard, and a stop to limit the upward movement of the link and side bars, consisting of a chain connected to the link and to a hook connected to the standard intermediate the link and crank axle bracket, substantially as specified.

**No. 59,545. Hose Nozzle. (Lance de boyaux.)**



John Shone, Chester, England, 6th April, 1898; 6 years. (Filed 17th March, 1898.)

*Claim.*—1st. In hose and pipe nozzles, a tubular body portion having at one end an internal concentric ring supported on wings, a jet-tube, having its inner end secured in said ring and its outer end provided with a flared exterior, a tubular part longitudinally adjustable on the body and having a flared mouth to fit the exterior of the jet-tube a longitudinally movable valve to enter and close the inner end of the jet-tube, a loose sleeve surrounding the body, and connections between said sleeve and the valve stem whereby the turning of the sleeve moves the valve, substantially as described. 2nd. In hose and pipe nozzles, a stationary body portion having at one end a concentrically fixed jet-tube, and at the other end a longitudinal partition, the said partition having an axial hole and a transverse radial slot intersecting the said hole, a valve for closing the jet-tube having its stem received in said hole, a bar passing transversely through the said slot and stem, and a sleeve loosely surrounding the said body between fixed shoulders and adapted to engage with the said bar and to move it lengthwise of the said body to close or open the jet-tube, substantially as described. 3rd. In hose and pipe nozzles, a stationary body portion having at one end a concentrically fixed jet-tube with a flaring outer end, a tubular part longitudinally movable on the said body and having mouth to fit the outside of the jet-tube, a cylinder fitting inside the body, having a partition slotted transversely and provided with a lengthwise hole intersecting the said slot, a valve to close the inner end of the jet-tube, having its stem received in the hole in the partition, a transverse bar passing through the slot and the valve-stem and having serrated ends, and an internally screw-threaded sleeve surrounding the said body and engaging with the ends of the said bar, the body being longitudinally slotted to permit the ends of the bar to project, substantially as described.

**No. 59,547. Art of Waterproofing Fabrics.**

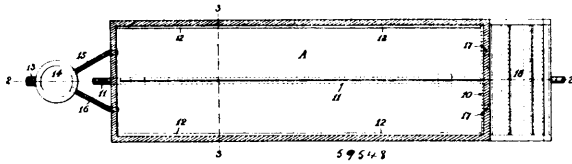
(Art de rendre les tissus impermeable.)

Lyman Prentice Converse, Chicago, Illinois, U.S.A., 6th April, 1898; 6 years. (Filed 16th August, 1897.)

*Claim.*—1st. The process of producing a compound for waterproofing fabric, which consists in boiling a suitable vegetable oil, such as linseed oil, thereupon cooling the oil, adding thereto and mixing therewith, animal's blood or Irish moss, or both, and soda, or its equivalent, and cooking the mixture, substantially as set forth. 2nd. The process of producing a compound for water-proofing fabric, which consists in boiling a suitable vegetable oil, such as linseed oil, for a long period of time at a high temperature, raising the temperature to 650° F, or thereabout, thereupon cooling the oil, adding thereto and mixing therewith animal's blood or Irish moss, or both,

and soda, or its equivalent, cooking the mixture for a period of from two to four hours, or thereabout, and adding coloring matter, substantially as set forth. 3rd. The process of producing a compound for water-proofing fabric, which consists in boiling a suitable vegetable oil, such as linseed oil, thereupon cooling the oil, adding thereto and mixing therewith animal's blood or Irish moss, or both, and soda, or its equivalent, cooking the mixture and thereupon cooling it and adding thereto petrolatum or its equivalent, substantially as set forth.

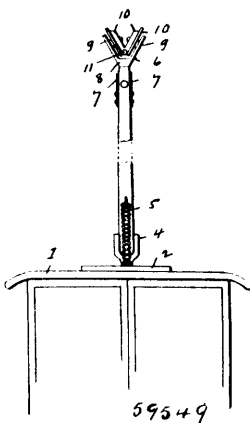
**No. 59,548. Treatment of Sewage and Apparatus therefor. (Traitement et appareil d'égouts.)**



Donald Cameron, Frederick J. Commin and Arthur J. Martin, all of Exeter, England, 6th April, 1898; 6 years. (Filed 4th March, 1897.)

*Claim.*—1st. The process of treating sewage which consists in subjecting the sewage under exclusion of light and air to the action of multiplying bacteria until the solid matter is dissolved, and then discharging the effluent along an extended line below the normal level of the sewage. 2nd. In an apparatus for purifying sewage, a tank A, provided with an inlet-discharge below the water level, and an outlet 10 extending across the whole or greater part of the width of the tank and below the water level. 3rd. In an apparatus for purifying sewage, a tank A, having a closed top and provided with an inlet-discharge below the water level, an outlet 10, extending across the whole or greater part of the width of the tank, and a slotted pipe or perforated conduit 11, at the floor, as set forth. 4th. A tank for the treatment of sewage, having an inlet aperture occupying the whole or greater part of the sectional area, and outlet aperture 10, across the whole or greater part of the width of the tank and below the water level, a slotted or perforated conduit 11, at the floor, said floor sloping towards said pipe or conduit, and slotted or perforated pipes 12, at or near said floor, as and for the purpose set forth. 5th. The combination with a tank for the treatment of sewage, of an aerator to which the effluent liquid is delivered as it leaves the tank, said aerator consisting of a series of nearly level surfaces or a lip or lips over which such effluent flows in thin films, as set forth.

**No. 59,549. Trolley. (Trolley.)**



William Willett, Johnstown, Pennsylvania, U.S.A., 6th April, 1898; 6 years. (Filed 11th October, 1897.)

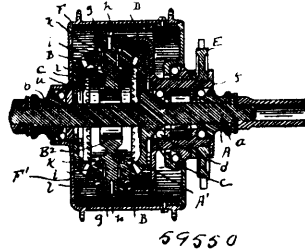
*Claim.*—The combination with a trolley pole, springs, the energy of which is exerted to draw the pole downward, of a harp hinged to the upper end of the pole and having a movement at right angles to the movement of the pole, springs at the joint of the harp with the pole, and trolley wheels arranged at obtuse angles to the pole and adapted to embrace and ride upon the upper side of the conducting or trolley wire, substantially as set forth.

**No. 59,550. Bicycle Gearing. (Engrenage de bicycles.)**

Joseph D. Partello and Henry B. Rosenberg, both of St. Joseph, Michigan, U.S.A., 6th April, 1898; 6 years. (Filed 21st March, 1898.)

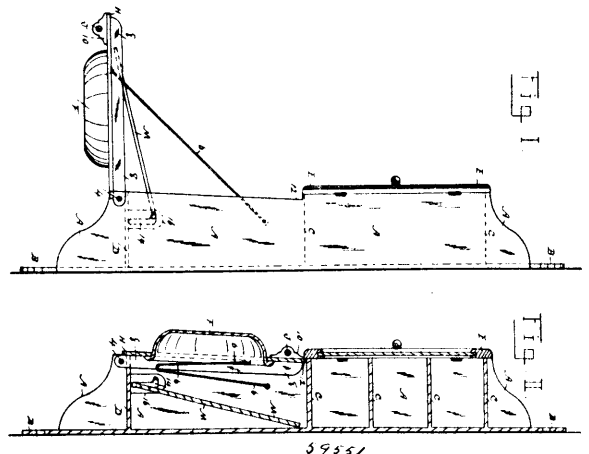
*Claim.*—1st. The combination with the stationary axle having a fixed bevel-gear, of a sprocket wheel turning on the axle, having a casing inclosing said fixed gear, and provided with small bevel-gears in mesh with said fixed gear, a rotary wheel-hub inclosing the said casing and gears and having end bearings on the said axle, and the

hub of the sprocket respectively, and a bevel gear within the hub at one end thereof for rotating it and meshing with the small bevel



gears at their sides opposite said fixed bevel-gear, substantially as described. 2nd. The combination with the stationary axle having a fixed bevel-gear, of a sprocket-wheel turning on the axle, having a casing inclosing said fixed bevel-gear, and provided with small bevel-gears in mesh with said fixed gear, a rotary-wheel hub inclosing said casing and gears and having end bearings on the stationary axle and the sprocket hub respectively, a loose bevel-gear within the wheel hub and in mesh with the small bevel-gears at points opposite said fixed bevel-gear and means for locking said loose bevel-gear to the wheel-hub and releasing it therefrom, substantially as described. 3rd. The combination with the stationary axle provided with a fixed bevel-gear, of a driving sprocket turning on said axle and provided with a casing inclosing said bevel-gear, and flattened beyond the gear at opposite points, a ring within the open end of said casing and provided with opposite axles *k* secured at their ends to said flattened portions, bolts securing the ring and casing together at points at right angles to said axle, small bevel-gears on said axle and meshing at one side with said stationary gear, a wheel hub inclosing said casing and gearing and having end bearings on the stationary axle and the hub of the sprocket respectively, and a bevel gear at the inner side of the hub and meshing with the small gears opposite to said fixed bevel-gear, substantially as described. 4th. In the herein described device, the external rotatable casing, a gear carried thereby, a second rotatable casing, with means for operating it, gear connections between the second casing and the gear on the external casing and means for detaching said gear from the casing and simultaneously uniting the two casings, substantially as described. 5th. In the herein described device, the fixed axle, the stationary gear thereon, the rotatable casing D, the loose gears B carried thereby and meshing with the stationary gears, the external casing F, the gear C adapted to rotate therewith, and in mesh with the gears B, means for releasing the gear C from engagement with the casing F and for locking said casings D and F together, substantially as described. 6th. In the herein described speed changing device, the member D having notches, the rotating gear C having notches, the member F, and an oscillating rod having dogs or projections arranged thereon, to engage at alternate periods the notches on the respective parts whereby the members D and F may be locked together, or the gear C and members F, substantially as described. 7th. In the herein described device, the member D having notches, the member F, the rotating gear C having notches, and an oscillating rod having dogs or projections arranged thereon, to engage at alternate periods the notches on the respective parts whereby the members D and F may be locked together on the gear C and member F, and a latch as G on the rod outside said casing, substantially as described.

**No. 59,551. Wash Stand. (Lavabo.)**

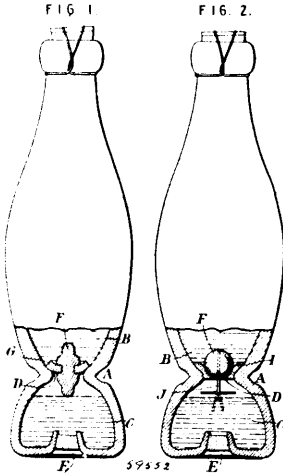


Thomas Andrews, Ancaster, Ontario, Canada, 6th April, 1898; 6 years. (Filed 18th March, 1898.)

*Claim.*—1st. A toilet and wash-stand of the character described, comprising a back board with projecting sides, a series of upper

shelves extending from side to side, a side hinged door with suitable glass plate mirror covering said shelves, a wash-bowl support having side flanges hinged to the outer lower part of said sides and capable of being suspended by chains and folded up in closed position to said sides and inclining inwards, and a towel rack situated to cover said wash-bowl, as described. 2nd. A toilet and wash-stand of the character described, consisting of a framework secured to a wall in vertical position, shelves in the upper part thereof, a hinged door having mirror covering said shelves, a wash-bowl support hinged to the lower part of the sides of frame and suspended when in use by side chains and supplied with towel rack as described, and capable of closing to said sides in inclined position, of a desk having its inner end pivoted to and to operate in a vertical slot having upper outer curve in a piece secured to the said inner sides and above said wash-bowl support, the outer end being capable of resting upon said support at suitable adjustment thereto, and capable of placement in closed position in the frame.

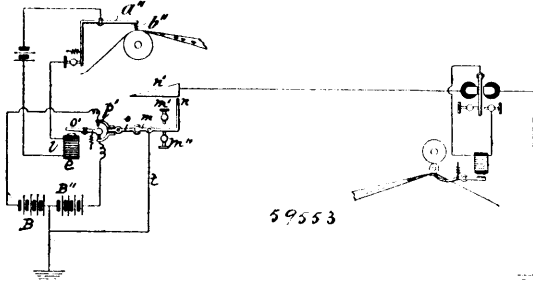
**No. 59,552. Bottle. (Bouteille.)**



Charles Sebastian Smith, Shipley, Derby, England, 6th April, 1898; 6 years. (Filed 17th March, 1898.)

*Claim.*—1st. A bottle for containing two different liquids separate from each other, consisting of an upper chamber with open neck for containing the one liquid which is aerated and a lower chamber for containing the other liquid, the partition dividing the two chambers being provided with an opening closed by a valve which opens in the direction of the upper chamber, so as to be kept closed by the pressure of the aerated liquid therein, while the bottom of the lower chamber has an opening for filling it that is closed by a cork or stopper, substantially as described. 2nd. A bottle for containing two liquids separate from each other, consisting of an upper chamber with open neck for containing the one liquid, a lower chamber for containing the other liquid formed by contracting the sides of the bottle at a point some distance from the bottom and communicating by an opening with the upper chamber, a valve closing the said opening, and an opening in the bottom of the lower chamber for filling the same adapted to be closed by a cork or stopper, substantially as described. 3rd. In combination with a bottle described in claim 1, means for holding the said valve closed, and an opening in the bottom of the lower chamber for filling the same adapted to be closed by a cork or stopper, substantially as described.

**No. 59,553. Electric Telegraph System and Apparatus therefor. (Système et appareil de télégraphe électrique.)**

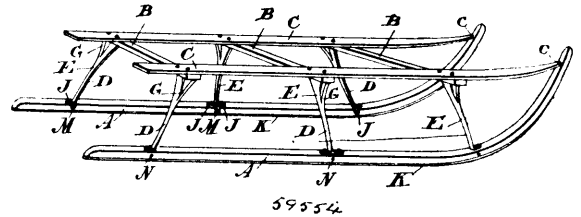


Charles G. Burke, Brooklyn, New York, U.S.A., 6th April, 1898; 6 years. (Filed 28th May, 1897.)

*Claim.*—1st. The method of telegraphing herein described, which consists in transmitting over a line electrical impulses of uniform

duration at variable intervals and indicating or recording at the receiving station the intervals between impulses or the periods of no current on the line, as set forth. 2nd. The method of telegraphing herein described, which consists in transmitting over a line electrical impulses of uniform duration at intervals corresponding to the length of the elements of the characters and spaces of the Morse code, and interrupting by such impulses the action or operation of an electro-magnetic recording instrument, whereby the said instrument, will produce marks or lines during intervals between successive impulses only, or after such impulses have ceased, as set forth. 3rd. In a telegraph system, the combination with a main line, a transmitter and a perforated strip for operating the same, provided with a single line of perforations of uniform length but at variable intervals, which perforations determine the periods of the current on the line, of a recording instrument at the receiving end of the line operated or controlled by the transmitted impulses and adapted in its operation to record the intervals between such impulses, as set forth. 4th. A perforated strip or band for telegraphic transmitters in which the perforations have their initial edges at right angles to the length of the strip, and their opposite edges inclined thereto, whereby the duration of the periods of contact of a style under which the strip is drawn may be varied or adjusted by a transverse adjustment by the style with reference to the line of movement of the strip, as set forth. 5th. In a telegraph system the combination with an instrument adapted to make and brake an electric circuit by means of a perforated strip, of an instrument controlled or operated thereby and adapted to transmit over the line two immediately successive alternating impulses corresponding to each of the unidirectional impulses produced by the passage of the trailer over the perforated strip, as set forth.

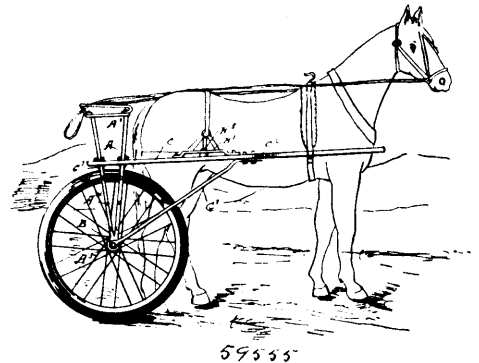
**No. 59,554. Cutter or Sleigh Gearing. (Engrenage pour traîneaux.)**



George Hillyard Phillips, Winchester, Ontario, Canada, 6th April, 1898; 6 years. (Filed 21st March, 1898.)

*Claim.*—1st. The combination with the runners, crosspieces, and parallel sides bars, of the knees extending between the parallel side bars and the runners, the said knees comprising the main portion E, the top plate, the brace G, extending from the main portion to the top plate, the off-sets J, the depending pieces M, and the bolts extending through the top and bottom of the knees and securing them to the cross bars and runners, as and for the purpose specified. 2nd. As a new article of manufacture, a knee for sleighs and the like, comprising the main portion E, the top plate H, brace G, the bottom off-sets J, and depending pieces N, all formed integral and arranged as and for the purpose specified.

**No. 59,555. Trotting Sulky. (Désobligeante.)**

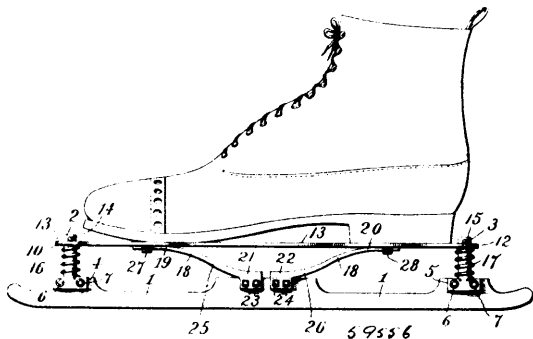


Henry Marguedant, Eagle, Michigan, U.S.A., 6th April, 1898; 6 years. (Filed 19th March, 1898.)

*Claim.*—1st. The combination with the main bearings or beams A, arched at A<sup>1</sup>, bent horizontally at A<sup>2</sup>, turned at A<sup>3</sup>, to provide the side members A<sup>4</sup>, said beams converging and meeting at a point A<sup>5</sup>, and provided with bearings for the axles B, of the thills C, secured to the horizontal portions A<sup>2</sup>, thill braces D attached to the thills from the inner side, the brace-rods E converging as described, the truss-rods F, connecting the brace-rods with the side members, the forward brace-bars G, and the second brace-rod G<sup>1</sup>, all arranged and adapted to operate, substantially as shown and described. 2nd. The com-

bination with the thill C, of the thill-brace D, the perforated plate H, arranged upon the top of the brace D, and a similar plate H<sup>1</sup>, arranged upon the top of thill C, and a second foot-rest H<sup>2</sup>, having a hook H<sup>3</sup>, at the inner end adapted to engage the perforated plate H, the opposite end of the said foot-rest being flattened and adapted to slide beneath the plate H<sup>1</sup>, said flattened end having an aperture H<sup>4</sup>, a thumb-screw H<sup>5</sup>, adapted to pass through the perforated plate H<sup>1</sup>, and engage the threaded aperture H<sup>4</sup>, substantially as and for the purpose described.

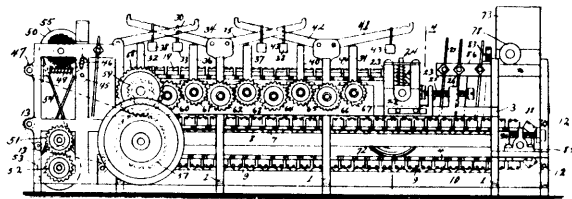
**No. 59,556. Ice Skate. (Patin.)**



Robert Bustin, St. John, New Brunswick, Canada, 6th April, 1898; 6 years. (Filed 22nd March, 1898.)

*Claim.*—1st. The combination with the foot-plate and runner of a skate, of fore and aft springs, and an intermediate equalizing spring, by which the yielding of the foot-plate is equalized uniformly from the front to the rear extremities thereof, substantially as described. 2nd. The combination with the foot-plate and runner of a skate, of fore and aft springs interposed between the extremities of the foot-plate and the runner, and an intermediate equalizing spring, consisting of two flattened parts or sections having broadened, flat free extremities bearing against the foot-plate, and contracted shanks secured to the runner, for equalizing the yielding motion of the foot-plate from front to rear thereof, substantially as described. 3rd. The combination with the foot-plate and runner of a skate, of independent fore and aft spring interposed between the ends of the foot-plate and the runner, and an intermediate equalizing spring having broadened, flat extremities bearing against the foot-plate and contracted shank portions rigidly secured to the runner, for uniformly equalizing the yielding motion of the foot-plate from the front to the rear extremities thereof, substantially as described. 4th. The combination with the foot-plate and runner of a skate, of independent fore and aft springs interposed between the ends of the foot-plate and the runner, an intermediate equalizing spring having broadened, flat extremities bearing against the foot-plate and contracted shank portions rigidly secured to the runner, for uniformly equalizing the yielding motion of the foot-plate from the front to the rear extremities thereof, and guide brackets secured to the under side of the foot-plate and in which the broadened, flat extremities of the equalizing spring are movable, substantially as described. 5th. The combination, in an ice skate, of a runner having rigidly attached spindles at its front and rear ends, a foot-plate having fore and aft orifices through which the spindles project, devices engaging the spindles above the foot-plate and serving to retain the latter on the spindles, and springs between the runner and the foot-plate, substantially as described. 6th. The combination, in an ice skate, of a runner having rigidly attached spindles at its front and rear ends, a foot-plate having fore and aft orifices through which the spindles project, devices engaging the spindles above the foot-plate and serving to retain the latter on the spindles, springs encircling the spindles between the runner and the foot-plate, and an equalizing spring located intermediate the springs on the spindles, attached to the runner and having free extremities bearing against the under side of the foot-plate, substantially as described. 7th. The combination, in an ice skate, of a runner having rigidly attached spindles at its front and rear ends, a foot-plate having fore and aft orifices through which the spindles project, devices engaging the spindles above the foot-plate and serving to retain the latter on the spindles, springs encircling the spindles between the runner and the foot-plate, and an equalizing spring located between the springs on the spindles, and composed of two parts or sections having broadened, flat extremities bearing against the foot-plate and contracted shank portions constructed with slotted heads secured to the runner, substantially as described. 8th. The combination, in an ice skate, of a runner, having fore and aft orifices, spindles extending through the orifices and having slotted heads at their lower ends which embrace and are rigidly attached to the skate-runner, devices engaging the spindles above the foot-plate and serving to retain the latter on the spindles, and springs encircling the spindles between the runner and the foot-plate, substantially as described.

**No. 59,557. Press. (Presse.)**

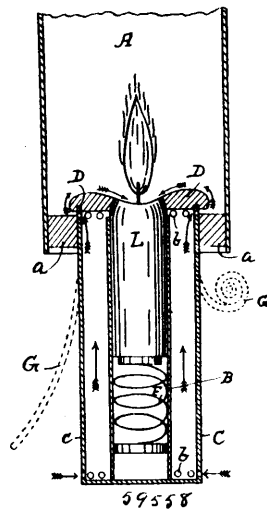


Gerhard Baumann, Monmouth Junction, New Jersey, U.S.A., 6th April, 1898; 6 years. (Filed 22nd March, 1898.)

*Claim.*—1st. A press comprising a substantially horizontally-movable endless carrier supported on two carrying-rollers on which the carrier is stretched and one of said rollers being vertically yielding and adjustable, vertically movable rollers inclosed in the presser for bearing the same down upon the carrier, yokes having their two downwardly-extending arms engaging the bearings of the presser-rollers, and weighted levers bearing down upon the horizontal cross-bars of said yokes, all substantially as set forth. 2nd. A press, having means for carrying the material operated on, a presser located above said means and consisting of a belt, one run of which bears on said means, a roller engaging said run of the presser, a yoke spanning the presser and connected to the trunnions of the roller, and means for moving the roller so as to force the presser into engagement with the means for supporting the material operated on, substantially as described. 3rd. A press having a frame, a carrier, a hopper located at one end of the frame and above the carrier, a cutter within the hopper, a spreader located at the mouth of the hopper, two arms respectively connected to the side portions of the spreader and to the frame, and a screw connected with the spreader and with the frame whereby the spreader may be adjusted vertically, substantially as described.

**No. 59,558. Candle, Lamp or Lantern.**

(Chandelle, lampe ou lanterne.)



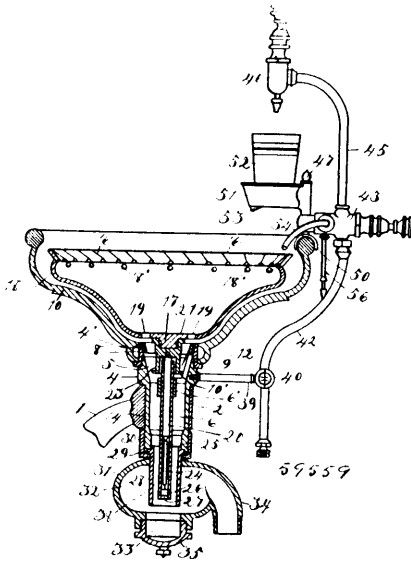
Alexander Bock, Blegdamsret 104 Copenhagen, Denmark, 6th April, 1898; 6 years. (Filed 19th October, 1897.)

*Claim.*—1st. A candle lamp having its candle tube surrounded by a perforated mantle, upon the upper end of which rests a disc having its upper face concave at the centre and its margin rounded or curved downwardly to the lower face of the disc, and provided with a central aperture into which the end of a burning candle is adapted to project, substantially as described. 2nd. A candle lamp, comprising a candle tube, a perforated mantle surrounding the candle tube and projecting above the upper end of the same, a disc on the upper end of the mantle and having its upper face concave at the centre and at its margin rounded or curved downwardly to the lower face of the disc and provided with a central aperture into which the burning end of a candle is adapted to project, and a chimney supported by said mantle, substantially as described. 3rd. A candle lamp having means for carrying the candle and for feeding the same as it is burned, and a plate having a central orifice adapted to receive the burning end of the candle, the upper surface of the plate being curved upwardly from the outer edge and thence downwardly to form a continuation of the curve of the concavity at the burning end of the candle, substantially as described. 4th. A candle lamp having a chimney, a tube held at the lower end of the



chimney, and projecting downwardly therefrom, the tube being capable of carrying the candle, means for feeding the candle upwardly in the tube, and a plate located at the upper end of the tube and having a central perforation adapted to receive the upper end of the candle, the plate curving from its outer edge upwardly and thence downwardly so as to run into the curve of the concavity at the upper end of the candle, the upper end of the tube having perforations to permit the passage of air from the interior of the tube into the base of the chimney at the outer edge of the plate, substantially as described. 5th. A candle lamp having a plate with an orifice therein, one face of the plate being curved inwardly toward the orifice so as to run gradually into the curve which will exist at the burning end of the candle, substantially as described. 6th. A candle lamp having a chimney, a mantle projected into the lower end of the chimney, a block fitted between the upper end of the mantle and the lower end of the chimney, means within the mantle for holding and feeding the candle upwardly into the chimney, and a plate secured at the upper end of the mantle and having a perforation, the upper side of the plate being curved downwardly toward the orifice so that said curve will run gradually into the curve of the concavity which will occur at the upper end of the candle, substantially as described.

**No. 59,559. Cuspidor. (C'rachoir.)**

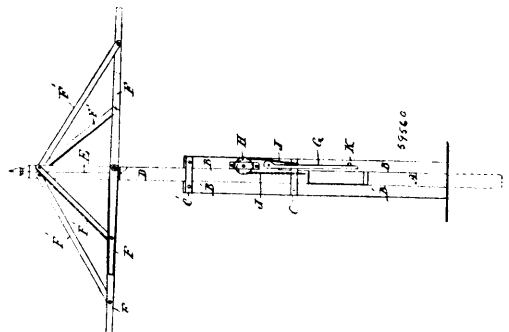


George Ephraim Johnson, Fort Wayne, Indiana, U.S.A., 6th April, 1898; 6 years. (Filed 21st March, 1898.)

**Claim.**—1st. In a fountain cuspidor a saliva ejector consisting of a hollow body or shell having a valved connection with the water supply pipe, and a discharge pipe in operative relation with the liquid receiving bowl or receptacle, and provided with a saliva receiving vacuum chamber having an outlet opening for the saliva conveying tube, and an outer siphonic tube arranged as shown and projecting into said discharge pipe as shown, and adapted to be encircled by the outflowing jet, whereby the contents of said chamber will be withdrawn by the suction of said jet, substantially as described. 2nd. In an apparatus of the class described, a saliva ejector consisting of a hollow body or casting having a valved connection with the water supply pipe, and a lateral discharge pipe, in combination with a saliva receptacle having a vacuum chamber, an inlet opening for the saliva conveying tube, and provided with a siphonic tube so arranged within said body and discharge pipe as to drain said receptacle by the suction of the outflowing water in said discharge pipe, substantially as described. 3rd. A saliva ejector consisting of a cylindrical body 43, having a fixed diametric supply pipe section 62, provided with a valved lateral opening to the chamber 58, an outlet valve 59, seated in said opening and provided with a valve-stem mounted by a screw-threaded connection in the adjacent end of said body, an inclined discharge pipe 54, and a saliva receptacle 55, having an inlet opening for the conveying tube and provided with a siphonic outlet tube 57 within said chamber 58, and having its discharge end arranged in concentric relation with said discharge pipe 54, substantially as described. 4th. In a saliva ejector the herein described method of creating a vacuum in the saliva receptacle chamber, by causing a circulation of the pumping-jet or motive liquid under pressure through a contracted annular passage about the discharge end of the suction pipe communicating with said chamber. 5th. In a saliva ejector the herein described method of creating a suction in the saliva conveying tube and in the vacuum chamber therefor, by circulating a water-jet under pressure through a contracted annular opening about the discharge end of the edu-

tion pipe leading from said chamber, and terminating in the throat of the ejector discharge tube, thereby drawing the saliva from said conveying tube, and by enveloping the viscid fluid in the annular film of cleansing liquid discharges the same without the adhesion of its particles to the sides of the discharge tube. 6th. The method herein described for producing a vacuum in the saliva receptacle chamber of a direct acting saliva ejector, by circulating the motive water-jet or stream under pressure through a contracted annular passage about the discharge end of the suction tube or pipe leading from said chamber, whereby the viscid contents of said chamber when withdrawn by suction will be enveloped by annular film of the motive jet for the purpose specified, and the motive power of said jet or stream can be further utilized in the manner described. 7th. In a fountain cuspidor, the combination of a fixed outer bowl properly mounted in a supporting bracket, an inner bowl rotatably mounted in said outer bowl in concentric relation therewith, having its perimeter convoluted as shown and adapted to be rotated by the saliva ejector operating jet, and a saliva ejector having a valved connection with the water supply pipe, a discharge opening, and a saliva receptacle having a vacuum chamber provided with an inlet opening for the saliva conveying tube, and a discharge siphonic tube so arranged in said discharge opening as to produce a vacuum in said chamber by the discharging jet, whereby the said jet is adapted to simultaneously cleanse and actuate the said revolving bowl and operate the said saliva ejector, substantially as described. 8th. The combination in a self cleansing cuspidor, of an outer fixed bowl, an inner revoluble bowl of non-corrosive material arranged in concentric relation therewith, having a convoluted perimeter to receive the propelling jet as described, and a suitable saliva ejector adapted to simultaneously actuate said inner bowl and cleanse said inner and outer bowls, all substantially as described. 9th. In a fountain cuspidor, the casting 4 chambered as described and provided upon its upper end with the screw-threaded collar having an annular flange 9 for the purpose specified, a pendent tube 28 suspended from the lower end of said casting by the screw-threaded coupling 30, the water trap 31 rigidly fixed upon said tube 28, having a water chamber 32 and a gold deposit chamber 33, and provided upon the bottom thereof with the screw-threaded plug 35, in combination with the outer bowl 10 fixed as described upon the collar 8, the inner bowl 18 revolubly mounted within said outer bowl, and provided upon its perimeter with a series of convolutions to receive the impact of the actuating jet, and a proper saliva ejector adapted to simultaneously actuate said revoluble bowl and cleanse said inner and outer bowls, substantially as described. 10th. In a fountain cuspidor, a revoluble bowl concentrically mounted in an outer fixed receptacle and provided upon its perimeter with a series of radial convolutions adapted to receive at an angle the impact of the actuating or propelling jet, and adapted to so deflect the said jet laterally as to simultaneously cleanse both the revoluble bowl and the said fixed receptacle, substantially as described. 11th. The combination in a dental cuspidor, of an outer fixed bowl, an inner revoluble bowl concentrically pivoted therein, having a convoluted perimeter adapted to receive the impact of the propelling jet, and so deflect the same as to simultaneously cleanse both the inner and outer bowls, and a water ejector adapted to supply and direct the said propelling jet, substantially as described. 12th. In a fountain cuspidor, a supporting spider 4' for the inner revoluble bowl, adapted to enable the operator to remove or replace the said bowls without exposing the bearing for its pivotal support as described, the spider, consisting of a hub 6', a ring 5' of a greater diameter than said hub and having inclined sides, and a plurality of integral legs adapted to unite said hub and said ring in a concentric relation, the said legs and said ring being provided with the oblique knife edged flanges 8' for the purpose specified, all substantially as described.

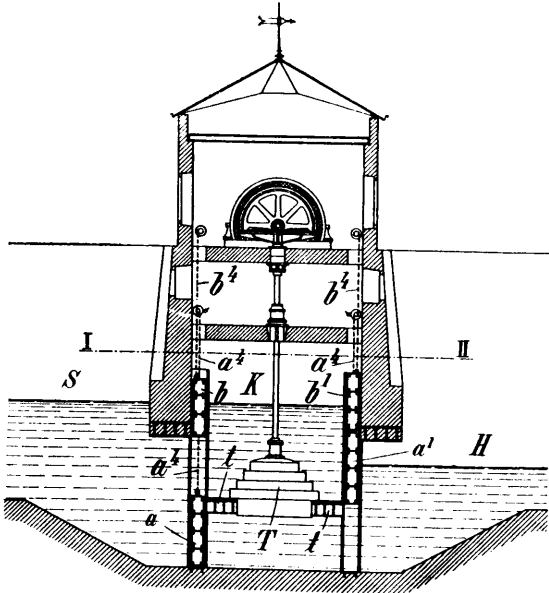
**No. 59,560. Clothes Drier. (Sechoir à linge.)**



Robert Simpson, London, Ontario, Canada, 6th April, 1898; 6 years. (Filed 21st March, 1898.)

**Claim.**—The combination with the posts B, B', and D, of the lever G, fulcrumed to post B, the side pulley h, secured to said post B, above the lever, and the chain J, passing over said pulley, the ends secured to the post D, and lever G, respectively, as set forth,

**No. 59,561. Turbine for Tide Mills.**  
(*Turbine pour moulins.*)

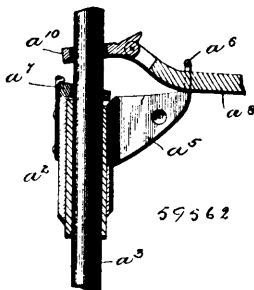


59561

Johann Ferdinand Robert Knobloch, No. 10 Von der Tann Strasse, Hamburg, Germany, 7th April, 1898; 6 years. (Filed 24th January, 1898.)

*Claim.*—In a turbine installation for utilizing water the inlet and outlet of which changing with regard to the turbine chamber, a stationary turbine or turbines within a turbine chamber, the inlet and outlet opening of the latter being provided with movable gates designed to alternately block or shut off the water passages above and below the turbine or turbines or to give these passages partly or entirely free, substantially as and for the purpose set forth.

**No. 59,562. Lifting Jack. (Cric.)**



59562

Benjamin Heon, St. Gregoire, Quebec, Canada, 7th April; 6 years. (Filed 4th March, 1898.)

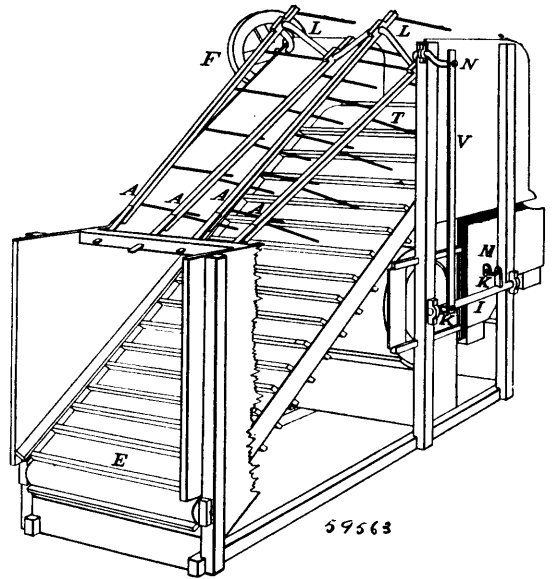
*Claim.*—1st. A lifting jack, comprising a frame, a slide-bar mounted therein, a lever pivotally mounted on said frame, a collar pivotally connected to said lever, and adapted to elevate said slide-bar, and a collar mounted on said slide-bar above said frame, substantially as described. 2nd. A lifting jack, comprising a frame having an inclined upper face, a slide-bar mounted therein, a pivotally mounted lever having a pivotally connected collar, and a collar having inclined face mounted on said slide-bars above the frame, substantially as described.

**No. 59,563. Straw and Grain Separator.**  
(*Séparateur à grain et paille.*)

Havelock Linkletter, Summerside, Prince Edward Island, Canada, 7th April, 1898; 6 years. (Filed 21st March, 1898.)

*Claim.*—1st. In a straw and grain separating machine, the combination of the shakers A A, consisting of toothed arms with slide-bar at lower end, running in slot and driven by crank-spindle at upper end, with the elevator E T, substantially as and for the purpose hereinbefore set forth. 2nd. In a straw and grain separating machine, the crank-spindle L driven by pulley attached at one end, the other end projecting over side of machine and forming a short crank at its extremity, with the shakers A A and the elevator E T, substantially as and for the purpose hereinbefore set forth. 3rd. In

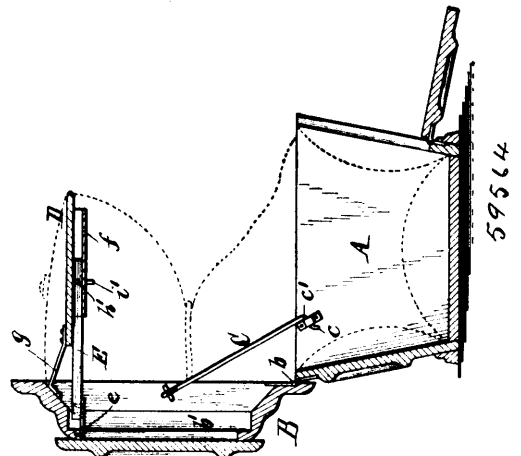
a straw and grain separating machine, the combination of the shakers A A, consisting of toothed arms with slide-bar at lower



59563

end, running in slot and driven by crank-spindle at upper end with the elevator E T and the fanners, substantially as and for the purpose hereinbefore set forth. 4th. In a straw and grain separating machine, the combination of the spindle L, perpendicular pitman V, the rocker I, provided with rocker-pins K K, and the riddle-box N, substantially as and for the purpose hereinbefore set forth. 5th. In a straw and grain separating machine, the combination of the shakers A A, consisting of toothed arms with slide-bar at lower end, running in slot and driven by crank-spindle at upper end, with the elevator E T, and the straw roller at rear of upper elevator roller, spindle L, pulley F, perpendicular pitman V, rocker I, and fanners, substantially as and for the purpose hereinbefore set forth.

**No. 59,564. Burial Casket. (Cercueil.)**



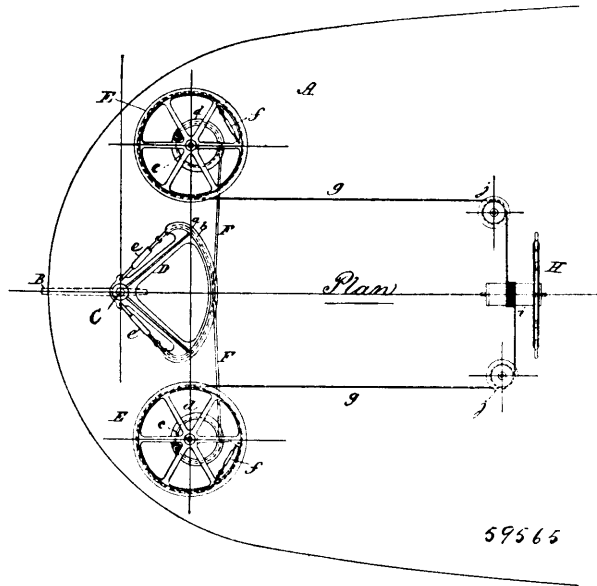
59564

Joseph Jaixen and Edward Harry, both of Buffalo, New York, U.S.A., 7th April, 1898; 6 years. (Filed 12th January, 1898.)

*Claim.*—1st. The combination with a casket body and a lid hinged to the same, of a movable canopy arranged on the underside of the lid and adapted to project forwardly over the body when the lid has been placed in an upright position, substantially as set forth. 2nd. The combination with a casket body and lid, of an extensible canopy pivoted to the underside of the lid, substantially as set forth. 3rd. The combination with the lid, of supporting arms hinged or pivoted to the underside thereof, a canopy mounted on said arms and capable of sliding on the same toward and from the lid, and a supporting device extending from the projected canopy upwardly to the lid, substantially as set forth. 4th. The combination with the lid, of supporting arms hinged or pivoted to the underside thereof, a canopy mounted on said arms and capable of sliding on the same toward and from the lid, a supporting device extending from the projected canopy upwardly to the lid, and a locking device whereby the canopy is interlocked with the supporting arms

when projected, substantially as set forth. 5th. The combination with the lid, of supporting arms hinged or pivoted to the underside thereof, a canopy provided with slide-ways in which said arms engage, spring locking bolts mounted on the canopy and adapted to engage with said arms when the canopy is projected, and a supporting device which extends from the projected canopy upwardly to the lid, substantially as set forth.

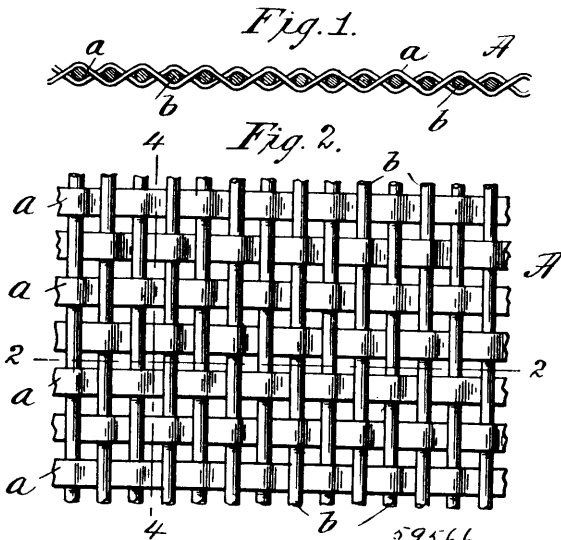
**No. 59,565. Steering Gear for Vessels.**  
(Appareil à gouverner les vaisseaux.)



Hugh Fairgrieve, Hamilton, Ontario, Canada, 7th April, 1898; 6 years. (Filed 17th January, 1898.)

*Claim.*—1st. In a steering apparatus, the combination of a rudder post of a double grooved quadrant, two sheave wheels with eccentrics attached thereto, a tiller rope or chain connecting each eccentric with the quadrant, and a wire rope or chain connecting the sheave pulleys to which the eccentrics are attached to a steering wheel, all arranged and constructed substantially as set forth. 2nd. In a steering apparatus the combination of the rudder post C, the quadrant D keyed thereto, the sheave wheels E, E, secured to steel shafts C, C, on each side of the quadrant D respectively, eccentrics d, d, secured to the sheave wheels E, E, the ropes F, F, connecting the quadrant with the eccentrics, and a rope or chain g, connecting the sheave wheels E, E, with the drum of the steering wheel H, and over the pulleys J, J, all constructed substantially as and for the purpose specified.

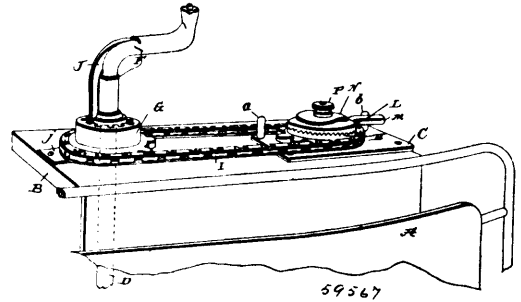
**No. 59,566. Wire Cloth for Paper Making Machine.**  
(Toile de fil de fer pour machines à faire le papier.)



John Carrick Bell, Springfield, Massachusetts, U.S.A., 7th April, 1898; 6 years. (Filed 28th December, 1897.)

*Claim.*—1st. A wire cloth for paper making machines, comprising warp wires and filling wires woven together, the warps being composed of flat wires whereby the outer or most prominent surface portions of the cloth are constituted by the flat faces or sides of the warp wires. 2nd. A wire cloth for paper making machines, having the warps composed of flat annealed brass wires, the same being woven with a filling of cross wires, the outer and most prominent portions of the cloth being constituted by the flat faces of the warp wires. 3rd. A wire cloth for paper making machines, having one set of its wires made with flat sides, and of a width greater than its thickness together with inter-woven crossing wires, the flat wires forming a flat surfaced face for the fabric.

**No. 59,567. Electric Controller.** (Contrôleur électrique.)

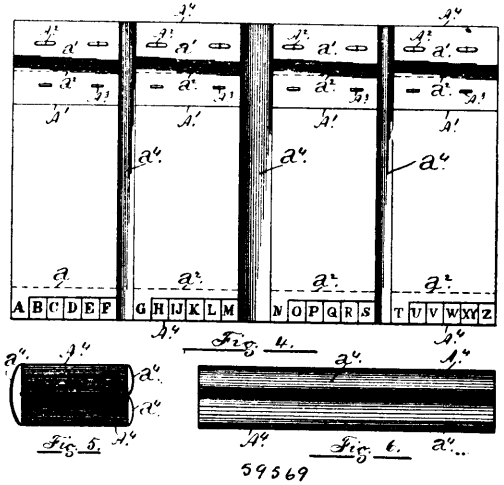


Adolphe Grossman, New Orleans, Louisiana, U.S.A., 7th April, 1898; 6 years. (Filed 1st December, 1897.)

*Claim.*—1st. A mechanism for controlling the motor and brake of an electric car, comprising a rotary brake staff, a handle so connected with the staff that it will turn in one direction with said staff, and in the opposite direction loose on the same, a gear wheel loosely mounted on the staff, a suitable means for holding said gear wheel against casual rotation, suitable means for detachably connecting said gear wheel with the handle and a rheostat or switch shaft connected by gearing with said gear wheel, substantially as specified. 2nd. A mechanism for controlling the motor and brake of an electric car, comprising a suitable support, a rotary brake staff, a crank for turning said staff, a gear wheel loosely mounted on the staff and clutched to the support, means for fixing said gear wheel to the crank, and a rotary rheostat or switch shaft connected by gearing with the gear wheel on the brake staff, substantially as specified. 3rd. A mechanism for controlling the motor and brake of an electric car, comprising a support, a rotary brake staff, a stop on the support, a rotary rheostat or switch shaft provided with means for engaging said stop, and a gear wheel loosely mounted on and clutched to the rheostat or switch shaft and connected by gearing with the brake staff, substantially as specified. 4th. A mechanism for controlling the motor and brake of an electric car, comprising a support, a rotary brake staff, a rotary rheostat or switch shaft, stops arranged on the support on opposite points with respect to the rheostat shaft, a gear wheel loosely mounted on the rheostat or switch shaft and connected by gearing with the brake staff, a plate mounted on the rheostat so as to turn therewith and adapted to engage the stops on the support, and coacting clutches on said plate and the gear wheel, substantially as specified. 5th. A mechanism for controlling the motor and brake of an electric car, comprising a suitable support, a rotary brake staff, a crank for turning said staff, a gear wheel loosely mounted on the staff and clutched to the support, means for fixing said gear wheel to the crank, a stop arranged on the support, a rotary rheostat or switch shaft provided with means for engaging said stop, and a gear wheel loosely mounted on and clutched to the rheostat or switch shaft and connected with the brake staff, substantially as specified. 6th. A mechanism for controlling the motor and brake of an electric car, comprising a suitable support, a rotary brake staff, a crank for turning said staff, a sprocket wheel loosely mounted on the staff, an adjustable device for detachably fixing said sprocket wheel to the crank, coacting clutch faces on the support and sprocket wheel, a rotary rheostat or switch shaft, stops on the supports at opposite points with respect to said shaft, a sprocket wheel loosely mounted on the shaft, a plate mounted on said shaft so as to turn therewith and adapted to engage the stops on the support, coacting clutch faces on said plate and sprocket wheel, and an endless chain connecting the sprocket wheels of the brake staff and rheostat shaft, substantially as specified. 7th. A mechanism for controlling the motor and brake of an electric car, comprising a rotary brake staff, a rotary rheostat or switch shaft, a wheel loose on the brake staff and connected by gearing with the rheostat shaft, a handle for turning the brake staff and means for detachably fixing said handle to the loose wheel, substantially as specified. 8th. A mechanism for controlling the motor and brake of an electric car, comprising a rotary rheostat or switch shaft, a wheel loose on the brake staff and connected by gearing with the rheostat shaft, a crank for turning the brake staff, and a

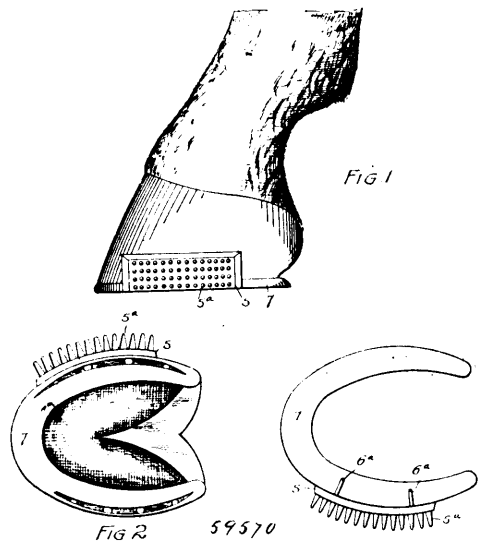
detent on said crank for engaging the loose wheel and fixing it to the crank, said detent being normally held out of engagement with the wheel, substantially as specified. 9th. A mechanism for controlling the motor and brake of an electric car, comprising a rotary brake staff, a rotary rheostat or switch shaft, a sprocket wheel on said rheostat shaft, a sprocket wheel loose on the brake staff, a handle for turning the brake staff, means for detachably fixing said handle to the sprocket wheel, and an endless sprocket chain connecting the sprocket wheels of the brake staff and rheostat shaft, substantially as specified. 10th. A mechanism for controlling the motor and brake of an electric car, comprising a rotary brake staff, a rotary rheostat or switch shaft, a wheel loose on the brake staff and connected by gearing with the rheostat shaft and having an interiorly toothed annular flange on its upper side, a crank for turning the brake staff, a spring-pressed detent lever fulcrumed on the crank and normally held out of engagement with the toothed flange of the gear wheel, and a plunger arranged in the crank and adapted when depressed to hold the detent lever in engagement with the toothed flange of the gear wheel, substantially as specified. 11th. A mechanism for controlling the motor and brake of an electric car, comprising a brake staff, a stop, a rheostat or switch shaft provided with means for engaging the stop, whereby said stop is enabled to arrest its rotation, and a gear wheel so connected with the rheostat shaft that it will turn with said shaft until the rotation thereof is stopped and will then turn thereon, said gear wheel being also connected by gearing with the brake staff, substantially as specified. 12th. A mechanism for controlling the motor and brake of an electric car, comprising a support, a rotary brake staff, a rotary rheostat or switch shaft, a stop arranged on the support, a plate mounted on the shaft so as to turn therewith and having an arm to engage the stop and also having a clutch face, a gear wheel loosely mounted on the shaft and having a clutch face engaging that of the plate, a spring for pressing said plate and gear wheel together, and a connection between the gear wheel and brake staff, substantially as specified. 13th. A mechanism for controlling the motor and brake of an electric car, comprising a support, a rotary brake staff, a rotary rheostat or switch shaft, a gear wheel loosely mounted on the brake staff and having a clutch face, a clutch member fixed on a spring connected to the support and having a clutch face engaging that of the gear wheel, and a connection between said gear wheel and the rheostat shaft, substantially as specified. 14th. A mechanism for controlling the motor and brake of an electric car, comprising a support, a rotary brake staff, a rotary rheostat or switch shaft, a stop on the support, a plate mounted on the shaft so as to turn therewith and having an arm to engage the stop and also having a clutch face, a sprocket wheel loosely mounted on the shaft and having a clutch face engaging that of the plate, a spring for pressing said plate and sprocket wheel together, a sprocket wheel loosely mounted on the brake staff and having a clutch face, a clutch member fixed on a spring connected to the support and having a clutch face engaging that of the sprocket wheel, a sprocket chain connecting the sprocket wheels of the staff and shaft, a crank for turning the brake staff and means for detachably fixing the sprocket wheels of the staff to said crank, substantially as specified. 15th. A mechanism for controlling the motor and brake of an electric car, comprising a stop, a rheostat or switch shaft provided with means for engaging the stop whereby said stop is enabled to arrest its rotation, a gear wheel so connected with the rheostat shaft that it will turn with said shaft until the rotation thereof is stopped and is then free to turn thereon, a brake staff, a gear wheel loosely mounted on said staff and connected with the staff and in the opposite direction on the same, and a suitable means for detachably connecting the handle with the gear wheel on the brake staff, substantially as specified.

ged in sections, with binding pins passed through said ends and through said cover, and pads of separate sheets arranged in said



binders with binding pins passed therethrough and through said sheets, substantially as described and for the purpose hereinbefore set forth.

**No. 59,570. Anti Interfering Device.**  
(Appareil anti-heurtant.)



Thomas Henneberry, Denver, Colorado, U.S.A., 7th April, 1898; 6 years. (Filed 22nd March, 1898.)

*Claim.*—1st. An anti-interfering device, comprising a yielding and highly resilient pad preferably composed of soft rubber and having soft elastic fingers formed on its outer surface, said fingers being preferably formed integral with the body of the pad, and suitable means for fastening the pad to the hoof of the horse, said means comprising a metal device attached to the pad and having one or more arms adapted to engage recesses formed in the shoe, substantially as described. 2nd. An anti-interfering device comprising a soft rubber pad having fingers formed on its outer surface and integral with the body of the pad, suitable means for attaching said pad to the hoof of the horse said means comprising a device cast in the pad and having one or more horizontal projections provided with depending extremities adapted to engage recesses formed in the shoe, as and for the purpose set forth.

**No. 59,571. Vapor Burning Apparatus.**  
(Brûleur à vapeur.)

Arthur Kitson, Philadelphia, Pennsylvania, U.S.A., 9th April, 1898; 6 years. (Filed 6th December, 1897.)

*Claim.*—1st. In a vapor burning apparatus, the combination of the burner, vaporizing tube being located within the heating zone of the burner, together with a mass of absorbent non-conducting re

**No. 59,568. Medicinal Compound.** (Composition médicale.)

Jules Grenon Lussier, Salaberry of Valleyfield, Quebec, Canada, 7th April, 1898; 6 years. (Filed 23rd October, 1897.)

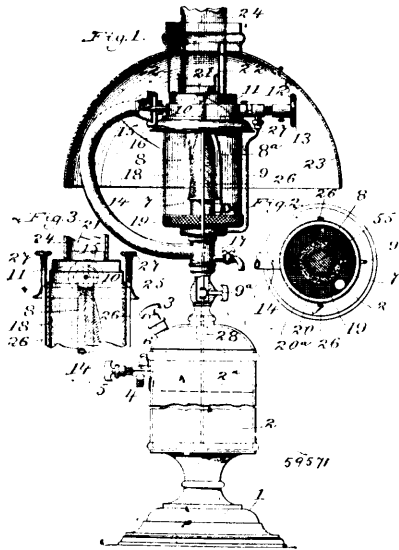
*Claim.*—A medicinal compound, composed of iodine, iodide of lithium, sulphate of quinine, muriatic acid, alcohol, sherry wine and water, in the proportions and for the purpose set forth.

**No. 59,569. Ledger.** (Grand-livre.)

Charles Thompson, Marietta, Pennsylvania, U.S.A., 7th April, 1898; 6 years. (Filed 27th December, 1897.)

*Claim.*—1st. In a portfolio ledger, pad-binders comprising upper and under covers with indexed letters at one end thereof and their other ends permanently secured to the extremities of pliant strips folded over into tag ends whereby said binders are arranged in groups and removably secured to a portfolio cover, substantially as and for the purpose hereinbefore set forth. 2nd. In a portfolio ledger, pads comprising separate sheets arranged and removably secured between binder covers having indexed letters at one end thereof and their other ends rigidly affixed to the extremities of yielding strips folded over into tag-ends whereby said pads are arranged in groups and removably secured to a portfolio cover substantially as described, and for the purpose hereinbefore set forth. 3rd. A petit ledger comprising a portfolio cover adapted to be folded over in sections, as shown, groups of indexed pad binders having pliant tag-ends, arran-

fractory material arranged adjacent to the vaporizing tube, but leaving space for the passage of the gases of combustion around said

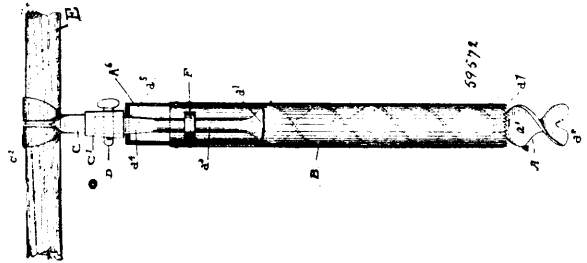


tube, and between it and the refractory material, substantially as described. 2nd. In a vapor burning apparatus, a vaporizing tube and connections, and a mass of absorbent non-conducting refractory material arranged on opposite sides of said tube, so as to leave space between it and the refractory material for the passage of hot gases, and along a considerable portion of the length of said tube, substantially as described. 3rd. In combination with the lamp hood and the central opening therein, of the plates which partly close said opening, and have depending parallel flanges supporting masses of non-conducting refractory fibrous material, and the vaporizing tube located between said flanges and parallel thereto, substantially as described. 4th. A vapor burning attachment for gas fixtures composed of the combination of a vaporizing tube supported over said fixture, a mixing tube extending from a point in front of the end of the vaporizing tube to the burner, the burner mounted on the gas fixture, and a passageway discharging gas into the said burner, substantially as described. 5th. A vapor burning attachment for gas fixtures, composed of the combination of a vaporizing tube supported over said fixtures, a mixing tube extending from a point in front of the end of the vaporizing tube to the burner, the burner mounted on the gas fixture, and a passage-way discharging gas into said burner together with the air regenerating chamber over said fixture and communicating with the mixing tube, substantially as described. 6th. A vapour burning attachment for gas fixtures, composed of the combination of a vaporizing tube supported over said fixture, a mixing tube extending from a point in front of the end of the vaporizing tube to the burner, the burner mounted on the gas fixture and a passageway discharging gas into said burner, together with the air regenerating chamber over said fixture and communicating with the mixing tube, and the incandescent mantle supported over said burner, substantially as described. 7th. A vapor burning attachment for gas fixtures, composed of the burner, mounted on the fixture, the vaporizing tube above, the two oppositely arranged upwardly extending tubes supporting the same, one of which tubes conducts the oil to the vaporizing tube, while the other serves as a mixing tube conducting the air and vapor to the burner, and the passageway in said burner for gas, substantially as described. 8th. In a vapor burning lamp the combination of burner and connections, the incandescent mantle therefor, the translucent globe surrounding said incandescent mantle, the reflector mounted over said burner and resting on said globe, and having a central opening for the passage of the hot gases, and the vaporizing tube extending across said opening, substantially as described. 9th. In a vapor burning lamp the combination of the burner and connections, the incandescent mantle, the globe surrounding said mantle and open to the air at the bottom, the reflector which has a central opening for the passage of hot gases, the outer circumference of which reflector fits over the top of said globe, and the vaporizing tube extending across the opening in said reflector, substantially as described. 10th. In a vapor burning lamp the combination of the burner and connections, the incandescent mantle, the globe surrounding said mantle and open to the air at the bottom, the reflector which has a central opening for the passage of hot gases, the outer circumference of which reflector fits over the top of said globe, and the vaporizing tube extending across the opening in said reflector, together with the chimney mounted on said reflector over said opening, substantially as described. 11th. In a vapor burning lamp, the combination of the burner and connections, the incandescent mantle, the globe surrounding said mantle, and open to the air at the bottom, the reflector which has a central opening for the passage of hot gases,

the outer circumference of which reflector fits over the top of said globe, and the vaporizing tube extending across the opening in said reflector, together with the chimney mounted on said reflector over said opening, the shade supports attached to said reflector and shade supported thereon, substantially as described. 12th. In a vapor burning lamp, the combination of the burner and its connections, the globe of translucent material surrounding said burner, the chimney mounted above said globe, and the vaporizing tube located between said globe and the chimney, substantially as described. 13th. In a vapor burning apparatus or attachment to a gas bracket, the combination of a vapor burner, the vaporizing tube and connections, the gas tube having a passageway admitting gas beneath said burner, and the surrounding tube having air inlets admitting air to mix with said gas, substantially as described. 14th. A vapor burning attachment for gas fixtures, consisting of the combination of a vaporizing tube supported over said fixture, a mixing tube extending from a point in front of the end of the vaporizing tube to the burner, the burner mounted on the gas fixture, and a passageway discharging gas into said burner, substantially as described. 15th. The combination of the vapor burner, the gas bracket on which it is supported, and with which it is in communication, the vaporizing tube, the short mixing tube connected to the base of the burner, the nozzle and valve in said tube and connections from the vaporizing tube to the nozzle, substantially as described. 16th. The combination of the vapor burner, the gas bracket on which it is supported, and with which it is in communication, the vaporizing tube, the short mixing tube connected to the base of the burner, and having air inlets, the nozzle and valve in said tube, and connections from the vaporizing tube to the nozzle, together with adjustable means for controlling the air inlets to said mixing tube, substantially as described.

#### No. 59,572. Prospecting Implement.

(Outil pour prospecteurs.)



Eli Sheldon (Glover, San Francisco, California, U.S.A., 9th April, 1898; 6 years. (Filed 6th November, 1897.)

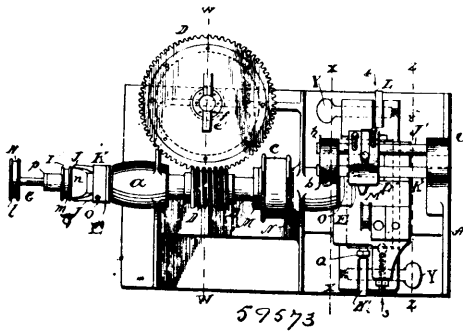
*Claim.*—1st. The herein described implement, comprising the tool A having a spiral blade, a straight shank and a cutting point on the bottom end of the spiral, and a handle for rotating the said tool secured to the straight shank, the tube B enclosing the spiral blade, of the tool A having a cutting edge on the bottom, and means for locking the said tools together to be driven with a rotative movement and for unlocking the tool A from the tube for rotating the tool A in the tube without giving motion to the latter part, constructed for operation as set forth. 2nd. The combination with the tube B open at both ends, having a cutting edge on the bottom, and a stirrup with a rectangular hole on the top, of the tool A within the tube, having a spiral blade terminating in a cutter on the lower end that projects beyond the bottom end of the tube, a straight shank having a cylindrical portion and a rectangular portion above it to fit the hole of corresponding shape in the tubestirrup, and a collar on the shank below said cylindrical portion, substantially as described. 3rd. In a prospecting implement, the combination of a rotatable tube open at both ends and having a cutting edge on the bottom, a spiral blade rotatable within said tube having a cutter on the lower end projecting beyond the lower end of the tube and laterally beyond the circle described by the cutting edge of said tube, means secured to the upper end of the spiral blade for rotating the said part within the enclosing tube, and means for locking the said spiral blade in the tube to rotate the said parts together, substantially as described.

#### No. 59,573. Lathe. (Tour.)

Charles Perry Ball, Thompsonville, Connecticut, U.S.A., 9th April, 1898; 6 years. (Filed 8th March, 1898.)

*Claim.*—1st. The worm-wheel D, having an annular oil reservoir in its body and holes leading therefrom outward to its teeth and to the interior of its hub, combined with a cover removably closing said reservoir, a rectangular hollow boss thereon, channels connecting its interior with the reservoir, and a nipple carried by the boss for receiving the oil-cup, as and for the purpose set forth. 2nd. In a lathe, the combination with the carriage, having a screw, of the frame on which the carriage moves, a pin in the frame at right angles to the length of said screw, such pin having an inclined sur-

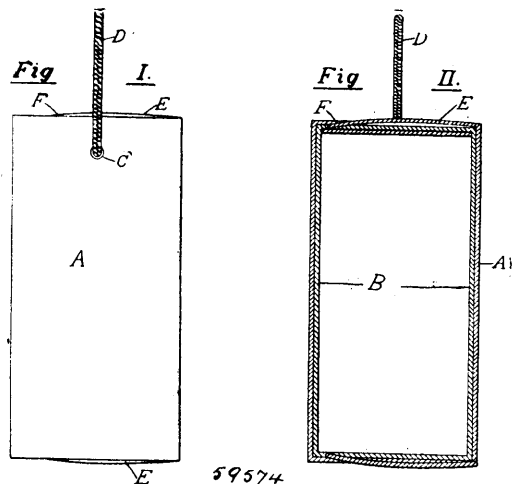
face contacting with the point of the screw and a groove around its outer end, a collar-screw parallel with the pin with its collar



entering said groove, and means for locking the pin after adjustment, as and for the purpose set forth. 3rd. In a lathe, the combination with the carriage having a screw, of the frame, a pin in the frame having two differently inclined surfaces at angles to each other adapted to contact with the point of said screw, and two longitudinal grooves parallel with said surfaces, means for adjusting the pin longitudinally, and a locking set-screw adapted to engage one of said grooves, as and for the purpose set forth. 4th. In a lathe, the combination with the carriage having a screw, of the frame, a pin in the frame having two inclined surfaces at different angles to the axis of the pin and at angles to each other adapted to contact with the point of the screw, means for adjusting the pin longitudinally and axially, and a locking set-screw adapted to engage the pin after its adjustment, as and for the purpose set forth. 5th. The combination of the frame, the tool-carriage with the screw having two longitudinal grooves, and the locking set-screw adjusted in the carriage at right angles to and in contact with the said screws, the inner end of the locking set-screw being adapted to fit said grooves, as and for the purpose set forth. 6th. In a lathe, the combination with the frame having an adjustable pin, of the carriage moving on the frame and having a lug, a set-screw through the latter at right angles to said pin and having the face of its contacting end bevelled, means for adjusting said set-screw longitudinally, and a locking set-screw for holding it in adjusted position, as and for the purpose set forth. 7th. In a lathe, the combination with the frame having an adjustable pin with an inclined inner end, of the carriage, a set-screw therein at right angles to said pin, means for adjusting said screw, and a locking set-screw for holding it in adjusted position, as and for the purpose set forth. 8th. In a lathe, the combination with the frame, and the carriage moving thereon, of a longitudinally-adjustable pin in one member have a bevelled surface, and a longitudinally-adjustable set-screw in the other member at right angles to the length of said pin and having the face of its contacting portion bevelled at the same inclination as that of the pin, as and for the purpose set forth. 9th. In a lathe, the combination with the frame, and the carriage, of a longitudinally-adjustable pin in one member having a bevelled surface, and a longitudinally and axially adjustable set-screw in the other member at right angles to the length of said pin and having the face of its contacting portion bevelled, as and for the purpose set forth. 10th. In a lathe, the combination with the frame, and the carriage, of a longitudinally-adjustable pin in one member having two differently bevelled surfaces and a longitudinally-adjustable set-screw in the other member having the face of its contacting portion bevelled, as and for the purpose set forth. 11th. In a lathe, the combination with the frame, and the carriage, of a longitudinally-adjustable pin in one member having two differently-bevelled surfaces, a longitudinally and axially adjustable set-screw in the other member having the face of its contacting portion bevelled, and means for locking this set-screw against movement after adjustment, as and for the purpose set forth. 12th. In a lathe, the combination with the base-plate having a hole and a segment of threads in its face around the hole, of the tool holder mounted on the plate and pivoted in said hole, the lower face of the holder having a recess with concentric reduced and extensions, and a screw fitting said recess and engaging the threads in the base-plate and having axial projections turning in said extensions, as and for the purpose set forth. 13th. In a lathe, the combination with the base-plate having a hole through its body and a concentric enlarged recess at the upper end thereof, of the tool-holder mounted on the base-plate and having an upright hole, a boss depending from the holder concentric with said hole therein and journal in the recess in the base-plate, and a pivotal bolt through the aligned holes, as and for the purpose set forth. 14th. A tool-holder having an upright flange with a transverse hole for the tool-shank, and an upright hole enlarged at one point to form a recess opening into one side of the transverse hole, combined with a cylindrical plug fitting said recess and having a cut-away portion projecting slightly into the transverse hole, said plug also having an upright hole of the size of that in the flange, and a bolt through said registering holes, as and for the purpose set forth.

