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RECORD





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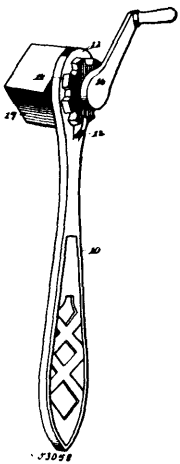
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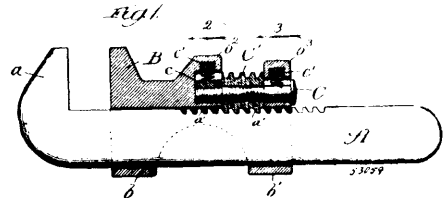
No. 53,058. Wrench. (Clé à écrou.)



Joseph Shafer, San Bernardino, California, U.S.A., 1st August, 1896; 6 years. (Filed 10th June, 1896.)

Claim.—1st. The combination of a handle having a longitudinally slotted head and a projection adjacent thereto, a bolt extending through said slot and capable of sliding and turning therein, a casing made in the shape of an open polygonal box whereby it is adapted to engage a nut, said casing being secured to the bolt on one side of the handle, a locking wheel secured to the bolt on the opposite side of the handle and adapted to engage the lug thereon, and means for turning the casing and the wheel, substantially as described. 2nd. The combination of a handle provided with a longitudinally slotted head, and a projection adjacent thereto, an angular bolt extending through said slot and capable of turning and sliding therein, a casing secured to one end of the bolt exteriorly of said handle and provided with a polygonal recess adapted to engage a nut, a locking wheel likewise secured to the said angular bolt but on the opposite side of the handle and adapted to engage the projection of the handle, and a crank secured to the bolt exteriorly of the said locking wheel, substantially as described.

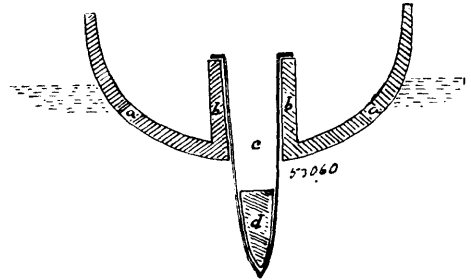
No. 53,059. Wrench. (Clé à écrou.)



Frank Stewart Smith, Chicago, Illinois, U.S.A., 1st August, 1896; 6 years. (Filed 11th June, 1896.)

Claim.—In a screw wrench, the combination of a body portion provided with teeth and a rigid jaw, a second jaw slidingly mounted thereon, a worm shaft having one end secured in a movable block and mounted in elongated openings in the sliding jaw so that it is held against longitudinal movement but is permitted to move laterally, an adjusting worm rotatably mounted on the worm shaft, and helically coiled springs for normally holding the worm in engagement with the teeth on the body portion, substantially as described.

No. 53,060. Sailing Vessel. (Vaisseau à voile.)



Ronald Gillis, Sydney, Nova Scotia, Canada 1st August, 1896; 6 years. (Filed 11th June, 1896.)

Claim.—1st. The herein described filter attachment for down spouts, comprising an outer case or receptacle into which the down spout discharges, an inner filter box E removably supported in said receptacle, and having a perforated bottom, and a catch brim removably fitted to the open upper end of said filter box, and having a depending open frame and a catch sack supported by said frame of the upper portion of said box, substantially as specified. 2nd. The herein described filter attachment for down spout to cisterns, said attachment comprising the outer case or receptacle A, into which the down spout opens, and from which the water is discharged into the cistern, said box having a hinged cover and supporting straps, an inner filter box E, removably supported in said receptacle and having feet which hold it away from the bottom thereof, said box

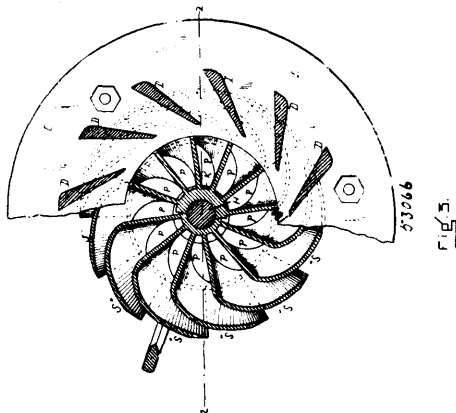
No. 53,061. Down Spout Filter. (Filtre.)

Jacob S. Baughman, Burlington, Iowa, U.S.A., 1st August, 1896; 6 years. (Filed 11th June, 1896.)

Claim.—1st. The herein described filter attachment for down spouts, comprising an outer case or receptacle into which the down spout discharges, an inner filter box E removably supported in said receptacle, and having a perforated bottom, and a catch brim removably fitted to the open upper end of said filter box, and having a depending open frame and a catch sack supported by said frame of the upper portion of said box, substantially as specified. 2nd. The herein described filter attachment for down spout to cisterns, said attachment comprising the outer case or receptacle A, into which the down spout opens, and from which the water is discharged into the cistern, said box having a hinged cover and supporting straps, an inner filter box E, removably supported in said receptacle and having feet which hold it away from the bottom thereof, said box

discount allowed and the goods returned during the current period, substantially as specified. 9th. A ledger comprised of one or more folios, each folio divided into a plurality of sections, to correspond with a similar division of the year, each section divided into debit and credit subdivisions, the debit subdivision divided into a column for the balance carried over from the end of the preceding period, a column for the goods purchased during the current period, a column for the number of the order or contract under which the goods were sold, the credit subdivision divided into a column for the payments made during the current period, a column for the total of the said payments, and columns for the discount allowed and the goods returned during the current period, substantially as specified. 10th. A ledger comprised of one or more folios, each folio divided into a plurality of sections, to correspond with a similar division of the year, each section divided into debit and credit subdivisions, the debit subdivision divided into a column for the balance carried over from the end of the preceding period, a column for the goods purchased during the current period, a column for the number of the order or contract under which the goods were sold, the credit subdivision divided into a column for the payments made during the current period, a column for the total of the said payments, column for the discount allowed and the goods returned during the current period, a name column for each folio, and ledger number columns set opposite the name columns and the folio sections, substantially as specified. 11th. A ledger comprised of one or more folios, each folio divided into a plurality of sections to correspond with a similar division of the year, each section divided into debit and credit subdivisions, the debit subsection divided into a column for the balance carried over from the end of the previous period, a column for the merchandise purchased during the current period, a column for the number of the order or contract under which the merchandise was sold, the credit subsection divided into a series of columns for the payments made during the current period, a column for the total of these payments, a column for the discount allowed during the current period, a column for the goods returned during the current period, a column adjoining each section for the ledger number of each account, a column in which may be entered the folio of the same account in a previous ledger, adjoining the ledger number column of the first folio section, a name column adjoining the folio column, a column adjoining certain of the folio sections, in which may be entered the accounts considered bad, a column at the end of the folio for the balance on hand to be carried forward to the next folio, and a column for remarks, substantially as specified. 12th. A ledger comprised of one or more folios, each folio divided into a plurality of sections to correspond with a similar division of the year, each section divided into debit and credit subsections, the debit subsection divided into a column for the balance carried over from the end of the previous period, a column for the merchandise purchased during the current period, a column for the number of the order or contract under which the merchandise was sold, the credit subsection divided into a series of columns for the payments made during the current period, a column for the total of these payments, a column for the discount allowed during the current period, a column for the goods returned during the current period, a column adjoining each section for the ledger number of each account, a column in which may be entered the folio of the same account in a previous ledger, adjoining the ledger number column of the first folio section, a name column adjoining the folio column, a column adjoining certain of the folio sections, in which may be entered the accounts considered bad, a column at the end of the folio for the balance on hand to be carried forward to the next folio, a column for remarks, a numerical index at the side of the ledger for the folios, the number on the index adapted to read with the numbers in the ledger number columns, to make the ledger number of the account, and a corresponding numerical index at the foot of the ledger, substantially as specified.

No. 53,066. Turbine. (Turbine.)

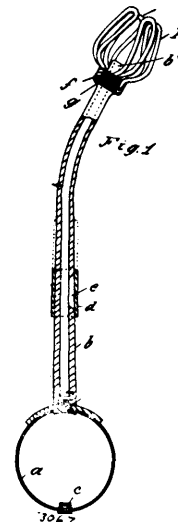


Elbridge Gerry Libby, Everett, Massachusetts, U.S.A., 1st August, 1896; 6 years. (Filed 19th June, 1896.)

Claim.—1st. In a turbine of the character described, the water wheel, comprising the hub T, outwardly flaring upper portion K¹, the downwardly extending and outwardly flaring lower crown plate S¹ constituting the floor or lower wall of the buckets, the upper crown plate S constituting the upper wall of the buckets and set substantially parallel with the lower crown plate, and the upwardly flaring curved partitions S¹¹ extending from the upper to the lower crown plate and constituting the sides of the buckets, the water passage in each of said buckets produced by the above named parts, describing an arc which is greater than ninety degrees, substantially as described. 2nd. In a turbine of the character described, the water wheel, comprising the hub K, outwardly flaring upper portion K¹, the downwardly extending and outwardly flaring lower crown plate S¹ constituting the floor or lower wall of the buckets, the upper crown plate S constituting the upper wall of the buckets and set substantially parallel with the lower crown plate, and the upwardly flaring curved partitions S¹¹ extending from the upper to the lower crown plate and constituting the sides of the buckets, the water passage in each of said buckets produced by the above named parts, describing an arc which is greater than ninety degrees, and the outlet of each bucket pointing at a downward and outward angle and with its major portion at a point farther from the axis of the water-wheel than the inlet thereof, substantially as set forth. 3rd. In a turbine of the character described, the combination of the vertical shaft H, the inner casing or cylinder A¹ provided on its lower edge with the annular vertical groove A¹¹, the crown sheet C through which said shaft extends, and the water wheel K, K¹, fast on said shaft and provided with the upwardly projecting annular flange L extending into said annular groove, whereby the water is prevented from entering the chamber above the water wheel and within the casing, substantially as described.

No. 53,067. Vaginal Powder Injector.

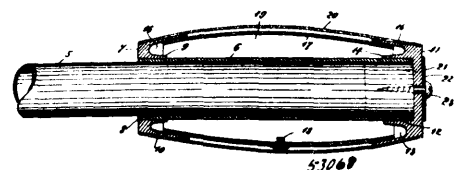
(Injecteur vaginal.)



Josef Schoene, Berlin, Germany, 1st August, 1896; 6 years. (Filed 19th June, 1896.)

Claim.—1st. In a vaginal powder injector, the combination of the stiff head piece a of open work, with the bent tube b and the india-rubber ball a, as set forth. 2nd. In a vaginal powder injector, the combination of a stiff head piece a of open work, with the bent tube b, the ring d for covering the openings e, and the india-rubber ball a, with valves c and i, as set forth. 3rd. In a vaginal powder injector, the combination of the bent wire loops b, pivotally fastened to the head m and having short arms n, with tube p sliding on tube b and having a funnel-shaped part o, as and for the purpose set forth.

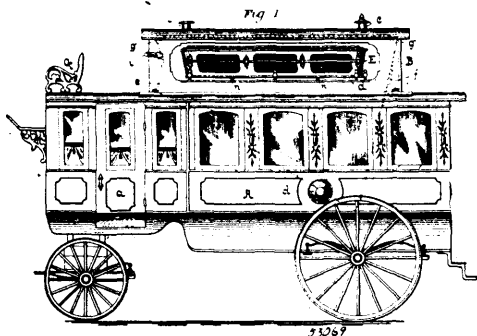
No. 53,068. Pneumatic Handle for Handle-bars of Bicycles. (Poignée pneumatique pour barres de bicycles.)



Frederick Harley Merry, Brooklyn, New York, U.S.A., 1st August, 1896; 6 years. (Filed 19th June, 1896.)

Claim.—1st. A detachable pneumatic handle or grip for bicycles and similar vehicles, constructed as herein set forth and described. 2nd. A detachable pneumatic handle or grip for bicycles and similar vehicles, consisting of a central longitudinal tube provided with circular heads or ends, and an inflatable tubular casing of rubber or similar material connected with said heads, substantially as described. 3rd. A detachable pneumatic handle or grip for bicycles and similar vehicles, consisting of a central longitudinal tube provided with circular heads or ends, and an inflatable tubular casing connected with said ends, and a cover of cloth or similar material upon said casing, and connected with said end pieces, substantially as described. 4th. A detachable pneumatic handle or grip for bicycles and similar vehicles, consisting of a central longitudinal tube provided with circular heads or ends, and an inflatable tubular casing connected with said heads or ends, and a cover of cloth or similar material upon said casing, and connected with said end pieces, one end of said tube being open, and the other end being closed with a plug, and screws passing through said plug to secure the handle in position upon the handle bar, substantially as described.

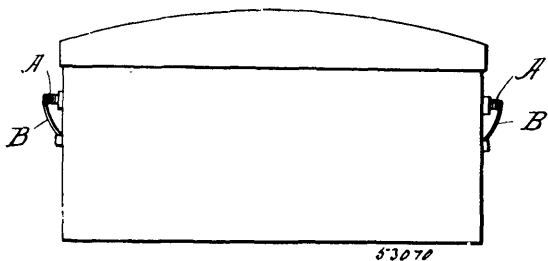
No. 53,069. Funeral Carriage. (Corbillard)



Reuben Allen McCauley, Baltimore, Maryland, U.S.A., 1st August, 1896; 6 years. (Filed 20th June, 1896.)

Claim.—1st. In a funeral carriage, the combination of a wheeled vehicle, a casket receptacle situated on the roof of the vehicle, a bottom for the receptacle susceptible of elevation and depression, and means to operate the said bottom whereby the casket is raised to its position on the vehicle or lowered so that it may be removed therefrom, substantially as specified. 2nd. In a funeral carriage, the combination of a wheeled vehicle, a casket receptacle elevated on the top or roof of the same, there being an opening between the receptacle and the interior of the carriage, a floor or bottom for the receptacle, adapted for elevation and depression, means to raise and lower the said bottom, and catches to retain the bottom in an elevated position, substantially as specified.

No. 53,070. Valise Handle. (Poignée de valise.)



Aristide Jean Gauthier, St. Ephrem d'Upton, Québec, Canada, 1er août, 1896; 6 ans. (Déposé 12 juin 1896.)

Résumé.—La combinaison, avec une poignée de valise A, d'une pièce B fixé au milieu de la dite poignée, par une de ses extrémités et située dans un plan perpendiculaire au plan de cette dernière; le tout tel que décrit et pour les fins indiquées.

No. 53,071. Hand Power Propeller. (Propulseur à main.)

Isaac Albert Wilson, Arthur, Manitoba, Canada, 1st August, 1896; 6 years. (Filed 22nd June, 1896.)

Claim.—1st. In a hand-power propeller, a chamber located below the bottom of the boat to receive the screw shaft and gearing, substantially as and for the purpose above set forth. 2nd. In a hand-power propeller, the combination of the boat *a*, having projecting counter, the chamber *a'* with conical termination *a''*, guard bar *i'*, rudder *i*, substantially as and for the purpose above set forth. 3rd. In a hand-power propeller, the combination of the boat *a*, chamber *a'*, lower stern board *a''*, upper stern board *a'''*, conical termination of chamber *a''*, channels *b, b*, bed plates *c*, set screws *c', c', c', c'*,

standards *c''* and *c'''*, bevelled cog-wheel *d*, double crank *d'*, handles *d''*, *d''*, combined cog and sprocket-wheel *e*, chain *e'* passing through

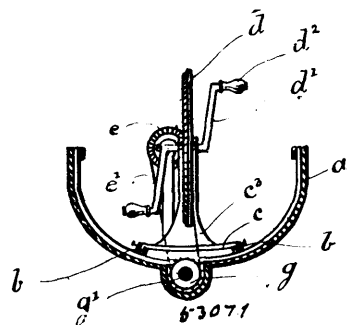
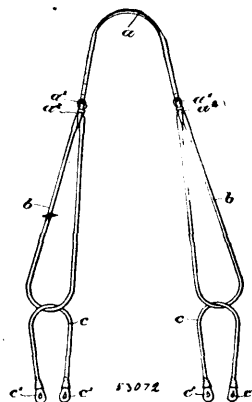


Fig. 4.

aperture *e''*, bearing boxes *f, f*, sprocket-wheels *g* and *g''*, stern bearing *g''*, with nuts *g'''* and *g''''*, packing *g''''*, screw shaft *g'*, screw *h*, rudder *i* guard bar *i'*, substantially as and for the purpose above set forth.

No. 53,072. Boot Holder for Horses. (Porte-botte de cheval.)

(Porte-botte de cheval.)



John Milton Earl Morrill, Boston, Massachusetts, U.S.A., 1st August, 1896; 6 years. (Filed 29th June, 1896.)

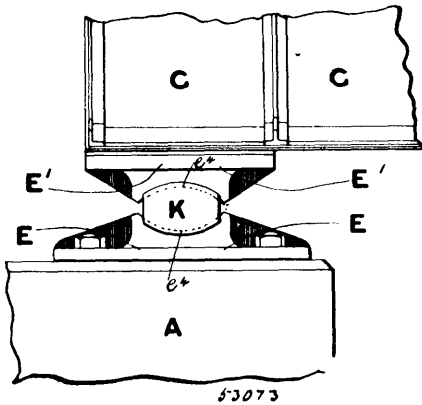
Claim. 1st. The herein-described boot holder for horses, the same consisting of a non-elastic shoulder strap, elastic and flexible suspending loops connected with the opposite ends of said strap, and provided with means for fixed adjustment relatively to said strap, and rubber holding members passed loosely through said loops, and provided at their ends with holding devices, substantially as described. 2nd. In a holding device for horses, the combination with a rubber tube, of a non-elastic piece having its shank inserted in the expanded end of said rubber tube and held therein by cement and by the contraction of said tube end about the non-elastic leather piece, substantially as described. 3rd. In a holding device for horses, the combination with a rubber tube, of a non-elastic piece having a shank, and one or more layers of non-elastic stiffening material secured to said shank, the whole inserted in the expanded end of said tube and held by contraction of said tube and by cement, substantially as described. The herein-described boot holder for horses, the same consisting of a non-elastic shoulder strap, rubber suspending loops connected with the opposite ends of said strap and provided with means for fixed adjustment relatively to said strap, and rubber holding members passed loosely through said loops, and provided at their ends with button tabs, as *c'*, substantially as described.

No. 53,073. Means for Supporting the Ends of Girders and other Beams. (Moyen de supporter les bouts des poutres, etc.)

Alfred Westwood Horseley Heath, Tipton, Staffordshire, England, 1st August, 1896; 6 years. (Filed 7th July, 1896.)

Claim.—The improvements in the mode and means for supporting the ends of girders, trusses, bridges and other structures of a top

FIG. 1

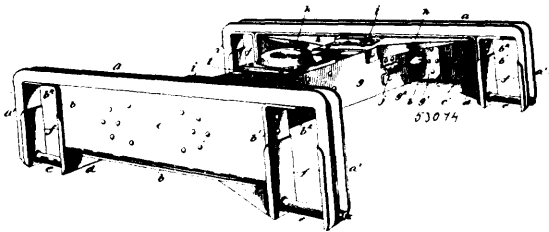


53073

and bottom bearing plate hollowed out to a concentric curve in combination with an elliptical intermediate bearing block rounded on its upper and lower faces to corresponding concentric curves substantially as herein set forth and shown upon the drawings.

No. 53,074. Truck Frame for Railway Cars.

(*Cadre de châssis de chemins de fer.*)

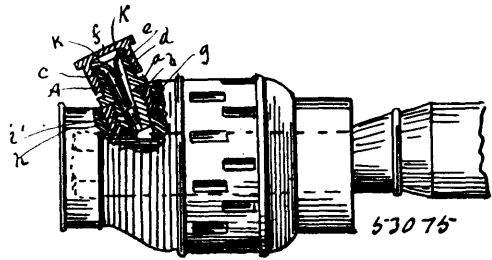


53074

Charles Thomas Schoen, Philadelphia, Pennsylvania, U.S.A., 1st August, 1896; 6 years. (Filed 7th July, 1896.)

Claim.—1st. A built-up or composite side frame for railway car trucks, comprising a compression member or top chord, of inverted channel form, and having its ends bent down vertically to form the outer jaws or members of the pedestals, a bottom or tensile chord, of flat metal, having its ends bent up vertically to form parts of the inner members or jaws of the pedestals and terminating in horizontal portions which form the tops of the pedestals, and a one-piece diaphragm having its four edges flanged inwardly, the chords and the diaphragm being riveted or otherwise rigidly united, substantially as described. 2nd. The combination with side frames constructed essentially as described, of a transom composed of two channel beams, having their flanges turned toward one another, and provided with end flanges by means of which the said transom and the side frames may be riveted together, substantially as described. 3rd. The combination with side frames constructed essentially as described, of a transom composed of two channel beams having their flanges turned toward one another, and provided with end flanges, and gusset plates flanged to embrace the transom and having lateral flanges extending from the transom outwardly toward and near to the pedestals, the end flanges of the transom and the lateral flanges of the gusset plates being riveted to the side frames, substantially as specified. 4th. A built-up or composite side frame for railway car trucks, comprising a compression member or top chord, of inverted channel form, and having its ends bent down vertically to form the outer jaws or members of the pedestals, a bottom or tensile chord of flat metal having its ends bent up vertically to form parts of the inner jaws or members of the pedestals and ending in horizontal portions at the tops of the pedestals, a one-piece diaphragm having its four edges flanged inwardly, angle pieces or braces having vertical portions aligned with the vertical portions of the bottom chord to complete the inner jaws or members of the pedestals, the chords, diaphragm and angle pieces or braces being riveted or otherwise rigidly united, and stay bolts passed through the said angle pieces or braces and the outer jaws of the pedestals, the said chords, diaphragm, and angle pieces or braces being of pressed steel, substantially as described.

No. 53,075. Means for Automatically Lubricating Vehicles Axles. (*Moyen de lubrifier automatiquement les essieux de voitures.*)



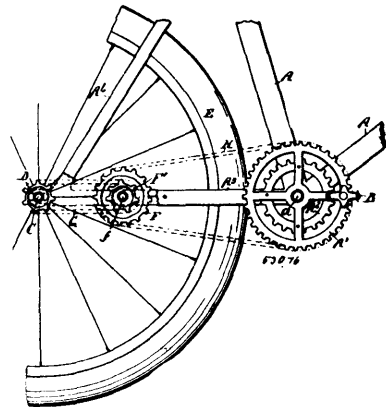
53075

William W. Conner, Dover, Delaware, U.S.A., 1st August, 1896; 6 years. (Filed 8th July, 1896.)

Claim.—1st. In combination with a vehicle-hub formed with an opening leading radially through the hub, a holding-nut, provided with interior screw-threads seated in said opening, a lubricating-tube in the holding-nut, having a slightly-tapering bore, and screw-threads on its lower end to engage in the holding-nut, and an annular flange to set down thereon, a valve formed with a stem terminating in an enlargement at its lower end and having spring-ears at its upper end, and a screw-threaded cap to close the tube and regulate the position of the valve, substantially as and for the purpose specified.

No. 53,076. Speeding-gear for Bicycles.

(*Engrenage de vitesse pour bicycles.*)



53076

Samuel Nash, Detroit, Michigan, U.S.A., 1st August, 1896; 6 years. (Filed 8th July, 1896.)