15th. A tool-holder having a flange with a transverse hole for the tool-shank and an upright hole enlarged at one point to form a recess opening into the transverse hole, combined with a cylindrical plug fitting said recess and having a portion projecting slightly into the transverse hole, said plug also having an upright hole of the size of that in the flange, a base plate, a pivotal and tightening bolt passing through the aligned holes in plug and flange and through the base plate, and means for adjusting the remote end of the tool holder on the base plate around said bolt, as and for the purpose set forth. 16th. In a lathe, the combination with the carriage having a T-shaped slot, and the base plate having a projection entering said slot, of the tool-holder resting on the plate, a pivotal bolt passing through the holder and plate with its head engaged in said slot in the carriage, means for turning the holder around said pivot, and a clamping bolt also passing through the holder and plate with its head in said slot, as and for the purpose set forth. 17th. In a lathe, the combination with the carriage having a T-shaped slot, and the base plate having a projection entering said slot, of the tool-holder resting on the plate and having an upright flange with a transverse hole for the tool and an upright hole for the pivotal bolt having a recess merging into the tool hole, a plug within the recess bearing against the tool-shank, a pivotal bolt passing through the plug holder, and plate with its head engaged in said slot in the carriage, and a clamping bolt also passing through the holder and base plate, as and for the purpose set forth. 18th. The combination of the back rest rods J<sup>11</sup> and K<sup>11</sup>, fastened at their respective ends to the lugs b and i of the frame A, and the back rest holder L<sup>11</sup>, adjusted on the rods J<sup>11</sup> and K<sup>11</sup>, over the tool carriage P<sup>11</sup>, all constructed substantially as and for the purpose set forth. 19th. The combination of the back rest holder L<sup>11</sup>, and the back rest bars M<sup>11</sup>, and N<sup>11</sup>, each independently adjusted in the back rest holder L<sup>11</sup>, and the collar screws O<sup>11</sup>, O<sup>11</sup>, with their collars x<sup>11</sup>, x<sup>11</sup>, made to fit the grooves r<sup>11</sup>, and r<sup>11</sup>, in the back rest bars M<sup>11</sup> and N<sup>11</sup>, respectively, all constructed substantially as and for the purpose set forth. 20th. The combination with the back rest rods, and the holder adjustable thereon and having a rectangular aperture, of the substantially square back rest bars passing through and filling said aperture and having their operative surfaces at right angles to each other, and means for adjusting these bars longitudinally and independently, as and for the purpose set forth. 21st. The combination with a cam, of a pivoted lever, a spring attached near its ends thereto and curving around and remote from the end of the lever which is struck by the cam, and a screw through the lever against the under side of the spring, as and for the purpose set forth. 22nd. The combination with a cam, of a lever having a scale marked thereon, a spring attached at one end to the lever and adapted to receive the impulse from the cam, means for adjusting the distance of the spring from the lever, and an indicator pivoted to the lever with one end moving over the scale and the other end having a pin resting under the spring, substantially as hereinbefore described. 23rd. The combination of the lever Q<sup>11</sup>, with its scale r<sup>11</sup>, the spring R<sup>11</sup>, held by the tension of the spring R<sup>11</sup>, the set screw V<sup>11</sup>, adjusted to regulate the tension of the spring R<sup>11</sup>, and the indicating lever W<sup>11</sup>, pivoted by the pin X<sup>11</sup>, so as to swing on the side of the lever Q<sup>11</sup>, all constructed substantially as and for the purpose set forth.

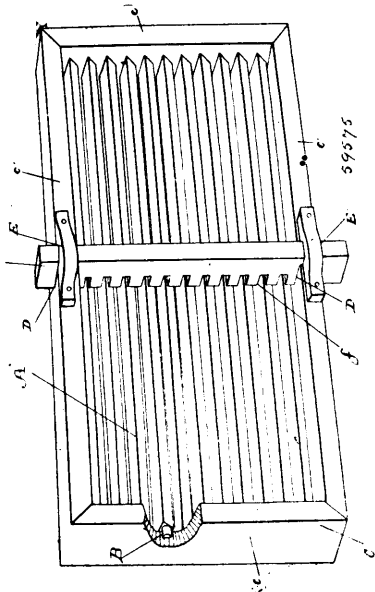
**No. 59,574. Paper Box. (Boite en papier.)**



Charles Wood Arthur, Toronto, Ontario, Canada, 9th April, 1898; 6 years. (Filed 10th November, 1897.)

**Claim.**—The combination of a paper box, in a case A, with inner portion B, and tongue E, slot F, ridges or cuts G, the opening C, slots H, and the thread, ribbon or cord D, all formed, arranged and combined, as and for the purpose hereinbefore set forth

**No. 59,575. Prismatic Reflector. (Réflecteur prismatique.)**

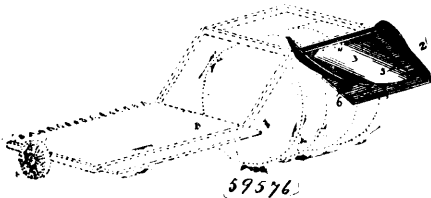


Renny Burger, Toronto, Ontario, Canada, 9th April, 1898; 6 years. (Filed 10th January, 1898.)

*Claim.*—1st. A prismatic reflector consisting of a plurality of independent transparent prisms, each end of each prism provided with a trunnion, a frame, in which is journaled the trunnions of the prisms, and means for holding the prisms at their proper relative angle to each other, and altering the angle at will, substantially as specified. 2nd. A prismatic reflector, embracing in its construction a plurality of independent transparent prisms, each end of each prism provided with a trunnion in combination with a frame, embracing in its construction two opposite sides and ends uniting the opposite sides, journals formed in the opposite sides to receive the trunnions of the transparent prisms, and an operating bar adjustably mounted in the frame, to hold the transparent prisms at their proper relative angle to each other, and to vary the angle at will, substantially as specified.

**No. 59,576. Harvester Swather. (Rangeur pour moissonneuses.)**

(Rangeur pour moissonneuses.)



Lemuel Fritts, Sunnyside, New Jersey, U.S.A., 9th April, 1898; 6 years. (Filed 19th March, 1898.)

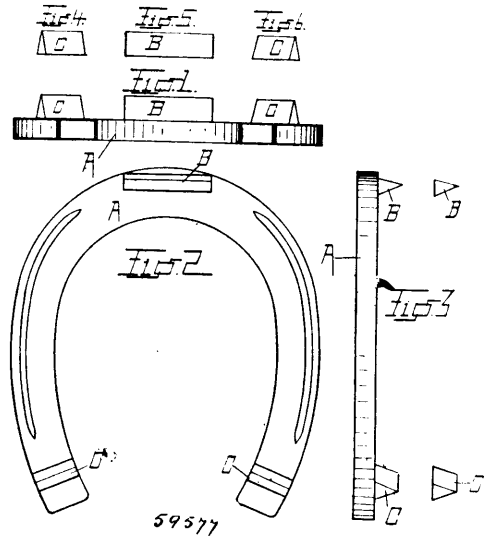
*Claim.*—In combination with the inclined delivery-board of a harvester, a mouldboard 3, secured thereto, a supporting-bracket therefor, said bracket having slots 8 and 11, and bolts adapted to enter said slots and engage the delivery-board and the mouldboard, in the manner and substantially as described.

**No. 59,577. Horseshoe. (Fer à cheval.)**

Jacob Bennett Wallace, Erie, Pennsylvania, U.S.A., 9th April, 1898; 6 years. (Filed 22nd March, 1898.)

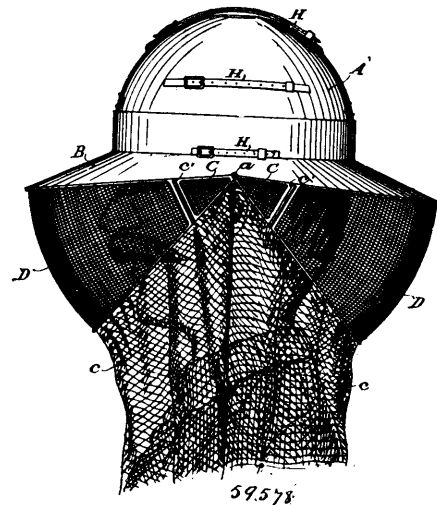
*Claim.*—1st. As an article of manufacture, a horse shoe comprising a metal hoof plate and a calk or calks secured to said plate by brazing. 2nd. As an article of manufacture, a horse shoe comprising a metal hoof plate and a calk or calks, being formed of material, the non-abrading quality of which does not deteriorate by reason of the heating incident to brazing. 3rd. As an article of manufacture, a horse shoe comprising a metal hoof plate and a calk or calks, secured to said plate by brazing, said calk or calks being formed of material differing in quality or character from the material of the plate, and being of such quality or character as not to be injured relatively to its use as a calk by the heat incident to brazing. 4th. As an article of manufacture, a horseshoe comprising a

metal hoof plate, and a calk or calks secured to said plate by brazing, said calk or calks being formed of a material differing in



quality or character from the material of the plate, the non-abrading quality of which material forming the calk or calks, does not deteriorate by reason of the heating incident to brazing.

**No. 59,578. Hat. (Chapeau.)**



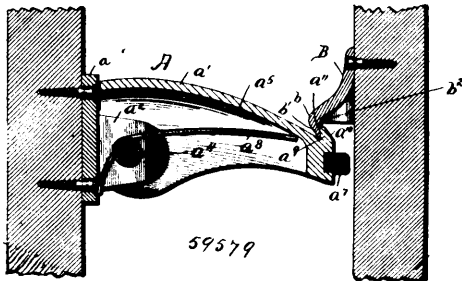
Wisner G. Scott, San Francisco, California, U.S.A., 9th April, 1898; 6 years. (Filed 15th March, 1897.)

*Claim.*—1st. The combination with a hat of hinged foldable masks or screens pivoted to the sides of the hat, substantially as described. 2nd. The combination with a hat, of screens adapted to be lowered in front and rear of the head of the wearer, pivot pins by which they are connected with the rim at opposite sides whereby they may be turned up and folded upon each other with relation to the hat, substantially as described. 3rd. A hat having a crown, a peripheral rim-band wholly or partially metallic, metallic strips hinged or pivoted at opposite sides of the rim-band diverging from each other, and a covering of semi-flexible, semi-rigid foraminous material filling the globular or spheroidal segment between the strips, said screens being adapted to drop over the face and head of the wearer or to fold upon themselves when not in use, substantially as described. 4th. The combination with a hat of globular or spheroidal segmental foraminous screens hinged upon opposite sides and foldable with relation to the hat and each other, and a fibrous veil connecting with the edges of the masks adapted to cover the upper portion of the body and shoulders, said veil being foldable upon and with the masks, substantially as described. 5th. A hat or helmet having foraminous masks pivoted to opposite sides of the rim and foldable with relation to the hat and each other, a veil connecting with the lower edges of the masks adapted to cover the upper portion of the body and shoulders, said masks being foldable upon or inside of the crown of the hat and the veil adapted to fold



over the masks with securing devices by which the two are attached to the crown and rim of the hat when not in use, substantially as described. 6th. The combination with a hat of the character described of foraminous masks hinged to opposite sides of the rim adapted to drop below the rim at front and rear, a flexible veil forming a continuation from the lower edges of the masks, said masks being foldable with relation to the hat and by each other and the veil adapted to fold upon and cover the masks, the parts being compressible for packing purposes, substantially as shown and described.

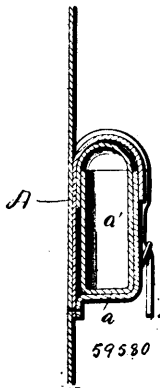
**No. 59,579. Door Stop and Catch. (Arrête-porte.)**



Joseph Rosario Lavigneur, Montreal, Quebec, Canada, 9th April, 1898; 6 years. (Filed 14th December, 1897.)

*Claim.*—1st. A combined door stop and catch comprising a base plate, a member pivotally connected therewith and having a holding face, a spring for normally holding said member in a horizontal position, and a catch adapted to engage with said holding face, substantially as described. 2nd. A combined door stop and catch comprising a base plate having forwardly extending lugs, a member having a pivotal connection with said lugs, a spring mounted between said member and said base plate, serving to normally hold said member in a horizontal position, a lug formed at the front end of said member and extending outwardly therefrom, said lug having an inclined front face and a vertical rear face, a tip of resilient material connected to the front end of said member, and a catch having a depending lug adapted to ride over and engage the vertical face of the lug on said member, substantially as described.

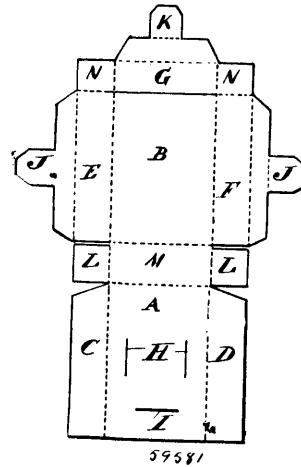
**No. 59,580. Provision Bag. (Sac à provisions.)**



Moritz Gutmann, Victoria, British Columbia, Canada, 9th April, 1898; 6 years. (Filed 22nd November, 1897.)

*Claim.*—1st. In a provision bag, the combination with a strip of material provided on its upper face with closing straps, of series of pockets arranged at one end of the inner face of said strip, each of said pockets being provided with a flap and also with a fastening means, and a series of inner bags for said pockets, said bags being adapted to contain distinct kinds of provisions, substantially as described. 2nd. As a new article of manufacture, a provision bag, comprising a strip of material, pockets secured to the inner face thereof, inner bags adapted to be placed within said pockets, and integral flaps formed on each side of said pocket portion, said flaps being adapted to be folded over said pockets, substantially as described. 3rd. In a provision bag, the combination with a strip of material, pockets secured to the inner face thereof, and inner bags adapted to be placed within said pockets, of a removable cover, adapted to be placed over said pockets, substantially as described.

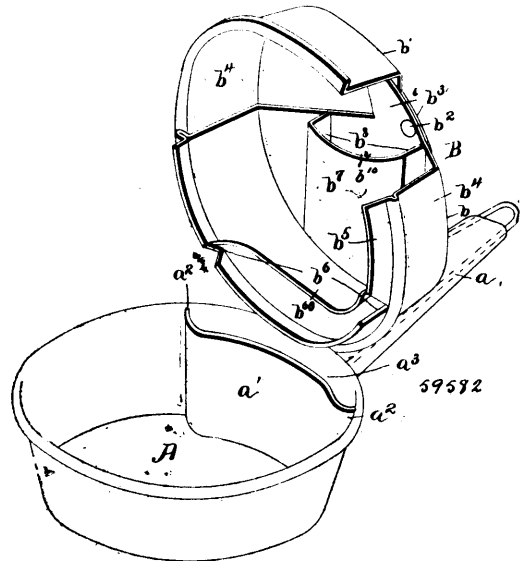
**No. 59,581. Paper Box. (Boîte de papier.)**



Charles Wood Arthur, Toronto, Ontario, Canada, 9th April, 1898; 6 years. (Filed 28th January, 1898.)

*Claim.*—The combination of a pasteless paper box, blank, made of a single piece, having a bottom portion M, continuous flaps L, L, extensions A and B, sides C, D, E, and F, flaps J, J, the section A having slots H and cover G, with folding flap K, a slot I, and the folding lips N, N. All formed, arranged and combined, as and for the purpose hereinbefore set forth.

**No. 59,582. Cooking Utensil. (Ustensile de cuisine.)**



Joseph Aimé Dion, Point St. Charles, Quebec, Canada, 9th April, 1898; 6 years. (Filed 20th January, 1898.)

*Claim.*—1st. The combination with a cooking utensil, having a conduit at one side, of a lid having a conduit adapted to connect with the conduit in the pan, substantially as described. 2nd. A lid for cooking utensils, comprising a plurality of sections pivotally connected together, said sections being adapted to be rotated about each other. 3rd. The combination with a cooking utensil, having a conduit at one side, of a lid formed in sections pivotally connected, one of said sections being provided with a conduit adapted to connect with the conduit in the cooking utensil.

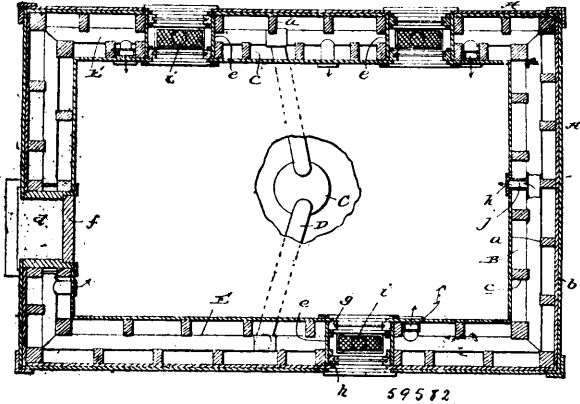
**No. 59,583. Construction of Buildings.**

(Construction d'édifice.)

Jake Friedlander, Fargo, North Dakota, U.S.A., 9th April, 1898; 6 years. (Filed 10th February, 1898.)

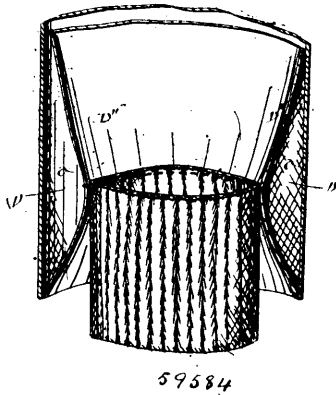
*Claim.*—1st. In a building, the combination of the outer walls having the air-space B therein, a heater located in the building, a conduit leading from the heater to one of the outer walls, and a pipe arranged in the air-space B of the walls and communicating with the conduit, the said pipe being adapted to convey a heating agent to the apartment or apartments to be heated, and being also

adapted to give off heat by radiation and thereby heat the air in the space B, substantially as specified. 2nd. In a building, the



combination of the outer walls having the air-space B therein, registers *k*, *l* arranged in the inner portions of the outer walls, a furnace located in the building, a hot-air pipe arranged in the air-space B of the walls and connected with the furnace and also connected with the register or registers *k*, a flue communicating with the outer air at a point adjacent to the top of the building and extending down through the space B and communicating at its lower end with the register *l*, and a connection between the hot-air pipe and said flue, substantially as specified. 3rd. In a building, the combination of the outer walls having the air-space B therein, a window-casing arranged in one of the outer walls and having inner and outer sashes and also having a register *i* in its sill at a point between the sashes, one or more registers *k* formed in the inner portions of the outer walls, a furnace located in the building, and a hot-air pipe arranged in the air-space B of the walls and connected with the furnace and also connected with registers *i*, *k*, substantially as specified.

**No. 59,584. Garment. (Vêtement.)**



Joseph J. Westgate and Charles Leander Higgins, both of Montreal, Quebec, Canada, 12th April, 1898; 6 years. (Filed 4th November, 1896.)

*Claim.*—The combination with the sleeve lining D of the cuff C, substantially as set forth.

**No. 59,585. Fermentation of Worts. (Fermentation du moût.)**

Jean Effront, Brussels, Belgium, 12th April, 1898; 6 years. (Filed 19th October, 1896.)

*Claim.*—1st. A process for the fermentation of worts which have been rendered antiseptic, characterised by the fermentation of such worts by the action of yeast which has been acclimatised so as to be capable of enduring at least double the amount of antiseptic inserted in the wort, such antiseptic being the same as that employed for acclimatising the yeast, substantially as described. 2nd. In a process such as described, the preparation of yeast acclimatised to antiseptics characterised by the treatment of worts at 30° centigrade minimum, with a maximum proportion of 0.2 grammes of antiseptic, (H F<sup>1</sup> per litre in the first stage of cultivation, increasing it by .01 at each stage of the subsequent cultivation up to 1 gramme per litre, renewing the wort for each successive stage after the yeast has fallen in the next stage from

18° to 9° baling and finally by the compression and desiccation under vacuum of the dregs in two operations or stages, one at 30° centigrade, and the second at 45° centigrade, with the object of imparting to the acclimatised yeast the property of keeping or being preserved, substantially as described. 3rd. In a process such as described, the use instead of H F<sup>1</sup> of antiseptics having analogous properties, and conformably to the nature of the latter, the variation of the antiseptic degree of the wort in proportion to the efficacy of the antiseptic, for instance in the case of formic aldehyde from .02 to .04 in the first stage, and increasing by .02 in each successive stage up to 2 grammes per litre, substantially as described. 4th. The utilization in distilleries of the herein described dregs yeast, by diluting it in the proportion of 100 grammes in 10 litres of wort rendered antiseptic to the extent of .08 and after fermentation in four times this quantity of a similar wort, (40 litres) and after fermentation by again four times this latter quantity (say 200 litres), then fermenting the whole and afterwards utilizing the yeast wort in the vats in the proportion of 2 to 100 hectolitres of wort rendered antiseptic to about half the degree to which the yeast is rendered antiseptic, substantially as described. 5th. The utilization of yeast acclimatised according to the process hereinbefore described in a barn containing at most a  $\frac{1}{4}$  or a  $\frac{1}{2}$  per cent. of grain, for the fermentation of molasses-worts and eventually the total suppression of grain, and in the latter case the fermentation of the molasses-worts by blending or mixing two vats, substantially as described.

**No. 59,586. Soap Manufacture. (Fabrication de savon.)**

Guillaume Steeken, Rue Christine, 66 Ostend, Belgium, 12th April, 1898; 6 years. (Filed 12th May, 1896.)

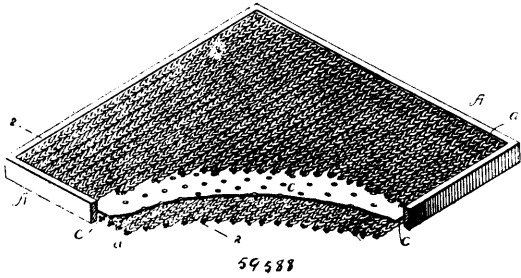
*Claim.*—An improved soap composed of the following ingredients and proportions, animal or fatty matter such as cocoa-nut oil, palm oil, olive oil, etc., 10 kilogrammes, water 40 litres, and caustic soda 10 kilogrammes, mixed and saponified under the action of heat, to which is added powdered colophony (resin) 10 to 15 kilogrammes stirred therein while the mass is in a boiling condition, sea salt 2 kilogrammes, and sodium sulphate 2 kilogrammes, each dissolved in water 4 litres, mixed together and added to the aforesaid mass while in a semi-fluid state, and colouring material in the nature of a dye in the proportions specified added to the soap mass while in a semi-fluid state, the mass being allowed to cool and harden, substantially as described.

**No. 59,587. Waterproofing Composition. (Composition imperméable.)**

Charles James Grist, 20 Gracechurch Street, London, England, 12th April, 1898; 6 years. (Filed 21st December, 1897.)

*Claim.*—1st. In the manufacture of waterproof goods for packings, acid tank linings and for other purposes, the process of treating oil and fibrous substances by the preparation of the oil by heating it over 400° Fahr. and keeping it in motion for a period of about forty-eight hours, dipping the fibrous substances (dried and cleaned) in the oil, at normal temperature, placing them immediately in a hydro-extractor or other suitable machine to eliminate superfluous oil and leaving only small particles attached separately to the fibres, submitting the fibrous substances so treated to the oxidizing action of the air, but previously loosening and pulling them apart and during the oxidizing action at intervals of say about an hour redistributing and turning the fibres spread on the netting, repeating these steps of the treatment not more than three times in all and lastly crushing and consolidating the mixture of oxidized oil and fibrous substances so prepared with the addition of powdered sulphur and colouring matters, all as and for the purpose hereinbefore set forth. 2nd. The preparation of fibrous materials in cold oil that has been treated as set forth removing off superfluous oil and oxidation of the particles remaining and repeating the process three times in all, at most, so as by degrees to cover the individual fibres with small particles of oil which shall be accessible to the fullest oxidizing influence of air and the treatment finally of the material by grinding and consolidation with addition of powdered sulphur, as set forth. 3rd. In the manufacture of insulating compositions for electrical purposes, and for golf balls and balls for like uses, the material resulting from the above described method of treating fibrous substances with oil with the addition of at least fifteen per cent. of sulphur for insulating composition and five per cent. for balls added as described and the addition of gutta percha, or other suitable compounds adapted to give enhanced tenacity, all as and for the purpose set forth. 4th. The method of manufacturing an insulating compound and golf and like balls from fibres by coating them with oil, oxidizing, grinding with a large proportion of sulphur and then vulcanizing, substantially as described. 5th. The manufacture of paints, anti corrosive compositions and compositions for like uses by the preparation of hair, jute or like fine or thin fibre in cold oil that has been treated as set forth, removing superfluous oil and oxidizing remaining particles, repeating the process until each fibre becomes coated with small particles of oil, and oxidizing same fully and finally grinding, consolidating and treating the mixed material, with the addition of powdered sulphur, if desired, all as set forth.

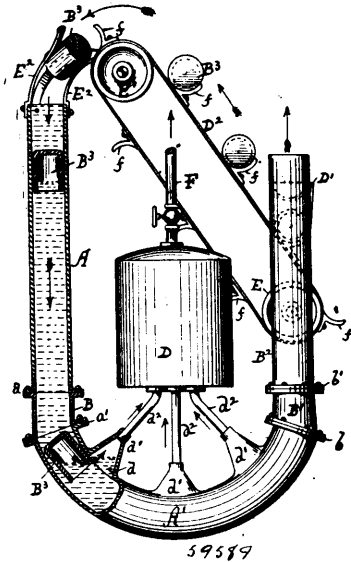
**No. 59,588. Electrode for Storage Batteries.**  
(*Electrode pour batteries secondaires.*)



Herbert Samuel Lloyd, Philadelphia, Pennsylvania, U.S.A., 12th April, 1898; 6 years. (Filed 16th November, 1897.)

*Claim.*—1st. An electrode comprising a frame, two or more layers or strips formed of lead or an alloy thereof extending between the side bars of the frame, and a perforated leaden plate situated between such layers, substantially as specified. 2nd. An electrode comprising a frame and two layers of rods or strips of lead or an alloy thereof, said rods or strips being plaited in series and extending between the side bars of the frame, and a perforated leaden plate situated between the said layers, substantially as specified.

**No. 59,589. Air and Gas Compressor,**  
(*Machine de compression pour le gaz et l'air.*)

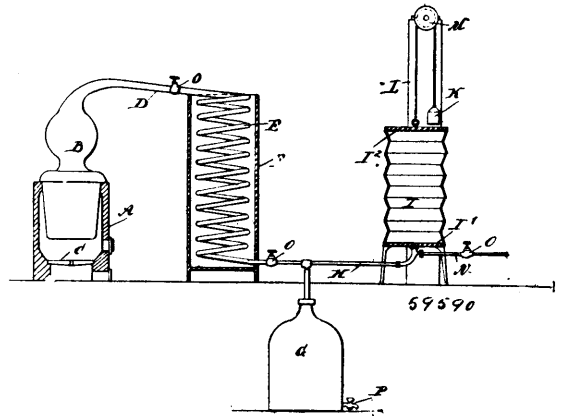


Francis M. Graham, San Jose, California, U.S.A., 12th April, 1898; 6 years. (Filed 8th October, 1897.)

*Claim.*—1st. In a compressing apparatus, the combination with the vertical inlet pipe, of the vertical water-outlet pipe of less length than the inlet pipe, the curved joint united to the lower ends of the inlet and outlet pipes, of air-escape openings formed in said joint, a receiver located above the said joint, air-pipe connection between the receiver and the escape openings of the joint, and the cups fitted to move within the passageway formed by the pipes and curved joint. 2nd. In a compressing apparatus, the combination with the vertical water-inlet pipe, of the vertical water-outlet pipe of less length than the water-inlet pipe, the curved joint united to the lower ends of the inlet and outlet pipes, of air-escape openings formed in the curved joint, a receiver located above the said joint, air-pipe connection between the receiver and the escape openings of the joint, the cups fitted to move within the passageway formed by the water-inlet and water-outlet pipes and the curved joint, the open hopper secured to the upper end of the water-outlet pipe, an endless travelling carrier or conveyor arranged to receive the cups as dis-

charged from the water-outlet pipe into the hopper and convey the same to the water-inlet pipe, and of the chute secured to the water-inlet pipe into which the cups are discharged from the endless carrier. 4th. In an air or fluid compressing apparatus, the combination with the water-inlet and water-outlet pipes, a pipe connection between the inlet and outlet pipes, said connection having escape openings formed therein, and of a receiver connected with the escape openings of the pipe connection between the inlet and outlet pipes.

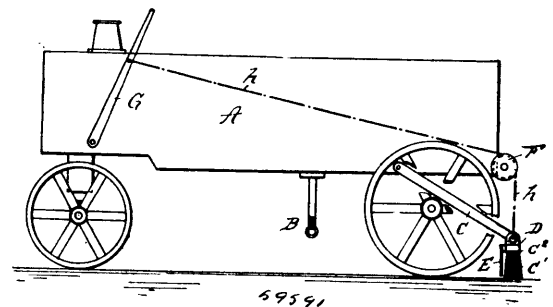
**No. 59,590. Distilling Apparatus.**  
(*Appareil de distillation.*)



Jose Gallegos, Antigua, Guatemala, Central America, 12th April, 1898; 6 years. (Filed 19th January, 1898.)

*Claim.*—1st. The combination of the still, and the expansion chamber having a movable wall so that its volume can vary according to the pressure within the apparatus and the cooler or condenser located between the still and the expansion chamber, substantially as described. 2nd. The combination of the still, the cooler or condenser, the expansion chamber having a movable wall so that its volume can vary according to the pressure within the apparatus, and a counterbalance connected to said movable wall, as and for the purpose set forth. 3rd. The combination of the still, the cooler or condenser, the bellows connected to said condenser, and having a stationary wall, and a movable wall opposing the stationary wall, a flexible connection, one end whereof is secured to said movable wall, and a counterweight secured to the other end of said connection, substantially as described. 4th. The combination of the still, the cooler or condenser, the expansion chamber connected to the condenser and having a movable wall, a flexible connection, one end whereof is secured to said movable wall, and a counterweight secured to the other end of said connection and tending to draw the movable wall away from the stationary part of the expansion chamber, substantially as described. The combination of the still, the cooler or condenser, the expansion chamber connected to the condenser and having a stationary bottom and a movable top wall, a flexible connection extending upwardly from said movable top, a pulley or guide over which passes said connection, and a counterweight secured to the free end of the said connection and arranged to pull said movable wall upward, substantially as described.

**No. 59,591. Street Sweeper.**  
(*Balayeuse de rue.*)

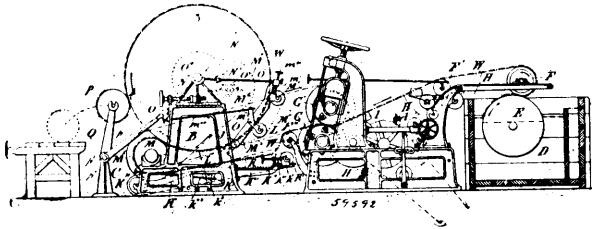


John Hasson, Reading, Pennsylvania, U.S.A., 12th April, 1898; 6 years. (Filed 23rd March, 1898.)

*Claim.*—In a combined street sweeper and sprinkler, a tank having a depending pipe B attached thereto, arms C pivotally attached at their upper ends to the tank, their lower ends pivotally connected to and carrying a frame provided with brush bristles and a scraper, a lever G secured at its lower end pivotally, to the front end of said

tank, and having a flexible cord attached thereto and passing over a pulley secured to the rear end of the tank, the lower end of said cord attached to the frame of brushes and adapted to lift said brushes, all substantially as set forth.

**No. 59,592. Dry Pulp Manufacturing Machine.**  
(*Machine pour la fabrication de pulpe.*)

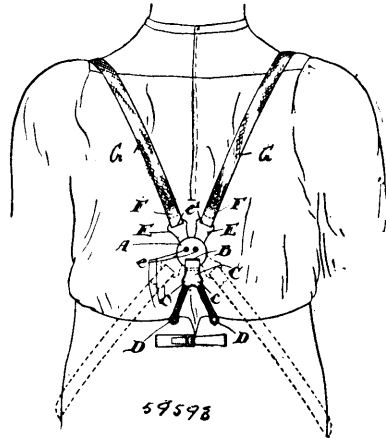


Francis Hector Clergue, Sault Ste. Marie, Ontario, Canada, 12th April, 1898; 6 years. (Filed 16th October, 1897.)

*Claim.*—1st. The process of manufacturing dry pulp consisting in forming a perforated web on the cylinder mould, passing said web on an endless felt to the press rolls over a suction box, allowing said web to drop upon an endless felt acting as a carrier, taking up said web by another felt passing over a press roll, passing said web by said press roll and felt on a drying cylinder causing it to adhere thereto and holding it thereon by said felt for a part of a revolution and finally taking off the dry web by a self-winder, substantially as set forth. 2nd. In a cylinder mold for a machine for manufacturing dry pulp, the filling up of the meshes in selected spots with material to which the wet pulp is non-adhesive, substantially as set forth. 3rd. In a drying attachment of a pulp machine, the combination of frame sides adapted to carry a drying cylinder and felt carrying rollers and attachments, of a carrier felt extending under the delivery roller of the wet machine, a driving roller journaled in said frame over which one end of said felt runs, a carrying roller journaled under said delivery roller in adjustable bearings, brackets, secured to said frame sides upon which said adjustable bearings are adapted to slide, a slack roller carrying the return run of said felt and journaled in adjustable bearings and brackets in which said slack roller is journaled pivoted to said frames and provided with means of adjustment, substantially as set forth. 4th. In a drying attachment of a pulp machine, the combination of frame sides adapted to carry a drying cylinder and attachments, brackets secured slidably upon the top of said frame sides, means of adjusting said brackets, a drying cylinder journaled in said bracket, and a press roll journaled in said frame sides below said drying cylinder in contact therewith, bent to one side of its centre, substantially as set forth. 5th. In a pulp machine consisting of a wet machine and a drying attachment, the combination of transmitting gear between the press rolls of the wet machine and the driving roller of the carrying felt or blanket and said press rolls and the press roll of the drying attachment and said last named press roll and the drying cylinder whereby said press rolls of the wet machine, carrying felt, press roll of the drying attachment and drying cylinder are caused to have a uniform surface speed, substantially as set forth. 6th. In a pulp machine, the combination with the press rolls of a wet machine, the frame sides of a drying attachment adapted to carry a drying cylinder press and felt rolls and their appurtenances, a press roll journaled in said frame sides and driven from one of said press rolls in the wet machine and adapted to carry one end of a cylinder felt, a felt roller adapted to carry the other end of said felt in contact with a drying cylinder and journaled adjustably on adjustable brackets or arms pivoted to said frame sides, a guide-roller adapted to guide the return run of said felt clear of said cylinder and journaled on adjustable brackets pivoted on said adjustable arms, a cylinder felt running over said press and other rollers aforementioned, adjustable brackets on the top of said frame sides adapted to carry a drying cylinder, a drying cylinder journaled in said adjustable brackets, connecting gear between said press roll and said drying cylinder, a receiving felt below said cylinder felt, an end roller for said last-mentioned felt journaled in said frame sides, connecting gear between said roller and one of the press rolls in the wet machine, a roller journaled adjustably on brackets on said frame sides and carrying the other end of said felt, and a slack roller journaled in adjustable brackets pivoted to said frame sides and carrying the slack of the return run of said felt, substantially as set forth. 7th. In a drying attachment for a pulp machine, the combination of suitable frame sides, adjustable brackets upon said frames adapted to have a cylinder journaled upon them, a drying cylinder journaled upon said brackets, a press roll journaled in said frames to one side of the centre of and below said drying cylinder and adapted to be in contact therewith, pulleys on said press roll, one adapted to be driven and the other to drive the drying cylinder, a spur-wheel on the axle of the drying cylinder, an intermediate or countershaft with pulley driven from the press roll pulley and having pinion gearing into said spur-wheel, arms or brackets pivoted to said frame and held adjustably at their upper ends, brackets secured adjustably to said arms or brackets, two felt

rollers journaled in said adjustable brackets, a cylinder felt carried on said rollers and press roll so as to be in contact with said cylinder, a pair of rollers below said cylinder felt journaled on said frame, one adapted to be driven and the other journaled adjustably, and a felt running over said rollers adapted to receive a web from the wet machine, substantially as set forth. 8th. The combination, in a pulp machine, of a wet machine of the ordinary construction, of a receiving or carrying felt or blanket carried upon suitable rollers geared to the press rolls of the wet machine, a press roll geared to the press rolls of the wet machine, two others journaled adjustably to carry with said press roll an endless felt or blanket in contact with a drying cylinder, a drying cylinder suitably heated journaled in adjustable bearings to be in contact with said press roll and the press roll felt, and gearing connecting said press roll and said cylinder, substantially as set forth. 9th. A pulp machine, adapted to form a continuous web of dry pulp, consisting of a wet machine, of a dryer having a drying cylinder press roll, endless felts or blankets and rolls to carry the same, gear to transmit motion from the wet machine to the dryer, and a self-winder adapted to take the web from the drying cylinder, substantially as set forth.

**No. 59,593. Suspender. (Bretelles.)**



Arthur James Jackson, Toronto, Ontario, Canada, 12th April, 1898; 6 years. (Filed 23rd March, 1898.)

*Claim.*—1st. In suspenders for personal wear, the combination with the lower tabs for the back, of a central connecting plate provided with a lower slot and a connection extending through such slot to the tops of the lower tabs, and the side shoulder portions of the suspenders pivotally and flatly connected at the bottom to the central plate, as and for the purpose specified. 2nd. In suspenders for personal wear, the combination with the side shoulder portions and lower tabs for the back, of a central connecting plate provided with a lower slot and leather loop connection extending through such slot suitably connected to the tops of the bottom tabs, upwardly extending swing arms pivotally connected to the plate and provided with upper slots and loops extending through such slots and suitably connected to the side shoulder portions of the suspenders, as and for the purpose specified. 3rd. In suspenders for personal wear, the combination with the side shoulder portions and the lower tabs for the back, of a central connecting double folded plate provided with a lower slot and leather loop connection extending through such slot suitably connected to the tops of the bottom tabs, upwardly extending swing plates having cross slots at their upper ends, and the lower ends located between the two portions of the double plate forming a guide therefor, and eye-rivets extending through the double plate and the bottom ends of the swing plates, and the loop connections extending through the slots and suitably connected to the lower ends of the side shoulder portions of the suspenders, as and for the purpose specified.

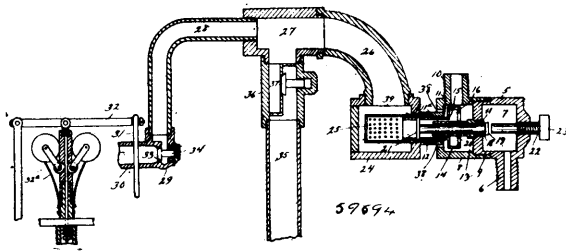
**No. 59,594. Gas Engine Apparatus.**  
(*Appareil de machine à gaz.*)

Franklin F. Snow, St. Joseph, Michigan, U.S.A., 12th April, 1898; 6 years. (Filed 31st January, 1898.)

*Claim.*—1st. In a vaporizing-carbureter and air-governor for gas engines, the combination of a main casing, with means for admitting gasoline thereto, said casing being provided at its outer end with a screw-threaded bolt which passes therethrough, and at its inner end with a central tube, a supplemental casing connected with said main casing through which said tube passes, a valve mounted in said main casing, and provided with a stem which passes through said tube, said valve being adapted to close the passage through said tube, said supplemental casing being also provided centrally of its outer end with a tubular extension with which is connected an auxiliary casing, within which is mounted a perforated tube which is connected with said tubular extension, and a cylindrical hollow valve mounted in said supplemental casing and provided with a

tubular extension, which passes through the tubular extension of the supplemental casing into the perforated tube in the auxiliary

the cylinder below said grooves, a rod having an angular top and a screw-threaded portion extended through said screw-seat and



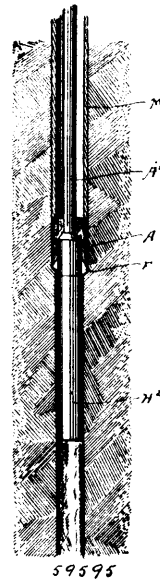
casing, and the inner end of the valve stem of the valve within the main casing being provided with a cross-head or rod which is connected with the tubular extension of the valve within the supplemental casing, substantially as shown and described. 2nd. In a vaporizing-carbureter and air-governor for gas engines, the combination of a main casing with means for admitting gasolene thereto, said casing being provided at its outer end with a screw-threaded body which passes therethrough, and at its inner end with a central tube, a supplemental casing connected with said main casing through which said tube passes, a valve mounted in said main casing, and provided with a stem, which passes through said tube, said valve being adapted to close the passage through said tube, said supplemental casing being also provided centrally of its outer end with a tubular extension with which is connected an auxiliary casing within which is mounted a perforated tube, which is connected with said tubular extension, and a cylindrical hollow valve mounted in said supplemental casing and provided with a tubular extension, which passes through the tubular extension of the supplemental casing into the perforated tube in the auxiliary casing, and the inner end of the valve stem of the valve within the main casing being provided with a cross-head or rod which is connected with the tubular extension of the valve within the supplemental casing, and said supplemental casing being provided with air parts or passages which are controlled by the valve mounted therein, substantially as described. 3rd. In a vaporizing carbureter and air-governor for gas-engines, the combination with a casing as 5 provided with a screw-threaded bolt 22 in one end thereof, and at the other with a central tube as 17 of a supplemental casing as 8, connected therewith, and provided with a tubular extension as 12, an auxiliary casing as 24 mounted on said tubular extension, and provided with a perforated tube which communicates therewith, the casing 5 being provided with a valve as 19 which closes the passage through the tube 17, and with a valve-stem which passes therethrough, and the casing 8, being provided with a hollow cylindrical valve as 14, which is provided with a tubular extension which incloses the tube 17, and which communicates with the perforated tube in the casing 24, and the end of said valve stem and the tubular extension of the valve 14 being connected, and said supplemental casing being provided with air ports or passages which are controlled by the valve 14, mounted therein, substantially as shown and described. 4th. In a vaporizing-carbureter and air-governor for gas-engines, the combination of three separate casings connected in line as described, means for admitting gasolene to the outer casing, means for admitting gas and air to the central casing, and valves located in each which are operatively connected, said central casing being also in communication with the inner casing which is provided with a perforated tube which is in communication with said outer and central casings, said central casing being also provided with air ports or passages which are controlled by the valve located therein, substantially as shown and described. 5th. In a vaporizing-carbureter and air-governor for gas-engines, the combination of three separate casings connected in line as described, means for admitting gasolene to the outer casing, means for admitting gas and air to the central casing, and valves located in each which are operatively connected, said central casing being also in communication with the inner casing which is provided with a perforated tube, which is in communication with said outer and central casings, said central casing being also provided with air ports or passages which are controlled by the valve located therein, and said inner casing being also in communication with the engine, this connection being made in the usual manner, substantially as described.

**No. 59,595. Well Boring and Tubing Apparatus.**

(Appareil à percer et de tubage des puits.)

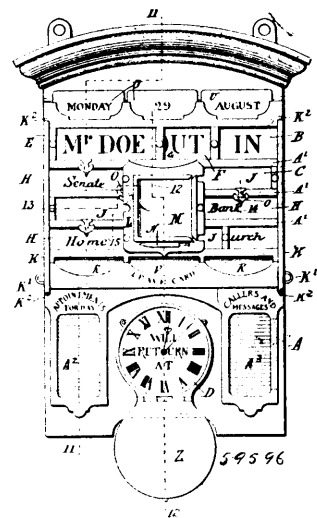
Cyrus M. Smith, Lake City, Iowa, U.S.A., 12th April, 1898; 6 years. (Filed 7th December, 1896.)

Claim.—1st. A reamer adapted to enlarge and tube a bore from top to bottom, comprising a cylinder having screws at its ends for detachably connecting tube-sections therewith, a screw-seat fixed in the top portion of the cylinder, grooves in the inside of the cylinder extending downward from the screw-seat, a sliding block fitted in said grooves, radial slots extending downward and outward through



rotatably connected with the sliding-block, cutters having curved outer corners at their top ends and having cutting edges across their bottom ends pivoted in said slots, arranged and combined to operate in the manner set forth. 2nd. An apparatus for tubing a well, comprising a reamer adapted to enlarge and tube a bore from top to bottom, comprising a cylinder having screws at its ends for detachably connecting tube-sections therewith, a screw-seat fixed in the top portion of the cylinder, grooves in inside of the cylinder extending downward from the screw-seat, a sliding block fitted in said grooves, radial slots extending downward and outward through the cylinder below said grooves, a rod having an angular top and a screw-threaded portion extended through said seat and rotatably connected with the sliding block, cutters having curved outer corners at their top ends and cutting edges across their bottom ends pivoted in said slots, a tube adapted to be detachably attached to the top of said cylinder, a tube adapted to be attached to the top of said cylinder and mechanism for rotating said tube and cylinder, all arranged and combined to operate in the manner set forth and for the purposes stated.

**No. 59,596. Office Indicator. (Indicateur de bureau.)**

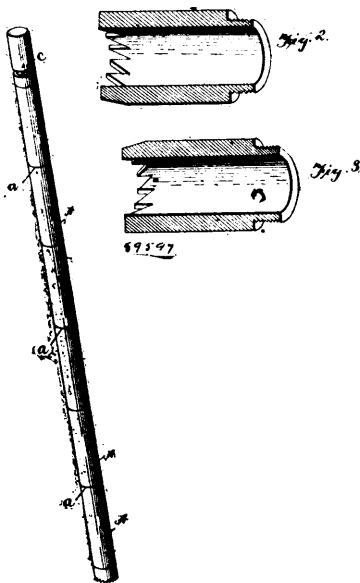


Charles Smith, Casterton, Victoria, Australia, 12th April, 1898; 6 years. (Filed 20th October, 1897.)

Claim.—1st. In an indicator substantially such as described, the combination of the slide way B, named panel E, and shutters F and G, arranged and operating substantially in the manner and for the purpose described. 2nd. In an indicator substantially such as designated, the combination with a series of slide ways C, of a series

of destination cards H, a series of movable shutters J, and a series of pointers numbered to exhibit the order in which the several destination cards are to be read, substantially in the manner described. 3rd. In an indicator substantially such as described, the combination of a slide way B, name panel E, shutters F and G, series of slide ways C, a series of destination cards H, series of movable shutters J, and a series of pointers numbered to exhibit the order in which the several destination cards are to be read, substantially in the manner and for the purpose described. 4th. In an indicator substantially such as described, the combination of a series of sliding ways C, a series of destination cards H, a series of movable shutters J, a series of pointers numbered to exhibit the order in which the several destination cards are to be read and the shield L, formed with spaces into which the movable shutters and pointers may be slid, substantially in the manner and for the purpose described. 5th. In an indicator substantially such as described, the combination with a slide way B, name panel E, shutters F and G, series of slide ways C, series of destination cards H, series of movable shutters J, and the movable slate or slab M, the whole arranged and operating in the manner and for the purpose described. 6th. In combination with an indicator substantially such as described, the numbered pointer O, having the tail piece P, constructed and operated, substantially in the manner and for the purpose described. 7th. In an indicator substantially such as described, the combination with the numbered pointer provided with a hook Q, and a destination card H, arranged and operating, substantially in the manner and for the purpose described. 8th. In combination with an indicator substantially such as described, a clock dial provided with an adjustable hands or pointers and an opaque closable cover, substantially in the manner and for the purpose described. 9th. In combination with an indicator substantially such as described, the time indicator D, having the centrally perforated glass cover, the hands with barrels D<sup>1</sup>, and X, respectively, the spindles W and X<sup>1</sup>, the spring D<sup>2</sup>, with forked end D<sup>3</sup>, and the engaging barrel D<sup>1</sup>, the whole arranged and operating substantially in the manner and for the purpose described. 10th. In combination with an indicator substantially such as described, the time indicator D, having the centrally perforated cover, the hands with barrels D<sup>1</sup>, and X, respectively, the spindles W and X<sup>1</sup>, the spring D<sup>2</sup>, with forked end D<sup>3</sup>, the engaging barrel D<sup>1</sup>, the rearward projection Y, from the minute hand center, and the hour hand center formed with a corresponding frontal depression Y<sup>1</sup>, substantially in the manner and for the purpose described.

**No. 59,597. Earth Auger for Prospecting Purposes.**  
(*Sonde à trepan pour prospecteurs*)

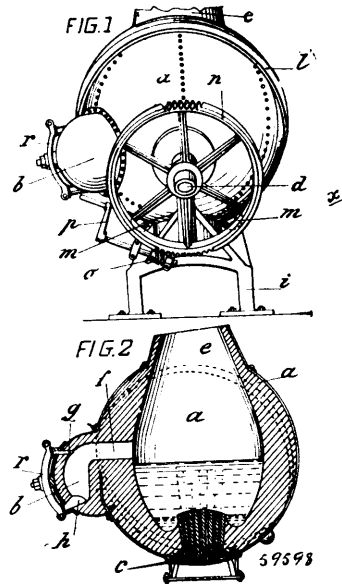


Frederick W. A. Poppe, Millbank, South Dakota, U.S.A., 12th April, 1898; 6 years. (Filed 23rd March, 1898.)

*Claim.*—1st. A prospecting implement consisting of a series of hollow sections having screw-threaded shouldered ends adapted to be united and a detachable drive-head, substantially as described. 2nd. An implement for the purpose described, comprising a series of sections, each section having one end with an external screw-threaded portion, and its opposite end with an internal screw-threaded shouldered portion, a detachable drill-head and a detachable drive-head, the drive-head having an escape opening, substantially as described. 3rd. An implement for the purpose described, comprising a series of hollow sections, each having at one end an external screw-threaded portion and at its opposite end an internal

screw-threaded shouldered portion, a hollow drill implement, and a hollow drive-head having its outer end made solid and its inner end hollow with an external air escape, substantially as described.

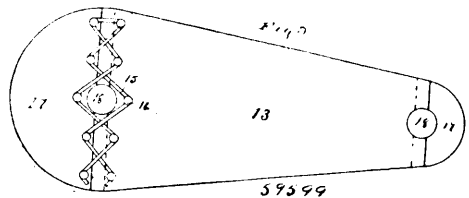
**No. 59,598. Method of Reducing and Separating Copper and other Metals.** (*Méthode de réduire et séparer le cuivre du nickel et autres métaux.*)



Paul David, Vacluse, France, 12th April, 1898; 6 years. (Filed 7th December, 1897.)

*Résumé.*—1° Le procédé de traitement des mattes de cuivre et autres matières consistant à en séparer les bas métaux ou les impuretés pendant l'opération même de la réduction, sans laisser refroidir la matte ou la matière de manière à obtenir le cuivre ou le métal par une seule opération. 2° Les dispositions d'ensemble et le détail de l'appareil selecteur décrit ci-dessus pour la mise en pratique de mon procédé, et consistant en principe en deux récipients accolés et communiquant de telle sorte que l'on peut d'enverser une partie de son contenu dans l'autre sans que ce contenu puisse revenir dans le premier; le tout en principe comme cela a été expliqué et dans le but spécifié.

**No. 59,599. Bicycle Chain Guard and Case.**  
(*Garde et étui pour chaînes de bicycles.*)



Robert Albertis, Dennis Dayton and Charles B. Oglesby, Middletown, Ohio, U.S.A., 12th April, 1898; 6 years. (Filed 9th March, 1898.)

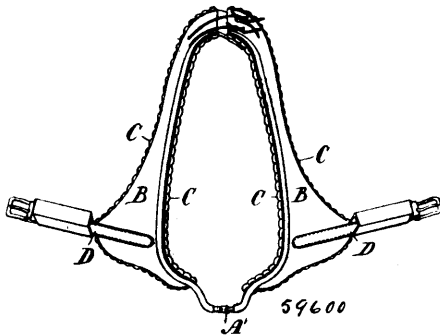
*Claim.*—1st. A chain guard for bicycles, comprising the frame wires 1 and 2, which are joined and held a suitable distance apart by cross wires 7, wire 1 having a loop at one end by which it is supported, and clips at the other end for the same purpose. 2nd. A dust-proof gear case for bicycles, comprising wire frames 1 and 4, interwoven with cross wires and held a suitable distance apart, a loop at one end, and clips at the other end for supporting said frame, and a flexible cover inclosing said frame and laced thereto.

**No. 59,600. Horse Collar.** (*Collier de cheval.*)

Howe Jacques and Walter C. Atherton, both of Woodstock, New Brunswick, Canada, 13th April, 1898; 6 years. (Filed 21st March, 1898.)

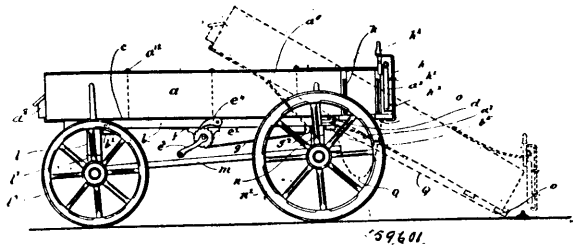
*Claim.*—A horse collar of the class described, having the U-shaped steel rim A, divided at the bottom and conjoined by a stop hinge

joint A<sup>1</sup>, as and for the purpose set forth. 2nd. A horse collar of the class described, having the U-shaped steel rim A, divided at



the bottom and curved outwardly near the lower ends, forming a bend A<sup>2</sup>, and conjoined by a stop hinge-joint A<sup>1</sup>, as and for the purposes set forth.

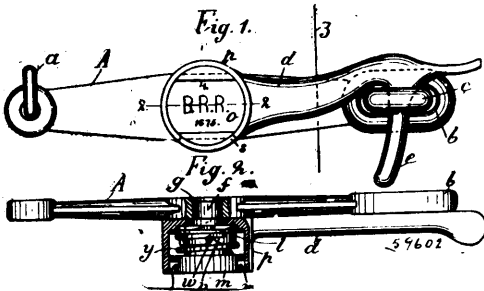
**No. 59,601. Dump Waggon. (Char à bascule.)**



John S. Hall and Robert Hall, both of Winnipeg, Manitoba, Canada, 13th April, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—In a dump waggon the box *a* with bottom *a*<sup>1</sup>, guides *a*<sup>2</sup>, *a*<sup>2</sup>, tail board *a*<sup>3</sup>, roller plates *a*<sup>4</sup>, *a*<sup>4</sup>, brace bars *a*<sup>5</sup>, *a*<sup>5</sup>, forward ring or hook plate *a*<sup>6</sup>, rear ring plate *a*<sup>7</sup>, ring plates *a*<sup>8</sup>, *a*<sup>8</sup>, springs *a*<sup>10</sup>, *a*<sup>10</sup>, straps *a*<sup>11</sup>, *a*<sup>11</sup>, bolts *a*<sup>12</sup>, *a*<sup>12</sup>, and frame having the side pieces *b*, *b*, head *b*<sup>1</sup> cross bars *b*<sup>2</sup>, *b*<sup>3</sup>, and *b*<sup>4</sup>, blocks *b*<sup>4</sup>, *b*<sup>4</sup>, rollers *c*, *c*, and *d*, *d*, drum *e*, axle *e*<sup>1</sup>, ratchet wheel *e*<sup>2</sup>, crank handle *e*<sup>3</sup> dog *e*<sup>4</sup>, rope or chain *f*, horizontal pulley *f*<sup>2</sup>, rope or chain *g*, vertical pulley *g*<sup>2</sup>, lock bars *h*<sup>1</sup>, *h*<sup>1</sup>, staples *h*<sup>2</sup>, *h*<sup>2</sup>, lever *h*<sup>2</sup>, spring *j*, braces *k*, *k*, rings *p* and *o*, and chain or rope *q*, all formed, arranged and combined as set forth.

**No. 59,602. Car Door Fastener. (Arrête-porte de chars.)**

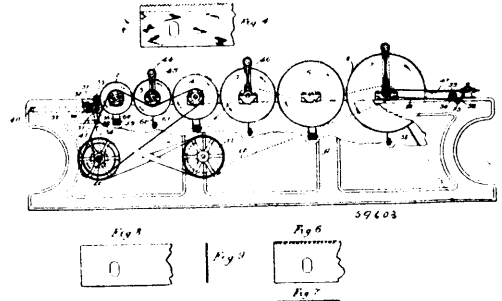


Alden M. Young, Waterbury, Connecticut, Willard B. Hosmer, Boston, Massachusetts, and Frank W. Wood, New York, all in the U.S.A., 13th April, 1898; 6 years. (Filed 12th March, 1898.)

*Claim.*—1st. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder in which the seal is not removable intact when the door is fastened, of a seal breaker and means operated by the hub of the hook to actuate said breaker by the opening of the hook, and automatically break the seal prior to the release of the hasp, substantially as described. 2nd. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder located in the axis of the pivotal hub of the hook, and in which the seal is not removable intact when the door is fastened, a seal breaker and means to actuate said breaker by the opening of the hook, and automatically break the seal prior to the release of the hasp, substantially as described. 5th. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder located in the axis of the pivotal hub of the hook, and consisting of a groove in the head of the hook pivot

stud, and of the surrounding shell of the hook, said shell having a notch for admitting the seal when opened and in which holder the seal is not removable intact when the door is fastened, a seal breaker and means to actuate said breaker by the opening of the hook, and automatically break the seal prior to the release of the hasp, substantially as described. 4th. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder located in the axis of the pivotal hub of the hook, and in which the seal is not removable intact when the door is fastened, a seal breaker, consisting of a sliding plunger located behind the seal, and means to actuate the plunger by the opening of the hook, and automatically break the seal prior to the release of the hasp, substantially as described. 5th. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder in which the seal is not removable intact when the door is fastened, a seal breaker consisting of a sliding plunger located behind the seal, a cam for thrusting the plunger forward to break the seal, and means to actuate the cam by the opening of the hook, and automatically break the seal prior to the release of the hasp, substantially as described. 6th. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder in which the seal is not removable intact when the door is fastened, said holder located in the axis of the pivotal hub of the hook, a seal breaker consisting of a sliding plunger in said axis, a cam ring turning on the pivot stud for actuating the plunger, a ratchet of the hub of the hook for turning the cam ring, and a shell of said hub enclosing the ratchet and ring, substantially as described. 7th. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder consisting of a groove in the head of the pivot stud of the hook, and of the surrounding shell of the hook, said shell having a notch for admitting the seal when the hook is opened, and in which holder the seal is not removable intact when the door is fastened, the seal breaker consisting of a sliding plunger in the axis of the pivotal hub of the hook, cam ring for actuating the plunger, and the retracting spring for the cam ring, substantially as described. 8th. In a car door fastener, the combination with a hasp jointed at one end to the door or door frame and having one staple eye near the other end, and another eye intermediately of said ends, of a duplex hook pivoted to said hasp intermediately of the staple eyes and adapted to engage and secure a staple in either eye of the hasp, substantially as described. 9th. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder in which the seal is not removable intact when the door is fastened, of a seal breaker and means operated by the hub of the hook to actuate said breaker by the opening of the hook, and automatically break the seal prior to the release of the hasp, also means to prevent false engagement of the hook so as to open without breaking the seal, substantially as described. 10th. In a car door fastener, the combination with a hasp, and a hook pivoted on said hasp, of a seal holder in which the seal is not removable intact when the door is fastened, said holder located in the axis of the pivotal hub of the hook, a seal breaker consisting of a sliding plunger in said axis, a cam ring turning on the pivot stud for actuating the plunger, a ratchet of the hub of the hook for turning the cam ring, said cam ring having the teeth and notches to prevent opening of the hook without engagement with the cam ring for breaking the seal, substantially as described. 11th. In a car door fastener, the combination with a hasp, having two staple eyes, of a hook for each eye both joined to a common hub and pivoted intermediately of said eyes for conjoint action relatively to the respective staple eyes, substantially as described.

**No. 59,603. Waste Tow Preparing Machine. (Machine à préparer l'étoupe.)**



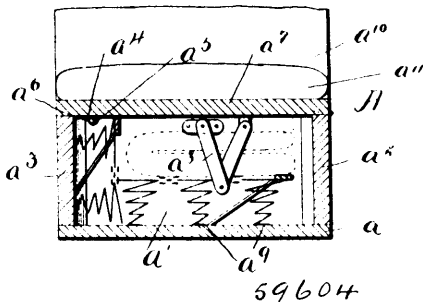
The United States Flax-Fibre Company, Passaic, New Jersey, assignee of Mahlon D. Miller, St. Paul Park, Minnesota, both in the U.S.A., 13th April, 1898; 6 years. (Filed 9th March, 1898.)

*Claim.*—1st. The method of cleaning a mass of tow, which consists in subjecting it to the action of centrifugal force, and simultaneously picking and loosening the same. 2nd. The method of freeing a mass of tow from shive and other foreign matter, which consists in subjecting it to the action of centrifugal force progressively increasing. 3rd. The method of freeing tow from foreign matter of greater



specific gravity than its fibre, which consists of subjecting a mass of it to the action of centrifugal force, simultaneously picking and loosening the same, and successively separating it apart and reversing its surface exposure until the entire mass has thus been exposed. 4th. The method of separating foreign matter from a mass of tow, which consists in subjecting it to the action of progressively increasing centrifugal force, simultaneously stirring and loosening the mass, and successively, with each increase of applied centrifugal force, reversing its surface exposure. 5th. The method of freeing a mass of tow from shive and other impurities, which consists of subjecting it to the action of centrifugal force to throw such impurities outward, and simultaneously removing the impurities adhering to its fibre. 6th. The method of cleaning tow, consisting of subjecting it to the unrestrained action of centrifugal force to throw the intermingled impurities out of and away therefrom, picking and loosening the mass of tow, and detaching such impurities as are thrown away from the mass but adhere to the fibres. 7th. The method of cleaning a mass of tow of its impurities, consisting of subjecting it to the action of centrifugal force, simultaneously picking and loosening it to release the included impurities, successively separating the mass apart and reversing its exposure, and progressively increasing the applied centrifugal force, whereby heavier impurities are first thrown off, and then the lighter, and all of the mass is brought to the surface to free its entangled impurities. 8th. The method of cleaning a mass of tow, consisting of subjecting it to the action of centrifugal force to throw off the heavier impurities, picking and loosening the mass while under the influence of such force, successively separating and rearranging the mass to bring the interior portions to the exterior, progressively increasing the applied centrifugal force and detaching from the mass the impurities projected therefrom and clinging to the fibres. 9th. Means for separating foreign matter from a mass of tow by centrifugal force, comprising a series of toothed cylinders, means for rotating them oppositely with progressively increasing peripheral speed, intermediate devices for picking and loosening the mass, and the stops for whipping off the impurities projected outward but clinging to the tow fibres. 10th. Means for separating impurities from tow by centrifugal force, consisting of a series of contiguous cylinders, means for rotating them oppositely at progressively increasing peripheral speeds, and the clothing of the teeth upon said cylinders, inclined in the direction of their rotation, adapted to gather the tow from those of the preceding cylinder, and thereby expose all the portions of the mass and permit the impurities in the same to be thrown out of and away therefrom. 11th. Means for cleaning tow by centrifugal force, consisting of a series of adjacent cylinders, means for rotating speeds, said cylinders having clothing of teeth inclined in the direction of their rotation adapted to gather the tow from the teeth of the preceding cylinder and deliver it to those of the succeeding cylinder and the stops for detaching the matter which is thrown away from the cylinders but clings to the fibres of said tow. 12th. Means for cleaning tow, comprising in combination a series of horizontally arranged contiguous cylinders, means for rotating them oppositely at progressively increased speeds, the wire-toothed clothing upon said cylinders inclined in the direction of their rotation, adapted to clear the tow from the teeth of the preceding cylinder, and to be cleared of said tow by the teeth of the succeeding cylinder, the crimped or serrated stops arranged closely adjacent to said cylinders, and in the path of foreign matter attached to fibres of said tow but thrown away from the surface of the same by centrifugal force, and the toothed stirring rolls arranged adjacent to said cylinders and adapted to penetrate into and stir and loosen the mass of tow thereon. 13th. Means for separating impurities from tow by centrifugal force, consisting of a series of contiguous cylinders, means for rotating them oppositely, at progressively increasing peripheral speeds, and the clothing of teeth upon each of said cylinders, adapted to pick and loosen the tow and gather it from the preceding cylinder and thereby expose all portions of the mass and permit the impurities to be thrown out of and away therefrom.

**No. 59,604. Bedstead. (Bois de lit.)**

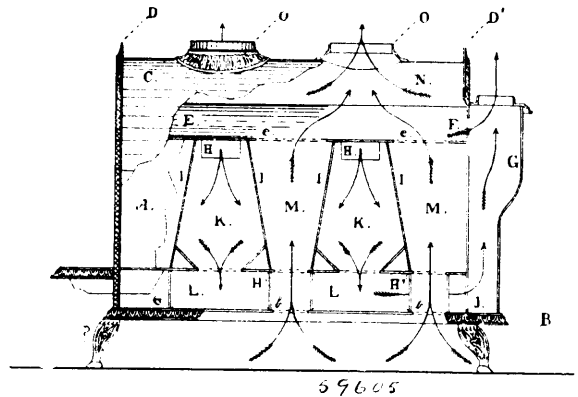


Treffé Guilbault and John Henkel, both of Montreal, Quebec, Canada, 13th April, 1898; 6 years. (Filed 24th February, 1898.)

*Claim.*—1st. A sofa bedstead, comprising a frame having a fixed bottom, ends and back, a front hingedly connected to said bottom,

a top hingedly connected to said back, supports for said back when in a vertical position, and pivotal supports for said front when in horizontal position. 2nd. A sofa bedstead, comprising a frame having a fixed bottom, ends and back, and also having a front and top each hingedly connected thereto, supports for said top in its open position, and supports for said front when in open position, said supports also serving to secure said front in its closed position. 3rd. A combined foot and catch comprising a hinge, and an angular extension secured to one of the leaves of said hinge, said angular portion being adapted to engage with a stop when in one position. 4th. In a sofa bedstead, the combination with a frame having a hinged front and top, folding supports for said top, and supports for said front, of a head rest, hingedly connected to said frame, adapted to fold over on said top when in closed position, substantially as described.

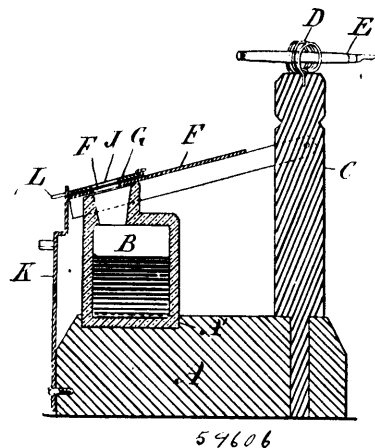
**No. 59,605. Heating stove. (Poêle de chauffage.)**



The William Buck Stove Co., assignee of William Ernest Buck, all of Brantford, Ontario, Canada, 13th April, 1898; 6 years. (Filed 17th February, 1898.)

*Claim.*—As an article of manufacture, a heating stove comprising the fire box A, surrounded by an outer casing C, having openings O, base plate B, having openings b, end plates D, and D', having openings F and J, into smoke flue G, crown plate E, having openings e, side plates having openings H, partitions I between smoke flues K, and air flues M, and chamber or flue L, and air chamber N, all formed and combined as and for the purpose set forth.

**No. 59,606. Inkstand. (Encrier.)**



Louis Robinson, Chesley, Ontario, Canada, assignee of Henry Hardecastle, Tara, Ontario, Canada, 13th April, 1898; 6 years. (Filed 27th January, 1898.)

*Claim.*—1st. An inkstand having a base provided with a row of cavities, and bottles standing therein and backing or posts at the rear, a flap cover hinged to said backing or posts and provided with holes coinciding with the mouth of the bottles, and a slide attached to said cover and having holes only one of which registers with the hole in the cover, the other holes closed by the slide, as set forth. 2nd. An inkstand having a base and backing or posts provided with pen holders and holding a row of bottles, a cover or flap hinged to said backing or posts and having holes coinciding with the mouth of the bottles and a perforated slide covering said holes, as set forth.

**No. 59,607. Match Manufacture.**

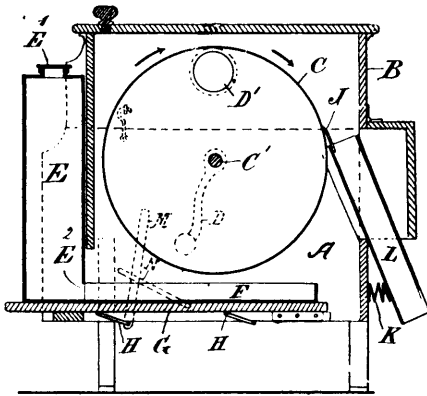
(Fabrication d'allumettes.)

Siegmund Neuburg and Ignaz Neuburg, both of Vienna, Austria, assignees of Georg Firshing of Vienna, aforesaid, 13th April, 1898; 6 years. (Filed 15th December, 1897.)

*Claim.*—1st. The method herein described of manufacturing headless safety matches, which consists in applying to the end or ends of the match splints sodium chlorate, a metallic sulphate and a gum in solution, so as to impregnate the end or ends of the splints, thoroughly drying and subsequently dipping the splints to a greater depth in a hydro-carbon waterproof solution, substantially as described. 2nd. The method herein described of manufacturing headless safety matches, which consists in securing the match splints together in flat bundles, dipping the ends of the match splints in an oxidizing solution, drying the same and then dipping such match splints to a greater depth in a hydrocarbon waterproof solution, substantially as described. 3rd. A solution for the impregnation of matches in the manufacture of safety matches, consisting of sodium chlorate, gum arabic, a metallic sulphate and water, substantially as specified. 4th. A solution for treating matches after their impregnation with an oxidizing or consuming agent, said solution consisting of resin, turpentine, oleic acid and linseed oil, substantially as specified.

**No. 59,608. Ice Cream Freezer.**

(Appareil réfrigérant pour crèmes.)



59608

William E. White, Brockville, and Alfred Hudson, Ottawa, Ontario, Canada, 13th April, 1898; 6 years. (Filed March 21st, 1898.)

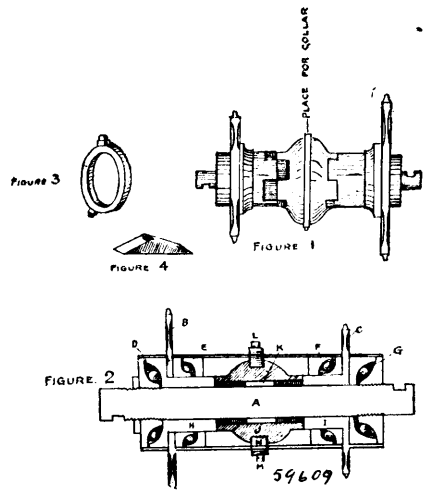
*Claim.*—1st. An ice cream freezer, comprising a box or casing A, a hollow cylindrical vessel C, mounted on a shaft journalled through the casing, an adjustable floor G, carrying a cream trough F, to bring the cream into and out of contact with the circumference of said cylinder C, a cream receptacle E, standing on said floor to discharge into the cream trough, a scraper or knife J, engaging the circumference of the rotary cylinder to clear the surface of ice cream, and a chute L, to convey it to a receiving receptacle, as set forth. 2nd. An ice cream freezer, comprising a vertical rotating cylinder to contain the freezing mixture, mounted on a horizontal shaft journalled through an exterior case or box, an adjustable floor below said cylinder, a cream receptacle to feed a trough on said floor, and a scraper to remove the frozen cream from the circumference of the cylinder when in contact with the cream in said trough, substantially as set forth.

**No. 59,609. Bicycle. (Bicycle.)**

Edgar Wilson and Joseph Thompson, both of Tilsonburg, Ontario, Canada, 13th April, 1898; 6 years. (Filed 18th March, 1898.)

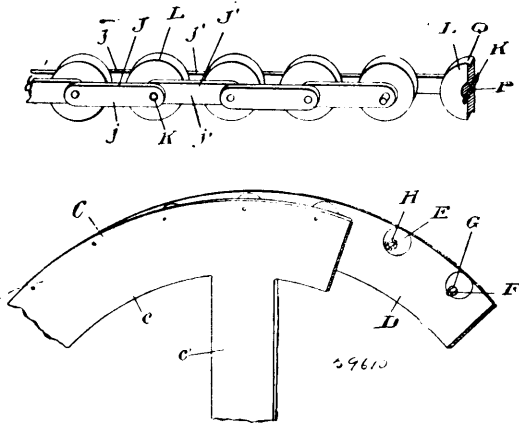
*Claim.*—1st. In combination with a bicycle having a driving wheel, a crank axle, driving pedals mounted on said axle and the usual diamond frame or a modification thereof, two sprocket-wheels or other form or differential gear mounted loosely on said axle, one on each end, and connecting by chain or otherwise with sprocket-wheels or other form of gear mounted on the axle of the hind or driving wheel of the bicycle. 2nd. In combination with a bicycle having a driving wheel, a crank axle, driving pedals mounted on said axle and a frame as above, two sprocket-wheels or other gear loosely mounted on said axle, one on each end, provided on the inside with a sleeve mounted on said axle between the two sprocket-wheels. 3rd. In combination with a bicycle having a frame as above, a driving wheel, a crank axle or driving pedals mounted on said axle, two sprocket-wheels or other gear loosely mounted on said axle, the outside and inside of each of which is fitted with ball bearings, the inside ball bearing to be boxed in the hanger of said machine. 4th. In combination with a bicycle having a frame as above, a driving wheel, a crank axle, driving pedals

mounted on said axle, two sprocket-wheels or other gear loosely mounted in said axle, a pin or key through the centre of the said



axle, over which a sleeve or cylinder may be mounted on said axle in such manner as to permit said sleeve or cylinder to move along the axle a limited direction but to retain the same in connection with the said axle as the said axle rotates. 5th. In combination with a bicycle having a frame as above, a driving-wheel, a crank axle, driving pedals mounted on said axles, two sprocket-wheels or other gear mounted on said axle in the manner before mentioned, and a pin or key fitted through the centre of said crank axle, a cylinder or clutch mounted upon the said axle and over the said key, and fitted on each end with clutches adapted to make said engagement with either of said sprocket-wheels by being shifted along the said crank axle over the said pin or key, or to be set in an intermediate position connected with neither of said sprocket-wheels. 6th. In combination with a bicycle having a frame as above, a driving-wheel, driving crank axle, driving pedals mounted on said axle, two sprocket-wheels or other gear mounted upon said axle with ball bearings and clutches as hereinbefore mentioned, and a centre cylinder or sleeve mounted upon the key in said axle and adapted for engagement with either of said sprocket-wheels or for an intermediate position, means for shifting the said clutch to said intermediate position or to either side, substantially as set forth hereinafter. 7th. In combination with a bicycle having a driving-wheel, crank axle, driving pedals mounted upon said axle, two sprocket-wheels or other gear mounted upon said axle, ball bearings, clutches and a cylinder or sleeve mounted upon said axle over a key, as hereinbefore stated, and adapted for shifting to an intermediate position or into position with either of said sprocket-wheels, a collar around said cylinder and fitted thereto in a groove made in the said cylinder, or with ball bearings, in such manner that the pressure upon the collar above and below will shift the cylinder from side to side or into an intermediate position, said collar being fitted with a stud on the upper part and also a stud on the lower part, these studs being so constituted that they will protrude respectively through an opening to be made at the point of juncture of the tubing from the fork of the machine with the tubing from the seat and through an opening to be made in the under part of the hanger, the stud which protrudes through the upper opening of the hanger to be fitted with a slide having a hole in the upper part thereof, into which the shifting device hereinafter set forth may be inserted. 8th. In combination with a bicycle having a driving-wheel, crank axle, driving pedals mounted upon the said axle, two sprocket-wheels or other gear mounted upon the said axle, a cylinder or sleeve keyed upon said axle, adapted for engagement with either of said sprocket-wheels or gears, said axle and cylinder being mounted in the hanger of the machine with suitable ball bearings for rotation, and a collar around said sleeve or cylinder for the purposes of enabling pressure to be exerted on said sleeve or cylinder to shift the same, a shifting-rod or device for enabling the rider of the said machine to shift the said cylinder or sleeve at his pleasure, said shifting-rod passing through the cross-bar in front of the rider, and being fitted there with a handle, and through the tubing from the forks of the hanger near the hanger, and being fitted both above and below the tubing with offsets connecting respectively with the slide over the upper stud of the collar, hereinafter referred to, and with the lower stud, in such manner that where the handle is in line with the cross-bar the collar holds the cylinder or sleeve hereinbefore referred to in an intermediate position between the two sprocket-wheels or other gear, and so that when the handle is turned to either side, turn so acts upon said collar through said offsets connected as aforesaid that thereby the said cylinder or sleeve is caused to make engagement with whichever of said sprocket-wheels or other gear the rider may desire.

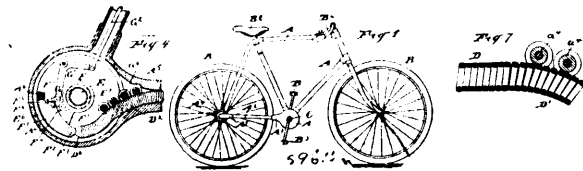
No. 59,610. Bicycle Gear. (Engrenage de bicycles.)



John G. S. Clarke and Samuel Coxon, both of Toronto, Ontario, Canada, 13th April, 1898; 6 years. (Filed 15th March, 1898.)

*Claim.*—1st. A driving gear for foot propelled vehicles, consisting of two sprocket wheels, each having a circumferentially grooved felloe, a plurality of anti-friction balls journalled in the felloe at regular intervals, and a chain consisting of a plurality of links pivotally connected, and anti-friction rollers journalled between the opposite sides of each link, corresponding in diameter to the pitch of the anti-friction balls in the felloe, substantially as specified. 2nd. A driving gear for foot propelled vehicles, consisting of two sprocket wheels, each embracing in its construction a hub, a web or spokes, and a rim connected to the web or spokes, a removable side plate corresponding to the rim, a plurality of anti-friction balls, each having a spindle or trunnions journalled in the rim and side plate, the side face of each ball concaved, a washer located on each spindle at each side of its respective anti-friction ball, containing a lubricant in combination with a sprocket chain, consisting of a plurality of links pivotally connected together, and an anti-friction roller journalled between the opposite sides of each link, corresponding in diameter to the pitch of the anti-friction balls, substantially as specified. 3rd. A driving gear for foot propelled vehicles, consisting of two sprocket wheels, each embracing in its construction a hub, a web or spokes, and a rim connected to the web or spokes, a removable side plate corresponding to the rim, a plurality of anti-friction balls, each having a spindle or trunnions journalled in the rim and side plate, the side face of each ball concaved, a washer located on each spindle at each side of its respective anti-friction ball, containing a lubricant in combination with a sprocket chain, consisting of a plurality of links pivotally connected together, an anti-friction roller journalled between the opposite sides of each link, corresponding in diameter to the pitch of the anti-friction balls, each side face of each anti-friction roller concaved, and fabric washers mounted on the spindle of each roller, located one at each side thereof, and a circumferential V-shaped groove in the perimeter of each roller, substantially as specified.

No. 59,611. Bicycle. (Bicycle.)

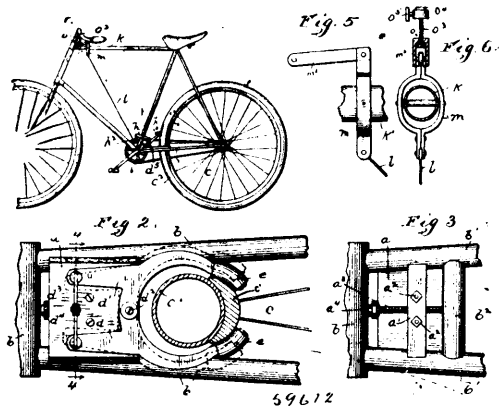


Francis W. Mallett and William A. Hulbert, both of New York City, U.S.A., 13th April, 1898; 6 years. (Filed 10th March, 1898.)

*Claim.*—1st. In a bicycle, a spur driving-wheel, a flexible thrust-rod adapted to follow the curves in the inclosing frame members and casings, held yieldingly with one end in the path of the spurs and reciprocated by the passage of the latter, in combination with said frame members and casings and with a clutch engaging the rear wheel of the bicycle and operated by the reciprocations of said rod, all substantially as herein specified. 2nd. In a bicycle, a spur driving-wheel, a thrust-rod reciprocated by the passage of the spurs and having an inflexible middle portion and flexible ends adapted to follow the curves in the inclosing frame members and casings, in combination with the latter and with guide-rollers arranged at such curves on the opposite side of the rod to prevent buckling of said ends, and a clutch engaging the rear wheel of the bicycle and operated to drive the latter by the reciprocations of said rod, all arranged to serve substantially as herein specified. 3rd. In a bicycle,

the thrust-rods D, D<sup>1</sup>, D<sup>2</sup> inclosed within the members of the lower rear fork, the bushings a<sup>1</sup> and a<sup>2</sup> therein, the collars d on said rods, the springs D<sup>4</sup> and cushion-springs D<sup>5</sup> arranged between said collars and bushings, the spur driving-wheel C<sup>1</sup> for reciprocating said rods, and the clutch mechanism engaging the rear wheel of the bicycle, all combined and arranged to serve substantially as herein specified. 4th. In a bicycle, the thrust-rods having the inflexible middle portions D and flexible ends D<sup>1</sup>, D<sup>2</sup> inclosed within the lower rear fork members, the bushings a<sup>2</sup> therein and collars d on the rods, the wheels C<sup>1</sup> and spurs C<sup>2</sup> thereon, the springs D<sup>4</sup> forcing one end of each rod into the path of the spurs, clutch mechanism engaging the rear wheel of the bicycle, and the flanges C<sup>2</sup> on said spur wheels, and the brake-shoes C<sup>3</sup>, fixed stops a<sup>1</sup> and springs a<sup>2</sup> for engaging said flanges to prevent reversing the direction of motion of the spur-wheels, all combined and arranged to serve substantially as herein specified. 5th. The clutch described, consisting of a loose ring encircling the shaft on which the rear wheel turns, a spring-arm extending radially from the ring, a clutch-block, a link connecting the latter to the ring to form a toggle, and an annular flange on said rear wheel engaged by said clutch-block when the toggle straightens by pressure applied to said spring-arm, all combined and arranged to serve substantially as herein specified. 6th. In a bicycle, the loose ring F encircling the shaft on which the rear wheel turns, a spring-arm F<sup>1</sup>, F<sup>2</sup> extending radially therefrom, and connected to the reciprocating thrust-rod D, D<sup>1</sup>, D<sup>2</sup>, the clutch-block F<sup>3</sup>, the link F<sup>4</sup> connecting the latter to the ring to form a toggle, an annular flange E<sup>0</sup> on the said rear wheel engaged frictionally by said clutch block when the toggle straightens, in combination with each other, and a stop fixed to the casing in advance of the throw of the clutch block, a lever and a wedge thereon adapted to be thrust between said stop and clutch block, and means for operating the lever, all arranged to serve substantially as and for the purpose herein specified. 8th. In a bicycle, the loose ring F encircling the shaft on which the rear wheel turns, a spring arm F<sup>1</sup>, F<sup>2</sup> extending radially therefrom and connected to the reciprocating thrust rod D, D<sup>1</sup>, D<sup>2</sup>, the clutch block F<sup>3</sup>, the link F<sup>4</sup> connecting the latter to the ring to form a toggle, an annular flange E<sup>0</sup> on the said rear wheel engaged frictionally by said clutch block when the toggle straightens, the stop A<sup>6</sup> fixed on the casing in advance of the throw of the clutch block, the bell crank lever G<sup>1</sup> and wedge G thereon, the rod G<sup>2</sup> inclosed within a member of the upper rear fork, the flexible portion G<sup>3</sup> joining the said rods, and the operating lever G<sup>2</sup> pivoted into said upper member, all combined and arranged to serve substantially as herein specified. 9th. In a bicycle, the driving spur wheels and flexible reciprocating thrust rods, clutches operated by the latter and engaging the rear wheel of the bicycle, in combination with the casings A<sup>1</sup> and A<sup>2</sup> inclosing said spur wheels and clutches, and the tubular lower fork members A<sup>2</sup> inclosing and guiding said rods, all substantially as herein specified. 10th. In a bicycle, the driving spur wheels, the flexible reciprocating thrust rods, and clutches operated by the latter and engaging the rear wheel of the bicycle, in combination with the casings A<sup>1</sup> and A<sup>2</sup> inclosing said spur wheels and clutches, and the tubular lower fork members A<sup>2</sup> inclosing and guiding said rods, the upper rear fork members and upper tube A<sup>3</sup>, and the brake operating rods inclosed and guided therein, all arranged to serve substantially as and for the purpose herein specified.

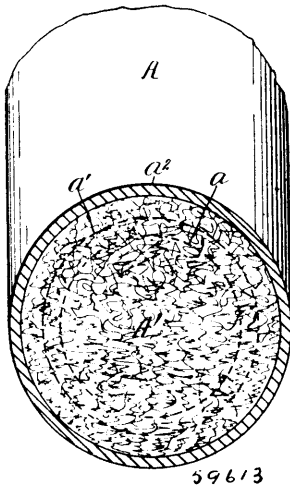
No. 59,612. Bicycle Brake. (Frein de bicycles.)



Hogan D. Crosby, Chicago, Illinois, U.S.A., assignee of Frederick P. Stanley, also of Chicago, 13th April, 1898; 6 years. (Filed 10th February, 1898.)

*Claim.*—1st. In a bicycle brake, the combination with the lower tubes of the bicycle frame, of a pair of horizontal tire-encircling brake levers pivoted back of the crank hanger and above the tubes and having the ends or brake shoes arranged to be pressed upon the opposite sides between the tire and the spokes of the rear wheel, and a pair of vertically extending links connected with an operating rod and connected respectively to the forward ends of the brake levers, whereby the thrust of the operating rod and links is on the opposite side of the pivot and is in the same direction as is the pull of the wheel upon the brake ends of the brake levers, substantially as described. 2nd. In a bicycle brake, the combination with the frame of the bicycle, of a pair of horizontal tire-encircling brake levers pivoted back of the crank hanger and above the lower tubes and having the ends or brake shoes arranged to be pressed upon the opposite sides between the tire and the spokes of the rear wheel, and a pair of vertically extending links connected with an operating rod and connected respectively to the forward ends of the brake levers, and a lever *h* pivoted to the upright tubing *k*, the rear end of which lever engages the end of the operating rod connected with the links, and the other ends of which is connected by suitable operating mechanism with an operating lever, substantially as described.

**No. 59,613. Bicycle Tire. (Bandage de bicycles.)**



Louis Baecker and Charles B. Andrews, both of Detroit, Michigan, U.S.A., 13th April, 1898; 6 years. (Filed 25th February, 1898.)

*Claim.*—1st. An article of manufacture formed of fibre worked into crimped, curled or analagous condition, said fibre being compressed and treated with a solution of silicate, as described, to render the article impervious on its exterior, and with a solution of paraffine to make the article waterproof, substantially as set forth. 2nd. An article of manufacture formed of capillary fibre worked into crimped, curled or analagous condition, said fibre being compressed and treated with a solution of silicate, as described, to render the article impervious on its exterior, and with paraffine to make the article waterproof, said solutions only partially penetrating said article, leaving the interior resilient, substantially as set forth. 3rd. A solid bicycle tire formed of fibre worked into crimped, curled or analagous condition, said fibre being compressed and treated with a solution of silicate to render the tire impervious, and also with paraffine to render the tire water-proof, said tire provided with an exterior covering of prepared gum, substantially as set forth. 4th. The herein described process of constructing a solid bicycle tire, consisting of working capillary fibre into irregular, crimped or curled condition, compressing the same to form the tire, then treating the fibre with a solution penetrating the fibre and rendering it impervious on its exterior, the tire being also treated with paraffine to render it water-proof, substantially as set forth. 5th. A resilient solid bicycle tire made of capillary fibre worked into crimped, curled or analagous condition, said fibre being compressed and treated with a solution of silicate, and with paraffine.

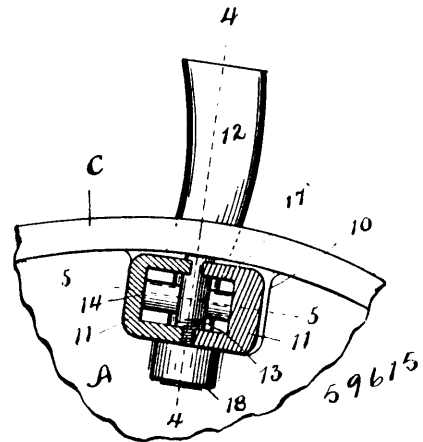
**No. 59,614. Cement. (Ciment)**

W. S. Robinson, Shubenacadie, and Gardner Clish, R. J. Turner and J. H. McKay, all of Truro, Nova Scotia, Canada, 13th April, 1898; 6 years. (Filed 23rd November, 1896.)

*Claim.*—1st. A cement composed of iron or its compounds, in a low state of oxidation, in combination with earth, gravel, sand,

broken rock or the like, and a solution of metallic salt, impregnating the mass, whereby oxidation of the iron and hardening of the mass is facilitated, in the proportion, and for the purpose described. 2nd. A hardening cement, composed of oxidized iron, materials such as earth, gravel, sand or the like, and a fluid such as brine, or other ingredient to hydration in combination, and in the proportion described. 3rd. The methods of uniting the loose particles of earth, gravel, sand, or the like, by mixing the same with either metallic iron ferrous compounds or both, and exposing the same to the atmosphere while moistened with brine or other metallic salt solutions, as described.

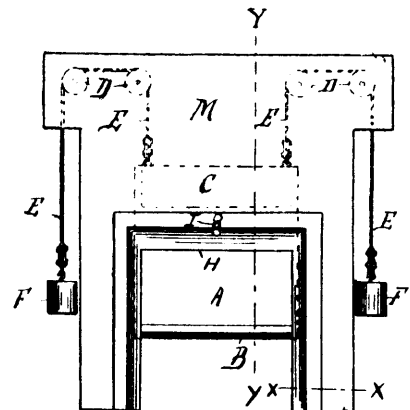
**No. 59,615. Threshing Cylinder. (Machine à battre.)**



George W. Morris, Racine, Wisconsin, U.S.A., 14th April, 1898; 6 years. (Filed 24th March, 1898.)

*Claim.* 1st. The combination with the cylinder heads, of the 2-part bar secured thereto and the thresher teeth removably clamped between the parts of said bar, substantially as described. 2nd. The combination with the cylinder-heads of the dual U-channel irons matched at intervals along their confronting edges, the thresher teeth having their shanks seated in said notches and furnished with guards abutting on the U-irons to prevent centrifugal play, and the cross-bolts to clamp the dual U-irons together, substantially as described. 3rd. The combination with the cylinder-heads of the dual U-channel irons notched at intervals along their confronting edges, the thresher teeth having their shanks seated in said notches and suitable means for clamping the U-irons together, substantially as described. 4th. A removable tooth for threshing cylinders, the same having a reduced shank with lower guard projecting therefrom, substantially as described. 5th. A removable tooth for threshing cylinders, the same having a reduced non-circular shank and a lower guard projecting therefrom, substantially as described. 6th. In threshing cylinders, the combination with the disc-heads recessed at intervals about the rim, the tie-pins at the recesses and the enclosing keeper-rings, of the 2-part clamp-bar mounted in said recesses and having a set of teeth replacably secured thereto substantially as described.

**No. 59,616. Grate Front. (Devant de grille.)**

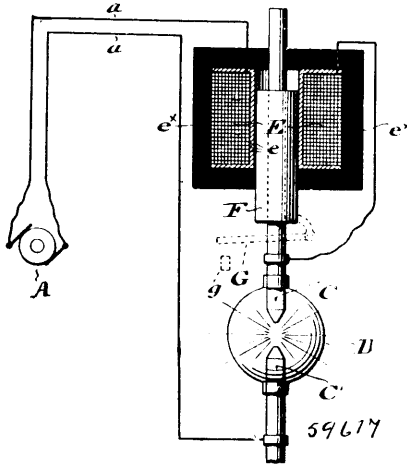


William E. Jordan, Nashville, Tennessee, U.S.A., 14th April, 1898; 6 years. (Filed 28th March, 1898.)

*Claim.*—1st. The combination with a fire-place of a vertically movable summer front adapted to close and disclose the same, of a cut-off hinged to the top of said front and adapted, when the front is lowered, to be swung backward to cover the throat of the chimney. 2nd. The combination with a fire place having a vertically movable summer front, of a smoke cap attached to the lower end of the summer front and projecting from the side of the same, whereby when the front is raised, it will serve to prevent smoke from entering the room. 3rd. The combination with a fire place of a vertically movable summer front closing the same, having at the front of its lower end a recess, and a cut-off hinged to said summer front and adapted to be swung into said recess.

**No. 59,617. Electric Arc Lamp.**

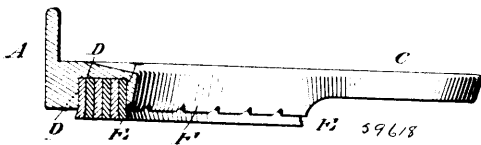
(*Lampe électrique à arc.*)



Thomas Spencer, Philadelphia, Pennsylvania, U.S.A., 14th April, 1898; 6 years. (Filed 26th August, 1897.)

*Claim.*—In combination, in an inclosed arc lamp adapted to be operated by an alternating current, opposed solid carbon electrodes, an enclosure for the proximal ends of said electrodes, a choking coil in electric circuit with said electrodes, an automatically movable core for said choking coil, and means connective of said core and one of said electrodes, whereby a reciprocatory movement of said core may be imparted to said electrode, substantially as set forth.

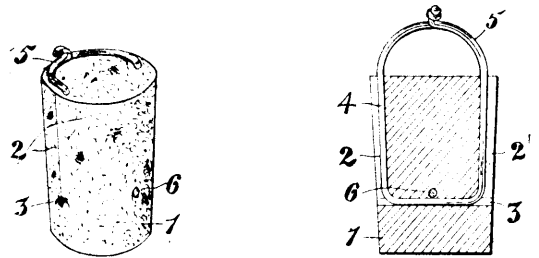
**No. 59,618. Horse Shoe.** (*Fer à cheval.*)



Lionel D. Saxton, Philadelphia, Pennsylvania, U.S.A., 14th April 1898; 6 years. (Filed 18th March, 1898.)

*Claim.*—1st. A soft-tread-shoe having flanges forming a recess, for the soft packing or cushion, the outer flange being beveled outwardly, and countersinks to receive the nail holes, the countersinks extending into the wall of said flange and beveled towards the nail holes. 2nd. A soft-tread-shoe having flanges forming a recess and a soft packing in said recess, the outer flange of said recess being beveled outwardly and having nail openings therein. 3rd. A soft-tread-shoe having flanges forming a recess and a soft packing in said recess, the outer flange of said recess being beveled outwardly and having nail openings therein, said packing consisting of layers of fabric and elastic material. 4th. A soft-tread-shoe having flanges forming a recess and a soft packing in said recess, the outer flange of said recess being beveled outwardly and having nail openings therein, said packing consisting of layers of fabric and elastic material, said outer flange having countersinks which extend into the wall thereof and are beveled towards the nail holes. 5th. A soft-tread-shoe having a recess in its underside, and soft packing in said recess, and heels having their undersides raised above the underside of the adjacent portion of the shoe forward of said heels.

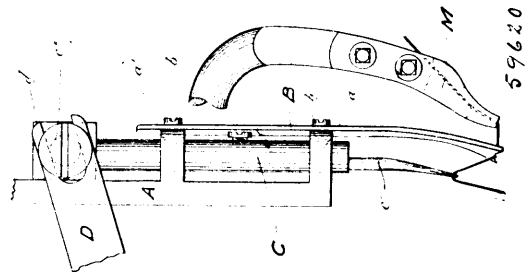
**No. 59,619. Cork Extractor.** (*Tire-bouchon.*)



John McMurrie, Montreal, Quebec, Canada, 14th April, 1898; 6 years. (Filed 28th April, 1897.)

*Claim.*—1st. A device of the character described, comprising a cork and an extracting strip having its side portions imbedded in said cork with its outer ends connected to form a finger-loop, substantially as described. 2nd. A device of the character described, comprising a cork and an extracting strip carried thereby, and having its sides disposed within the cork so as to prevent corrosion, substantially as described. 3rd. A device of the class described, comprising a cork and an extracting strip carried by the cork, and having its side portions imbedded therein, and means imbedded within the cork to engage the transverse portion of said strip, substantially as described. 4th. A device of the class described, comprising a cork and extracting strip carried by said cork, and having its sides disposed within the cork to prevent corrosion, and means also carried by the cork and arranged in such relation to the extracting strip so as to prevent the latter breaking through the cork, substantially as described. 5th. A device of the class described, comprising a cork and an extracting strip carried by said cork, and having its sides disposed within the cork to prevent corrosion, the ends of the sides of said strip being connected to form a finger-loop at the exterior of the cork, substantially as described.

**No. 59,620. Sewing Machine.** (*Machine à coudre.*)

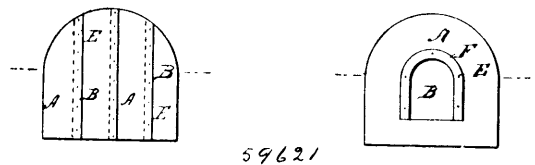


Olivier Bellefeuille, Montreal, Quebec, Canada, 14th April, 1898; 6 years. (Filed 20th March, 1897.)

*Claim.*—In a sewing machine, a thread-giving device consisting in an oscillating lever D operated by a cam, a vertically-sliding piece C, provided with a hook c, a stationary adjustable guard B and a bracket A, substantially as described and for the purposes set forth.

**No. 59,621. Electric Heel Plate.**

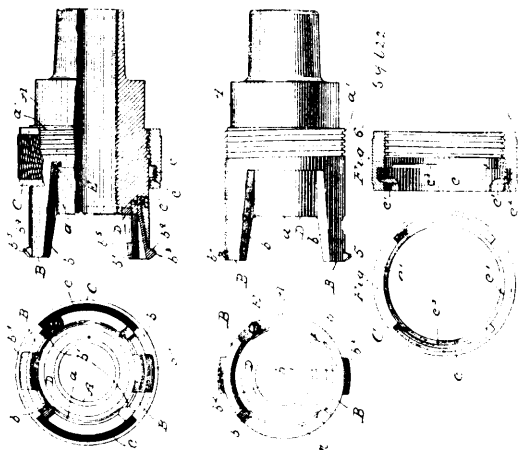
(*Plaque de talon électrique.*)



John Wilson Gibbs, New York City, U.S.A., 14th April, 1898; 6 years. (Filed 2nd March, 1898.)

*Claim.*—In an insole-plate, the combination with a plate element as A, of an opposing plate element as B, and of a non-electric generating plate to cover the rounding edge E of the upper element, as a U-shaped or horseshoe-shaped plate F, the latter serving also as a means of supporting the person and as connecting means for said elements.

**No. 59,622. Hose Coupling. (Joint de boyaux.)**

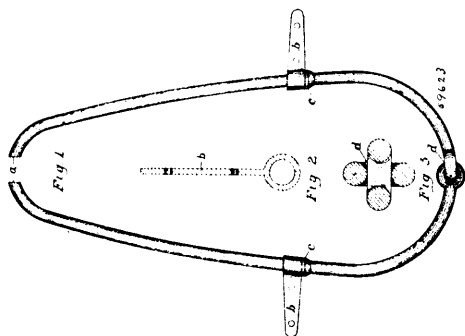


Alden Lee Bailey, St. Johnsbury, Vermont, U.S.A., 14th April, 1898; 6 years. (Filed 21st March, 1898.)

*Claim.*—1st. In a hose coupling composed of duplicate sections, a pair of tapering tongues arranged at opposite sides of their adjacent ends, each tongue being provided at its end with a laterally inclining projection, an external threaded portion located back of the tongues on each section, and a threaded sleeve fitting the threaded portion of each section having an internal annular recess adapted to receive the laterally inclining projection of said tongues, substantially as set forth. 2nd. In a hose coupling composed of duplicate sections, a pair of tapering tongues arranged at opposite sides of their adjacent ends the tongues of each section filling the space between those of the other when united, a laterally-inclining projection at the end of each tongue, an external threaded portion located back of the tongues on each section having an internal annular recess adapted to receive the laterally-inclining projection of said tongues, substantially for the purpose set forth. 3rd. A hose coupling composed of duplicate sections having a pair of tapering tongues arranged at opposite sides of their adjacent ends, having each an internal longitudinal recess, a yielding bar fitting each of said recesses and secured at one end to each section and having a laterally inclining projection at its free end, a sleeve threaded to each section having an internal annular recess adapted to receive the spring actuated laterally inclining projections of said tongues, substantially for the purpose set forth. 4th. A hose coupling composed of duplicate sections having a pair of tapering tongues arranged at opposite sides of their adjacent ends, the tongues of each section being provided with an internal longitudinal recess and being adapted to close the space between the tongues of the other when united, a spring actuated bar fitting the recess in each tongue provided at its free end with a laterally inclining projection having an internal annular recess adapted to receive the laterally inclining projections of said bars and to lock said sections together by a slight rotative movement. 5th. A hose coupling, composed of duplicate sections having a pair of tongues arranged at opposite sides of their adjacent ends, the tongues of each section filling the spaces between those of the other when united, a lateral spring actuated projection secured to each tongue and tapered both sides, and a sleeve threaded to each section having an internal annular recess adapted to receive the spring actuated projection of said tongues and to lock said sections together by a slight rotative movement.

**No. 59,623. Rim for Horse Collars.**

(Rebord de collier de cheval.)

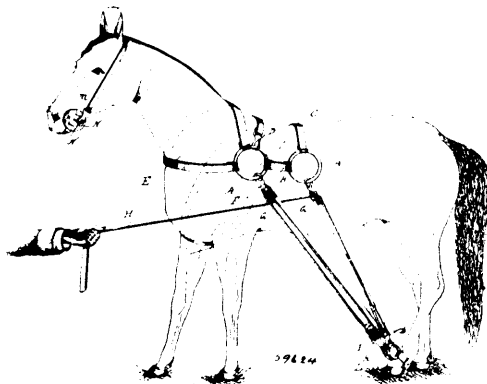


William George Lee, Owen Sound, Ontario, Canada, 14th April, 1898; 6 years. (Filed 25th March, 1898.)

*Claim.*—The combination of round steel rim *a a*, hinged together at *d*, having shoulders *c c* and hane clips *b b*, substantially as and for the purpose hereinbefore set forth.

**No. 59,624. Horse Shoeing Apparatus.**

(Appareil à ferrer les chevaux.)

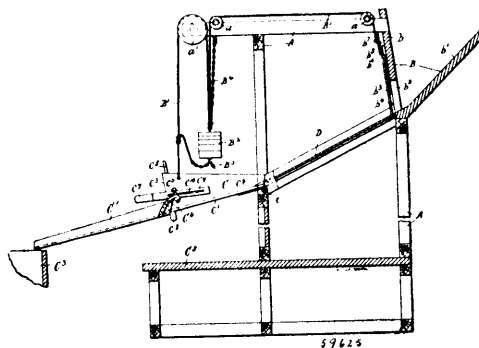


Frank Ellsworth, Alliance, Ohio, U.S.A., 14th April, 1898; 6 years. (Filed 24th March, 1898.)

*Claim.*—1st. In an apparatus for controlling horses, a loop adapted to pass around the horses neck, a retaining strap passing over the horse's back and around one of the forelegs, and an operating strap hung from the loop and retaining strap and adapted to be attached to the foot of the horse to raise the same. 2nd. In an apparatus for controlling horses, a pair of connected rings, a loop attached to the forward ring, adapted to pass around the neck of the horse and rest on his shoulders, a retaining strap having its ends attached to said rings and its intermediate portion adapted to pass over the horse's back, and around one of his forelegs, and an operating strap hung from said rings and adapted to raise a foot of the horse. 3rd. In an apparatus for controlling horses, a pair of connected rings, a loop attached to the forward ring and adapted to pass around the horses neck, a retaining strap attached to the said rings and passing around one of the horse's forelegs, rollers hung from said rings, a band adapted to pass around a foot of the horse, rings in the ends of said band, and an operating strap passing to and fro between said rings and the rollers.

**No. 59,625. Dumping Apparatus for Coal, etc.**

(Appareil à bascule pour le charbon, etc.)



Thomas Marshall Nalton, Syracuse, New York, U.S.A., 14th April, 1898; 6 years. (Filed 31st March, 1898.)

*Claim.*—1st. In a feeding apparatus, the combination with a main pocket or receptacle *B* having an outlet opening *b<sup>2</sup>*, provided with a closure *b<sup>1</sup>*, a supporting frame *A*, a movable delivery-pocket *C* for receiving the material discharged from the outlet-opening *b<sup>2</sup>*, said delivery-pocket having its end adjacent to the main pocket or receptacle pivoted to the supporting frame and having its other end movable up and down, a chute *D* for conducting the material from the main pocket or receptacle to the delivery-pocket, and means connected to the delivery-pocket *C* and the closure *b<sup>1</sup>*, and actuated by the delivery pocket for effecting the operation of said closure, substantially as and for the purpose described. 2nd. In a feeding apparatus, the combination with a main pocket or receptacle *B* having an outlet opening *b<sup>2</sup>*, provided with a closure *b<sup>1</sup>*, a fixed downwardly inclining chute *D* for conducting the material discharged from the main pocket or receptacle, a delivery-pocket *C* forming a continuation of the chute, said delivery-pocket having its end adjacent to the chute pivoted in proximity to said chute and having its other end movable up and down, connections between the delivery-pocket

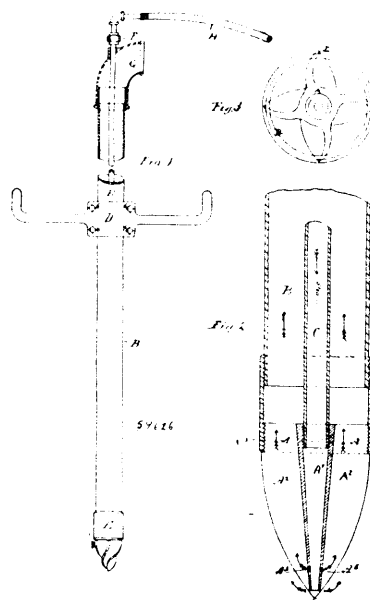
and the closure for effecting the operation of said closure, and a stop for limiting the movement of the delivery-pocket, substantially as and for the purpose specified. 3rd. In a feeding apparatus, the combination with a main pocket or receptacle B having an outlet opening  $b^2$ , provided with the closure  $b^3$ , a supporting frame A, a movable delivery-pocket C for receiving the material discharged from the outlet-opening  $b^2$ , said delivery-pocket having its end adjacent to the main pocket or receptacle pivoted to the supporting frame and having its other end movable up and down, a chute D for conducting the material from the main pocket or receptacle to the delivery-pocket, connections  $B^1$   $B^2$  between the delivery-pocket and the closure for effecting the operation of said enclosure, and means secured to the delivery-pocket for supporting a bag or other receptacle in position to receive the material discharged from the delivery-pocket, substantially as and for the purpose set forth. 4th. In a feeding apparatus, the combination with the main pocket or receptacle B, having an outlet-opening  $b^2$  provided with a closure  $b^3$ , a downwardly inclining chute D for conducting the material discharged from the main pocket or receptacle B, a movable delivery-pocket C for receiving the material conducted by the chute, said delivery-pocket having one end pivoted to the lower extremity of the chute and its other end movable up and down, connections  $B^1$   $B^2$  between the delivery-pocket and the closure for effecting the operation of said closure, separated arms  $e^7$   $e^8$ , secured to the movable end of said delivery-pocket for engaging a bag or other receptacle adapted to receive the material discharged from the delivery-pocket, the arm  $e^7$   $e^8$  secured to the movable end of said delivery-pocket for engaging a bag or other receptacle adapted to receive the material discharged from the delivery-pocket, the arm  $e^7$  being movable towards and away from the arm  $e^8$ , and a support  $C^5$  beneath the delivery-pocket for supporting the bag or other receptacle, substantially as and for the purpose described. 5th. In a feeding apparatus, the combination with a main pocket or receptacle B having an outlet-opening  $b^2$ , provided with a closure  $b^3$ , a movable delivery-pocket C for receiving the material discharged from the outlet-opening  $b^2$ , supports  $a^1$   $a^1$  arranged one in advance of the other above the delivery-pocket, a flexible connection  $B^1$  having one extremity connected to the delivery-pocket C, its intermediate portion passed over the supports  $a^1$   $a^1$ , and its opposite extremity connected to the closure  $b^3$ , and a movable weight or counter-balance  $B^2$  connected to the portion of the flexible connection B interposed between said supports, substantially as and for the purpose specified. 6th. In a feeding apparatus, the combination with a main pocket or receptacle B, having an outlet-opening  $b^2$  with a closure  $b^3$ , a movable delivery-pocket C for receiving the material discharged from the outlet-opening  $b^2$ , supports  $a^1$   $a^1$  arranged one in advance of the other above the delivery pocket, a flexible connection  $B^1$  having one extremity connected to the delivery-pocket C, its intermediate portion passed over the supports  $a^1$   $a^1$  and its opposite extremity connected to the closure  $b^3$ , a weight or counter-balance  $B^2$  movable towards and away from the delivery-pocket C and connected to the portion of the flexible connection  $B^1$  interposed between said supports, and a second flexible connection  $B^3$  having one end connected to the movable weight or counter-balance  $B^2$  and its opposite end connected to the connection  $B^1$  beneath said weight or counter-balance, substantially as and for the purpose set forth. 7th. In a feeding apparatus, the combination with a main pocket or receptacle B, having an outlet-opening  $b^2$  provided with a closure  $b^3$ , a supporting frame A, a movable delivery-pocket C for receiving the material discharged from the outlet-opening  $b^2$ , supports  $a^1$   $a^1$  arranged one in advance of the other above the delivery-pocket, its intermediate portion passed over the supports  $a^1$   $a^1$  and its opposite extremity connected to the closure  $b^3$ , a weight or counter-balance  $B^2$  movable towards and away from the delivery-pocket and connected to the portion of the flexible connection  $B^1$  interposed between said supports, and a second flexible connection  $B^3$  having one end connected to the movable weight or counter-balance  $B^2$  and its opposite end connected to the frame A above said weight or counter-balance, substantially as and for the purpose described. 8th. In a feeding apparatus, the combination with a main pocket or receptacle B, having an outlet-opening  $b^2$  provided with a closure  $b^3$ , a supporting frame A, a movable delivery-pocket C for receiving the material discharged from the outlet-opening, said delivery-pocket having its end adjacent to the main pocket or receptacle hinged to the supporting frame and its other end movable up and down, a chute D for conducting the material from the main pocket or receptacle to the delivery-pocket, means connected to the delivery-pocket and the closure and actuated by the delivery-pocket for effecting the operation of said closure, and an extension chute  $C^1$  removably secured to the pocket, substantially as and for the purpose specified.

**No. 59,626. Earth Auger and Earth Thawing Implement.** (*Sonde à trepan et outil à dégeler la terre.*)

John Bertram, Dundas, Ontario, Canada, 14th April, 1898; 6 years. (Filed 29th March, 1898.)

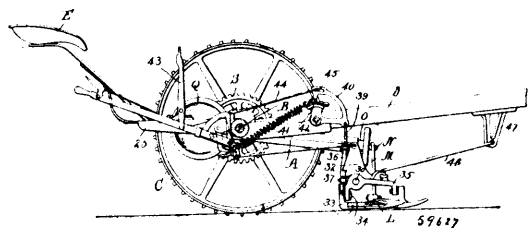
*Claim.*—1st. An earth-boring and steam-excavating implement, comprising a hollow shaft or body-tube B, a spirally converging flanged boring point A, having a centre tube  $A^1$ , provided with holes  $A^2$  near the end of said tube and point, a collar or ring E

connecting said tube and boring tube, a pipe C within said body-tube, one end connected to said centre tube in the point, and the



other end provided with a universal coupling or hose connection F, whereby steam admitted into tube C passes out through said central tube and holes therein against the frozen earth, which when raised by the spiral flanges comes in contact with the pressure of steam, and is thereby forced up tube B and discharged on the surface of the ground, substantially as set forth. 2nd. A steam earth-thawing, boring and ejecting implement or device, comprising a body-tube or hollow shaft D, a boring bit A, having spiral flanges  $A^2$  converging to a point and a centre tube  $A^1$  open at the end near said point, and provided with holes  $A^2$  near said end to discharge steam against the earth to be bored, a pipe C within said tube B, and connecting with the central tube of the boring bit A, and adapted to operate, substantially as set forth. 3rd. A steam earth-raising, thawing and boring instrument, comprising a boring point or bit A, having spiral flanges  $A^2$  converging to a point for boring the earth, and a central tube  $A^1$  for discharge of steam to thaw and lift the earth during boring and connected to a tubular shaft B, to which rotation to bore is given by handles D or other means, a steam pipe C within said tubular shaft and connected to said boring bit for the supply of steam thereto to thaw the earth and force it up said tubular shaft by pressure of steam, and discharge the earth on the surface of the ground, substantially as described.

**No. 59,627. Mower. (Fauçeuze.)**



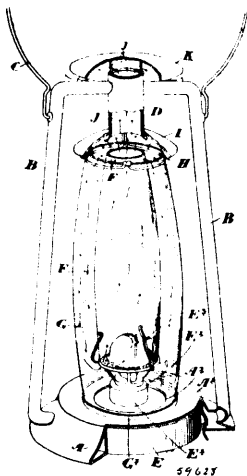
Maurice Kane, Austin, Illinois, U.S.A., 14th April, 1898; 6 years. (Filed 28th March, 1898.)

*Claim.*—1st. In a mowing machine, a main frame, a driving axle mounted therein, traction wheels mounted on said axle, and means for coupling said wheels to said axle to effect the rotation thereof when said wheels rotate in one direction, but permitting the rotation of said wheels in the opposite direction without rotating said axle, said means comprising ratchet teeth and engaging pawls, and means whereby when the parts are assembled said pawls may be readily and rapidly engaged in proper relation with respect to such teeth, as and for the purpose set forth. 2nd. In a mowing machine, the combination with a driving axle, a series of pawls pivotally mounted with respect thereto, and adapted to revolve with such axle, traction wheels having a hub with ratchet teeth formed on the inner surface thereof, the edge of said hub provided with seats or depressions, whereby when the wheels are slid upon the ends of such axle the proximate edges of said pawls may be received in said seats or depressions, whereby on rotation of such wheels the pawls are depressed into position for the ends thereof to be received into



operative engagement with the teeth of such ratchet, as and for the purpose set forth. 3rd. In a mowing machine, a framework, arms extending rearwardly from such framework, a counter-shaft journaled in such rearwardly extending arm, gearing for driving such counter-shaft from the main axle to the machine, means for actuating the cutter bar from such counter-shaft, and a driver's seat carried by one of said arms, as and for the purpose set forth. 4th. In a mowing machine, a cutter bar, means for actuating the same, including a counter-shaft, gearing for driving such counter-shaft from the main axle of the machine, and a ball-bearing arranged to receive the end thrust of said counter-shaft, as and for the purpose set forth. 5th. In a mowing machine, a counter-shaft, means for driving the same from the main axle, gearing driven from said counter-shaft for actuating the cutter bar and means for receiving the end thrust of said counter-shaft comprising a disc having transverse seats formed therein and adapted to receive anti-friction balls of greater diameter than the transverse thickness of said disc, and discs or plates mounted to contact on opposite sides with said balls, as and for the purpose set forth. 6th. In a mowing machine, a counter-shaft, a journal bearing therefor, a pair of discs mounted on said shaft, an intermediate disc having transverse openings adapted to receive bearing balls of greater diameter than the transverse thickness of said intermediate disc, a driving gear for such shaft, and means driven from such shaft for operating the cutter bar, as and for the purpose set forth. 7th. In a mowing machine, a cutter bar, gearing for actuating the same, a shaft for driving such cutter bar, such gearing including a gear wheel loosely sleeved upon said shaft, a clutch for coupling said gear wheel to said shaft including a movable clutch collar, a bar connected to such collar and having a lever, a cam slot in which such lever operates, and a spring interposed between the frame of the machine and said bar, the tension of such spring being normally exerted to move such collar into coupling position, as and for the purpose set forth. 8th. In a mowing machine, a cutter bar, a bell crank lever, connections between such lever and bar, and a carrying or counter-balance spring connected at one end to the frame of the machine and at the pivotal axis of said bell crank lever and the frame connection of the other end of said spring, whereby when the cutter bar is raised by meeting an obstruction the leverage exerted by such spring upon such bell crank lever is not varied, as and for the purpose set forth. 9th. In a mowing machine, a framework, a cutter bar, a bell crank lever pivotally mounted upon such framework and connected to such cutter bar, a counter-balance spring connected at one end to the framework and at the other end to such bell crank lever at a point on the same side of the pivot of such bell crank lever with the frame end connection of the spring, a foot lever pivotally mounted in the framework, a rod connection between said foot lever and bell crank lever, said rod connection to the foot lever being so arranged as to compensate for the uniform leverage exerted by the carrying spring when said cutter bar is raised through the operation of such foot lever, as and for the purpose set forth. 10th. In a mowing machine, a cutter bar, a yoke or bridge upon which said cutter bar is mounted, a coupling arm upon which said yoke or bridge is pivotally sleeved or otherwise mounted, and a draw bar pivotally connected at one end to said yoke or bridge at a point forward of the axis of said yoke or bridge, and pivotally connected at the other end thereof to the tongue of the machine, as and for the purpose set forth.

**No. 59,628. Lantern. (Lanterne.)**

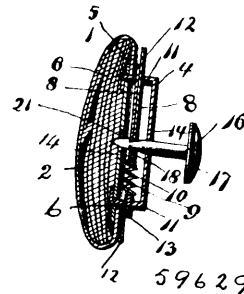


Joseph W. Heric, Austin, Manitoba, Canada, 14th April, 1898 : 6 years. (Filed 20th March, 1898.)

*Claim.*—1st. In a lantern, in combination the frame, the oil bowl, burner and inner chimney, the outer glass supported on the frame at the bottom and extending down at the bottom below the burner

and at the top to about the level of the upper chimney, a suitable hood above the outer glass and chimney and an extension chimney above the central chimney and a hood provided at the top of the same, as and for the purpose specified. 2nd. In a lantern, in combination the frame, the oil bowl, burner and inner chimney, the outer glass supported on the frame at the bottom and extending down at the bottom below the burner and at the top to about the level of the upper chimney, a suitable hood above the outer glass and chimney, a suitable central casing and an extension chimney adjustable vertically in same, and a suitable hood connected at the top of the adjustable extension chimney, as and for the purpose specified. 3rd. In combination the lower ring and frame provided with an inwardly extending flange ring A', the bowl having a burner extending through the central hole within the flange ring, the central chimney and extension chimney and hood, the outer glass extending downwardly to the ring and the hood extending over the top of the ring and the hood extending over the top of the outer glass all arranged, as and for the purpose specified.

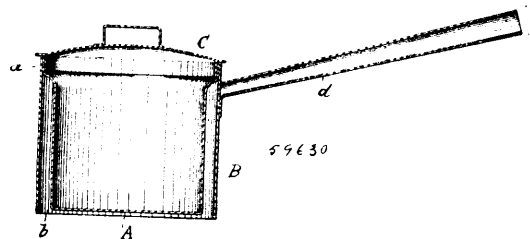
**No. 59,629. Necktie Holder. (Porte-cravate.)**



Joseph Marie Turcotte, City of Quebec, Canada, 14th April, 1898 : 6 years. (Filed 26th March, 1898.)

*Claim.* 1st. A necktie holder comprising a casing, spring actuated slides movable within said casing, a button removably secured therein and means securing the holder to the tie. 2nd. A necktie holder comprising a casing, spring actuated slides movable within said casing and having longitudinal and transverse slot therein, a button removably secured within said casing and means for securing the holder to the tie. 3rd. A necktie holder comprising a casing, spring actuated slides movable within said casing and having longitudinal and transverse slots therein, a button removably secured within said casing, comprising a shank having a reduced portion, a lug upon the outer end of said shank, and means for securing the holder to the tie. 4th. A necktie holder comprising a casing, having slot therein, slides movable within said casing, said slides having longitudinal and transverse slots therein, a spring secured within the longitudinal slots and adapted to operate the slides, a button comprising a head, provided with a shank, having shoulders formed by reducing said shank, a lug formed upon the extreme outer end of said shank, and means for securing the holder to the tie.

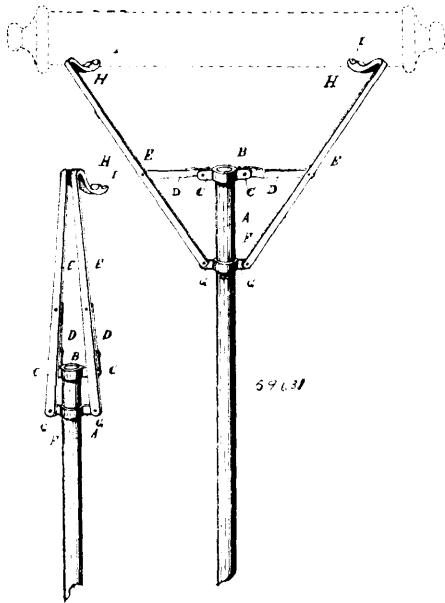
**No. 59,630. Cooking Utensil. (Ustensile de cuisine.)**



William Henry Witham, Brixton, London, England, 15th April, 1898 : 6 years. (Filed 31st March, 1898.)

*Claim.*—1st. A cooking or water heating utensil composed of a liquid receptacle and a mantle secured to the same, the said mantle surrounding the receptacle concentrically, so as to form an annular air jacket open at the bottom and closed at the top, substantially as described and for the purposes specified. 2nd. A cooking or water heating utensil composed of a liquid receptacle and a mantle secured to the same, the said mantle surrounding the receptacle concentrically, so as to form an annular air jacket open at the bottom and closed at the top, but provided with perforations, substantially as described and for the purpose specified. 3rd. The combination of a metallic liquid receptacle with a mantle of impregnated papier maché secured to the same, so as to form an annular air jacket open at the bottom, substantially as described and for the purpose specified. 4th The combination of a liquid receptacle A, with a mantle B secured to the receptacle at the top and forming with the same an annular air jacket b, substantially as described and for the purposes specified.

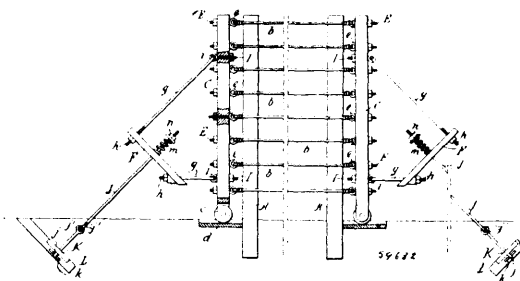
**No. 59,631. Curtain and Picture Adjuster.**  
(*Ajusteur de rideaux et images.*)



Joseph Sharpe, Ottawa, Ontario, Canada, 12th April, 1898; 6 years. (Filed 26th March, 1898.)

*Claim.* 1st. In a combined curtain and picture adjuster secured to one end of a suitable handle by a lugged ferrule, a second lugged ferrule, loosely mounted on said handle, and capable of being moved upward or downward as and for the purpose herein specified. 2nd. In a combined curtain adjuster provided with extended frames, having curved ends suitably arranged and extended outward, and means connecting the said curved ends, and a sliding ferrule as and for the purpose herein specified. 3rd. In combination with a collapsible curtain adjuster, having a rigid and a slidable ferrule with link arms interposed between the said rigid ferrule and the extended frames as and for the purpose herein specified. 4th. In combination with a collapsible curtain adjuster in folded position, with means, for supporting the same in such position, the small curved ends of the extended frames, the link arms and suitable supporting handle, as and for the purpose herein specified.

**No. 59,632. Wire Fence Post.**  
(*Poteau pour clôtures en fil de fer.*)

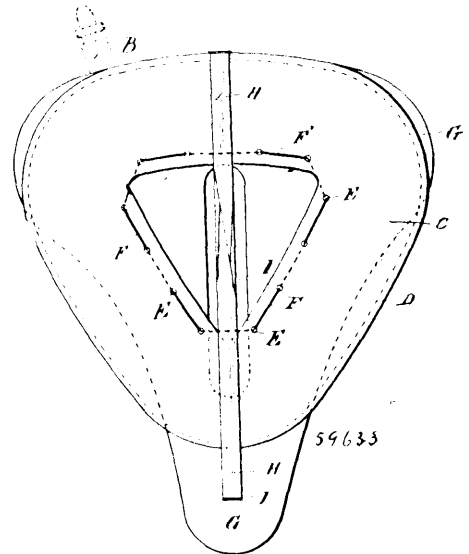


Olin Harley, South Whitley, Indiana, U.S.A., 15th April, 1898; 6 years. (Filed 28th March, 1898.)

*Claim.* 1st. In an end post mechanism for wire fences, the combination with the fence wires, of an end post connected with said wires and having a sliding or movable support at its bottom, and a spring mechanism for maintaining said post in upright position and permitting its movement, said mechanism connected to the post and to a ground-anchor, substantially as and for the purpose set forth. 2nd. An improved end post mechanism for wire fences, comprising a post to which the fence wires are adapted to be connected, and a stay-mechanism embodying an equalizer obliquely mounted with respect to the post, and anchor devices having a spring connection with the equalizer, substantially as and for the purpose set forth. 3rd. An improved end post mechanism for wire fences, comprising a post to which the fence wires are adapted to be connected, said post having a sliding or movable support, and a stay-mechanism connected with the post and embodying an equalizer and an anchor-rod having a spring connection with said equalizer, substantially as and for the purpose set forth. 4th. An improved

end post mechanism for fences, comprising the post to which the fence wires are adapted to be connected, said post having a wheel or roller forming a bearing at its bottom, an equalizer, connecting-rods for mounting the equalizer with respect to the post, and an anchor-rod carrying a coiled spring adapted to bear with relation to the equalizer, substantially as and for the purpose set forth. 5th. In an improved end post mechanism for wire fences, the combination, with the fence wires, of an end post connected with said wires, and having a wheel or roller bearing at its bottom, an equalizer obliquely mounted with relation to said end post, connecting-rods extending from the respective ends of the equalizer to the upper and lower portions of the end post, a headed anchor-rod passing through said equalizer, and a coiled spring arranged between the geared end of the rod and the equalizer, substantially as and for the purpose set forth.

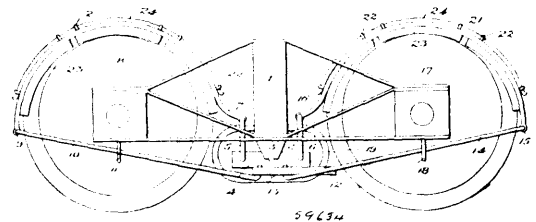
**No. 59,633. Cycle Seat Cushion.**  
(*Coussinet de siège de cycles.*)



Frederick William Roe, Stonehenge, Tasmania, 15th April, 1898; 6 years. (Filed 18th February, 1898.)

*Claim.*—The improved pneumatic cushion for use upon the saddles or seats of cycles, consisting of an air-tube enclosed within a cover of any convenient shape and provided with a lace or equivalent means upon the inner edge thereof for securing the said tube within the case or cover, the whole being secured to the saddle by a strap or the like, all substantially as herein described and shown by the appended drawings.

**No. 59,634. Car Brake.** (*Frein de chars.*)



Jessie T. Davis, Booneville, Mississippi, U.S.A., 15th April, 1898; 6 years. (Filed 31st March, 1898.)

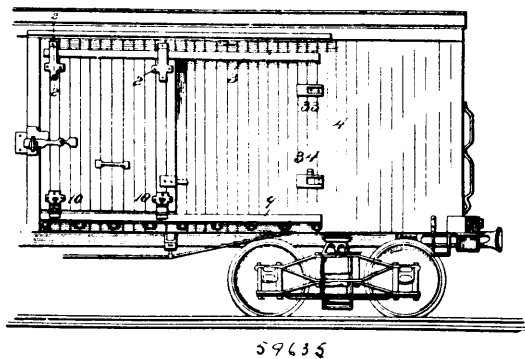
*Claim.*—A car brake, comprising the rock lever 4, the links 5, 6 secured to the opposite ends thereof, the straps 7 and 16 connected at one end of said links and provided with the slots 21, the sectional brake shoes provided with the eyes 22 extending through said slots, and detachably secured to said straps by the spring rods 24, the rods 10, 10 connected to the outer ends of said straps and passing through guide brackets 11, 18, and having their inner ends secured to the shorter arm of the brake-lever 12, said lever being fulcrumed on a stud 13 on the face of the rock lever 4, substantially as shown and described.

**No. 59,635. Car Door.** (*Porte de chars.*)

John W. Kennedy, South Chicago, Illinois, U.S.A., 15th April, 1898; 6 years. (Filed 29th March, 1898.)

*Claim.*—1st. In a device of the class described, the combination with a car, of an L-shaped upper rail, a sliding door, and a hanger

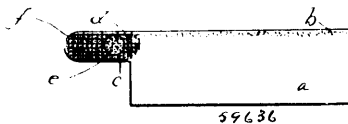
secured to the door and provided with a substantially U-shaped bend located above the rail and having its inner side bent downward



and engaging under the same, and a roller mounted in the bend and arranged on the tread of the rail, substantially as described. 2nd. In a device of the class described, the combination with a car, of a lower rail provided with an inwardly-extending horizontal flange, a door slidingly mounted on the car, and a shoe comprising an upper portion secured to the door, and a lower portion provided with an inner depending hook engaging under the horizontal flange of the rail, whereby the lower portion of the shoe is interlocked with the rail, said upper portion being movably connected with the lower portion to permit the door to swing outward at the bottom, substantially as described. 3rd. In a device of the class described, the combination with a car, of a bottom rail mounted thereon and provided with an inwardly-extending horizontal flange, a sliding door, a shoe comprising an upper member provided with an exterior horizontal lip 14, and having an inwardly-extending casing with ways, and a lower member provided with an inner depending hook 17 to engage under the horizontal flange of the rail, and having front and rear side flanges, the front ones being provided with depending arms 21, and means for locking the upper member against outward movement, substantially as specified. 4th. In a device of the class described, the combination with a car, of a bottom rail mounted thereon, a sliding door, a shoe comprising an upper member provided with substantially vertical slots and having a casing with ways, and a lower member provided with front and rear side flanges, the rear ones being interlocked with said ways and the front ones being provided with depending arms 21, disposed opposite said slots, and a transverse fastening device mounted on the front flanges and arranged to engage the upper member to limit the sliding movement of the same, substantially as described. 5th. In a device of the class described, the combination with a car, of a bottom rail mounted thereon, and provided with an inwardly-extending horizontal flange, a sliding door, a shoe comprising an upper member having an opening, provided with an exterior horizontal lip and having an inwardly-extending casing with ways, and a lower member provided with an inner hook-shaped portion to engage under the horizontal flange of the bottom rail, and having front and rear side flanged, the rear ones being interlocked with the said ways, and the front ones fitting in the said openings and provided at their inner terminals with depending arms, and a sliding key mounted on the upper member and engaging the lower member, substantially as described. 6th. In a device of the class described, the combination with a car, of a lower rail provided with an inwardly-extending horizontal flange, a door slidingly mounted on the car, a shoe comprising an upper portion or member mounted on the door and provided with a vertical housing, and a lower member provided with a depending hook to engage the horizontal flange, slidingly connected with the upper member and extending through an opening thereof, a transverse fastening device 23, forming a stop and limiting the sliding movement of the members on each other, a slotted key arranged in the vertical casing and adapted to engage the lower member, and a fastening device mounted on the casing, passing through the slot of the key and limiting the movement of the latter, substantially as described. 7th. In a device of the class described, the combination with a car, and a sliding door, of a step mounted on the car and provided with a projecting lip 35 to engage the door, and having a casing at the inner end of the lip, said casing being provided at its front with an opening and having a vertical bolt-opening, and a vertically-movable bolt mounted in the bolt-opening of the casing, and a plate-mounted on the door and provided with a beveled lug 39, adapted to enter the opening at the front of the casing and provided with a slot to receive the bolt, substantially as described. 8th. In a device of the class described, the combination with a car, and a sliding door, of a stop mounted on the car and provided with a projecting lip 35 to engage the door and having a casing at the inner end of the lip, said casing being provided at its front with an opening and having a vertical bolt-opening, a slotted bolt mounted in the bolt-opening of the casing and provided at the lower end of the slot with an enlargement or stop 42, a fastening device mounted on the casing and extending through the slot of the bolt to limit the movement of the

same and to secure the device to the car, and a slotted lug carried by the door and adapted to enter the opening at the front of the casing and to be engaged by the bolt, substantially as described. 9th. In a device of the class described, the combination with a car, and a sliding door, of a stop having a bolt, and a lock member comprising a plate provided at its outer end with a flange 38 arranged on the rear edge of the door and having its terminals bent inward and embedded in the said door, and a lug mounted on and extending from the flange 38, and adapted to be engaged by the bolt, substantially as described.

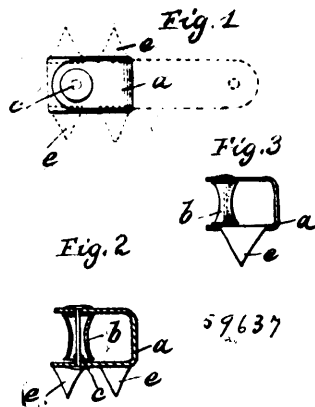
**No. 59,636. Cigarette Lighting Device.**  
(Appareil à allumer les cigarettes.)



Martin Huggard, Carcur House, Wexford, Ireland, 15th April, 1898; 6 years. (Filed 10th January, 1898.)

*Claim.*—1st. An ignition cap for cigarettes consisting of a flap or extension made in one piece with the cigarette wrapper and having its inner side lined with a piece of wire gauze having a cap of ignition substance affixed thereto, the said flap of extension being provided with a coat of mucilage or other adhesive substance and being turned down over, and secured to the top of the cigarette after the latter is rolled, substantially as and for the purpose herein shown and illustrated. 2nd. An ignition cap for attachment to cigars and cigarettes consisting of a strip of papers or other suitable substance lined with a piece of fine wire gauze having a cap of ignition substance affixed thereto and having a coat of mucilage or other suitable adhesive on the inner side thereof substantially as and for the purpose herein described and illustrated. 3rd. Cigars and cigarettes having attached thereto ignition caps consisting of strips of paper or other suitable substance each lined with a piece of fine wire gauze and having a cap of ignition substance affixed thereto and having a coat of mucilage or other suitable adhesive on the inner side thereof, substantially as herein described and illustrated.

**No. 59,637. Lacing Eyelet. (Oillet.)**



Max Schiemaugk, Berlin, Germany, 15th April, 1898; 6 years. (Filed 25th February, 1898.)

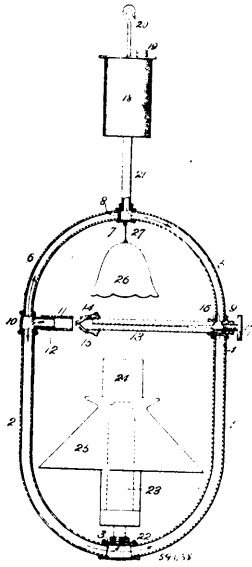
*Claim.*—As a new article of manufacture, a lacing eyelet, comprising a V-shaped clip *a*, having means of attachment, a pin or rivet *c*, and a roller *b* journaled upon the pin or rivet *c* between the sides of the V-shaped clip, as set forth.

**No. 59,638. Gasoline Lamp. (Lampe à gazoline.)**

William Clow, Independence, Missouri, U.S.A., 15th April, 1898; 6 years. (Filed 14th January, 1898.)

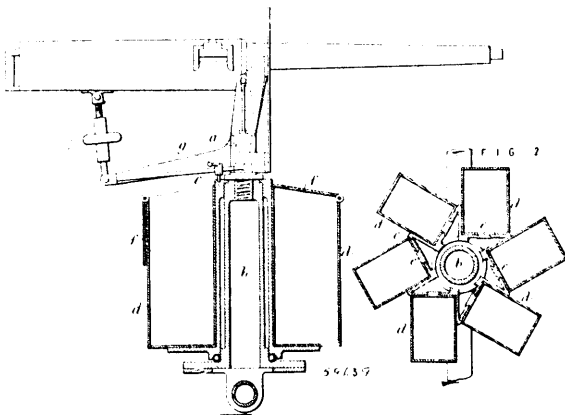
*Claim.*—1st. A gasoline lamp, comprising a tubular frame, having a communicating mixing chamber tube, a burner at the bottom of said frame, a valve-controlled vaporizing tube vertically over the burner, connected to the frame at one end and discharging into the mixing chamber tube, and a gasoline magazine connected to the tubular frame and arranged to feed the vaporizing tube. 2nd. A gasoline lamp, comprising a tubular frame, embodying a U-shaped frame provided with a diaphragm, a substantially semi-circular frame provided with a diaphragm, a vaporizing tube, a coupling between one pair of arms of the frames and the tube and provided with a passage connecting the passages of the semi-circular frame and tube, and a valve controlling such passage, an oil magazine in

communication with the valve-controlled passage, a coupling between the other pair of arms of said frames and arranged between



the diaphragms of the same, a mixing chamber tube connected to said coupling and located to receive the discharge of vapor from the vaporizing tube, and a burner vertically below the vaporizing tube and connected to the frame between the mixing chamber tube and the first named diaphragm, substantially as described. 3rd. A gasoline lamp, comprising a tubular frame embodying a U-shaped frame provided with a diaphragm, a substantially semi-circular frame provided with a diaphragm, a gasoline tank provided with a supporting hook, a pipe connecting the same with the upper part of the last named frame at one side of its diaphragm, a vaporizing and also a fine passage slightly enlarged at its rear end, tube having a discharge nozzle a coupling connecting said frames at a point between the oil tank connection and the diaphragm of the first named or U-shaped frame, and provided with a passage connecting the passages of the tube and last named or semi-circular frame, a valve controlling such passages, a T-coupling between the opposite ends of said frames, and therefore between their diaphragms, and an adjustable perforated mixing chamber tube thereon and opposite the nozzle of the vaporizing tube, a burner connected to the U-shaped frame between its diaphragm and the mixing chamber tube, a mantle and appurtenances therefor, over the burner, and a pendant bell vertically over the tube and burner, substantially as shown and described.

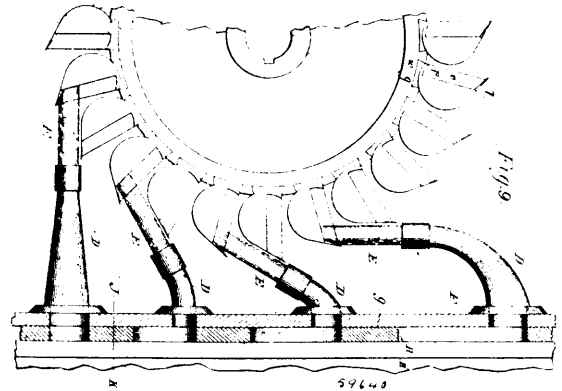
**No. 59,639. Ammunition Holder for Machine Guns.**  
(*Porte-munitions pour armes à feu.*)



The Earl of Dundonald, 34 Portman Square, London, England, 15th April, 1898; 6 years. (Filed 21st January, 1898.)

*Claim.* - In combination with the vertical axis around which a machine gun turns, a sleeve adapted to turn around the said axis, and made with a base and notched sides adapted to receive a number of detachable ammunition boxes, with means for bolting the sleeve so as to bring each box in suitable position relatively to the gun, substantially as described.

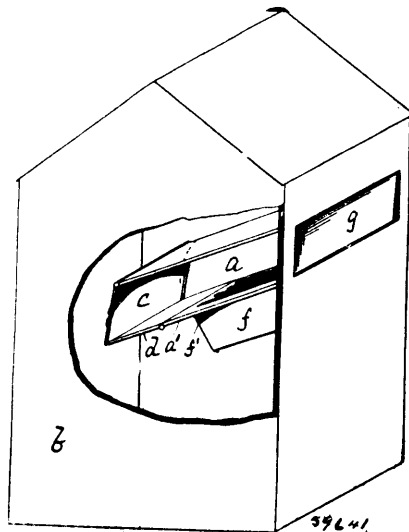
**No. 59,640. Water Wheel.** (*Roue hydraulique.*)



Francis M. F. Cazin, Hoboken, New Jersey, U.S.A., 15th April, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.* - 1st. In a percussion or impulse wheel, a series of vanes or buckets whose cavities are bounded by four triangular sides uniting at their four corners in the lowest part of the cavity, two constituting one pair having their sides opposite each other, and the adjacent ones being at a right angle, each being the arc of a circle and each pair forming an exact circular curve which is continuous and a tangent to this curve, this last being formed in one pair by the interior face of the lips, and in the other pair by a side of the knife, or one pair alone forming this curve and tangent, while the other may form a curve without the tangent, each pair of opposite sides ending in inverse direction. 2nd. In a percussion or impulse wheel, a series of jets and nozzles co-operating therewith, the arrangement being such that after the jet for any nozzle has attained the highest effective point striking the buckets perpendicularly to the radius on which the bucket is supported, the following bucket will reach with its lip parallel to the jet and in contact therewith, by which arrangement the entire effective force is obtained upon the wheel and produces a continuous action. 3rd. In a percussion or impulse wheel, a series of vanes and nozzles co-operating therewith, the vanes being provided on the side farthest from the centre of the wheel with a lip for the inception of the jet and the sides of the nozzles being cut away on straight or curved lines on the side towards the lip just outside the circle of rotation of the front edge of said lip, as and for the purpose set forth. 4th. As a means for attaching vanes or buckets to a water wheel, base plates upon said vanes, dove-tailed upon their transverse edges, the rear edge being at a right angle to the plane of rotation and the front edge being at another angle than a right angle to the plane of rotation, in combination with dove-tailed grooves across the crown of the wheel, corresponding in form to the described bases, as and for the purpose set forth.