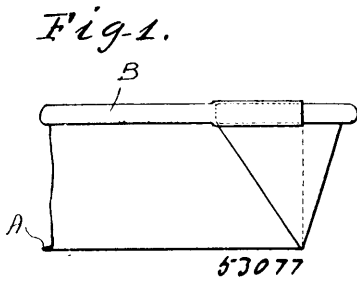
Claim.—1st. In a bicycle gear, a sprocket-wheel having a driving pedal connected therewith toward the periphery thereof, substantially as set forth. 2nd. In a bicycle gear, shaft *a*, a sprocket-wheel upon one end thereof, and a wheel or disc upon the opposite end thereof, said wheel or disc and said sprocket-wheel each having a driving pedal connected therewith toward the periphery thereof, substantially as set forth. 3rd. In a bicycle gear, a shaft *a*, having a sprocket-wheel thereupon, the axle *C* having a sprocket-wheel thereupon, and a sprocket-wheel intermediate the sprocket-wheels upon said axle and shaft, said intermediate sprocket-wheel connected with the sprocket-wheels at each side thereof, substantially as set forth. 4th. In a bicycle gear, a shaft *a*, having a sprocket-wheel thereupon, the axle *C* having a sprocket-wheel thereupon, an intermediate shaft provided with sprocket-wheels thereupon, connected the one with the sprocket-wheel at one side thereof, and the other to the sprocket-wheel on the opposite side, substantially as set forth. 5th. In a bicycle gear, a shaft *a*, provided with sprocket-wheels of different diameters, the axle *C* provided with a sprocket-wheel, an intermediate shaft provided with sprocket-wheels, the one connected with the sprocket-wheel upon the axle, and the other with one of the sprocket-wheels upon the shaft *a*, one of the sprocket-wheels upon the intermediate shaft being adjustable thereupon, substantially as and for the purpose set forth.

No. 53,077. Pan. (*Poêle à frire.*)

August Luidemann, Milwaukee, Wisconsin, U.S.A., 1st August, 1896; 6 years. (Filed 8th July, 1896.)

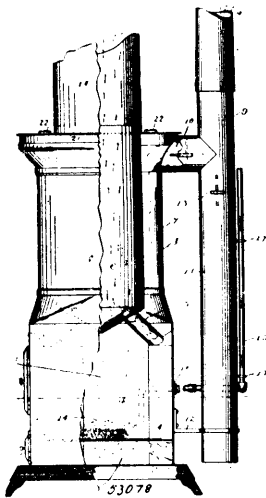
Claim.—1st. A pan constructed from a blank of sheet-metal bent up to form sides and ends, the edges of the sides and ends being rolled over to form stiffening beads at the upper edge of the pan and the said beads telescoping at the corners of the pan so as to give to the same a continuous upper edge, substantially as described. 2nd.

A pan constructed from a blank of sheet-metal bent up to form lap-corners sides and ends, the edges of the sides and ends being turned



outward and lapped at the corner-tops to thereby stiffen the pan and give to the same a continuous upper edge, substantially as described.

No. 53,078. Stove. (Poêle.)



James Fleming, Shakopee, Minnesota, U.S.A., 1st August, 1896; 6 years. (Filed 9th July, 1896.)

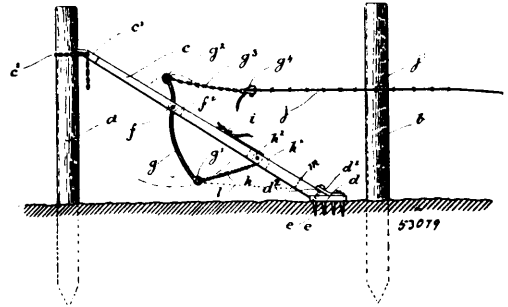
Claim.—1st. In a stove of the class described, the combination with the rectangular fire-box and the centrally arranged air chamber above the same, of the triangular air ducts arranged in the respective corners of the fire box opening to the outer air at the bottom of the stove, the converging pipes connecting said air ducts with said centrally arranged air chamber, and the conduit between the central air chamber and the outer wall of the stove connecting the fire box with the smoke outlet. 2nd. In a stove of the class described, the combination with the rectangular fire box and the centrally arranged air chamber above the same, of the triangular air ducts arranged in the respective corners of said fire box opening at their bottoms to the outer air, and connected at their tops with the centrally arranged air chamber, the air ducts in the rear corners of said fire box covering more of the rear wall than the side wall space, so as to permit the maximum amount of radiation through the side walls, and the conduit between the air chamber and the outer wall of the stove connecting the fire box with the smoke outlet pipe. 3rd. In a stove of the class described, the combination with the rectangular fire box and the centrally arranged air chamber above the same, of the triangular air ducts arranged in the respective corners of said fire box and opening at their bottoms to the outer air, and connected at their tops with said centrally arranged air chamber, the conduit between the air chamber and the outer wall of the stove connecting the fire box with the smoke outlet pipe, and the damper controlled branch pipe extending parallel with the wall of the stove and adapted to admit air to the smoke outlet, whereby the draft may be checked or equalized, said branch pipe also serving as a support for an oil supply pipe connected with the burner removably arranged within the fire box.

No. 53,079. Appliance for Straining Fence Wire.

(Appareil à tendre le fil de fer pour clôtures.)

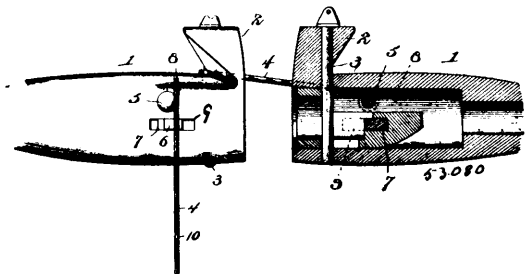
John Glover, Headingly, Manitoba, Canada, 1st August, 1896; 6 years. (Filed 10th July, 1896.)

Claim.—In a fence wire straining appliance, the strut or brace *c* having slots *b*¹ and *f*¹, with cap *c*¹, having serrated edge *c*², chain



*c*², projection or hook *c*³, foot *d* with strap *d*¹, bolt *d*², teeth *e*, lever *g* working on fulcrum *f* in slot *f*¹, chain *g*², catch or hand vice *g*³, rope *h*, cleat *i*, substantially as and for the purpose above set forth.

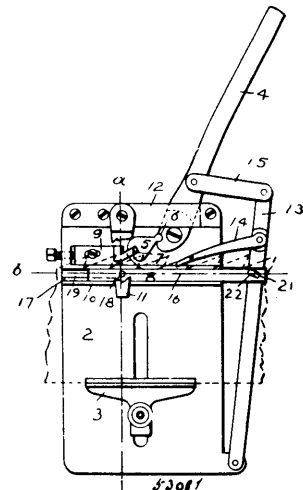
No. 53,080. Car Coupler. (Attelage de chars.)



Edgar C. Cowan and Harley S. Seely, both of Prattville, Michigan, U.S.A., 3rd August, 1896; 6 years. (Filed 10th July, 1896.)

Claim.—In a car coupling, the combination of a draw-head having a link opening and provided with a coupling pin perforation and having at its top a hook extension through which the coupling pin perforation passes, the back of the extension being recessed to form a hook and intersecting the coupling pin perforation to expose a portion of a coupling pin, a tubular slide arranged within a link opening of the draw-head and provided with lateral projections extending through slots in the sides of the draw-head, and a swinging link hinged to the draw-head at opposite sides thereof, and having its terminals extended beyond the pivotal point and arranged to engage the lateral projections when the link is in an elevated position, said link being adapted to engage the said projections to move the tubular slide inward when it is swung downward, substantially as described.

No. 53,081. Saw-swage. (Machine à affûter les scies.)

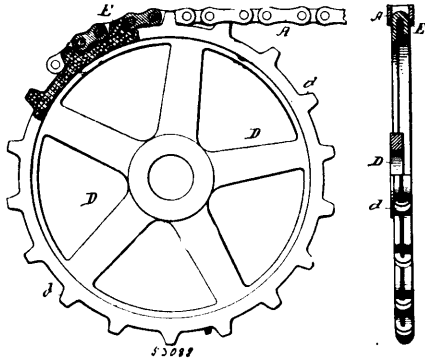


Thomas Seely, Marshall, Indiana, U.S.A., 3rd August, 1896; 6 years. (Filed 10th July, 1896.)

Claim.—1st. In a saw-swage the combination of the bed-plate, means for supporting the saw thereon, the operating lever pivoted to the bed-plate, the swaging-die hinged to the operating lever and

provided at its opposite end with an open slot having a convex swaging surface formed on one of its edges, and the anvil having an inclined surface adapted to support the back of a saw-tooth, said anvil projecting into the slot in the swaging-die so as to form a guide therefor, all arranged to co-operate substantially as and for the purpose set forth. 2nd. In a saw-swage, the combination with the bed-plate, the anvil, the operating lever, and the swaging-die opposed to said anvil, of the rib provided with ways arranged on the bed-plate so as to support the side of the saw, and having formed therein a groove, one end of which is inclined as described, the bar arranged to slide longitudinally in the ways of said rib, the pin mounted loosely in said bar and engaging said groove, and intermediate connecting mechanism connecting said bar and the operating lever, whereby the bar is actuated by the movement of the operating lever, all substantially as and for the purpose set forth.

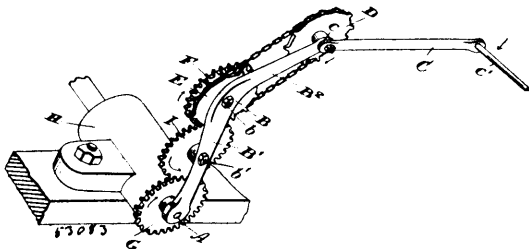
No. 53,082. Sprocket-wheel and Chain for use in Bicycles and like Vehicles. (*Hérison et chaîne à l'usage des bicyclettes et autres véhicules.*)



Perry G. Gardner, Bound Brook, New Jersey, U.S.A., 3rd August, 1896; 6 years. (Filed 10th July, 1896.)

Claim.—1st. A sprocket-wheel provided with a lubricating substance held thereupon, substantially as described. 2nd. A sprocket-wheel having a lubricant held in the teeth thereof, substantially as described. 3rd. A sprocket-wheel having a lubricant held in the teeth thereof, and in the space between the teeth, substantially as described. 4th. A sprocket-wheel having a lubricant held in an annular space at the periphery of said wheel, substantially as described. 5th. A sprocket-wheel having a lubricant held in an annular space at the periphery of said wheel, and extending also into the teeth thereof, substantially as described. 6th. A sprocket-wheel having the metal at its periphery bent to form the teeth, and an annular socket combined with a lubricant compressed into said socket and extending into the teeth, substantially as described. 7th. A sprocket-chain having the lubricant held in the links thereof adjacent to the connecting pins, substantially as described. 8th. A sprocket-chain composed of links, connecting pins and a lubricant compressed in recesses in the links adjacent to and bearing upon said pins, substantially as described. 9th. The combination with a sprocket-wheel having a lubricant confined in a socket about the periphery thereof, of a sprocket-chain having a lubricant confined in sockets in its links and bearing against the pins connecting said links, substantially as described. 10th. A sprocket-chain composed of links and connecting pins having a lubricant compressed in recesses in said pins adjacent to and bearing upon said links, substantially as described.

No. 53,083. Crank Drive. (*Manivelle à conduire.*)

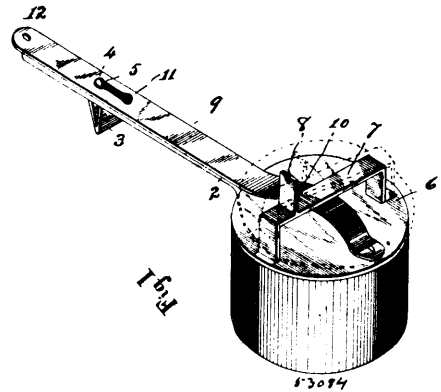


James Heron, Toronto, Ontario, Canada, 3rd August, 1896; 6 years. (Filed 11th July, 1896.)

Claim.—1st. In a crank drive in combination, a crank arm, supplemental arm pivotally connected by a pin extending laterally through the end of the crank, a crank pin on the end of the arm and means for maintaining such arm in the same operative position as it is caused to rotate with the crank, as and for the purpose specified. 2nd. In a crank drive in combination, a crank arm, supplemental arm pivotally connected by a stud extending laterally from the end of the crank, a crank pin on the end of the arm and the sprocket

wheel and gear connecting the outer sprocket with a stationary gear on the journal box, as and for the purpose specified. 3rd. A crank drive consisting of an obtuse-angled elbow crank secured at the end of the axle, an arm pivotally secured on the end of the elbow crank, a stud extending through the inner end of the arm and the other end of the crank, a sprocket wheel secured to the stud, stud extending through the centre of the elbow, sprocket-wheel on such stud, sprocket-chain connecting such sprocket to the sprocket-wheel on the end of the crank, and gear F, intermediate gear I and the stationary gear G secured to the axle-box, as and for the purpose specified.

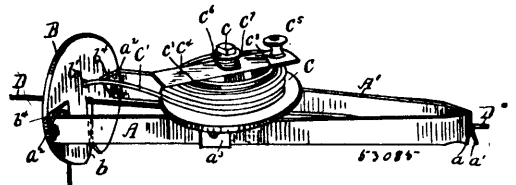
No. 53,084. Saucepan Cover. (*Couvercle de poêlon.*)



George Curley, Salt Lake, Utah, U.S.A., 3rd August, 1896; 6 years. (Filed 11th July, 1896.)

Claim.—1st. The combination with a saucepan having a handle projecting outwardly therefrom, of a cover therefor, a handle attached to said cover extending outwardly therefrom, resting upon the handle of said pan and pivotally connected thereto, substantially as and for the purpose described. 2nd. The combination with a saucepan having a handle projecting outwardly therefrom, with a headed pin upon its upper side, of a cover for said pan having a handle extending outwardly therefrom, resting upon the handle of said pan and provided with a key-hole slot within which said headed pin fits, whereby a pivotal connection between said handles is formed and whereby said cover may be readily detached from the handle of the pan. 3rd. The combination with a saucepan having a handle projecting outwardly therefrom with a headed pin upon its upper side and a projection upon its under side, of a cover for said pan having a handle extending outwardly therefrom, resting upon the handle of said pan, extending slightly beyond the outer end thereof and provided with a key-hole slot therein, within which said headed pin fits, whereby a pivotal connection between said handles is formed and whereby said cover handle may be readily detached from the handle of the pan. 4th. The combination with a saucepan having a handle projecting outwardly therefrom, of a cover for said pan, having an arched strip of metal upon its upper side and a handle for said cover pivotally connected thereto near one edge thereof, extending outwardly beneath said arched strip and curved slightly so that it engages the under side of said strip and holds said cover in frictional contact therewith. 5th. The combination with a saucepan having a handle projecting outwardly therefrom, of a cover for said pan having an arched strip of metal upon its upper side, a projection on said strip and a handle for said cover pivotally connected thereto near one edge thereof, extending outwardly beneath said arched strip and curved slightly, so that it engages the under side of said strip and holds said cover in frictional contact therewith.

No. 53,085. Fence Implement. (*Outil pour clôtures.*)

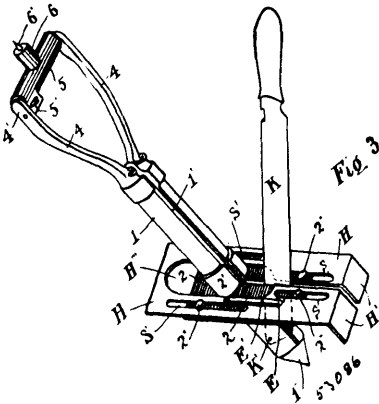


George S. Axford and Charles W. Case, both of Rochester, Michigan, U.S.A., 3rd August, 1896; 6 years. (Filed 3rd June, 1896.)

Claim.—1st. In a fence implement, the combination of a spring frame adapted to clamp itself into position on the fence wire with spring pressure, a slotted disk mounted on said frame and adapted to engage said wire, and a wire reel on said frame to supply wire to the said slotted disk to wind upon the main wire, substantially as described. 2nd. In a fence implement, the combination of a frame adapted to clamp itself into position on a fence wire, a slotted disk

mounted on said frame and adapted to engage said wire, a wire reel on said frame, and an adjustable tension device for said reel, substantially as described. 3rd. In a fence implement, the combination of a spring frame adapted to clamp itself in position on the fence wire with spring pressure, a slotted disk mounted on said frame and adapted to engage said wire, a wire reel on said frame, an adjustable tension device for said reel, and an operating handle for rotating said reel to refill it with wire when needed, substantially as described. 4th. In a fence machine, the combination of a frame adapted to clamp itself on the fence wire, a slotted disk mounted on said frame and adapted to engage said wire, a reel rotatably mounted on said frame, a bolt passing through said frame and reel, a plate engaging said reel, and a spiral spring mounted on said bolt and engaging said plate to keep said reel under tension, substantially as described. 5th. In a fence implement, the combination of a spring V-shaped frame composed of connected spring arms having grooved and flared ends adapted to be sprung over the fence wire, a slotted and apertured disk mounted on said frame, a rotatable wire reel on said frame, the wire from the same adapted to pass through the aperture in the disk, substantially as described.

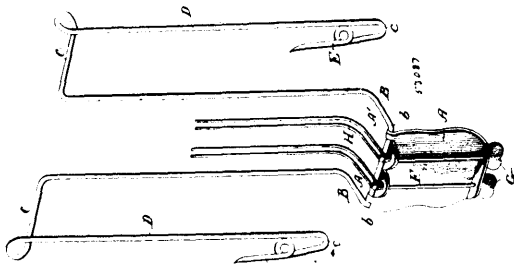
No. 53,086. Cheese Knife. (Couteau à fromage.)



Joseph McKay, Charles C. Irving and Jeremiah Anderson, all of Essexville, Michigan, U.S.A., 3rd August, 1896; 6 years. (Filed 22nd June, 1896.)

Claim.—1st. A cheese knife consisting of a blade, a sheath for the blade having a longitudinal opening in front of the blade, a pivot in the lower end of the sheath passing through the sheath and the point of the blade, the sheath having a pointed end adapting it to be pressed through the centre of the cheese, a loose collar on the sheath, a brace secured to the collar and extending to the edge of the cheese and having a depending flange engaging the outer edge of the cheese, thereby holding the cheese to the knife, and means as described for holding the blade in the cheese as it is cut, substantially as described. 2nd. In a cheese knife the combination with a blade pivoted in the lower end of a sheath, and the sheath adapted to be passed through and be turned in the centre of a cheese, and engaging the bottom of a cheese box, of adjustable braces secured to a loose collar on the sheath, the braces extending to the edge of the cheese and having depending flanges engaging the outer edge of the cheese, the braces forming a guideway for the blade, and means for securing and holding the sheath in the cheese as the blade is operated, substantially as described. 3rd. The combination with a blade pivoted in the lower end of a sheath, the sheath adapted to be pressed through the centre of the cheese and to be turned therein, a loose collar on the sheath and adjustable double braces secured to the collar and extending to the edge of the cheese, a depending flange on the edge of the brace engaging the outer edge of the cheese, the braces being on each side of the blade and forming a guide for it as well as holding the cheese to the blade, substantially as described.

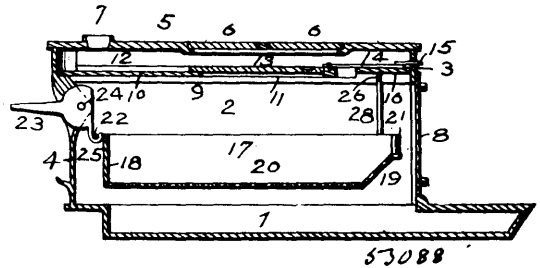
No. 53,087. Book Turner. (Tourne-livres.)



David Moon and John Smith, both of Walla Walla, Washington, U.S.A., 3rd August, 1896. (Filed 13th June, 1896.)

Claim.—1st. The combination with the base piece, of the wire supported therefrom and having their free ends bent to form book-holders and provided with coils upon which the book is designed to rest, with the ends of the wire beyond the coils turned outwardly and tapered, substantially as specified. 2nd. The combination with the base piece and the book-holding wires supported therefrom, and having their free ends bent upward and provided with coils and turned outwardly and tapered, of the movably mounted leaf-turners, carried by said base piece, as set forth. 3rd. The combined book-holder and leaf-turner described, consisting of the base-piece, the wires extending from opposite sides thereof and formed with book-receiving ends and coils with their free ends turned outwardly and tapered, the rods mounted for rotation on the base-piece, the keys on the ends of said rods, and the leaf-turners carried by the other ends of said rods, substantially as shown and described.

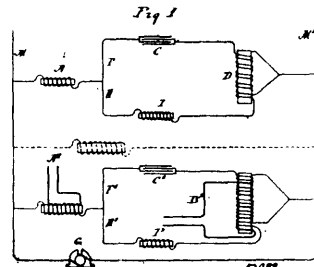
No. 53,088. Stove. (Poêle.)



Mark W. Foster, Peconica, Illinois, U.S.A., 3rd August, 1896; 6 years. (Filed 10th July, 1896.)

Claim.—1st. The combination with the stove, having a pot-hole in its top, of the slidable damper arranged horizontally in the combustion chamber, and having the central opening, 11, which is directly beneath the pot-hole, the independently slidable plate, 13, for closing said opening, and parallel side ribs, forming guides for said plate, as shown and described. 2nd. The combination, with the stove proper, and the grate, of the means for suspending and rocking it, which consists of the two-armed rocker and the pivoted lever, 23, having a circular body fitted in a slot in the rear end of the stove, as shown and described.

No. 53,089. Means for Developing Displaced Magnetic Phases and Producing Rotary Magnetic Fields. (Moyen de développer des phases magnétiques déplacées et produire des pièces magnétiques rotatoires.)



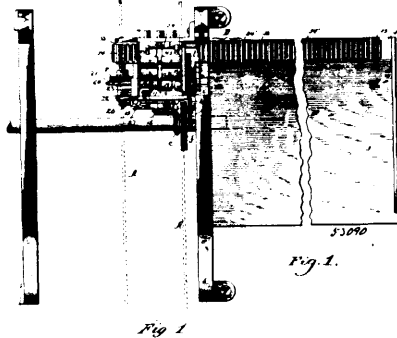
Charles S. Bradley, Avon, New York, U.S.A., 3rd August, 1896; 6 years. (Filed 27th July, 1896.)

Claim.—1st. As a means of producing a definite displacement of magnetomotive force in a core, a compound coil substantially as described in combination with a phase advancing device. 2nd. As a means of producing a definite displacement of magnetomotive force in a core, a compound coil substantially as described in combination with a condenser and an inductance in its branches. 3rd. As a means of producing currents of relatively displaced phases, a coil influenced by line current, and a coil whose current phases are a resultant of two branch currents passing through a condenser and inductance respectively. 4th. As a means of producing currents of relatively displaced phases, a coil influenced by line current and a compound coil substantially as described, containing in its branches a condenser and an inductance. 5th. As a means of producing currents of relatively displaced phases, a simple coil and a compound coil substantially as described, having two branches containing respectively a condenser and inductance each in series relation to the simple coil. 6th. As a means of producing a rotary magnetic field, a compound coil and a simple coil suitably spaced on a ring or drum core, the compound coil having a condenser in series therewith to produce a displaced magnetomotive force relatively to that of the simple core. 7th. As a means of producing a rotary magnetic field, a compound coil and a simple coil suitably spaced on a ring or drum core, the compound coil being connected in two branch circuits containing an inductance and condenser adjusted to produce a definite displacement of magnetomotive force. 8th. As a means of pro-

ducing a rotary magnetic field, a compound coil and a simple coil suitably spaced on a ring or drum core, the compound coil having two members in parallel relation to the supply circuit differentially wound and in the same inductive relation to the core, and containing respectively inductance and capacity to produce the required phase displacement of magnetomotive force relatively to that produced by the simple coil. 9th. As a means of producing a rotary magnetic field, a compound coil and a simple coil suitably spaced on a ring or drum core and connected in series relation, the compound coil comprising two members in parallel relation differentially wound and in the same inductive relation to the core and containing respectively inductance and capacity to produce a displacement of phase of magnetomotive force to correspond to the angular displacement on its core. 10th. As a means of producing a rotary magnetic field, a compound coil and a simple coil spaced ninety degrees apart on a ring or drum core and connected in series relation, the compound coil comprising two members in parallel relation differentially wound and in the same inductive relation to the core, and containing respectively inductance and capacity to produce a phase displacement of magnetomotive force of ninety degrees with reference to the simple coil.