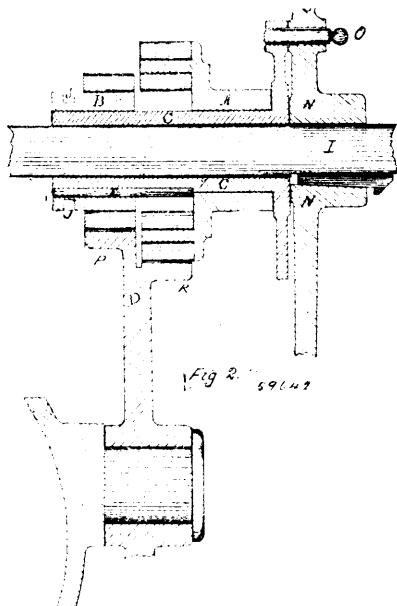
**No. 59,641. Letter Box.** (*Boite à lettres.*)



James Teevan, Dublin, Ireland, 15th April, 1898; 6 years. (Filed 14th March, 1898.)

*Claim.*—In postal letter boxes the inclined shoot having a flap hinged to the extremity of the top adapted to close against the slanting ends of the shoot sides, in combination with a second flap hinged to and forming a continuation of the floor of the shoot, said second flap having stops to maintain it in a plane with the said floor, substantially as and for the purpose described.

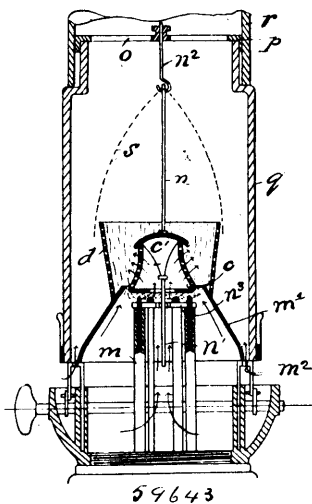
**No. 59,642- Traction Engine Gear.**  
(*Engrenage de locomobile à traction.*)



The Waterloo Manufacturing Company, assignee of Horace Longhurst, all of Waterloo, Ontario, Canada, 15th April, 1898; 6 years. (Filed 27th August, 1897.)

*Claim.*—1st. The combination of the recessed gear A and the sliding gear B, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the recessed gear A the sliding gear B, the intermediate wheel D and the intermediate wheel gears P and R, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the gears A and B, the sleeve C, the key E, substantially as and for the purpose hereinbefore set forth. 4th. The combination of the gears A and B and the means of moving the gear B back and forth along the sleeve C, substantially as and for the purpose hereinbefore set forth.

**No. 59,643. Lamp Burner.** (*Porte-mèche.*)

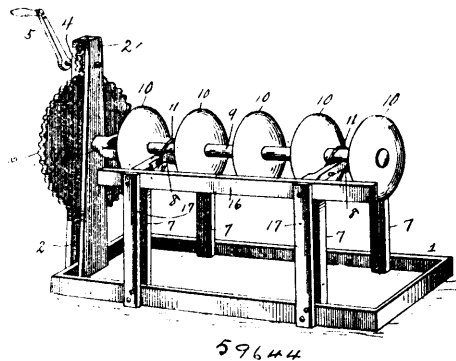


Adolph Albrecht, 115, 116, Leipziger Strass, Berlin, Germany, 15th April, 1898; 6 years. (Filed 24th January, 1898.)

*Claim.*—A burner for incandescent lamps, having a cone *m*<sup>1</sup> open at the top, enclosing the wick, and having a flared perforated sleeve *d*, fitted at the upper part thereof, and a perforated body *e* having an opening at the bottom, said body being tapered towards the top

and having its bottom substantially in the opening of the cone *m*<sup>1</sup> aforesaid, and means for suspending said body substantially as described.

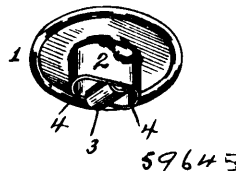
**No. 59,644. Disc Sharpener.** (*Aigiseur de disques.*)



Henry H. Vernon, Parker, North Dakota, U.S.A., 15th April, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.*—1st. In a disc-sharpener, the combination with disc supporting and rotating devices, and a guide arranged parallel with the disc-spindle, of a knife having its shank provided with opposite side cutting edges, and an intermediate concave surface, a guard attached to the shank, and spaced from said concave surface, and means for adjusting the guard to vary the interval between the same and the contiguous edged portion of the shank, substantially as specified. 2nd. In a disc-sharpener, the combination with disc supporting and rotating devices, and a guide arranged parallel with the disc-spindle, of a knife having its shank provided with cutting edges, a guard attached to the shank, and means as a set-screw for adjusting the guard to vary the interval between the same and the contiguous edged portion of the shank, the contiguous faces of the guard and shank being respectively convexed and concaved to fit the curvature of the disc, substantially as specified. 3rd. The herein-described knife for sharpening discs, the same comprising a shank provided at one end with a concave side surface, and contiguous side cutting edges, a spring-guard permanently secured at one end to the shank and extending approximately parallel therewith to the extremity at the concaved portion of said shank, the surface face of said guard opposite and contiguous to the concaved surface of the shank being convexed, and a set-screw adjustably engaged with the guard to vary the interval between its convex surface and said cutting edges, substantially as specified.

**No. 59,645. Button.** (*Bouton.*)



Oliver William Ketchum, Baltimore, Maryland, U.S.A., 15th April, 1898; 6 years. (Filed 28th March, 1898.)

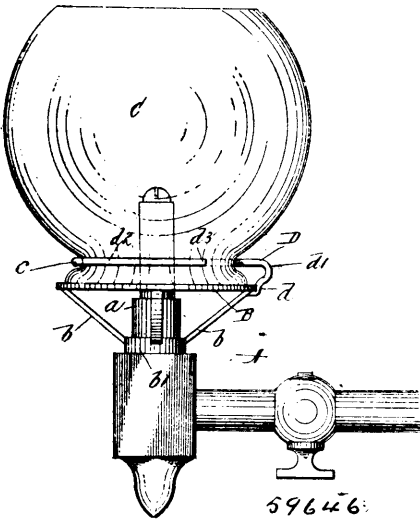
*Claim.*—1st. As an improved article of manufacture, a button having a hollow oblong shank and a cross-bar at the bottom thereof free from sharp edges, substantially as described. 2nd. As an improved article of manufacture, a button having an oblong hollow shank and a cross-bar at the bottom thereof, provided with inclined upper edges to avoid cutting the thread, substantially as described. 3rd. The combination with a two-pronged fastener, of a button having an oblong hollow shank, and a bridge at its bottom and adapted to guide the prongs of the fastener parallel with each other as they are turned down, substantially as described. 4th. As an improved article of manufacture, a button having a substantially flat face, a hollow shank round at the top and oblong below, and a bridge connecting the bottom of the sides of the shank, substantially as described. 5th. The combination with a button having a hollow oblong shank 2 and 3, of a fastener comprising the cap 5, disc 6, and wire prongs 8 connected by a flat bar 9, substantially as described.

**No. 59,646. Globe Holder.** (*Porte-globe.*)

Alphonse Feser, New York City, U.S.A., 15th April, 1898; 6 years. (Filed 19th January, 1898.)

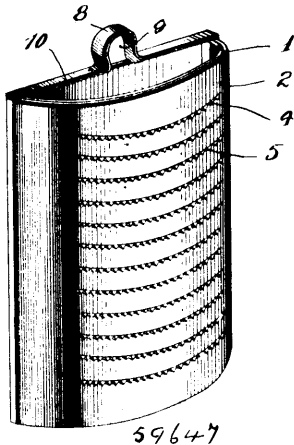
*Claim.*—1st. An improved globe holding device of the class described, comprising a curved spring arm having a fixed securing end and a free or open outer end and adapted to receive and retain

the neck of the globe, substantially as and for the purpose set forth. 2nd. An improved globe holding device of the class described, com-



prising, in combination with a supporting frame or base upon which the globe is adapted to rest, a curved spring arm projecting from said supporting base and having one end connected therewith, the other end being free to open, said spring arm being adapted to embrace the neck of the globe and retain it in position upon the supporting base frame, substantially as and for the purpose set forth. 3rd. An improved globe holding device of the class described, comprising the annular base ring adapted to support the globe and having means for securing it in position upon a gas or other lighting fixture, and the horizontal circular or curved spring arm mounted above said supporting ring and carried thereby, one end of said spring arm being secured to the ring and its other end being free or open, substantially as and for the purpose set forth. 4th. A globe holding device of the class described, comprising a circular or curved spring arm adapted to embrace the neck of the globe and retain the same in position, one end of said arm being connected with a support or bracket, substantially as and for the purpose set forth.

**No. 59,647. Grater. (Râpe.)**



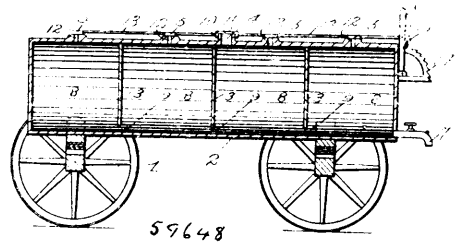
William J. Curry, Nanaimo, British Columbia, Canada, 16th April, 1898; 6 years. (Filed 26th March, 1898.)

*Claim.*—1st. A grater, comprising a series of members one of which is provided with a series of slots, and a series of grating ridges carried by the other member and projecting through said slots, substantially as described. 2nd. A grater, comprising a series of separable members one of which is provided with a series of slots, a series of grating ridges carried by the other member and projecting through said slots, and means for locking said members together, substantially as described. 3rd. A grater, comprising an inner member, an outer member provided with a series of slots, a series of grating ridges carried by said inner member and projecting through said slots, a retaining flange formed on said outer member and adapted to receive the inner member, and a locking spring adapted to engage said inner member for retaining the latter in the outer member, substantially as described. 4th. A grater, comprising an

inner member, an outer member provided with a series of slots, a series of serrated grating ridges carried by said inner member and projecting through said slots, a retaining flange formed on said outer member and adapted to receive the inner member, an engaging strip carried by the inner member, and a locking spring adapted to contact with said engaging strip for retaining the inner member in the outer member, substantially as described. 5th. A grater, comprising an inner member, an outer member provided with a series of slots, a series of grating ridges carried by the inner member and projecting through said slots, a retaining flange formed on one end of the outer member and adapted to receive one end of the inner member, an engaging strip carried by the inner member, and a locking spring also carried by the outer member and adapted to contact with said engaging strip for retaining the inner member within the outer member, substantially as described. 6th. A grater, comprising an inner member, an outer member provided with a series of slots, a series of serrated grating ridges carried by the inner member and projecting through said slots, a retaining flange formed on one end of the outer member and adapted to receive one end of the inner member, an engaging strip carried by the inner member, a spring locking strip also carried by the outer member and adapted to contact with said engaging strip for retaining the inner member within the outer member, and a finger loop formed in said locking strip, substantially as and for the purpose described.

**No. 59,648. Tank for Oil Waggon.**

(*Réservoir pour wagons à huile.*)

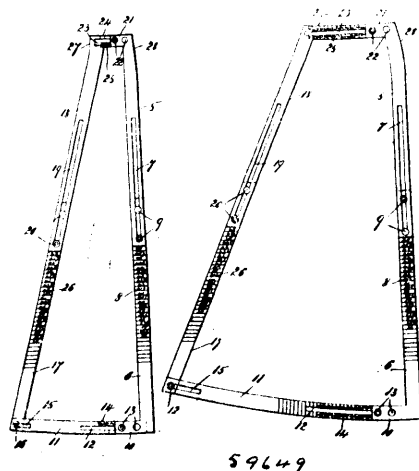


George W. Gooding, Seattle, Washington, U.S.A., 16th April 1898; 6 years. (Filed 26th March, 1898.)

*Claim.* The combination with a tank proper of a plurality of vertical partitions mounted therein and terminating a short distance above the bottom of the same, a discharge for said tank, valved air-lets for each of the compartments formed in said tanks, rods connected to the said valves, pivoted levers for operating the rods, devices for holding said levers in their adjusted positions, and means for introducing oil into the tank, substantially as described.

**No. 59,649. Garment Cutting Apparatus.**

(*Appareil à tailler les vêtements.*)



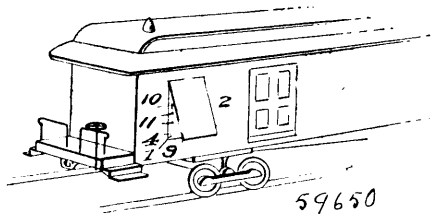
Almeda Augusta Pinkham, North Adams, Massachusetts, U.S.A., 16th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. The herein described pattern or chart for drafting skirts, comprising a side consisting of two parts 5 and 6, one of which is provided with a longitudinal slot 7 and the other with a scale 8, set screws 9 secured to said part provided with a scale and adapted to move in the said longitudinal slot 7, the lower end of said part 6 being provided with an angular extension 10, a bar 11, connected therewith, said bar 11 being provided with a longitudinal

slot 12, set screws 13 mounted in said extension 10 and adapted to engage said longitudinal slot 12, said bar being also provided with a scale 14, said bar 11 and extension 10 being so constructed that they will be slightly curved when connected, the outer end of said bar 11, being provided with a longitudinal slot 15, a side piece consisting of a bottom part 17, and an upper part 18 provided with a longitudinal slot 19, screws 20 mounted in said part 17, and adapted to move in the said slot 19, a set screw 16 mounted in the lower end of said part 17 and adapted to engage said longitudinal slot 15 of the bar 11, the said part 5 being provided with an angular extension 21, at the upper end thereof, set screws 22 mounted thereon, the said part 18 being provided with an angular extension 24 provided with a slot, which set screws are adapted to move, said extension 24 being provided with a scale 25, and the said part 17 being provided with a scale 26, substantially as and for the purpose described.

**No. 59,650. Safeguard for Express Cars.**

(Appareil de surêté pour chars-express.)



John Lamborg, Castalia, South Dakota, U.S.A., 16th April, 1898; 6 years. (Filed 31st March, 1898.)

*Claim.*—1st. In a railway-car, or other apartment, the combination with a wall thereof having an aperture therein, of a suitable receptacle closely fitted into, and pivotally suspended from the top of said aperture so as to vibrate therein, and open on its inner side, and means for limiting the vibratory movements of said receptacle, the exposable portions of the side walls of said receptacle being provided with a suitable loop, and sight-hole, substantially as described. 2nd. In a railway-car, or other apartment, the combination with a wall thereof, having an aperture therein, of a suitable receptacle closely fitted into, and pivotally suspended from the top of, said aperture, so as to vibrate therein, and inwardly projecting and inclosing side walls, and bottom wall or seat, said side walls being provided with suitable loop and sight holes, and means for limiting the vibratory movement of said receptacle, substantially as described. 3rd. In a railway-car, or other apartment, the combination with a wall thereof, having an aperture therein, of a suitable receptacle, closely fitted into, and pivotally suspended from the top of, said aperture, so as to vibrate inwardly and outwardly therein, and open on its inner side, the exposable portions of the side walls of said receptacle being provided with suitable loop and sight holes, and means for limiting the vibratory movements of said receptacle, said receptacle being actuated by gravity to normally assume its inward position, substantially as set forth. 4th. In a railway-car, or other apartment, the combination with a wall thereof, having an aperture therein, of a suitable receptacle closely fitted into, and pivotally suspended from the top of said aperture, so as to vibrate inwardly and outwardly therein, and consisting of an outer or pivoted wall, and inwardly projecting and inclosing side and bottom walls, said side walls being provided with suitable loop and sight holes, and laterally projecting flanges arranged at the inner edges of the side and bottom walls, and at the outer edge of the bottom wall, said receptacle being adapted to be actuated by gravity to normally assume its inward position, substantially as described.

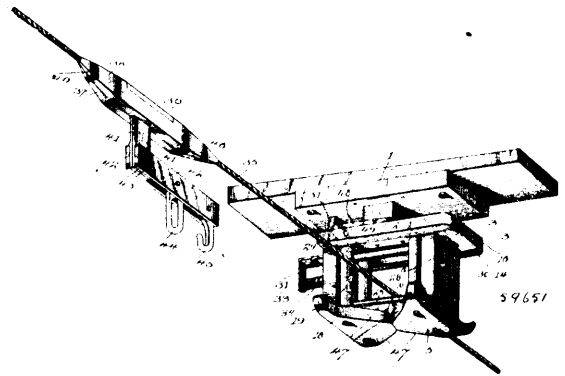
**No. 59,651. Conveyor for Endless Rope Railways.**

(Halage de courroie sans fin pour chemins de fer.)

Charles Lever Van Buskirk, Lodi, California, U.S.A., 16th April, 1898; 6 years. (Filed 31st March, 1898.)

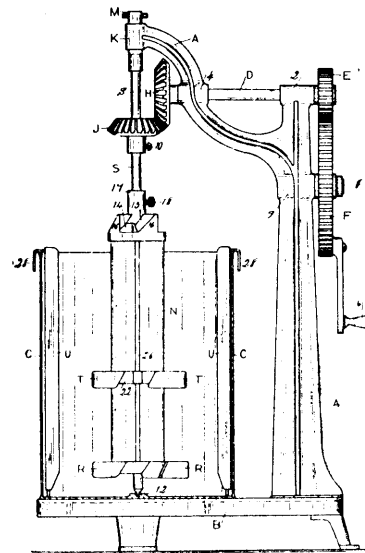
*Claim.*—1st. A cable railway support, comprising the grooved plate 2 formed with the depending arm 4 and the integral horizontal shoe 5 formed with the bearing socket 7 and semi-circular groove 8, in combination with the spring-actuated bracket 14 sliding on said plate and formed with the integral arm 17, shoe 18, bearing socket 20 and semi-circular groove 21, and the rollers 10, 23, provided at their outer ends with the collars 9 and 22 respectively, as and for the purpose set forth. 2nd. The combination with the grooved plate 2 formed with the depending arm 4 and the integral shoe 5 provided the bearing socket 7 and semi-circular groove 8, the rollers 10, 9, journalled in said socket, and the vertical parallel rollers 6, 6, journalled between the plate and shoe, of the spring-actuated bracket 14 sliding on said plate and provided with the integral arm 17, shoe 18, bearing socket 20 and groove 21, the roller 23, 22, journalled in said socket 20, and vertical parallel rollers 19, 19, journalled between the bracket 14 and shoe 18, and the longitudinal roller sleeve 28 journalled between the arms 4 and 17, sub-

stantially as shown and described. 3rd. The combination with the grooved plate 2, its integral arm 4 and shoe 5, of the bracket 14



having a sliding movement in the grooves of said plate and formed with the integral arm 17 and shoe 18, the U-shaped bolt connecting said arms 4 and 17 and provided with the right angular plate 31, and the spring 34 extending between said plate 31 and the arm 17, substantially as shown and described. 4th. The combination with the plate 2 formed with the parallel grooves 3, 3, of the sliding bracket 14 formed with the parallel jaws 15, having the tongues 16 engaging said grooves, the bracket 48 adjustably secured to said plate, and the roller 50 journalled in the free end of said bracket 48 and adapted to rest on the plane face of the sliding bracket 14, substantially as shown and described. 5th. The conveyor-head for cable railways, comprising the hinged jaws 37, 38, formed with longitudinal grooves 40, 40, on their contiguous faces, and having their free ends terminating in the integral parallel shanks 41, 41, and means for detachably securing said jaws and shanks together, substantially as shown and described. 6th. The conveyor-head 36 comprising the hinged jaws 37, 38, formed with the longitudinal grooves 40, 40, the convergently bevelled faces 46, 46, and the integral parallel shanks 41, 41, the parallel bars 42, 42, arranged on the opposite sides of said shanks, and means for simultaneously securing said bars, shanks and jaws together, substantially as shown and described.

**No. 59,652. Churn. (Baratte.)**



Michael H. Le Hane and Arthur J. Seguin, both of Hamilton, Ontario, Canada, 16th April, 1898; 6 years. (Filed 30th March, 1898.)

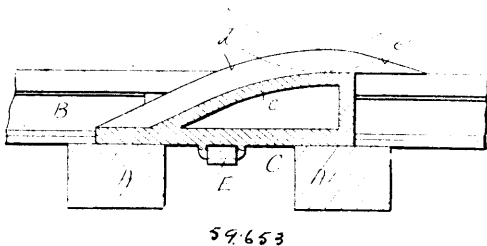
*Claim.*—1st. A machine of the character described, consisting of the frame secured to a circular base on a side extension thereof, a cylindrical cream receptacle resting vertically on said base, a vertical spindle centrally located in the receptacle and extending above with upper end in a sleeve in vertical bearing of frame, and revolved by means of an horizontal shaft in frame bearings having bevel wheel geared into an adjustable bevel wheel on the spindle, said horizontal shaft operated by the outer spur wheels and a cream cylindrical separator having upper and lower openings, lower blades and a cream cylindrical separator having upper and lower openings,



lower blades and adjustable blades, as described. 2nd. A vertical cylindrical cream receptacle supported on the circular base of a metallic frame, a vertical spindle, its lower end resting upon the bottom of the receptacle and the upper part extended for insertion in a vertical sleeve which fits loosely in central bearing of frame, a cylindrical separator adjustably attached to said spindle, having a series of upper air ducts with rear angle walls and lower detachable central bearing for said spindle, lower angle blades and adjustable upper angle blades forming a revolving cover for the cream, and the brake slats hung in the receptacle, said separator revolved by means of the mechanism as described and set forth. 3rd. An aerated butter churn of the character described, consisting of a vertical cylindrical separator having upper air ducts with rear flared out and side walls connected together by central bearing having set screw for central through spindle, said separator having lower angle blades and upper vertically adjustable angle blades as a cover, said spindle passing through lower removable bearing of the separator and resting on the bottom of the cylindrical cream receptacle, and the upper part having an adjustable bevel wheel and end in a vertical sleeve in bearing of metallic frame, and revolved by mechanism as described. 4th. The spiral centripetal scraper having vertical bearing adapted to receive the vertical spindle and fasten thereto, the cream receptacle resting on the circular base of the metallic frame to receive said scraper, upper bearing of frame with adjustable sleeve for said spindle, a bevel wheel capable of vertical adjustment on the spindle, to gear into bevel wheel on horizontal shaft in bearings of frame, driven by large crank wheel geared into the pinion wheel on said horizontal shaft, as described. 5th. An aerated butter churn of the character described, consisting of a vertical cylindrical tube, a number of upper air ducts formed by rear raised walls at an angle verging rearwards at the base with outer side walls and connected by central bearing for vertical spindle, a lower detachable bearing for said spindle, lower blades at a suitable angle forming a part of said tube, to create a vacuum to allow the compressed air to permeate the cream receptacle, and upper angle blades to form a revolving cover to the cream and capable of vertical adjustment to suit various quantities of cream, said separator capable of rotary motion by means of mechanism applied to said vertical spindle, as described.

**No. 59,653. Railway Wrecking Frog.**

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

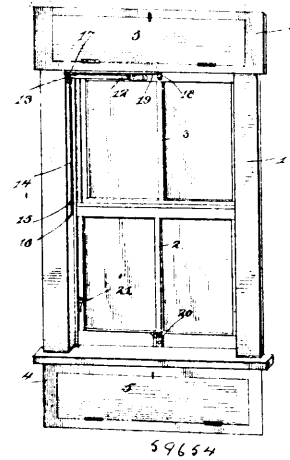


Michael Farrall, Baraboo, Wisconsin, U.S.A., 16th April, 1898; 6 years. (Filed 19th February, 1898.)

*Claim.*—1st. An outside railway wrecking-frog comprising a horizontal triangular base provided with an upper inclined central rib having diverging branches extended beyond the forward narrow end of the base and so designed that the one innermost at any time may overlap the tread of a track-rail and terminate practically flush therewith, an inside railway wrecking-frog comprising a triangular base provided with upper acute angle inclined ribs each having its inner side facing a parallel groove and its outer side flush with a longitudinal edge of the corresponding base, and suitable means for securing both frogs in position for service. 2nd. An outside railway wrecking-frog, comprising a horizontal triangular base provided with an upper inclined rib having diverging branches extending beyond the forward narrow end of the base so designed that the one innermost at any time may overlap the tread of a track-rail and terminate practically flush therewith, an inside railway wrecking-frog comprising a triangular base provided with acute-angle inclined ribs each having its inner side facing a parallel groove and its outer side flush with a longitudinal edge of the corresponding base, longitudinal side-flanges on each frog adapted to fit against webs of track-rails between treads and flanges of the same, a bar in pivotal connection with the underside of each frog, a track-rail clamp-block in sliding engagement with each bar, and a bar-engaging wedge-key arranged to hold each clamp-block in working position. 3rd. An outside railway wrecking-frog comprising a horizontal triangular base provided with an upper inclined center rib having diverging branches extended beyond the forward narrow end of the base and so designed that the one innermost at any time may overlap the tread of a track-rail and terminate practically flush therewith, an inside railway wrecking-frog comprising a triangular base provided with a longitudinal upper center rib having a taper-point extending beyond the forward narrow end of the base for snug alignment against a track-rail flange and acute-angle inclined ribs

that have their inner sides parallel with the center rib in opposite directions therefrom at a predetermined distance, their outer sides being parallel to longitudinal edges of the corresponding base, and suitable means for securing both frogs in position for service.

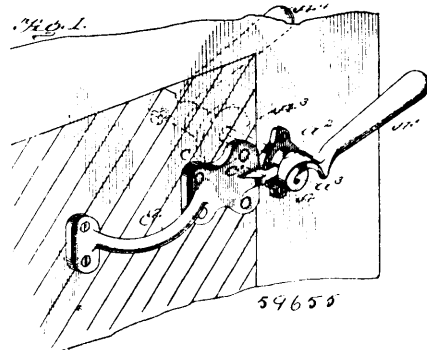
**No. 59,654. Window Screen. (Store de fenetre.)**



William Henry Casselberry, Williamport, Pennsylvania, U.S.A., 16th April, 1898; 6 years. (Filed 31st March, 1898.)

*Claim.*—The combination with a window frame, a screen casing, a screen roller in the screen casing, a screen secured to the roller, the upper sash, a bar extending inwardly from the upper sash, a catch pivoted to the upper sash, an operating rod carried by the bar, and a link connecting the operating rod to the catch, whereby said catch may be caused to engage the screen and draw it down in the act of lowering the upper sash, substantially as set forth.

**No. 59,655. Latch. (Loquet)**



Austin Adams, New York City, U.S.A., 18th April, 1898; 6 years. (Filed 23rd December, 1897.)

*Claim.*—The combination, in a fastening device, with a fixed projection, of a rotatory latching device, and a handle for actuating the same, said latching device consisting of a hub provided with a spirally inclined edge or way extending around the periphery of the same, whereby the projection may have free ingress and egress to said spiral way when the latch is in its normal inoperative position without impinging the latch-way, as specified.

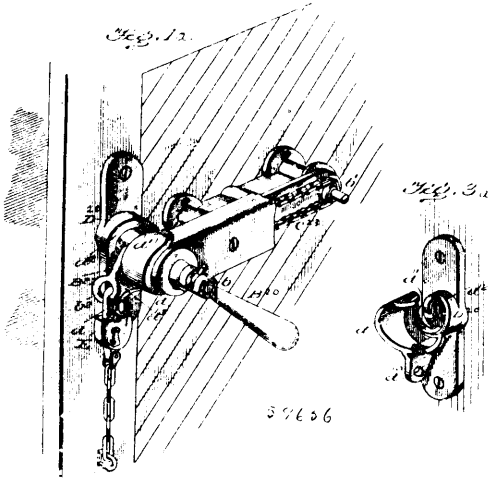
**No. 59,656. Latch. (Loquet.)**

Austin Adams, New York City, U.S.A., 18th April, 1898; 6 years. (Filed 23rd December, 1897.)

*Claim.*—1st. In a fastening device, the combination, with one member consisting of a self latching device, as a pivoted or swinging latch, of another member, constituting a keeper, the two being respectively secured to a door and jamb of a compartment, and being constructed and arranged to become automatically engaged upon the door being closed, one of the said members being permanently provided with a secondary and independent manually operated device, as a handle located in a part of said member, so that their relative position may always be the same, the said secondary handle extending within the compartment, whereby the members may also be disengaged. 2nd. In a latching device, to be applied to a door, etc., of a wall, the combination with a rotating or swinging latch, and with a keeper having an inclined edge or

way engaged by said latch, of a rotating shaft axially disposed as regards the said keeper, and passing to the opposite side of

and below the upper edge thereof, a pump in communication with said compartments for raising and lowering the water through the

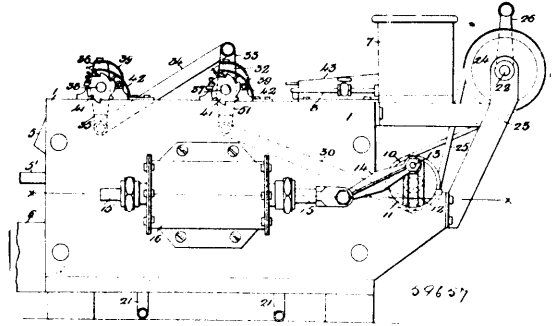


the wall, said shaft being permanently attached to said member so that their relative position will always be the same, and provided at its forward end with an operating finger or projection and at its opposite end with an operating handle, whereby the latch may be fastened or released from either side of the wall. 3rd. In a latching device, the combination of a pivoted or swinging latch, of a tubular keeper, the longitudinal axis of which is substantially at right angles to the plane or face of the support thereof, provided with a spiral slot extending rearwardly, said latch engaging the interior and posterior edges of such latch, whereby in locking the latch the door is crowded into its seat and in releasing such latch the door is forced open as specified. 4th. In a latching device, the combination, with a rotating or swinging latch, of a tubular keeper having a spiral slot engaged by said latch, of a rotating shaft passing axially through said tubular keeper to the opposite side of the door, said shaft provided at the forward end with an operating finger or projection, and at its opposite end with an operating handle, whereby the latch may be fastened or released from either side of the door, as specified. 5th. In a latch, consisting of two members, respectively secured to the door or jamb, the combination, with a keeper provided with a spirally inclined edge and a spiral groove, of a pivoted or swinging latch, and a handle having a limited rotatory movement with respect to said latch as specified. 6th. The combination, in a fastening device, with one member constituting a keeper, of another member constituting a latching device and provided with two actuating handles located on different axial lines, and projecting from different sides of said member. 7th. The combination, in a fastening device, with one member constituting a keeper, of another member constituting a latching device provided with two actuating handles located on different axial lines and projecting from different sides of said member, and also of intermediate connecting means whereby the said handles are constructed and arranged to act in unison when either handle is operated. 8th. The combination, in a fastening device, with one member constituting a keeper, of another member constituting a latching device, provided with two actuating handles located on different axial lines and projecting from opposite sides of said member, and also of intermediate connecting means consisting of a sprocket chain, whereby the handles act in unison when either handle is operated. 9th. In a fastening device, the combination with one member, provided with an upwardly and rearwardly inclined spiral edge or way, terminating in a downwardly and forwardly inclined edge or way, of another relatively movable member, whereby the members may be engaged by a forward movement of the object to be fastened, and unlocked by a slight forward and backward movement of the said object. 10th. A hollow tubular keeper provided with an upwardly and rearwardly inclined spiral edge, and terminating in a downwardly and forwardly inclined slot, and also formed with an intermediate depression or recess between said spiral edge and inclined slot as specified.

**No. 59,657. Ore Concentrator. (Concentrateur de minerai.)**

Thomas A. O'Leary and Denis L. Cronin, both of St. Louis, Missouri, U.S.A., 18th April, 1898; 6 years. (Filed 5th January, 1898.)

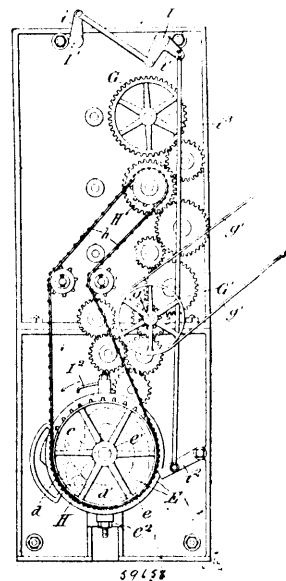
*Claim.*—1st. An ore concentrator, comprising one or more compartments adapted to contain water, screens located adjacent to the upper surface of said compartments through which the water passes, and a pump in communication with said compartments for raising and lowering the water through the screens, substantially as set forth. 2nd. An ore concentrator, comprising two compartments adapted to contain water, screens located within the same



screens, and suitable throw-off devices adapted to be intermittently operated simultaneously with the operation of the pump, substantially as set forth. 3rd. An ore concentrator, comprising two compartments adapted to contain water, screens located within the same and below the upper edge thereof, a pump in communication with each compartment for raising and lowering the water through the screens, hoppers arranged at the bottom of the compartments for receiving the particles of gold, pipe in communication with the same, and suitable power-transmitting mechanism for operating the pump and throw-off devices simultaneously, substantially as set forth. 4th. An ore concentrator, comprising two compartments, screens located within the same and below the upper edge of the same, hoppers also located within said compartments below said screens, a pump located on one side and in communication with each of said compartments, shafts journaled above the screens and provided with prongs, suitable ratchet mechanism for intermittently rotating said shafts, and suitable power-transmitting mechanism for operating said pump and shafts simultaneously, substantially as set forth. 5th. An ore concentrator, comprising a tank divided into two compartments, and having an overflow, a pump in communication with each compartment, screens located within the latter and below the upper edge thereof, shafts journaled on the tank and above the screens, ratchet discs fixed to both ends of said shafts, spring pawls co-operating with one of the discs of each shaft, and fixed to said tank, levers movably upon said shafts, spring pawls carried by the same and co-operating with the ratchet discs below the same, a link connecting said levers, a second link also connecting the opposite end of one of said levers, a crank-arm connected to the opposite end of the last-named lever, a shaft for simultaneously operating said pump, and shaft carrying the crank-arm, substantially as set forth.

**No. 59,658. Bread Making Machine.**

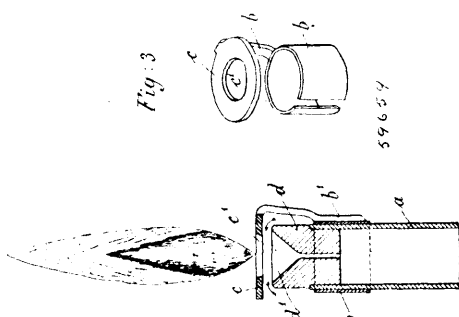
(Machine à faire le pain.)



Peter Forbes Bryce and Alexander Fergusson Bryce, both of Chicago, Illinois, U.S.A., 18th April, 1898; 6 years. (Filed 8th January, 1898.)

*Claim.*—1st. In a bread-making machine, the combination of a set of rolls for reducing a piece of dough to a sheet and web of a desired width and thickness, and means for receiving the dough and forming it into a substantially cylindrical shape, substantially as described. 2nd. In a bread making machine, a movable belt arranged to form a piece of dough into a substantially cylindrical shape, substantially as described. 3rd. In a bread-making machine, the combination of a movable belt, a set of rolls or pulleys upon which such belt is mounted and moved, and means for operating one or more of the pulleys and moving them in connection with the belt so as to form a space in which a piece of dough may be formed or rolled into a cylindrical shape, substantially as described. 4th. In a bread-making machine, the combination of a movable belt, a pulley the axis of which is relatively fixed for supporting and holding one portion of the belt, a second pulley arranged to be vibrated to and from the relatively fixed pulley and adapted to control another portion of the belt, a third pulley arranged to be given a substantially rectilinear motion for the purpose of scratching or compressing the dough, and an idler pulley or pulleys connecting the upper surface of the belt adjacent to and between the fixed and vibrating pulleys so as to compel such belt to form a space in which it may receive a piece of dough and form it into a substantially cylindrical shape, substantially as described. 5th. In a bread-making machine, the combination of a movable forming belt, a pulley having its axis relatively fixed for guiding and supporting such belt in a portion of its path of motion, a second roll or pulley vibrably mounted for supporting and operating another portion of such belt, a cam and shaft for vibrating the last named pulley, a third pulley or roll having a reciprocating motion to take up the slack and act as a compressor on such belt, eccentric mechanism upon the cam shaft adapted to rotate in common with such cam and impart a reciprocating motion to the third named pulley, and a pair of idle rolls vibrably mounted adjacent to and between the fixed and vibrating pulleys so as to contact the forming belt at each of its lateral edges to compel such belt to form a space in which a piece of dough may be received and formed into a substantially cylindrical shape, substantially as described. 6th. In a bread-making machine, the combination of a forming belt, means for guiding such belt and compelling it to form a space in which a piece of dough may be rolled into a cylindrical shape and alternately operate such belt or a portion of it to discharge the formed piece of dough, substantially as described. 7th. In a bread-making machine, the combination of a set of reducing rolls arranged in a substantially vertical plane one above the other, a forming belt arranged underneath such set of rolls and adapted to receive the sheet of dough and form it into a substantially cylindrical shape, a trap door or doors arranged above the rolls adapted to receive and hold a piece of dough, and means connected with a movable part of the machine for opening such doors to allow the piece of dough to drop into the reducing rolls at certain predetermined times, substantially as described. 8th. In a bread-making machine, the combination of a set of reducing rolls for reducing a piece of dough into a sheet of the desired length, width, and thickness, a movable forming belt, rolls or pulleys upon which such forming belt is moved and mounted to compel it to assume the desired shapes to receive the sheet of dough, form it into a cylindrical shape and discharge it therefrom, cam mechanism for operating the rolls or pulleys upon which the belt is moved and mounted to operate and move such rolls and compel the belt to assume its desired shapes, a trap door or doors arranged adjacent to the first pair of rolls and adapted to hold a piece of dough and drop it into such rolls at predetermined times, rock shafts upon which such doors are mounted, and mechanism interposed between rock shafts and the cam mechanism and arranged to be contacted by a projection or tappet on the cam and operate such doors to open them at the desired times, substantially as described.

**No. 59,659. Acetylene Burner.** (*Brûleur d'acétylène.*)



Ernest H. J. Schulke, No. 94 Leipzigerstrasse, Berlin, Germany, 18th April, 1898; 6 years. (Filed 3rd February, 1898.)

*Claim.* Improved device in connection with acetylene burners for avoiding the formation of soot, consisting of a guard plate or cap above the burner outlet and provided with an opening or recess for the emission of the acetylene gas, substantially as described and shown.

**No. 59,660. Acetylene Gas Making Machine.**

(*Machine à faire le gaz acétylène.*)

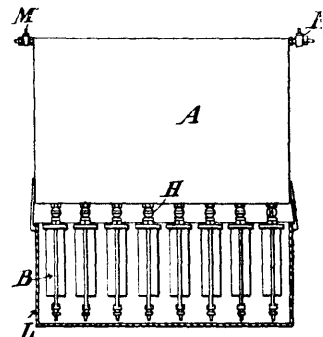


Fig. 1. 59660

John V. Sherrin, 28th Victoria Street, London, S.W., England, 18th April, 1898; 6 years. (Filed 7th February, 1898.)

*Claim.*—1st. In acetylene-making apparatus, the combination of a water cistern, a series of carbide containing generators attached to the lower part of it, taps for connecting the cistern with the generators, a gas bag or other gasholder, and means for ensuring the putting one generator after the other in communication with the water cistern as required, substantially as set forth. 2nd. In acetylene making apparatus, the combination of a water cistern, a series of carbide containing generators attached to the lower part of it, means for slowly rotating the cistern, taps for connecting the cistern with the generators, and a stop for opening one tap after the other as required as the cistern rotates, substantially as set forth.

**No. 59,661. Wheat Food Production.**

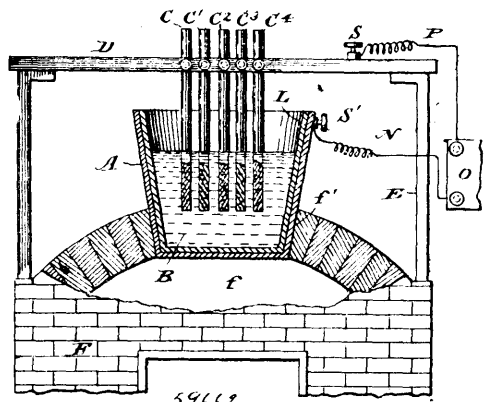
(*Produit alimentaire.*)

Jorgen Simmons, Appleton, Minnesota, U.S.A., 18th April, 1898; 6 years. (Filed 16th February, 1898.)

*Claim.* 1st. In a laxative nutritious food derived from wheat, the combination of coarsely-granulated first-germ middlings with coarsely-granulated second and third break middlings, and coarsely-granulated cereal germ-shorts, as and for the purposes substantially as set forth. 2nd. In a laxative nutritious food derived from wheat, the combination of about forty per cent, by weight, of coarsely-granulated purified cereal and germ-shorts, with about forty per cent of coarsely-granulated, purified first germ middlings, and about twenty per cent of the second and third break purified middlings coarsely granulated, as and for the purposes substantially as set forth.

**No. 59,662. Aluminium Reduction.**

(*Réduction d'aluminium.*)

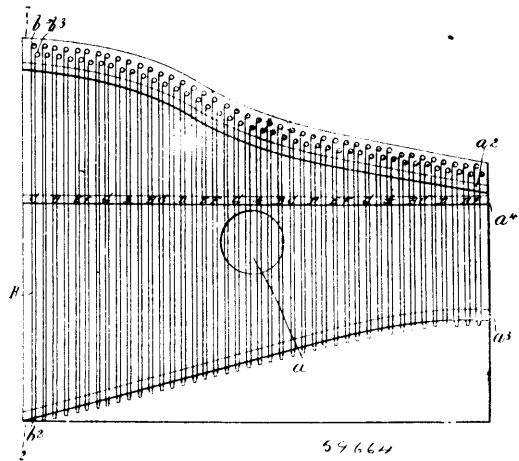


Frank Austin Gooch, New Haven, Connecticut, U.S.A., 18th April, 1898; 6 years. (Filed 5th March, 1898.)

*Claim.* 1st. As an improvement in the art of manufacturing aluminium, the herein-described process which consists in fusing together sodium fluoride, the oxid of aluminium and a suitable hydrous chlorin compound of aluminium, and passing an electric current through the fused mass, substantially as described. 2nd. As an improvement in the art of manufacturing aluminium, the herein-described process which consists in fusing together sodium fluoride, alumina and a suitable hydrous chlorid of aluminium, and passing an electric current through the fused mass, substantially as described. 3rd. As an

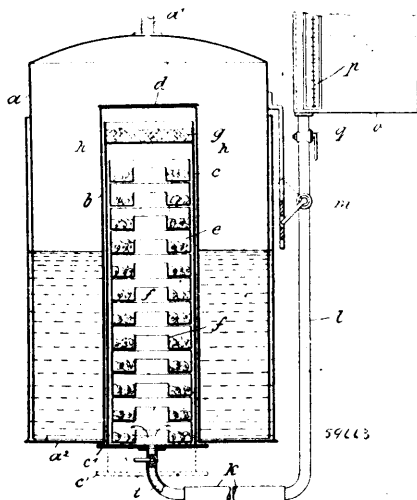
improvement in the art of manufacturing aluminium, the herein-described process which consists in fusing together sodium fluorid, alumina and the hydrous crystalline chlorid of aluminium, whose symbol is  $Al^2, Cl^6, 12 H^2, O$ , and passing an electric current through the fused mass, substantially as described. 4th. As an improvement in the art of manufacturing aluminium, the herein-described continuous process, which consists in fusing together sodium fluorid, the oxid of aluminium and a suitable hydrous chlorin compound of aluminium, passing an electric current through the fused mass, and adding to the bath from time to time suitable quantities of the oxid of aluminium, substantially as described. 5th. As an improvement in the art of manufacturing aluminium, the herein-described continuous process which consists in fusing together sodium fluorid, alumina and a suitable hydrous chlorid of aluminium and a suitable hydrous chlorid of aluminium, passing an electric current through the fused mass, and adding to the bath from time to time suitable quantities of alumina, substantially as described. 6th. As an improvement in the art of manufacturing aluminium, the herein-described continuous process which consists in fusing together sodium fluorid, alumina and the hydrous crystalline chlorid of aluminium, whose symbol is  $Al^2, Cl^6, 12 H^2, O$ , passing an electric current through the fused mass, and adding to the bath from time to time suitable quantities of alumina, substantially as described. 7th. As an improvement in the art of manufacturing aluminium, the herein-described process which consists in fusing together sodium fluorid and the hydrous crystalline chlorid of aluminium in excess of the amount thereof which will dissolve in the sodium fluorid used, and passing an electric current through the fused mass, substantially as described. 8th. As an improvement in the art of manufacturing aluminium, the herein-described continuous process which consists in fusing together sodium fluorid and the hydrous crystalline chlorid of aluminium in excess of the amount thereof which will fuse in the sodium fluorid used, passing an electric current through the fused mass, and adding to the bath from time to time suitable quantities of alumina, substantially as described.

wrest pins, pins on one of said bridges, and strings adapted to pass over said pins and to be secured at each end to adjacent wrest pins,



whereby a simultaneous attunement of two strings in unison is accomplished, substantially as described. 2nd. In a musical instrument, the combination with a box or casing having an opening therein, of a front bridge, a rear bridge, wrest pins, pins on one of said bridges and strings adapted to pass over said pins and to be secured at each end to adjacent wrest pins whereby a simultaneous attunement of two strings in unison is accomplished, said strings being attuned to represent the full notes and half notes, substantially as described. 3rd. In a musical instrument, the combination with a box or casing having an opening therein, of a front bridge, a rear bridge, wrest pins, pins on one of said bridges and strings adapted to pass over said pins and to be secured at each end to adjacent wrest pins whereby a simultaneous attunement of two strings in unison is accomplished, said box or casing being provided with characters to indicate the location of the various strings, substantially as described. 4th. In a musical instrument, the combination with a box or casing, two opposite ends of which are parallel, and the other sides at right angles thereto, and curved to render the width of the casing gradually less, having a central opening therein, of a front bridge, a rear bridge, wrest pins, pins on one of said bridges, and strings adapted to pass over said pins, and to be secured at each end to adjacent wrest pins, whereby a simultaneous attunement of two strings in unison is accomplished, said box or casing being provided with characters to indicate the location of the various strings, substantially as described.

**No. 59,663. Acetylene Gas Making Machine.**  
(Machine à faire le gaz acétylène.)



Hans Berger, 89 Alt. Moabit, Berlin, Prussia, Germany, 18th April, 1898; 6 years. (Filed 12th March, 1898.)

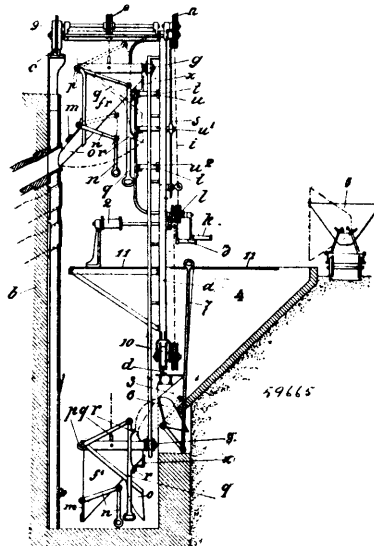
Claim.—1st. A continually working acetylene gas generator characterized by columns of vertically arranged receptacles, the same being divided into several partitions to receive carbide of calcium, which columns can be withdrawn from below through the bottom of the generator, the cylinder for the reception of the different combined columns being provided with a lid or valve so as to close automatically by the gas-pressure of the filled gasometer for the purpose of effecting the filling and emptying of the different reservoirs without interruption of the delivery of gas, constructed and arranged substantially as hereinbefore described. 2nd. A form of construction of the continually working acetylene gas generator having a guiding cylinder arranged in the gasometer, the upper lid of said cylinder to be automatically closed by the pressure of the gas, so as to effectually prevent the escape of the same when the reservoir *c* containing carbide of calcium is removed, constructed and arranged substantially as hereinbefore described.

**No. 59,664. Musical Instrument.**  
(Instrument de musique.)

Jacob Lindner, New York City, U.S.A., 18th April, 1898; 6 years. (Filed 25th August, 1897.)

Claim.—1st. In a musical instrument, the combination with a box or casing having an opening therein, of a front bridge, a rear bridge,

**No. 59,665. Coal Elevator for Gas-Making Machines.**  
(Système d'élevateur pour le chargement des cornues dans la fabrication du gaz.)

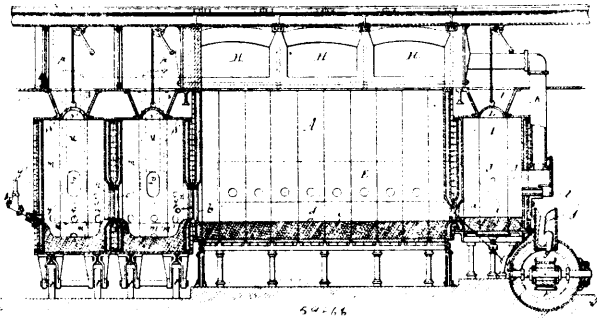


André Coze, Reims, France, 18th April, 1898; 6 years. (Filed 30th December, 1897.)

Résumé. 1° Une armature métallique *a* munie de zones *9* et *10*, mobile sur des rails *c*, *d*, cette armature en pont *a* supportant des

pouilles *c* auxquelles sont suspendues les bernes équilibrées *f* et *h*, dont la position est réglée par un tendeur *u*, et l'arrêt de ces bernes au point voulu est obtenu par la manœuvre d'un levier *s* actionnant des barres *t* unies d'arrêt *u* sur lesquels vient s'appuyer une équerre *x* partie par la berne, de manière à fixer la berne en regard de la cornue pour le déchargement du combustible par la manœuvre des leviers *u* et *q* qui actionnent réciproquement le clapet *m* et la rallonge *o*. 2° Dans le système de pont roulant élévateur pour le chargement des cornues inclinées employées dans la fabrication du gaz d'éclairage et autres industries, revendu ci-dessus, la combinaison d'un magasin à charbon *4*, placé au niveau du sol et parallèlement au massif des jours, pour le chargement automatique des bernes, ce magasin comportant des conduits *3* convenablement disposés et munis de clapets *6* que l'on manœuvre par des leviers *7*, le tout disposé et combiné comme décrit ci-dessus en principe, en référence au dessin spécimen annexé et dans le but spécifique.

**No. 59,666. Method of and Apparatus for Bessemerizing Matte.** (*Méthode et appareil pour convertir la matte par le système Bessemer.*)

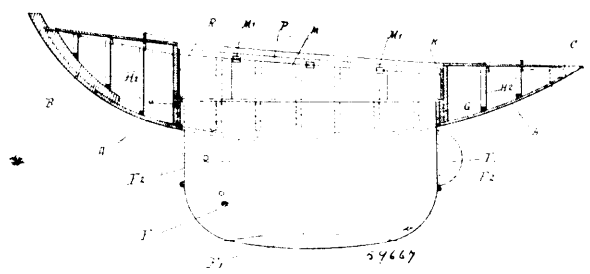


Oliver Stephens Garrets m, Buffalo, New York, U.S.A., 18th April, 1898; 6 years. (Filed 26th August, 1897.)

*Claim.*—1st. The herein-described method of converting or Bessemerizing molten matte, which consists in subjecting the matte to a converting or Bessemerizing blast underneath a column of flux or silicious material, substantially as set forth. 2nd. The herein-described method of converting or bessemerizing matte, which consists in supplying the molten matte continuously to a converting or bessemerizing chamber and subjecting the matte to a converting or bessemerizing blast therein underneath a column of flux or silicious material, substantially as set forth. 3rd. The herein-described method of converting or bessemerizing matte, which consists in supplying the molten matte continuously to a converting or bessemerizing chamber, subjecting the matte therein to a converting or bessemerizing blast underneath a column of flux or silicious material, and removing the slag continuously from said chamber, substantially as set forth. 4th. The herein-described method of smelting or converting or bessemerizing matte, which consists in smelting the ore to produce matte, causing the matte to flow continuously from the smelting chamber to a separate converting or bessemerizing chamber, subjecting the matte in the latter to a converting or bessemerizing blast underneath a column of flux or silicious material, and causing the slag to flow from said converting or bessemerizing chamber to said smelting chamber, substantially as set forth. 5th. The herein-described method of separating the metallic constituents contained in complex ores or mattes, which consists in smelting the ore to produce matte, causing the matte to flow from the smelting furnace into several successive converting or bessemerizing furnaces, subjecting the matte to converting or bessemerizing blasts in the latter and forming a fluid slag therein, causing such slag to flow from said converting or bessemerizing furnaces to said smelting furnace where the slag is acted upon by the sulphur and sulphids before it is discharged from the smelting furnace, and withdrawing the deposited metallic constituents separately from said converting or bessemerizing furnaces, substantially as set forth. 6th. The combination with a smelting furnace, of a separate converting or bessemerizing furnace having air ports or tuyeres and having a stack adapted to hold flux, said converting furnace communicating with the smelting furnace by a passage which is arranged in the lower portions of the adjacent side walls of said furnaces and adapted to allow the matte to flow from the smelting furnace into the converting furnace and the slag to flow from the converting furnace into the smelting furnace, substantially as set forth. 7th. The combination with a smelting furnace, of a separate converting or bessemerizing furnace having air ports or tuyeres and having a stack adapted to hold flux, said converting furnace communicating with said smelting furnace by a passage which is arranged in the lower portions of the adjacent side walls of said furnaces and adapted to allow the matte to flow from the smelting furnace into the converting furnace and the slag to flow from the converting furnace into the smelting furnace, and a fire hearth arranged at the opposite side of the smelting furnace and receiving the slag therefrom, whereby the slag formed in the con-

verting furnace is compelled to flow through the smelting furnace and is subjected to the action of the sulphur and sulphids therein in passing to the forehearth, substantially as set forth.

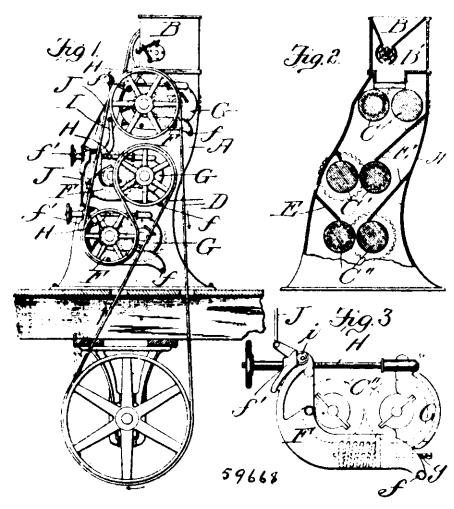
**No. 59,667. Life Boat.** (*Vaisseau de sauvetage.*)



Albert Henry, Rochefort Sur Mer, France, 18th April, 1898; 6 years. (Filed 11th October, 1897.)

*Claim.*—1st. A boat that cannot be upset and that is proof against sinking, having a well for a centre-board in communication with an open space inclosed by water-tight compartments on each side of the well, adapted to allow the water falling into the open space to run out through the well, substantially as described. 2nd. A boat having a well for a centre-board, said well being flush with the bottom of the boat and being connected at the top with the bottom of an open space to form a lower deck for passengers, said open space being formed by the inner sides of water-tight compartments, substantially as described. 3rd. A boat of the class described, having a well for a centre-board in communication with an open space inclosed by water-tight compartments on each side of the well, adapted to allow the water falling into the open space to run out through the well, in combination with a centre-board having at the bottom a weight formed by a metallic body in the shape of a cigar and having a rudder suitably hinged at its end, said rudder adapted to close against the side of the centre-board and to allow of the withdrawal of the latter, substantially as described.

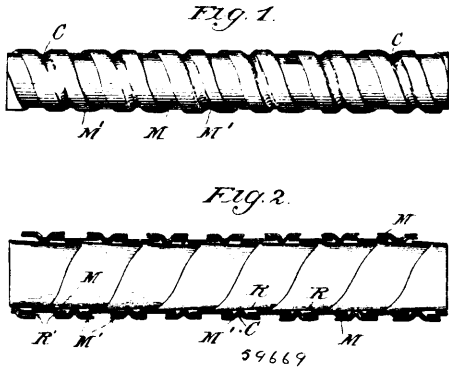
**No 59,668. Method of Treating Oleaginous Seeds.** (*Méthode de traitement des graines.*)



Alexander Euston, St. Louis, Missouri, U.S.A., 18th April, 1898; 6 years. (Filed 7th December, 1897.)

*Claim.*—1st. The process herein described for treating oleaginous seeds, the same consisting of fracturing or cutting the seeds without crushing the oil cells or sacs, tempering the seeds so fractured, and extracting the oil therefrom, substantially as described. 2nd. The process herein described for treating oleaginous seeds, the same consisting in cutting or fracturing the seeds so as to expose their meal contents, at the same time, preserving the integrity of the oil cells or sacs as far as possible, impregnating the meal contents of the seeds with moisture or water while the seeds are subjected to heat, and, finally, subjecting the seeds so treated to pressure to express the oil from the meal, substantially as described. 3rd. The herein described process of preparing oleaginous seeds for tempering, the same consisting in cutting or fracturing the seeds so as to expose their meal contents at the same time preserving the integrity of the oil cells or sacs as far as possible, substantially as described.

**No. 59,669. Conduit. (Conduit.)**

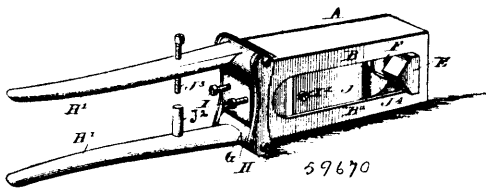


Edwin Truman Greenfield, New York City, U.S.A., 18th April, 1898; 6 years. (Filed 9th December, 1897.)

*Claim.*—1st. An armored conduit consisting of a flexible interior insulating tube and one or more spirally wound layers of metal secured thereto. 2nd. An armored conduit consisting of a flexible insulating lining and alternate layers of spirally wound strips of metal separated from each other by layers of insulating material and all united together. 3rd. An armored conduit tube consisting of an insulating lining surrounded by alternate layers of metal armour and insulating material, the entire structure being of a flexible nature. 4th. An armored conduit consisting of alternate layers of spirally wound insulating material and metal armour breaking joints with each other and united together so as to constitute a water-tight flexible conduit. 5th. An armored conduit consisting of alternating layers of spirally wound sheet rubber or rubber cloth and metal armour, said layers being united together by the process of vulcanization. 6th. A flexible armored conduit tube consisting of a flexible lining and two or more metallic armour strips spirally wound thereon and curved in opposite directions, substantially as shown in Figs. 5 and 6 of the drawings. 7th. A flexible armored conduit tube consisting of a flexible lining and two or more metallic armour strips spirally wound thereon, said armour strips being curved in opposite directions and breaking joints with each other, substantially as shown in Figs. 5 and 6 of the drawings.

**No. 59,670. Bolt and Nut Clipper.**

(Appareil à rogner les noix et boulons.)



George S. Noel, Crab Tree, Pennsylvania, U.S.A., 16th April, 1898; 6 years. (Filed 4th February, 1898.)

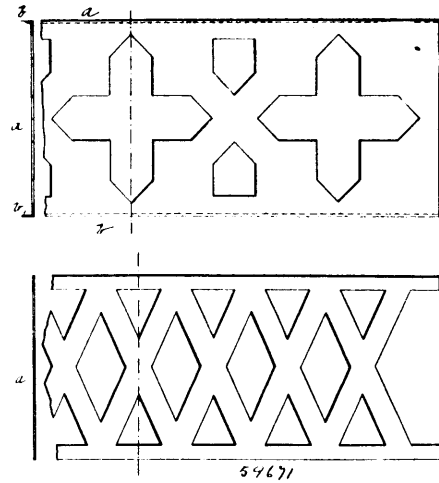
*Claim.*—1st. In a combined nut and bolt clipper, the combination of a suitable frame provided with the guides, the stationary knives arranged at one end of the casing, the sliding knives working between the guides at the other end of the frame, a plunger at that end of the frame, set screws fastened through the head of said plunger and loosely connected with the sliding knives, and operating handles pivoted to the frame and engaging said plunger for moving it, substantially as shown and described. 2nd. In a combined nut and bolt clipper, the combination of the frame provided with the flanges at the top and bottom, and with the ribs, stationary knives secured at one end of the frame, sliding knives at the other end of the frame and working between the flanges and ribs, a plunger, adjustable connections between said plungers and knives, operating handles for said plunger, and adjusting means between said handles, substantially as shown and described. 3rd. In a combination nut and bolt clipper, the combination of the frame, the stationary knives located at one end, and having their cutting faces at right angles to each other, the sliding knives at the other end of the frame and having their cutting edges corresponding with the cutting edges of the stationary knives, and suitable means for operating the knives, substantially as shown and described.

**No. 59,671. Snow-Catching Trellis.**

(Trellis pour la neige.)

George Lesemeister, Cologne, Germany, 19th April, 1898; 6 years. (Filed 23rd March, 1898.)

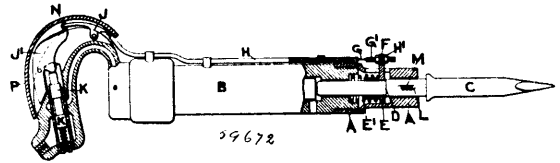
*Claim.*—A trellis or lattice work for catching snow consisting of a strip of suitable metal of sufficient width punched out for giving to



it any shape, pattern or design and necessary stiffness in proportion to its length.

**No. 59,672. Pneumatic Hammer.**

(Marteau pneumatique.)

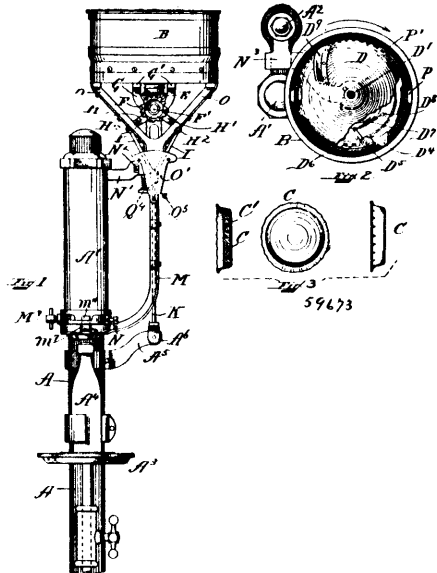


John Moore, Moss Street, York, County of York, England, 19th April, 1898; 6 years. (Filed 4th January, 1898.)

*Claim.*—The combination, with a pneumatic percussive tool provided with an air supply valve K of a slidable spring-pressed rod G connected with the reciprocatory shank of the tool C and lever mechanism J and J' interposed between the said rod and valve, and operating to open the valve when the said rod is pushed back, substantially as set forth. 2nd. In pneumatic hammers or other like percussive tools, the combination of the tool C, spring E', socket or ferrule E, push rod G, lever J, and trigger J' for operating the valve, as and for the purposes substantially as shown and described.

**No. 59,673. Bottle Stopping Apparatus.**

(Appareil à boucher les bouteilles.)



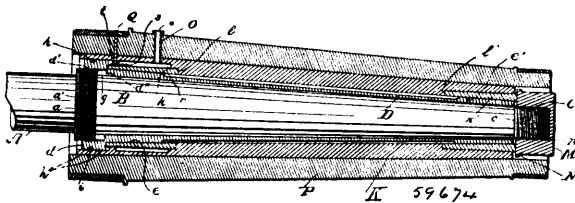
Nelson Muslar, West Boylston, Massachusetts, U.S.A., 19th April, 1898; 6 years. (Filed 31st March, 1898.)





head for capping the stoppers on the bottles, a hopper for holding said bottle stoppers, a chute for delivering stoppers from said hopper, a centering head secured to said operating head and to the end of said chute, and consisting of an upper section, an inner section within said upper section and secured to the operating head, a lower section provided with spring pawls for centering the bottle as it enters the centering head, and means for securing the three sections together. 21st. In a feed device for bottle stoppering machines, an operating head for capping the stoppers on the bottles, a hopper for holding the bottle stoppers, a chute for delivering stoppers from said hopper, a centering head secured to said operating head and to the end of said chute, and consisting of an upper section, an inner section within said upper section and secured to the operating head, a lower section provided with spring pawls for centering the bottle as it enters the centering head, and a movable ring around the upper section for securing the three sections together. 22nd. In a feed device for bottle stoppering machines, an operating head for capping the stoppers on the bottles, a hopper for holding said stoppers, a main chute through which the bottle stoppers pass to said head, branch chutes between said hopper and main chute, openings in said hopper registering with said branch chutes, a disc within said hopper for keeping said stoppers in motion to bring them over said openings, mechanism for operating said disc, a swivel guide at the junction of said branch chutes and main chute for controlling the passage of said stoppers from said branch chutes into said main chute and journalled at its lower end, means for holding said swivel guide in alignment with one of said branch chutes, and means for moving said swivel guide from said alignment into alignment with another branch chute.

**No. 59,674. Vehicle Axle. (Essieu de voiture.)**



James A. McLaughlin, Jessup, Georgia, U.S.A., 19th April, 1898; 6 years. (Filed 23rd March, 1898.)

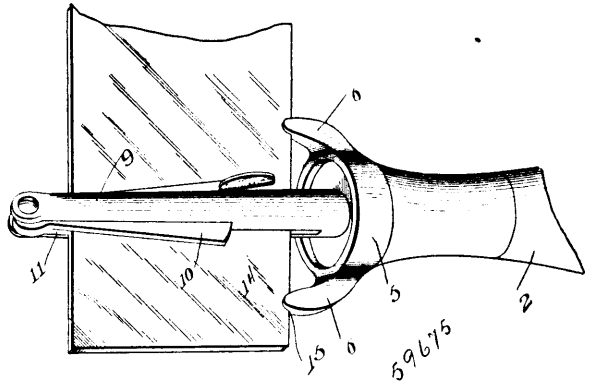
*Claim.*—1st. In a vehicle-axle, a threaded collar at the base of a tapering spindle, a flaring sleeve fitted upon said spindle having an abruptly enlarged threaded end forming exterior and interior shoulders, and adapted to engage the said threaded collar when turned over toward the front of the vehicle, and a space reserved between the outer edge of said collar and the contiguous interior shoulder of the sleeve to allow automatic adjustment of said sleeve, as described. 2nd. In a vehicle-axle, an adjustable sleeve having annular bearing elevations and an intermediate oil-seat, a hub-box with removable bushings bearing superficially upon said elevations, and each with an edge projecting beyond the ends of the hub-box, the projecting edge of one bush bearing against the exterior shoulder of the sleeve, and that of the other against a terminal axlet-nut, as herein set forth. 3rd. In a vehicle-axle, a threaded collar at the base of a tapering spindle, a flaring sleeve fitted upon said spindle having an abruptly enlarged threaded end forming exterior and interior shoulders and adapted to engage the said threaded collar, a space provided between the outer edge of said collar and the contiguous interior shoulder of the sleeve, peripheral ribs and groove on said enlarged end of the sleeve, bearing elevations on the sleeve with oil seat between them, a hub-box loosely fitted upon the sleeve having terminal bush-seats, bushings seated therein whose outer edges project beyond their seats, the edge of the inner bushing bearing against the exterior shoulder of the sleeve, and the edge of the outer bushing having contact with a flange on a tubular nut threaded to engage the terminal threads on the spindle, as described. 4th. In a hub-box, a broad, inner, annular recess within its bush-seat, a bush in said seat enclosing said recess and forming an oil-chamber, an oil supply tube through the box and hub, and a duct connecting said chamber with an adjacent bearing, as described. 5th. In a vehicle-axle, an oil-chamber formed by a broad annular groove within the box covered by the box bushing, a supply tube through the hub and box, a suitable cap for said axle, an oil duct and wick therein connecting the oil-chamber with an adjacent bearing, and a threaded gauge to regulate the flow of oil, substantially as described.

**No. 59,675. Saw Handle. (Manche de scie.)**

David Isaac Green, Frontier, Michigan, U.S.A., 19th April, 1898; 6 years. (Filed 31st March, 1898.)

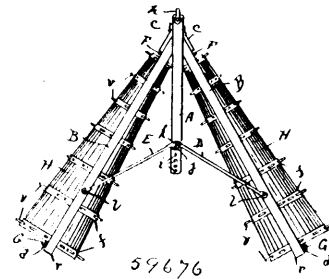
*Claim.*—1st. In a saw-handle, the combination with the grip having a longitudinal bore, a shank extending through said bore and provided with two parallel arms at one end and adapted to embrace the sides of the saw, and a cam lever pivoted between said ends and adapted to engage the saw and clamp it in position, substantially as set forth. 2nd. In a saw-handle, the combination with a grip hav-

ing a longitudinal bore and a swivel ring, a shank extending through said bore and having a screw-threaded connection with the grip,



said shank being provided with parallel arms, and a lever pivoted between said arms and provided with a cam, substantially as set forth. 3rd. In a saw-handle, the combination with the grip having a longitudinal bore, a nut secured in said bore against rotation, a longitudinal bore, a nut secured in said bore against rotation, a rubber packing confined between the nut and a shoulder in said bore, a shank extending through the bore and having one end screw-threaded to engage the nut and the other end bifurcated, a ring swiveled to the inner end of said grip, and a cam lever pivoted between said bifurcated arms, substantially as set forth.

**No. 59,676. Roller Harrow. (Herse roulante.)**



Houghton D. Edwards, Blackwell, Oklahoma, U.S.A., 19th April, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.*—1st. In a harrow of the class described, the combination of the frame consisting of the centre piece A, having openings *t*, the side pieces B, secured to the centre piece A by the hinges C, and provided with depending roller-journals F and G, said side and centre pieces being adjustably secured at their rear ends by means of the pivoted brace-rod consisting of the section B, having a shoulder *u*, with an opening *o*, to receive a pin *j* and the section E, pivoted to section D, cone-shaped rollers H, having the bands *t*, to which are secured the harrow-teeth *r*, said rollers being provided with the journals *d*, which enter the bearings *c*, in the depending roller-journals F and G, all substantially as shown and described. 2nd. The combination in a harrow having an adjustable frame, of the pivoted brace-rod consisting of two section D, and E, the outer end of each section having an opening whereby they are secured to the side pieces B, of the frames by the bolts *l*, the inner ends having the openings *m*, to receive the bolt *k*, and the section D, having the shoulder *u*, with the opening *o*, said opening being adapted to receive a pin *j*, which lies therein, and in one of the openings *t*, in the centre piece A, with said frame, and the conical rollers H, having the bands *t*, and the harrow-teeth *r*, secured thereto, said rollers being connected with the frame by means of the depending roller-journals, substantially as set forth. 3rd. A roller-harrow having a V-shaped adjustable frame consisting of the centre piece A, and the side pieces B, secured to said centre piece A, at their front ends by the hinges C, and adjustably secured near their rear ends by the pivoted brace-rod formed as shown in two sections, with the cone-shaped rollers H, having journals *d*, connected with the frame by means of the depending roller-journals F and G, said rollers carrying bands *t*, to which are attached teeth, as shown and described.

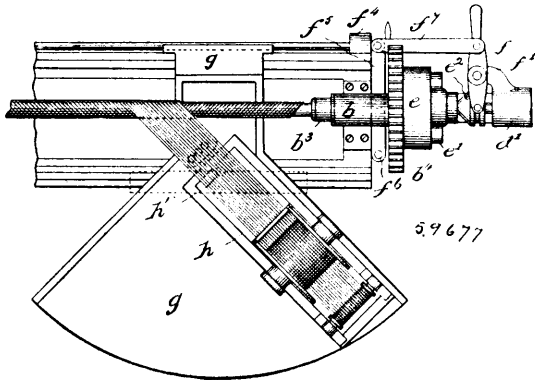
**No. 59,677. Machine for Making Tires for Vehicles.**

(Machine pour faire des bandages de voitures.)

Frederick W. Huestis, Boston, Massachusetts, U.S.A., 19th April, 1898; 6 years. (Filed 24th March, 1898.)

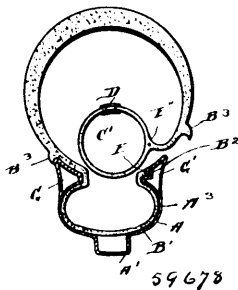
*Claim.*—1st. In a machine of the character described, in combination, a bed, a mandrel thereon, means for rotating the mandrel, a carriage mounted to slide upon the bed, means for sliding the car-

ridge, a warp beam mounted upon the carriage, and a liquid receptacle also mounted upon the carriage to move therewith. 2nd. In a



machine of the character described, in combination, a bed having parallel guides, a mandrel, a carriage arranged to slide on the parallel guides of the bed, means for sliding said carriage, a liquid tank or receptacle mounted upon the said carriage, and a warp beam also mounted upon the carriage, said receptacle and said beam being adjustable relatively to the mandrel. 3rd. In a machine of the character described, in combination, a bed frame having parallel guides, a carriage arranged to slide upon said guides, a mandrel mounted upon the said frame, a liquid tank or receptacle mounted upon said carriage, a warp beam journaled upon said carriage, and means for conducting the threads therefrom through the liquid in the tank to the mandrel. 4th. In a machine of the character described, in combination, a bed-frame, a mandrel thereon, a carriage arranged to slide upon the bed-frame, a warp beam mounted upon the carriage, and adjustable means mounted upon the carriage for varying the width of the warp. 5th. In a machine of the character described, in combination, a bed-frame, a mandrel thereon, a carriage arranged to slide upon the bed-frame, a warp beam mounted upon the carriage, and an adjustable comb mounted upon the carriage for varying the width of the warp.

**No. 59,678. Pneumatic Tire and Wheel Rim.**  
(*Bandage et jante pneumatique de roues.*)



Thomas Henry Ramsden, Bramhope, Leeds, Yorkshire, England, 19th April, 1898; 6 years. (Filed 28th March, 1898.)

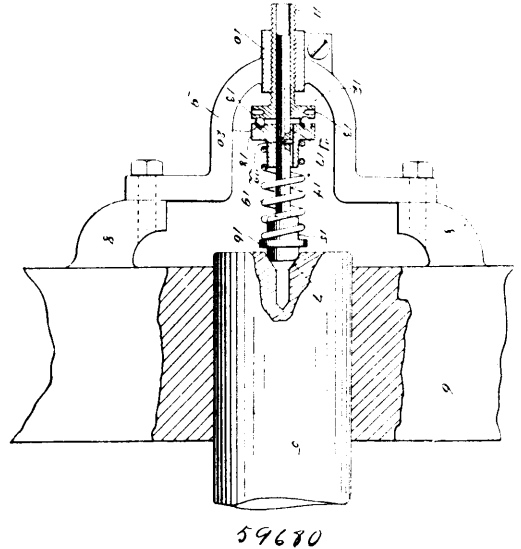
*Claim.*—1st. In a pneumatic tire and rim for wheels, the combination of a rim provided with treble grooves, a tire composed of a single strip having a tube formed integral with and upon the outside face of one edge thereof, the opposite edge of said tire being adapted to fold within the side grooves and over the middle groove, said tire being arranged to receive air-pressure whereby said tube is forced within said side grooves to engage with said lap, forming an elastic bed over lower groove, substantially as described. 2nd. In a pneumatic tire, the combination of a main body portion B, having the lap B<sup>1</sup> formed at one edge thereof, and the tube C<sup>1</sup> formed integral with and upon the outside face of its opposite edge, and a rim adapted to receive said tire whereby the air-pressure therein causes the overlap joint to be held air-tight, substantially as described. 3rd. In a rim and pneumatic tire for wheels, the combination of a rim provided with grooves therein, a tire having a tube formed integral with one edge adapted to be engaged within the side grooves, said tire having a lap formed at its opposite edge to fit within said grooves, and means whereby the pressure of air forced within said tire produces an equal pressure within said tube to form an air-tight joint between said tube and lap, substantially as described.

**No. 59,679. Pneumatic Tire Repairing Composition.**  
(*Composition pour réparer les bandages pneumatiques.*)

Philip John Winch and John Tebbet Snell, both of Adelaide, South Australia, 19th April, 1898; 6 years. (Filed 24th March, 1898.)

*Claim.*—1st. The herein described method of rendering pneumatic tires puncture proof, consisting essentially in the application to the inner surface of the cover or tire of a gelatinous composition substantially as herein described and subsequently hardening or rendering the same insoluble by the application of formic aldehyde. 2nd. The herein described composition for the purposes indicated, consisting of gelatine, glue or other suitable gelatinous substance dissolved in water with the addition of glycerine and a suitable oxide in about the proportions indicated subsequently subjecting the same to the action of formic aldehyde, substantially as herein described.

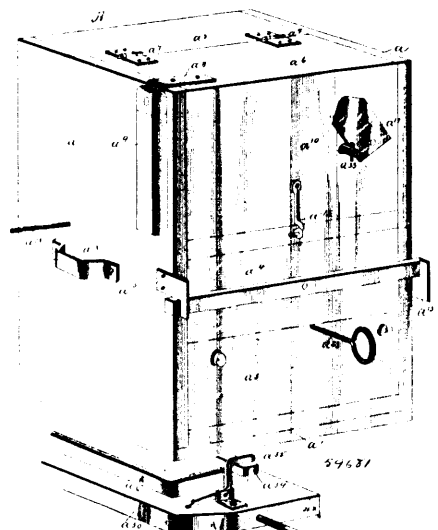
**No. 59,680. Support for Armature Shafts.**  
(*Support pour essieux d'armatures.*)



William Richard Thompson, South Norwalk, Connecticut, U.S.A., 19th April, 1898; 6 years. (Filed 20th August, 1897.)

*Claim.*—1st. The combination with the supports of an armature shaft, of a yoke secured thereto, a tubular screw threaded shaft passing through said yoke, and a supplemental spring operated shaft passing thereto, and adapted to bear on the armature shaft, substantially as shown and described. 2nd. The combination with the supports of an armature shaft, of a yoke secured thereto, a tubular screw threaded shaft passing through said yoke, and a supplemental spring operated shaft passing thereto, and adapted to bear on the end of the armature shaft, said supplementary shaft being provided with a sleeve which is mounted thereon, and with a head which is formed on said sleeve, and said screw threaded tubular shaft being also provided with a head between which and the head formed on the sleeves are ball bearings, substantially as shown and described.

**No. 59,681. Ash Sifter.** (*Tamis à cendres.*)

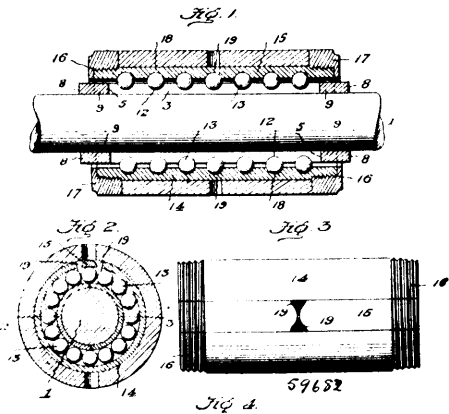


Isidore Turcotte, Lowell, Massachusetts, U.S.A., 19th April, 1898; 6 years. (Filed 2nd February, 1898.)

*Claim.*—1st. An ash sifter comprising a casing, a bin located therein having an opening, an ash receptacle located in said casing,

and a reciprocating sifter removably located in said receptacle below said opening, substantially as described. 2nd. The combination with an ash receptacle, of a removable bail pivotally mounted in said receptacle, and a sifter removably mounted on said bail, substantially as described. 3rd. An ash sifter comprising a casing, a bin located therein having an opening, an ash receptacle located in said casing, a reciprocating sifter located in said receptacle below said opening, and a rotatory frame mounted above said bin and adapted to receive an ash pan, substantially as described. 4th. In an ash sifter, the combination with the top, bottom, back and sides of the casing, of a cover hingedly connected to the top and extending downward partially over the front, said cover being provided with means for holding it in position, and a series of independently removable sections, mounted in the front of said casing below said cover, substantially as described. 5th. An ash sifter, comprising a closed casing having a removable front, a bin located therein having an opening, an ash receptacle located in said casing, and a reciprocating sifter located in said receptacle below said opening, substantially as described. 6th. An ash sifter, comprising a casing, a bin located therein having an opening, having means operated from without the casing, for opening and closing said opening in said bin, an ash receptacle located in said casing, and a reciprocating sifter located in said receptacle below said opening, substantially as described.

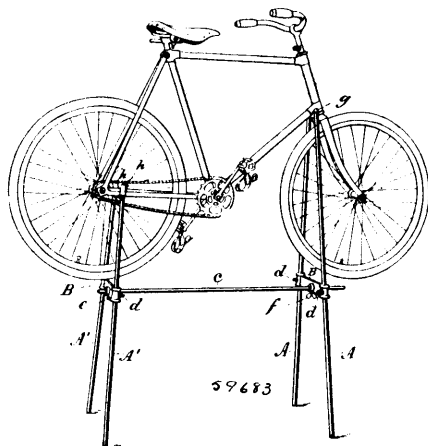
**No. 59,682. Ball Bearing.** (*Coussinet à roulettes.*)



Hermann L. C. Doe and John Deloyea, both of Grand Rapids Michigan, U.S.A., 19th April, 1898; 6 years. (Filed 31st March, 1898.)

*Claim.*—1st. In an adjustable ball bearing of the class described, the combination with the shaft, of a divided sleeve encompassing said shaft and provided externally with a series of parallel annular ball races, bearing balls arranged in said races, and a bearing sleeve formed with a series of internal annular parallel ball races, and encompassing said bearing balls and interior divided sleeve, substantially as shown and described. 2nd. In an adjustable ball bearing for cylindrical shafts, the sleeve sections 2 and 3 formed with dovetail recesses 4 and 5, the radial grooves 6, 7, and the annular ball races 12, 12, in combination with the locking keys 8, 8, an encompassing sleeve formed with a series of ball races, and the bearing balls arranged between said sleeves, substantially as shown and described.

**No. 59,683. Bicycle Stand.** (*Support de bicycles.*)

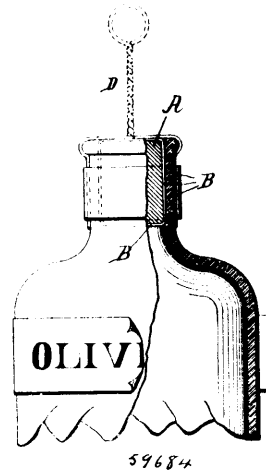


Robert R. Boyer, St. John, New Brunswick, Canada; 9th April, 1898; 6 years. (Filed March 29th, 1898.)

*Claim.*—A bicycle stand comprising two pairs of A-shaped legs, both pairs having a tie piece B provided with tubular ends to receive one of said legs and clamped thereto by set screws, and a stretcher or reach bar C, passing adjustably through said tie pieces and clamped by set screws, the front legs A, longer than the rear legs A', and at top adapted to support a bicycle at the junction of the head and main stay, and the after part of the bicycle frame, as set forth.

**No. 59,684. Cork Puller and Label Destroyer.**

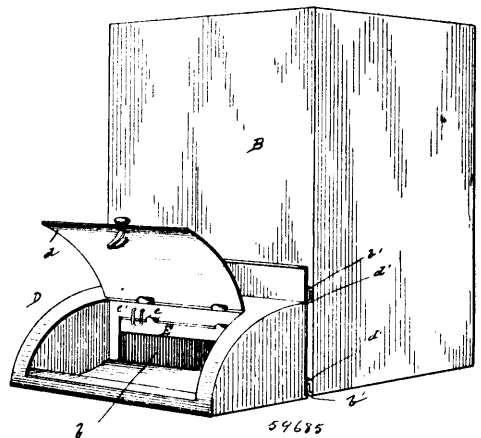
(*Tire bouchon et destructeur d'étiquette.*)



John H. Poole, St. John, New Brunswick, Canada, 19th April, 1898; 6 years. (Filed 9th August, 1897.)

*Claim.*—The combination with a bottle, of a cork adapted to fit the neck of said bottle, said cork being provided with a wire bail, formed on a single piece of wire, the ends of said wire being twisted at the meeting point at the top of the cork and extended downward over the edges of the bottle, at opposite sides thereof, and held in position against the neck of the bottle by a label, substantially as described.

**No. 59,685. Package and Caddy.** (*Paquet et boîte.*)

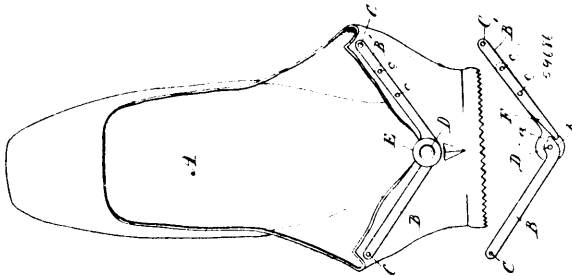


Cornelius Toohy, San Francisco, California, U.S.A., 19th April, 1898; 6 years. (Filed 14th February, 1898.)

*Claim.*—1st. The removable metallic lining of a shipping package, having an opening at the lower portion of one of its sides, and provided with means exterior to said opening for the attachment to said lining, wholly outside of the opening, of a suitable base attachment communicating with said opening. 2nd. The removable metallic lining of a shipping package, having an opening at the lower portion of one of its sides, and provided with means exterior to said opening for interchangeably receiving on the outside of said lining, a slide to cover the opening while the package is being transported, and a base attachment to communicate with said opening, when the lining is to be converted into a grocer's caddy. 3rd. The removable metallic lining of a shipping package, having an opening at the lower portion of one of its sides, and provided with flanges exterior to the opening, said flanges forming grooves adapted for interchangeably receiving on the outside of said lining a slide to cover the opening while the package is being transported, and a base attachment to communicate with said opening when the lining

is to be converted into a grocer's caddy. 4th. The removable metallic lining of a shipping package, consisting of a box-like structure with smooth interior walls and devoid of internal mechanism or devices, said lining having an opening at the lower portion of one of its sides and provided with flanges exterior to the opening, said flanges forming grooves adapted for interchangeably receiving on the outside of said lining, a slide to cover the opening while the package is being transported, and a base attachment to communicate with said opening when the lining is to be converted into a grocer's caddy. 5th. In a convertible shipping package and grocer's caddy, the combination of the removable metallic lining of the package, having an opening at the lower portion of one of its sides adapted to be closed during transportation, a suitable base attachment adapted to be fitted to said lining and to communicate with its opening when the latter is uncovered, and means exterior to said opening for connecting the base attachment to the lining wholly on the outside of said lining. 6th. In a convertible shipping package and grocer's caddy, the combination of the removable metallic lining of the package, having an opening at the lower portion of one of its sides, adapted to be closed during transportation, a suitable base attachment adapted to be fitted to said lining and to communicate with its opening when the latter is uncovered, and the means for connecting the base attachment wholly exteriorly to the lining consisting of the interengaging exterior flanges on the lining and the flanges on the inner face of the base attachment. 7th. In a convertible shipping package and grocer's caddy, the combination of the removable metallic lining of the package, having an opening at the lower portion of one of its sides, a slide to cover and uncover said opening, a base attachment to be substituted for the slide and to communicate with said opening, and means exterior to said opening, for interchangeably receiving the slide and base attachment wholly exterior to the opening and on the outside of the lining. 8th. In a convertible shipping package and grocer's caddy, the combination of the removable metallic lining of the package, having an opening at the lower portion of one of its sides, a slide to cover and uncover said opening, a base attachment to be substituted for the slide and to communicate with said opening, and the flanges on the outside of the lining, exterior to the opening, for interchangeably receiving the slide and base attachment. 9th. The metallic lining of a shipping package having the opening at the lower portion of one of its sides, and formed with a flange at the end of said opening, in combination with the slide adapted to cover said opening, and having a flange on the under side of its inner end, whereby a groove is formed to receive the flange of the lining, at the end of the opening, when the slide is pushed home. 10th. The metallic lining of a shipping package having an opening at the lower portion of one of its sides, said opening being bounded at one end by a flange of the lining wall, and the flanges on the exterior of the lining at the top and bottom of the opening, in combination with the slide engaging the top and bottom flanges, and having a flange on the under side of its inner end whereby a groove is formed to receive the flange of the lining at the end of the opening when the slide is pushed home. 11th. In a convertible shipping package and grocer's caddy, the base attachment therefor having the hinged flap on its inner wall to control the communication with the body of the caddy. 12th. In a convertible shipping package and grocer's caddy, the base attachment therefor having the hinged flap on its inner wall to control the communication with the body of the caddy, and the fixed stop lugs to hold the flap in position. 13th. In combination with the removable metallic lining of a shipping package, said lining having an opening at the lower portion of one of its sides, and the base attachment adapted to be fitted to the exterior of the lining in communication with said opening, said base attachment having the hinged flap on its inner side adapted to control said communication.

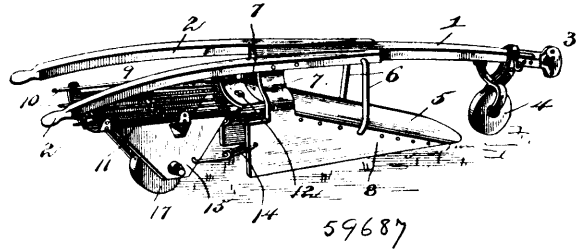
**No. 59,686. Rubber Overshoes and Other Shoes.**  
(Chaussures.)



Angus Buchanan, Kemptville, Ontario, Canada, 19th April, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.* A rubber overshoe or shoe, slitted at the back from the top to the heel, and having spring jaws to maintain the slit open for insertion of the foot and to close the same to keep the overshoe or shoe on the foot, as set forth.

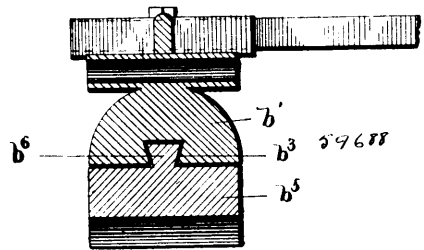
**No. 59,687. Potato Digger.** (Scarificateur à pales.)



Arthur S. Bullock, Pomona, Michigan, U.S.A., 19th April, 1898; 6 years. (Filed 30th March, 1898.)

*Claim.*—1st. In a potato-digger, the combination with a plough or shovel, of a separator arranged contiguous to the discharge end of the plough or shovel to receive the contents thereof, and loosely connected with the plough, for draught thereby, a supporting-wheel mounted upon the separator to peripherally traverse the surface of the soil, and co-operating means respectively on said supporting-wheel and separator for imparting a lateral vibratory movement to the latter, substantially as specified. 2nd. In a potato-digger, the combination with a plough or shovel, of a separator having a slotted connection at its front end with the contiguous extremity of the plough or shovel to allow lateral vibration, side draught links of flexible construction connecting the separator with the plough to prevent deflection of the separator from the line of the plough or shovel, and means for imparting a lateral vibratory movement to the separator, substantially as specified. 3rd. In a potato-digger, the combination with a plough or shovel, of a separator arranged to receive the discharge from the plough or shovel, an actuating-wheel mounted upon a transverse shaft carried by the separator to support the latter, and co-operating pairs of movable and fixed cams respectively on the wheel and separator for imparting a lateral vibratory movement to the latter, substantially as specified. 4th. In a potato-digger, the combination of an upwardly and rearwardly-inclined plough or shovel provided with pendant side-runners and having its rear end upwardly concaved, a separator having an upwardly concaved front end extending under the said rear end of the plough or shovel and provided with a transverse slot, a bolt carried by the rear end of the plough fitting loosely in the slot of the separator to allow vibratory movement of the latter, side plates 15 depending from the separator, draught links loosely connecting said side plates with the runners of the plough, a transverse shaft connecting said side plates, fixed cams concentric with the shaft contiguous to the inner surfaces of the side plates, and a separator supporting-wheel loosely mounted upon said shaft between said fixed cams to traverse the soil, and provided with movable cams for co-operation therewith, whereby a combined vertical and lateral vibratory motion is imparted to the separator, substantially as specified.

**No. 59,688. Brake Shoe.** (Sabot de frein.)



Francois Xavier Genest, Lowelltown, Maine, U.S.A., 19th April, 1898; 6 years. (Filed 2nd March, 1898.)

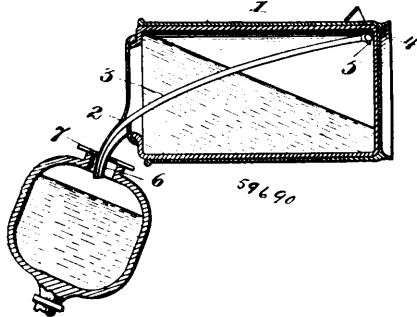
*Claim.* 1st. In a brake apparatus for railway cars, the combination with the support, having its front face grooved, of a shoe, having its rear face provided with a tongue adapted to fit said groove, and means for preventing a vertical movement of said shoe on said support, substantially as described. 2nd. In a brake apparatus for railway cars, the combination with the support having its front face grooved, and also having a stop formed at the lower end of said groove, of a shoe removably connected therewith, said shoe being provided with a tongue to fit said groove, and a pin, removably secured to the upper end of said support and said shoe, whereby all movement of said shoe on said support will be prevented, substantially as described.

**No. 59,689. Peat Fuel.** (Tourbe.)

Archibald Anderson Dickson, Toronto, Ontario, Canada, 19th April, 1898; 6 years. (Filed 31st December, 1897.)

Claim.—As a new article of manufacture, a hard dense fuel block consisting of peat containing approximately only the atmospheric degree of moisture, and embodying all of the fibrous, carbonaceous, volatile and other elements inherent of the raw material intact and unimpaired, substantially as set forth.

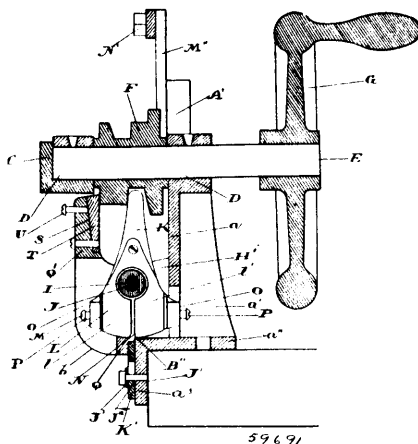
No. 59,690. Oil Receptacle. (Receptacle à huile.)



William Ernest Winters and Charles Winters, both of White Lake, New York, U.S.A., 19th April, 1898; 6 years. (Filed 31st March, 1898.)

Claim.—1st. An oil receptacle, comprising an air tight chamber 1, provided with a discharge spout 2, in combination with an air inlet tube 3 fixed in said discharge spout and having its outer end arranged flush with the outer end of said spout, and its inner flaring end 4 terminating at a point contiguous to the inner wall of said receptacle, and a floatable ball-valve 5 arranged in said tube between its flaring end and the contiguous wall of said receptacle, substantially as and for the purpose set forth. 2nd. An oil receptacle, comprising an air tight receptacle 1, provided with an externally threaded spout 2, in combination with the yoke 7, adjustably secured on said spout and an air inlet tube 3 fixed in said spout and having its outer end arranged flush with the outer end of said spout, and its inner flaring end 4 terminating within said receptacle at a point contiguous to the inner wall thereof, and the floatable ball-valve arranged in said tube between its flaring end 4 and the contiguous wall of said receptacle, substantially as and for the purpose set forth.

No. 59,691. Saw Setting Machine. (Fer à contourner.)

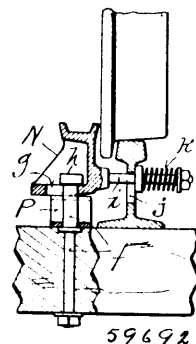


William Clark, Galt, Ontario, Canada, 12th April, 1898; 6 years. (Filed 1st April, 1898.)

Claim.—1st. A saw setting machine embracing in its construction a setting die, mechanism for feeding the saw to the setting die, a saw holding vice consisting of a stationary jaw, and a movable jaw arranged to be automatically moved alternately to and away from the stationary jaw, during the setting of the teeth and the feed of the saw to the setting mechanism respectively, substantially as specified. 2nd. In a saw setting machine, a setting die embracing in its construction a rocker arm, a die connected to the rocker arm in combination with a cam motion, arranged to actuate the rocker arm to move the die alternately in opposite directions, to set the teeth successively on alternate sides of the blade, a feed mechanism to intermittently feed the saw teeth to the setting dies, and a saw holding vice arranged to be automatically closed on the saw during the setting of the tooth, and to be automatically opened during the feed of the next successive tooth to the setting mechanism, substantially as specified. 3rd. In a saw setting device, mechanism for feeding the saw to the setting dies, consisting of a pivoted arm, a cam for actuating the arm, a dog pivotally connected to the arm and arranged to engage the teeth of the saw, in combination with a

setting die, mechanism for rocking the setting die alternately to the opposite sides of the saw blade, a saw holding vice and mechanism for alternately closing the vise on the saw during the setting of the tooth, and opening the jaws during the feed of the next successive tooth to the setting die, substantially as specified. 4th. In a saw setting machine, a feed mechanism embracing in its construction an arm pivotally connected to the frame of the machine, a spring actuated dog pivotally connected to the arm and arranged to engage the teeth of the saw, mechanism for regulating the length of the stroke of the arm, and a cam and spring to actuate the arm, substantially as specified. 5th. In a saw setting machine, a feed mechanism embracing in its construction an arm pivotally connected to the frame of the machine at one side thereof, a lever pivotally connected to the frame at the opposite side of the machine, a link connecting the lever and the arm to cause their united action, a cam engaging the lever, a spring to return the lever and arm to their normal position after being actuated by the cam, a spring actuated dog pivotally connected to the arm, and mechanism for regulating the length of the stroke of the arm, substantially as specified. 6th. In a saw setting machine, a feed mechanism embracing in its construction an arm pivotally connected to the frame of the machine at one side thereof, a lever pivotally connected to the frame at the opposite side of the machine, a link connecting the lever and the arm to cause their united action, a cam engaging the lever, a spring to return the lever and arm to their normal position after being actuated by the cam, a spring actuated dog pivotally connected to the arm, mechanism for regulating the length of the stroke of the arm, in combination with a setting die, a rocker arm to which is connected the setting die, a cam to actuate the rocker arm, and a vise to rigidly hold the saw during the setting of the teeth, substantially as specified. 7th. In a saw setting machine a feed mechanism embracing in its construction an arm pivotally connected to the frame of the machine at one side thereof, a lever pivotally connected to the frame at the opposite side of the machine, a link connecting the lever and the arm to cause their united action, a cam engaging the lever, a spring to return the lever and arm to their normal position after being actuated by the cam, a spring actuated dog pivotally connected to the arm, mechanism for regulating the length of the stroke of the arm, in combination with a setting die, a rocker arm to which is connected the setting die, a cam to actuate the rocker arm, a vise to rigidly hold the saw during the setting of the teeth, consisting of a stationary jaw, a movable jaw, a cam, the movable jaw arranged to be closed by the cam against the saw during the setting of the teeth, and a spring to open the movable jaw during the feeding of the teeth to the setting dies, substantially as specified. 8th. In a saw setting machine, a feed mechanism embracing in its construction an arm pivotally connected to the frame of the machine at one side thereof, a lever pivotally connected to the frame at the opposite side of the machine, a link connecting the lever and the arm to cause their united action, a cam engaging the lever, a spring to return the lever and arm to their normal position after being actuated by the cam, a spring actuated dog pivotally connected to the arm, mechanism for regulating the length of the stroke of the arm, in combination with a setting die, a rocker arm to which is connected the setting die, a cam to actuate the rocker arm, a vise to rigidly hold the saw during the setting of the teeth, consisting of a stationary jaw, a movable jaw, a cam, the movable jaw arranged to be closed by the cam against the saw during the setting of the teeth, a spring to open the movable jaw during the feeding of the teeth to the setting dies, a vertically adjustable table to support the saw, and a vertically adjustable gauge for the saw teeth, substantially as specified.

No. 59,692. Railway Gate. (Barrière de chemin de fer.)

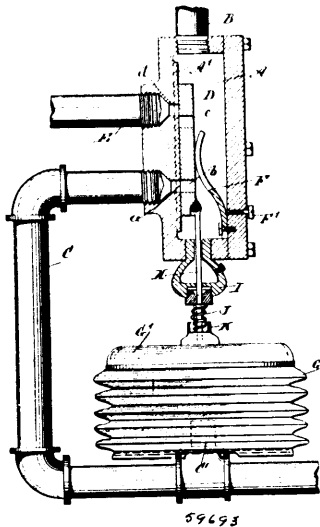


Frederick Austin Cramer and James Austin Garman, both of Neenah, Wisconsin, U.S.A., 20th April, 1898; 6 years. (Filed 2nd April, 1898.)

Claim.—1st. The combination of counter-weighted gate-bars in pivotal connection with posts at opposite sides of a railway crossing, sheave supported weight-controlled flexible runners that extend along the railway-track in opposite directions from the crossing and have branches connecting opposite gate-bars, a slack take-up operative in conjunction with each runner, a cranked rock-shaft

arranged under the track-rails, a crank-shaft lever having spring-connection with said runner, and air-cushion mechanism co-operative with the lever, and a spring-supported auxiliary rail of suitable length in spring-controlled laterally adjustable connection with a track rail over the rock-shaft crank, one end of the auxiliary rail being in the path of the car-wheel flanges and the other end beveled upon its inner side to obtain clearance for said flanges. 2nd. The combination of counterweighted gate-bars in pivotal connection with posts at opposite sides of a railway-crossing, sheave-supported weight-controlled flexible runners that extend along the railway-track in opposite directions from the crossing and have branches connecting opposite gate-bars, a slack take-up operative in conjunction with each runner, a cranked rock-shaft arranged under the track-rails, a crank-shaft lever having spring-connection with said runner, and a spring-supported auxiliary rail of suitable length in spring-controlled laterally adjustable connection with a track-rail over the rock-shaft crank, one end of the auxiliary rail being in the path of car-wheel flanges and the other end beveled upon its inner side to obtain clearance for said flanges. 3rd. The combination of counterweighted gate-bars in pivotal connection with posts at opposite sides of a railway crossing, sheave-supported weight-controlled flexible runners that extend along the railway track in opposite direction from the crossing and have branches in direct connection with opposite gate-bars, a lever-mechanism and slack take-up in connection with each flexible runner, and a spring-supported auxiliary rail of suitable length in spring-controlled laterally adjustable connection with a track rail and co-operative with the lever-mechanism, one end of the auxiliary rail being in the path of car-wheel flanges and the other end beveled upon its inner side to obtain clearance for said flanges.

**No. 59,693. Safety Pressure Regulators.**  
(*Régulateur de pression de surité.*)

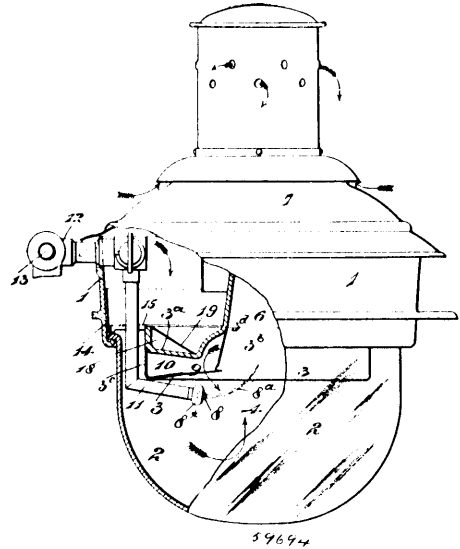


Jenkin Williams and Joseph Reuben Rees, both of Pueblo, Colorado, U.S.A., 20th April, 1898; 6 years. (Filed 1st April, 1898.)

*Claim*—1st. In a fluid pressure regulator, the combination of a chest having an inlet and an outlet orifice, and having a valve seat formed around the outlet orifice, a slide valve mounted on the seat and commanding the outlet orifice, a spring attached to the interior of the chest and pressing the slide valve against the seat, a rod attached to the slide valve, a spring actuating the rod, and a bellows in connection with the rod whereby to actuate the same. 2nd. In a fluid pressure regulator, the combination of a chest having an inlet and an outlet orifice, the chest having a valve seat formed around the outlet orifice, a slide valve mounted on the valve seat and commanding the outlet orifice, a spring attached to the interior of the chest and pressing the slide valve against the seat, a rod attached to the slide valve and moving through a gland in the chest, and means for actuating the rod whereby to move the slide valve. 3rd. In a fluid pressure regulator, the combination of a chest having an inlet and an outlet orifice, the chest having a valve seat formed around the outlet orifice, a slide valve moving on the valve seat and commanding the outlet orifice, a spring attached to the interior of the chest and pressing the slide valve on the seat, a rod attached to the slide valve, a packing gland in one wall of the chest through which gland the rod reciprocates, a bellows in connection with the rod and having communication with the outlet orifice of the chest, and an expansive spring surrounding the rod and bearing against the bellows and against the packing gland. 4th. In a fluid pressure regulator, the combination of a chest having an inlet and an outlet orifice therein, a slide valve commanding one of the orifices, a rod attached to the slide valve, a packing gland in one wall of the chest through which gland the rod reciprocates, a bellows attached to the

rod and having communication with the orifice commanded by the valve, and an expansive spring surrounding the rod and bearing against the gland and bellows.

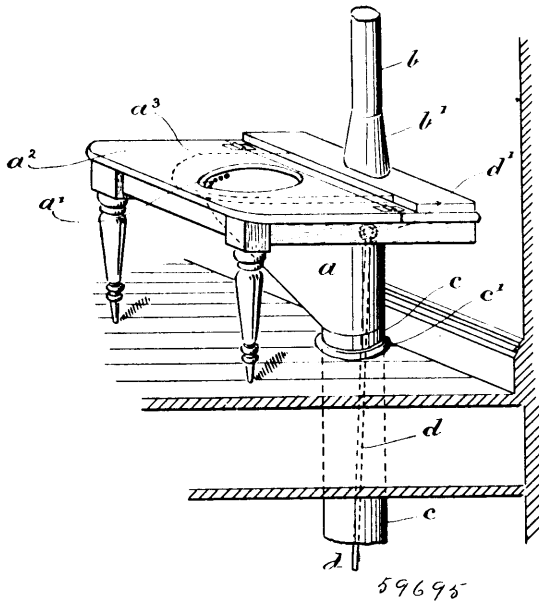
**No. 59,694. Gas Lamp.** (*Lampe à gaz.*)



Thomas Cooper John Thomas and William Muddstill, both of London, England, 20th April, 1898; 6 years. (Filed 3rd May, 1897.)

*Claim*—1st. In a gas lamp, the combination with a lamp body or casing carrying a glass bowl below and a lamp head above, of a removable reflector comprising an upper perforated dished part carrying a chimney, a lower part formed with one or more comparatively large triangular or equivalently shaped air outlet openings 9 arranged at one side of or around the central portion of the reflector and an upper perforated baffle plate, the said perforated parts being connected together so as to form two connected annular air passages communicating with the said air outlet opening or openings 9, and one or more flat flame burners 8 arranged or each arranged as set forth below and in proximity to one only of said openings 9 and so that the flame extending from the said burner or each burner presents its broad or extended surface towards the reflector, substantially as described. 2nd. In a gas lamp of the kind herein referred to, the combination with the lamp casing, bowl and head of a removable reflector having a shallow conical lower surface with one or more triangular or equivalently shaped air outlet passages therein and a central conical portion in line with and in free and open communication with the chimney, and one or more flat frame burners arranged or each arranged as set forth below one only of said openings, the burner or each burner of the gas supply pipe carrying the same being constructed with a part adapted to serve as a receptacle in which foreign matter can collect, substantially as described for the purpose specified. 3rd. In a gas lamp, the combination of a lamp body or casing carrying a glass bowl below and a lamp head above, a gas supply pipe hinged or jointed to a main gas supply so that it can be turned into and out of the bowl, and provided with one or more horizontal or slightly inclined flat flame burners, and a removable compound reflector comprising an upper dished casting having a chimney in one therewith and perforations 17, a lower dished part of sheet metal forming the reflector proper secured to the lower side of the casting so as to form an annular air chamber therewith and formed with one or more comparatively large triangular or equivalently shaped air outlet openings 9 located or each located above one of said flat flame burners, and a conical perforated sheet metal plate secured to the top of said casting so as to form therewith another annular air passage, substantially as herein described for the purpose specified. 4th. A gas lamp having a body 1, glass bowl 2, lamp-head 7, removable compound reflector comprising a dished casting 3a provided with perforations 17 and having a chimney 6 in one therewith, a reflector proper consisting of a dished sheet metal lower part 3b secured to the lower side of said casting so as to form an annular air passage 10 therewith and formed with one or more triangular air outlet openings 9 and with a raised central portion 3c having a central opening 3d, a conical sheet metal baffle plate 19 formed with perforations 20 and secured to the top of said casting so as to form an annular air passage 18 therewith, a gas supply pipe 11 that is hinged or jointed to the main gas supply pipe 13, extends through a slot in the perforated flanged part of the casting which rests upon the ring 14, and provided with a lower straight or curved portion carrying one or more horizontal or nearly horizontal flat flame burners located below the air outlet openings 9 or each such opening, substantially as described and shown in the drawings annexed.

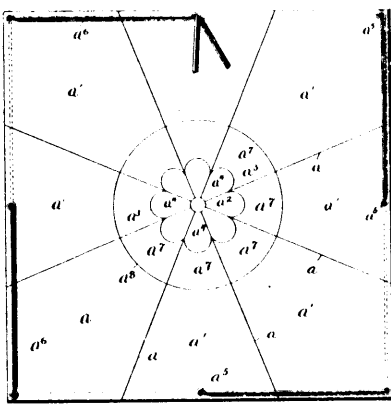
**No. 59,695. Closet. (Lustrine.)**



John Tobin, Winnipeg, Manitoba, Canada, 20th April, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—In a closet, the hopper *a*, row of perforations *a*<sup>1</sup>, vent pipe *b*, base *b*<sup>1</sup>, tube *c*, collar *c*<sup>1</sup>, ring *e*<sup>2</sup>, oblique plate *c*<sup>3</sup>, rod *d*, plug *d*<sup>2</sup>, curved handle bar *d*<sup>1</sup>, outlet pipe *e*, flange plate *f*, face or stop plate *f*<sup>2</sup>, washer *f*<sup>1</sup>, bolt *g*, hook fastener *g*<sup>1</sup>, with ordinary seat *a*<sup>2</sup>, and lid *a*<sup>3</sup>, all formed, arranged and combined as set forth.

**No. 59,696. Game Apparatus. (Appareil de jeu.)**



Goillaume Boivin, Montreal, Quebec, Canada, 20th April, 1898; 6 years. (Filed 12th November, 1897.)

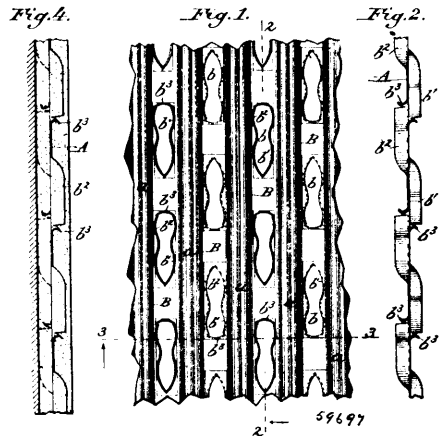
*Claim.*—1st. As an improved article of manufacture, a game apparatus comprising a cloth provided with a central division, and also having a series of divisions for each player radiating from said central divisions, substantially as described. 2nd. As an improved article of manufacture, a game apparatus comprising a cloth having a series of divisions for each player, eyeletted openings, arranged above the side of said cloth near the edge, and a cord or string removably secured in said eyeletted openings, said cord being adapted to embrace the legs of a table after said cloth has been placed thereon, substantially as described.

**No. 59,697. Metallic Lathing. (Lattes métalliques.)**

Alexander R. Fordyce, Newark, New Jersey, U.S.A., 20th April, 1898; 6 years. (Filed 31st March, 1898.)

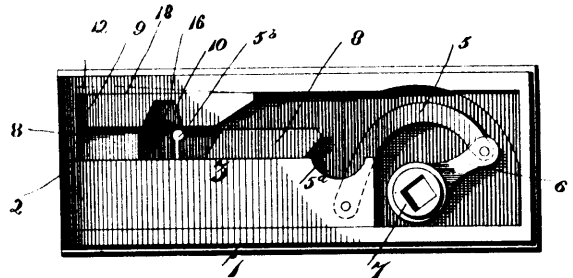
*Claim.*—1st. A lathing consisting of a metallic plate having an elongated aperture formed therein and the metal displaced by the formation of said aperture turned back to form two irregular elongated flanges, the said flanges constituting a substantially continuous collar forming a key having irregular sides. 2nd. A lathing consisting of a metallic plate having apertures formed therein, the metal displaced by the formation of said apertures turned back to form flanges, the said flanges arranged in rows projecting alternately from opposite sides of the plate, and also arranged so that the flanges of

one row break joint with and overlap the flanges of an adjacent row. 3rd. A lathing consisting of a metallic plate having apertures



formed therein, the metal displaced by the formation of said apertures turned back to form two irregular elongated flanges, the said flanges forming a key with irregular sides, and the said keys arranged in rows projecting alternately from opposite sides of the plate, and also arranged so that the keys of one row break joint with and overlap the keys of an adjacent row.

**No. 59,698. Lock. (Serrure.)**



Burton Rowley, Argyle, New Brunswick, Canada, 20th April, 1898; 6 years. (Filed 2nd April, 1898.)

*Claim.*—1st. A lock, comprising a casing, a bolt located therein and connected to the sleeve by a pivoted arm, a tumbler adapted to lock said bolt and means for operating said tumbler. 2nd. A lock, comprising a casing, a bolt located therein having a bifurcated end, an arm pivotally connecting said bolt to the sleeve, a bifurcated tumbler having a pivoted spring actuated locking arm, notches formed in the casing to retain said arm, and a key to operate said tumbler. 3rd. A lock, comprising a casing, a bolt located therein and having a bifurcated end, a curved arm pivotally connecting said bolt to the sleeve, said sleeve having lugs integrally formed therewith, a bifurcated tumbler having a pivoted spring actuated arm locking arm, a lug formed on said locking arm and adapted to register with notches formed in the casing, notches formed in said tumbler and locking arm, and a key to operate said tumbler.

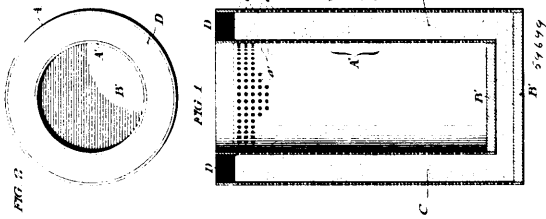
**No. 59,699. Porous Diaphragm for Electrolytic Apparatus. (Diaphragme poreux pour appareil électrolytique.)**

John Harrison, Thomas S. Harrison and George L. Harrison, assignees of James Douglas Darling, all of Philadelphia, Pennsylvania, U.S.A., 20th April, 1898; 6 years. (Filed 11th January, 1898.)

*Claim.*—1st. As an improvement in porous diaphragms for electrolytic apparatus, the combination, with a support, of a granular filling consisting principally of a vitrified oxide or oxides, substantially resistant to combination or fluxing by a fused hydroxide or other above specified compound under the conditions of electrolysis, substantially as set forth. 2nd. As an improvement in porous diaphragms for electrolytic apparatus, the combination, with a support, of a granular filling consisting principally of vitrified magnesia,

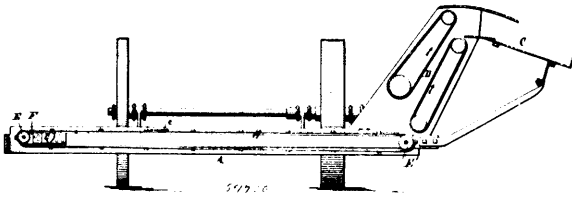


substantially as set forth. 3rd. As an improvement in porous diaphragms for electrolytic apparatus, the combination, of a pair



of cylindrical, perforated supports, arranged with an interspace between them, bases for said supports, an intermediate granular filling consisting principally of vitrified magnesia arranged in the interspace between said supports, and an annular top of cement above said filling, substantially as set forth.

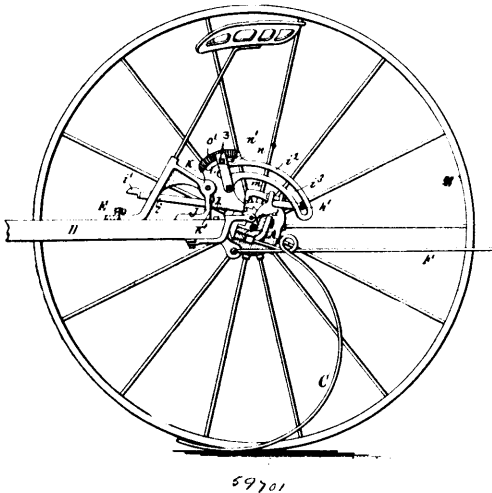
**No. 59,700. Harvester. (Moissonneuse.)**



The Johnston Harvester Company, assignee of Edward Pridmore, both of Batavia, New York, U.S.A., 20th April, 1898; 6 years. (Filed 17th February, 1898.)

*Claim.*—1st. The combination with the platform frame and the conveying apron, of an adjustable roller around which the apron passes, and rock arms in which said roller is mounted and which are pivoted to the platform frame, whereby the apron can be slackened or tightened by swinging the roller and its supporting rock arms on the pivots of the latter, substantially as set forth. 2nd. The combination with the platform frame and the conveying apron, of an adjustable roller around which the apron passes, rock arm in which said roller is mounted and which are pivoted to the platform frame, and stops on the platform frame and rock arms which arrest the tightening movement of the rock arms when the same and the roller have reached their normal position, substantially as set forth.

**No. 59,701. Horse Hay Rake. (Rateau à cheval.)**

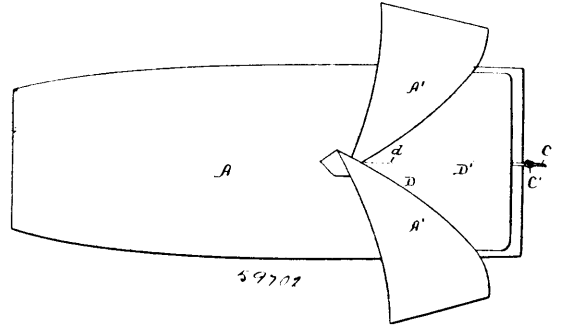


The Johnston Harvester Company, assignee of Edward Pridmore, both of Batavia, New York, U.S.A., 20th April, 1898; 6 years. (Filed 24th February, 1898.)

*Claim.*—1st. The combination with the rake head, the dumping lever, the clutch, and the clutch shaft having a crank which is controlled by said dumping lever and which travels along the same as the rake head is raised, of an adjustable stop which is secured to the dumping lever and which arrests the forward movement of the crank of the clutch shaft, thereby turning the clutch shaft to disengage the clutch, substantially as set forth. 2nd. The combination with the rake head, the dumping, lever having a slot, the clutch, and the clutch shaft having a crank moving in said slot, of an adjustable stop arranged across said slot near the end thereof

and adapted to arrest the forward movement of said crank, substantially as set forth. 3rd. The combination with the rake head, the dumping lever having a slot, the clutch, and the clutch shaft having a crank moving in said slot, of a stop bar arranged across said slot and connected to the dumping lever by a pivot bolt and by an adjusting bolt passing through the outer end of said bar and through an adjusting slot in the dumping lever, substantially as set forth.

**No. 59,702. Pneumatic Mattress. (Matelas pneumatique.)**



Henry Baxter, Spokane, Washington, U.S.A., and Charles S. Baxter, Windsor, Ontario, Canada, 20th April, 1898; 6 years. (Filed 3rd March, 1898.)

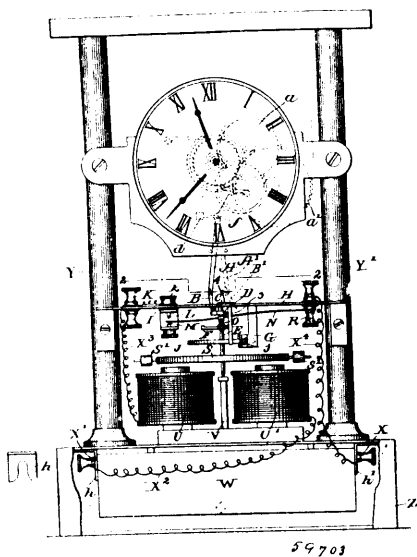
*Claim.*—1st. The portable, flexible pneumatic mattress, comprising a double or two-legged flexible pneumatic envelope and a single flexible sheath having pockets or receptacles for confining and supporting the two legs of the pneumatic envelope, and at the same time connecting them together and holding them in position parallel to each other so as to form a central longitudinal hollow or valley to receive the person lying upon it and prevent rolling off, substantially as specified. 2nd. The portable, flexible pneumatic mattress, comprising a double or two-legged flexible pneumatic envelope and a single flexible sheath having pockets or receptacles for confining and supporting the two legs of the pneumatic envelope, and at the same time connecting them together and holding them in position parallel to each other so as to form a central longitudinal hollow or valley to receive the person lying upon it and prevent rolling off, said pneumatic envelope having also a head or pillow portion extending the width of the mattress, and the sheath or covering having also a corresponding head or pillow portion, substantially as specified. 3rd. A portable, flexible pneumatic mattress, having an inside two limbed rubber bag, in combination with an exterior flexible sheath connecting and holding together the two limbs of the rubber bag, substantially as specified. 4th. In a pneumatic mattress, the combination with a flexible rubber bag, having a head portion B<sup>1</sup> and two legs or limbs B<sup>2</sup> B<sup>2</sup>, with a flexible outer sheath or covering D, having a head or pillow portion D<sup>1</sup>, and two connected leg or limb portions D<sup>2</sup> D<sup>2</sup>, substantially as specified. 5th. In a pneumatic mattress, the combination with a flexible rubber bag, having a head portion B<sup>1</sup> and two legs or limbs B<sup>2</sup> B<sup>2</sup>, with a flexible outer sheath or covering D having a head or pillow portion D<sup>1</sup>, and two connected leg or limb portions D<sup>2</sup> D<sup>2</sup>, said legs or limbs D<sup>2</sup> D<sup>2</sup> of the outer sheath or covering contracted near the foot end of the mattress, substantially as specified. 6th. In a pneumatic mattress, the combination with a flexible rubber bag, having a head portion and two legs or limbs B<sup>2</sup> B<sup>2</sup>, with a flexible outer sheath or covering D having a head or pillow portion D<sup>1</sup>, and two connected leg or limb portions D<sup>2</sup> D<sup>2</sup>, said legs or limbs D<sup>2</sup> D<sup>2</sup> of the outer sheath or covering being contracted near the foot end of the mattress by double divergent seams *d, d*, substantially as specified. 7th. The portable flexible pneumatic mattress, comprising in combination a thin, flexible interior rubber bag or envelope and an outer flexible sheath or covering, substantially as specified. 8th. The portable flexible pneumatic mattress, comprising in combination a thin, flexible interior rubber bag or envelope and an outer flexible sheath or covering, and a long flexible inflating tube adapted to be tied in a knot to close the same, substantially as specified. 9th. The combination with a sleeping bag, of a pneumatic mattress, comprising a pneumatic bag having a head portion and two legs or limbs, and an outer sheath or covering connecting the two leg portions of the pneumatic envelope to hold them in juxtaposition, substantially as specified.

**No. 59,703. Electric Clock. (Horloge électrique.)**

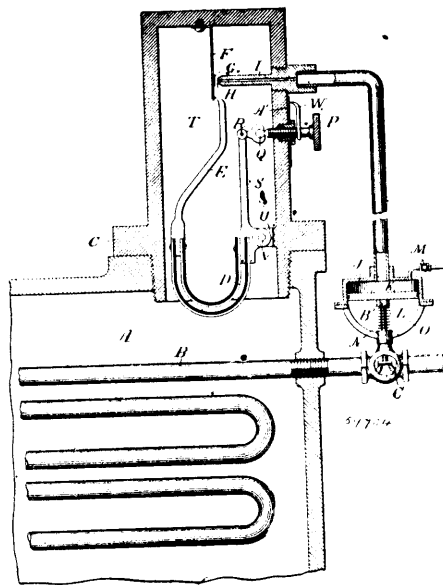
Frederic Richard and Theodore Lentz, both of Boston, Massachusetts, U.S.A., 20th April, 1898; 6 years. (Filed 4th January, 1898.)

*Claim.*—1st. In a clock or time piece operated by a balance wheel whose vibration is accelerated or renewed automatically as needed, the combination of the electric magnets U U<sup>1</sup>, armature balance wheel S S, the spindle E, the hair spring G, the automatic contacting devices consisting of radial notched arm F, pallet O and spring N, the radial actuating arm D and pendulous arm A connected for

transmitting the motion of the balance wheel to the clock mechanism, all substantially as and for the purposes set forth. 2nd. In a clock



valve for controlling the passage of water from said hot water tank to said piston or diaphragm chamber, a waste-cock for regulating



or time piece operated by a balance wheel whose vibration is accelerated or renewed automatically as needed, the combination of the electromagnets U U<sup>1</sup>, balance wheel S S, with regulating screw weights S<sup>1</sup> S<sup>1</sup> mounted upon spindle E, the hair spring J surrounding said spindle, the regulating arm 3, 4, adapted to regulate the clock fast or slow, the automatic contacting devices consisting of the notched arm F attached to the spindle E, palate O and spring N, the radial actuating arm D attached to the spindle E, and pendulous arm A provided with pivoted catch B and connecting to ratchet wheel b, actuating clock gears and hands a, a, all substantially as and for the purposes set forth. 3rd. In a clock or time piece operated by a balance wheel whose vibration is accelerated or renewed automatically as needed, the combination of the electro magnets U U<sup>1</sup>, balance wheel S S, with regulating screw weights S<sup>1</sup> S<sup>1</sup>, mounted upon the spindle E pivoted at both ends, the spring J surrounding said spindle, the automatic contacting devices consisting of notched arm F attached to spindle E, palate O and spring N, making rubbing contact at L, the radial actuating arm D attached to the spindle E and pendulous arm A provided with pivoted catch B and connecting to the ratchet wheel b, all substantially as and for the purposes set forth. 4th. In an electric time piece or clock operated by a balance wheel whose vibration is accelerated or renewed automatically as needed, the combination of the electro magnets U U<sup>1</sup>, balance wheel S S, spindle E, hair spring J, notched arm F, palate O and spring N, actuating arm D, pendulous arm A connected to the ratchet wheel b, the hollow base, the dry battery U with terminals X X<sup>1</sup>, adapted to slip into its forked arm, contact brackets H H<sup>1</sup> or their equivalents, all substantially as and for the purposes set forth.

the escape of water from said piston or diaphragm chamber, means for raising said piston or diaphragm as the water escapes through said waste-cock, and a thermostat located in said hot water tank and adapted to automatically control the valve mechanism between said hot water tank and said piston or diaphragm chamber, substantially as and for the purpose specified. 3rd. In a temperature regulator for hot water heater, the combination of a tank containing water under pressure, a steam coil in said tank, a steam supply pipe connected thereto, a valve in said steam supply pipe controlling the admission of steam to said coil, an outlet port in said tank, a piston or diaphragm chamber communicating with said tank through said outlet port, an exhaust in said piston or diaphragm chamber of small capacity relative to said outlet port, a piston or diaphragm in said chamber, a rod connecting said piston or diaphragm with said steam controlling valve, a valve controlling said outlet port in said tank, a thermostat surrounded by the water in said tank, and connections between said valve controlling said outlet port in said tank and said thermostat whereby said valve is actuated to open said port when the temperature of the water in said tank rises and close said port when said temperature falls, substantially as described. 4th. The combination with a cylinder having an exhaust port always open and an inlet port adapted to be opened and closed of large capacity relative to said exhaust port, of a piston or diaphragm therein actuated in one direction by fluid pressure and in the other by a spring, substantially as described.

**No. 59,704. Temperature Regulator for Water.**

(Régulateur de température pour l'eau.)

The Davis and Roesch Temperature Controlling Company, New York City, assignee of Alfred Roesch, Bridgeport, Connecticut, both in the U.S.A., 20th April, 1898; 6 years. (Filed 2nd March, 1898.)

Claim.—1st. In a temperature regulator for a water heater, the combination of a tank containing water under pressure, a piston or diaphragm chamber communicating through a duct with said tank, a piston or diaphragm located in said chamber, a waste-water cock connected with, and adapted to control, the escape of water from said piston or diaphragm chamber, means for raising said piston or diaphragm as the water escapes through said waste cock, a valve adapted to control the admission of steam to said hot water tank, a rod connecting said piston or diaphragm with said steam controlling valve, a valve for controlling the admission of water from said hot water tank to said piston or diaphragm chamber, and a thermostat located within said hot water tank surrounded with water and adapted to be actuated by the change of temperature of the water in said tank, and in turn to actuate the water controlling valve located between said hot water tank and said piston or diaphragm chamber, all substantially for the purpose specified. 2nd. In a temperature regulator for hot water heating, the combination of a hot water tank, a steam heating coil located in said tank, a steam controlling valve for controlling the admission of steam to said coil, a piston or diaphragm chamber communicating with said hot water tank, a piston or diaphragm in said chamber, a rod connecting between said steam controlling valve and said piston or diaphragm, a

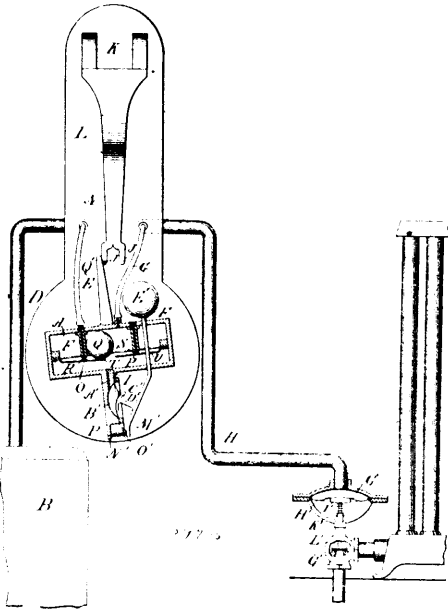
**No. 59,705. Temperature Regulator.**

(Régulateur de température.)

The Davis and Roesch Temperature Controlling Company, New York City, assignee of Alfred Roesch, Bridgeport, Connecticut U.S.A., 20th April, 1898; 6 years. (Filed 2nd March, 1898.)

Claim.—1st. In a temperature regulator, the combination of an oscillating valve chamber, an inlet air duct communicating between said valve chamber and an air reservoir, an outlet air duct communicating from said valve chamber with the diaphragm chamber of a steam controlling valve, inlet and outlet air controlling valves, both located within said valve chamber and provided with supporting bearings, by which said valves are automatically thrown in contact with their respective seats, a rolling weight or ball located in said valve chamber and adapted as said chamber is oscillated toward the right and left, to roll of its own gravity from one side of said valve supporting bearings, to the other, whereby said valves are alternately opened by the gravity of said weight, and means under control of a thermostat for actuating said oscillating valve chamber, substantially as and for the purpose specified. 2nd. In a temperature regulator, the combination of an oscillating valve chamber, an inlet air duct communicating between said valve chamber and an air reservoir, an outlet air duct communicating from said valve chamber with the diaphragm chamber of a steam controlling valve, inlet and outlet air controlling valves both located within said valve chamber and provided with supporting bearings by which said valves are automatically thrown in contact with their respective seats, a weight or ball located in said valve chamber and adapted, as said chamber is oscillated toward the right and left, to roll of its gravity from one side of said valve supporting bearings, to the other, whereby said valves are alternately opened and closed by the gravity

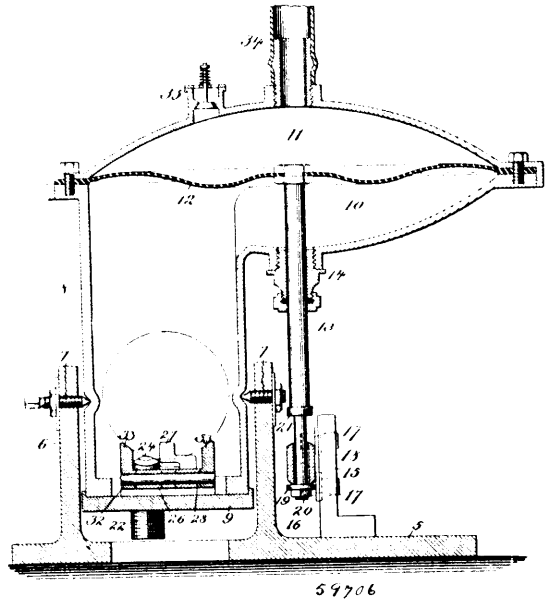
of said weight, means for actuating said oscillating valve chamber, retaining catches adapted to automatically engage the bearings of



said valve chamber at each end of its oscillating movement, and a thermostat, adapted as it is moved by the changes of temperature, to release said oscillating chamber from engagement with said retaining catches, substantially as and for the purpose specified. 3rd. In a temperature regulator, the combination of an oscillating valve chamber, and inlet air duct communicating between said valve chamber and an air reservoir, and outlet air duct communicating from said valve chamber with the diaphragm chamber of a steam controlling valve, inlet and outlet air controlling valves both located within said valve chamber and provided with supporting bearings by which said valves are automatically thrown in contact with their respective seats, a weight or ball located in said valve chamber and adapted, as said chamber is oscillated toward the right and left, to roll of its own gravity from one side of said valve supporting bearings, to the other, whereby said valves are alternately opened and closed by the gravity of said weight, a diaphragm chamber formed in connection with said oscillating valve chamber, an air duct communicating between said valve chamber and said diaphragm chamber, a weight-supporting arm pivotally connected with said valve chamber, a diaphragm plate or bearing communicating between the diaphragm of said diaphragm chamber and said weight-supporting arm and adapted to move said weight and arm in one direction, past the center of gravity, as said diaphragm, is extended by the admission of compressed air, a counteracting spring communicating between the stationary bearing of said valve chamber and said weight supporting arm and adapted, when relieved from the action of the compressed air in said diaphragm chamber, to throw said weight-supporting arm in the opposite direction, an oscillating extension arm formed in connection with said valve chamber and adapted, as said chamber is oscillated, to be brought in contact with retaining catches, a thermostat rigidly affixed to one end of a supporting bed-plate, an arm affixed at one end to the free end of said thermostat, retaining catches affixed to the free end of said arm, and an oscillating arm or bearing extending from said valve chamber and adapted to engage the catches supported from said thermostat, all substantially as and for the purpose specified. 4th. An oscillating valve chamber having inlet and outlet ports, and exhaust port, valves controlling said inlet and exhaust ports and normally closing said ports, a rolling weight or ball controlling the movement of said valves and adapted to retain one or the other alternately in an open position as said chamber is oscillated, substantially as described. 5th. An oscillating valve chamber having inlet and outlet ports, an exhaust port valves, controlling said inlet and exhaust ports and normally closing said ports, a rolling weight or ball controlling the movement of said valves and adapted to retain one or the other alternately in an open position as said valve chamber is oscillated, and a weighted arm pivoted to said valve chamber and adapted to swing on said pivot to oscillate said valve chamber, substantially as specified. 6th. In a temperature regulator, the combination with an oscillating valve chamber having inlet and outlet ports, an exhaust port, valves controlling said inlet and exhaust ports and normally closing said ports, a rolling weight or ball controlling the movement of said valves and adapted to retain one or the other alternately in an open position as said valve chamber is oscillated, and a thermostat governing said oscillating movement of

said valve chamber, of connections between said inlet port and a fluid reservoir, connections between said outlet port and fluid actuated mechanism and means whereby said weighted arm is swung in one direction by the fluid admitted to said valve chamber from said reservoir and is permitted to swing in another direction when said fluid is exhausted therefrom, substantially as specified.

**No. 59,706. Air Pump. (Pompe à air.)**

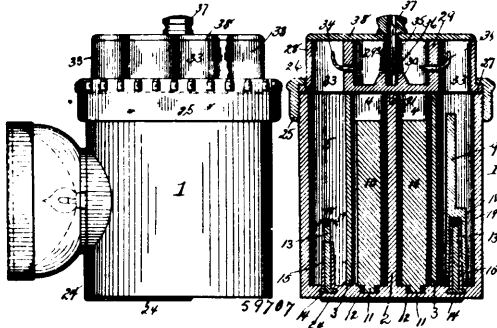


The Davis and Roesch Temperature Controlling Company, New York City, assignee of Alfred Roesch, Bridgeport, Connecticut, all of the U.S.A., 20th April, 1898; 6 years. (Filed 2nd March, 1898.)

*Claim.*—1st. In an air pump the combination with a hollow casing adapted to tilt or rock a limited distance of a diaphragm fitted in said casing, a water intake and a water discharge on one side of said diaphragm, an air inlet and discharge on the other side thereof, and means operating through the movement of said diaphragm to tilt or rock the said casing, substantially as and for the purpose set forth. 2nd. In an air pump the combination with a hollow casing adapted to tilt or rock a limited distance of a diaphragm contained in said casing, a water intake and a water discharge communicating with the interior of said casing on one side of said diaphragm, an air inlet and discharge communicating with the other side thereof, and means operated by the movement of said diaphragm to tilt or rock the said casing and to control the water intake and discharge, substantially as specified. 3rd. In an air pump the combination with a hollow casing adapted to tilt or rock a limited distance of a diaphragm contained in said casing, a water intake and a water discharge communicating with the interior of said casing on one side of said diaphragm, an air inlet and discharge communicating with the other side thereof, means connected with said diaphragm operating to tilt or rock the said casing, valves in said water intake and discharge, and means operated by the tilting of said casing to alternately open and close the valves in said water intake and discharge, substantially as specified. 4th. In an air pump, the combination with a hollow casing adapted to tilt or rock a limited distance of a diaphragm contained in said casing, a water intake and a water discharge communicating with the interior of said casing on one side of said diaphragm, an air inlet and discharge communicating with the other side thereof, a rod connected to said diaphragm, a lever pivoted to said casing and fulcrumed to a fixed support, a connection between said rod and said lever whereby a movement of the diaphragm will cause a movement of the lever and a consequent tilting of the casing, valves in said water intake and discharge and means operated by the tilting of the casing to alternately open and close the said valves, substantially as specified. 5th. In an air pump the combination with a hollow casing adapted to tilt or rock a limited distance of a diaphragm contained in said casing, a water intake and a water discharge communicating with the interior of said casing on one side of said diaphragm, an air inlet and discharge communicating with the other side thereof, means connected with said diaphragm operating to tilt or rock the said casing, valves in said water intake and discharge and a ball or rolling device mounted to roll on tracks in said casing and adapted to open or close the said water intake or discharge valves according to which way the casing is tilted, substantially as specified. 6th. In an air pump, the combination with a hollow casing adapted to tilt or rock a limited distance of a diaphragm contained in said casing, a water intake and a water discharge communicating with the interior of said casing on one side of said diaphragm, an

air inlet and discharge communicating with the other side thereof, a lever pivoted to said casing and fulcrumed to a fixed support, a connection between said diaphragm and said lever whereby the first movement of the diaphragm will not effect the lever, but the final movement of the said diaphragm will cause the lever to be moved and the casing rocked or tilted, and means operated by the rocking and tilting of the casing to control the water discharge or intake, substantially as specified.