No. 53,090. Counter for Envelope Machines.

(Compteur pour machines à enveloppes.)



Henry Buckley Cooley, John Madison Noble and James Edward Trevor, all of Hartford, Connecticut, U.S.A., 3rd August, 1896; 6 years. (Filed 16th June, 1896.)

Claim.—1st. In an envelope or analogous machine, the combination of a chain composed of a series of sections adapted to receive the envelopes as they are discharged from the machine, mechanism for moving said chain, and mechanism controlled by the envelopes as they are discharged from the machine to cause the chain to move one section at a time when a predetermined number of envelopes has been received by said section, substantially as specified. 2nd. In an envelope or analogous machine, the combination with mechanism for receiving the envelopes from the machine, and mechanism for placing said envelopes upon a chain, of a chain composed of a series of sections, and means controlled by the envelopes for moving said chain one section at a time intermittently when a predetermined number of envelopes has been placed thereon, substantially as described. 3rd. The combination with an envelope or analogous machine, of a chain composed of a series of sections, mechanism for receiving envelopes from the machine and discharging the same downwardly, mechanism operating across the path of the envelopes for pushing the said envelopes one at a time upon a section of the chain, and means for moving said chain a section at a time when a predetermined number of envelopes has been placed upon said section, substantially as described. 4th. The combination with an envelope or analogous machine, of receiving rolls between which the envelopes are passed, a counter train normally out of gear with said rolls, mechanism for automatically throwing said train in gear with the rolls when an envelope passes between them, a chain comprising a series of sections adapted to receive the envelopes, and mechanism between the chain and the receiving rolls for pushing the envelopes one at a time upon the sections of said chain, with mechanism controlled by the counter train to cause the chain to move one section at a time as a predetermined number of envelopes is placed on said section, substantially as described. 5th. The combination with an envelope or analogous machine, of the main driving shaft, the receiving rolls through which the envelopes are passed downwardly from the machine, connections between said driving shaft and rolls for continuously rotating the same, a counter train normally at rest, connections between the receiving rolls and counter train adapted to be put in operation by the envelope as it passes through the rolls, whereby the counter train is operated to count each time an envelope passes between the rolls, substantially as described. 6th. In an envelope or analogous machine, the combination with a chain and mechanism for automatically moving said chain step by step when a predetermined number of envelopes has been placed thereon, of the receiving rolls journaled in bearings below the delivery of the machine, a shaft journaled in bearing adjacent thereto, connections between the main driving shaft and receiving rolls for continuously rotating the same, a bevelled gear loosely mounted on said shaft,

pawl mechanism carried by the shaft of one of the receiving rolls normally holding said gear against rotation, a locking device between the gear and its shaft, and means for causing said locking device to lock the gear and shaft together as an envelope passes between the receiving rolls, a counter train, and connections between said counter train and gear, whereby the said counter train may be caused to count each envelope as it passes between the rolls, substantially as described. 7th. In an envelope or analogous machine, the combination with the main frame, of a supplemental frame attached thereto below the delivery of the machine, of the receiving rolls mounted in said supplemental frame, connections between the driving shaft and said receiving rolls for continuously rotating the same, a shaft journaled in said supplemental frame adjacent to the receiving rolls in gear therewith, a clutch roll fixed to said shaft, a bevel gear loosely mounted on the shaft with its hub in contact with the clutch roll and provided with a groove therein, a stop pin or shoulder in said groove, a recess in the clutch roll, a spring-actuated plunger in said recess having its outer end travelling in the groove in the face of the hub of the gear, a pawl journaled upon a shaft of one of the receiving rolls and projecting slightly beyond the line of contact of the two receiving rolls and normally engaging a tooth on the gear to hold it against rotation, means for disengaging said pawl from the gear and holding it out of engagement therewith as the envelope passes between the rolls, so that the spring-actuated plunger may engage and remain in contact with the pin or shoulder of the groove of said gear thereby locking the gear and clutch roll together, a counter train, connections between said counter train and gear whereby the former is caused to move each time an envelope passes between the rolls, substantially as described. 8th. In a counter for envelopes or analogous machines, the combination with the receiving rolls through which the envelopes pass, of a clutch roll mounted on a shaft adjacent to said rolls and rotating continuously therewith, an interrupted flange on said roll forming a land, a cam projecting upon the roll between the ends of the land having its upper surface in line with the upper surface of the land, a spring-actuated plunger in the body of the roll with its end projecting beyond the face thereof, a pawl fulcrumed upon the shaft of the receiving roll adjacent to the clutch roll with one end projecting slightly beyond the line of contact between the two receiving rolls, a gear loosely mounted upon the same shaft with the clutch roll, normally held against rotation by said pawl, a tappet projecting from the pawl in the path of the ends of the land and cam on the clutch roll, a groove in the face of the hub of the gear with a shoulder or stop therein, in which groove the end of the plunger travels in the rotation of the roll, said stop pushing the plunger into its recess when the gear is held against rotation and locking the gear and roll together when the gear is released by the pawl, substantially as described. 9th. In a counter for envelopes or analogous machines, the combination with the receiving rolls between which the envelopes pass, of a shaft adjacent to one of the rolls, a clutch roll fixed to said shaft, a gear loosely mounted on said shaft with its hub in contact with the clutch roll, a pawl mounted on the shaft of one of the receiving rolls with one end projecting slightly beyond the line of contact of said rolls and normally holding the gear against rotation, a cam on the clutch roll for raising the pawl to throw its end out of line with the envelope as it enters between the receiving rolls and permitting the pawl to drop until its end engages the envelope after it has cleared the edge thereof, thus holding the said pawl out of engagement with the gear, means for locking the clutch roll and gear together in the further rotation of the roll, whereby the gear is caused to make one revolution as the envelope passes between the receiving rolls, and means for raising the pawl out of contact with the envelope to clear the edge thereof as it drops from the receiving rolls and to cause the pawl to engage the gear and to lock the same against rotation when the envelope is passed from the receiving rolls, substantially as described. 10th. The combination with an envelope or analogous machine, of the receiving rolls between which the envelopes are passed, a counter train normally out of action, mechanism directly controlled by the passage of the envelopes between the receiving rolls for connecting the said rolls with the counter train, whereby a count is made only when an envelope is passed between the rolls, substantially as described. 11th. The combination with an envelope or analogous machine, of the receiving rolls, each consisting of two parts with a space between said parts, a pawl fulcrumed upon the shaft of one roll within the space between its two parts, and having one end projecting within the space between the two parts of the other roll and beyond the line of contact between the rolls, a counter train, clutch mechanism between said train and the receiving rolls, normally held out of action by the pawl and thrown into action by passage of an envelope between the receiving rolls, substantially as described. 12th. The combination with an envelope or analogous machine, of the receiving rolls, a clutch roll adjacent to a bevel gear loosely mounted upon the same shaft with said clutch roll, mechanism for locking the said gear and clutch roll together as an envelope passes between the receiving rolls, a counter train comprising a series of gears intermittently intermeshed with the clutch roll by the said bevel gear, and springs bearing upon the driven gears of the counter train to hold them against their bearings, whereby said driven gears may be prevented from moving more than one tooth at a time, substantially as described. 13th. The combination with an envelope or analogous machine, of the receiving rolls, connections between said rolls and a rotating part of the machine, a clutch roll mounted on a shaft adja-

cent to said receiving rolls so timed as to make one revolution to two or more revolutions of the receiving rolls, a bevel gear on the same shaft with the clutch roll, a pawl normally holding said gear against rotation, and having one end projecting beyond the line of contact of the receiving rolls, a counter train in mesh with the bevel gear, connections between the clutch roll and bevel gear adapted to lock the said parts together when the pawl is released from the gear by the envelope passing between the rolls, substantially as described. 14th. In a counter for envelopes or analogous machines, the combination with the receiving rolls through which the envelopes pass, of a counter train, a gear mounted on the shaft between said counter train and receiving rolls and normally held against rotation, a pawl fulcrumed on the shaft of one of the rolls adapted to hold said gear against rotation having one end projecting beyond the line of contact of said rolls, mechanism for positively raising said pawl to clear the edge of the envelope as it enters between the receiving rolls, and immediately releasing the same to bring it into contact with the envelope passing between the rolls to hold the pawl out of engagement with the gear, a clutch device fixed to and rotating with the shaft of the gear, adapted to lock the gear to the shaft when the pawl is out of engagement therewith, and means for positively lifting the pawl out of engagement with the envelope to clear the edge as it leaves the rolls and release the pawl to engage the gear to hold it against movement when the envelope falls to pass through the receiving rolls at the proper time, substantially as described. 15th. In a counter for envelopes or analogous machines, the combination with the receiving rolls, of a counter train, connections between said receiving rolls and the train controlled by the envelope passing through the rolls to transmit motion from the said rolls to the counter train only when an envelope passes between said receiving rolls, a chain below the receiving rolls, means for pushing the envelopes upon said chain successively, and means for moving said chain, with connections between the counter train and the operating means for the chain arranged to move the chain one section at a time upon the completion of a package of envelopes of a predetermined number, substantially as described. 16th. The combination with an envelope or analogous machine, of the receiving rolls through which the envelopes pass, a counter train, connections between the receiving rolls and the counter train, normally out of action and set in motion by the passage of envelopes between the receiving rolls to cause the train to count one envelope at a time, a shaft journaled below the receiving rolls, a chain operated by said shaft, means for pushing the envelopes upon said chain as they fall from the receiving rolls, a gear loosely mounted on said shaft, connections between said gear and an operating part of said machine for continuously rotating the same, an arm fixed upon said shaft and a clutch between the gear and said arm normally out of action, with connections between said clutch device and the counter train adapted to throw the clutch device in action and lock the gear to the shaft upon the completion of the count of a predetermined number of envelopes by the train, substantially as described. 17th. In a counter for envelopes or analogous machines, the combination with a counter train, of a chain comprising a series of sections, a shaft for operating the chain, a gear loosely mounted on said shaft, an arm fixed to said shaft, a disc fixed to the gear and rotating therewith, a spindle journaled on said arm having a locking pawl held normally out of engagement with the disc, and a tappet arm on the opposite side thereof, a spring-actuated bell crank lever mounted upon the frame of the machine with one arm normally in contact with the said tappet thereby holding the pawl out of engagement with the disc, an arm on the shaft of the last gear of the counter train provided with a side cam rotating in the path of the other arm of the bell crank lever adapted to move the same to release the tappet arm, upon the completion of a revolution of the last in the counter train, substantially as described. 18th. The combination with an envelope or analogous machine, of the supplemental frame secured to the main frame below the delivery of the machine, the receiving rolls through which the envelopes are passed, a counter train, mechanism between the receiving rolls and train for causing the latter to count one envelope at a time as the envelopes pass between the receiving rolls, a chain below the receiving rolls composed of sections adapted to receive each package of envelopes of a desired number, a shaft for operating said chain held normally against rotation, a clutch disc loosely mounted upon said shaft, connections between said disc and the main shaft of the machine for continuously operating the same, an arm fixed to the shaft, a pawl carried thereby, a bell crank lever fulcrumed upon the frame with one arm projecting through a slot in the same and adapted to hold the pawl out of engagement with the rotating disc, a cam carried by the sleeve of the last gear of the counter train arranged to engage the other arm of the bell crank lever and force it down to release the pawl and permit it to lock the arm and disc together, whereby the said arm may make one revolution to move the chain one section, substantially as described. 19th. The combination with the receiving rolls from which the envelopes are discharged downwardly, of the bottom plate or table upon which they fall, the chain comprising a series of sections adapted to be held in position to receive the envelopes, means for intermittently moving the chain at right angles to the table, the reciprocating pusher plate below the receiving rolls, and connections between the pusher plate and the main driving shaft for reciprocating the same, whereby the envelopes are successively pushed into the chain, substantially as described. 20th. The combination with the receiving rolls through which the envelopes are passed, the bottom

plate or table below the receiving rolls upon which envelopes fall, and the main driving shaft, a cam thereon, a bell crank lever fulcrumed to the frame of the machine having one arm held in contact with said cam, a pusher plate connected to the other arm of the bell crank lever located below the receiving rolls, a chain upon which the envelopes are to be placed adapted to be held with a section opposite the pusher plate, and means for moving said chain intermittently at right angles to the table, whereby the envelopes are pushed successively into a section of the chain, substantially as described. 21st. The combination with an envelope or analogous machine, of the receiving rolls through which the envelopes are passed, the table upon which the envelopes fall, the chain-supporting structure comprising the frames having guideways thereon secured to the machine at right angles to said table, the chain composed of a series of links each having Z-shaped lugs, and pintles passing through said lugs connecting the separate links together, the ends of said pintles resting upon the guide-ways on the frames, and sprocket-wheels around which the chain passes, with means for pushing the envelopes upon the chain, and means for moving said chain, substantially as described. 22nd. The combination with an envelope or analogous machine, of a mechanism for discharging the envelopes downwardly, a table upon which the envelopes fall, a chain comprising a series of sections formed of a plurality of links hinged together, frames for guiding said chain, a driving shaft mounted in bearings upon the machine, a sprocket-wheel on said shaft between the frames of the chain structure, a second sprocket-wheel mounted in adjustable bearings on the said frames, with means for rotating the said shaft to move the chain at right angles to the table, substantially as described. 23rd. The combination with the receiving rolls, of a counter mechanism for envelopes or analogous machines, the table or bottom plate upon which the envelopes fall from the rolls, the pusher plate reciprocating below the receiving rolls across the path of the envelopes, a chain upon which the envelopes are pushed, mechanism for operating the pusher plate, a spring buffer having a pivoted finger depending therefrom against which the envelopes are pushed, and the rock shaft mounted above the chain provided with fingers projecting normally below the top of the envelope in line therewith, with means for vibrating said rock shaft to raise the fingers out of the path of the envelopes and lower the same after the envelopes are pushed on the chain to confine the same within the chain, substantially as described. 24th. In an envelope or analogous machine, the combination with the chain, the receiving roll and the mechanism for pushing the envelopes upon the chain, of the means for holding and retaining the envelopes in upright position in the chain while being loaded, consisting of the spring buffer with a pivoted finger against which the envelopes press on one side, a rock shaft mounted above the chain provided with fingers adapted to engage the upper part of the other side of the envelope, and means for intermittently vibrating said shaft to raise the fingers out of the path of the envelopes as they pass to the chain, substantially as described. 25th. In an envelope or analogous machine, the combination with the chain and the mechanism for loading the envelopes upon the chain, of the buffer against which the envelopes press on one side, a rock shaft mounted above said buffer provided with downwardly-projecting fingers adapted to hold the envelopes in upright position, a lever fulcrumed to a fixed part of the machine having a slotted connection to an arm on the rock shaft, a spring normally holding the other arm of said lever upward, thereby depressing the finger thereon, a pin carried by a rotating part of the machine arranged to engage the other arm of the lever so as to depress the same as each envelope is loaded upon the chain, thus raising the confining fingers out of the path of said envelope and lowering the same to hold the envelope in position, substantially as described.

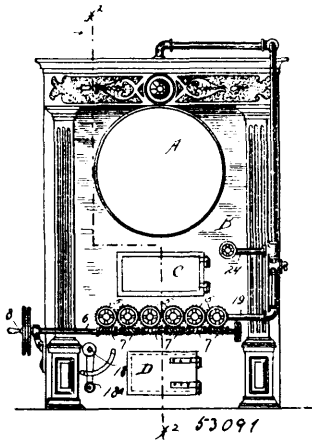
No. 53,091. Furnace for Steam-Generators, etc.

(*Fournaise pour générateurs à vapeur, etc.*)

Robert B. Carsley and John H. Batts, both of Keyport, New Jersey, U.S.A., 3rd August, 1896; 6 years. (Filed 11th June, 1896.)

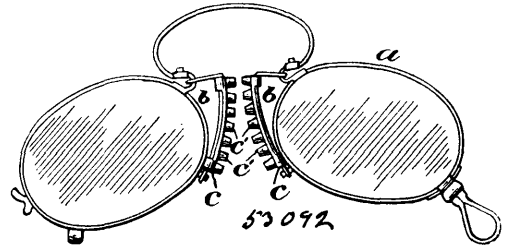
Claim.—1st. A furnace-grate or fire-bed having its fuel-supporting surface composed wholly of rotatably mounted grate-bars having right and left-hand intermeshing spiral flanges, those having right-hand spiral flanges alternating in position with those having left-hand spiral flanges, and connecting gearing for simultaneously rotating all of the bars, those with left-hand spiral flanges in one direction and the others in the opposite direction, substantially as set forth. 2nd. A furnace-grate or fire-bed having its fuel-supporting surface composed of rotatably mounted grate-bars having right and left-hand interlocking spiral flanges, the spiral flange 2, on one bar being convex or rounded and the interspace on the adjacent bar being concave to receive the flange 2, and having means for simultaneously rotating adjacent bars in opposite directions, substantially as set forth. 3rd. A furnace-grate or fire-bed having its fuel-supporting surface composed wholly of rotatably mounted hollow grate-bars furnished with right and left-hand interlocking spiral flanges, and jet apertures in the hollows between said flanges, means for rotating said bars simultaneously, adjacent bars in opposite directions, as described, and means for admitting steam to the fuel, through said bars, substantially as set forth. 4th. A furnace-grate or fire-bed having its fuel supporting surface composed of rotatably mounted grate-bars having right and left-hand interlocking spiral flanges, means for simultaneously rotating said bars, those adja-

cent in opposite directions, and means, substantially as described for simultaneously shifting said bars laterally for varying the spacing



between said adjacent bars, substantially as set forth. 5th. In a furnace, the combination of the bearing-blocks 12, and the transverse supporting-tracks in which they are mounted, of the rotary grate-bars, the journals of which have bearings in said blocks, the lazy-tongs 13, connecting said bearing-blocks, and means for operating said lazy-tongs, substantially as set forth. 6th. The combination with the transverse tracks 10 and 11, the bearing-blocks 12 mounted therein, the lazy-tongs 13, connecting said blocks, the rack-bar 15, coupled to said lazy-tongs, the shaft and pinion for operating said rack-bar, and the guide for the latter, of the rotatively mounted, spirally-flanged grate-bars journaled in the respective bearing-blocks, substantially as set forth. 7th. The combination with the grooved transverse tracks 10 and 11, arranged one above the other, the bearing-blocks 12, mounted in said tracks and provided with lapping pieces 12^a, and the balls 12^b, interposed between the bearing-blocks and tracks, of the lazy-tongs 13, connecting together the bearing-blocks, the guided rack-bar 15, coupled to the lazy-tongs, the pinion 17, gearing with said rack-bar, the shaft of said pinion, and the spirally-flanged grate-bars, rotatably mounted in the respective bearing-blocks, substantially as set forth. 8th. In a furnace, the combination with the rotatively mounted, hollow grate-bars 1, having lateral air-inlets 23, of the steam-jet nozzles 20, mounted in the ends of the respective bars, the valve casings 21, connected with the outer ends of the respective nozzles 20, the valves 22, in the casings, adapted to control the admission of the steam to the nozzle from the casing, a steam supply-pipe connected with one of the valve-casings of the series, and pipes connecting the several casings, whereby the steam may flow through the latter, substantially as set forth. 9th. In a furnace, the combination with the spirally flanged hollow grate-bars, means for rotating or rocking said bars, and means for shifting said bars laterally to vary the interspacing, of the steam-jet nozzles 20, mounted in the outer ends of the respective grate-bars, the valve casings 21, connected with the respective nozzles 20, and the steam-pipe 19^a, connecting the adjacent valve-casings, each of said steam-pipes extending through and being adapted to play in a gland in one of said valve-casings in order to accommodate the steam-connections to the lateral shifting of the grate-bars, substantially as set forth. 10th. In a furnace, the combination with the fuel-supporting grate, the bridge-wall, and a steam-supply pipe 24, of the sectional super-heating pipe 25, composed of sections provided with interlocking, tapered dovetail couplings, substantially as described, whereby the pipe may be replaced in sections without cooling the furnace, substantially as set forth. 11th. In a furnace, the combination with the bridge-wall at the back of the combustion-chamber and the grate for supporting the fuel, a steam generator, and a steam-supply pipe 24, connected therewith, of a sectional pipe 25, extending through the four walls of the furnace, one transverse branch being adjacent to the bridge-wall and the terminal transverse branch, which crosses the combustion-chamber at the front, provided with jet-apertures, the pipe 24 being connected with and adapted to supply steam only to the pipe 25, substantially as set forth. 12th. A furnace grate or fire-bed having its entire fuel-bearing surface composed of rotatively mounted grate-bars having right and left-hand interlocking or intermeshing spiral flanges, and having means for simultaneously rotating or rocking all of said bars, and means for shifting said bars laterally, substantially as set forth. 13th. A furnace having its entire fuel-bearing surface composed of rotatively mounted hollow grate-bars, provided with right and left-hand intermeshing spiral flanges, alternating bars having rounded flanges 2, which engage with concave interspaces 2^a, between the flanges on the other bars, said furnace having means for introducing steam and air to the fuel through said bars, means for rocking said bars, and means for separating said bars laterally, substantially as set forth.

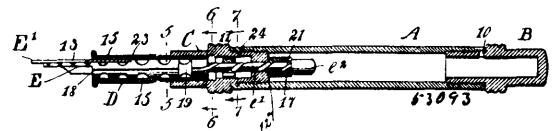
No. 53,092. Eyeglass and Holder therefor.
(Pince-nez.)



Charles John Bailey, Newton, Massachusetts, U.S.A., 3rd August, 1896; 6 years. (Filed 23rd June, 1896.)

Claim.—1st. An eyeglass having a nose piece provided with a holding surface presenting a series of flexible feet to operate substantially as described. 2nd. An eyeglass having a nose piece provided with a holding surface presenting a series of hollow flexible feet, to operate substantially as described. 3rd. An eyeglass having a nose piece, composed of a tubular back and a series of projecting feet, to operate substantially as described. 4th. An eyeglass having a nose piece, composed of a back, a portion of which is made to surround the nose piece leaving the feet attached to the back to bear against the nose, to operate substantially as described. 5th. The within described rubber holding surface for eyeglass nose pieces, the same provided with a series of cellular projections, substantially as described.

No. 53,093. Fountain Pen. (*Plume à réservoir.*)

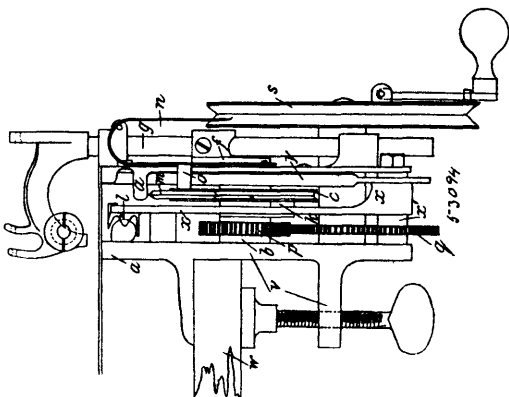


Carl Julius Renz, New York, State of New York, U.S.A., 3rd August, 1896; 6 years. (Filed 24th June, 1896.)