**No. 59,707. Bicycle Lamp. (Lampe de bicycless.)**



Charles Jones Hubbell, Harry Cross Hubbell, William De Wald Boyer, and Edward Pierce Mucklow, all of Scranton, Pennsylvania, U.S.A., 21st April, 1898; 6 years. (Filed 18th January, 1898.)

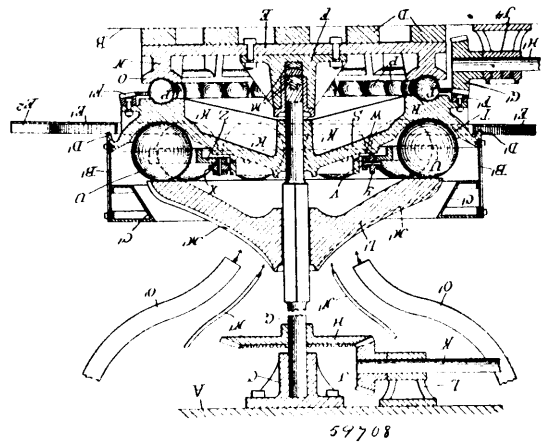
*Claim.*—1st. In a primary battery, negative element having a central vertical cylindrical enlargement provided at its lower end with a depending lug, in combination with a ring or thimble surrounding said lug. 2nd. In a primary battery, the hollow plates or elements, a support for said plates or elements, comprising a metallic post secured within the battery cell and provided with spring fingers for engaging the inside of the element. 3rd. In a primary battery, a support for the plates or elements, comprising a metallic post provided at its upper end with a metallic disc having radial wings or fingers. 4th. In a primary battery, an element support or holder comprising a post provided with an enlarged base, and having at its upper end radially projecting fingers. 5th. The combination with a battery cell, of a cover divided into a series of chambers, consisting of a central chamber communicating with the atmosphere, and a plurality of chambers radially arranged with relation to the central chamber and communicating with the interior of the cell, means for securing the cover upon the cell, and communications between said radial chambers and the central chamber. 6th. The combination with a battery cell or casing, of a removable cover divided into a central chamber opening to the atmosphere, and a series of radial gas escape chambers communicating with the interior of the cell, and a cap-plate for said cover, and means for securing the cover and cap-plate in position. 7th. The combination with a battery cell or casing, of a removable cover divided into a central gas chamber opening to the atmosphere, and a series of supplemental gas escape chambers, the latter communicating with the interior of the cell, means for permitting the escape of gases through said supplemental chambers to the central chamber, and an escape vent for the latter. 8th. The combination with the cell or casing, of a removable cover divided into a central chamber communicating with the atmosphere, and a series of supplemental gas escape chambers communicating with the interior of the cell, communications between said supplemental chambers and central chamber, a clamping ring for securing the cover upon the cell, and a cap-plate closing the upper ends of said chambers. 9th. The combination with the cell or casing, of a removable cover divided into a central chamber opening to the atmosphere, and a series of supplemental radially arranged chambers communicating with the interior of the cell, communications between said supplemental chamber and central chamber, comprising contracted tubes, the outer ends of which are bent upwardly within the supplemental chambers. 10th. The combination with the cover, comprising a central chamber opening to the atmosphere and supplemental gas escape chambers communicating with the interior of the cell, of conduits connecting the latter with the former, a cap-plate for closing the upper ends of said chambers, and means for securing the cap-plate comprising a gas escape tube and a knob or finger piece. 11th. The combination with a cell or casing divided into separate compartments of a removable cover divided into a central gas chamber opening to the atmosphere, and a plurality of supplemental radially disposed gas chambers, one communicating with each compartment of the cell, means for conducting the gases to the central chamber of the cover, and an escape vent for said central chamber.

**No. 59,708. Reducing Mill. (Moulin à réduire)**

Charles J. Best and John H. Vogt, both of Chicago, Illinois, U.S.A., 21st April, 1898; 6 years. (Filed 30th September, 1897.)

*Claim.*—1st. In a reduction mill, the combination of a rotatable table supported on ball bearings, with mechanism for rotating the

same in one direction, a series of reduction balls on such table, a weight resting on said balls, mechanism for rotating said weight in



a direction opposite to the direction of rotation of said table, and an intermediate frame-work independent of said table and weight, said frame-work provided with projecting parts which extend outwardly between the balls and keep them properly distanced from each other, said frame-work provided with anti-friction discs adapted to engage said table. 2nd. In a reduction mill the combination of a rotatable pan with a groove thereon, a series of balls within said groove, said balls and groove so proportioned that the balls are free to move radially within said groove, a pan-like weight resting upon the top of said balls, means for rotating said weight, said pan operatively connected with a rotating shaft so as to be rotated in a direction opposite to the direction of rotation of the weight, an intermediate frame-work independent of said table and weight and provided with projecting parts which extend outwardly between the balls and keep them properly distanced from each other, an exterior stationary pan or trough supported independent of the said first pan, the whole so arranged that the material ground can be mixed with water which then passes through the sieve and is received on the exterior pan. 3rd. In a reduction mill the combination of a table, provided with a channel, with a series of reduction balls in such channel, and means for rotating such table partly about a somewhat horizontal axis and partly about a somewhat vertical axis, and means for causing the balls to travel in the channel in a serpentine path. 4th. In a reduction mill, the combination of a table with a series of reduction balls adapted to travel in a somewhat circular path thereon, and a frame loosely supported so as to be independent of the motion of the other parts of the machine and adapted to hold the balls in proper relation to each other and distance from the centre. 5th. In a reduction mill, the combination of a pan or disc-shaped piece S provided with a gear F<sup>1</sup>, adapted to operatively engage the pinion G<sup>1</sup>, on the driving-shaft H<sup>1</sup>, and having an annular groove therein, a series of balls U in said groove, a pan-shaped weight, L<sup>1</sup>, resting upon said balls and connected with a shaft G so as to be rotated thereby and so as to be free to move longitudinally, an intermediate frame-work Z interposed between the piece S and the weight L<sup>1</sup>, and provided with the arms A<sup>1</sup>, extending between the balls, the anti-friction discs Y connected with said frame-work, all substantially as described. 6th. In a reduction mill, the combination of a pan provided with a gear on its under surface adapted to operatively connect with a pinion on a driving shaft, said pan provided with an annular groove with a series of balls therein, said groove so formed that the balls are free to move radially, an inverted pan-like weight resting upon the top of said balls, a shaft projecting through said weight and provided with a pinion above the weight by which it is rotated, the parts so constructed that the weight and pan may be rotated in opposite directions, an intermediate frame-work independent of said table and weight, said frame-work provided with projecting parts which extend outwardly between the balls and keep them properly distanced from each other, said frame-work provided with anti-friction discs adapted to engage said table, an annular bearing surface on said table, a screen or sieve which surrounds said pan at a slight distance above the bottom of the groove, and an exterior stationary trough supported independently of said pan, substantially as described.

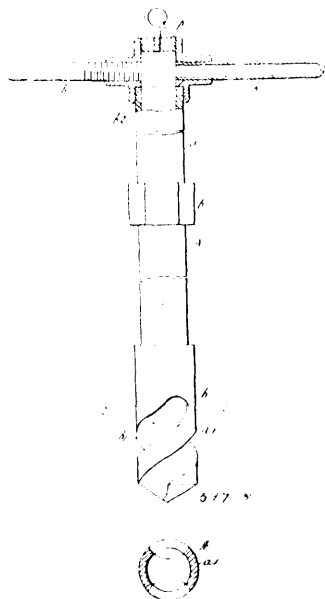
**No. 59,709. Prospecting Tool and Drill.**

(Outil et foret pour prospecteurs.)

The Prospecting Tool Company, assignee of Josiah Bradley, Theo. W. Otto and Joseph L. Wolf, all of Stamford, Connecticut, U.S.A., 21st April, 1898; 6 years. (Filed 22nd December, 1897.)

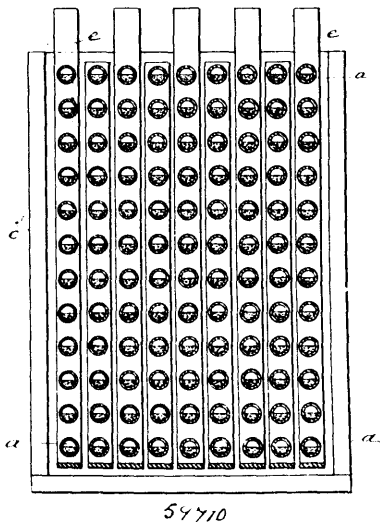
*Claim.*—1st. A prospective tool or drill, comprising a drill point and its stem or body, the stem or body being provided with a bore intersecting the grooves of the drill point, substantially as and for

the purpose set forth. 2nd. A prospective tool or drill, comprising a drill point and its stem or body, the grooves of the drill point



being intersected by a bore extending longitudinally through the stem or body and opening at the top thereof, substantially as and for the purpose set forth. 3rd. A prospective tool or drill, comprising a drill point provided with a longitudinal bore intersecting the grooves of the drill point, and a separable stem or body connected with said drill point and provided with a longitudinal bore intersecting the bore in the latter, substantially as and for the purpose set forth. 4th. An improved prospecting tool or drill, comprising a tubular cylindrical stem or body carrying a drill point and having its interior bore or chamber intersecting the grooves in the latter, substantially as and for the purpose set forth. 5th. In a prospecting tool or drill, comprising a tubular stem or body carrying a drill point and having its bore intersecting the grooves in the latter, and adapted to receive a suitable conveyor or elevator mechanism, substantially as and for the purpose set forth. 6th. In a perspective tool or drill, the combination with a drill point, of a tubular or cylindrical stem or body connected with said drill point and having its bore intersecting or connected with the grooves in said drill point, the tubular stem or body being formed of separate sections jointed together, substantially as and for the purpose set forth.

**No. 59,710. Electrode. (Electrode.)**

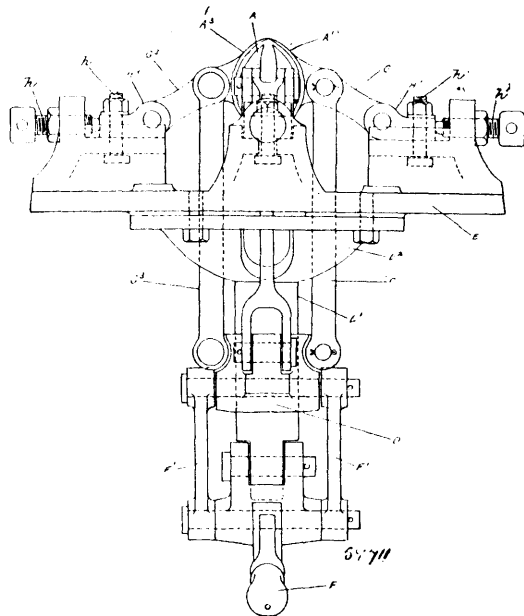


Electricitäts Gesellschaft Triberg, assignee of Friedrich Wilhelm Schneider, both of Triberg, Baden, Germany, 21st April, 1898; 6 years. (Filed 24th August, 1896.)

Claim.—1st. Electrodes for secondary batteries, comprising carriers *a* adapted to receive the active material, said carriers having a

perforated upper part for the purpose of admitting the electrolyte to the active material, preventing, at the same time, the active material from being washed out, substantially as described. 2nd. Electrodes for secondary batteries comprising carriers *a* for the active material and conductible enclosed bodies *f*, substantially as described. 3rd. Electrodes for secondary batteries, comprising carriers *a* for the active material and an insulated casing *b* surrounding the carriers, substantially as described. 4th. Electrodes for secondary batteries, comprising a carrier *a* of trough like shape and a perforated covering above the same, substantially as described.

**No. 59,711. Ball Making Machine, (Machine à faire des boules.)**



The Eccles Rubber and Cycle Company, Manchester, assignee of William Henry Cox, also of Manchester, England, 21st April, 1898; 6 years. (Filed 22nd December, 1897.)

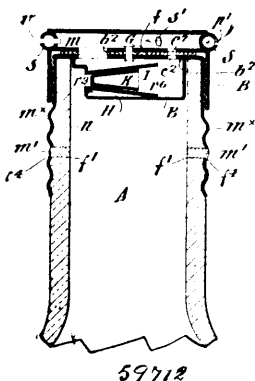
Claim. 1st. A ball making machine, comprising inwardly curved and pointed metallic plates or petals *A* having bevelled edges *A'*, and capable of being outspread to receive a sheet of caoutchouc coated with an adhesive solution, and of being subsequently closed upon each other and upon the caoutchouc, whereby the latter is puckered and gathered together, the superfluous caoutchouc is cut off by the edges *A*, and the severed edges of the caoutchouc are pressed together by the bevelled edges *a* of said petals, to form a hermetically sealed bag of caoutchouc, substantially as described. 2nd. In combination in a ball making machine, the petals *A* hinged to the top of a vertically oscillating plunger *B* and having bevelled edges *a*, links *G* by which said petals are yoked to adjustable stop blocks *H*, whereby on the plunger *B* rising, the links *G* pull the petals *A* apart in order to receive a sheet of caoutchouc, and, on the plunger *B* sinking, push said petals together, whereby the caoutchouc sheet is gathered together in the form of a bag, the superfluous caoutchouc is cut off, and the severed edges pressed together and sealed by the bevelled edges *a*, substantially as described. 3rd. In combination in a ball making machine, the petals *A* hinged to the top of a plunger *B* and having bevelled edges *a*, links *G* by which said petals are yoked to the stop blocks *H*, bolted to the bed plate *E*, a stem *E'* forming a part of a flange *E''* bolted to the said bed plate, a cross-head *D* sliding on said stem, and coupled by rods *C* to the plunger *B* and by links *F'* to a hand lever *F* fulcrumed to said stem, whereby on raising said hand lever the cross-head *D* and plunger *B* are raised, the petals *a* are pulled apart by the yokes *G* ready to receive a sheet of caoutchouc, said petals being closed on said caoutchouc by depressing the hand lever, whereby the caoutchouc sheet is gathered together in the form of a bag, the superfluous caoutchouc is cut off and the severed edges pressed together and sealed by the bevelled edges *a*, substantially as described.

**No. 59,712. Outlet for Fluid Containing Vessels. (Goulot pour bidons, etc.)**

Francis Raymond, assignee of William Cotter Wilson, both of Brooklyn, New York, U.S.A., 21st April, 1898; 6 years. (Filed 14th June, 1897.)

Claim. 1st. The combination with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap *B*, having opening *c*, *c'*, and the axially movable hollow screw-threaded shell *C*, having openings *g'*, *c'*, substantially as set forth. 2nd. The combination

with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap B, having openings *c*, *c'*, the axially movable



hollow screw-threaded shell C, having openings *g*<sup>1</sup>, *c*<sup>1</sup>, and the interposed disc *z*, having openings corresponding to those of the cap and shell, substantially as set forth. 3rd. The combination with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap B, having openings *c*, *c'*, the axially movable hollow screw-threaded shell C, having openings *g*<sup>1</sup>, *c*<sup>1</sup>, and the spout *g*, attached to the shell, substantially as set forth. 4th. The combination with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap B, having openings *c*, *c'*, the axially movable hollow screw-threaded shell C, having openings *g*<sup>1</sup>, *c*<sup>1</sup>, the spout *g*, attached to the shell, and an elastic washer having openings corresponding to those of the shell and interposed between the latter and the cap, substantially as set forth. 5th. The combination with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap B, having openings *c*, *c'*, the axially movable hollow screw-threaded shell C, and a disc *z*, interposed between the cap and shell to close the openings thereof, substantially as set forth. 6th. The combination with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap B, having openings *c*, *c'*, the axially movable hollow screw-threaded shell C, and a disc *z*, and an elastic washer interposed between the cap and shell, substantially as set forth. 7th. The combination with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap B, having openings *c*, *c'*, and the axially movable screw-threaded shell composed of the parts *r*, hollow ring *s*, having inlet and outlet openings, and top piece *n*, said parts forming a chamber H, substantially as set forth. 8th. The combination with a vessel having an opening *b*, of the circumferentially screw-threaded fixed cap having openings *c*, *c'*, and the axially movable screw-threaded shell composed of the part *r*, top piece *n*, and hollow ring *s*, constructed to provide a circuitous passage therethrough, substantially as set forth. 9th. The combination with a vessel neck provided with a chamber H, and a tapering tube I in said chamber, of a longitudinally movable tapering cup K, placed in said tube, substantially as set forth. 10th. The combination of the part B providing a chamber H, a tapering tube I placed in said chamber, a longitudinally movable tapering cup K placed in said tube, and the internally chambered axially movable part C, having inlet and outlet openings, and means for attaching parts B and C to each other, substantially as set forth. 11th. The combination with the part B having flange *n* and sleeve *m*, and constructed with a chamber H, the tapering tube I placed in said chamber, and the longitudinally movable tapering cup K placed in said tube, of the chambered part C having a collar which passes around the sleeve *m*, substantially as set forth. 12th. The combination with the part B having a chamber H, the tapering tube I placed in said chamber, and the longitudinally tapering cup K placed in said tube, of a part C composed of a plate having inlet and outlet orifices, a hollow ring *m* having an outlet *r*, and a disc *z* arranged to provide a chamber *f*, substantially as set forth. 13th. The combination with a chambered part B, a tapering tube I placed in said part, and a longitudinally movably tapering cap placed in said tube, of a chambered part C having a pouring outlet, and a rivet G placed axially in said two parts, substantially as set forth. 14th. The combination with a chambered part B, having a flat top, a tapering tube I placed in said part, a longitudinally movable tapering cup placed in said tube, of a chambered part C, having a flat bottom, and an axial rivet which connects the parts, substantially as set forth. 15th. The combination with the chambered part B, its externally threaded sleeve *m*, a tapering tube I placed in said part, a longitudinally movable tapering cup K placed in said tube, a chambered part C having a pouring outlet, an outlet opening *a'* and an air inlet *b'*, of an internally threaded collar connecting the said parts B and C, substantially as set forth. 16th. The combination with the chambered part B, its externally threaded sleeve *m*, a tapering tube I placed in said part, a longitudinally movable cup K placed in said tube, a chambered part C having a pouring outlet, an outlet opening and an air inlet, of an internally threaded collar which engages with the sleeve *m*, and an axial rivet which connects the parts B and C, substantially as set forth. 17th. The combination with a

bottle-neck which has one or more holes *f*<sup>1</sup>, a chambered part B, a tapering tube I placed in said part, a tapering cup placed in said tube and movable therein, a sleeve extended from the said part downward around the bottle-neck and provided with one or more holes *f*<sup>2</sup>, a pin or pins *m*<sup>1</sup> passed into said holes *f*<sup>1</sup>, and soldered to the sleeve, and a part C attached to the part A and adapted to receive the liquid contents from the bottle and to discharge the same through a suitable pouring outlet, all substantially as and for the purpose herein set forth.

**No. 59,713. Oil Refining Process.**

(*Procédé pour raffiner l'huile.*)

Luther A. Roby, Harris B. Burrows, Fanny D. Smith, William A. Smith, all of Cleveland, Ohio, U.S.A., 21st April, 1898; 6 years. (Filed 27th September, 1897.)

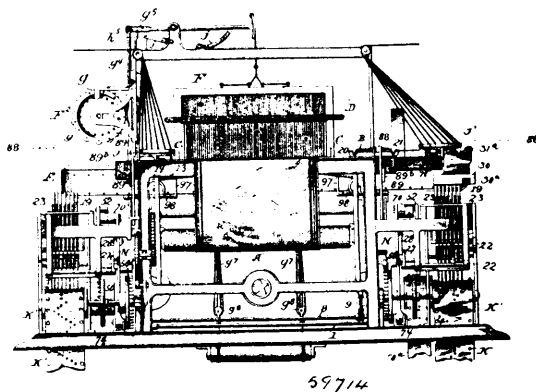
*Claim.*—1st. In a process of refining refractory oils the following steps, introducing turpene into the oil or distillate to be refined, subjecting the mixture to heat, removing turpene, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth. 2nd. In a process of refining refractory oils consisting of the following steps, introducing turpene into the oil or distillate to be refined, subjecting the mixture to a temperature below the point of distillation, removing turpene, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth. 3rd. In an oil refining process the following steps, introducing into the oil or distillate to be refined spirits of turpentine, or any one of the herein named equivalents thereof, subjecting the mixture to heat, removing turpentine or equivalent substance, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth. 4th. The process of treating oils for the elimination of sulphurous compounds, which consists in the application to the oil or distillate to be refined, of heat, and of a substance characterized by the formula (C<sub>2</sub>H<sub>4</sub>)<sub>n</sub>, or any derivative of said substance, removing (C<sub>2</sub>H<sub>4</sub>)<sub>n</sub>, or said derivative, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth. 5th. The process of refining refractory oils, consisting in the introduction into the oil or distillate to be refined, a turpene, subjecting the mixture to a temperature immediately beyond which distillation begins, permitting it to cool to a point of safety, subjecting it to a bath of sulphuric acid, after removal of the acid washing with water, neutralizing any residue of acid therein, substantially as set forth. 6th. A series of steps in refining refractory oils, consisting in introducing into the oil or distillate to be refined, a terbinthinate substance, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth. 7th. In a process of refining oils containing sulphurous compounds, the following steps, introducing into the oil or distillate from which it is desired to remove or subdue the sulphurous compounds, an oleo-resinous substance or its product, subjecting the resultant mixture to a temperature approximating the point of distillation, removing oleo-resinous substance or its product, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth. 8th. A process of refining oils containing sulphurous compounds, consisting in introducing into the oil or distillate to be refined, resinous proximate principles or their products, heating the resulting mixture to a point approximating the point of distillation, then removing from the mixture said substance previously introduced, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth. 9th. A step in a process of refining oils containing sulphurous compounds, consisting in introducing in to the oil or distillate to be refined, exudations of the coniferæ or products or derivatives thereof, heating the resultant mixture, allowing it to cool to the point of safety, removing therefrom said coniferous exudations, whereby the oil or distillate is rendered amenable to further treatment, substantially as set forth.

**No. 59,714. Loom. (Métier à tisser.)**

William Weaver, Norwalk, Connecticut, U.S.A., 22nd April, 1898; 6 years. (Filed 28th January, 1898.)

*Claim.*—1st. In a loom, the combination of one or more thread-shifters, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, means for moving the thread shifter or shifters bodily toward the edge of the warp, a thread-carrier and means for reciprocating the thread-carrier across the warp, substantially as described. 2nd. In a loom, the combination of the thread-shifters arranged one on each side of the warp, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, means for moving said thread-shifters bodily alternately toward the edge of the warp, and a thread-carrier and means for reciprocating the thread-carrier across the warp, substantially as described. 3rd. The combination in a loom, of one or more thread-shifters arranged one on each side of the warp, mechanism for shifting the same to present a proper thread to the thread-carrier, means for moving said thread shifter or shifters bodily at a variable speed towards the edge of the warp, a thread-carrier, and means to reciprocate the thread-carrier across the warp, substantially as described. 4th. In a loom, the combination of the thread-shifters arranged one on each side of the warp, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, devices for supporting the thread-shifters, means for reciprocating said supporting devices, whereby

the thread-shifters are brought bodily to the edge of the warp alternately, a thread-carrier, and means for reciprocating it across



the warp, substantially as described. 5th. The combination in a loom, of a slide, the thread-shifters supported thereon, one on each end thereof, means for moving said slide to bring the thread-shifters bodily to the edges of the warp alternately, and a thread-carrier and means for reciprocating the thread-carrier across the warp, substantially as described. 6th. The combination in a loom, of a slide, the thread-shifters supported one on each end thereof, the cams and their shaft, mechanism connecting said cams and slide, whereby the latter is caused to reciprocate to bring the thread-shifters bodily to the edges of the warp alternately, and a thread-carrier and means for reciprocating the thread-carrier across the warp, substantially as described. 7th. A loom provided with one or more thread-shifters arranged one on each side of the warp, a thread-carrier and means for reciprocating the same across the warp, a perforated primary pattern-belt, a perforated cylinder upon which said belt is supported, intermediate mechanism between the thread-shifters and the primary pattern-belt for shifting the thread-shifters to cause a proper thread to be presented to the thread-carrier, a secondary or director pattern belt, a cylinder upon which said belt is supported, devices between said secondary and primary pattern-belts whereby the movement of the latter is controlled by the former, substantially as described. 8th. A loom, provided with one or more thread-shifters arranged one on each side of the warp, primary pattern devices, means for imparting movement to the primary pattern devices, mechanism intermediate of the thread-shifters and the primary pattern devices, pattern-controlled devices adjacent to the primary pattern devices for throwing the same out of movement to cause a thread of one colour or character to be repeatedly fed to the thread-carrier and for throwing them into movement to cause a thread of a different colour or character to be fed to the thread-carrier, a thread-carrier, and means for reciprocating the same across the warp, substantially as described. 9th. In a loom, the combination of the cutters arranged upon each side thereof adjacent to the edge threads of the warps, thread-shifters arranged one on each side of the warp, a thread-carrier, means for reciprocating it across the warps, and devices for moving the thread-shifters alternately to the edges of the warps simultaneously with the movement of the thread-carrier toward the opposite side thereof, and for maintaining them in said position until the thread-carrier starts on its return movement, substantially as described. 10th. In a loom, the combination of one or more thread-carriers, a series of independently-movable slides, devices between the slides and thread-shifters adapted to be acted upon by any one of said series of slides, mechanism for moving said slides to cause the thread-shifters to be shifted, pattern devices, and devices intermediate of the pattern devices and slides whereby the latter are thrown into engagement with their moving mechanism, substantially as described. 11th. A loom, provided with one or more thread-shifters arranged one on each side of the warp, and each supporting a series of threads of different colours or characters, a thread-carrier, and means for reciprocating it across the warp, a primary pattern-belt provided with parallel series of perforations, a series of needles for engaging the perforations of the primary pattern belt, devices between the needles and thread-shifters, a secondary or director pattern-belt, a needle-bar for engaging said belt, means for moving said needle-bar into and withdrawing it from engagement with the director pattern-belt, and devices intermediate of the needle-bar and primary pattern-belt whereby the movement of the latter is controlled by that of the former, substantially as described. 12th. A loom, provided with one or more thread-shifters arranged one on each side of the warp and each supporting a series of threads of different colours or characters, pattern devices, mechanism intermediate of the thread-shifters and the pattern devices adapted to be operated by the said pattern devices and to be operated independently thereof, means for operating said mechanism independently of the pattern devices to shift the thread-shifters, a thread-carrier and means for reciprocating it across the warp, substantially as described. 13th. In a loom, the com-

bination of one or more thread-shifters arranged one on each side of the warps, mechanism for shifting the thread-shifters to present a proper thread to the thread-carrier, a primary pattern-belt, a series of needles for engaging said belt, devices for elevating said needles out of engagement with said pattern-belt, mechanism intermediate of said needles and thread-shifter for shifting the latter, secondary or director pattern devices for regulating the movement of the primary pattern-belt, devices between the primary pattern devices and secondary pattern devices, and a thread-carrier and means for reciprocating it across the warp, substantially as described. 14th. In a loom, provided with one or more thread-shifters, a series of slides, mechanism between the slides and thread-shifters for shifting the latter to cause a proper thread to be presented to the thread-carrier, a primary pattern-belt, devices between the slides and pattern-belt for operating said slides, and director pattern devices for regulating the movement of said primary pattern-belt, a thread-carrier and means for reciprocating it across the warp, substantially as described. 15th. A loom, provided with one or more thread-shifters arranged one on each side of the warp and each supporting a series of threads of different colours or characters, primary pattern devices, mechanism intermediate of the thread-shifters and primary pattern devices, said mechanism adapted to be operated by said pattern devices and to be operated independently thereof, means for operating said intermediate mechanism independently of the primary pattern devices to shift the thread-shifters, director or secondary pattern devices, devices between the secondary and primary pattern devices whereby the movement of the latter is controlled by that of the former, a thread-carrier and means for reciprocating it across the warp, substantially as described. 16th. In a loom, the combination of the thread-shifters arranged one on each side of the warps, means for shifting the same to cause a proper thread to be presented to the thread-carrier, mechanism for moving the thread-shifters bodily to the edge of the warps, cutters arranged one on each side of the warp, a thread-carrier and means for reciprocating it across the warp, substantially as described. 17th. In a loom, the combination of the thread-shifters, arranged on one side of the warp, means for shifting the same to cause a proper thread to be presented to the thread-carrier, mechanism for moving the thread-shifters when in their shifted position bodily to the edge of the warp, means for returning the thread-shifters from their shifted to their initial positions, cutters on each side of the warp, a thread-carrier and means for reciprocating it across the warp, substantially as described. 18th. In a loom, the combination of the thread-shifters arranged one on each side of the warp, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, means for moving said thread-shifters alternately toward the edge of the warp, cutters arranged on each side of the warp, means for alternately operating said cutters, a thread-carrier and means for reciprocating it across the warp, substantially as described. 19th. In a loom, the combination of the thread-shifters arranged one on each side of the warp, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, means for moving the thread-shifters toward the edge of the warp, cutters arranged on each side of the warp, a lathe and mechanism for reciprocating it toward the cutters, a thread-carrier carried upon the lathe, and means for reciprocating it across the warp, substantially as described. 20th. A loom provided with one or more thread-shifters arranged one on each side of the warp, guides on the thread-shifters extending upon each side of the thread for preventing the deflection thereof, a thread-carrier having grippers adapted to be thrust between said guides to grip the thread, and means for reciprocating the thread-carrier across the warp, substantially as described. 21st. In a loom, the combination of the thread-carrier, the gripper-jaws thereon which normally rest together, a depressing-plate also carried upon the thread-carrier and connected between the depressing-plate and gripper-jaws whereby said jaws are forced apart when the depressing-plate is depressed, and means for depressing said plate as the thread-carrier reaches a terminal of its movement, substantially as described. 22nd. In a loom, provided with one or more thread-shifters arranged one on each side of the warp, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, guides on the thread-shifters extending upon each side of the thread for preventing the deflection of the thread to insure it being gripped by the grippers of the thread-carrier, a thread-carrier having grippers adapted to be thrust between said guides to grip the thread, means for opening and closing the grippers and means for reciprocating the thread-carrier across the warp, substantially as described. 23rd. A loom, provided with one or more thread-shifters, a cross-plate and devices between the cross-plate and thread-shifters, a series of independently-movable slides, each provided with a vertical arm for engaging said cross-plate, and with a lug, a reciprocating cross-head for engaging said lugs, means for reciprocating said cross-head, and pattern controlled mechanism for lifting said slides into position to be engaged by the said cross-head, substantially as described. 24th. In a loom, the combination of the thread-shifters, arranged one on each side of the warp, a cross-plate, devices for connecting the cross-plate with the thread-shifters, pattern devices, a series of independently-movable slides adapted to engage the cross-plate, a reciprocating cross-head and means for moving the same, and a series of jacks and needles engaging the slides and pattern-belt of the pattern devices respectively, substantially as described. 25th. In a loom, the combination of one or more thread-shifters, arranged one on each side of the warp,

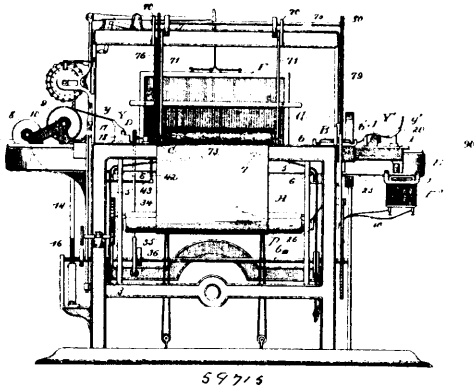


a series of slides capable of independent vertical and horizontal movement, and mechanism between the slides and thread-shifters for moving the latter by the horizontal movement of the former, a pattern-belt, devices between the slides and pattern-belt for elevating the slides, and mechanism for imparting a horizontal movement thereto, substantially as described. 26th. A loom, provided with one or more thread-shifters, arranged one on each side of the warp, pattern devices, mechanism between the pattern devices and thread-shifter for shifting the latter, and devices independent of the shifting mechanism of the thread-shifters for returning said thread-shifters from their shifted to their normal position, substantially as described. 27th. In a loom, provided with one or more thread-shifters, a series of independently-movable slides arranged below the same, devices between the slides and thread-shifter for shifting the latter, pattern devices, a cross-head and means for reciprocating the same, and mechanism between the pattern devices and slides for lifting said slides into the path of movement of the cross-head, substantially as described. 28th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, a series of independently-movable slides, a cross-plate adapted to be acted upon by any one of said series of slides, devices between the cross-plate and thread-shifters, a reciprocating cross-head adapted to move said slides, means for reciprocating said cross-head and pattern devices for throwing the slides into engagement with the reciprocating cross-head, substantially as described. 29th. In a loom, the combination of the thread-shifters, arranged one on each side of the warp, the cross-plate, and devices between the cross-plate and thread-shifters, a series of slides capable of vertical and horizontal movement, mechanism for moving said slides vertically, a reciprocating cross-head for moving said slides horizontally, and means for reciprocating said cross-head, substantially as described. 30th. A loom, provided with a thread-shifter, a series of slides, each slide being capable of vertical and horizontal movement independent of the others, only one of the slides being movable at the same time, devices intermediate the thread-shifter and said slides adapted to be engaged by the latter to actuate the thread-shifter, and mechanism for moving said slides vertically and horizontally, substantially as described. 31st. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, mechanism for shifting the thread-shifters to cause a proper thread to be presented to the thread-carrier, means for locking the thread-shifters in their shifted positions for a predetermined time and for releasing them at the end of such period, a thread-carrier, and means for reciprocating it across the warp, substantially as described. 32nd. In a loom, the combination of the thread-shifters arranged one on each side of the warp, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, means for locking the thread-shifters in their shifted positions for a predetermined time and for releasing them at the end of such period, cutters arranged on each side of the warp, a thread-carrier, and means for reciprocating it across the warp, substantially as described. 33rd. In a loom, the combination of the thread-shifters arranged one on each side of the warp, mechanism for shifting the same to cause a proper thread to be presented to the thread-carrier, means for locking the thread-shifters in their shifted position for a predetermined time and means for releasing them at the end of such period, devices for moving the thread-shifters to the edge of the warp, cutters arranged on each side of the warp, a thread-carrier, and means for reciprocating it across the warp, substantially as described. 34th. In a loom, the combination of one or more thread-shifters, a perforated primary pattern-belt, a plurality of needles, means for throwing said needles into engagement with the perforations of said belt, devices for elevating said needles above the primary pattern-belt at regular intervals, mechanism between the needles and the thread-shifters, director pattern devices adapted to control the movement of the primary pattern-belt whereby the shifting mechanism of the thread-shifter is caused to continue shifting the thread-shifters to one position in order that a thread of one colour or character may be repeatedly fed to the thread-carrier, and to throw the primary pattern-belt into movement when it is desired to change the colour or character of the thread, a thread-carrier, and means for reciprocating it across the warp, substantially as described. 35th. In a loom, the combination of one or more rotary reciprocating thread-shifters arranged one on each side of the warp, mechanism for shifting said thread shifter or shifters to cause a proper thread to be presented to the thread-carrier, the springs for returning said shifters from their shifted to their normal positions, a thread-carrier and means for reciprocating it across the warp, substantially as described. 36th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, mechanism for shifting the thread-shifter or shifters to cause a proper thread to be presented to the thread-carrier, means for locking the thread-shifters for a predetermined time when the desired thread has been brought in position to be gripped by the thread-carrier and for retaining the thread-shifters in their shifted position until the thread-carrier has travelled to the opposite side of the warp, a thread-carrier and means for reciprocating it across the warp, substantially as described. 37th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, mechanism for shifting the thread-shifters to cause a proper thread to be presented to the thread-carrier, means for locking the thread-shifters when the desired thread has been brought to a position to be gripped by the thread-carrier and for retaining the thread-shifters in their

shifted position while the thread-carrier is travelling to the opposite side of the warp, devices for releasing the thread-shifters at the end of such period, means for returning them from their shifted to their normal position, a thread-carrier and means for reciprocating it across the warp, substantially as described. 38th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, a series of independently movable slides, provided with the lugs 16 and 18, devices between the slides and thread-shifters adapted to be acted upon by any one of said series of slides, mechanism adapted to engage the lugs of the slides to reciprocate the same, and pattern-controlled mechanism for throwing said slides into position for the lugs thereof to be engaged by their reciprocating mechanism, substantially as described. 39th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, each provided at its under side with teeth, means for shifting the thread-shifters to cause a proper thread to be presented to the thread-carrier, a spring-pressed pawl for engaging the teeth of the thread-shifter to hold it against rearward movement, devices for releasing said pawl from engagement with the teeth of the thread-shifter at a predetermined time, means for returning the thread-shifter to its normal position, a thread-carrier and means for reciprocating it across the warp, substantially as described. 40th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, primary pattern devices, secondary pattern devices, intermediate mechanism between the thread-shifters and primary pattern devices, a needle-bar for engaging said secondary pattern devices, means for reciprocating said needle-bar, and devices between the needle-bar and primary pattern devices whereby the operation of the primary pattern device is controlled, substantially as described. 41st. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, a primary pattern belt, provided with a parallel series of perforations, mechanism between the primary pattern-belt and thread-shifters, a director pattern-belt, provided with a single series of perforations, a needle-bar for engaging the director pattern-belt, means for reciprocating said needle-bar, and intermediate devices between the said needle-bar and primary pattern-belt whereby the movement of the latter is controlled by the former, substantially as described. 42nd. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, a series of independently-movable slides provided with lugs 16 and 18, the lugs on each side being of different relative distances apart, devices between the slides and thread-shifters adapted to be acted upon by any one of said series of slides, mechanism adapted to engage the lugs of the slides to reciprocate the same, and pattern-controlled mechanism for throwing said slides into position for the lugs thereof to be engaged by their reciprocating mechanism, substantially as described. 43rd. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, a perforated primary pattern-belt, a plurality of needles adapted to engage the perforations of the primary pattern-belt, a plurality of needles adapted to engage the primary pattern-belt, means for moving said needles into engagement with the perforations of the primary pattern-belt, devices for elevating said needles above the primary pattern-belt at regular intervals, means for imparting a step-by-step progressive movement to the primary pattern-belt, intermediate mechanism between the needles and the thread-shifters, a director pattern-belt and means for imparting a continuous step-by-step progressive movement thereto, and devices under the control of the director pattern-belt whereby the progressive movement of the primary pattern-belt may be arrested or continued as desired, substantially as described. 44th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, primary pattern devices for controlling the movement thereof, devices intermediate of the thread-shifters and primary pattern devices a director pattern-belt, the swinging frame N, carrying the pawls 73 and 56, means for swinging said frame, the ratchet wheels 74 and 57, the plate 58, for elevating the pawls 56, the needle-bar 52, adapted to engage the director pattern-belt means for reciprocating said needle-bar, the slide 53 for lifting the pawl 73 out of engagement with the ratchet 74, and the link 55 connecting the needle-bar 52 and the slide 53, substantially as described. 45th. In a loom, the combination of one or more thread-shifters arranged one on each side of the warp, means for shifting the same to cause a proper thread to be presented to the thread-carrier, a thread-carrier having thread-grippers, and a depressing plate for opening said grippers, means for reciprocating the thread-carrier across the warp, the arm 88, the slide 89 connected to said arm and having an L-shaped slot therein, the lever 91 carrying a pin for engaging said slot, the spring 94, and means for imparting a reciprocating movement to the lever 91, substantially as described. 46th. In a loom, the combination of the thread-carrier, consisting of the gripper-jaws S, S', normally resting together, the arms 86 pivoted in the thread-carrier and carrying tapering pins adapted to be forced between the opposing faces of the gripper-jaws S, S', to open the same, a depressing-plate 87 on the thread-carrier for depressing said arms, devices for engaging the depressing-plate to open the gripper jaws of the thread-carrier and devices for closing the jaws, substantially as described. 47th. The combination with the primary and director pattern devices, a bar for engaging the director pattern devices, means for positively lifting said bar from engagement with the said director pattern devices at regular intervals, devices intermediate the bar and the primary pattern

devices whereby the operation of said primary pattern devices may be suspended or continued, substantially as described. 48th. The combination with the primary and director pattern-cylinders and their attached ratchet-wheels, of the swinging frame, pawls carried by the swinging frame for engaging the ratchet wheels of the director and primary pattern-cylinders respectively, a reciprocating slide, and a link connecting the slide and reciprocating bar whereby the slide is projected beneath or withdrawn from beneath the pawl of the primary ratchet-wheel, substantially as described.

**No. 59,715. Loom. (Métier à tisser.)**



William Weaver, Norwalk, Connecticut, U.S.A., 22nd April, 1898; 6 years. (Filed 28th January, 1898.)

*Claim.*—1st. In a loom, the combination of a thread-carrier, means for reciprocating it across the warp and mechanism for automatically and positively feeding the thread as the thread-carrier travels across the warp, substantially as described. 2nd. In a loom, the combination of the thread-carrier, means for reciprocating it across the warp, mechanism for automatically and positively feeding the thread at the same rate of speed as that at which it is carried by the thread-carrier, substantially as described. 3rd. In a loom, the combination of a thread-carrier, means for reciprocating it across the warp, mechanism for automatically and positively feeding the thread as thread-carrier travels across the warp, and a cutting device arranged on one side of the warp adjacent to the feeding-mechanism, substantially as described. 4th. In a loom, the combination of a thread-carrier, and its reciprocating mechanism, an electric motor for driving said reciprocating mechanism and devices for automatically throwing said motor into and out of operation at a predetermined time, substantially as described. 5th. In a loom, the combination of a thread-carrier and its reciprocating mechanism, an electric motor for driving said mechanism, and devices for throwing said motor out of operation as the thread-carrier reaches the terminal of its movement, and for throwing it into operation to move the thread-carrier across the warp, substantially as described. 6th. In a loom, the combination of a lathe, means for imparting an oscillating movement thereto, a thread carrier supported on the lathe, mechanism for reciprocating the thread-carrier across the lathe, a motor for driving the reciprocating mechanism of the thread-carrier and devices for throwing the motor out of operation at each forward movement of the lathe and for throwing it into operation when the lathe returns to its normal position, substantially as described. 7th. In a loom, the combination of a lathe, means for imparting an oscillating movement thereto, a thread-carrier carried upon the lathe, an electric motor also carried upon the lathe and devices intermediate of the thread-carrier and motor operated by the latter for reciprocating the thread-carrier, substantially as described. 8th. In a loom, the combination of a thread-carrier, means for reciprocating it across the warp-threads, a take up wheel at one side of the warp threads, means for rotating the take-up wheel in one direction to pay off the weft-thread as the thread-carrier travels across the warp-threads to the opposite side thereof, and for rotating it in the opposite direction to draw the end of the thread released by the thread-carrier to the edge of the warps, substantially as described. 9th. In a loom, the combination of a thread-carrier, means for reciprocating it across the warp-threads, a selvage shuttle arranged at one side of the warp-threads for feeding a shuttle-thread through a loop in the weft-thread, a take-up wheel at the opposite side of the warp, means for rotating the take up wheel in one direction to pay off the weft-thread as the thread-carrier travels across the warp-threads and for rotating it in the opposite direction to draw the loop of the weft-thread to the edge of the warp after the shuttle-thread has been fed there-through, substantially as described. 10th. In a loom, the combination with a thread-carrier, and means for reciprocating it across the warp-threads, of suitable feeding devices at one side of the warp-threads adapted to feed a filling strip to the thread-carrier, a selvage shuttle and cutting device, arranged intermediate the feeding devices and the edge of the warp, and feeding and take-up mechanism arranged at the opposite side of the warp, substantially as described.

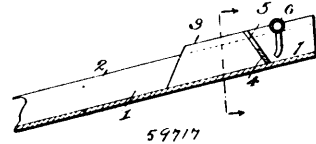
**No. 59,716. Process of Precipitating Precious Metals.**

(*Procédé de précipitation des métaux.*)

Max Netto, Almazarron, Spain, 22nd April, 1898; 6 years. (Filed 23rd August, 1897.)

*Claim.*—1st. The process herein described of precipitating silver and gold from their alkali cyanid solutions, which consists in acidulating the alkali cyanid solution containing said metals by hydrochloric acid so as to precipitate silver chlorid, separating the precipitated silver chlorid by filtration from the solution, and subjecting the acid filtrate to the action of an electric current so as to deposit the gold on the cathode, substantially as set forth. 2nd. The process herein described of precipitating silver and gold from their alkali cyanid solutions, which consists in acidulating the alkali cyanids solution containing said metals with hydrochloric acid so as to precipitate silver chlorid by filtration, subjecting the acid filtrate to the action of the electric current so as to deposit the gold on the cathode, and regenerating the cyanid solution by the addition of caustic alkali, substantially as set forth.

**No. 59,717. Ore Separator. (Séparateur de minerai.)**

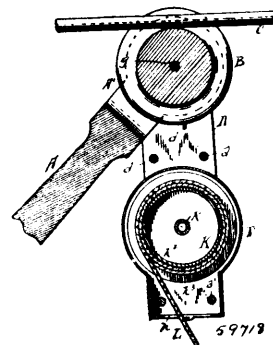


Bruse F. House, Denver, Colorado, U.S.A., 22nd April, 1898; 6 years. (Filed 15th October, 1897.)

*Claim.*—1st. The herein described process which consists in admitting ammoniated air below the surface of water or pulp for the purpose of precipitating the ore held therein in the manner and for the purpose herein set forth. 2nd. The herein described process for separating ores from arsenic which consists in bringing said ores and arsenic in the presence of ammoniated air, in the manner and for the purpose herein set forth. 3rd. The herein described process of precipitating ores held in suspension by air bubbles, which consists in bringing said ores into the presence of ammoniated air, in the manner and for the purpose herein set forth. 4th. The herein described process which consists in forcing ammoniated air into a stream of water or pulp in which ores containing arsenic are held in suspension, in the manner and for the purpose herein set forth.

**No. 59,718. Trolley Catcher.**

(*Appareil à actionner les trollees.*)

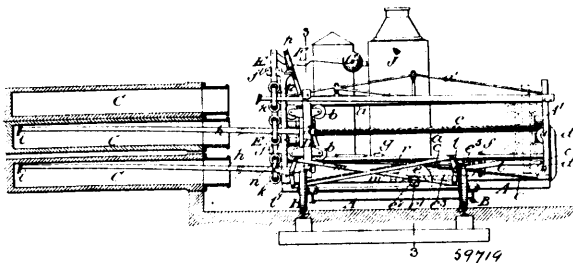


Orville R. Sackett, Niagara Falls, New York, U.S.A., 22nd April, 1898; 6 years. (Filed 15th September, 1897.)

*Claim.*—1st. The combination with a trolley-pole of a supporting-frame pivotally suspended from the trolley-pole, a spring drum journaled in said frame, a restraining-rope or cord wound on said drum, a trolley-wheel yieldingly journaled in said frame, and a lock or stop adapted to engage with said drum, and controlled by the movable trolley-wheel, substantially as set forth. 2nd. The combination with the trolley-pole having openings or bearings in its head, of a supporting frame having trunnions journaled in said bearings, a trolley-wheel supported in yielding bearings guided on said frame, a spring drum journaled in said frame, a restraining-rope or cord wound upon said drum, and a lock or stop for said drum controlled by the movable trolley-wheel, substantially as set forth. 3rd. The combination with a trolley-pole having openings or bearings in its head, of a supporting-frame having trunnions journaled in said bearings, and provided with guide slots, a trolley-wheel having bearings which slide in said slots, a spring drum journaled in said frame and having a restraining cord wound thereon, and a lock or stop for said drum controlled by the movable trolley-wheel, substantially as set forth. 4th. The combination with a trolley-pole, and a supporting frame attached thereto, of a trolley-wheel

mounted in movable bearings guided on said frame, a spring drum journaled in said frame below the trolley-wheel and having locking-teeth, a restraining cord wound upon said drum and a rod or extension connected with one of the bearings of the trolley-wheel and having a stop or projection adapted to interlock with the teeth of the spring drum, substantially as set forth. 5th. The combination with a trolley-pole and a supporting-frame attached thereto, and provided in opposite sides with upright pockets, of a trolley-wheel, journaled in vertically-movable bearings guided in said frame and provided with depending rods or extensions which slide in the pockets of the frame, springs arranged in the pockets and acting to raise said rods and bearings, a spring drum journaled in said frame below the trolley-wheel, and having locking-teeth, a restraining cord wound upon the drum, and a locking-pin or stop arranged on one of said bearing rods or extensions, and adapted to interlock with the teeth of said drum, substantially as set forth. 6th. The combination with a trolley-pole and a supporting-frame attached thereto, and provided in opposite sides with upright pockets, of a trolley-wheel, journaled in vertically-movable bearings guided in said frame and provided with depending rods or extensions which slides in the pockets of the frame, springs arranged in said pockets, and acting to raise said rods and bearings, a spring drum journaled in said frame below the trolley-wheel and having locking-teeth, a restraining cord wound upon the drum, a casing inclosing said drum, and having a slot for the passage of said cord, and a locking pin or stop arranged on one of said bearing rods or extensions and adapted to interlock with the teeth of said drum, substantially as set forth.

**No. 59,719. Gas-Retort Discharging Machinery.**  
(Machine pour la décharge des cornues à gaz.)

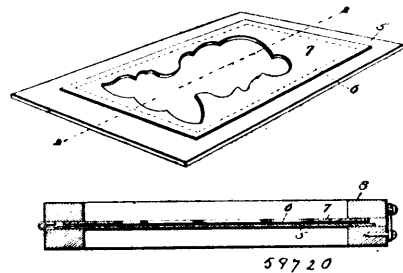


Gaston Aloysius Bronder, New York City, U.S.A., 22nd April, 1898; 6 years. (Filed 9th December, 1897.)

*Claim.*—1st. In a machine for discharging gas-retorts, the combination of a rake-lifting bar and a counter-balance lever from which said bar is suspended, and the fulcrum of which is movable with the rake, substantially as herein described. 2nd. In a machine for discharging gas-retorts, the combination of a rake, a rake-carrier, a rake-lifting bar, a counterbalance lever from which said bar is suspended, and the fulcrum of which is movable, mechanism for moving the said carrier towards and from the retorts, mechanism for moving the said fulcrum, and a connection between the carrier-moving mechanism and fulcrum-moving mechanism whereby the said two mechanisms operate together for the shifting of the said fulcrum with the backward and forward movement of the rake-carrier, substantially as herein described. 3rd. In a machine for discharging gas-retorts, the combination of a carriage, two or more rakes, a carrier for said rakes, and means for moving said carrier backward and forward on said carriage, a lifting-bar on said carriage common to the several rakes, a counterbalance lever from which said lifting-bar is suspended and the fulcrum of which is movable, mechanism for moving the said fulcrum, means for connecting said rakes with the said carrier and carriage whereby one or more of them may be moved with the carrier while the other or others are held stationary on the carriage, and a detachable connection between the fulcrum-moving mechanism and the carrier-moving mechanism, all substantially as and for the purpose herein described. 4th. The combination with the rake-lifting bar, the main frame or carriage, and the counterbalance lever connected at one end with said bar, of a lever, as H, having its fulcrum on the main frame or carriage and carrying the fulcrum p, of the counterbalance lever, and the swinging links s s by which the latter lever is connected with its fulcrum, substantially as herein described. 5th. The combination of the rake-lifting bar, the main frame or carriage, the counterbalance lever connected at one end with said bar and having a movable fulcrum supported on said frame or carriage, and a guide for said bar consisting of rollers pivoted in the frame or carriage in front of and behind the said bar to receive the lateral thrust of said bar, substantially as herein described. 6th. The combination with the rake-carrier and the mechanism for moving the same, of a piston connected with said mechanism, and a hydraulic cylinder in which said piston works, and between the ends of which, on opposite sides of the piston, there is a passage with ports at such different distances from the cylinder heads as to be successively closed by the piston in its movement for the purpose of gradually arresting the movements of the rake-carrier and rakes in either direction, substantially as herein described. 7th. The combination with the rake-carrier and

the mechanism for moving the same, of a piston connected with said mechanism, and a hydraulic cylinder in which said piston works, and between the ends of which, on opposite sides of the piston, there is a passage with several ports at each end, the said cylinder being counterbored at each end, the several ports being at different distances from the cylinder heads, the ports nearest the cylinder heads being within the counterbore and the other ports being within the range of the piston to be successively closed thereby, substantially as herein described.

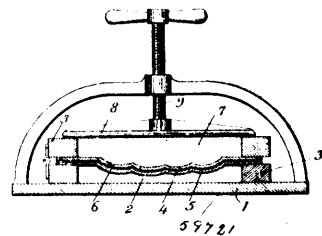
**No. 59,720. Art of Embossing.**  
(Art de bosselage.)



Duran F. Hulbert, St. Louis, Missouri, U.S.A., 22nd April, 1898; 6 years. (Filed 14th June, 1897.)

*Claim.*—1st. The improvement in the art of embossing, which consists of taking a pliable non-elastic malleable metal mount, such as lead, having a picture or design upon one of its faces and embossing said mount and said picture or design, substantially as specified. The improvement in the art of embossing, which consists of taking a pliable non-elastic malleable metal mount, such as lead, having a picture or design upon one of its faces and embossing said mount and said picture or design and filling the depressions upon the back of said mount with a plastic material which will harden when cold or dry, substantially as specified. 3rd. As an article of manufacture a pliable non-elastic malleable metal mount, such as lead, having a picture or design upon one of its faces and being embossed as outlined by said picture or design, substantially as specified.

**No. 59,721. Art of and Apparatus for Embossing.**  
(Art et appareil de bosselage.)



Duran F. Hulbert, St. Louis, Missouri, U.S.A., 22nd April, 1898; 6 years. (Filed 14th June, 1897.)

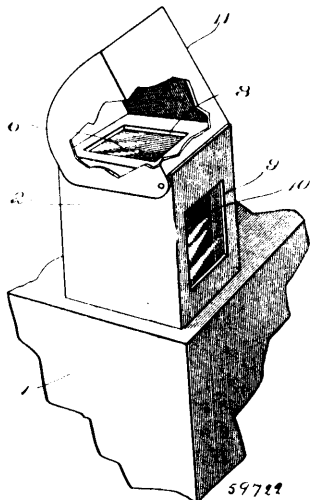
*Claim.*—1st. The improvement in the art of embossing, which consists of taking a malleable metal plate having a picture or design upon one of its sides, embossing said picture or design with embossing tools and thus producing a pattern, placing plastic material against one side of said pattern and allowing said material to harden thus producing a form or die, placing a second malleable metal plate against the first plate and pressing said plate firmly into the indentations of the first plate thus producing a second pattern, placing plastic material against one side of said second pattern and allowing said material to harden, thus producing a second form or die, placing the copy to be embossed between said forms or dies and pressing said forms firmly together, substantially as specified. 2nd. In an apparatus or device for embossing photographs and the like, an embossing die or form consisting of a malleable metal plate having a picture or design upon one of its sides, said plate being embossed to form a pattern, said pattern being outlined or indicated by said picture or design and said plate being backed by a mass of hardened plastic material and an embossing die or form consisting of a malleable metal plate adapted to be pressed firmly against the first-mentioned malleable metal plate and backed by a mass of hardened plastic material, substantially as specified.

**No. 59,722. Finder for Photographic Cameras.**  
(Chercheur pour cameras.)

Alfred C. Mercer, Syracuse, New York, U.S.A., 22nd April, 1898; 6 years. (Filed 29th November, 1897.)

*Claim.*—1st. A photographic finder comprising a casing having a front opening and a top opening, and a triangular glass prism sup-

ported back of the said front opening and below the said top opening, the said prism having two internally-reflecting faces, one of which



faces not only transmits at one point in its path the ray or pencil of light that passes from the object or view through the finder to the eye, but also totally reflects at another point in its path, the said ray or pencil of light, the said ray having been reflected intermediately from the other of the said faces. 2nd. A photographic finder comprising a casing having a front opening and a top opening, a triangular glass prism supported back of the said front opening and below the said top opening, the said prism having two internally-reflecting faces one of which faces not only transmits at one point in its path the ray or pencil of light that passes from the object or view through the finder to the eye, but also totally reflects at another point in its path the said ray or pencil of light, the said ray having been reflected intermediately from the other of the said faces, and two contours, one bounding the said front opening in the said casing, and the other bounding the said top opening in the same, the said contours being so proportioned as visually to coincide when the eyes are located correctly in using the finder. 3rd. A photographic finder comprising a casing having a front opening and a top opening, a negative lens supported in the said front opening and a triangular glass prism supported back of the said front opening and below the said top opening, the said prism having two internally-reflecting faces one of which faces not only transmits at one point in its path, the ray or pencil of light that passes from the object or view through the finder to the eye, but also totally reflects at another point in its path, the said ray or pencil of light, the said ray having been reflected intermediately from the other of the said faces, the said prism also having an emitting face through which the said ray of light passes obliquely to the eye, and a black screen supported above and in front of the said emitting face at such an angle that it alone is reflected to the eye by the said emitting face. 5th. A photographic finder, comprising a casing having a front opening and a top opening, a negative lens supported in the said front opening, a triangular glass prism supported back of the said front opening and below the said top opening, the said prism having two internally-reflecting faces one of which faces not only transmits at one point in its path, the ray or pencil of light that passes from the object or view through the finder to the eye, but also totally reflects at another point in its path, the said ray or pencil of light, the said ray having been reflected intermediately from the other of the said faces, the said prism having also an emitting face through which the said ray of light passes obliquely to the eye, and a black screen supported above and in front of the said emitting face at such an angle that it alone is reflected to the eye, by the said emitting face, and two contours, one bounding the said front opening in the said casing and the other bounding the said top opening in the same, the said contours being so proportioned as visually to coincide when the eyes are located correctly in using the finder. 6th. In a finder, a prism having a final-emitting surface oblique to the emitted pencil or ray of light, in combination with a screen so placed and sized as alone to be reflected to the eye by said surface. 7th. A finder having two separated contours proportioned and placed to coincide visually when the eyes are located correctly in using the finder, the image at such time corresponding in extent with the picture being photographed.

**No. 59,723. Method of Producing Embossed Photography.** (*Méthode pour la production de photographie en relief.*)

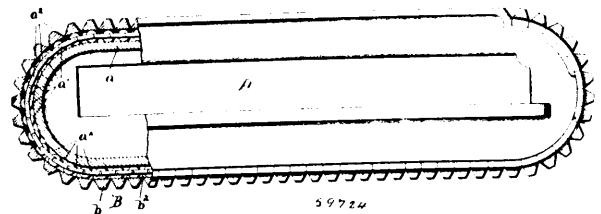


Freeman Augustus Taber, San Francisco, California, U.S.A., 22nd April, 1898; 6 years. (Filed 15th March, 1897.)

*Claim.*—The method herein described of producing an embossed photograph, consisting in forming an embossing mould, forming a transparency the counterpart of the prints, providing a frame to fit the transparency, securing the frame rigidly to the mould so that the transparency within the frame registers with the mould, trimming the prints so that when they register or rest against the frame the prints will coincide with the mould, placing the prints within the frame and pressing the print into the mould to emboss the same, substantially as described.

**No. 59,724. Boat Propelling Mechanism.**

(*Mécanisme pour la propulsion des vaisseaux.*)

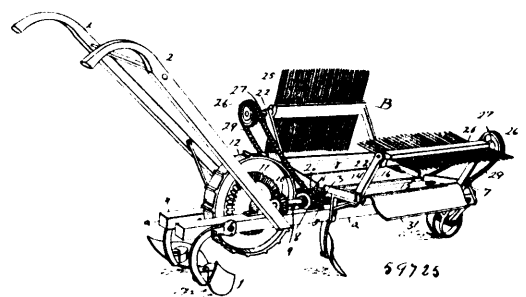


Harlow Miner Welsh, Cowansville, Quebec, Canada, 22nd April, 1898; 6 years. (Filed 12th February, 1898.)

*Claim.*—Boat propelling mechanism, comprising a boat having a race-way, rollers flexibly connected together to form an endless roller-bearing about said race-way, a series of floats flexibly connected together and adapted to move on said endless roller-bearing, and means for moving said floats.

**No. 59,725. Potato Bug Exterminator.**

(*Exterminateur de mouches à patates.*)



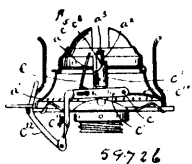
Charles D. Loomis, Austerlitz, New York, U.S.A., 22nd April, 1898; 6 years. (Filed 4th January, 1898.)

*Claim.*—1st. A potato-bug exterminator, with cultivator attachment, comprising a frame, rolls having their faces substantially in contact, brushes journaled in supports on said frame, substantially as described. 2nd. A potato-bug exterminator, with attachment for cultivators, comprising a frame, rolls journaled in said frame, a hopper above said rolls, and brushes journaled above said hopper for collecting vermin from vines and depositing the same upon the hopper, said collecting mechanism being carried by plates laterally adjustable upon said hopper, substantially as described. 3rd. A

potato-bug exterminator, with attachment for cultivators, comprising a frame, rolls journaled in said frame, a hopper above said rolls, said hopper having plates laterally adjustable thereon, and collectors for the vermin carried by said plates, substantially as described. 4th. A potato-bug exterminator, with attachment for cultivators, comprising a frame, rolls journaled in the frame, a hopper, collectors for the vermin carried by plates within the hopper and operating over the edges of said hopper, and aprons extending from the edges of the hopper over which the collectors operate, substantially as described. 5th. In a potato-bug exterminator, with cultivator attachment, a frame composed of beams having a space between them, a roll journaled upon each of said beams, said rolls having their faces in contact or approximately so at a point over the space between the beams, one of said rolls being yieldingly located, the other of said rolls having its shaft extended and provided at its end with a gear, a wheel journaled to rotate in the space between the beams, said wheel being provided with a gear in mesh with the gear upon the roll-shaft, gears between the rolls, brushes journaled in suitable supports upon the frame, sprockets upon said brushes, sprockets upon the shaft of the fixed roll, and chains connecting the sprockets, a hopper having plates adjustable laterally, and collectors for the vermin carried by said plates, substantially as described.

**No. 59,726. Lamp Burner and Extinguisher.**

(*Bec et éteignoir de lampes.*)



George H. Straight, Allenton, Rhode Island, U.S.A., 22nd April, 1898; 6 years. (Filed 12th February, 1898.)

*Claim.*—1st. In a lamp extinguisher, the combination with a lamp burner proper, of a sliding tube surrounding the wick tube, a pivoted plate connected to said sliding tube so as to move therewith, means for said tube and plate upward so as to cause the latter to close over the top of the former to cut off the supply of air thereto, and a catch for holding said tube adapted to be engaged and held down by the chimney, substantially as described. 2nd. In a lamp extinguisher, the combination with a lamp burner, of a sliding tube mounted upon the wick tube, a pivoted plate connected to said sliding tube so as to move therewith and having a lip at its upper end adapted to lap over and close the upper end of the sliding tube when the tube and plate are forced upward, a spring forcing said tube and plate upward to bring together above the wick-tube, and a pivoted catch adapted to hold said tube and plate down against the tension of the spring and be engaged by the lamp chimney so that upon the latter being tipped or moved said catch will be released, substantially as described. 3rd. In a lamp extinguisher, the combination with a lamp burner proper, of an extinguishing device connected to the wick tube, a pivoted catch connected to said extinguishing device for holding the same normally down out of the way, a shoulder formed on said catch and adapted to normally engage the under side of the lamp-ring, and a lateral arm also mounted on said catch, and adapted to be engaged by the chimney when the latter is in position, the construction being such that the pivoted catch is disengaged from the lamp-ring upon the application of the chimney and held from rising by the latter, substantially as described. 4th. In a lamp extinguisher, the combination with a lamp burner proper, of a yoke pivotally mounted in the same, a spring connecting said yoke and the burner for normally forcing the former upward, a tube surrounding the wick-tube and connected to said yoke and projecting through the top of the perforated burner-plate, and a pivoted catch connected to said yoke, and adapted to be held down by the lamp chimney, so that when the latter is removed said catch will be released to permit the tube to rise, and come together before the wick tube to extinguish the blaze, substantially as described. 5th. In a lamp extinguisher, the combination with a burner proper of a spring-pressed yoke pivoted in the same and provided with elongated slots, a tube adapted to surround the wick-tube, and provided with apertured arms, an extinguishing plate adapted to project through the top of the perforated burner plate and provided with laterally projecting pins that pass through the apertured arms of the tube and enter the elongated slots of the yoke, a catch pivotally mounted on said yoke, and provided with a shoulder adapted to engage the underside of the burner ring, and so constructed as to be normally held down by the lamp-chimney, substantially as described.

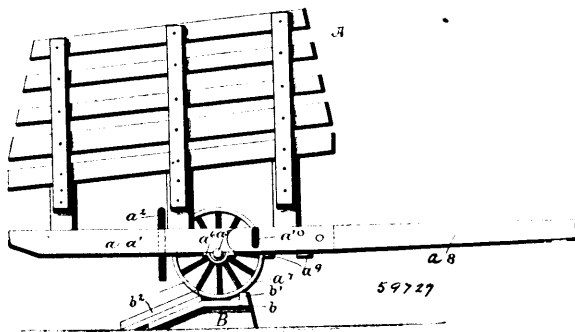
**No. 59,727. Horse Power Attachment.**

(*Attache de manège.*)

Charles Alphonse Julien, Point Rouge, Quebec, Canada, 22nd April, 1898; 6 years. (Filed 2nd February, 1898.)

*Claim.*—1st. The combination with a horse power, of an axle and wheels removably connected therewith centrally of its length, and a supplemental axle and wheels secured to said horse power in

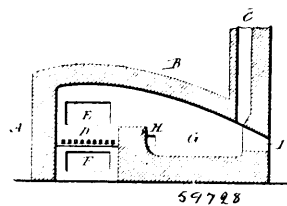
front of said axle and wheels, said supplemental axle and wheels serving to release said axle, substantially as described. 2nd. A



support for horse powers, comprising a platform, an upwardly extending flange secured to the front edge thereof, and inclined runways extending rearwardly therefrom, substantially as described.

**No. 59,728. Art of Refining Precious Metals.**

(*Art de raffiner les métaux.*)

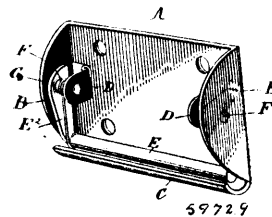


Franklin Reuben Carpenter, Deadwood, South Dakota, U.S.A., 22nd April, 1898; 6 years. (Filed 10th January, 1898.)

*Claim.*—1st. The hereinbefore described improvement in the art of concentrating the precious metals in and separating them from metallic copper, which improvement consists in subjecting melted copper containing precious metals to an oxidizing atmosphere acting on its surface, thereby forming an oxide of copper, and discharging it in a liquid state from the furnace, leaving the precious metals behind. 2nd. The hereinbefore described improvement in the art of concentrating the precious metals in and separating them from metallic copper, which improvement consists in subjecting melted copper containing precious metals to an oxidizing atmosphere acting on its surface in the presence of silica, and discharging the resulting silicate in a molten state from the furnace, leaving the precious metals behind.

**No. 59,729. Handle for Trunks, Boxes, etc.**

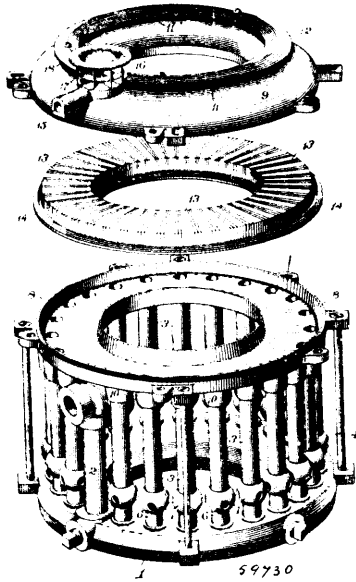
(*Poignée pour coffres, boîtes etc.*)



James O'Neill, Gem, Idaho, U.S.A., 22nd April, 1898; 6 years. (Filed 28th January, 1898.)

*Claim.*—1st. A handle comprising a plate having end flanges and the handle proper pivoted between said end flanges, substantially as shown and described. 2nd. A handle comprising a plate having end and bottom flanges and a handle proper pivoted between the end flanges and adapted to normally rest in the bottom flange, substantially as shown and described. 3rd. The combination with the plate having end flanges and parallel ears struck up from the body of the plate and the handle proper pivoted between said flanges and ears, substantially as shown and described. 4th. The combination with a plate having end and bottom flanges and ears parallel with the end flanges, the handle pivoted between the ears and flanges and the spring attached to handle and bearing upon the plate, substantially as shown and described.

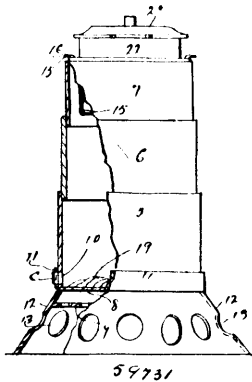
**No. 59,730. Gas Burner. (Bec de gaz.)**



August Buerkle, Troy Hill, Allegheny, Pennsylvania, U.S.A., 22nd April, 1898; 6 years. (Filed 14th February, 1898.)

*Claim.*—1st. A gas burner having in combination a gas receiving chamber, a series of mixing tubes connected to the receiving chamber, and a mixing chamber connected to the mixing tubes, the upper portion of the mixing chamber being contracted and having its side walls perforated, substantially as set forth. 2nd. A gas burner having in combination a gas receiving chamber, a series of mixing tubes connected to the receiving chamber, a mixing chamber connected to the mixing tubes, the upper portion of said chamber having its side walls perforated, and a hood projecting over the perforations, substantially as set forth. 3rd. A gas burner having in combination a gas receiving chamber, a series of mixing tubes connected to the receiving chamber, a mixing chamber connected to the mixing tubes and having its upper wall perforated for the escape of gas and air and a slitted diaphragm arranged in the mixing chamber, substantially as set forth. 4th. A gas burner having in combination a gas receiving chamber, a series of mixing tubes connected to the receiving chamber, a mixing chamber connected to the mixing tubes and having its upper wall perforated for the escape of gas and air and a diaphragm having slits arranged in sets and so located in the mixing chamber that the slits are at one side of the axes of the mixing tubes, substantially as set forth.

**No. 59,731. Smudge Stove. (Poêle à fumivor.)**



Henry Tevers, Quebec City, Canada, 22nd April, 1898; 6 years. (Filed 17th March, 1898.)

*Claim.*—1st. A smudge stove having a body composed of a number of telescoping sections so as to be collapsible, outlets for smudging purposes and containing a support for a vessel for heating food or the like, for the purpose set forth. 2nd. A smudge stove consisting of a cylindrical body portion, a perforated base, an intact bottom 8, a perforated false bottom 9, located beneath same and an air inlet 10 near the base of the cylindrical body portion, as set forth. 3rd. A smudge stove consisting of a body 5, 6, 7, a bottom 8, false bottom 9, ring 11, having opening 10, with curled edges c, base

12, perforated as at 13, basket 15, annulus 16, having openings 18, and turned down portion 17, a vessel 22, and a cover 20, with turned down portions 21, substantially as described and for the purpose set forth.

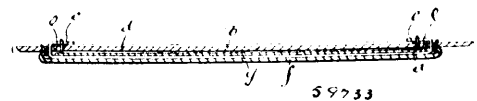
**No. 59,732. Process of Impregnating Milk etc., with Carbonic Acid. (Procédé pour impregner le lait etc., d'acide carbonique.)**

Dr. Fridrich W. H. Graeff, Berlin, Prussia, 22nd April, 1898; 6 years. (Filed 3rd December, 1897.)

*Claim.*—1st. The hereindescribed process of preserving milk or its constituent products, cream, skimmed milk, butter-milk, whey, etc., which consists in submitting the same in a closed vessel to motion by stirring, to heat and to a vacuum in order to completely evacuate the air contained therein, then cooling and finally admitting carbonic acid under pressure upon the milk in motion, said carbonic acid having been previously charged with suitable proportions of formic aldehyde by passing the same through a solution of formic aldehyde, substantially as described. 2nd. The hereindescribed process of preserving milk or its fluid products, (cream, skimmed milk, butter-milk, etc.), which consists in submitting the same in a closed vessel to motion by stirring, to heat and to a vacuum in order to completely evacuate the air contained therein, then cooling and finally admitting carbonic acid gas under pressure upon the milk in motion, substantially as described. 3rd. The herein described process of preserving milk or its fluid products, (cream, skimmed milk, butter-milk, etc.) which consists in submitting the same in a closed vessel to motion by stirring, and to a vacuum in order to completely evacuate the air contained therein, then cooling and finally admitting carbonic acid gas under pressure upon the milk in motion, substantially as described. 4th. The hereindescribed process of charging milk or its fluid products, (cream, skimmed milk, butter-milk, whey, etc.), with additions of flavor or medicinal effect, then submitting the same in a closed vessel to motion by stirring, to heat and to a vacuum in order to completely evacuate the air contained therein, then cooling and finally admitting carbonic acid gas under pressure upon the milk in motion, substantially as described. 5th. The hereindescribed process of preparing an effervescent drink from whey, which consists in separating the albumen from the whey, by heating and filtering, then submitting the same in a closed vessel to motion by stirring, to heat and to a vacuum in order to completely evacuate the air contained therein, then cooling and finally admitting carbonic acid gas under pressure upon the whey in motion, substantially as described. 6th. The hereindescribed process of reconverting milk and its constituent products into their original state after having been charged with carbonic acid as described, which consists in eliminating the carbonic acid by exhaust, substantially as set forth. 7th. The hereindescribed process of recovering milk and its constituent products into their original state after having been charged with carbonic acid by heating, substantially as described. 8th. A process of rendering the caseine in fresh milk or its fluid products apt to coagulate with equal parts of a suitable alcohol solution, which consists in submitting the same in a closed vessel to motion by stirring, to heat and to a vacuum in order to completely evacuate the air contained therein, then cooling and finally admitting carbonic acid under pressure upon the milk in motion, substantially as described.

**No. 59,733. Pocket Closing Device.**

(Appareil de fermeture de poches.)



John Moore, Montreal, Quebec, Canada, 22nd April, 1898; 6 years. (Filed 18th February, 1898.)

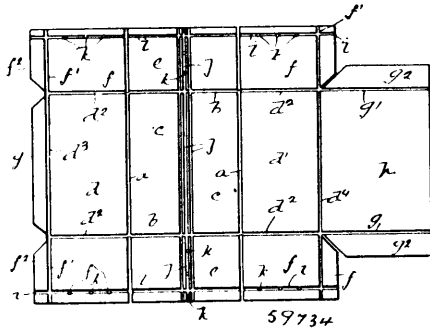
*Claim.*—1st. A pocket closing device, consisting of a flexible stiffener inserted in the garment paralld with the edge of the pocket, as show andn described. 2nd. A pocket closing device consisting of a strip of elastic fabric adapted to extend along the edge of the pocket of a garment and have its ends secured to the body portion of such garment, as set forth. 3rd. A pocket closing device consisting of a strip of elastic fabric adapted to extend along the edge of the pocket of a garment and have its end secured to a stiffener carried by the body portion of the garment, as set forth. 4th. The combination with the garment body d, slitted as at c c, and the pocket welt f, of the elastic strip a, extending along such welt, and with its ends pass d through said slits and secured to the ends of the stiffener b, on the inside surface of the body d, as set forth.

**No. 59,734. Folding Box. (Boîte pliante.)**

Reginald Harry Filmer, London, England, 22nd April, 1898; 6 years. (Filed 16th February, 1898.)

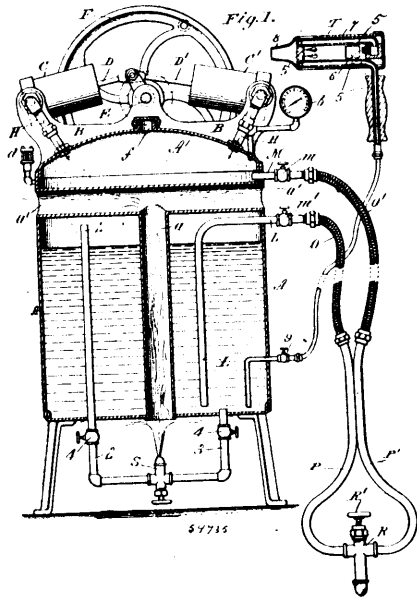
*Claim.*—The herein described folding-box, comprising the undivided bottom c and integral inner end flaps e, continuously scored

transversely at *j*, the sides *d d'*, each having integral outer and flaps *f* scored at *i*, the said bottom, sides and end flaps being scored so as



to permit them to be set up in box form and permit of the folding of the box, when set up, along the lines of the scorings *j* and *i*, the scorings *i* when the box is set up or folded being aligned with the scoring *j* in the end flaps, substantially as set forth.

**No. 59,735. Hydrocarbon Burner.**  
(Foyer à hydro-carbure.)



James Herbert Hullard, Springfield, Massachusetts, U.S.A., 22nd April, 1898; 6 years. (Filed 20th November, 1897.)

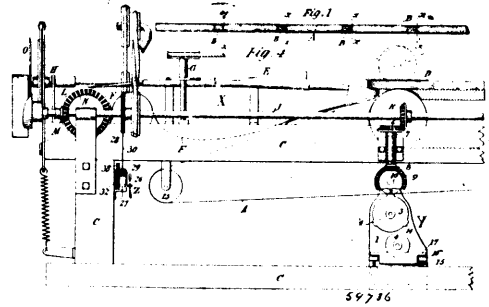
*Claim.*—A portable device for burning hydrocarbons, consisting of a sealed receptacle for the liquid hydrocarbon, air-compressing mechanism attached to said receptacle, inter-communicating vertical and cross-flues therein, a suitably located burner for discharging flame into said flues for heating the contents of said receptacle, valves for regulating the supply of hydrocarbon and air for said burner, pipe connections between said air-compressing mechanism and the air-chamber *A'* in said receptacle, a pipe *O* extending through the wall of said receptacle and communicating with the supply of hydrocarbon therein, a second pipe *O'* extending through the wall of said receptacle and communicating with the said air-chamber *A'* therein, suitable valves for said pipes, a portable burner, substantially as described, and flexible connections between said pipes *O*, *O'*, and said portable burner, a regulating valve for the latter, and means for actuating said air-compressing mechanism, substantially as described.

**No. 59,736. Cigarette.** (Cigarette.)

Theodore E. Allen, New York City, U.S.A., 22nd April, 1898; 6 years. (Filed 29th December, 1897.)

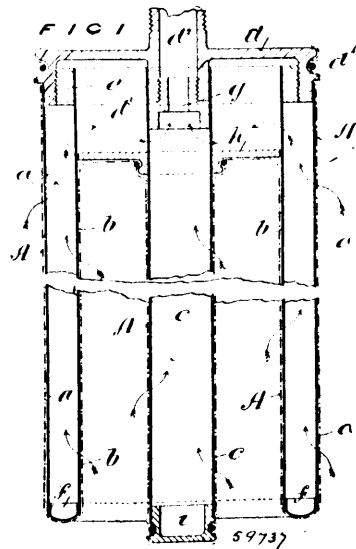
*Claim.*—1st. The combination substantially as set forth, in a mechanism for making cigarettes with moisture-protected ends, of devices for applying a series of sections of coating material to a long wrapper strip, devices for delivering a long filler or rod of tobacco to the strip, devices for wrapping and securing the strip around the filler rod to form a long cigarette with a series of surrounding rings of coating material, and devices for severing the long cigarette into

short marketable cigarettes, whereby each severed cigarette is provided with a ring of coating material at one of its ends. 2nd. The



combination substantially as set forth, in a mechanism for making cigarettes with moisture-protected ends, of devices for applying a series of sections of coating material to a long wrapper strip, devices for wrapping the strip around a long filler rod, and means for cooling or drying the applied coating material located between the devices for applying the same and the wrapping devices. 3rd. The combination substantially as set forth, in a mechanism for making cigarettes with moisture protected ends, of devices for applying a series of sections of coating material to a long wrapper strip, devices for wrapping the strip around a long filler rod, and an air blast mechanism for cooling or drying the applied coating material located between the devices for applying the same and the wrapping devices. 4th. The combination substantially as set forth, in a mechanism for making cigarettes with moisture-protected ends, of devices for applying a series of sections of coating material to a long wrapper strip, devices for wrapping the strip around a long filler rod, an air blast mechanism and a retaining surface for the wrapper strip, as a pulley 25, located between the devices for applying the coating material and the wrapping devices. 5th. The combination substantially as set forth, in a machine for making cigarettes with moisture-protected ends, of devices for forming a long cigarette and providing it with surrounding rings of coating material at equal distances apart, devices for severing the long cigarette into short or marketable cigarettes, devices for advancing the long cigarette to the severing devices and means for relatively adjusting and operating the advancing and severing devices, whereby each severed cigarette is provided with a ring of coating material at one of its ends.

**No. 59,737. Filter.** (Filtre.)



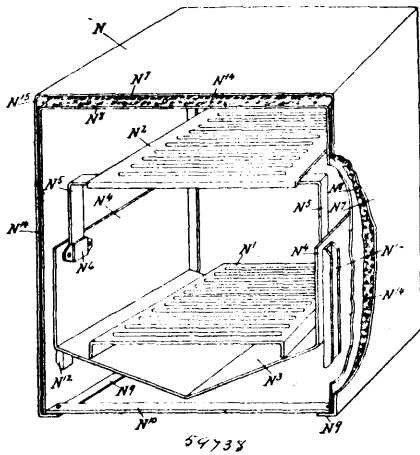
William Henry Barr, Bury, Lancaster, England, 22nd April, 1898; 6 years. (Filed 1st December, 1897.)

*Claim.*—1st. The improved arrangement of filter bed for use in the filtration and purification of water, and other liquids consisting of a series of concentric perforated metal cylinders of different diameter placed one within the other and coated with filtering medium or covered with a layer or layers of straining cloth or other material, upon the surface of which is carried and deposited a close porous coating of filtering medium, whereby a large filtering surface is obtained within a comparatively small space, arranged and acting



in the manner and substantially as described and shown. 2nd. The improved filter had for use in the filtration and purification of water, beer, cider and spirits consisting of two or three concentric perforated metallic cylinders coated with filtering medium, or covered with a layer or layers of straining cloth or other material upon which is carried and deposited a close porous coating of filtering medium, the said filter bed being used in conjunction with a suitable form of casing and arranged and acting in the manner and substantially as described and shown. 3rd. A filter bed for use in the filtration and purification of water, beer, cider and spirits consisting of a central perforated tube around which is arranged a spiral coil of wire upon which is secured a straining cloth or cloth and paper on the surface of which is carried and deposited a close porous coating of filtering medium, arranged and acting in conjunction with a suitable casing, in the manner and substantially as described and illustrated. 4th. The improved filtering medium, for use with filter beds, as described, consisting of a mixture of cellulose fibre and powdered agalite, kieselguhr, china clay, per salts of iron and per salts of manganese, and lime or other suitable filtering and oxidising substance any of which may be used alone with the cellulose or in combination, prepared and applied in the manner and substantially as described and shown.

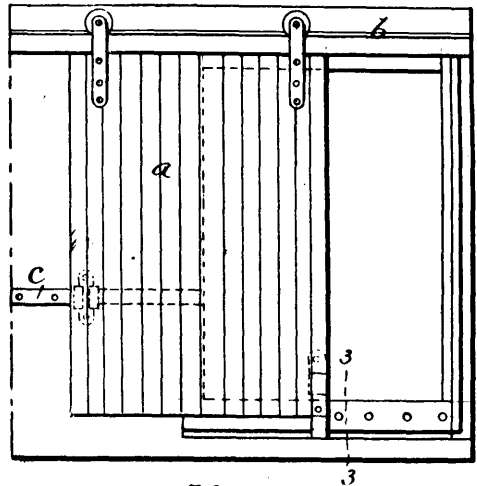
**No. 59,738. Stove. (Poêle.)**



Charles Cannon, London, Ontario, Canada, 22nd April, 1898; 6 years. (Filed 19th February, 1898.)

*Claim.*—1st. A tube C, wick D, and thumb screw C<sup>5</sup>, for compressing said wick in said tube, in combination with the reservoir B, and cap C<sup>1</sup>, provided with the flags C<sup>2</sup>, and C<sup>3</sup>, and formed with the perforations C<sup>4</sup>, substantially as and for the purpose set forth. 2nd. The base A, and the deflector E, in which one or more openings c<sup>1</sup>, and formed in combination with the reservoir B, tube C, and cap C<sup>1</sup>, said deflector deflecting the heat away from said reservoir and to the point at which it is utilized, substantially as and for the purpose set forth. 3rd. The base A, the deflector E, in which the openings c<sup>1</sup>, are formed, the saddles c<sup>2</sup>, and brace F, for firmly holding in place the portions of the deflector on each side of said openings c<sup>1</sup>, in combination with the reservoir B, tube C, and cap C<sup>1</sup>, substantially as and for the purpose set forth. 4th. The base A, and draft shields G, in combination with a reservoir B, tube C, and cap C<sup>1</sup>, said shields G, being concentric of the burning gas for the purpose of preventing it from being blown out or extinguished by sudden drafts or gusts of wind, substantially as and for the purpose set forth. 5th. The base A, consisting of the closed ends a<sup>1</sup>, bottom a<sup>2</sup>, side bars a<sup>3</sup>, and removable top H, in which one or more openings b<sup>1</sup>, are formed, in combination with the flanged ring supports J, substantially as and for the purpose set forth. 6th. The deflector E, and draft shields G, in combination with the base A, reservoir B, cover K, tube C, and cap C<sup>1</sup>, substantially as and for the purpose set forth. 7th. The oven N, consisting of the inclined bottom N<sup>3</sup>, and short walls N<sup>4</sup>, flanges N<sup>12</sup>, and grate N<sup>1</sup>, in combination with the walls N<sup>7</sup>, N<sup>8</sup>, covering N<sup>14</sup>, interposed between said walls N<sup>7</sup>, N<sup>8</sup>, frames N<sup>11</sup>, and doors O, substantially as and for the purpose set forth. 8th. The oven N, consisting of the inclined bottom N<sup>3</sup>, the short walls N<sup>4</sup>, flanges N<sup>12</sup>, and grate N<sup>1</sup>, in combination with the walls N<sup>7</sup>, N<sup>8</sup>, covering N<sup>14</sup>, interposed between said walls N<sup>7</sup>, N<sup>8</sup>, frames N<sup>11</sup>, and doors O, substantially as and for the purpose set forth. 9th. The oven N, consisting of the inclined bottom N<sup>3</sup>, formed with closed ends N<sup>3</sup>, the short walls N<sup>4</sup>, flanges N<sup>12</sup>, and grate N<sup>1</sup>, in combination with the walls N<sup>7</sup>, and N<sup>8</sup>, frames N<sup>11</sup>, doors O, in which the opening O<sup>1</sup>, is formed, pipe or duct O<sup>1</sup>, and means for regulating the size of said opening O<sup>1</sup>, substantially as and for the purpose set forth. 10th. The oven N, consisting of the inclined bottom N<sup>3</sup>, short walls N<sup>4</sup>, and grates N<sup>1</sup>, and N<sup>2</sup>, in combination with the walls N<sup>7</sup>, and N<sup>8</sup>, covering N<sup>14</sup>, air chamber N<sup>15</sup>, frames N<sup>11</sup>, doors O, in which the opening O<sup>1</sup>, is formed, the pipe or duct O<sup>1</sup>, and means for regulating the size of said opening O<sup>1</sup>, substantially as and for the purpose set forth.

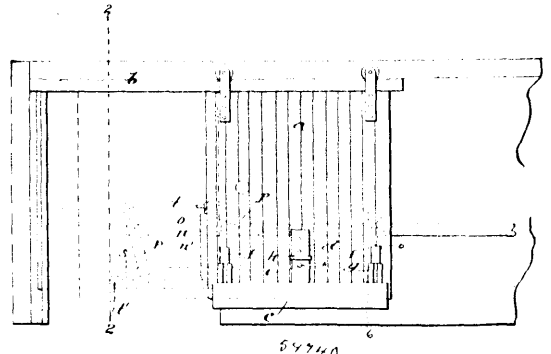
**No. 59,739. Sliding Door Fixtures. (Coulisse de porte.)**



Charles R. Case, Allen's Hill, New York, U.S.A., 23rd April, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. The combination of a support provided with a door-opening, a sliding door, means for supporting the door on the support, and means for guiding the door, said means consisting essentially of a device connecting the free part of the door to the support, said device having a sliding connection to the support and to the door, the sliding-connection to the door being at an angle to that of the support, and being in a substantially vertical plane, whereby the door may sag vertically without binding. 2nd. The combination of a support, a sliding-door, and means for supporting the door on the support, a rail on the support, and a device slidingly connecting the door to said rail, said device having a sliding connection to the door at an angle to the rail, the sliding-connection to the door lying in a substantially vertical plane, whereby the door may sag without binding. 3rd. The combination of a support, a sliding-door, means for attaching the door to the support, a rail attached to the support to one side of the opening, a plate attached to the door in a substantially vertical plane, and a device connecting the rail to said plate and having a movable connection with each. 4th. The combination of a support, a sliding door thereon, means for slidingly connecting the door to the support, said means consisting of a rail attached to the support at one side of the door-opening, a plate attached to the door and arranged in a substantially vertical plane, and a device connecting said rail to the plate, said device consisting of a pair of clips slidingly engaging respectively the rail and the plate, and having a substantially vertical movement on the latter, substantially as described. 5th. The combination of a support provided with a door-opening, a sliding-door adapted to slide across said opening, and a clip slidingly connected to the lower front corner of said door, and a flanged plate extending across the door-sill and having a sliding connection with said clip, substantially as described. 6th. The combination of a support provided with a door opening, a sill-plate provided with an inward-turned flange extending across said door-opening, a clip having a substantially vertical sliding connection to the lower front corner of the door and provided with a hook-like extension engaging said flange, substantially as described.

**No. 59,740. Sliding Door Fixture. (Coulisse de porte.)**

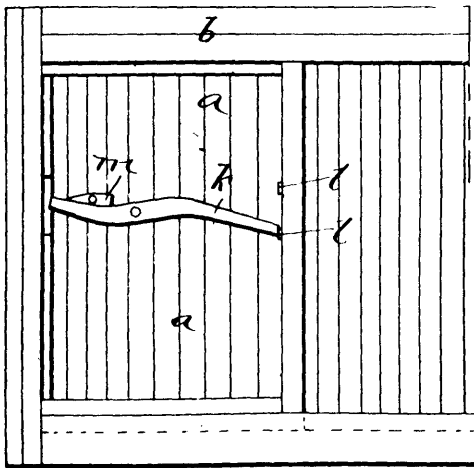


Charles R. Case, Allen's Hill, New York, U.S.A., 23rd April, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. The combination of a structure and sliding-door supported thereon and having a transverse flange on its free-end, means

for attaching the free end of the door to the structure, said means consisting of a stay or brace adapted to be projected into the door-opening when the door is closed, said stay being carried by the structure and having a sliding connection with flange on the door, as and for the purposes set forth. 2nd. The combination with a structure and a sliding-door thereon, provided with a transverse flange, of a stay connecting the lower end of the door to the structure and means for folding or swinging said stay across the door-opening when the door is closed, the stay being carried by the structure and having a sliding connection with the flange at all times, for the purposes set forth. 3rd. The combination with a structure and a sliding-door thereon, of a stay pivoted to the structure at one side of the door-opening, and means for letting down said stay across the door-opening when the door is closed, as and for the purpose set forth. 4th. The combination of a support and a sliding-door suspended thereon, with a folding-stay pivoted to the door-post at one side of the door-opening, a pivoted link connecting the stay to the door and adapted to raise the stay against the post and lower it across the door opening as the door is moved back and forth, and means carried by the stay for slidingly engaging the lower end of the door for holding it to the support, for the purpose set forth. 5th. The combination with a support provided with a door-opening, and a sliding-door therefor, and means for holding the door to the support at its lower end, said means consisting essentially of a movable stay adapted to be projected across said door-opening when the door is shut, said stay being provided with a flange sliding engaging a flange carried by the door, for the purpose set forth. 6th. The combination with a support provided with a door-opening and a sliding-door, of a movable stay carried by the support and adapted to be projected across the door-opening when the door is shut, said stay being provided with an extension-rod or stay adapted to be projected beyond the end of the said stay, and means carried by the lower end of the door for slidingly engaging said extension-stay, substantially as set forth.

**No. 59,741. Sliding Door Latch.**  
(*Loquet de porte à coulisse.*)

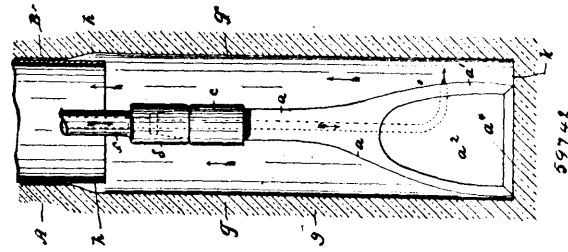


59741

Charles R. Case, Allen's Hill, New York, U.S.A., 23rd April, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. The combination of a support and a sliding-door, a latch-lever pivoted on said door and extending across the same, said lever being curved upward at one end and downward at its other end, the downward turned end normally tending downward, and a pair of stops carried by the support and adapted to abut against the respective ends of said lever. 2nd. The combination of a support and a sliding-door, a pivoted gravitating lever on said door, said lever curved upward at one end and downward at its other end, impinging stops between which said lever moves endwise, and a cam for disengaging said lever from said stops, substantially as described. 3rd. The combination of a support and a sliding-door, a pivoted lever on said door, curved upward at one end and downward at its other end, stops between which said lever moves endwise, a rock-shaft journaled in the door and extending therethrough, a double cam on the inner end of the rock shaft, for the purpose set forth, a swinging arm on the outer end of the rock-shaft, and means carried by the door for restricting the swing arm, substantially as set forth. 4th. The combination of a support, a sliding-door, a pivoted lever extending across said door, said lever being curved upward at one end and downward at its other end, stops between which the lever moves, said lever being constructed of endwise adjustable sections, substantially as described.

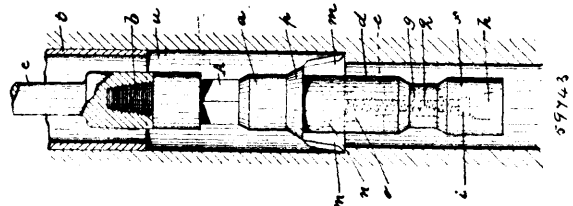
**No. 59,742. Well Boring Tool.**  
(*Outil pour creuser les puits.*)



Waclaw Wolski and Kazimier Odezywolski, both of Lemberg, Galicia, Austria, 23rd April, 1898; 6 years. (Filed 29th March, 1898.)

*Claim.*—1st. A boring tool comprising a stem, and a flattened blade carried by said stem and substantially rectangular in cross section, the edges of said blade being eccentrically arranged to the axial or centre line of the stem, substantially as and for the purpose described. 2nd. A boring tool, comprising a stem, and a flattened blade carried by said stem and terminating at its lower portion in a cutting edge, the edges of said blade being eccentrically arranged with relation to the centre line of the stem, substantially as and for the purposes described. 3rd. A boring tool comprising a hollow stem, and a flattened blade carried by said stem and having its edges arranged eccentrically with relation to the centre line of the stem, the narrower portion of said blade being penetrated by a hole communicating with the hollow stem, substantially as and for the purposes described. 4th. A boring tool, comprising a hollow stem, and a flattened blade carried by said stem and having its edges arranged eccentrically with relation to the centre line of the stem, the narrower portion of said blade being penetrated by a hole communicating with the hollow stem, and means for removably connecting said stem to a hollow rod, substantially as and for the purposes described.

**No. 59,743. Earth Boring Tool.** (*Sonde à trepan.*)



Waclaw Wolski and Kazimier Odzywolski, both of Lemberg, Galicia, Austria, 23rd April, 1898; 6 years. (Filed 29th March, 1898.)

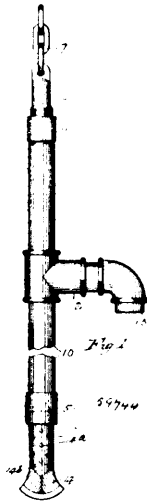
*Claim.*—1st. A boring tool, consisting of a chuck provided with a central vertical elongated slot, and a cutting blade in each side of the slot and movable in a plane at an angle to the vertical centre line of the chuck, substantially as and for the purposes described. 2nd. A boring tool, consisting of a chuck provided with a central vertical elongated slot, a cutting blade in each side of said slot and movable in a plane at an angle to the vertical centre line of the chuck, and means such as a spiral spring for retaining said cutting blades in operative position, substantially as and for the purposes described. 3rd. A boring tool consisting of a chuck provided with a central vertical elongated slot, a cutting blade in each side of said slot and movable in a plane at an angle to the vertical centre line of the chuck, and means arranged on said chuck and on the cutting blades respectively for guiding the latter, substantially as and for the purposes described. 4th. A boring tool, consisting of a chuck provided with a central vertical elongated slot, a cutting blade in each side of said slot and movable in a plane at an angle to the vertical centre line of the chuck and on the cutting blades respectively for guiding the latter, and means such as a spiral spring for normally holding said cutting blades in operative position, substantially as and for the purposes described. 5th. A boring tool consisting of a chuck provided with a central vertical elongated slot, a cutting blade in each side of the slot and provided with one or more inclined slots, a pin penetrating its respective inclined slot and carried by the chuck and at right angles to the cutting blades, and means such as a spiral spring for normally holding the cutting blades in operative position, substantially as and for the purposes described.

**No. 59,744. Drill for Testing Mining Ground.**  
(*Foret pour faire l'essai des terrains miniers.*)

Fred Fooks, Vancouver, British Columbia, Canada, 23rd April, 1898; 6 years. (Filed 31st March, 1898.)

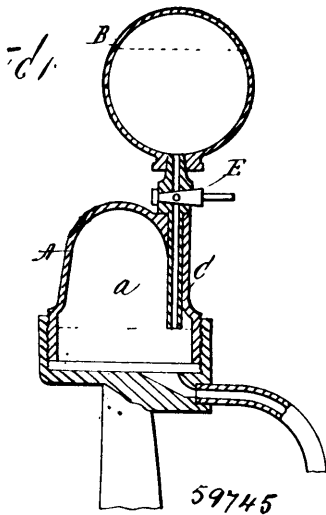
*Claim.*—1st. In a device for testing mining-ground, in combination with a cylindrical tube, a drill-bit 14 having openings 14<sup>a</sup>, con-

necting to within the tube 10, and a valve arranged in such connection in the said drill-bit, as set forth. 2nd. In a device for prospect-



ing for minerals, the combination with a cylinder 10, an attachable point or bit 18 to be secured thereto, a depending projection having a cutting or grubbing edge 18<sup>a</sup> on such bit, an opening 18<sup>b</sup> passing upwardly therein, a chamber within such bit and a hinged flap 18<sup>c</sup> arranged in the same, a passage from the said chamber to the pipe 10, a ball-valve in such passage, as and for the purposes set forth. 3rd. In a device for testing auriferous gravels below the surface of the ground, a cylindered tube 10, in combination with a drill point 14, means for passing matter through the point 14 to within the cylinder 10, a rod 20 having a valve mechanism on its depending end, whereby aqueous matters may be drawn upwards through the said tube 10, as and for the purposes set forth.

**No. 59,745. Lubricator. (Graisseur.)**



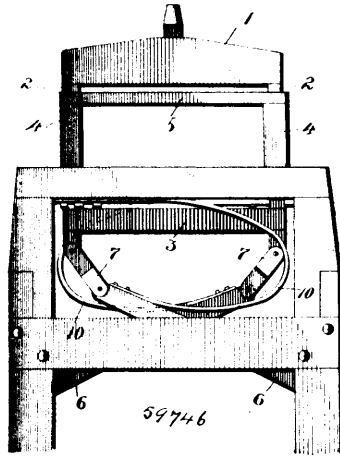
Richard Riley and Thomas Winstanley, both of Manchester, Lancaster, England, 23rd April, 1898; 6 years. (Filed 2nd April, 1898.)

*Claim.*—In a mechanism for maintaining a constant level of oil in oil cups and analogous vessels, the combination, with the cup, of a bottle or reservoir mounted in position at a point above the normal level and connected with the cup by a tube projecting in the latter and having its end terminating at a point relative to the normal level which it is desired to maintain, substantially as and for the purpose set forth. 2nd. In a mechanism for maintaining a constant level of oil in oil cups and analogous vessels, the combination, with the cup, of a bottle or reservoir mounted in position at a point above the normal level, and a feed tube extending from said bottle or reservoir and having its end terminating within the cup and on the plane of the normal level which it is desired to maintain, substantially as and for the purpose set forth. 3rd. In a mechanism for maintaining a constant level of oil in oil cups and analogous vessels, the combination, with the cup, of a bottle or reservoir mounted in position at a point above the normal level, feed tube extending from

said bottle or reservoir and having its end terminating within the cup at a point relative to the normal level which it is desired to maintain therein, and a cork or stopper arranged within said tube, and provided with a feed opening affording communication between the reservoir and the tube and with exterior passages forming air vents, substantially as and for the purpose set forth.

**No. 59,746. Elevator Car Safety Device.**

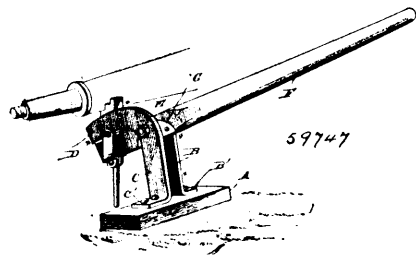
(Appareil de surtite pour elevateurs.)



George Harrison, King, Ontario, Canada, 23rd April, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. A safety attachment for elevators, comprising a guide frame, a sliding frame adapted to have movement therein, and gripping levers pivotally secured to said sliding frame, substantially as described. 2nd. A safety attachment for elevators, comprising a guide frame, a sliding frame adapted to have vertical movement therein, and spring actuated gripping levers pivotally secured to said sliding frame, substantially as described. 3rd. A safety attachment for elevators, comprising a guide frame consisting of vertical box-like side pieces connected by horizontal bars, a sliding frame consisting of vertical and horizontal bars, and adapted to have vertical movement within said guide frame, and gripping levers pivotally connected to the sliding frame by means of angular links, said gripping levers being fulcrumed to the elevator frame, substantially as described.

**No. 59,747. Waggon Jack. (Chevre pour wagons.)**

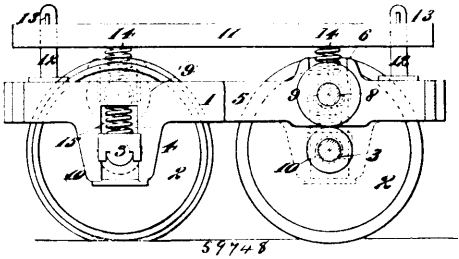


David E. Copp, Woodstock, Virginia, U.S.A., 23rd April, 1898; 6 years. (Filed 4th April, 1898.)

*Claim.*—1st. The combination of a base, a pair of uprights mounted thereon at a slight distance apart, one of which is extended forwardly and laterally, a handle bar pivoted between the two uprights and extending beyond the pivot, and a metal plate secured upon the upper face of the handle bar and provided with teeth to co-act with teeth on the said laterally extended part, substantially as described. 2nd. The combination with the base A, of the upright B provided with horizontal flange B<sup>1</sup> and bolted to the base, the upright C provided with a horizontal flange and bolted to the base a short distance from and parallel with the upright B, the forward extension D to the upright C having its outer end extended laterally and provided with teeth D<sup>2</sup> on its lower edge, the handle bar F pivoted between the uprights B and C and projecting beyond the pivot, and a metal plate H secured to the top of the handle bar and having teeth H<sup>1</sup> in position to co-act with the teeth D<sup>2</sup>, substantially as described. 3rd. The combination of the base, parallel uprights secured thereto, the handle bar pivoted between said parallel uprights and projecting beyond them, two plates secured upon the opposite sides of the forwardly projecting portion of the handle bar, said plates being inclined in position with relation to the handle bar and projecting above and below it, a prop loosely pivoted between the lower ends

of these plates, and a rest block rigidly secured between the projecting upper ends of the two plates and provided with steps to receive the axle, substantially as described.

**No. 59,748. Car Truck. (Châssis de chars.)**

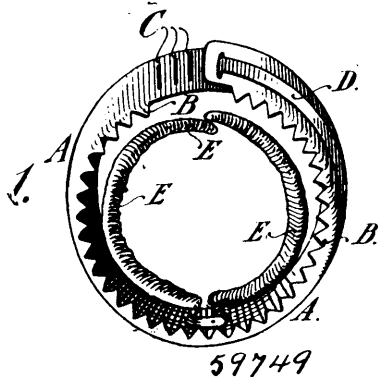


William Simpkin, Mexico City, Mexico, 23rd April, 1898; 6 years. (Filed 5th April, 1898.)

*Claim.*—1st. In a car truck, the combination with the truck proper and rolling parts thereof, of a frame carried by said truck, and means on which said frame is supported, said means being arranged to roll in contact with said truck rolling parts, substantially as and for the purpose set forth. 2nd. In a car truck, the combination with the truck proper and rolling parts thereof, of a frame carried by said truck, means on which said frame is supported, said means being arranged to roll in contact with said truck rolling parts, and springs located between said frame and said supporting means, substantially as and for the purpose set forth. 3rd. In a car truck, the combination with the truck proper and rolling parts thereof, of a frame carried by said truck, shafts on which said frame is supported, and wheels carried by said shafts arranged to bear upon and revolve with said truck rolling parts, substantially as described. 4th. In a car truck, the combination with the truck proper and rolling parts thereof, of a frame carried by said truck, and wheels by which said frame is supported, said wheel being arranged to bear upon said truck rolling parts and being of greater circumference than the portions of said rolling parts against which they bear, substantially as described. 5th. In a car truck, the combination with the truck proper and rolling parts thereof, of a frame carried by said truck, shafts on which said frame is supported, and wheels on said shafts arranged to bear upon said truck rolling parts, and springs located between said shafts and said frame, substantially as described. 6th. In a car truck, the combination with the truck proper and rolling parts thereof, of a frame carried by said truck shafts on which said frame is supported, wheels on said shafts arranged to bear upon said truck rolling parts, and a supplemental frame mounted above said truck frame, axles on which said supplemental frame is supported, bearing boxes in said supplemental frame for the axles on which it is supported, springs interposed between said bearing boxes and said frame, and wheels on said supplemental frame supporting axles adapted to bear upon and roll in contact with said axle of the truck proper, substantially as and for the purpose set forth.

**No. 59,749. Surgical Appliance.**

(Accessoires pour instrument de chirurgie.)



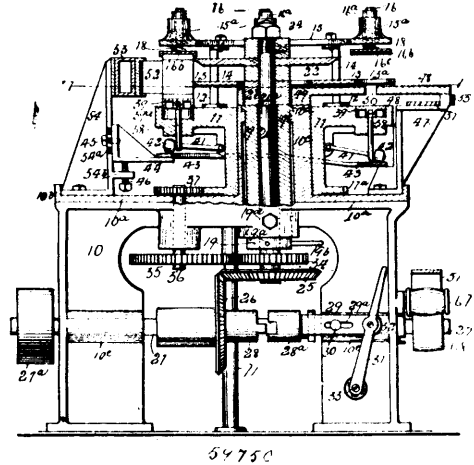
Horatio Gates Houghton, Ottawa, Ontario, Canada, 23rd April, 1898; 6 years. (Filed 20th January, 1898.)

*Claim.* 1st. The combination of the frame *a*, with the ring *E*, substantially as and for the purpose hereinbefore set forth. 2nd.

The combination of the frame *a*, having the scalloped teeth *B*, with the ring *E*, substantially as and for the purposes described. 3rd. The combination of the frame *a*, having the teeth *B* and the slits *C*, and the ring *E*, substantially as and for the purposes described. 4th. The combination of the frame *a*, having the teeth *B* and the slits *C*, and the keeper *D*, with the ring *E*, substantially as and for the purposes described. 5th. The combination of the frame *a*, teeth *B*, slits *C* and keeper *D*, with the ring *E* covered with textile or other protecting material, substantially as and for the purposes described.

**No. 59,750. Can Crimping Mechanism.**

(Machine à cambrer les boîtes métalliques.)

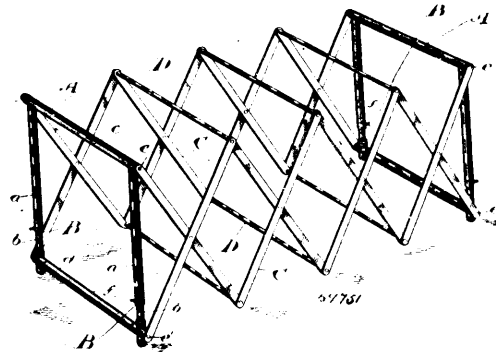


James DesBrisay, New Westminster, British Columbia, Canada, 23rd April, 1898; 6 years. (Filed 26th January, 1898.)

*Claim.*—1st. In a can crimping machine having a frame 10, a column 10<sup>c</sup> projecting upwards above a circular horizontal portion, a vertical aperture through said column and the frame 10, a sleeve eccentrically arranged thereon, a vertical shaft eccentrically arranged in said sleeve, a crimping disc 22 rigidly fixed on said shaft at a point above the column, a revolving table 11 journalled on the column, and can-engaging discs carried by said table, whereby the said cans will be brought in contact with the crimping disc for a portion of the way round the table, as set forth. 2nd. In a machine for crimping cans, having a frame 10, a raised column on said frame, a table journalled on the column, a disc or ring 13, having can-holding recesses secured on the table, a ring 15 secured to and connected with the disc 13, spindles carried by said ring, discs secured to the depending ends of said spindles, other discs secured on spindles in the table 11, radial arms passing through the depending ends of said spindles, rollers on the ends of such arms, and a track of uneven plane engaging such rollers, as set forth. 3rd. In a machine of the kind described, having a frame 10, a cylinder 10<sup>c</sup> raised above said frame, a bracket 49 secured on the top of said column and projecting laterally therefrom, a bracket 47 secured on the outer edge of the horizontal part of the frame 10, a bracket 48 secured to the top of the bracket 47 and projecting inwardly towards the bracket 49 on the raised column, a space 50 between the two horizontally disposed brackets 48 and 49, a revolving table 11 journalled on the column 10<sup>c</sup>, a can holding disc or ring 13 secured above the table and supports 12 connecting the table 11 with the disc 13 are arranged to pass through the space 50, as set forth. 4th. In a machine for crimping cans having a frame 10 with an upwardly projecting column 10<sup>c</sup>, a table 11 arranged to turn around said column, and upwardly projecting bracket 47 secured near the edge of the frame 10, a bracket 48 secured on the top thereof and extending towards the column, a bracket 49 secured to the top of the said column, a space 50 between these brackets, the same being guideways for the cans to and from the machine, as set forth. 5th. In a machine for crimping cans, having the frame 10 with the upwardly projecting column, a table 11 turning round said column, a can holding disc 13 secured to and at some distance above the table, spindles 16 arranged at intervals in a ring 15, discs 16<sup>b</sup> secured to the depending ends of the spindles, springs 18 interposed between the discs 16<sup>b</sup> and the ring 15, whereby the spindles will normally be held downward, as set forth. 6th. In a crimping machine having a frame 10 and an upwardly extending column and a table journalled thereon, spindles 38 vertically movable in said table, can carrying discs pivotally fixed on such spindle, an endless belt 51 arranged to lie upon a bracket 47, and held tight by suitably arranged pulleys at some distance on either side of the machine, and pulley mechanism engaging the belt beneath the bracket 47, and means for imparting move-

ment thereto, by the shaft 27, as set forth. 7th. A machine of the kind having a revolving table adapted to receive and discharge cans a shaft passing up through and extending above the table, such shaft being arranged eccentrically thereto, a crimping disc fixed on said shaft, means for imparting movement to said shaft, a gear 34 on the shaft connecting with a larger gear 35 on a shaft 36, having a transmitting gear 37 to the gear 11<sup>a</sup> of the table, whereby the shaft having the crimping disc and the table revolve at different speeds, and means of bringing the cans in connection with the bevelled edge of the crimping disc for a distance of the way round the machine, as and for the purposes set forth. 8th. Means for automatically feeding cans in a vertical position to a crimping machine, an arm 58 pivotally fixed to the rim of a frame 10, a bracket, 60 secured to an upwardly projecting bracket having a semicircular horizontal portion 60<sup>a</sup>, a slot therein to receive the said arm 58, a spring 61 connecting the bracket and the arm together for the purposes as specified, the laterally projecting arm 58<sup>b</sup>, engaging in the track of projections on a revolving table, whereby the arm 58 will be thrown back and cans allowed to pass the semicircular portion 60<sup>a</sup>, as set forth. 9th. In a machine for crimping cans in a vertical position having a frame 10 with a circular horizontal top 10<sup>a</sup>, a bracket extending upwards from one side thereof, and a column extending to about the same plane near the center of the horizontal portion, brackets 48 and 49 secured to the bracket 47 and the column respectively, and advancing towards each other concaved circles in either vertical sides of the brackets, an endless belt 51 lying on the bracket 47 and passing to either side thereof around pulleys 70 in a tightly drawn position, and round a pulley mechanism arranged beneath the bracket 47, and means for passing cans into holders in a turning table on one side of the brackets 48 and 49 and out to the same belt on the other side thereof, as set forth. 10th. In a machine for crimping and drying cans having a frame 10 and a table arranged thereon, can engaging and retaining discs arranged about the table to engage the tops of cans, and other discs in the table to support and press the cans upwardly, a bevel-edged disc made to contact with the cans as specified, a series of metallic brushes engaging the outermost sides of the cans, a steam heater by which said brushes are heated, whereby the cans will be brushed and dried while passing through the machine, as set forth. 11th. In a machine for the purposes set forth, having a frame 10 with a rotating table thereon, series of metallic brushes held in U-shaped frame in the form of an arc at an even radius from the axis of the said table, a steam reservoir attached to the said brushes, the whole being arranged on suitable supports, and means for supplying steam thereto as specified, whereby the brushes will be heated, means for supplying cans to can-carrying discs, which contact with said cans and roll them against the heated brushes, as set forth. 12th. In a machine for crimping oval cans in combination with a turntable arranged eccentrically upon an upwardly projecting column above a frame 10, a sleeve 19 eccentrically arranged within said column and resting on the top thereof by a flange 19<sup>a</sup>, and its opposite end depending beneath to an opening below the frame 10, a revoluble shaft 20 eccentrically journaled in said sleeve and extending above and below thereof and means for turning the sleeve 19 whereby the axis of the shaft 20 would be changed substantially as specified, a crimping disc rigidly fixed upon the shaft 20, the said disc having a projecting rim 22<sup>a</sup>, a rubber band 63 secured to a plate or disc and arranged integrally with the said shaft, and means of presenting the even surface of oval cans to such rubber bands and the crimping disc, as set forth. 13th. In a machine for crimping oval cans having a frame 10 and an upwardly projecting column to which is rotatably mounted a table, spindles 36 in said table, having discs 38 projecting above same, means for keeping same above said table, can-receiving rings 66 arranged to lie over the upwardly projecting discs on the spindles, and means for retaining cans therein, for the purposes as specified, a shaft eccentrically arranged within the axis of said table, a built-up portion rigidly secured and forming an integral with the said shaft, the said built-up portion consisting of detachable sections 62 having a rubber band 63, a disc 34, a crimping disc 22, a section 65 and a nut 24 jamming the whole, as and for the purposes set forth. 14th. In a machine for crimping oval cans in combination with a table rotatably mounted on a frame 10, oval rings 66 carried by the said table, and means of retaining them loosely thereon, a shaft arranged to turn within said table but eccentrically fixed to the axis thereof, a rubber band secured to said shaft, the same to engage the said rings for a distance of the way round the table, and a crimping disc secured to and turned by said shaft and made to engage cans carried by the said rings, and means for imparting a slow movement to the said table and a fast movement to the said shaft carrying the rubber band and the crimping disc, as set forth. 15th. In a machine of the kind having a frame 10 with a horizontal circular top 10<sup>a</sup>, a column projecting above said horizontal portion and arranged from the centre thereof, a revoluble table journaled on said column, standard brackets 54 arranged at intervals around the outer side of the side of the horizontal path of the frame 10<sup>a</sup> that has the greatest radius from the axis of the table, vertically adjustable brackets 44 supported by said standard brackets 54, a circular track 43 arranged around the table at an even radius thereto and the same being supported by the adjustable brackets 44, spindles depending below the outer edge of the table, radial arms pivoted to the vertical body of the frame and their outer ends passing through the depending spindles and having rollers thereon to travel upon the track 43, as set forth.

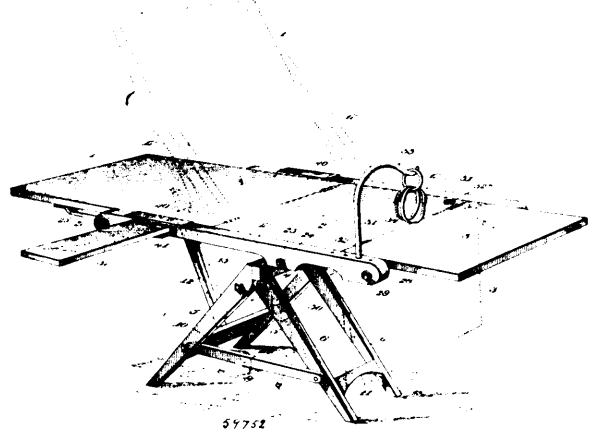
### No. 59,751. Casket-Stand. (*Support de cerceuil*.)



(George Crommiller, Welland, Ontario, Canada, 23rd April, 1898; 6 years. (Filed 8th February, 1898.))

*Claim.*—1st. As a casket-stand, two end frames, each made in two parts telescoped together, in combination with two sets of lazy-tong levers, each set being pivotally connected with the two parts of each frame, substantially as and for the purpose specified. 2nd. As a casket-stand, two end frames, each made in two parts telescoped together, and collars adjustable upon the inner members of the frames, in combination with two sets of lazy-tong levers, each set being pivotally connected with the two parts of each frame, substantially as and for the purpose specified. 3rd. As a casket-stand, two end frames A, each comprising cross-bars *c* and *d* and the telescoped vertical members *a* and *b*, in combination with the lazy-tong levers C, connected by the cross-bars D, and pivoted on the frames A at *e e'*, substantially as and for the purpose specified. 4th. As a casket-stand, two end frames A, each comprising the cross-bars *c* and *d*, the telescoped vertical members *a* and *b* and the adjustable collars B upon the members *b*, in combination with the lazy-tong levers C, pivoted on the frames A at *e e'*, substantially as and for the purpose specified. 5th. As a casket-stand, two end frames A, each comprising the cross-bars *c* and *d*, the telescoped vertical members *a* and *b* and the adjustable collars B upon the members *b*, in combination with the lazy-tong levers C, connected by the cross-bars D and pivoted on the frames A at *e e'*, substantially as and for the purpose specified.

### No. 59,752. Surgical Chair. (*Fauteuil de chirurgie*.)



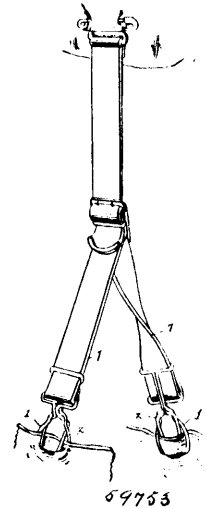
(Edward J. Wells, Morristown, Tennessee, U.S.A., 23rd April, 1898; 6 years. (Filed 4th February, 1898.))

*Claim.*—1st. The combination with a base or stand, and a table, of a hinge connection between the chair and base, and having one member firmly secured to the chair and its other member pivotally connected with the base, and means for turning the hinge upon its pivotal connection with the base and securing the same positively in an adjusted position, substantially as and for the purpose set forth. 2nd. The combination with a base or stand, and a chair, of a hinge connection applied to the table and having a member pivotally connected with the base and provided with a curved portion having a series of notches, and a latch adapted to engage with one of the series of notches and secure the pivoted member of the hinge in an adjusted position, substantially as and for the purpose set forth. 3rd. In a convertible chair, the combination with a base or supporting-frame, of hinged seat, back, and leg sections, a side arm having a pivotal and sliding connection with each of the seat and back sections, and a detachable connection at its front end with the leg-section, for connection with and disconnection from the

latter, respectively by forward and rearward adjustment of the arm, whereby the leg-section may be disconnected from the arm to depend vertically when the back-section is extended, substantially as specified. 4th. In a convertible chair, the combination with a base or supporting-frame, a hingedly connected seat, back, and leg-sections, an arm mounted at an intermediate point for pivotal and sliding movement upon the seat section, having a sliding connection with the back-section, and provided at its front end with a supporting-pin adapted, by forward adjustment of the arm, to be arranged in the path of the downward swinging movement of the leg-section, and adapted, by backward adjustment of the arm, to be withdrawn from the path of the leg section, to allow the latter to depend vertically when the back-section is extended, substantially as specified. 5th. In a convertible chair, the combination with a base or supporting-frame, of hingedly connected seat, back, and leg-sections, a terminally-notched guide on the seat-section, a side arm provided at an intermediate point with a slide fitted in said guide and adapted to be fitted in either of the terminal notches thereof, a sliding connection between the front end of the side-arm and the leg-section, substantially as specified. 6th. In a convertible chair, the combination with a base or supporting-frame, of hingedly connected seat, back and leg sections, guides carried by the seat and back sections, slides fitted in said guides for linear adjustment, a side-arm pivotally connected at an intermediate point to the slide in the guide of the seat-section, and pivotally connected at its upper end to the slide in the guide of the back-section, means for securing said slides at the desired adjustment in the guides, and a connection between the side-arm and the leg-section, substantially as specified. 7th. In a convertible chair, the combination with a base or supporting-frame, of hingedly connected seat, back and leg sections, guides carried by the seat and back sections, the guide on the seat-section having terminal seats, slides fitted respectively in said guides, the slide in the guide of the seat-section being adapted to be fitted in one of the terminal seats thereof, a side-arm pivotally connected at an intermediate point and at its upper end respectively to said slides on the seat and back sections, and provided at its lower end with a supporting-pin arranged in the path of the leg-section, and clamping devices for securing said slides at the desired adjustment in the guides, substantially as specified. 8th. In a convertible chair, the combination of a base or supporting-frame having front and rear pairs of transversely-connected legs, pivotally mounted at their upper ends for relative swinging movement in longitudinal planes, and spaced apart transversely, with their contiguous faces at an interval, to fold into a common transverse plane, a folding brace, of less width than and connecting the front and rear legs at one side of the base or frame, and arranged in the longitudinal plane of the interval between the contiguous faces of said legs, to fold in a common transverse plane therewith, seat, back, and leg sections mounted upon the base or supporting-frame, and means for securing said sections at the desired relative adjustment, substantially as specified. 9th. In a convertible chair, the combination with a base or supporting-frame, of seat, back, and leg sections, a side arm permanently connecting the seat and back sections and having a detachable connection with the leg-section, said side arm being mounted to project terminally in advance of the front edge of the seat-section, and a stirrup-supporting rod, for lithotomical operations, seated upon the front end of the side arm, substantially as specified. 10th. In a convertible chair, the combination with a base or supporting-frame, of seat, back, and leg sections, a side arm connecting said sections and mounted for longitudinal adjustment upon the seat-section, to vary the position of its front end with relation to the front edge of the seat-section, and a stirrup-supporting rod, for lithotomical operations, carried by the side arm, substantially as specified. 11th. In a convertible chair, the combination with a base of supporting-frame, of connected seat, back and leg sections, a side-arm connecting said sections and mounted for longitudinal adjustment, to vary the position of its front end with relation to the front edge of the seat-section, said front end of the side-arm being provided with sockets, and a stirrup-supporting rod, for lithotomical operations, removably seated in one of said sockets, substantially as specified. 12th. The combination with a surgical chair, provided in its frame with a socket, of lithotomical apparatus, including a supporting-rod removably seated in said socket, and having an arm projecting inwardly and terminating centrally above the plane of the chair-seat, contiguous to its front edge, in an upturned hook, and supporting-stirrups or suspending loops, detachably connected with the said hood, for engagement therewith subsequent to their application to the patient, substantially as specified. 13th. In a convertible chair, the combination of a base or supporting-frame, seat, back and leg sections mounted thereon for relative adjustment, and a side-arm, one of said members being provided with a plurality of spaced sockets open laterally, a socket-plate having openings communicating with said sockets, and an arm-rest provided with terminal T-heads 38 to fit in the sockets in said chair-member, with the upper extremities of the heads in engagement with the openings in said plate, substantially as specified. 14th. In a convertible chair, the combination with a base or supporting-frame, and a hinged back-section, of a brace having relatively adjustable members respectively mounted at their remote ends upon the back-section and the base or supporting-frame, for swinging movement, and having a sliding connection at their contiguous ends, and means for securing the contiguous ends of the brace-members at the desired relative adjustment, substantially as specified. 15th.

In a convertible chair, the combination with a base or supporting-frame, and a hinged back-section, of a sectional brace having members mounted for swinging movement at their remote ends respectively upon the back-section and the base or supporting-frame, a yoke or guide carried by one of the members to receive the contiguous end of the other member, and a locking device mounted in the yoke for securing the inserted extremity of the last-named member at the desired adjustment, substantially as specified. 16th. In a convertible chair, the combination with a base or supporting-frame, and a hinged back-section, of a sectional brace having its members mounted at their remote ends respectively upon the back-section and the base or supporting-frame, for swinging movement, one of the said members being provided at its free end with a yoke or guide to receive the contiguous end of the other member, a cam having its spindle mounted in the yoke for frictional contact with the free end of the last-named brace-member, and an operating-handle for the cam, substantially as specified. 17th. In a convertible chair, the combination with a base or supporting-frame, and a hinged back-section, of a sectional brace having its members mounted at their remote ends respectively upon the back-section and the base or supporting-frame, for swinging movement, a yoke carried by the free end of one of the brace-members to receive the contiguous end of the other brace-members, a cam mounted for rotary and axial movement in the yoke, co-operating lugs for contact with the beveled surface of the cam, and means for operating the cam to engage the last-named brace-member and lock it against linear movement in the yoke, substantially as specified. 18th. In a convertible chair, the combination with a base or supporting-frame, of hingedly-connected seat and back-sections, the former being mounted upon the base or supporting-frame for transverse and longitudinal tilting movement, means for securing the seat-section at the desired transverse adjustment, chair-arms for locking the seat and back-sections at the desired relative adjustment, and a sectional brace having its members hingedly mounted at their remote ends respectively upon the back-section and the base or supporting-frame, a yoke carried by the free end of one of the brace-members to loosely receive the contiguous end of the other brace-member, and locking devices for securing the last-named brace-member at the desired linear adjustment in the yoke, substantially as described. 19th. In a convertible chair, the combination with a base or supporting-frame, and seat, back and leg sections, of a side-arm connecting said sections and mounted for linear adjustment parallel with the plane of the back-section, and an arm-rest detachably mounted upon the side-arm contiguous to its point of connection with the back-section, and adjustable therewith, substantially as described.

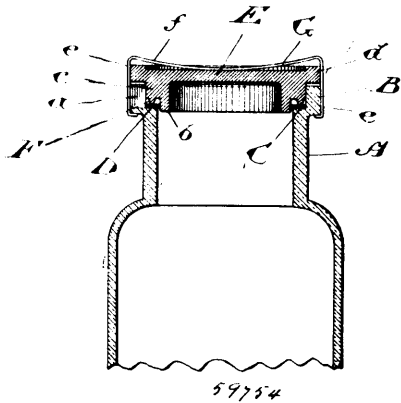
**No. 59,753. Garment Supporter. (Support de vêtement.)**



William H. Cornell, Brookings, South Dakota, U.S.A., 23rd April, 1898; 6 years. (Filed 4th February, 1898.)

*Claim.*—1st. The herein described clasp for hose or garment supporters, made up of a base piece having a loop at the forward end, and a guide for the supporting strap at the rear end, and a tongue to which one end of the supporting straps is attached, having a loop with a shank at substantially right angles thereto, the said loop being slightly narrower and longer than the loop in said base piece, substantially as and for the purpose described. 2nd. The herein described clasp for hose and garment supporters, made up of a base piece having a loop at the forward end, and a guide for the supporting strap at the rear end, and a tongue having a loop with shanks affixed firmly in a metal yoke having an opening for passing the supporting through, substantially as and for the purpose described.

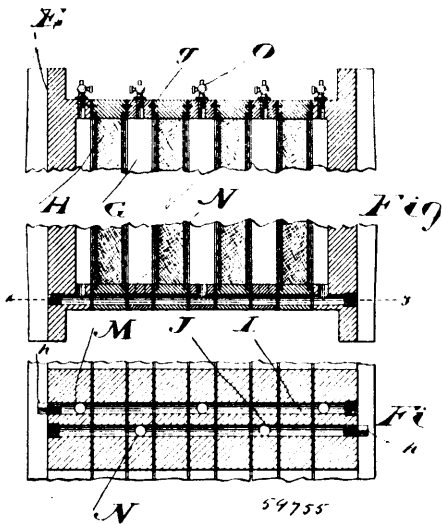
**No. 59,754. Jar Sealing Device.**  
(Appareil à sceller les jarres.)



William Blanckley Rogers, Niagara Falls, Ontario, Canada, 25th April, 1898; 6 years. (Filed 26th January, 1898.)

*Claim.* 1st. A jar or receptacle having its neck provided with an upwardly extending flange and a substantially flat seat inside of and below the upper edge of the flange, in combination with a packing ring resting upon the said seat, and a cover comprising a central portion extending below the seat, a sharp downwardly projecting annular shoulder or flange resting upon the packing ring and a body portion fitting within the flange of the neck, substantially as and for the purpose specified. 2nd. A jar or receptacle having its neck provided with an upwardly extending flange and a substantially flat seat inside of and below the upper edge of the flange, in combination with a packing ring resting upon the said seat, a cover comprising a central portion extending below the seat, a sharp downwardly projecting annular shoulder or flange resting upon the packing ring and a body portion fitting within the flange of the neck, and a spring clamp engaging the top of the cover and the lower edge of the flange, substantially as and for the purpose specified. 3rd. A jar or receptacle having its neck provided with an internal seat and an upwardly extending flange slotted or cut away at one point down to the level of the seat, in combination with a packing ring resting upon the seat, and a cover having an annular shoulder resting upon the packing ring, substantially as and for the purpose specified. 4th. A jar or receptacle having its neck provided with an annular seat, and an upwardly extending flange slotted or cut away at one point down to the level of the seat, in combination with a packing ring resting upon the seat, and a cover having a sharp annular shoulder or flange resting on the packing ring, and a central portion extending below the seat, substantially as and for the purpose specified.

**No. 59,755. Beer Filter.** (Filtre à bière.)

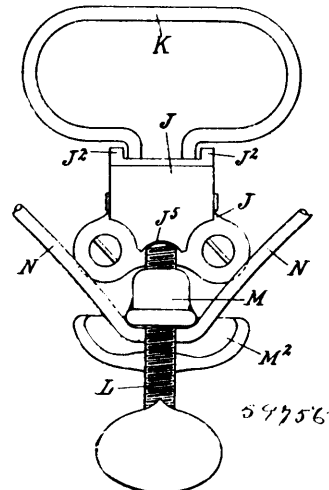


Thomas Frederick White, Port Colborne, Ontario, Canada, 25th April, 1898; 6 years. (Filed 8th February, 1898.)

*Claim.* 1st. In a sectional beer filter, end sections and a series of intermediate sections, in combination with two rods provided with nuts and adapted to clamp the said sections together by engaging the end sections at diametrically opposite points, trunnions connect-

ed to the said rods and a frame in which the said trunnions are journaled, substantially as and for the purpose specified. 2nd. In a sectional beer filter, end sections notched at two or more points of their peripheries, and a series of intermediate sections, in combination with two rods provided with nuts and adapted to clamp the said sections at diametrically opposite points, trunnions connected to the said rods and a frame in which the said trunnions are journaled, and bolt rods connecting the end sections by having their heads and nuts engaged with the notches therein, substantially as and for the purpose specified. 3rd. In a sectional beer filter, the combination of a recessed or chambered end beer sections, ring filter sections containing filtering material held in place by foraminous walls, and ring beer sections separating the said filtering sections, each ring having holes formed therein which form when the sections are clamped together, two beer channels which, by suitable holes, are connected with the interior of alternate beer sections, substantially as and for the purpose specified. 4th. In a sectional beer filter, the combination of recessed or chambered end beer sections, ring filter sections containing filtering material held in place by foraminous walls, ring beer sections separating the said filtering sections, each ring having holes formed therein which form, when the sections are clamped together, two beer channels which, by suitable holes, are connected with the interior of alternate beer sections, and stop cocks connected with the interior of each beer section opposite to the passage-ways, substantially as and for the purpose specified. 5th. In a sectional beer filter the combination of recessed or chambered end beer sections, an even number of ring filter sections containing filtering material held in place by foraminous walls, an odd number of ring beer sections separating the said filtering sections, each ring having holes formed therein which form, when the sections are clamped together, two beer channels, one for turbid, the other for filtered beer, the interior of the end sections and of every alternate section being connected by suitable holes with the turbid beer channel and the interiors of the other sections with the filtered beer channel, substantially as and for the purpose specified. 6th. In a sectional beer filter, end sections, a series of intermediate sections, and dowel pins connecting the sections, in combination with two rods provided with nuts and adapted to clamp the said sections together by engaging the end sections at diametrically opposite points, trunnions connected to the said rods and a frame in which the said trunnions are journaled, substantially as and for the purpose specified. 7th. In a sectional beer filter, end sections, a series of intermediate sections and dowel pins connecting the sections, and packing rings between the edges of the sections, in combination with the rods provided with nuts and adapted to clamp the said sections together by engaging the end sections at diametrically opposite points, trunnions connected to the said rods and a frame in which the said trunnions are journaled, substantially as and for the purpose specified. 8th. In a sectional beer filter, the combination of recessed or chambered end beer sections, ring filter sections containing filtering material held in place by foraminous walls, ring beer sections separating the said filtering sections, each ring having holes formed therein which form when the sections are clamped together, two beer channels which, by suitable holes, are connected with the interior of alternate beer sections; stop cocks connected with the interior of each beer section opposite to the said passage-ways, a hose pipe connected to one end of each of the beer channels and a plug crossing the opposite end of each beer channel, substantially as and for the purpose specified.

**No. 59,756. Churn.** (Baratte.)



William H. Wortman and Charles A. Pettet, both of London, Ontario, Canada, 25th April, 1898; 6 years. (Filed 9th December, 1897.)

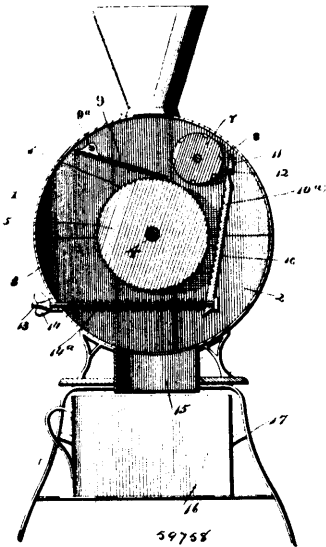
*Claim.*—1st. A frame for a barrel churn, consisting of supports  $a^1$ ,  $a^2$ , inclined towards one another and meeting together at their



upper ends, in combination with the cross bars  $a^1$ , substantially as and for the purpose set forth. 2nd. A frame for a barrel churn, consisting of the supports  $a^1, a^2$ , inclined towards one another and meeting together at their upper ends, and means for securing said upper ends together, in combination with the cross bars  $a^4$ , substantially as and for the purpose set forth. 3rd. A frame for a barrel churn, consisting of the supports  $a^1$  and  $a^2$ , inclined towards one another and meeting together at their upper ends and the plates B, B, in combination with the cross bars  $a^4$ , substantially as and for the purpose set forth. 4th. A frame for a barrel churn, consisting of the supports  $a^1$  and  $a^2$ , inclined towards one another and meeting together at their upper ends, in combination with the braces  $a^3$ , and the cross bars  $a^4$ , substantially as and for the purpose set forth. 5th. The supports  $a^1$  and  $a^2$ , inclined towards one another and meeting together at their upper ends, and the plates B, B, in combination with the braces  $a^3$ , and the cross bars  $a^4$ , substantially as and for the purpose set forth. 6th. The supports  $a^1$  and  $a^2$ , inclined towards one another and meeting together at their upper ends, and cross bars  $a^4$ , in combination with the plates B, B, provided with the flanges  $b^1$ , and bearings  $b^2$ , and the antifriction rollers C, C, substantially as and for the purpose set forth. 7th. The supports  $a^1$  and  $a^2$ , inclined towards one another and meeting together at their upper ends, the braces  $a^3$ , and cross bars  $a^4$ , in combination with the plates B, B, provided with the flanges  $b^1$ , and bearings  $b^2$ , and the antifriction rollers C, C, substantially as and for the purpose set forth. 8th. In the construction of barrel churn bodies, the forming of the tight joint on the ends of the staves, thereby leaving the space between the staves clear, to permit barrel churn bodies to be nested together for shipment, substantially as and for the purpose set forth. 9th. The cover E, in which the recess  $c^1$  is formed, and the packing G, in combination with the rim F, provided with the flange  $F^1$ , and means for securing said rim to said cover, substantially as and for the purpose set forth. 10th. The body D, in the ends of the staves of which the socket H is formed, in combination with the strip I, substantially as and for the purpose set forth. 11th. The cover E, the rim F, and packing G, in combination with the body D, in the ends of the staves of which a socket H, is formed, the strip I, and means for clamping said cover on said body, substantially as and for the purpose set forth. 12th. The body D, the bed plate J, provided with the shouldered recess  $J^2$ , the screw L, and nut M, in combination with the clamping bail N, the rim F, provided with the ears  $F^2$ , and the cover E, substantially as and for the purpose set forth. 13th. The bed plate J, provided with the projection  $J^1$ , and the shouldered recess  $J^2$ , the screw L, and nut M, provided with the recess  $M^1$ , and the flange  $M^2$ , in combination with the clamping bail N, and the rim F, provided with the ears  $F^1$ , substantially as and for the purpose set forth. 14th. The bed plate J, provided with the flanges  $J^2$ , in which the sockets  $J^3$  are formed, in combination with the handle K, provided with angular ends  $K^1$ , substantially as and for the purpose set forth. 15th. The bed plate J, provided with the flanges  $J^2$ , and the sockets  $J^3$ , formed in, and the knobs  $J^4$ , formed on the adjacent faces of said flanges, in combination with the handle K, provided with the angular ends  $K^1$ , substantially as and for the purpose set forth.

ing downward, one being reversal in figures of the other, a float projecting below the stem, a rod extending up from the float, and an indicating-band, surrounding the stock and provided with pointers, said band being connected with the float-rod, substantially as described. 2nd. In liquid-gauges, the combination of a stock provided with a reduced stem adapted to fit within a vessel-opening, said stock being provided also with a series of angularly disposed indicating-faces, each bearing two columns of gauge numerals reading downward, one being a reversal in figures of the other, and longitudinal slots, a float below the stem and limited in movement thereby, a rod projecting up from the float and carrying at its upper end two cross-bars  $i, j$ , whose ends project through said slots, and an indicating-band corresponding in configuration to and surrounding the stock and provided with indicating-pointers, said pointers being connected with the ends of the cross-bars, substantially as described.