Claim.—1st. In a fountain pen, a feeder provided on its under side with cavities, and a longitudinal groove on each side connecting said cavities, and passages for conducting the ink from the lower to the upper surface of the feeder, substantially as described. 2nd. In a fountain pen, a barrel having an apertured partition therein, reducing the diameter of the barrel, and a feeder mounted to slide through said partition, extending within and without the barrel, whereby when the feeder is moved in one direction a vacuum space in the barrel is reduced, and whereby through air pressure the ink is forced out from the barrel, and upon moving the feeder in a contrary direction said vacuum space is enlarged and through suction the ink is retained in said barrel, as set forth. 3rd. In a fountain pen, a barrel, and a feeder adjustable in the said barrel, the feeder being provided with a valve arranged to regulate the supply of ink from the barrel to the feeder upon the adjustment of the latter, as and for the purpose specified. 4th. In a fountain pen, a feeder provided with basins for the reception of ink, said basins being connected by grooves, the point of the feeder adapted for engagement with the nib of the pen being apertured, as and for the purpose specified. 5th. In a fountain pen, a feeder comprising a body and a shank of less diameter than the body, the body having a tapering form and provided with top and bottom basins, corresponding basins at the top and bottom being connected, as and for the purpose specified. 6th. A feeder for fountain pens, of tapering shape and provided with basins at top and bottom, grooves connecting the basins at the top, and openings passing through the basin portions of the feeder from top to bottom, as and for the purpose specified. 7th. A feeder for fountain pens, provided with series of basins at the top and at the bottom, sundry of the basins at the top and bottom being in registry, and all of the basins having openings made therein, extending through from top to bottom, and the feeder being further provided with a series of longitudinally located grooves, as and for the purpose specified. 8th. A feeder for fountain pens, provided with basins at top and bottom and openings extending through the basin portions of the feeder, the said feeder being provided with a shank of less diameter than the basin portion, and a collar loosely mounted on the said shank, as and for the purpose specified. 9th. A feeder for fountain pens, provided with basins at top and bottom and openings extending through the basin portions of the feeder, the said feeder being provided with a shank of less diameter than the basin portion, and a collar loosely mounted on the said shank, together with a fixed collar adapted at predetermined times to shut off the supply of ink from the barrel of the pen to the feeder when the feeder is connected with the barrel, as and for the purpose specified. 10th. In a fountain pen, the combination, with a barrel having an exit opening for the ink, and a

nozzle adjustably connected with the barrel, of a nib carried by the said nozzle, a feeder, the body of which is located in the nozzle, the body portion of which feeder extends along the bottom of the nib practically in engagement therewith, the said body being provided with upper and lower connected basins, and means, substantially as described, for supplying ink from the barrel to the feeder, as and for the purpose set forth. 11th. In a fountain pen, the combination, with a barrel, a nozzle adjustable in the barrel, the said barrel being provided with an outlet for the ink in communication with the nozzle, of a nib located in the said nozzle, a feeder, the body of which is located in the said nozzle, the said feeder having top and bottom basins and apertures connecting the same, the apertures extending to the point of the feeder which is adapted for engagement with the aforesaid nib, the feeder being provided with a shank extending loosely through the outlet of the barrel and into the barrel, and a sliding collar mounted on the shank of the feeder, as and for the purpose set forth. 12th. In a fountain pen, the combination, with a barrel, and a nozzle adjustable in the barrel, the said barrel being provided with an outlet for the ink in communication with the nozzle, of a nib located in the said nozzle, a feeder, the body of which is secured within the nozzle, the said feeder having top and bottom basins and apertures connecting the same, the apertures extending to the point of the feeder which is adapted for engagement with the aforesaid nib, the feeder being provided with a shank extending loosely through the outlet of the barrel and into the barrel, and a sliding collar mounted on the shank of the feeder, the inner end of the shank of said feeder being arranged to close or partially close the outlet of the said valve, as and for the purpose specified. 13th. In a fountain pen, the combination, with a barrel, and a nozzle adjustable in the barrel and adapted to receive a nib, of a feeder carried by the nozzle, having connected top and bottom basins for the reception of ink and openings for the circulation of air, the said feeder being provided with a valve at one end adapted in the adjustment of the nozzle to close the ink outlet in the barrel of the pen, as and for the purpose specified. 14th. In a fountain pen, the combination, with a barrel having an apertured partition, of a sliding feeder having its inner end projecting through the said partition and provided with an enlargement or head for closing the aperture therein, the said feeder being provided with cavities, longitudinal grooves and passages for conducting the ink from the lower to the upper surface of the feeder, and a nozzle fitting tightly on the feeder over the cavities, and movable with the feeder, substantially as described. 15th. In a fountain pen, the combination, with a barrel having an apertured partition, of a feeder having an enlargement or head at its inner end for closing the aperture of the said partition, said feeder having cavities on opposite sides connected by transverse apertures and provided with longitudinal grooves, and a nozzle fitting tightly on the feeder over the cavities and connected with the barrel to have endwise movement, whereby the feeder can be slid in and out substantially as described. 16th. In a fountain pen, the combination, with a barrel and a hollow plug fitting in the end of the barrel and having the bore of its inner end reduced, of a feeder having an enlargement or head at its inner end for closing the inner end of the plug, and provided with cavities in opposite sides connected by apertures, and with longitudinal passages, and a nozzle fitting tightly on the feeder over the cavities thereof, and connected with the plug to have endwise movement therein, substantially as shown and described. 17th. In a fountain pen, the combination, with a barrel and a nozzle adjustable in the barrel and adapted to receive a nib, of a feeder carried by the nozzle, having basins for the reception of ink and openings for the circulation of air, the said feeder being provided with a valve at one end, adapted in the adjustment of the nozzle to close the ink outlet in the barrel of the pen, and a collar mounted to slide on the said feeder, between the basin portion thereof and the aforesaid valve, the collar serving to force the ink to the outer extremity of the feeder, substantially as set forth.

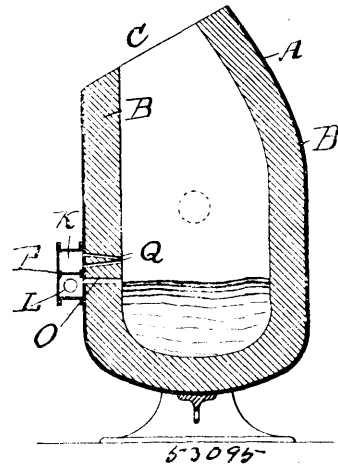
No. 53,094. Sewing Machine. (Machine à coudre.)



Harry Manning, London England, 4th August, 1896; 6 years. (Filed 24th June, 1896.)

Claim.—1st. In a sewing machine as shown, the means for operating the needle bar or piston *g*, consisting of the crank pin *e* fixed on a grooved disc *c*, working in the curved slotted lever *f*, said needle bar working in guides fixed to the frame *a*, as herein described and set forth. 2nd. In a sewing machine as shown, the combination of cam *b* and special feed presser arm *g*, and presser *i*, said arm being centred and slotted to work upon pin *e'*, as herein described and set forth. 3rd. In a sewing machine as shown, the cam *k* working in open lever frame *x*, centred upon *x'*, to operate shuttle driver, as herein described and set forth. 4th. In a sewing machine the general combination of main driving spindle, driven and operating the various cams as described, the spool-winding gear, together with frame, *a*, pin *e'*, spur wheels and pinions *q p*, shuttle driver *l*, and folding crank handle, as herein described and set forth.

No. 53,095. Converter. (Convertisseur.)

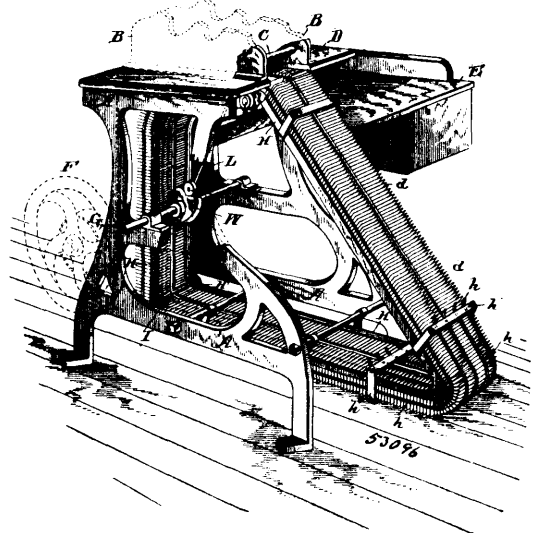


Alexander Tropenas, Boulogne sur-Seine, France, 4th August, 1896; 6 years. (Filed 29th June, 1896.)

Claim. 1st. A converter having a double tuyere box with separate sets of tuyeres leading therefrom, a blast pipe leading to the lower tuyere box and a branch pipe connecting the upper with the lower tuyere box, substantially as described. 2nd. A converter having two tuyere boxes, blast pipe connections, tuyere openings from the upper tuyere box to the interior of the converter, said two tuyere openings being in two sets one over the other, and inclined towards each other, as and for the purposes set forth.

No. 53,096. Drying Chain for Envelope Machines.

(Chaîne de séchage pour machines à enveloppe.)



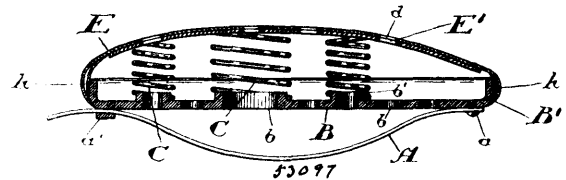
Henry Buckley Cooley, John Madison Noble and James Edward Trevor, all of Hartford, Connecticut, U.S.A., 4th August, 1896; 6 years. (Filed 16th June, 1896.)

Claim.—1st. A drying chain for envelope machines composed of a series of links adapted to carry two or more rows of envelopes side

by side and connected together at one end so as to form a closed bottom for supporting the lower edges of the envelopes in that side of the chain, and free at the opposite end so as to provide an unobstructed passage to the bottom delivery of the envelopes carried by that side of the chain, substantially as described. 2nd. The combination with an envelope machine, of a drying chain composed of a series of connected links, each of which is adapted to hold two or more envelopes side by side thereon, and means for pushing the envelopes from one side of the chain to the other, substantially as and for the purpose specified. 3rd. A drying chain for envelope machines composed of a series of connected links of plural capacity, one side of each link being provided with means for supporting the bottom edge of the envelope, and the other side provided with a flange adapted to press the envelope against the back of preceding link and hold the body of the envelope out of contact with the unsealed flap, substantially as described. 4th. The combination with the delivery of an envelope machine, of a drying chain composed of links adapted to hold two or more envelopes side by side, means for causing the chain to travel around its circuit, mechanism for pushing the envelopes from one side of the chain to the other at a certain point in the travel or circuit of said chain, and mechanism for striking and knocking the envelopes successively through the bottom of said chain at a given point in its travel, substantially as described. 5th. The combination with an envelope machine, of a drying chain having a receiving and delivery side, a shaft journaled below the delivery rolls of the envelope machine, or other delivery mechanism, a sprocket-wheel on said shaft meshing with the links of the drying chain, connections between said shaft and the driving shaft of the machine for intermittently rotating the said shaft, and mechanism for shifting the envelopes successively from the receiving to the delivery side of the chain, substantially as described. 6th. The combination with an envelope machine, of a drying chain adapted to hold two or more rows of envelopes side by side, mechanism for giving an intermittent motion to the drying chain, mechanism for pushing the envelopes successively from one side of the chain to the other, whereby the envelope may be caused to make nearly two or more circuits with the chain, substantially as described. 7th. The combination with an envelope machine, and the guide frames thereof, of a drying chain adapted to hold two or more rows of envelopes side by side, mechanism for giving intermittent motion to the drying chain, a bar slidably mounted upon the guard frames, mechanism for intermittently moving the said bar, a pusher rod extending diagonally across the line of travel of the envelopes, and connections between the bar and pusher rod for intermittently operating said rod, substantially as and for the purpose specified. 8th. The combination with an envelope machine, of the guide frames, and drying chain confined between the same, the intermittently rotating shaft journaled below the delivery of the machine and provided with a sprocket or spur gear, a casting loosely mounted upon said shaft, a ratchet wheel fixed to said shaft, having a pawl thereon engaging the ratchet wheel, a bar slidably mounted upon the guide frames and provided with a cam, a pusher rod fulcrumed upon a fixed part of the device, and extending diagonally across the receiving side of the chain, adapted to be engaged by the cam upon the sliding bar, substantially as and for the purpose set forth. 9th. The combination with an envelope machine, of the guide frames secured thereto, a drying chain adapted to hold two or more rows of envelopes confined between said frames, an intermittently rotating shaft journaled below the delivery of said envelope machine, a casting having a pawl thereon loosely mounted upon said shaft, a ratchet wheel fixed to the shaft, a sliding bar actuated from the casting and provided with a cam way mounted upon one of the guide frames, a tappet lever operated by the cam and extending across the line of travel of the chain with means for intermittently rotating the shaft, whereby the tappet is caused to strike the envelopes successively through the bottom of the chain, as they pass under the same, substantially as and for the purpose set forth. 10th. The combination with the intermittently moving drying chain, of the tappet lever fulcrumed upon the chain structure and extending across and above the line of travel of the envelopes, and normally out of contact therewith, mechanism for giving motion to said chain, and means for causing the tappet to strike the top edge of the envelopes successively as they pass thereunder to knock them through the bottom of the chain, substantially as and for the purpose set forth. 11th. The combination with an envelope machine or analogous structure, of a drying chain, a shaft journaled below the delivery of the machine around which shaft the chain passes, connections between the machines and shaft for intermittently rotating the same, mechanism operated from said shaft to shift the envelopes successively from one side of the chain to the other, and mechanism operatively connected with said shaft for striking the envelopes successively through the bottom of the chain, substantially as described. 12th. The combination with the drying chain, the driving shaft therefor, mechanism for intermittently rotating the shaft, a bar provided with two oppositely acting cams slidably mounted upon a fixed part of the drying chain structure, a pusher rod adapted to be engaged by one of the cams and pivoted to the chain structure and extending diagonally across the top thereof, a bell-crank tappet lever adapted to be engaged to the other cam and pivoted to the chain structure and having one arm extending transversely above the chain and normally held out of contact with the envelopes in the said chain, with connections between said sliding bar and shaft, whereby movement of the sliding

bar in one direction as the chain pauses moves the pusher rod to throw the envelope beyond the central line of the chain and movement of the said bar in the opposite direction operates the tappet lever to strike an envelope through the bottom of the chain, substantially as described. 13th. The combination with the drying chain, of plural capacity, of the guide frames for supporting and confining the links of the chain, guide wires at each side of the links, guide wires between the receiving and delivery sides of the chain, and the bottom guide wires on the delivery side of the chain, substantially as described. 14th. The combination with the chain adapted to carry two or more rows of envelopes side by side and composed of a series of links hinged together at one side by pintles or rods, of the guide frames for supporting and confining the chain having slide-ways upon which the end of the pintles are adapted to travel, and guide wires at each side of the links and between the adjacent rows of envelopes for confining the envelopes in their travel with the chain, substantially as described. 15th. A drying chain for envelope machines composed of a series of links, each adapted to hold two or more envelopes side by side, said links being provided at one side with lugs projecting in opposite directions therefrom, with flanges connecting the lugs on one of the sides of the links forming sleeves upon which the envelopes may rest, pintles passing through the lugs to hinge the links together at that side, and flanges projecting forwardly from the top of the other side of the link, the bottom of said side being open and free from obstruction, substantially as described. 16th. The combination of an envelope machine and the guide frames H, H', and the guide wires h, secured thereto, of the drying chain adapted to hold two or more rows of envelopes side by side confined between the same, the shaft journaled below the table of the machine, the pusher rod fulcrumed upon the guide frame H, the tappet lever likewise fulcrumed upon said guide frame, the guide frames H', and inner guide wires h, being interrupted between the said shaft and the tappet lever to permit the envelopes to be discharged through the bottom of the chain and to allow the envelopes to be shifted from one side of the chain to the other, connections between the machine and the shaft for intermittently rotating said shaft, with pusher and tappet mechanism, to push the envelopes successively from one side of the chain to the other and strike the same through the bottom thereof, substantially as described.

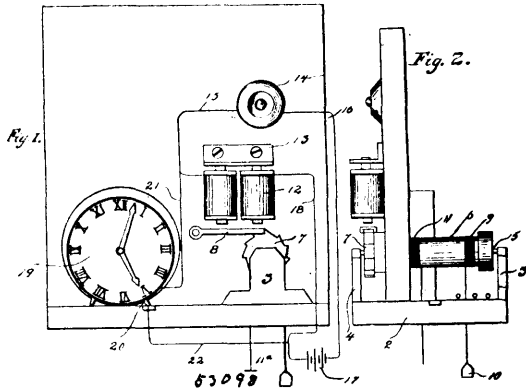
No. 53,097. Bicycle Saddle. (Selle de bicyclee.)



Lewis Edson Lawson, Toronto, Ontario, Canada, 4th August, 1896; 6 years. (Filed 29th June, 1896.)

Claim.—1st. A bicycle saddle having a base-plate suitably connected with the seat-post and shaped substantially as indicated, in combination with a flexible cover of similar outline and a series of springs arranged between the base-plate and flexible cover so as to support and hold the said cover in operative position, substantially as specified. 2nd. A bicycle saddle having a perforated base-plate, with spring connection to the seat-post, and shaped substantially as indicated, in combination with a perforated and flexible cover of similar outline, and a series of spiral springs arranged between the base-plate and flexible cover so as to hold the said seat in operative position, substantially as specified. 3rd. A bicycle saddle having a perforated base-plate of rigid material connected to the seat-post and shaped substantially as indicated, in combination with a perforated and flexible seat of similar outline and a series of springs so arranged between the base-plate and flexible seat as to form a normally dome-shaped seat, the whole being covered with a perforated covering, substantially as and for the purpose specified. 4th. A bicycle saddle comprising the following elements: curved spring A, centrally connected to the seat post; the base plate B, shaped as indicated; the spring C; flexible and movable seat D, and cover E, substantially as specified. 5th. In a bicycle saddle, the combination of a curved spring A, suitably connected to the seat-post; the perforated base-plate B, shaped as indicated, and provided with rim B' and shoulders b' surrounding the openings b; the spiral springs C; the flexible and normally dome-shaped seat D provided with perforations d; and the cover E, with perforations E', substantially as specified. 6th. In a bicycle saddle, the combination of curved spring A, centrally connected to the seat-post and riveted at one end to the bottom of the base-plate; keeper a; the perforated base-plate B; rim B' with rounded edge; shoulders b' surrounding the openings b in the base-plate; the flexible and movable seat D with perforations d; the spiral springs C; the cover E, with perforations E' and horse-hair packing L, substantially as described and for the purpose specified.

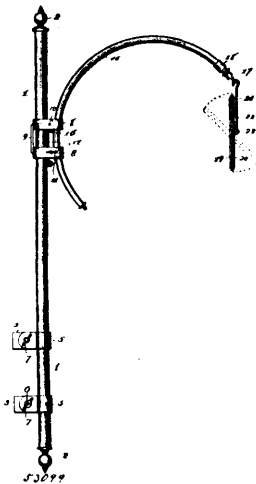
No. 53,098. Automatic Damper Attachment.
(*Attache de registre automatique.*)



Warren Dudley King, Peabody, Massachusetts, U.S.A., 4th August, 1896; 6 years. (Filed 19th June, 1896.)

Claim. 1st. An apparatus for operating dampers from a distance, consisting of a frame in which is mounted a counter-weighted drum, a ratchet wheel mounted on the drum shaft, a pawl mounted on the frame and adapted to operate to engage the ratchet wheel, and retain the damper in a desired position, and means for releasing the pawl and to open the damper, substantially as described. 2nd. An apparatus for operating dampers from a distance, consisting of a frame in which is mounted a counter-weighted drum, a ratchet wheel mounted on the drum shaft to operate and engage the ratchet wheel, and retain the damper in a desired position, a weight provided with a chain or cord, which is attached to the drum, and an additional chain or cord attached to the damper, and means for releasing the pawl, whereby the ratchet wheel will be released, and the damper open by its own weight, substantially as described. 3rd. An apparatus for operating dampers from a distance, consisting of a frame in which is mounted a counter-weighted drum, a ratchet wheel mounted on the drum shaft to operate and engage the ratchet wheel, and retain the damper in a desired position, a weight provided with a chain or cord, which is attached to the drum, and an additional chain or cord attached to the damper, and electro-magnets having electrical connections, and a push button to close the electric circuit, and magnetize the pawl to release the ratchet wheel and to operate the damper, substantially as described. 4th. An apparatus for operating dampers from a distance, consisting of a frame in which is mounted a counter-weighted drum, a ratchet wheel mounted on the drum shaft to operate and engage the ratchet wheel, and retain the damper in a desired position, a weight provided with a chain or cord, which is attached to the drum, and an additional chain or cord attached to the damper, and electro-magnets having electrical connections, and means for automatically closing the circuit to open the damper, substantially as described.

No. 53,099. Mirror Attachment for Dressers, &c.
(*Attache pour miroirs de cabinets.*)

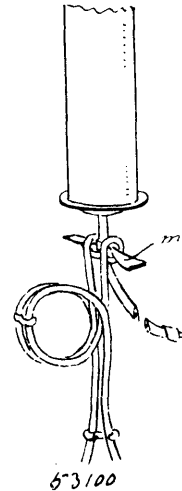


Townsend W. Noxon, St. Louis, Missouri, U.S.A., 4th August, 1896; 6 years. (Filed 22nd June, 1896.)

Claim.—1st. In a device of the class described, a pair of straps adapted to be rigidly fixed to a stationary object, a standard held

by and vertically adjustable in said straps, a pair of loops fixed for vertical adjustment upon said standard, a semi-circular arm adjustably carried by said loops, a hanger carried by the outer end of said arm, and a mirror adjustably connected to said hanger. 2nd. In a mirror attachment for dressers, the combination of a vertically adjustable standard, a pair of loops arranged to slide upon said standard, a tongue pivoted in the upper loop, an eccentric arranged in the lower loop for causing said tongue to engage the vertical standard, and a mirror-carrying arm adjustably held in the forward ends of said loops, substantially as specified. 3rd. The combination of a vertically adjustable standard, a pair of loops adjustable vertically upon said standard, a semi-circular arm adjustably carried by the forward ends of said loops, a hanger carried by the outer upper end of said arm, the inwardly bent ends of said hanger being split, a mirror-frame, a loop extending horizontally across the rear side of said frame in which the split ends of the hanger engage, and a mirror carried by said frame.

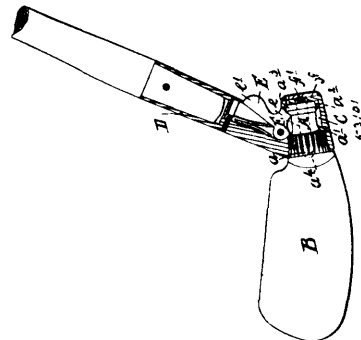
No. 53,100. Bicycle Pump Handle and Stand.
(*Manche de pompe de bicyclette.*)



Frederick Wilkinson, Dartmouth, Nova Scotia, Canada, 4th August, 1896; 6 years. (Filed 15th June, 1896.)

Claim.—1st. The handle containing metal band fig. 5 operated by a thumb-screw fig. 6, the latter obtaining an even pressure on about 5-6ths of the area of circumference of inflation within same, thereby gripping same firmly and evenly and being substantially as described. 2nd. The frame or stand figs. 7 and 8 with loops for holding inflator handles K and M as in figs. 9, 10 and 13, substantially as set forth.

No. 53,101. Golf Club. (*Massue pour golf.*)

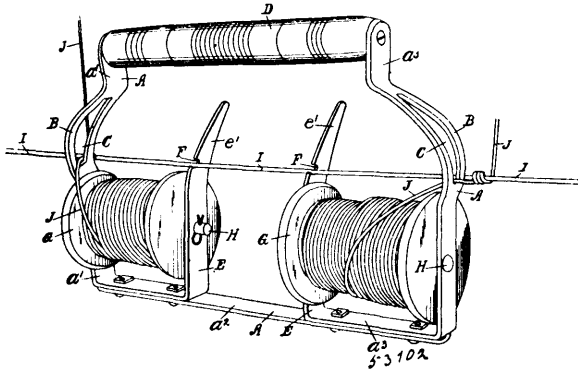


David Inglis Urquhart, Glasgow, and Robert Urquhart, Edinburgh, both in North Britain, 4th August, 1896; 6 years. (Filed 22nd June, 1896.)

Claim.—1st. The arrangement, construction and combination of parts constituting our improved adjustable golf club head, substantially as and for the purpose hereinbefore described and shown in the drawings. 2nd. The tail piece A having the teeth formed with tapered grooves or spaces a, substantially as and for the purposes hereinbefore described and shown in the drawings. 3rd. The arrangement of the lever E having its buttoned portion e' at the back of the club as to be out of the player's line of sight, substantially as described and shown in the drawings. 4th. The steadying and guiding pin F, substantially as hereinbefore described and shown in the drawings.

No. 53,102. Fence Weaving Machine.

(Machine à tisser.)

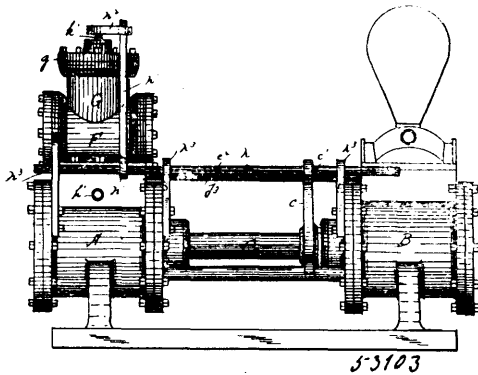


Henry Withey, Lucan, Ontario, Canada, 4th August, 1896; 6 years. (Filed 11th May, 1896.)

Claim.—1st. A frame A, formed with a swell or projection B, and with an opening C, and a handle D, in combination with the spool G, and means for supporting the latter, and standards E, E, formed with the bevelled or inclined ends *e*¹, and with a notch or recess F, substantially as and for the purpose set forth. 2nd. A frame A, formed with the projections B, B, and with the openings C, C, and a handle D, in combination with spools G, G, and means for supporting the latter, and standards E, E, formed with the bevelled or inclined end *e*¹, and with a notch or recess F, substantially as and for the purpose set forth. 3rd. A frame A, formed in three sections *a*¹, *a*², and *a*³, and the sections *a*¹, and *a*², each formed with the swell or projection B, and with an opening C, and a handle D, in combination with the spools G, G, and means for supporting the latter, and the standards E, E, formed with the bevelled or inclined end *e*¹, and with a notch or recess F, substantially as and for the purpose set forth.

No. 53,103. Valve for Steam Pumps.

(Soupape pour pompes à vapeur.)

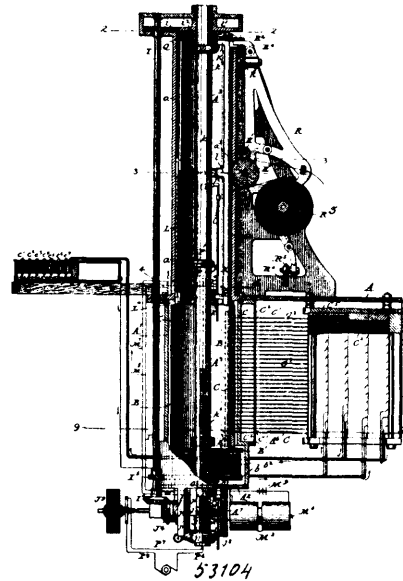


John L. McGiffin, Scottdale, Pennsylvania, U.S.A., 4th August, 1896; 6 years. (Filed 15th July, 1896.)

Claim.—1st. The combination with a steam cylinder, of a main slide valve controlling the ports thereof, a primary tappet valve operated by tappet connections from the piston rod, and an auxiliary piston operating the main slide valve, the steam inlet communicating with the primary tappet valve chamber which controls the flow to the auxiliary piston, and the auxiliary piston controlling the ports of the main valve chamber, substantially as set forth. 2nd. The combination with a steam cylinder, of a main slide valve controlling the ports thereof, a primary tappet valve operated by tappet connections from the piston rod, and an auxiliary piston moving the main slide valve, and a single steam inlet opening into the primary valve chamber, said auxiliary piston having solid piston heads and being operated from ports controlled by the primary valve and said piston heads controlling the ports to the main valve chamber, substantially set forth. 3rd. The combination with a main cylinder A having the piston *a*, the piston rod C carrying the tappet arm *e*, a rotary reciprocating tappet valve *k* operated by connections from the tappet arm, and mounted in the valve chamber G, with which the steam supply communicates, ports *m*, *m*¹ leading therefrom to the auxiliary piston cylinder, which has ports *p*, *p*¹, communicating with the slide valve chamber, the auxiliary piston valve *f* mounted in the chamber F and having solid piston heads, the main slide valve *d* in the main valve chamber, and moved by the auxiliary piston, and controlling the main cylinder ports *a*¹, *a*², substantially as set forth.

4th. The combination of the valve chamber G having ports leading therefrom to the chamber F, and having the steam supply port *h* and cushioning port *h*², rotary reciprocating valve *k* mounted in the said chamber and having the valve faces *l*, *l*¹ controlling the ports *b*, *b*², and mechanism for moving said valve *k*, substantially as set forth. 5th. The combination of a steam cylinder A, piston rod C having the tappet arm *e*, valve chamber G having the rotary reciprocating valve *k* mounted therein and provided with a valve stem extending through the cap of the valve chamber, tappet bar *n* having tappets thereon with which tappet arm *e* engages, the bar *n*¹ and the lever *n*² connected to the valve stem, substantially as set forth.

No. 53,104. Linotype Machine. (Machine linotype.)



The Stenotype Co., of Portland, Maine, assignee of Charles Elmer Allen, of Washington, D.C., all of the U.S.A., 4th August, 1896. (Filed 22nd June, 1896.)

Claim. 1st. In character-selecting and aligning devices, the combination of a revolving pin-holder, movable pins in said holder, and a series of longitudinally-movable type-bars adapted to be engaged by the pins in the pin-holder to align said type-bars, as set forth. 2nd. The combination of a series of movable type-bars, a multiplicity of series of type-bar stops, keys and connections for shifting said stops, and means whereby the type-bars are brought into contact with sets of projected stops in some of the series, while stops in the remaining series are being shifted in readiness to properly shift type-bars, and means whereby the said stops are returned to normal position after they have shifted the type-bars, as set forth. 3rd. The combination of a multiple series of vertical and horizontal rows of type-bar stops or shifters moving in an endless path, means for projecting stops in each series located at one side of their path, and means for returning the stops to normal position before they again pass the projecting devices, as set forth. 4th. In a character-selecting machine, revolvable selecting devices, means for placing said devices in selecting position, in combination with a rotating and reciprocating type-holder, means to reciprocate said holder to cause the type thereon to contact with the predetermined selecting devices to align the types, as set forth. 5th. In a character-selecting device, the combination of a revolvable cylinder having type-selecting devices around the same, with a rotating and reciprocating segmental type-holder having a series of adjustable types thereon, the selecting devices being adapted to be continuously operated, whereby, while one set of selected devices are being operated to position and align the types, another set may be in the process of selection, as set forth. 6th. A bank of electro-magnets consisting of a number of holders or casings having magnetic cores therein arranged in sets of two or more, the said casings being so positioned with reference to each other that the magnetic cores therein will lie one behind the other in such manner as to convert the joint magnetic pull of corresponding magnets into a mechanical thrust, as set forth. 7th. Two or more electro-magnets arranged in tandem and provided with armatures and hollow cores, the said armatures having stems secured thereto of greater length than the hollow cores of the magnets, the said magnets being so positioned with reference to each other that the end of the stem projecting from the hollow core of one magnet will be thrust against the armature of the magnet preceding for the purpose of converting the magnetic pull of the magnets, in tandem, into one mechanical thrust, as set forth. 8th. An escapement consisting of a wheel or

disc having arms hinged radially thereon, magnets for raising said arms, and a magnet and spring for releasing said wheel or disc to make the proper interval, as set forth. 9th. In a device for variable spacing, the combination of an escapement wheel having suitable arms hinged thereon, with a catch or stop adapted to catch and hold the wheel at rest, and means for disengaging said catch or stop to permit the movement of the said wheel, as set forth. 10th. A number of magnets arranged in multiple arc, each magnet being provided with a relay and conductors whereby the magnet next preceding is caused to become energized, as set forth. 11th. An escapement mechanism consisting of a wheel or disc having hinged arms thereon, magnets arranged over said arms, spring catch or stop for engaging said arms, and a magnet for withdrawing said catch for releasing the arms, as set forth. 12th. In a device for variable spacing a rotatable wheel or disc having movable arms thereon, a number of stationary magnets adapted to control the lifting movement of the said arms, each magnet having a switch for causing the preceding magnet to become energized, whereby the arms under every magnet preceding the magnet first energized will be lifted, as set forth. 13th. In an escapement mechanism a series of magnets controlling an escapement wheel or disc arranged in the main circuit from a battery or other source, each magnet when energized, by the closing of the main circuit, being adapted to energize the magnet preceding it by a shunt circuit, and an auxiliary circuit having therein a magnet adapted to release the escapement wheel, the said auxiliary circuit being momentarily established upon the breaking of the main circuit, substantially as set forth. 14th. The combination of a rotary holder and a series of parallel longitudinally movable type bars thereon, with adjustable type-bar stops, and means for simultaneously bringing the type bars into contact with the stops whereby the bars are simultaneously shifted, as set forth. 15th. The combination of a rotary holder and a series of parallel longitudinally movable type or matrix bars thereon, adjustable type-bar stops and means for simultaneously bringing the bars into contact with the stops, whereby the bars are simultaneously shifted, with mechanism for taking an impress from the aligned type on the bars after they have been adjusted by contact with the stops, as set forth. 16th. The combination of a parti-cylindrical holder and a series of parallel longitudinally movable type bars attached to said holder, a rotary stop cylinder having a series of vertical rows of stops mounted on said cylinder and means for projecting stops in successive rows, with means for telescoping the bar holder and stop cylinder so as to simultaneously shift the type bars by projected stops on the cylinder, devices for locking the type bars after contact with the stops, and mechanism for taking an impression from the bars while locked, as set forth. 17th. The combination of the type-bar holder and longitudinally movable type bars thereon, cylindrical series of rows of stop pins, means whereby the stops in successive rows can be projected, mechanism whereby the type-bar holder can be intermittently brought into contact with the projected stops, so that the type bars thereon will contact therewith and be shifted by pins in different rows at alternate telescoping movements, as set forth. 18th. The combination of a rotary holder carrying a series of longitudinally movable type bars, and means for reciprocating said holder longitudinally, with devices for locking the bars in the holder and means for shifting the bars after each impression, substantially as described. 19th. In a machine of the character described the combination of a rotary holder, a series of parallel longitudinally movable type bars carried by said holders, means for reciprocating said holder, means for variably shifting the bars in the holder when it moves in one direction, and means for taking an imprint from the aligned type on the bars when the holder is free of the bar-shifting devices, as and for the purpose set forth. 20th. The combination with a pin cylinder provided with stop pins, substantially as described, of a series of pin pushers, keys controlling said pin pushers, and means whereby the pin cylinder is given a rotary movement, as set forth. 21st. The combination of a rotating cylinder, a multiplicity of series of type-bar stops mounted on said cylinder, with a series of stationary devices adapted to trip correspondingly located stops in any series on the cylinder brought opposite the trip devices, keys controlling said trip devices, and mechanism for turning said cylinder so as to move a new series of stops into register with the trip devices upon the action of any trip, substantially as described. 22nd. The combination of the type-bar holder, the longitudinally movable type bars therein, the paper carriage and platen, and a series of type-bar stops, with mechanism for reciprocating said holder, means for rotating it after the bars are shifted and locked therein, and means for moving the carriage past the holder when the latter is in printing position so as to take an impression from the aligned type thereon, as set forth. 23rd. The combination of a type-bar holder and type-bars thereon, a pin-cylinder and pins therein, pin-shifting devices and controlling keys therefor, mechanism for lowering the holder into the pin-cylinder, mechanism for raising the holder from the cylinder and giving it a partial rotation when clear of the cylinder, with a paper-carriage movable at right angles to the holder, and means whereby the carriage is moved past the holder when the latter is in printing position so as to take an impression from the aligned type thereon, substantially as described. 24th. The combination of a hollow cylinder, the series of stop-pins thereon, and means for rotating the said cylinder, sets of pin-pushers at one side of the cylinder, springs for retracting said pushers, electro-magnetic devices for forcing said

pushers against the pins, and electrical key contacts and electrical connections between the respective keys and the push-pin magnets, substantially as described. 25th. The combination of the hollow cylinder, the series of stop-pins thereon, and means for rotating the said cylinder, sets of pin-pushers at one side of the cylinder, springs for retracting said pushers, electro-magnetic devices for forcing said pushers against the stop-pins, and electrical key contacts and electrical connections between the respective keys and push-pin magnets, a paper-carriage and mechanism for moving said carriage past the holder when in printing position so as to take an impression from the type thereon, and means for retracting the carriage to normal position after the printing operation, as set forth. 26th. The combination of a rotatable cylinder having a series of parallel rows of stops or pins in it, a number of rows of pin-pushers at one side of the cylinders, keys and connections for operating said pushers, and an escapement mechanism whereby the cylinder is controlled in its movement, substantially as described, with a type-bar holder, means for allowing the holder to descend into and partly rotate with the pin-cylinder, mechanism for raising it from the pin-cylinder, and mechanism for completing its rotation, as set forth. 27th. The combination of the pin-cylinder, the series of stop-pins thereon, sets of pin-pushers at one side of the cylinder, electro-magnets for forcing said pushers against the pins, and springs for retracting the said pin-pushers, with means for rotating the cylinder, an electro-magnetic escapement for controlling the extent of movement of the cylinder, a key-board having circuit closing keys and electrical connections substantially as described, whereby the depression of any key establishes an electric circuit through the corresponding push-pin magnets and through the escapement, as set forth. 28th. The combination of the stationary main shaft or support, the pin-cylinder surrounding said support, the holder rotatably mounted on said shaft above the cylinder and means for lowering the holder in the cylinder and allowing it to partially rotate therewith, and means for raising the holder clear of the cylinder and completing its rotation, with mechanism substantially as described, whereby the holder is brought to register with the pin-cylinder and locked thereto while telescoping therewith, substantially as described. 29th. The combination of the pin-cylinder, the spring for rotating said cylinder, the main shaft and the clutch for winding said spring intermittently, and means for operating said clutch, as set forth. 30th. The combination of the pin-cylinder, the type-bar holder, the rack for raising said holder, the gearing for raising said rack, the main driving shaft and a clutch for throwing said gear into and out of action at the proper times, as set forth. 31st. The combination of the pin-cylinder, the type-bar holder, the rack for raising said holder, the main driving shaft, a sleeve on said shaft, gearing between said sleeve and rack and a clutch for locking said sleeve to the rack, with the train of gearing driven by said sleeve, a device for locking said gearing as the clutch is disengaged from the sleeve and devices for releasing said lock when the holder is to descend, substantially as described. 32nd. The combination of the pin-cylinder, the type-bar holder, mechanism for lowering the holder, an electrically controlled release for said mechanism, and the circuit closer on the holder, and electrical connections between said holder and release, whereby said mechanism is released when the holder is in position to descend, and means for releasing said holder at the proper time, as set forth. 33rd. The combination of the pin-cylinder, the type-bar holder, mechanism for raising said holder, an electric motor for operating said elevating mechanism, a circuit closer controlled by the movement of the holder and electrical connections between said circuit closer and motor, whereby the latter is thrown into circuit when the holder is ready to ascend, substantially as described. 34th. The combination of the pin-cylinder, the type-bar holder, a main driving shaft, mechanism for elevating and rotating said holder driven from said shaft, mechanism for lowering the holder and a lock for the lowering devices, with means for releasing the lock of the lowering mechanism when the holder is ready to descend, means whereby the main shaft is put in action when the holder is ready to ascend and kept in action until it is ready to again descend, and a mechanism whereby the elevating mechanism is thrown out of gear when the holder is elevated, and the holder rotating mechanism thrown into gear until the holder is ready to descend, as set forth. 35th. The combination of the pin-cylinder, the type-bar holder adapted to telescope the cylinder, mechanism for raising said holder, a motor for operating said elevating mechanism and mechanism for lowering said holder, with an electrical circuit closer on the holder and connections between the same and the lowering mechanism, whereby the latter is released when the holder descends, a second circuit closer governed by the movement of the holder, and connections between said second circuit closer and the motor, whereby the latter is thrown into action when the holder is ready to ascend, substantially as set forth. 36th. The combination of the type-bar holder, mechanism for elevating said holder, mechanism for lowering said holder, a motor for operating said elevating mechanism, a lock for said lowering mechanism, and mechanism for rotating said holder when elevated also driven from the motor, with a circuit closer operated by the holder for the releasing of the lock of the lowering mechanism when the holder is ready to descend, a second circuit closer operated by the holder for throwing the motor into action when the holder is ready to ascend and keep it in action until the said holder is ready to descend, a clutch mechanism whereby the elevating mechanism is thrown out of gear when the holder is elevated and the rotating mechanism thrown into gear until the

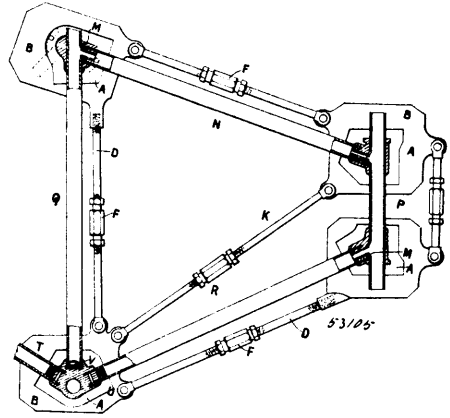
holder is ready to descend, substantially as described. 37th. The combination of the pin-cylinder, the spring for driving said cylinder, a main driving shaft, a motor for driving said shaft, a type-bar holder, gearing driven from the main shaft for elevating said holder, mechanism for rotating said holder when elevated, device for lowering said holder, and an electrically released lock for said lowering device, with a circuit closer operated by the movement of the holder for releasing said lowering devices when the holder is ready to descend, a second circuit closer operated by the holder for throwing the motor into action when the holder is ready to ascend and keep it in action until the holder is ready to descend, a clutch mechanism whereby the elevating mechanism is thrown out of gear with the main shaft when the holder is elevated and the rotating and spring winding mechanism thrown in gear until the holder is ready to descend, substantially as described. 38th. The combination of the holder, the rack for raising and lowering the same, a train of gearing meshing with said rack and mechanism for positively driving said gearing so as to elevate the holder, and means for throwing the driving device out of action when the holder is raised, a stop for arresting the back movement of the gearing, a solenoid for tripping said stop, and an electric circuit closer operated by the holder for closing a circuit through the solenoid when the holder is in position to descend, as set forth. 39th. The combination of a revolving pin-holder, adjustable pins or stops therein, means for projecting the pins or stops, means for revolving said pin-holder, and means for returning the pins or stops in the pin-holder to their normal position after they have performed their proper office with the type-bar holder, movable types thereon, means for lowering the said type-bar holder to bring the types thereon in contact with the projected stops, means for moving said holder with the pin-holder until the said holder has been returned to its normal position, means for continuing the rotation of the type-holder after it returns to its normal position, and means for taking an imprint from the aligned types on the holder, the different mechanisms arranged to operate automatically and in their proper order upon the depression of the keys on the key-board, as set forth. 40th. The combination of a revolving pin-holder, adjustable pins or stops therein, means for projecting said pins, means for revolving said holder, escapement mechanism for regulating the degree of rotation of the pin-holder, means for returning the pins to their normal position in the holder after they have performed their proper office, with an electric motor and properly controlled circuits and connections whereby the said mechanisms are operated, as set forth. 41st. The combination of a travelling pin-holder, adjustable stop-pins therein, suitably electrically controlled mechanism for projecting said stop mechanisms, with mechanism for passing the pin-holder across the face of the projecting mechanism to bring successive rows of pins into position to be projected by the projecting mechanism, and electrically controlled mechanism for controlling the extent of movement of the said pin-holder, as and for the purpose set forth. 42nd. The combination of a travelling pin-holder provided with suitable stop-pins, electrically controlled mechanism for projecting said stops or pins, means for passing the pin-holder across the face of the pin projecting mechanism to bring successive stops or pins into position to be acted upon, electrically controlled mechanism for limiting the extent of movement of the pin-holder, with a series of longitudinally movable type-bars adapted to contact with the projected stops in the said holder to bring a number of type or other characters into alignment for printing, as set forth. 43rd. The combination of a rotary holder and a series of parallel longitudinally movable type-bars thereon, series of adjustable type-bar stops, keys and connections for projecting said stops, mechanism for simultaneously moving the type-bars against the stops, whereby the bars are adjusted and the proper types thereon brought into alignment, means for locking the adjusted type-bars, mechanism for moving the locked and aligned type-bars to the imprinting point, and mechanism for releasing the said type-bars from their locked position, as set forth.

No. 53,105. Cycle Frame. (Cadres de cycles.)

Frederick Arthur Ellis, Sylvan Grove, London, England, 4th August, 1896; 6 years. (Filed 3rd July, 1896.)

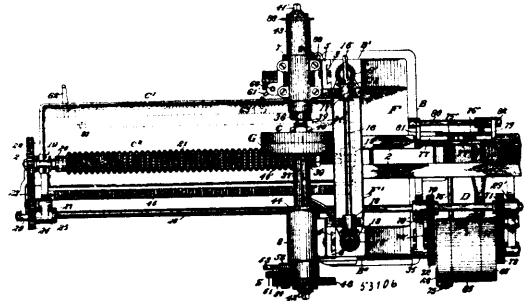
Claim.—1st. The process of manufacture of an aluminium cycle frame, consisting of the prior preparation of ends of tubular members by an aluminium braze worked thereon, and the casting of sockets of aluminium alloy thereover, with free ventilation to atmosphere from interior of tubular members, substantially as described. 2nd. In the manufacture of an aluminium cycle frame, the ventilation of the interior of the tubular members to the outer atmosphere to permit escape of expanded air, by junction between tubes and the extension of open tubes through the moulds to the external atmosphere, substantially as described. 3rd. In the manufacture of an aluminium cycle frame, the combination with metal moulds, or with plates carrying the same, of adjustable tension rods, capable of being set to gauge and of elastically admitting the expansion or contraction of the tubes, whilst the sockets are being cast, substantially as described. 4th. In a cycle frame of aluminium made as described, the arrangement of a pin transversely across the ends of tubular members around which the molten metal of a cast socket is allowed to flow to secure a mechanical lock. 5th.

In a cycle frame of aluminium made as described, the combination with a tubular member, split at its end to allow of spreading, of a



concave disc of metal therein, adapted by flattening to expand the end of the tube into the socket to make a mechanical lock, substantially as described.

No. 53,106. Machine for Making Gear-teeth. (Machine pour generer les dents d'engrenage.)