**No. 59,758. Coffee and Spice Grinding-Mill.**  
(Moulin à épice et café.)



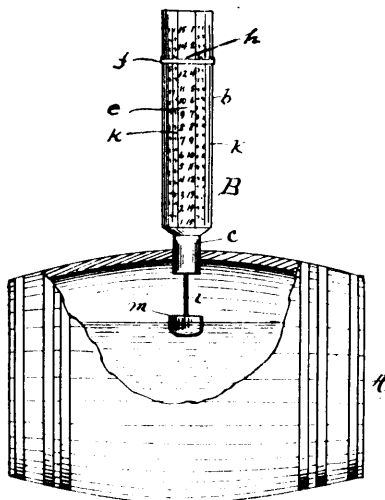
William Emerson Werner, Dunnville, Ontario, Canada, 25th April, 1898; 6 years. (Filed 9th April, 1898.)

*Claim.*—1st. A coffee or spice-mill, comprising a main roller adapted to co-operate with a small roller, both of said rollers being located within a casing, a finishing-plate, and means for adjusting the same, substantially as described. 2nd. A coffee or spice mill, comprising a main toothed roller adapted to co-operate with a small roller, both of said rollers being journaled within a casing, a toothed finishing-plate pivotally secured within the casing, and means for adjusting the same, substantially as described. 3rd. A coffee or spice-mill, comprising a main toothed roller adapted to co-operate with a small spirally grooved roller, both of said rollers being journaled within said casing and provided with teeth extending across its face adjacent the main roller, and means for adjusting said finishing-plate, substantially as described. 4th. A coffee or spice-mill, comprising a main toothed roller adapted to co-operate with a small spirally grooved roller, both of said rollers being journaled within a casing, a finishing-plate pivotally secured within said casing and provided with teeth extending across its face adjacent the main roller, an operating-rod secured to the lower end of said plate and passing through an aperture in the casing, a thumb-nut located upon the outer end of said operating-rod and a spiral spring encircling said rod, said spring normally holding the finishing-plate away from the main roller, substantially as described.

**No. 59,759. Window Sash.** (Cadre de châssis.)

George L. Hahn, Pittsburg, Pennsylvania, U.S.A., 25th April, 1898; 6 years. (Filed 6th April, 1898.)

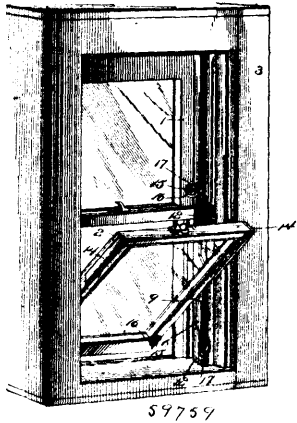
*Claim.*—In a device of the class described, the combination of a pair of sliding strips provided with horizontal perforations, the inner and outer plates having smooth perforations and the outer ones being provided with right and left hand threaded sockets, a reversible window-sash, and the right and left hand threaded pivots passing through the perforations of the inner plates, engaging the right



Joseph S. Long, Pursell, Missouri, U.S.A., 25th April, 1898; 6 years. (Filed 28th March, 1898.)

*Claim.*—1st. In liquid-gauges, the combination of a stock provided with a reduced stem adapted to fit within a vessel-opening, said stock being provided also with a series of angularly disposed indicating-faces, each bearing two columns of gauge numerals read-

and left hand threads of the sockets of the outer plates, engaging the right and left hand threads of the sockets of the outer plates and



provided with attachment-plates secured to the side edges of the sash, substantially as described.

**No. 59,760. Pneumatic Tire Repairing Compound.**

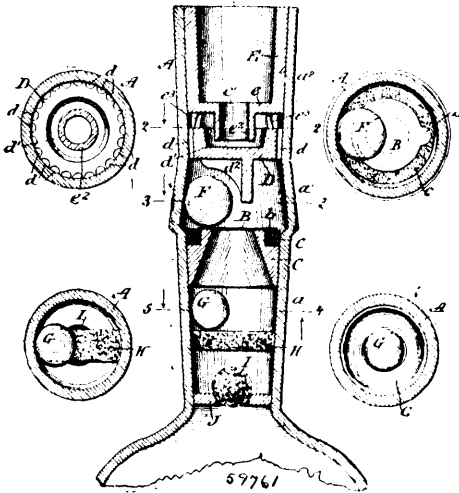
(Composé pour réparer les bandages pneumatiques.)

Charles Clare Allen and Fred Grant Allen, both of South Hadley Falls, Massachusetts, U.S.A., 25th April, 1898; 6 years. (Filed 9th October, 1897.)

*Claim.*—1st. A puncture-closing compound for tires consisting of finely rendered graphite, comminuted asbestos in about equal proportions, and a sufficient quantity of glycerine mixed therewith, to render the same semi-liquid, as set forth. 2nd. The improved compound for closing punctures in tires herein described, the same being composed of finely rendered graphite, comminuted asbestos, and a pulverized substance, as magnesia, whiting or the like, in about equal proportions, together with a sufficient quantity of glycerine to render the same semi-liquid, for the purpose set forth.

**No. 59,761. Non-Refillable Bottle.**

(Bouteille non réemplissable.)

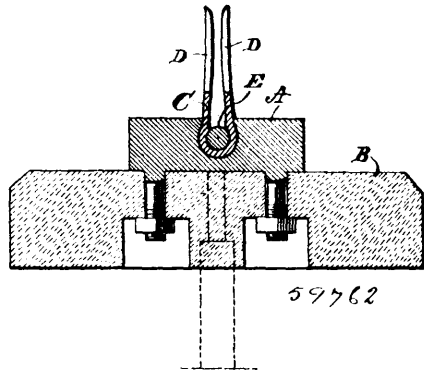


Frederic De Garis, Patchogue, New York, U.S.A., 25th April, 1898; 6 years. (Filed 6th April, 1898.)

*Claim.*—1st. The combination with a bottle having its neck flared upwardly and outwardly, then upwardly and inwardly and then upwardly and outwardly to form the three sections  $a, a^1, a^2$ , of a glass ring C inserted in the neck at the upper end of the chamber  $a$  and provided in the margin of its upper side with an annular groove, a packing-ring within said groove and serving to hold the glass ring in place, a flap-valve secured at one side of the packing-ring and closing downwardly, the packing-ring thus serving also as a means for attaching the valve, a ball or weight in the chamber  $a^1$  and caused by the flared walls of the section  $a^1$  to rest against and hold the valve closed when the bottle is in other than its pouring position and a barrier inserted in the section  $a^2$  to prevent access to the valve, substantially as described. 2nd. The combination with a bottle having a valve in its neck to prevent refilling, of a barrier in the

upper end of the neck comprising a disc tightly fitting the neck and provided in its upper side with a central depression and with peripheral passages, and the tubular cup-like cock or stopper receiving sleeve secured in the upper end of the neck and provided with depending lugs spacing its lower end from the upper side of said disc and formed on its bottom with a central depending tubular flange entering the said disc depression, substantially as described. 3rd. A non-refillable bottle having its neck formed in three internally-flared sections  $a, a^1, a^2$ , the middle section  $a^1$  being flared downwardly and outwardly while the other sections are flared upwardly, an apertured disc in the lower end of section  $a$ , a float-ball for said aperture, a cross-bar above said ball, a glass ring inserted in the upper end of section  $a$ , and having a downwardly-flared bore and an annular marginal groove in its upper side, a weight-ball or weight above said cross-bar to work in the flared bore of said ring and unseat the valve, a packing-ring in said annular groove, a flap-valve secured to the packing-ring and closing downwardly, a weight-ball in the downwardly-flared, integral chamber  $a^1$  to close the valve, and a barrier inserted in the chamber or neck-section  $a^2$ , substantially as described.

**No. 59,762. Electric Switch. (Commutateur électrique.)**



The Stanley Laboratory Company, assignee of Herbert Wilmont Smith, all of Pittsfield, Massachusetts, U.S.A., 26th April, 1898; 6 years. (Filed 15th September, 1897.)

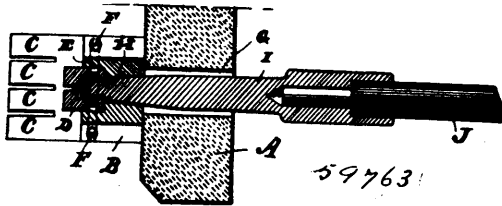
*Claim.*—1st. In an electric connection, a supporting means, a tapered opening therein, a detachable tapered plug, a nut loosely carried by one of said parts, holding means therefor to permit the nut to be free revolved, said means preventing independent longitudinal movement of said nut with respect to its supporting means, a screw-thread connection by which said parts are attached or detached. 2nd. In an electrical connection, a block having a tapered opening, a nut carried by said block and capable of being revolved independently thereof, holding means to prevent said nut from moving in a longitudinal direction independently of said block, a plug having a screw-threaded extremity, the sides of said plug adjacent said screw-threaded extremity being tapered to correspond substantially to the tapered opening in the block. 3rd. In an electrical connection, a block having a tapered opening in one side, a recess in the opposite side, a nut carried in said recess, an annular groove around said nut, pins carried by said block and projecting into said annular groove in said nut, a tapered plug screw-threaded at its extremity to correspond with the screw-thread of said nut. 4th. In an electrical connection, a block, a tapered opening in one side thereof, a recess in the opposite side thereof, a nut carried in said recess and means to prevent disengagement of said nut from said block, a tapered plug, said plug being screw-threaded at its extremity to correspond with the screw-thread of said nut. 5th. In an electric switch, a board, a metallic block secured thereto, a tapered opening in the rear of said block adjacent to said board, an opening in said board concentric therewith but of greater diameter, a nut carried in the face of said block and capable of being revolved, means for preventing the detachment of the nut from said block, a tapered plug screw-threaded at its free extremity to correspond with the screw-threaded opening in the nut.

**No. 59,763. Electric Switch. (Commutateur électrique.)**

The Stanley Laboratory Company, assignee of Herbert A. Bullard, both of Pittsfield, Massachusetts, U.S.A., 26th April, 1898; 6 years. (Filed 15th September, 1897.)

*Claim.*—1st. An electric-switch terminal, comprising a block, an undercut recess therein, a contact-plate bent to correspond substantially with said recess, and a pin adjacent to the bend and within said recess to secure the plate in place in said recess. 2nd. An electric-switch terminal comprising a block, an undercut recess therein, a contact plate bent substantially midway in its length to

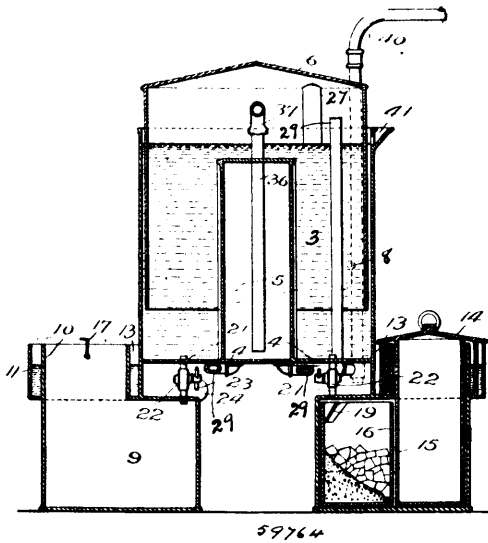
correspond with the recess and a pin within the bend of said plate to secure the same in place in said recess. 2nd. An electric-switch



terminal, comprising a block, a tapering undercut recess therein, a contact-plate bent to correspond substantially with said recess, and a pin within said recess to secure said plate in place.

**No. 59,764. Acetylene Gas Generator.**

(Générateur de gaz à acétylène.)



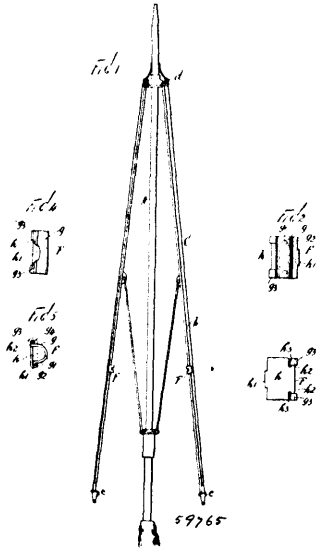
Samuel J. Taylor, Minneapolis, Minnesota, and William E. Fallis, Park River, North Dakota, both in the U.S.A., 26th April, 1898; 6 years. (Filed 4th March, 1897.)

*Claim.*—1st. In an acetylene gas apparatus, the combination, with the water tank, of a closed chamber arranged therein to be surrounded by and submerged in the water in the tank, and a generator to deliver gas to said chamber, the gas being cooled or condensed therein and finally discharged therefrom. 2nd. In an acetylene gas apparatus, the combination, with the water tank, of the submerged condenser chamber therein, the generator, a gas pipe leading therefrom to the bottom of said condenser and through which the liquids of condensation flow back into the generator, and a gas outlet pipe leading from said condenser chamber, substantially as described. 3rd. In an acetylene gas apparatus, the combination, with the water tank, of a carbide compartment, the pipe leading from the water tank to said compartment, a lever for closing said compartment, a condenser chamber arranged in said water tank to be surrounded by water, gas communicating between the same and said carbide compartment, and a gas exit from said chamber. 4th. In an acetylene gas generator, with a water tank and gas holder, of a carbide compartment independent of the water tank and connected therewith by a valved water pipe, an interior condenser chamber or compartment in said water tank normally submerged therein, a valved gas pipe connecting the same with the carbide compartment a gas pipe leading from the lower part of said condenser chamber upward to the gas holder, and valve operating devices extending within the tank and operated by the holder for operating the water valve, substantially as described. 5th. In an acetylene gas generator, the combination, with a water tank, of a carbide compartment, a water-pipe leading into said carbide compartment, a valve therein, a gas-holder to rise and fall according to the quantity of gas therein, a valve in said water-pipe, and rods or levers in connection with said gas-holder to open said valve by the partial downward movement of said gas-holder and to close the valve by the extreme or final movement of the gas-holder, whereby flooding of the carbide compartment is prevented. 6th. In an acetylene gas generator, the combination, with the water tank or supply, and a carbide can or compartment supplied with water from said tank or supply, of a water valve to control the flow of water to said can or compartment, and a movable gas-holder

operatively connected with said water valve and whereby said valve is opened upon the fall of the holder and closed by the final downward movement thereof, as and for the purpose specified. 7th. In an acetylene gas generator, the combination with the water tank and the gas-holder to rise and fall therein, of a compartment to hold gas producing material, a water-pipe by which water is supplied to said compartment, a valve in said pipe, a valve lever, a weight for closing the same when the gas-holder rises to a given length, a valve lever rod extending upward through the tank to be engaged by the gas-holder, as and for the purpose specified. 8th. In an acetylene gas generator, the combination, with the water tank and the gas holder to rise and fall therein, of the carbide compartments, the water-pipe thereof, the valve in said pipe, the weighted valve lever, the telescoping pipes within said tank and a gas-holder carried thereby, respectively, the valve lever rod extending upward through said pipes, and a removable plug in the upper end of the plug or stop carried by the gas-holder to engage said valve lever rod, as and for the purpose specified. 9th. In an acetylene gas generator, the combination, with the water tank and the gas-holder to rise and fall therein, of the carbide compartment, the water-pipe thereof, the valve in said pipe, the weighted valve lever, the telescoping pipes within said tank and the gas-holder carried thereby, respectively, the valve lever rod extending upward through said pipes, and a removable plug in the upper end of the plug or stop carried by the gas-holder to engage said valve lever rod, said plug or stop having an air-hole whereby the formation of a vacuum in the telescoping pipes is prevented, substantially as described. 10th. In an acetylene gas generator, the combination, with a suitable enclosed carbide can having closed bottom and side walls, of a duct or spout for feeding water by gravity down the side of the can, as and for the purpose specified. 11th. In an acetylene gas generator, the combination of the carbide can or cap and a suitable enclosing chamber or compartment, with means for feeding or supplying water into the top of said cap at the side thereof, said can having closed bottom and side walls, and means upon the can to direct the water down the side thereof, substantially as described. 12th. The carbide can having closed bottom and side walls and open at the top, and provided with the side spout or hopper 19, substantially as described. 13th. In an acetylene gas generator, the combination with the water tank of the carbide compartment to contain the carbide cans, and open at the top to permit the withdrawal of the can, a cap for the compartment, a water seal for said cap, and water supply and gas exit pipes connected with the compartment, substantially as described. 14th. In a gas generator, the combination, with a water tank and gas-holder, of the carbide compartment a water-pipe through which the same is supplied, said compartment having an extension provided with a water seal, a cap therefor, and a gas exit from said compartment to said gas holder, substantially as described. 15th. In a gas generator, the combination, with the water tank, and gas holder, of the carbide compartment, a water-pipe through which the same is supplied, said compartment being oblong in form to contain a carbide can, the portion not occupied by the can being provided with a cap, and a plug carried by said to occupy the space in the compartment which would otherwise be filled with gas, substantially as described. 16th. The combination, with an acetylene generator, of the gas holder, the gas pipe leading from the generator to the gas holder, a three-way valve provided in said pipe and which upon being turned to close the passage through said pipe opens a passage from the generator to the open air so that the gas may be exhausted from the generator before the same is opened, substantially as described. 17th. In a gas generator, the combination, with the tank and the gas holder, and the gas inlet pipe or float provided in said tank, and a flexible pipe extending from the gas inlet pipe and downward through said float, whereby the gas is discharged into the water in the tank and washed therein before rising into the holder, and whereby the gas is put under a uniform pressure, substantially as described. 18th. The combination in a gas holder, of the water tank and the movable holder, with telescoping pipes or rods arranged within said tank and holder and connected therewith, respectively, and forming guides for the holder, substantially as described. 19th. The process for generating acetylene gas which consists in confining a body of calcium carbide, feeding water by gravity to the lowest unconsumed parts of said body of calcium carbide, and confining the hydrate of lime that is formed to continually form a substantial floor upon which the water flows to attack the lowest unconsumed parts of the body of carbide, substantially as described. 20th. In an acetylene gas generator, the combination, with a water tank 2, of a carbide compartment 9, a condenser chamber 5 arranged within said water tank, having its bottom formed by the bottom of said tank, and being of less height than said water tank, to be submerged in the water in said tank, a gas pipe 36 leading from the lower part of said condenser chamber upward through the same to a point above the surface of the water in said tank, a gas holder 6 to rise and fall in said tank, said carbide compartment being beneath said condenser chamber 5, whereby the liquid of condensation from said chamber passes back into said compartment, and means for supplying and controlling the supply of water from said tank to said compartment, as and for the purpose specified. 21st. In an acetylene gas generator, the combination, with the water tank, and the gas holder to rise and fall therein, of a compartment to hold the gas producing material, a water pipe by which water is supplied to said compartment, a valve in said water pipe, a valve lever on said valve, a vertical valve rod operating said

lever guide pipes 26 and 27 arranged within said tank and said gas holder, said valve rod being held therein and adapted to be operated by said gas holder, whereby the movement of the gas holder is employed to control the flow of water to said compartment, substantially as described. 22nd. The combination with a water tank and a gas holder, of the carbide compartment arranged at the side thereof, and having an open top, a cap therefor, a water pipe leading from the tank into the bottom of said compartment, a gas exit pipe in the top of the compartment, and a carbide holder arranged in said compartment, the material therein being attacked from the bottom, substantially as shown and described.

**No. 59,765. Umbrella Clip.** (*Lien pour parapluies.*)

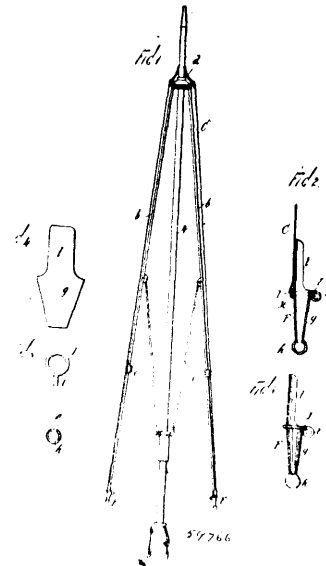


Frank Herbert Mitchell and John Miles, both of New York City, New York, U.S.A., 26th April, 1898; 6 years. (Filed 13th January, 1898.)

*Claim.*—1st. An improved clip for umbrella covers of the class described, comprising a body portion adapted to be attached to the umbrella cover and embrace the body of the rib, a bottom plate closing said body portion, and having a hinged connection therewith, and means for retaining the body portion and plate in relatively locked position when the rib is enclosed within the device, substantially as and for the purpose set forth. 2nd. An improved clip for umbrella covers of the class described, comprising a semi-tubular body portion conforming to and adapted to enclose the body of an umbrella rib, a flat bottom plate having a hinged connection with one edge of said semi-tubular body and adapted to close the same and extend across the inner edge of the rib, and means for locking the body portion and closing plate together at their free edges, substantially as and for the purpose set forth. 3rd. An improved clip for umbrella covers of the class described, comprising a semi-tubular body portion adapted to embrace an umbrella rib, and a bottom plate having a hinged connection with one edge of said body and a spring lip adapted to engage the other edge, substantially as and for the purpose set forth. 4th. An improved clip for umbrella covers of the class described, comprising a semi-tubular body portion conforming to and adapted to embrace the rib of an umbrella and having a projecting free edge, and a bottom plate hinged at one edge to the body portion and provided at its free edge with a spring lip operating with respect to the projecting free edge of the body, substantially as and for the purpose set forth. 5th. An improved clip for umbrella covers of the class described, comprising two members hinged together and adapted to conjointly embrace and enclose an umbrella rib, one of said hinged members being adapted to be carried by the umbrella cover, substantially as and for the purpose set forth. 6th. An improved clip for umbrella covers of the class described, comprising a body portion adapted to embrace or enclose the rib of an umbrella, and a closure plate or cover adapted to be connected with said body and close the open side of the same and operate to lock the device in position upon the rib, substantially as and for the purpose set forth. 7th. An improved clip for umbrella covers of the class described, comprising a body portion adapted to be carried by the umbrella cover and embrace or enclose the rib, and carrying a hinged cover plate or clip, substantially as and for the purpose set forth. 8th. In an improved clip for umbrella covers of the class described, the combination, with a semi-tubular body portion conforming to and adapted to embrace the outer edge and sides of the ribs, said body being adapted to be carried upon and projecting from the umbrella cover, and means for closing the open side of said semi-

tubular body and locking the same in position upon the rib, substantially as and for the purpose set forth. 9th. As an improved article of manufacture, clip for umbrella covers of the class described, having the semi-tubular portion provided with extensions at its rear edge curved to form bearing eyes and loops, and carrying a bottom plate having recesses in its side edges forming pintles or gudgeons engaging said ribs, substantially as and for the purpose set forth. 10th. As an improved article of manufacture, a clip for umbrella covers of the class described, having a semi-tubular spring body portion provided with a projecting free edge and carrying a bottom plate hinged to its rear edge and provided with a spring lip adapted to engage said projecting free edge upon the body, substantially as and for the purpose set forth. 11th. As an improved article of manufacture, a clip for umbrella covers of the class described, having a semi-tubular body portion provided with extensions at its rear edge curved to form bearing eyes or loops and provided with a projecting free edge, said body carrying a bottom plate having recesses in its ends forming pintles or gudgeons engaging the bearing eyes or loops and having a lip at its free edge engaging the projecting free edge of the body, substantially as and for the purpose set forth. 12th. In an improved umbrella or parasol of the class described, the combination, with the ribs, of the detachable cover mounted upon the end ferrule and carrying interiorly the clips comprising a body portion adapted to receive and enclose the sides and top edge of the rib and having a closure plate for closing the open side of said body portion and locking the same in connection with the ribs, substantially as and for the purpose set forth.

**No. 59,766. Umbrella Tip.** (*Ferrure pour bouts de parapluies.*)



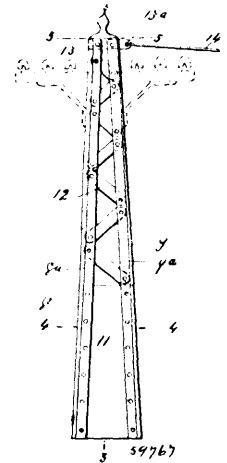
Frank Herbert Mitchell and John Miles, both of New York City, U.S.A., 26th April, 1898; 6 years. (Filed 13th January, 1898.)

*Claim.*—1st. An improved tip for umbrella covers of the class described, having an annular or circumferential ridge or flange surrounding the body of the tip at its top portion and adapted to retain the securing thread in proper position at all points of the circumference of said tip, substantially as and for the purpose set forth. 2nd. An improved tip for umbrella covers of the class described, having a circumferential or annular ridge or flange surrounding the body of the tip at its top portion, in combination with an eye or loop projecting with respect to said ridge or flange, substantially as and for the purpose set forth. 3rd. An improved tip for umbrella covers of the class described, having a circumferential ridge or flange surrounding the body of the tip at its top portion, in combination with an eye or loop projecting downwardly with relation to the under side or edge of said circumferential ridge, substantially as and for the purpose set forth. 4th. An improved tip for umbrella covers of the class described, having a circumferential or annular ridge or flange surrounding the body of the tip at its top portion and carrying an eye or loop projecting laterally with relation to said ridge or flange and with relation to the body of the tip, substantially as set forth. 5th. An improved tip for umbrella covers of the class described, having a circumferential ridge or flange surrounding the body of the tip at its top portion and carrying an eye or loop projecting laterally with relation to said circumferential ridge and with relation to the body of the tip and also projecting downwardly with relation to the under side or edge of said circumferential ridge or flange, substantially as and for the purpose set forth. 6th. An improved tip for umbrella covers of the class

described, having a circumferential or annular ridge or flange surrounding the body of the tip at its top portion and carrying an eye or loop, substantially as and for the purpose set forth. 7th. An improved tip for umbrella covers of the class described, having a laterally projecting eye or loop arranged with relation to a ridge or projection extending from the body of the tip at its top portion, substantially as and for the purpose set forth. 8th. In an umbrella or parasol of the class described, the combination of a tip having an annular or circumferential ridge or flange surrounding said tip at the top portion, the cover having its edge set around the edge of and extending beneath or below said circumferential ridge, and a securing thread engaging with the cover and encircling the body of the tip beneath said circumferential ridge or flange and retained by the latter in position at all points of the circumference of the tip, substantially as and for the purpose set forth. 9th. In an umbrella or parasol of the class described, the combination of a tip having an annular or circumferential ridge or flange surrounding the body of said tip at the top portion, said tip having an eye or loop projection with relation to the circumferential ridge or flange, a cover set around said ridge or flange and extending beneath or below the same, and a securing thread engaging the cover and encircling the body of the tip beneath the circumferential ridge or flange and retained by the same in position at all points of the circumference of the body, said thread being passed through the projecting eye or loop, substantially as and for the purpose set forth. 10th. In an umbrella or parasol of the class described, the combination, with the frame rib, of a tubular tip adapted to receive the same and having an annular or circumferential ridge or flange surrounding the body of the tip at the top portion, said tip being provided with an arm or extension projecting above said circumferential ridge or flange and adapted to embrace the edge of the rib, the cover passed around said ridge or flange and extending beneath or below the same, and a securing thread engaging the cover and encircling the body of the tip beneath the continuous under side or edge of the circumferential ridge or flange, substantially as and for the purpose set forth. 11th. An improved tip for umbrella covers of the class described, comprising a tubular body having an annular or circumferential ridge of flange surrounding said body at the top portion, and provided with an extension or arm projecting above said circumferential ridge or flange and arranged in approximately the longitudinal plane of the tip, substantially as and for the purpose set forth. 12th. An improved tip for umbrella covers of the class described, having a seat extending continuously with respect to the circumference of the body of the tip, against which seat the securing thread is adapted to bear at all points of the circumference of the tip, substantially as and for the purpose set forth. 13th. In an umbrella or parasol of the class described, the combination of a tip having a ridge or flange at its circumference, the cover passing over said ridge or flange and extending under or beneath the same, and the securing thread connected with the cover on a plane just beneath said ridge or flange and encircling the body of the tip whereby the cover is bound securely against and with respect to the under side or edge of said ridge or flange and the thread is adapted to offer resistance in the directions of the greatest strain in the drawing operations of the cover, substantially as and for the purpose set forth. 14th. As an improved article of manufacture, a tip for umbrella covers of the class described, comprising a body portion, and a ring conforming to and secured upon the circumference of said body, and forming an annular ridge or flange surrounding the same, substantially as and for the purpose set forth. 15th. As an improved article of manufacture, a tip for umbrella covers of the class described, comprising a body portion and a ring bent into shape with its terminal end forming an eye or loop projecting with relation to the body of said ring, said ring conforming to and being secured upon the body of the tip so that it forms an annular ridge or flange surrounding the same, substantially as and for the purpose set forth. 16th. As an improved article of manufacture, a tip for umbrella covers of the class described, having a tubular body bent up from sheet metal, and a ring encircling said body and secured to the same and forming a circumferential ridge or flange thereon, substantially as and for the purpose set forth. 17th. As an improved article of manufacture, a tip for umbrella covers of the class described, comprising a tubular body bent up from sheet metal and having a ball or knob inserted upon and secured to the end of said bent up body and binding the same, substantially as and for the purpose set forth. 18th. As an improved article of manufacture, a tip for umbrella covers of the class described, comprising a tubular conical or tapering body bent up from sheet metal with an open end or point and having an open ball or knob inserted upon said end or point and secured thereon, substantially as and for the purpose set forth. 19th. As an improved article of manufacture, a tip for umbrella covers of the class described, comprising a tubular conical or tapering body bent up from sheet metal, and a ring swedged or secured upon said conical body at its larger diameter and encircling the same, substantially as and for the purpose set forth. 20th. As an improved article of manufacture, a tip for umbrella covers of the class described, comprising a tubular body bent up from sheet metal and having its ends respectively bound by a ring secured to and encircling the body and an open ball or knob secured upon the end of said body, substantially as and for the purpose set forth. 21st. In an improved umbrella or parasol of the class described, the combination, with the ribs and the detachable cover carried upon

the said ferrule, of tips comprising a tubular body receiving the ends or the ribs and having an annular or circumferential ridge or flange surrounding said body at the top portion, around the edge of which circumferential ridge or flange the edge of the cover is placed, and securing threads attached to the edge of the cover and encircling the body of the tip beneath the continuous under side or edge of said circumferential ridge or flange, substantially as and for the purpose set forth.

No. 59,767. Column. (Colonne.)



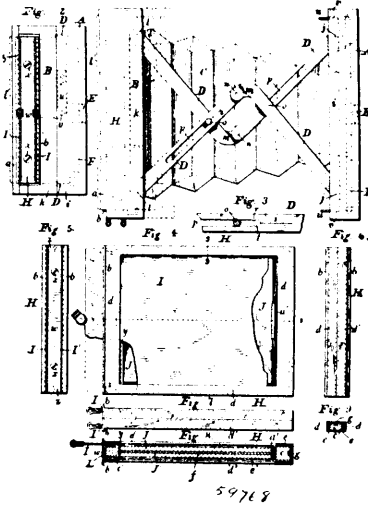
The Dominion Bridge Company, Lachine, assignee of Phelps Johnson, Montreal, both in Quebec, Canada, 26th April, 1898; 6 years. (Filed 19th August, 1896.)

Claim.—1st. A uniformly tapered metallic column composed of a tapered central web section, and a number of tapered lengths of angle iron or outside corner sections each corner section having two side portions, one of which is of the same width throughout its entire length and secured to the web section, and the other of tapering width and projecting at right angles to the web section, for the purposes set forth. 2nd. A uniformly tapered metallic column composed of a tapered central web section, and a number of tapered lengths of angle iron or outside corner sections, each corner section having two side portions one of which is of the same width throughout its entire length and secured to the web section and the other of tapering width and projecting at right angles to the web section, with single reinforcing plates extending over the outside surfaces of the tapered side portions of two adjacent corner sections and secured to such sections, for the purpose set forth. 3rd. A uniformly tapered metallic column composed of a tapered central web section, and a number of tapered lengths of angle iron or outside corner sections each corner section having two side portions, one of which is of the same width throughout its entire length and secured to the web section, and the other of tapered width and projecting at right angles to the web section with one or more cross arms secured rigidly between said lengths of angle iron and projecting laterally of the column, for the purpose set forth. 4th. A metallic column tapering on all sides and composed of a tapered central web-section, and four tapered lengths of angle-iron disposed to form four outside corner-sections of a quadrangular structure, and each corner-section having two side portions, one of which is of the same width throughout its entire length and secured to the web section, and the other of tapering width and projecting at right angles to the web-section, for the purpose set forth. 5th. A metallic column tapering on all sides and composed of a tapered central web-section, and four tapered lengths of angle-iron disposed to form four outside corner-sections, of a quadrangular structure and each corner-section having two side portions one of which is of the same width throughout its entire length and secured to the web-section and the other of tapering width and projecting at right angles to the web-section, with single reinforcing-plates extending over the outside surfaces of the tapered side portions of two adjacent corner-sections and secured to such sections, for the purpose set forth. 6th. A metallic column tapering on all sides and composed of a tapered central web-section, and four tapered lengths of angle-iron disposed to form four outside corner-sections of a quadrangular structure and each corner-section having two side portions, one of which is of the same width throughout its entire length and secured to the web section, and the other of tapered width and projecting at right angles to the web-section with one or more cross-arms secured rigidly between said length of angle-iron and project-

ing laterally of the column, for the purpose set forth. 7th. A uniformly tapered metallic column composed of a tapered central web section, and a number of tapered lengths of angle iron or outside corner sections each corner section having two side portions, one of which is of the same width throughout its entire length and secured to the web section, and the other of tapered width and projecting at right angles to the web section, the column having horizontal brackets secured thereto near the upper end thereof and adapted to project beyond the edges of either side of said column and support cross-arms on either side of said column, for the purpose set forth.

**No. 59,768. Photographic Camera.**

(Camera photographique.)



The Monroe Camera Company, assignee of Silas French, both of Rochester, New York, U.S.A., 26th April, 1898; 6 years. (Filed 30th August, 1897.)

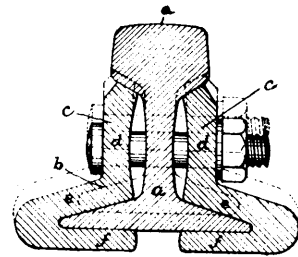
*Claim.*—1st. The combination in a collapsible camera of the front, back and bellows, a pair of crossed links pivoted to the front near its outer edges, a pair of crossed links pivoted to the back near its outer edges, each link extending inward beyond the point of crossing and pivoted to one of the opposite pair, and a spring-catch consisting of a slot *p* contracted at one end in one link and a pin *o* in its crossed link, substantially as described. 2nd. The combination in a plate-holder of the frame having grooves on its opposite sides and sheet metal shells having internal flanges *g* fitting said grooves to hold said shells upon the frame, the members in transverse section being of less dimensions than the shells to provide slide-receiving spaces *c, c'* and slides *I, I'*, substantially as described. 3rd. The combination with the interior wooden frame, of the flanged apertured sheet-metal shells *d, d'*, applied to and inclosing the frame from opposite sides, and exposing the frame from opposite sides, and exposing slides *I, I'* arranged to slide in recesses between the shells and the frame, the septum in the frame, means for holding the plates in the frame and means for excluding the light when the slides are removed, substantially as described. 4th. The combination with the interior wooden-frame, of the flanged apertured sheet-metal shells *d, d'* applied to and inclosing the frame from opposite sides *I, I'* arranged to slide in recesses between the shells and the frame, the septum and means for holding the plates in the frame, the removable plate attached to the frame between the slides, and the light excluding devices *L*, substantially as described. 5th. The combination with the interior wooden-frame, of the flanged apertured sheet metal shells *a, a'* applied to and inclosing the frame from opposite sides and having the ears *z* bent over the ends of the frame the exposing slides *I, I'* arranged to slide in recesses between the shells and the frame, the septum and means for holding the plates in the frame, the removable plate *w* attached to the frame at the end between the slides over the ears, and the light excluding device *L*, substantially as described.

**No. 59,769. Rail Joint. (Joint de rail.)**

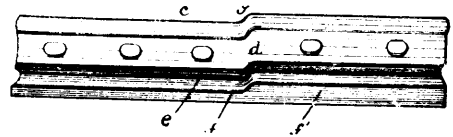
The Continuous Rail Joint Company of America, Newark, New Jersey, assignee of Elizabeth M. Thoupson, Madison, in New Jersey aforesaid, 26th April, 1898; 6 years. (Filed 19th October, 1897.)

*Claim.*—1st. The improved rail connection herein described, comprising a fish plate having a vertical portion adapted to fit between the rail tread and rail flange and having a doubled lateral extension adapted to fill the upper and lower sides of the rail flange, the said fish plate having the bottom portion of the doubled extension of varying thicknesses, providing seats of varying heights for the differently sized rails, substantially as set forth. 2nd. The combin-

ation with the rails of varying heights, of fish plates having vertical portions with off sets *g*, adapted to fit between the different rail

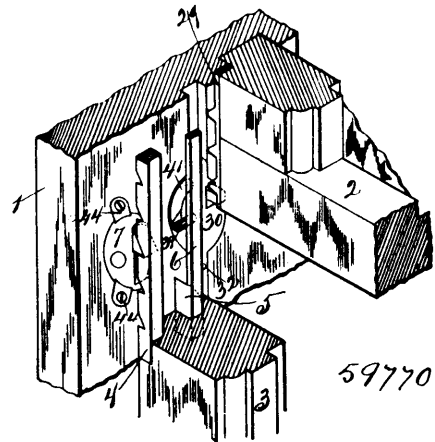


59769



head and flanges and having doubled lateral extensions adapted to lie on the upper and lower sides of the rail flanges, the lower portions of the doubled extensions being made of varying thicknesses to suit the differences in the heights of the rails, substantially as set forth.

**No. 59,770. Sash Lock. (Serrure de fenetre.)**



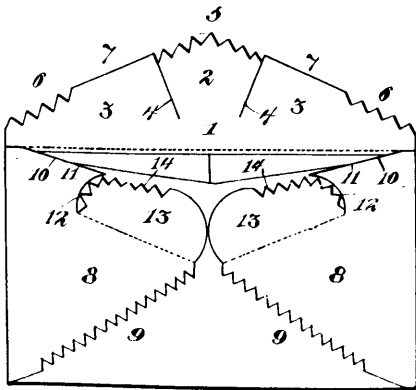
59770

The Miller Lock Company, assignee of Lewis Cass Miller, all of Louis, Missouri, U.S.A., 26th April, 1898; 6 years. (Filed 9th October, 1898.)

*Claim.*—1st. In a sash lock or fastener, the combination with mechanism for locking a top sash against downward movement while permitting it to move upward, of mechanism for locking the bottom sash against upward movement while permitting it to move downward, and means for unlocking the top and the bottom sash so that while unlocked they may be moved, respectively up and down, the portion of said means which operates in connection with the bottom sash being mechanically held out of operative relation, substantially as and for the purposes described. 2nd. In a sash lock or fastener, the combination with mechanism, for locking a top sash against downward movement while permitting it to move upward, of mechanism for locking the bottom sash against upward movement while permitting it to move downward, means for unlocking the mechanism of the bottom sash to permit it to be raised, and means carried by the bottom sash and in the upward movement of said sash brought in contact with a part of the locking mechanism of the top sash for actuating the same to permit the top sash to be lowered, substantially as and for the purposes described. 3rd. In a sash lock or fastener, the combination with mechanism for locking a top sash at various adjustments and in a closed position, of mechanism for locking the bottom sash at various adjustments and in a closed position, said mechanism of the bottom sash comprising a latch to engage a stop or rack bar on the sash, a guard catch adapted to fit over the end of the latch when retracted to hold it out of engagement with said stop or rack bar, and to be moved from the end of the latch in a downward movement of the sash to permit the latch to engage the stop or rack-bar, and means for unlocking the locking mechanism respectively of the top and bottom sashes, sub-

stantially as and for the purposes described. 4th. A sash lock or fastener, comprising a stop or rack bar for the sash, a latch to engage said stop or rack bar, a guard catch adapted to fit over the end of the latch when retracted to hold it out of engagement with said stop or rack bar and to be moved from the end of the latch by the sash in its movement in one direction, and means for retracting the latch from the stop or rack bar, substantially as and for the purposes set forth. 5th. A sash lock or fastener, comprising a stop or rack bar for the sash, a spring actuated latch to engage said stop or rack bar, a spring actuated guard catch having a shank, a heel, and a nose-piece to fit over the end of the latch when retracted to hold it out of engagement with the stop or rack-bar, and means for retracting the latch from the stop or rack-bar, substantially as and for the purposes described. 6th. In a sash lock or fastener, the combination with mechanism for locking one sash, of mechanism for locking the other sash and comprising a stop or rack-bar attached to said other sash on the side next to the sash frame, a spring actuated latch adapted to be thrown in and out from the sash frame next to the said stop or rack-bar, a finger to engage a part of said latch and having a pin projecting into the path of a cam carried by the other sash, substantially as and for the purposes described.

**No. 59,771. Envelope. (Enveloppe.)**



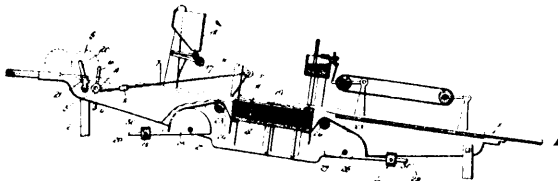
59771

Mary E. Hicks, Oleona, and Nancy Wykoff, Hammersley, assignees of William L. Brobst, late of Cross Fork, deceased, all in the State of Pennsylvania, U.S.A., 26th April, 1898. (Filed 3rd December, 1897.)

*Claim.*—A safety envelope consisting of a body portion having side flaps 8-8, the lower diagonal edges of which are provided with saw teeth, and the upper edges of which are provided with auxiliary flaps 13, having saw teeth edges, the sealing flap 1, provided with the tab 2 having saw tooth edges, said sealing flap 1 having a portion of its edge plain at 7-7 and saw tooth at 6-6, the plain portion adapted to be sealed by the auxiliary flaps 13-13, and the saw teeth 6-6 adapted to seal the plain edges 10-10 of the flaps 8-8, and the tab 2 to seal the abutting or adjacent edges of the auxiliary flaps 13-13, substantially as set forth.

**No. 59,772. Can Labelling Machine.**

(Machine à étiqueter les boîtes métalliques.)



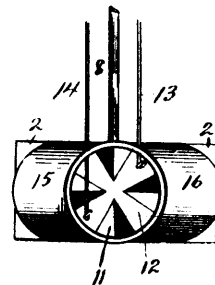
59772

Lyman C. Parke, San Francisco, California, assignee of Henry W. Pease, Goshen, Indiana, all in the U.S.A., 26th April, 1898; 6 years. (Filed 24th February, 1898.)

*Claim.*—1st. In a can-labelling machine, the combination with a runway and label-applying mechanism, of a rotary stop-wheel having a number of arms or spokes adapted to project into the path of the cans, a device for locking said stop-wheel against rotation, and a trip arranged in the path of and adapted to be struck by the cans for automatically releasing said locking device, substantially as set forth.

2nd. In a can labelling machine, the combination with a runway and label-applying mechanism, of a rotary stop-wheel having a number of arms or spokes adapted to project into the path of the cans and being provided with a toothed wheel, a bolt or latch arranged to engage the teeth of said wheel, and a trip arranged to be operated by the cans for automatically withdrawing said bolt or latch and releasing said stop-wheel, substantially as set forth. 3rd. In a can-labelling machine, the combination with a runway and label-applying mechanism, of a rotary stop-wheel having a number of arms or spokes adapted to project into the path of the cans and being provided with a toothed wheel, a bolt or latch arranged to engage with the teeth of said wheel, and a pivoted arm arranged in the path of the cans and connected to said latch for withdrawing the latter from engagement with said toothed wheel, substantially as set forth. 4th. In a can-labelling machine, the combination with the runway and label-applying mechanism of a horizontal shaft having a number of radial arms or spokes projecting upward from the runway, a ratchet-wheel on said shaft, a sliding bolt or latch arranged to engage with said ratchet-wheel, connected arms pivoted above the runway and having connection with said bolt or latch, projections on said arms extending transversely of the runway, and means for forcing said latch into engagement with the ratchet-wheel, substantially as set forth. 5th. In a can-labelling machine, the combination with a runway and label-applying mechanism, of a rotary stop-wheel having a number of arms or spokes adapted to project into the path of the cans, a ratchet-wheel on the axis of said stop-wheel having teeth corresponding in number and arrangement with said arms or spokes, a device for locking said stop-wheel against rotation, a trip arranged in the path of and adapted to be struck by the cans for automatically releasing said locking device, and a permanent stop-lever having a tooth and being pivoted so as to swing into engagement with the teeth of said ratchet-wheel, substantially as set forth. 6th. In a can-labelling machine, the combination, with a body portion, of can-delivering means, a paste-applying device, a label-carrying table, a stop-detent for the delivering-means, and a lever carried on the body portion and adapted to be engaged by the can, said lever being connected to and controlling the stop and detent, substantially as set forth. 7th. In a can-labelling machine, an inclined table or way over which the can rolls, a wheel located in the can-path and controlling the feed of the cans, a locking device for the wheel, and means also located in the can-path and actuated by the passing cans for releasing the locking device, substantially as set forth. 8th. In a can-labelling machine, radial arms forming receptacles into which the cans are received at the upper end of the table, a pawl-and-ratchet mechanism by which the holding arms are retained in position, a roller at the lower end of the apparatus adapted to be raised by the passage of the cans beneath it, and a connection between said roller and the pawl which holds the ratchet at the upper end, whereby the pawl is withdrawn and the cans delivered upon the table, substantially as set forth.

**No. 59,773. Water-Motor. (Moteur à eau.)**



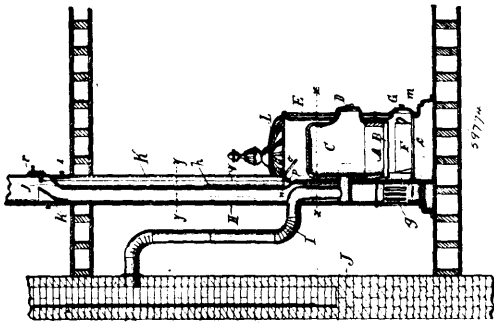
59773

Charles W. Horton and John Horton, both of Edgerton, Ohio, U.S.A., 26th April, 1898; 6 years. (Filed 12th March, 1898.)

*Claim.*—1st. In a water-motor, the combination of the casing 1, having bifurcated hollow portions 15 and 16 formed integral therewith, perforated attaching-plates 2 forming a portion of said bifurcated portions, the framework 3 located in said casing, said framework having a countershaft 4 journaled therein, the propeller-wheel 6 at the forward end of said countershaft and the mitre gear at the rear end thereof, the post 9 rising from the bottom of the casing, the vertical shaft 8, the lower end of said shaft journaled in said post 9, and the mitre-gear secured to said vertical shaft in such position as to normally mesh with gear 7, substantially as shown and described. 2nd. In a water-motor, the combination of the Y-shaped casing, the framework 3 therein, the countershaft journaled in said framework, a propeller-wheel at the forward end of said countershaft and the mitre-gear at the rear, collars 5 secured to said shaft at the sides of said framework, the gear 10 and shaft 8 for transmitting power from said countershaft and propeller, said valve consisting of parts 11 and 12, and the cables 13 and 14 connected with the movable member of said valve, all substantially as shown and described for the purpose set forth.



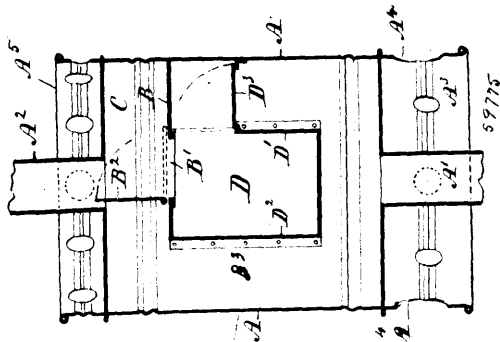
**No. 59,774. Heater and Ventilator.**  
(*Chauffeur et ventilator.*)



The Peck Williamson Heating and Ventilating Company, Cincinnati, Ohio, assignee of Joseph W. Johnson, Hartwell, Ohio, all in the U.S.A., 26th April, 1898; 6 years. (Filed 15th March, 1898.)

*Claim.*—1st. In a heater and ventilator, the combination with an outer shell having an open top and a fresh-air register or opening in its bottom, of a heater within said shell, a vent-flue forming part of and extending up from said shell, said vent-flue being out of communication with said other shell and having a foul air register in its base, and a smoke-pipe for the heater entering said vent-flue and passing upward there-through in a vertical direction for a short distance to induce a draft in said flue, and then out to the chimney, substantially as described. 2nd. In a heater and ventilator, the combination with a double-walled outer shell having an open top and a fresh-air register or opening in its bottom, of a heater within said shell, a vent-flue forming part of and extending up from said shell, and a vent-flue being out of communication with said outer shell and having a foul-air register in its base, and a smoke-pipe for the heater entering said vent flue and passing upward there-through in a vertical direction to induce a draft in said flue, and then out to the chimney, substantially as described. 3rd. In a heater and ventilator, the combination with a heating-shell, a vent-flue forming part of and extending up from said shell, a warm-air flue lying within said vent-flue and traversing said vent-flue, for a part of its length, said warm-air flue communicating at its lower end with said shell and at its upper end with a register in the room above, substantially as described. 4th. In a heater and ventilator, the combination of a heating-shell, a vent-flue forming part of and extending up from said shell, a warm-air flue within said vent-flue opening at its lower end into said shell and at its upper end at a register in the room above, a deflector in the vent-flue opposite said register and a second foul-air register in the vent-flue behind the deflector, substantially as described. 5th. In a heater and ventilator having an exterior heating-shell with an open top for the escape of heated air into the room containing the heater and a warm-air flue extending upward from said heating-shell, the combination thereof with a deflector hinged adjacent to the warm air flue so as to be adjustable in said shell, and means for operating said deflector from the room above, substantially as described.

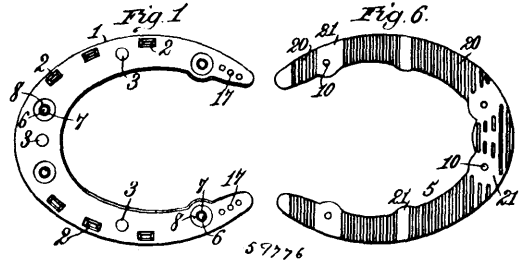
**No. 59,775. Heating Drum.** (*Poêle-sourd.*)



Richard Hewitt and George Creagh, both of Pilot Mound, Manitoba, Canada, 26th April, 1898; 6 years. (Filed 24th March, 1898.)

*Claim.*—1st. A stove pipe heating drum having within it near the top a partial horizontal partition B, having a smoke passage B<sup>2</sup>, a central aperture B<sup>1</sup>, provided with a damper B<sup>2</sup>, and forming a smoke chamber C, and a fire box D within the drum surrounded by smoke passages, said fire box having one side foreshortened and provided with a damper D<sup>2</sup> to cut off smoke ascending that side of the fire box and exclude it from the fire box, as set forth.

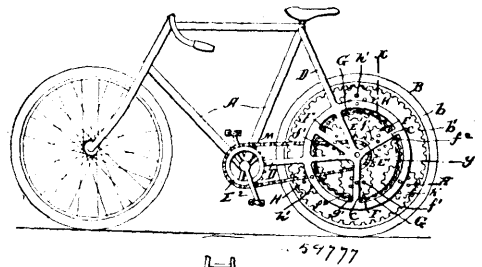
**No. 59,776. Horse Shoe.** (*Fer à cheval.*)



William Short Hitch and James Henry Wilson, both of Dover, Delaware, U.S.A., 26th April, 1898; 6 years. (Filed 22nd March, 1898.)

*Claim.*—1st. A horse-shoe, composed of an upper plate and a lower plate respectively provided with close fitting mortises and tenons, the said upper plate being provided on its bottom with tubular internally screw threaded bosses, and the said lower plate having on its top annular bosses to loosely engage the said tubular bosses of the upper plate, and provided on its bottom with recesses, an elastic plate interposed between the said upper shoe-plate and lower shoe-plate, and screw bolts engaged in the tubular bosses of the upper plate and having the heads of said bolts loosely inclosed in the recesses in the bottom side of the lower plate, substantially as and for the purposes described. 2nd. In a horse-shoe, the combination of an upper shoe-plate adapted to be nailed to the hoof and provided with a number of mortises and with circular openings that are surrounded on the bottom of said plate by tubular internally screw threaded bosses and concentric annular recesses, a lower shoe-plate having its top provided with tenons to closely engage said mortises and with annular bosses to loosely engage said tubular bosses and having circular recesses in its bottom, an elastic and perforated plate interposed between the said upper shoe-plate and lower shoe-plate, and screw bolts to secure the said plates together, the said screw bolts being engaged in the tubular internally screw threaded bosses of the upper plate and having their heads loosely inclosed in the recesses in the bottom of the lower plate, substantially as and for the purposes described. 3rd. In a horse-shoe, the combination of an upper shoe-plate adapted to be nailed to the hoof and having its under side provided with recesses to receive an elastic packing, and a lower shoe-plate detachably secured to the upper plate and provided with corrugated surfaces, substantially as described.

**No. 59,777. Bicycle.** (*Bicycle.*)



Lewis C. Cary, Thomas H. Conklin and Charles Robert Morehead, all of El Paso, Texas, U.S.A., 26th April, 1898; 6 years. (Filed 16th March, 1898.)

*Claim.*—1st. A multiple gearing for bicycles, vehicles, and traction devices, comprising a frame-work, an axle mounted therein, a traction-wheel having an inner cogged rim, mounted upon said axle by means of spokes connecting said rim with a sleeve upon said axle, a sprocket and gear-wheel secured together and rigidly mounted upon said axle to revolve with the same, an endless chain connecting said sprocket-wheel with a motive power to revolve the same, a series of gear-wheels mounted upon one side of said frame-work, equi-distant apart and having pins or lugs to mesh with the first gear-wheel, and provided with cogs or teeth upon their outer circumferences, a gear-

wheel having teeth or cog surfaces upon its exterior and interior surfaces, mounted upon a sleeve upon said axle, adjacent to the first sleeve and between the latter and the first sprocket-wheel, a series of gear-wheels mounted in said frame-work, at points equi-distant, and beyond the circumference of the last-mentioned wheel, and having pins or lugs upon their outer surfaces engaging the teeth upon the circumference of the latter wheel, said latter series of wheels having teeth meshing with teeth upon said rim of the traction-wheel, substantially as described and set forth. 2nd. A multiple gearing for a bicycle comprising a frame-work, a traction-wheel having a cogged rim upon its inner surface, an axle having two loose sleeves  $d$ ,  $d'$ , mounted thereon adjacent to each other, said traction-wheel being mounted on sleeve  $d$ , and two rigid wheels being secured

together and locked to revolve with said axle, one of said wheels being a sprocket-wheel connected by an endless chain with a motive power, and the second wheel meshing with a series of wheels mounted, equi-distant apart in the side of said frame-work adjacent to said sprocket-wheel, a second gear-wheel having teeth or cogs upon both its exterior and interior surfaces, mounted upon sleeve  $d'$ , by means of spokes, said second gear-wheel meshing with said series of wheels, a second series of gear-wheels mounted near the circumference of said frame work, equi-distant apart, and alternately with respect to the first series of wheels, said second series meshing with gear-wheel  $G$ , and the latter series having teeth or cogs in mesh with teeth or cogs upon the rim of said traction-wheel, substantially as described and set forth.



## TRADE-MARKS

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6443. J. E. JONES, Boston, Massachusetts, U.S.A. A Hair Tonic, 1st April, 1898.
6444. JOHN A. ELLIOTT & ROBERT HALL, Ridgetown, Ont., trading as ELLIOTT & COMPANY. Flour, 1st April, 1898.
6445. ROBERT SCOTT, Shoal Lake, Man. Butter, 1st April, 1898.
6446. THE MONTREAL OPTICAL COMPANY, Montreal, Que. Leather Goods, such as Spectacle Cases, Eye-Glass Cases, etc., 2nd April, 1898.
6447. JEAN H. LARKIN, Toronto, Ont. General Trade Mark, 4th April, 1898.
6448. WILLIAM HOLLINS & COMPANY (NOTTINGHAM,) LIMITED, Pleasley Works, Mansfield, Nottingham, England. Cloths and Stuffs of Wool, Worsted or Hair, and other similar goods, 4th April, 1898.
6449. EDWARD BOISSEAU, Toronto, Ont., trading as E. BOISSEAU & COMPANY. Manufactured and Ready Made Clothing of all kinds, 6th April, 1898.
6450. T. McAVITY & SONS, St. John, N.B. Boiler Tubes and Brass and Copper Pipe, 6th April, 1898.
6451. T. McAVITY & SONS, St. John, N.B. Sheet and Bar Steel, Sheet and Bar Iron and Chain, 6th April, 1898.
6452. T. McAVITY & SONS, St. John, N.B. Paints, Varnishes and Cements, 6th April, 1898.
6453. GRIFFITHS & McPHERSON, Vancouver, B.C. A Medical Compound for the Cure of Catarrh, 7th April, 1898.
6454. GRIFFITHS & McPHERSON, Vancouver, B.C. A Medical Compound for the Cure of Asthma, 7th April, 1898.
6455. THE FARBENFABRIKEN, vorm. FRIEDRICH BAYER & COMPANY, Elberfeld, Prussia, Germany, Pharmaceutical Preparations, 9th April, 1898.
6456. COLUMBUS BICYCLE COMPANY, Columbus, Ohio, U.S.A. Bicycles, Tricycles, Motor-Cycles and Horseless Carriages, 9th April, 1898.
6457. WILLIAM HORACE CARLIER BURNETT, Detroit, Michigan, U.S.A. A Perfume for the Bath, 12th April, 1898.
6458. WILLIAM HORACE CARLIER BURNETT, Detroit, Michigan, U.S.A. A Perfume for the Breath, 12th April, 1898.
6459. FREDERICK R. DEARBORN, St. John, N.B. Coffee, Tea and Ground Spices, 13th April, 1898.
6460. ARCHIBALD WAYNE DINGMAN, Toronto, Ont. Soap, 13th April, 1898.
6461. CHARLES COBURN JEROME, Chicago, Illinois, U.S.A. Sanitary Flour from which Sugar and Starchy substances are removed, 14th April, 1898.
6462. THE ENGLISH EMBROCATION COMPANY, Montreal, Que. An Embrocation for Horses and Cattle, 18th April, 1898.
6463. MARSHALL, McEWEN & COMPANY, Glasgow, Scotland. Whiskey, 18th April, 1898.
6464. H. UPMANN & COMPANY, Havana, Cuba, also doing business in New York, N.Y., U.S.A. Cigars, 18th April, 1898.
6465. T. McAVITY & SONS, St. John, N.B. Brass Goods and Anti-friction Metals, 18th April, 1898.
6466. } BAULD, GIBSON & COMPANY, Halifax, N.S. Tea, 18th April, 1898.  
6467. }
6468. ROCH MORIN, Quebec, Que. Apparatus for Generating Acetylene Gas, 18th April, 1898.
6469. } THE STANDARD SHIRT COMPANY, LIMITED, Montreal, Que. Shirts,  
6470. } Shirt Waist, Collars and Cuffs, 18th April, 1898.  
6471. }

6472. } JOHN ALEXANDER BRYSON, Ottawa, Ont. Teas, 20th April, 1898.  
6473. }
6474. GRIFFITHS & MACPHERSON, Vancouver, B.C. A Medical Compound,  
(Menthol Liniment,) 22nd April, 1898.
6475. THE QUEEN CITY OIL COMPANY, LIMITED, Toronto, Ont. Illuminat-  
ing and Lubricating Oils, 22nd April, 1898.
6476. THE KING MILLING COMPANY OF SARNIA, LIMITED, Sarnia, Ont.  
Flour, 25th April, 1898.
6477. B. E. McGALE, Montreal, Que. Medicinal Preparations, 25th April, 1898.
6478. THE MAYPOLE COMPANY, LIMITED, 98 and 99 High Holborn, London,  
England. Stove Polish, 26th April, 1898.
6479. JOHN A. HUME & COMPANY, LIMITED, New Westminster, B.C.  
Canned Salmon, 26th April, 1898.
6480. THE LUXFER PRISM COMPANY, LIMITED, Toronto, Ont. Prismatic  
and Electro-glazed Glass, manufactured in the form of windows,  
screens, vault-lights and canopies, 27th April, 1898.

## COPYRIGHTS

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9854. **HANDY ALPHABETICAL BIBLE INDEX.** (Folder.) Wm. Ward Simpson, Brantford, Ont., 1st April, 1898.
9855. **WHAT'S IN A NAME?** (Folder.) Wm. Ward Simpson, Brantford, Ont., 1st April, 1898.
9856. **STATEMENT FORM.** Fred O. C. Brown, Windsor, Ont., 1st April, 1898.
9857. **LESSONS IN ENGLISH FOR THE PUPILS OF THE COMMON SCHOOLS.** By G. R. Marshall and Wm. Kennedy. (Nova Scotia School Series.) A. & W. MacKimley, Halifax, N.S., 1st April, 1898.
9858. **LA REVUE CANADIENNE.** (Avril, 1898.) Alphonse Leclaire, Montréal, Qué., 1er Avril 1898.
9859. **THE KNAPP ROLLER BOAT AND ITS INVENTOR.** (Photo.) Wm. Thompson Freeland, Toronto, Ont., 2nd April, 1898.
9860. **MAMMY'S LITTLE BLUE GRASS HONEY.** Words by Deamor R. Drake, Music by H. O. Wheeler. Chas. O. Brokaw, St. Joseph, Missouri, U.S.A., 4th April, 1898.
9861. **MEMORIES.** Words and Music by Herbert Jenner. Whaley, Royce & Co., Toronto, Ont., 4th April, 1898.
9862. **SAY YOU'LL BE TRUE.** Words and music by Alexander S. Groves. Geo. Willig & Co., Baltimore, Maryland, U.S.A., 4th April, 1898.
9863. **A ROMANY OF THE SNOWS.** (An Adventurer of the North.) By Gilbert Parker, London, England, 4th April, 1898.
9864. **THE OLD TESTAMENT ITS OWN DEFENCE.** (Being a reply to THE OLD TESTAMENT VINDICATED.) By Joseph S. Cook, B.D., Ph.D. William Briggs, (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 5th April, 1898.
9865. **THE DAVIES COUNTER CHECK AND BANK CHEQUE PROTECTION SYSTEM.** C. J. W. Davies, Montreal, Que., 5th April, 1898.
9866. **SONG OF THE REAPER.** Words by A. E. McFarlane, Music by Edmund Hardy. The Anglo-Canadian Music Publishers' Association, (Limited), London, England, 5th April, 1898.
9867. **THE DIAMOND JUBILEE THROUGH THE PERFECSCOPE.** (Book.) Underwood and Underwood, Toronto, Ont., 6th April, 1898.
9868. **THE DOVE MEMORIAL.** (Engraving.) The Memorial Printing and Lithographing Co., London, Ont., 6th April, 1898.
9869. **THE HONOURABLE SIR CHARLES TUPPER, BART., C.B., G.C.M.G.** (Photo.) Lancefield, Abell Co., Ottawa, Ont., 6th April, 1898.
9870. **WOLFVILLE.** By Alfred Henry Lewis. (Dan Quin.) Illustrated by Frederic Remington. George N. Morang, Toronto, Ont., 9th April, 1898.
9871. **THE HOUSEKEEPER'S FRIEND.** (Labels.) Charles Robertson, Toronto, Ont., 12th April, 1898.
9872. **THE DELINEATOR.** (A Journal of Fashion, Culture and Fine Arts.) May, 1898. The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th April, 1898.
9873. **THE GLASS OF FASHION UP TO DATE.** (May, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th April, 1898.
9874. **METROPOLITAN FASHIONS.** (May, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th April, 1898.
9875. **MRS. FALCHION.** By Gilbert Parker, London, England, 12th April, 1898.
9876. **YEAR BOOK AND CLERGY LIST OF THE CHURCH OF ENGLAND IN THE DOMINION OF CANADA, 1898.** Joseph P. Clougher, Toronto, Ont., 12th April, 1898.
9877. **THE ONTARIO REPORTS.** Volume XXVIII. The Law Society of Upper Canada, Toronto, Ont., 12th April, 1898.

9878. THE BULLETIN ASSESSMENT LIFE INSURANCE CHART, 1898. The Bulletin Publishing Company of Toronto (Ltd.), Toronto, Ont., 12th April, 1898.
- ORABLE SIR ADOLPHE CHAPLEAU, K.C.M.G., C.R., L.L.D., C.P. (Portrait Lithographic.) G. A. Nantel, Montréal, Qué., 12 avril 1898.
9880. HISTORIE DE LA PROVINCE ECCLESIASTIQUE D'OTTAWA ET DE LA COLONISATION DANS LA VALLEE DE L'OTTAWA. (En deux volumes.) Par le Rév. P. Alexis de Barbezieux, Capucin, Ottawa, Ont., 12 avril 1898.
9881. THE STENOGRAPHER'S AND TYPEWRITER'S COMPANION. (Vol. I. No. 1, April, 1898.) Robert Goltman and A. Marks, Montreal, Que., 13th April, 1898.
9882. LUNENBURG. March. By Alfred H. Morash, Lunenburg, N.S., 14th April, 1898.
9883. THE PERFECTION BENEFIT TICKET FOLIO. Archibald H. Brintnell, Toronto, Ont., 14th April, 1898.
9884. GLIMPSES OF THE UNSEEN. A Study of Dreams, Premonitions, Prayer and Remarkable Answers, Hypnotism, Spiritualism, Telepathy, Apparitions, Unexplained Psychical Phenomena, &c., &c. Editor: Rev. Principal Austin, D.D. Introduction by Rev. E. J. Badgley, L.L.D. Bradley-Garretson Co., (Ltd.), Toronto, Ont., 14th April, 1898.
9885. THE CASHIER'S DAILY CERTIFICATE. Charles John Beal, London, Ont., 15th April, 1898.
9886. TRADING STAMPS. Issued by the Dominion Trading Stamp Company. Baldwin C. Hubbell, Marmora, Ont., 15th April, 1898.
9887. FIRE AND FROST. (Book.) Ethelbert F. H. Cross, Toronto, Ont., 15th April, 1898.
9888. THE BUSINESS GUIDE, or SAFE METHODS OF BUSINESS. By J. E. Hansford, LL.B. (Klondyke Edition.) J. L. Nichols & Co., Toronto, Ont., 15th April, 1898.
9889. CATALOGUE OF SAFFORD FLORENCE RADIATORS, SAFFORD CARPET FOOT RADIATORS, and SAFFORD RADIATOR PARTS. The Toronto Radiator Manufacturing Co., (Ltd.), Toronto, Ont., 15th April, 1898.
9890. CATALOGUE OF SAFFORD IDEAL VENTILATING RADIATORS. The Toronto Radiator Manufacturing Co. (Ltd.) Toronto, Ont., 15th April, 1898.
9891. MAGNIFICAT and NUNC DIMITTIS. (In the Key of B-Flat.) By J. Cunningham Stewart. Mrs. J. Cunningham Stewart, Ottawa, Ont., 18th April, 1898.
9892. TRADING STAMP DIRECTORY. Issued by the Dominion Trading Stamp Company. Baldwin C. Hubbell, Marmora, Ont., 18th April, 1898.
9893. THE STANDARD BEARER. By S. R. Crockett. D. Appleton & Co., New York, N.Y., U.S.A., 18th April, 1898.
9894. MINING MAP OF CHRISTINA LAKE AND SHEEP CREEK, BRITISH COLUMBIA. (Scale: 1 mile = 1 inch.) J. M. O'Toole, Rossland, B.C., 19th April, 1898.
9895. COME NOW. (Sacred Song.) Words by G. W. Armstrong. Music by Charles E. Wheeler. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 19th April, 1898.
9896. NEVER ALONE (Sacred Song.) Words Anonymous. Arranged by W. A. Hemphill. Accompaniment by M. E. Bullock. A. & S. Nordheimer, Toronto, Ont., 19th April, 1898.
9897. VIOLETTE. Waltz, for Piano. By Chasse Strickland. A. & S. Nordheimer Toronto, Ont., 19th April, 1898.
9898. CALDERON'S BUILDING WORKS DAILY REPORT. (Form.) Alfred M. Calderon, Ottawa, Ont., 19th April, 1898.
9899. MAP OF NEW WESTMINSTER DISTRICT. By Albert J. Hill, M. A. Lowenberg, Harris & Co., Victoria, B.C., 20th April, 1898.
9900. THE CIVIL CODE OF LOWER CANADA. By Robert Stanley Weir, D.C.L. Camille Theoret, Montreal, Que., 21st April, 1898.
9901. LA REVUE LÉGALE. Tome II. N.S. (1896.) Camille Theoret, Montréal, Qué., 21 avril 1898.
9902. LA REVUE LÉGALE. Tome III. N.S. (1897.) Camille Theoret, Montréal, Qué., 21 avril 1898.



9903. LA REVUE DE JURISPRUDENCE; OU, RECUEIL DE DÉCISIONS DES DIVERS TRIBUNAUX DE LA PROVINCE DE QUÉBEC. Volume III. (1897) Camille Theoret, Montréal, Qué., 21 avril 1898.
9904. SPRING AND SUMMER PRICE LIST No. 14 1898. The S. Carsley Co., (Ltd.) Montréal, Que., 22nd April, 1898.
9905. LE CARDINAL ALEX. TASCHEREAU. (Portrait photographié d'après F. De Federicis.) Albert Ferland, Montréal, Qué., 26 avril 1898.
9906. HUGHES' SAVINGS BANK INTEREST,  $2\frac{1}{2}$  per cent. (Card). Chas. M. C. Hughes, Montréal, Que., 28th April, 1898.
9907. INDEX TO RAILWAY LEGISLATION OF THE DOMINION OF CANADA FROM 1867 TO 1897, INCLUSIVE. Compiled by J. E. W. Currier, Ottawa, Ont., 29th April, 1898.
9908. EDUCATIONAL REVIEW SUPPLEMENTARY READINGS: CANADIAN HISTORY. (No. 1, March, 1897.) George U. Hay, St. John N.B., 29th April, 1898.
9909. CIRCULAR *re* THE IDENTIFICATION AND PROTECTIVE COMPANY OF CANADA, (Ltd.) George Isaac Goddard, Montréal, Qué., 30th April, 1898.