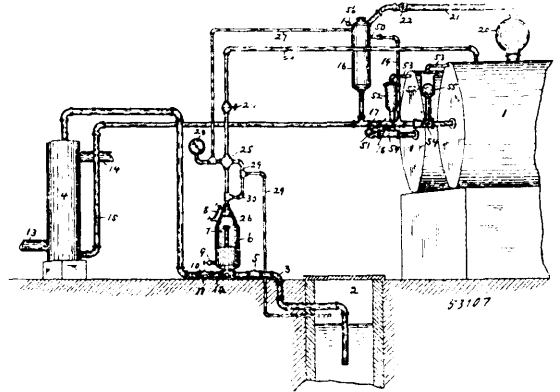
Herbert Curtis Warren, Hartford, Connecticut, U.S.A., 4th August, 1896; 6 years. (Filed 6th July, 1896.)

Claim.—1st. A machine for generating gear-teeth, embodying a rotative gear-blank carrier, a rotative cutter, and means for rotating the gear-blank, and for moving the cutter along the periphery of the gear-blank in the same direction and at the same peripheral velocity, whereby a portion of every tooth of the entire circuit of teeth is generated at one cutting operation. 2nd. The herein described instrumentalities for generating gear-teeth in a gear-blank by moving a cutter along the periphery of the gear-blank in the same direction and at the same peripheral velocity, and cutting portions of the entire circuit of teeth at one stroke of the cutter. 3rd. In a machine for generating gear-teeth, carrying and rotating means for a gear-blank, in combination with a multiplex-cutter of a length not less than the peripheral length of the blank to be cut, a movable cutter-carrier, and means actuated by the cutter-carrier for rotating the blank-carrier. 4th. The combination of a rotative gear-blank carrier, a reciprocative cutter-carrier supported in operative relation with the gear-blank carrier, a rotative, multiplex-cutter carried by said carrier, and having its effective stroke of a length not less than the peripheral length of the gear-blank in which the teeth are to be generated, synchronizing actuating mechanism for rotating the gear-blank and cutter, and for imparting to the cutter an endwise working-stroke of a length not less than the peripheral length of the gear-blank in which the teeth are to be generated, at each complete rotation of the gear-blank carrier, and in the direction of rotation of the gear-blank carrier, and at right-angles to the axis of said carrier. 5th. The combination of a reversibly-rotative gear-blank carrier, a reciprocative cutter-carrier, a rotative, multiplex-cutter carried by said cutter-carrier, actuating mechanism for synchronously rotating the gear-blank carrier, first in one direction and then in the opposite direction, and for simultaneously rotating the multiplex-cutter, and at the same time moving the same longitudinally at a velocity corresponding substantially with the pitch-line velocity of the blank in which the teeth are to be generated, and first in one and then in the opposite direction, coinciding with the directions of movements of the blank-carrier, and means controlled by the movements of the cutter-carrier for automatically changing the relative transverse relations of the gear-blank carrier and cutter-carrier. 6th. A machine for generating gear-teeth, comprehending a multiplex-cutter of a length not less than the peripheral length of the gear-blank in which the teeth are to be generated, a carrier for the gear-blank, actuating mechanism for imparting to the cutter and gear-

blank a motion corresponding to the motion of a rack and an intermeshing, rotating pinion, and for moving said cutter a distance not less than the peripheral length of the gear blank at each stroke of the cutter and at each complete rotation of the gear blank, means for continuously rotating the multiplex-cutter, and feeding mechanism for automatically changing the relative transverse relation of the gear-blank and cutter, intermediate to successive cutting strokes of said cutter. 7th. In a machine of the class specified, a rotative gear-blank carrier and a reciprocative cutter-carrier, supported one above the other, with their axes of movement in planes intersecting each other, in combination with means for reciprocating the cutter carrier, and an actuating connector between and operatively connecting, the gear-blank and cutter carrier, and adapted for rotating the gear-blank carrier in synchronism with the movements of the cutter carrier, and for establishing a predetermined ratio of movement between said cutter carrier and gear-blank carrier. 8th. A machine for generating gear-teeth, comprehending an axially rotative cutter of a length not less than the peripheral length of the blank to be cut, a rotative gear-blank carrying member and a reciprocative cutter-carrying member, one of which carrying members is in operative connection with, and is directly actuated by, the other in the same direction, and at comparative velocities of a predetermined ratio, and means for actuating one of said members. 9th. A machine for generating gear-teeth, comprehending a reversible rotative blank-carrying member, a reciprocative cutter-carrying member in direct geared connection with the blank carrying member and having the plane of its movements transverse to the axis of rotation of the blank-carrying member, and a rotative multiplex-cutter carried by the cutter-carrying member, actuating means for reciprocating the cutter-carrying member, and means for rotating the cutter simultaneously with the reciprocatory movement of the cutter-carrying member, substantially as described. 10th. In a machine for generating gear-teeth, a rotative gear-blank-carrying member, and a reciprocating cutter-carrying member, one of which is in operative connection with, and is directly actuated by, the other, means for actuating one of said members, and means controlled by one of said members for changing the relative transverse relations of the two members, substantially as described and for the purpose set forth. 11th. In a machine for generating gear-teeth, a rotative carrier for the gear-blank, a cutter-carrier supported for longitudinal movement in a plane transverse to the axis of the gear-blank carrier, a longitudinally-disposed rack on the cutter-carrier, a spur-wheel on the gear-blank carrier in geared connection with the rack of the cutter-carrier, an actuating mechanism for imparting longitudinal movements to the cutter-carrier, substantially as described and for the purpose set forth. 12th. In a machine for generating gear-teeth, a rotative gear-blank carrier, and a longitudinally-movable cutter-carrier supported with their axis of movement in relative transverse planes, a rack on the cutter-carrier, a pinion on the gear-blank carrier in geared connection with the rack on the cutter-carrier, a rotative multiplex-cutter carried by the cutter-carrier with its axis of rotation transverse to the axis of the gear-blank carrier, actuating mechanism for imparting longitudinal movements to the cutter-carrier, rotating mechanism in connection with the cutter, and feeding mechanism for effecting a change in the transverse relations of the gear-blank carrier and cutter, substantially as described and for the purpose set forth. 13th. In a machine for generating gear-teeth, a rotative gear-blank carrier, a multiplex-cutter supported for rotation in longitudinal movement below, and with its axis in a plane at right angles to the axis of the gear-blank, reversing-driving mechanism for rotating the cutter continuously in one direction and for moving the same longitudinally, first in one and then in the opposite direction, and actuating mechanism for rotating the gear-blank carrier, first in one direction and then in the opposite direction, in synchronism, and coinciding with the directions of movements of the cutter, to establish a uniform peripheral velocity between the cutter and the gear-teeth in which the teeth are to be generated. 14th. In a machine for generating gear-teeth, a rotative gear-blank carrier, a reciprocative cutter-carrier having its plane of movement transverse to the axis of the gear-blank carrier and a rotative multiplex-cutter, in combination with reversing-driving mechanism in connection with, and adapted for moving, the cutter-carrier longitudinally, first in one and then in the opposite direction, cutter-rotating mechanism in connection with, and adapted for continuously rotating, the cutter, gearing intermediate to, and operatively connecting, the reversing-driving mechanism and the cutter-rotating mechanism, synchronizing actuating mechanism intermediate to, and operatively connecting, the gear-blank carrier and cutter-carrier, and adapted for establishing a predetermined ratio of movement between the gear-blank carrier and the cutter-carrier, and feeding mechanism controlled by the longitudinal movements of the cutter-carrier for effecting a change in the transverse relation of the gear-blank carrier and cutter-carrier, substantially as described and for the purpose set forth. 15th. In a machine of the class specified, the combination of a cutter-carrier frame, a cutter-carrier supported for longitudinal movement on said frame, a rotative multiplex-cutter carried on said cutter-carrier with its axis in the plane of longitudinal movement of the cutter-carrier, a gear-blank carrier frame supported on the cutter-carrier frame for adjustment vertically thereof, adjusting means for said blank-carrier frame, a rotative gear-blank carrier supported on the blank-carrier frame with its axis transverse to the path of movement of the cutter-carrier,

and actuating mechanism for synchronously moving the gear-blank carrier and cutter-carrier, the first rotatively and the other longitudinally in the same direction and at comparative velocities of a predetermined ratio. 16th. In a machine of the class specified, the combination of a cutter-carrier frame, a horizontally-disposed cutter-carrier supported for longitudinal movement upon said frame, a multiplex-cutter rotatively carried on the cutter-carrier with its axis in the plane of the longitudinal movement of the cutter-carrier and transversely of a gear-blank carrier, a gear-blank carrier frame supported on the cutter-carrier frame for adjustment vertically thereof, adjusting means for said blank-carrier frame, a rotative gear-blank carrier supported on the blank-carrier frame, with its axis transverse to the path of movement of the cutter-carrier, and for adjustment transversely of the multiplex-cutter, synchronizing actuating mechanism operatively connecting the gear-blank carrier and cutter-carrier, and controlled by the movements of the cutter carrier for establishing a predetermined ratio of movement between the gear-blank carrier and cutter carrier, actuating mechanism in connection with, and adapted for moving, the cutter carrier and the cutter thereon transversely of the plane of the axis of the gear-blank carrier, rotative mechanism for the cutter, and means controlled by the movement of the cutter-carrier for intermittently feeding the gear-blank carrier transversely of the cutter. 17th. In a machine for generating gear-teeth, a rotative gear-blank carrier and a longitudinally-movable multiplex-cutter supported with their axis in a plane transversely of each other, in combination with actuating mechanism for rotating the cutter, and for simultaneously moving the cutter longitudinally, and the gear-blank carrier rotatively, in the same direction at comparative velocities of a predetermined ratio, reversing mechanism for intermittently reversing together the longitudinal and rotative directions of movements of the cutter and gear-blank carrier, respectively, feeding mechanism controlled by the longitudinal movements of the cutter for automatically and intermittently moving the cutter-carrier transversely of said cutter, and a stopping mechanism controlled by the movements of the cutter-carrier transversely of the cutter, for automatically stopping the longitudinal movement of the cutter at a predetermined point in said relatively-transverse movement of the gear-blank carrier. 18th. In a machine for generating gear-teeth, the combination with a rotative gear-blank carrier adapted for carrying the gear-blank in which the teeth are to be generated, of a rotative, multiplex-cutter supported for movement in the plane of its longitudinal axis and transversely of the axis of the gear-blank carrier, and comprehending a multiplicity of relatively transversely-separated polygonal cutters, in axial alignment and of an aggregate cutting length, longitudinally of said axis, not less than the peripheral length of the gear-blank in which the teeth are to be generated, a cutter-carrier, and means connecting said carriers, substantially as described. 19th. A rotative multiplex-cutter of a length not less than the peripheral length of the blank to be cut, and a movable cutter-carrier in combination with a gear-blank carrier, and mechanism connecting said carriers. 20th. A rotative multiplex-cutter of a length not less than the peripheral length of the blank to be cut, and a movable cutter-carrier in combination with a gear-blank carrier, mechanism connecting said carrier, and means for moving one of said carriers transversely. 21st. A gear-tooth-generating machine comprehending an axially-rotative multiplex cutter of a length not less than the peripheral length of the blank to be cut, a carrier by which said cutter is supported, a gear-blank carrier, and intervening means connecting the two carriers, and by which one carrier is actuated by the other carrier. 22nd. A movable carrier, and a multiplex-cutter of a length not less than the peripheral length of the blank to be cut, carried thereby, in combination with a gear blank carrier, means for moving one carrier transversely with relation to the other, and gearing connecting said carriers.

No. 53,107. Boiler Feeder. (Alimentateur de chauâdres.)



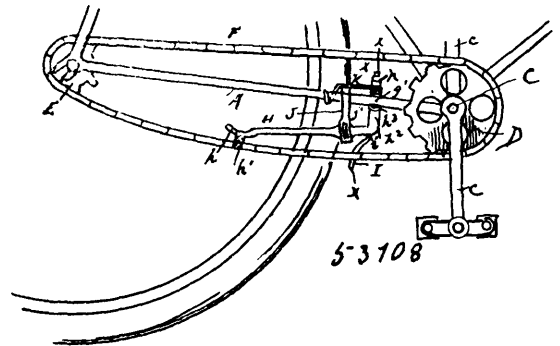
Orlo J. Scott, Louisville, Kentucky, U.S.A., 4th August, 1896; 6 years. (Filed 10th July, 1896.)

Claim. 1st. In a boiler feeder, a receiver, a pipe leading therefrom to the boiler with a check valve in it, and a pipe leading from

the boiler pipe behind the check valve to the receiver above the bottom, substantially as set forth. 2nd. In a boiler feeder, a receiver, an outlet pipe leading to the boiler with a check valve in it, a spray pipe leading from the boiler pipe behind the check valve to the receiver, a steam port entering the upper end of the receiver, a valve to close the port, and a float in the bottom of the receiver suspended from the valve, substantially as set forth. 3rd. In a boiler feeder, a compound valve for opening and closing the steam port in the receiver. 4th. In a boiler feeder, a valve mechanism for opening and closing the steam port into the receiver comprising a seat with a large port, an outer valve provided with a seat having a small port, an auxiliary valve seated within the outer valve, and means for actuating such inner valve first and through it the outer valve. 5th. In a boiler feeder, a valve mechanism for opening and closing the steam port into the receiver comprising a seat with a large port, an outer valve consisting of a cylindrical casing with a ring below it connected up by necks, such ring having a small port in it, an auxiliary valve movable within such outer valve so as to be seated on such ring, a float in the receiver, and a stem extending from such float to such inner valve. 6th. In a boiler feeder, a valve mechanism for opening and closing the steam port into the receiver comprising a seat with a large port, an outer valve provided with a seat having a small port, an auxiliary valve seated within the outer valve, and means for actuating such inner valve and through it the outer valve, a float in the receiver, a stem extending from such float to such inner valve, a guide bracket in the lower end of the receiver, and a stem connected to the float and extending through such guide bracket. 7th. In a boiler-feeder having a receiver and a steam port entering it, the combination with a valve for opening and closing the steam port and a float in the receiver connected with the valve by a suitable stem for actuating the valve, of a bell-crank weighted at one end and pivoted at the other end to the valve stem. 8th. In a boiler feeder having a receiver and a steam port entering it, the combination with a valve for opening and closing the steam port and a float in the receiver connected with the valve by a suitable stem for actuating the valve, of a bell-crank pivoted at one end to the valve stem, a weight carried on the other end thereof, a chain supported from the upper end of the receiver and connected with the bell-crank near its middle, and a chain extending from the outer end of the bell-crank to the stem below it to limit the upward movement of the weight and downward movement of the float. 9th. In a boiler feeder, a primary receiver, for drawing water from a cistern or other reservoir, whose upper end is conical or tapering, and a steam pipe from the boiler entering such conical end, as and for the purpose shown and described. 10th. In a boiler feeder, the combination of the main pipe 3, the primary receiver, the spray pipe 7 therein, the valve 10 in the pipe 3, and the by-pass 11. 11th. In the boiler feeder, the combination of a boiler, a main receiver, a check valve between the main receiver and boiler, a primary receiver, a pipe leading thereto from a suitable water supply, a pipe leading from the boiler to the primary receiver, a pipe leading from the primary receiver to the main receiver having a check valve in it between such receivers, and a by-pass around such valve. 12th. The combination with a plurality of boilers, of a boiler feeder, pipes leading from said boiler feeder to the boilers, a float chamber on a level with the desired water line in the boiler, a pipe leading from the upper end of the chamber to the upper portion of the boiler, a tube leading from the lower end of such chamber to the pipe from the feeder to the boiler, a valve in the pipe from the feeder to the boiler for closing the same, a float in such chamber, and a stem connecting the float and valve whereby the pipe from the feeder to the boiler may be closed or opened when the water in the boiler is above or below the desired water line. 13th. In a boiler feeder, a primary receiving tank, a pipe leading thereto from a suitable water supply and having a check valve in it, a main receiver, a pipe leading from the lower portion of the primary receiving tank to such main receiver and having a check valve in it, a boiler pipe leading from the lower end of the main receiver to the boiler, a steam pipe leading from the boiler to the upper end of the main receiver for conveying steam, a pipe leading from the steam pipe to the primary receiving tank provided with a differential valve, a pipe leading from the receiver to such valve to actuate the same, and an exhaust leading from such valve, the valve so arranged that when in one position there will be a passage-way from the boiler to the primary receiving tank, and when in the other position there will be a passage-way from the primary receiving tank to the exhaust, substantially as set forth. 14th. A boiler feeder comprising a primary receiving tank, a pipe leading from a suitable water supply in such tank and having a check valve in it, a main receiver, a pipe leading from the primary receiving tank to such main receiver and having a check valve in it, a pipe leading from the lower end of such main receiver to the boiler and having a check valve in it, a spray pipe leading from such boiler pipe behind the check valve to the receiver, a steam pipe leading from the boiler to the upper end of the receiver, an automatic valve for regulating the entrance of steam into the receiver from such steam pipe, a pipe leading from such steam pipe to the primary receiving tank having in it a differential valve, a pipe leading from the receiver to such valve to actuate it, and an exhaust from such valve, such valve being so arranged that when it is in one position there will be a passage-way from the boiler to the primary receiving tank, and when in the other position there will be a passage-way from the primary receiving tank to the exhaust, substantially as set forth.

No. 53,108. Automatic Bicycle Brake.

(Frein automatique de bicyclette.)

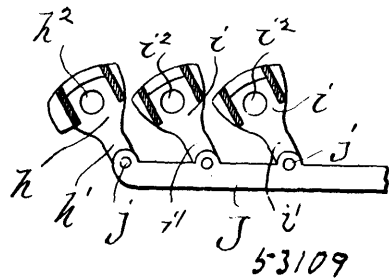


Lewis H. Guertin, Moline, Illinois, U.S.A., 4th August, 1896; 6 years. (Filed 13th July, 1896.)

Claim.—1st. An automatic brake for cycle vehicles consisting of a rock-shaft carrying a shoe, a lever, and a stop-bar J attached to the lever and adjustable vertically thereon, substantially as and for the purposes described. 2nd. In an automatic bicycle brake, substantially such as herein described, the combination with a rock-shaft, a brake shoe carried by said rock-shaft, and a brake lever of the leaf spring K rigidly fastened at one end to said rock-shaft to turn therewith, and provided at its free end with an off-standing arm or hook adapted to take against a part of the bicycle framing, said spring being arranged to exert its force on the rock-shaft only when the brake is applied, substantially as and for the purposes described. 3rd. An automatic brake for cycle vehicles, comprising a rock-shaft carrying a shoe, a brake lever provided with an angular arm which terminates in a collar that slips on the rock-shaft, a leaf spring fitted on said collar and having an off-standing free end, and a clamping screw which confines the collar and spring rigidly on the rock-shaft, substantially as described. 4th. The combination with the tubular fork bars a, having openings a' in their inner walls, of the rock-shaft provided with pivot pins, one of which is adjustable, which pins pass through the openings a' and abut against the outer walls of said tubular bars a, a brake shoe, a lever rigid with the rock-shaft, an adjustable stop bar carried by the lever and engaging one of the bars a, substantially as described.

No. 53,109. Shaking and Dumping Grate.

(Grille à bascule.)

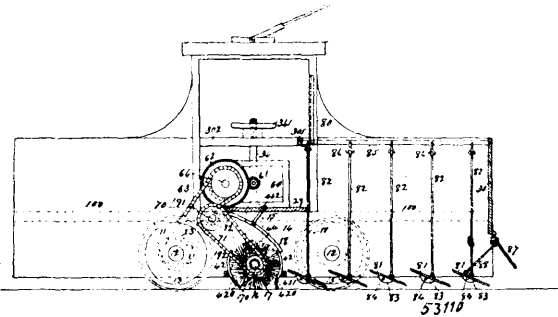


George Milan Conway, Milwaukee, Wisconsin, U.S.A., 4th August, 1896; 6 years. (Filed 13th July, 1896.)

Claim.—1st. In a shaking and dumping grate, a series of intermediate movable grate-sections, each comprising vertical parallel sides connected by transverse bars integral therewith and projecting beyond the line of said sides, and having integral end pieces, said grate-sections at the line of said bars being transversely of spherical triangular shape, and outer movable grate-sections, corresponding at the top and inner sides with the shape of the said intermediate grate-sections, but each having its outer bar extensions forming a sector of a circle extending from the intersection of the rounded top surface and adjacent vertical side of the said grate-section down to the base-line of the said vertical side. 2nd. In a shaking and dumping grate, the combination with a suitable socketed frame, and a series of movable grate-sections connected together and mounted therein, of independent removable outer stationary grate-sections, each comprising a vertical web, and obliquely-inclined transverse teeth projecting outward and upward, and inward and downward, from the opposite sides of said web, and held in the sockets of said frame, free from extraneous fastening devices. 3rd. In a shaking and dumping grate, the combination with a series of independent legs, each provided with enlarged basis, central vertical webs and cross-heads, of end frames having downward-forked flanges for engagement with said webs, horizontal flanges projecting above said forked flanges, and vertical angle-flanges above the said horizontal flanges, side and central bearing-

bars having cross-heads at their ends for engagement with the angle-flanges on the end frames, flanges with right-angular bottom extensions for receiving the stationary grate-sections, and projecting hubs for receiving the movable grate-sections, all adapted to be held together in operative position by the interlocking of the various parts named free from extraneous fastening devices.

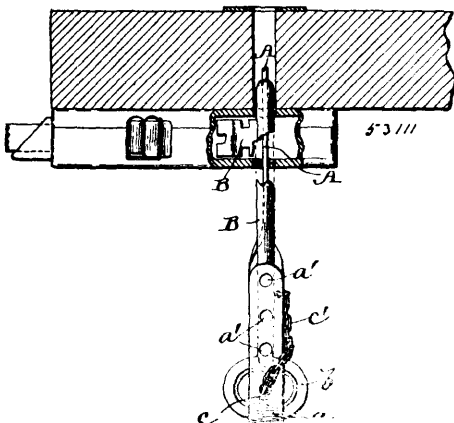
No. 53,110. Self-loading Track-cleaning Cars.
(Chargeur automatique de chars.)



Andrew Jackson Reynolds, Worcester, Massachusetts, U.S.A., 4th August, 1896; 6 years. (Filed 11th July, 1896.)

Claim.—1st. In a self-loading car, the combination of a rotary brush, stationary side casings and flexible aprons thereto. 2nd. In a self-loading car, the combination of a rotary brush, stationary side casings and deflector. 3rd. In a self-loading car, the combination of a reversible rotary brush, stationary side casings and an adjustable deflector. 4th. In a self-loading car, the construction of a reversible rotary brush, stationary side casings, flexible aprons thereto, and an adjustable deflector. 5th. In a self-loading car, the combination of a reversible rotary brush, means for operating the same, stationary side casings and flexible aprons thereto. 6th. In a self-loading car, the combination of a rotary brush, stationary side casings, and means for raising and lowering the brush. 7th. A rotary brush in combination with stationary side casings and side brushes, adapted to close the ends of the casings at each end of the brush. 8th. In a self-loading car, the combination of a reversible rotary brush, stationary side casings, flexible aprons thereto, and side brushes attached to the side bars in which the main brush is journaled. 9th. In a self-loading car, the combination with an electric motor supported on the raised flooring, sprockets and chain connecting counter shaft with car wheel axles, a counter shaft with sprockets outside such chain and driven by it, giving reverse and more rapid motion to the rotary brush by means of a second chain and stationary casings to such brush. 10th. In a self-loading car, the combination of a reversible rotary brush, an electric motor supported on a raised flooring, means of transmitting motion to the brush and stationary side casings thereto. 11th. The combination with the car, the main brush, the traction wheels, and a chain for imparting motion to said brush from the traction wheels, of the auxiliary side brushes, the axles of which are driven from the axle of the main brush, and from an angle with the same, substantially as and for the purpose set forth. 12th. The combination with the self-loading car, the main brush and side brushes, so arranged, that their side brushes will form an angle, of means for changing the direction of said angle from one side to the other, according to the direction of movement, substantially as described.

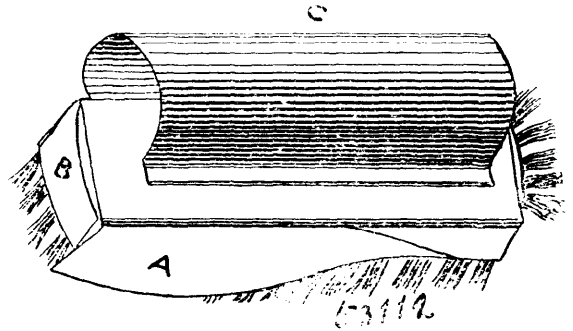
No. 53,111. Key Fastner. (Protecteur de clé.)



James A. Beebe, Tacoma, Washington, U.S.A., 4th August, 1896; 6 years. (Filed 4th July, 1896.)

Claim.—1st. In a key fastener, the combination of a shank, for slipping into the key hole, said shank being twisted at one end and turned back upon itself to form a loop for securing the bow of a key in a horizontal position when in the lock, substantially as described. 2nd. In a key fastener, the combination of a shank for slipping into the key hole, said shank being apertured at one end and twisted and turned back upon itself to form an apertured loop for securing the bow of a key in a horizontal position when in the lock and a pin adapted to be passed through the apertures in said loop and through the bow of the key, substantially as described. 3rd. In a key fastener, the combination of a flat vertical shank for slipping into the key hole, said shank being provided with a series of apertures at one end and twisted and turned back upon itself to form a flat apertured roof for securing the bow of the key and a split spring pin adapted to be passed through said apertures in said loop and through the bow of the key, substantially as described.

No. 53,112. Cleaning Instrument. (Outil à nettoyer.)

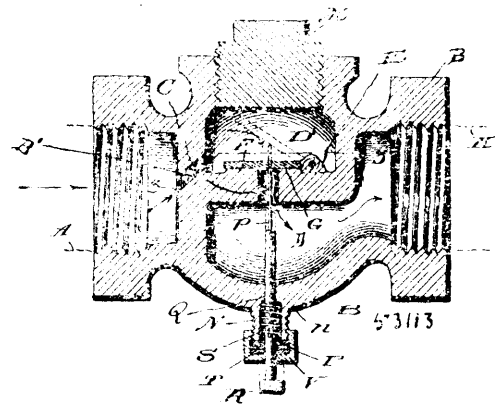


Edward George Turnbull Thomas, Dunedin, New Zealand, 14th August, 1896; 6 years. (Filed 10th July, 1896.)

Claim.—1st. The combination of a brush B and a scraper A fixed together for the purpose of cleaning, by scraping and brushing, or either operation, substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawing. 2nd. The method of cleaning, by the use of a combined scraper A and brush B fixed together in manner shown, substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawing. 3rd. The combination of any form of brush suitable for scrubbing B, (or cleaning), with a scraper such as A attached, and the whole followed by a cloth passed through the handle of, or attached to, the brush, as described and explained herein.

No. 53,113. Safety Gas Valve.

(Soupape de sûreté pour le gaz.)



Charles O. Jackson, Fairmount, West Virginia, U.S.A., 4th August, 1896; 6 years. (Filed 6th July, 1896.)

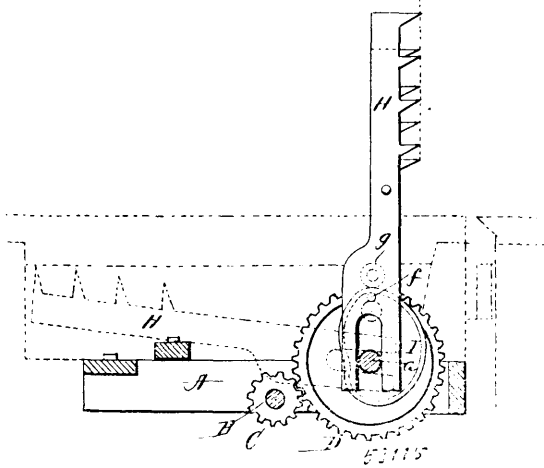
Claim.—In a safety gas valve for supply pipes, the combination with the union having a duct C in a partition wall therein, a valve G seated over the same, of the inclined duct B opening in a line with the free edge of the said valve, opposite its pivotal point when the said valve is open, of the spring actuated pin P having a contracted upper end p held in the aperture C, with its free end against the under side of the said valve, substantially as shown and described.

No. 53,114. Filter. (Filtre.)

Edgar A. Wilder, Fredonia, New York, U.S.A., 4th August, 1896; 6 years. (Filed 4th July, 1896.)

Claim.—1st. In a filter, a reservoir divided into galleries for unfiltered and filtered water by a partition formed of an outer wall

facing the gallery for unfiltered water constructed of slats held one above the other, an inner apertured wall facing the gallery for

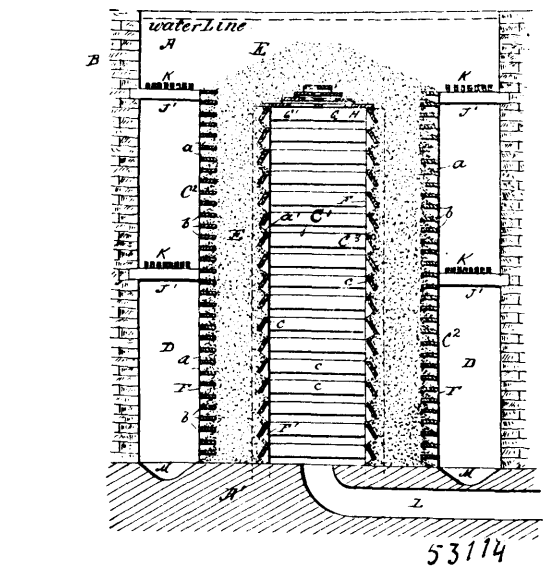
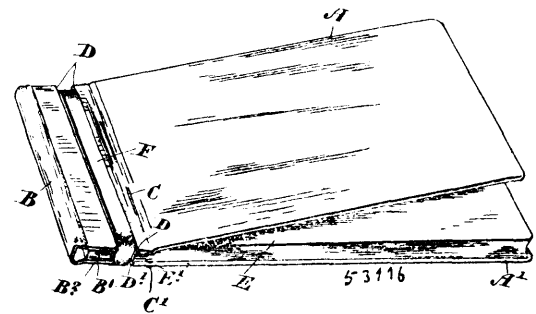


filtered water and spaced from the said outer wall to form a chamber between said walls, a body of sand or other filtering material held in said chamber and disposed in outward-projecting steps or layers upon said outer slats, substantially as described. 2nd. The reservoir A, formed of walls B and bottom B¹, of masonry, and the gutters M formed in said bottom, combined with the walls of filtering material E supported on said bottom adjacent to said gutters, and the open inner wall C², and outer wall C¹, formed of uprights F supported upon the said bottom B adjacent to said gutters, and spaced slats b, b, held by said uprights, substantially as and for the purposes set forth. 3rd. A filter comprising a reservoir formed of walls B and bottom B¹ of masonry, a wall or partition inclosed in said reservoir and which forms a gallery in said reservoir for filtered water, and which wall or partition is formed of a body of sand, or other filtering material E, uprights F, F¹, spaced slats b b and c c, in combination with braces J and J¹, arranged substantially as and for the purposes set forth. 4th. A filter whose outer filtering surface comprises a series of outwardly projecting ledges of sand, gravel or other filtering material which form a part of a sustained body of the filtering material forming a filtering wall or partition, substantially as described.

Claim.—1st. The toothed bars, having slots in their ends and means for engaging with the cams, the shaft passing through the slots, the cams secured to the shaft, and the operating wheels, the toothed bars being made to move in opposite directions, all combined to operate substantially as shown. 2nd. The shaft a, the toothed bars, and means secured to the shaft for causing the toothed bars to reciprocate, combined with the friction blocks or sections applied to the shaft, and connected at their outer ends to the bars, so as to move them into and out of action, substantially as described. 3rd. The toothed bars slotted at their inner ends and each provided with a pin or stud, and a friction roller, combined with the cams, secured to the operating shaft, and which move the toothed rods in opposite directions, the shaft, provided with a driving wheel, and friction blocks applied to the shaft, and loosely connected at their outer ends to the toothed bars, so as to form supports therefor, substantially as set forth. 4th. In a log roller the shaft a, provided with the enlarged parts b, and having the wheel D, and the two cams I, secured thereto, combined with the friction blocks secured to the enlarged parts of the shaft, and having slotted arms at their outer ends, and the toothed-bars, slotted at their inner ends so as to pass over the shaft, provided with means for engaging with the cams, and loosely connected with the slotted arms of the friction blocks, substantially as specified. 5th. A device for rolling logs, consisting of a suitable frame, a rotatable shaft having cams connected thereto, tooth-bars connecting with the cams, and frictional boxes or devices connecting the tooth-bars with the shaft, substantially as and for the purpose specified. 6th. A device for rolling logs, consisting of a suitable frame, a rotatable shaft having cams connected thereto, tooth-bars connecting with the cams, whereby a vertically and alternately reciprocating motion is imparted thereto, and sectional friction boxes connecting the shaft with the tooth-bars, and suitable gearing for imparting to the shaft, a rotary motion, substantially as and for the purpose set forth.

No. 53,115. Device for Rolling Logs.
(Appareil à rouler les billots.)

No. 53,116. Book and Catalogue Cover.
(Couverture de livre et catalogue.)



John Vandervort, James Derie Owen and Arthur Lazelle Vandervort, all of Lucyville, Pennsylvania, U.S.A., 5th August, 1896; 6 years. (Filed 3rd July, 1896.)

Oliver (Gabel Anderson, Woodstock, Ontario, Canada, 5th August, 1896; 6 years. (Filed 3rd July, 1896.)

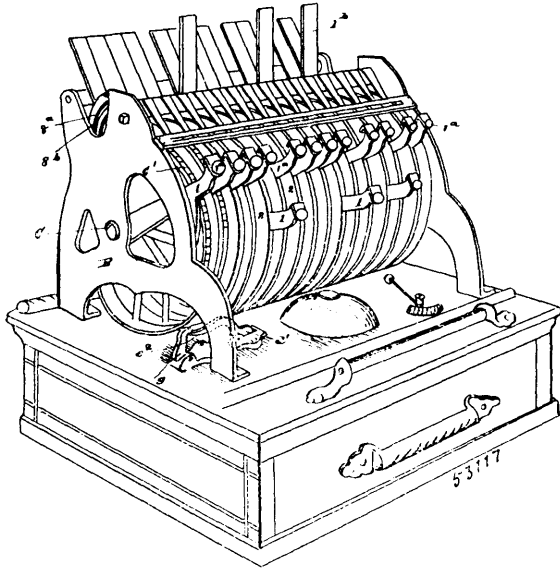
Claim.—1st. In combination a detachable book, a cover formed separately therefrom provided with a flexible back, stiff portions in proximity to the back on the top or bottom covers, and a flexible hinge or hinges between such stiff portions and the major portions of the cover, as and for the purpose specified. 2nd. In combination a detachable book, a cover formed separately therefrom provided with a flexible back, stiff portions in proximity to the back on the top or bottom covers, flexible hinge or hinges between such stiff portions and the major portion of the cover, and yielding means for holding the stiff portion in proximity to the flexible back against the bound edge of the book, as and for the purpose specified. 3rd. In combination a detachable book, a cover formed separately therefrom provided with a flexible back, stiff portions in proximity to the back on the top or bottom covers, a yielding hinge or hinges between such stiff portions and the major portion of the cover, notches in the top and bottom side edges of the top and bottom cover, registering notches made in the side edges of the book and a band designed to be passed around the book through the notches, as and for the purpose specified.

No. 53,117. Cash Register. (Registre de monnaie.)

Frederick H. Seymour, Detroit, Michigan, U.S.A., 5th August, 1896; 6 years. (Filed 2nd July, 1896.)

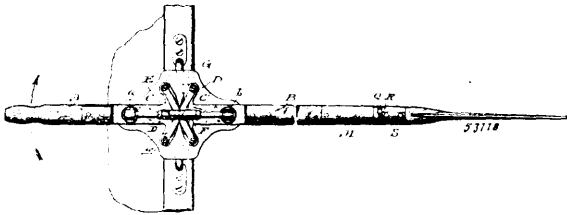
Claim.—1st. In a cash register, the combination of a registering wheel, a tablet and a tablet-actuating lever, a pawl adapted to turn and to slide on its supporting pin, to engage with the registering wheel and to be actuated by the tablet support, substantially as described. 2nd. In combination with a registering wheel, a pawl provided with an elongated pin-hole and with a curved locking hook, a round support passing through the pin-hole, a prismatic locking bar adapted to engage with the hook, and thereby ensure the close engagement of the pawl with the wheel and prevent the overthrow

of the wheel, substantially as specified. 3rd. In a cash register, the combination of a case, a drawer, a drawer-lock, a key-lever adapted



to draw the locking bolt, and means adapted to engage the key-lever and hold it with the bolt drawn and its tablet exposed while the drawer remains open, substantially as described.

No. 53,318. Oar. (Rame articulée.)



Samuel A. Tenney, Hartland, Wisconsin, U.S.A., 5th August, 1896; 6 years. (Filed 29th June, 1896.)

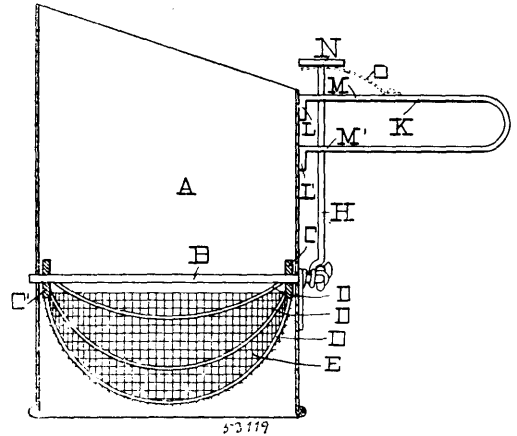
Claim.—1st. A bow-facing and self-feathering oar, consisting in the combination with the tilting-plate and the raised support therefor, of the oppositely-moving oar-sections pivoted thereto, and provided with the segments at their meeting ends, the straps connecting the diagonally-opposite ends of the segments, and the roller adapted to hold said segments to close proximity to the tilting-plate, together with the eccentric oar-blade, adapted to automatically rotate, partially, upon the outer pivoted oar section, upon its return movement, substantially as described. 2nd. In a bow-facing and self-feathering oar, the combination with the handle, of the eccentric oar-blade connected to the handle by a joint adapted to permit the blade to automatically rotate, and means for limiting the extent of such rotation, substantially as described. 3rd. In a bow-facing and self-feathering oar, the combination with the handle section provided with a metallic socket, the oar section provided with a pin adapted to fit into the socket, and a tapering sleeve adapted to secure the pin in the socket, with suitable bearings at the points of contact, substantially as described.

No. 53,119. Flour Sifter. (Sas à fleur.)

Warren Dearborn House, Kansas, Missouri, U.S.A., 5th August, 1896; 6 years. (Filed 29th June, 1896.)

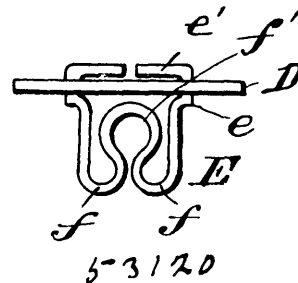
Claim.—1st. In a sifter of the kind described, the combination with the beater shaft having an end bent, a coil spring having one end connected to the beater shaft, and the other end connected to the body of the sifter, and mechanism connected to the handle of the sifter and to the bent arm of the beater shaft, whereby the hand holding the handle may operate the shaft against the pressure of the spring, substantially as described. 2nd. In a sifter of the kind described, the combination with a movable arm connected to or in close proximity to the sifter handle, of a bent beater-shaft connected to the said movable arm, and a spring tension between the said parts adapted to resist the pressure of the hand when said pressure is applied to the movable arm. 3rd. The combination with the beater shaft B, of the bent arm F, rod H, and J, as specified. 4th. The combination with the bent shaft B, the handle K and connecting arm H, the beater shaft being provided with a spring connection with the body of the shifter, as specified. 5th. In a sifter, the combination with a beater having a cranked shaft, of an operating

rod connected to the crank, and a handle of resilient material, connected at one end to the body of the sifter, and at its other end to



the operating rod, substantially as described. 6th. In a sifter, the combination with a beater having a cranked shaft, of a pivoted lever connected at one end to the crank, and a spring for normally holding the other end of the lever depressed, substantially as described. 7th. In a sifter, the combination with a beater having a cranked shaft, of a pivoted lever connected to the crank, a handle within which the lever is pivoted, and a spring for normally holding the free end of the lever depressed, substantially as described. 8th. In a sifter, the combination with a beater having a cranked shaft, of an operating rod journaled to the crank, a pivoted lever connected to the operating rod, a handle within which the lever is pivoted, and a spring for holding the free end of the lever depressed, substantially as described. 9th. In a sifter, the combination with a beater having a cranked shaft, of an operating rod journaled to the crank, a pivoted lever connected to the operating rod, a handle within which the lever is pivoted, and a torsion spring connected at one end to the body of the sifter and at the other end to the crank for holding the lever depressed, substantially as described. 10th. In a sifter, the combination with a beater having a cranked shaft, of an operating rod having at its lower end an eye through which the crank passes freely, and having at its upper end a thumb-presser top or cap, a handle in proximity to the operating rod, said handle having guides through which the rod passes, and a spring acting to opposition to the rod, substantially as described.

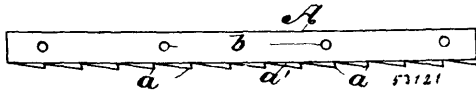
No. 53,120. Carpet-Fastener. (Attache de tapis.)



Katherine Campbell, Montreal, Quebec, Canada, 5th August, 1896; 6 years. (Filed 30th June, 1896.)

Claim.—1st. In a carpet fastener, the combination with a spring hook or clip adapted to be secured to the carpet, of an eye or staple adapted to be driven into the floor and provided with a cross-bar below its upper end for the said spring hook to engage with, substantially as set forth. 2nd. In a carpet fastener, the combination with a disc adapted to be fastened to the carpet, and a spring hook or clip provided at its upper end with shoulders and bent portions for engaging with the said disc; of an eye or staple adapted to be driven into the floor and provided with a cross-bar below its upper end for the said spring hook to engage with, substantially as set forth.

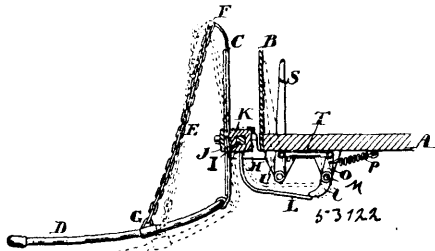
No. 53,121. Stationary Cutter Knives for Lawn Mowers. (*Couteaux stationnaires pour faucheuses.*)



Henry Eummelen, Vancouver, British Columbia, Canada, 5th August, 1896; 6 years. (Filed 15th July, 1896.)

Claim.—1st. In a lawn mower a stationary knife having angling bevelled teeth placed at about a line with right angles to the knife edges of a rotary cutter, substantially as specified. 2nd. In a rotary lawn mower a stationary fixed knife having a bevel a^1 upon its upper side, to engage at a tangent with rotary knives, and having bevelled teeth a , on its under side set at an angle to meet the advancing edges of the said rotary knives, and means for securing the said knife to the cross frame of such lawn mower, substantially as and for the purpose hereinbefore set forth.

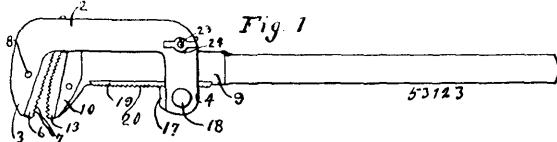
No. 53,122. Life Guard for Street Car. (*Défense pour chars des rues.*)



George Ashall Parmenter, Cambridge, Massachusetts, U.S.A., 5th August, 1896; 6 years. (Filed 17th July, 1896.)

Claim.—1st. In a car fender or life guard, the combination of a rocker-shaft mounted in suitable bearings attached to the body of the car; a pair of elliptical springs secured to said shaft and projecting above and below said shaft with both the upper and lower ends thereof free to yield; a scoop pivoted to the lower ends of said spring and suspended from the top ends thereof, a lever rightly connected to said rocker-shaft and extending backwardly therefrom; a locking arm or tumbler to engage the free or movable end of said lever to lock said scoop in raised position; and means for tripping said locking arm or tumbler to permit said scoop to drop to the track. 2nd. The combination of the scoop D, two elliptical springs C, C, secured in a vertical position, and having their upper and lower ends free to yield, said scoop being pivoted to the lower ends of said springs and suspended from the tops of said springs by suitable connections, the blocks K, K, secured to said springs C, C, and fixed to the shaft I; the shaft I, journaled in the hangers H, H, one or more horizontal arms L, rigidly secured to the shaft I, and extending backwardly therefrom, the rock-shaft M, having one or more trippers T, secured thereto and engaging the arm L, the arm O, and lever S, connected by the link T, arranged as shown for releasing the arm L, substantially as described.

No. 53,123. Pipe Wrench. (*Clé à tuyaux.*)

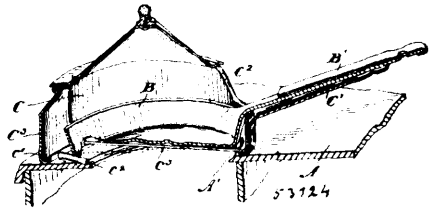


The Klose Wrench Company, Minneapolis, Assignee of Karl A. Klose, Richfield, both in Minnesota, U.S.A., 5th August, 1896; 6 years. (Filed 28th May, 1896.)

Claim.—1st. The combination in a pipe wrench of the frame, the jaw carried thereby, the shank arranged to slide within said frame and provided with a series of teeth, the fixed jaw on the outer end of said shank, said frame being provided with a pivoted block having a series of teeth to engage the teeth upon said shank, a spring carried by said frame for normally holding the teeth of said shank in engagement with the teeth of said block, and means for locking said shank in any desired position on said block, substantially as described. 2nd. The combination in a pipe wrench of the frame, the jaw carried thereby, the shank arranged to slide within said frame, and provided with a series of teeth, the fixed jaw on the outer end of said shank, said frame being provided with a pivoted block having teeth to engage the teeth upon said shank, and a spring carried by said frame and arranged to bear upon the edge of

said shank for normally holding the teeth of the same in engagement with the teeth of said block, substantially as specified. 3rd. The combination of a pipe wrench, of the yoke-shaped frame, the removable block carried at one end thereof and forming the jaw, the shank arranged to slide on bearings within said frame, and provided at its inner end with a removable block forming the second jaw, the rack bar arranged on the edge of said shank, the pivoted block carried by said frame and provided with a series of teeth to engage the teeth of said bar, a spring for normally holding said shank in engagement with said block, and a cam mechanism for locking said shank when in engagement with said pivoted block, substantially as described. 4th. The combination in a pipe wrench of the yoke-shaped frame, comprising the opposite depending lugs and the bar connecting the same, one of said lugs forming the jaw, the shank arranged to slide in bearings provided in a longitudinal slot in said bar and bearing the second jaw upon its inner end, said shank being arranged also to slide in the opposite lug of said frame, a pivoted block supported by said lug and having a series of teeth to engage a similar series provided on said shank, and means for locking said shank into engagement with said block, substantially as described.

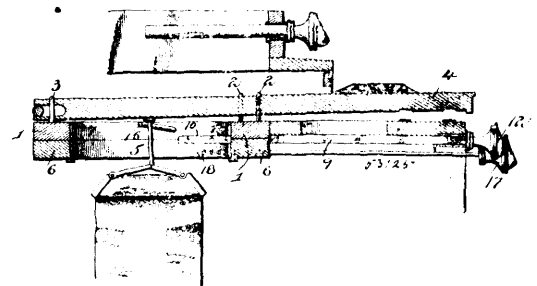
No. 53,124. Cooking Vessel. (*Ustensile de cuisine.*)



Archibald Fairgrieve and John W. Campbell, both of Toronto, Ontario, Canada, 5th August, 1896; 6 years. (Filed 11th June, 1896.)

Claim.—1st. In a cover for a frying pan, in combination, a cylindrical casing, an enlargement in the casing, cover for the top of the casing, an opening in one side of the casing opposite the enlargement and means for supporting the frying pan above the level of the top of the hole of the stove, as and for the purpose specified. 2nd. In a cover for a cooking utensil, in combination, a cylindrical casing, a peripheral enlargement for the same, cover for the top of the casing, an opening in one side of the casing, opposite the enlargement, and supporting wires extending across the bottom of the casing from edge to edge, as and for the purpose specified. 3rd. In a cover for a cooking utensil, in combination, a cylindrical casing, a handle for the same designed to lie directly beneath the handle of the frying pan, an enlargement in one side of the casing extending outside the periphery of the frying pan, and an opening in the opposite side near the handle, and means for supporting the frying pan above the level of the top of the hole in the stove, as and for the purpose specified. 4th. In a cover for a cooking utensil, in combination, a cylindrical casing provided with an enlargement in the same extending beyond the periphery of the frying pan, an opening in the casing opposite the enlargement, a hinged cover, a sectorial opening in the same designed to register, with the opening in the casing and means for supporting the frying pan above the level of the top of the stove, as and for the purpose specified. 5th. In a cover for a cooking utensil, in combination, a cylindrical casing surrounding the frying pan, provided with an enlargement and cover, and opening opposite the enlargement, and a drip trough around the inner edge provided with a suitable spout leading into the hole of the stove, as and for the purpose specified.

No. 53,125. Key Board. (*Clavier.*)

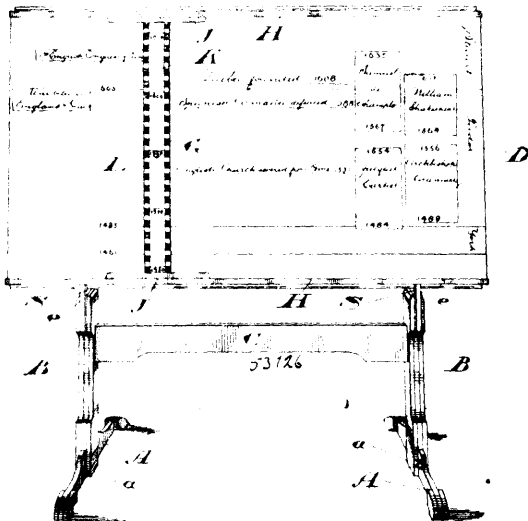


John Franklin Black, Carl Junction, Missouri, and Hugh George Fraser, Parsons, Kansas, both in the U.S.A., 5th August, 1896; 6 years. (Filed 19th June, 1896.)

Claim.—1st. In a keyed instrument, the combination of sound-producing devices and keys arranged respectively in operative relation therewith, and means for relatively re-adjusting the keys and sound-producing devices to vary the pitch of the tone pro-

duced by the manipulation of a given key, substantially as specified. 2nd. A keyed instrument having sound-producing devices, a keyboard including keys arranged respectively in operative relation with said sound-producing devices, and means for shifting the keyboard to bring the keys respectively in operative relation with different sound-producing devices, substantially as specified. 3rd. A keyed instrument having sound-producing devices, a keyboard mounted for lateral movement, and keys being arranged respectively in operative relation with different sound-producing devices, means for communicating motion to the keyboard to bring the keys respectively into operative relation with different sound-producing devices, and yielding return devices for returning the keyboard, when released, to its normal position, substantially as specified. 4th. A keyed instrument having sound-producing devices, a laterally movable keyboard having keys arranged respectively in operative relation with the sound-producing devices, and a plurality of operating devices for communicating motion to the keyboard to arrange the keys in operative relation with different sound-producing devices, said operating devices being adapted to move the keyboard through different distances, substantially as specified. 5th. A keyed instrument having sound-producing devices, a laterally movable keyboard having keys arranged respectively in operative relation with the sound-producing devices, a trip for temporarily disconnecting the keys from the sound-producing devices, and means for imparting lateral movement to the keyboard to bring the keys in operative relation with different sound-producing devices, substantially as specified. 6th. A keyed instrument having sound-producing devices, a laterally movable keyboard including a sliding frame, yielding devices for returning the frame when released to its normal position, and an operating device for moving the frame against said yielding devices, the same consisting of a slide mounted for movement transverse to the frame and provided with a bevelled or cam face to co-operate with a corresponding face on said frame, substantially as specified. 7th. A keyed instrument having sound-producing devices including pegs, a laterally movable keyboard including a sliding frame and having keys arranged respectively in operative relation with said pegs, means for communicating motion to the frame to arrange the keys in operative relation with different pegs, and a trip or lifting device including a crank-shaft arranged under the keys and adapted to elevate the same out of operative relation with said pegs, and means for actuating the trip or lifting device, substantially as specified.

No. 53,126. Blackboard. (Tableau.)

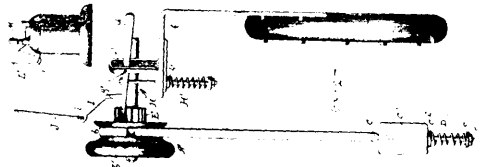


The Comparative Synoptical Chart Company, assignee of Walter Lyon Sinton, both of Toronto, Ontario, Canada, 5th August, 1896; 6 years. (Filed 29th June, 1896.)

Claim.—1st. In an article of the class described, the frame or easel comprising the feet A, detachable standards B, provided with the supports S, and detachable cross-bar C, in combination with the blackboard D, resting on the supports S, and provided with the loops E, adapted to fit over the upper ends of the standards, substantially as and for the purpose specified. 2nd. In an article of the class described, the frame or easel comprising the feet A, detachable standards B provided with the supports S and detachable cross-bar C, in combination with the blackboard D, resting on the supports S, and provided with the loops E, adapted to fit over the upper ends of the standards, and having a vertical straight edge G movable in guide-ways H, connected to the front of the board, substantially as and for the purpose specified. 3rd. In an article of the class described, the frame or easel comprising the feet A, the standards B, provided with the supports S, and with jaws a, embracing the feet A, and connected thereto by screws or pins, the cross-bar C, provided with hooked lugs b, engaging with the slotted

plates I, connected to the sides of the standards B, and overlying recesses therein, in combination with the blackboard D resting on the supports S, and provided with the loops E, adapted to fit over the upper ends of the standards, substantially as and for the purpose specified. 4th. In an article of the class described, a blackboard having horizontal guide-ways formed thereon, in combination with a vertical straight edge adapted to slide in the said guide-ways and provided with a scale, substantially as and for the purpose specified. 5th. In an article of the class described, a blackboard having horizontal guide-ways formed thereon, in combination with a vertical straight edge adapted to slide in the said guide-ways and provided with a detachable scale, substantially as and for the purpose specified. 6th. In an article of the class described, the blackboard D, having horizontal guide-ways H connected thereto shaped in section substantially as shown, in combination with the heads J adapted to slide in the guide-ways, the straight edge G, connected to the heads and a scale K sprung into the recesses c in the heads J, and secured to the straight edge by the hand screw L, substantially as and for the purpose specified.

No. 53,127. Valve. (Soupape.)

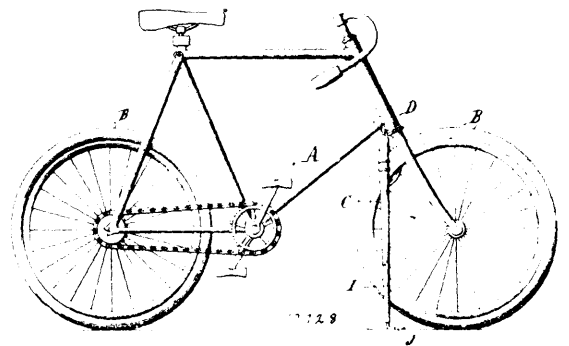


Edward G. Kimmell, Keyser, West Virginia, U.S.A., 5th August, 1896; 6 years. (Filed 17th July, 1896.)

Claim.—1st. The combination with the valve stem, of a ratchet wheel thereon, a pawl engaging the ratchet, a weight connected with the stem and means for actuating the pawl from any desired point to permit it to disengage the ratchet and thereby rotate the stem, and means for cushioning said weight, substantially as described. 2nd. The combination with the valve stem, a weight carried by a cord wound thereupon, a ratchet wheel mounted to move with said stem, a lever carrying a pawl engaging said ratchet, a spring for holding said pawl in engagement with the ratchet, and connections whereby the pawl may be actuated from any desired point, substantially as described. 3rd. The combination with the valve stem, a weight carried by a cord wound thereupon, a ratchet wheel mounted to move in said stem, a lever carrying a pawl engaging said ratchet, a spring for holding said pawl in engagement with the ratchet and connections whereby the pawl may be actuated from any desired point, and an audible alarm operatively connected with said connections, substantially as described. 4th. The combination with the valve stem, its handle and pulley and ratchet, of a weight carried by a cord wound upon said pulley, a pivoted lever carrying a pawl to engage said ratchet, an arm connected with said lever and a cord connected with said arm and with an audible alarm, and branch cords connected with said cords and extended to different parts of the building, substantially as described. 5th. The combination with the valve stem, its handle and pulley and ratchet, of a weight carried by a cord wound upon said pulley, a pivoted lever carrying a pawl to engage said ratchet, an arm connected with said lever and a cord connected with said arm and with an audible alarm, and branch cords connected with said cords and extended to different parts of the building, and a spring for normally holding said pawl in engagement with the ratchet, substantially as described.

No. 53,128. Bicycle Support and Lock.

(Support de bicyclette et serrure.)

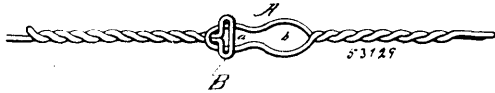


Robert Holmes, Canon, Colorado, U.S.A., 5th August, 1896; 6 years. (Filed 17th July, 1896.)

Claim.—1st. The combination with the rod provided with means for its attachment to the bicycle frame to support the machine when at rest and the lock therein, of the clamp ring at one end of the rod, and a hasp pivoted on said rod and adapted to enter said rod to

engage the bolt of the lock, substantially as specified. 2nd. The combination with the rod provided with means for its attachment to the bicycle frame to support the machine when at rest and the lock therein, of the clamp at one end of said rod, the hook at the opposite end, and a hasp pivoted on said rod, as set forth. 3rd. The combined bicycle support and lock described, comprising a rod, with a socket having a lock, a clamp ring pivoted on one end of the rod, an extension on the other end, a hook carried by said extension, and a hasp pivoted on the rod between its ends, substantially as and for the purpose specified.

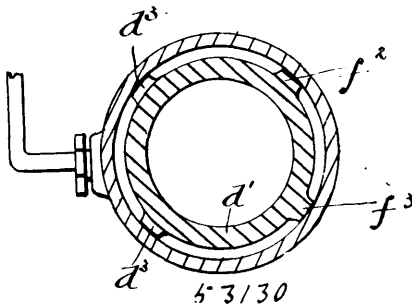
No. 53,129. Ball Tie. (Cercle de ballot.)



Cyrille Bourgeois, Henrysburg, Québec, Canada, 5 août 1896; 6 ans. (Déposé 11 juillet 1896.)

Résumé.—Un cercle de ballot constitué par un fil métallique dont une des extrémités est recourbée de manière à former un œillet A et l'autre aussi recourbée de manière à former un crochet B pouvant s'agraffer dans l'œillet A le tout tel que montré dans les dessins et décrit dans la spécification.

No. 53,130. Shaft Bearing. (Coussinet d'arbre.)

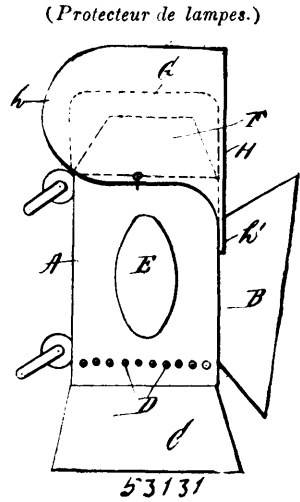


Andrew Wilson, Frank Wilson and John S. Clunie, all of Montreal, Quebec, Canada, 5th August, 1896; 6 years. (Filed 2nd November, 1895.)

Claim—1st. A vertical shaft bearing, having an outer body and an inner bearing portion proper, a supply inlet near its lower end, and an overflow at its upper end, with a circuit or passage-way between such inlet and overflow, for oil. 2nd. A vertical shaft bearing, having an outer body and an inner removable bearing portion proper, with an intermediate passage for oil and communicating ways to the face of the bearing, a supply inlet to the passage near the lower end of the bearing, and an overflow formed in same near the upper end thereof leading to an outlet, as set forth. 3rd. A shaft bearing, having an outer body or frame section, and an inner removable bearing section proper, grooved on its exterior, to form an independent feed and outflow spaces between the two sections, a supply inlet to the intermediate feed spaces, communicating ways leading from the supply space to the inner face of the removable section, an overflow leading to the outflow space, and an outlet from the latter space, for the purpose set forth. 4th. A self lubricating bearing, having an outer body or frame section and an inner bearing section proper, grooved on its exterior to form independent feed and outflow spaces between the two sections, the intermediate feed spaces, ways for the oil leading through same to the inner bearing face thereof, and annular grooves formed in such face in line with the inlet, for the purpose set forth. 5th. A self lubricating bearing, having an outer body or frame section and an inner removable bearing section proper grooved on its exterior to form independent feed and outflow spaces between the two sections, the intermediate feed spaces, ways for the oil leading through same to the inner bearing face thereof, and grooves formed in such face in line with the said ways, for the purpose set forth. 6th. A vertical shaft bearing, having an outer body or frame section, an inner removable bearing section proper, and an intermediate annular oil chamber or passage with ways leading through the bearing section to the face of the inner section, a supply inlet near the lower end of the bearing, and an overflow at the top of same, and grooves formed in such face in line with said ways, for the purpose set forth. 7th. In a vertical shaft bearing, an outer body or frame section having an inwardly projecting shoulder at its lower end, an inner bearing section proper supported by such shoulder and having independent longitudinal feed and outflow grooves or depressions on its exterior surface, a supply inlet to the feed groove or grooves, ways from the latter to the inside face of the inner bearing section, an overflow opening between the said inside bearing face and the outflow groove, and an outlet from the latter, for the purpose set forth. 8th. In a vertical shaft bearing, an outer body or frame section having an inwardly projecting shoulder at its lower end, an inner bearing section proper supported by such shoulder

and having independent longitudinal feed and outflow grooves or depressions in its exterior surface, a supply inlet to the feed groove or grooved ribs intervening such grooves, and communicating openings in such ribs between the feed grooves, ways from the latter to the inside face of the inner bearing section, an overflow opening between the said inner bearing face and the outflow groove, and an outlet from the latter, for the purpose set forth. 9th. In a self oiling vertical shaft bearing, an outer body or frame section having an inwardly projecting shoulder at its lower end, an inner bearing section proper supported by such shoulder and having independent longitudinal feed and outflow grooves or depressions in its exterior surface, an oil supply located higher than the top of the bearing, a supply inlet to the feed grooves, ways from the latter to the inside face of the inner bearing section, grooves formed in such face in line with said ways, an overflow opening between the said inner bearing face and the outflow groove, and an outlet from the latter, for the purpose set forth.

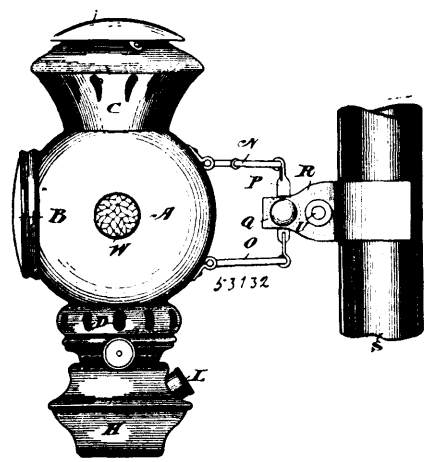
No. 53,131. Guard or Shields for Lamps. (Protecteur de lampes.)



Samuel N. Goodman, Germantown, Pennsylvania, U.S.A., 5th August, 1896; 6 years. (Filed 7th May, 1896.)

Claim.—1st. A lamp or lantern such as is usually employed in connection with bicycles or other vehicles, provided with a shield, guard or protector which encloses the front and sides of the upper portion thereof, and extends above the top, and which is provided with side wings which extends outwardly and backwardly at each side, substantially as shown and described. 2nd. A lamp or lantern of that class employed in connection with bicycles or other vehicles, which is provided with the usual means for ventilation and the usual front reflector, and also provided with a shield, guard or protector which extends upwardly in front thereof, above the reflector, to and above the top of the lamp or lantern and is provided with side wings which extends backwardly beyond the sides thereof, substantially as shown and described.

No. 53,132. Bicycle Lamp. (Lampe de bicyclette.)

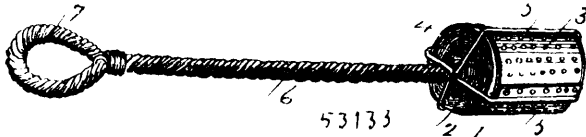


Edward Lambrick Williams, Chicago, Illinois, U.S.A., 5th August, 1896; 6 years. (Filed 6th May, 1896.)

Claim.—1st. A bicycle lamp having its body or flame chamber composed of a single sheet of metal wrought into hollow spherical

form and provided with an opening in its top for the escape of the vitiated air, an opening in its bottom for the burner or wick tube, a front opening of less diameter than the body having a glass fitted thereto, and a burner arranged in the vertical axis of the flame chamber with air inlet openings below the flame and the interior of the flame chamber having curved surfaces over which the air currents may pass without deflection upon the flame, substantially as described. 2nd. A bicycle lamp having a hollow spherical body formed of a single sheet of metal and providing a flame chamber whose transverse and vertical diameters are equal and having an opening in its bottom, a burner arranged in said opening and in the vertical axis of the flame chamber, air inlet openings arranged concentrically to the burner and below the flame and an outlet for the vitiated air at the top of the chamber, substantially as described. 3rd. In a bicycle lamp a wind guard therefor in the form of a diaphragm between the air inlet openings and the flame chamber and closing the space in front of the wick tube with an opening in the rear of said tube, substantially as described. 4th. In a bicycle lamp, a wind guard consisting of a plate arranged horizontally across the base of the flame chamber and surrounding the wick tube, imperforate in front of the wick tube and having an opening in the rear thereof, substantially as described. 5th. In a bicycle lamp having a flame chamber with curved walls, a wick tube arranged axially of said chamber and projecting upwardly therein, and a wind guard consisting of a diaphragm arranged at the base of the flame chamber and above the air inlet, imperforate in front of the wick tube and having an opening extending at the sides and in the rear of said wick tube, substantially as described. 6th. A wind guard for a bicycle lamp, consisting of a metal plate or diaphragm adapted to close the opening in front of the wick tube and having an aperture in the rear thereof, and adjustable wings or plates adapted to be moved to cover or uncover said opening, substantially as described. 7th. A clamp for bicycle lamps, consisting of a single plate of sheet metal doubled upon itself to provide arms and having at its bend seats or depressions forming members of a universal joint and the extremities of said arms being adapted to clasp a part of the bicycle frame and means for flexing said arms whereby to secure the clamp to the lamp and to the bicycle, substantially as described. 8th. The combination with a bicycle lamp bracket having a ball formed upon one member thereof, and a clamp formed in a single piece of sheet metal doubled upon itself and provided at the bend with seats or depressions to embrace said ball, the extremities of the members being adapted to engage a fixed part of the bicycle, and a tightening screw for flexing the members between their ends whereby to secure the joint members in any desired angular position and at the same time secure the clamp to the frame of the bicycle, substantially as described.

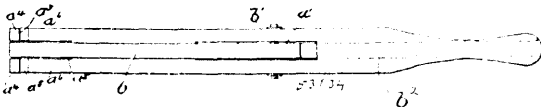
No. 53,133. Fire Kindler. (Allumoir.)



Reese C. A. Jones and James P. Brown, both of Hillsborough, Illinois, U.S.A., 5th August, 1896; 6 years. (Filed 18th June, 1896.)

Claim.—1st. A fire-kindler having a non-combustible absorbent core, a cylindrical laterally-contractible foraminous shield encircling the core and terminating short of the ends of the core, a laterally and axially contractible cage inclosing the core and shield and bearing against the outer surface of said shield and the extremities of the core, and a handle integral with said cage and adapted to be twisted to contract the cage axially and laterally, substantially as specified. 2nd. A fire-kindler having a core constructed of a continuous strip or ribbon of non-combustible absorbent material, a cylindrical foraminous shield consisting of a metal strip extending around the core and having its extremities overlapped, the strip forming the shield being of less width than the strip or ribbon of absorbent material, a cage constructed of wire loops arranged in intersecting planes embracing the axis of the core and having their sides or legs twisted together to form a handle 6 in alignment with the axis of the core, said loops bearing against the outer surface of the cylindrical shield and against the projecting extremities of the core, substantially as specified.

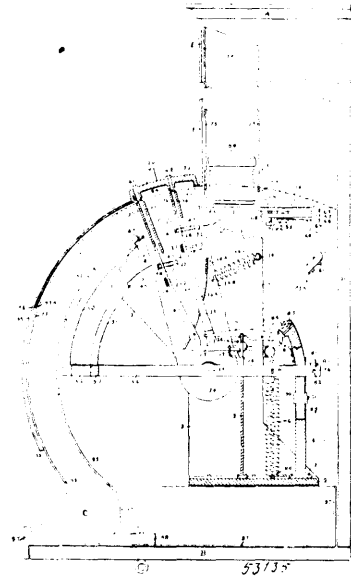
No. 53,134. Clothes Lifter. (Appareil pour soulever le linge.)



Adolf Kellnor and Mary Jacobs Schwersenski, both of Montreal, Quebec, Canada, 5th August, 1896; 6 years. (Filed 16th November, 1895.)

Claim.—1st. A clothes lifter constructed of a pair of integral wooden bars, one straight and the other curved, and one of which is wider than the other and slotted to receive and allow the passage through same of the narrower bar with or without interlocking finger ends and both pivotally connected together, substantially as and for the purpose set forth. 2nd. A clothes lifter constructed of a pair of bars pivotally connected together and at one end affording handle portions and at the other gripping fingers, such latter being respectively narrowed and slitted so that the narrowed end of one can enter the slitted end of the other and with or without hooked or barbed ends, substantially as shown and for the purpose set forth. 3rd. A clothes lifter constructed of a pair of bars *a, b*, the one, *a*, having slots *a¹, a²*, handle *a²* and barbs *a¹*, and barb *b²*, and the two pivotally connected together substantially as and for the purpose set forth.

No. 53,135. Vending Machine. (Appareil de vente.)



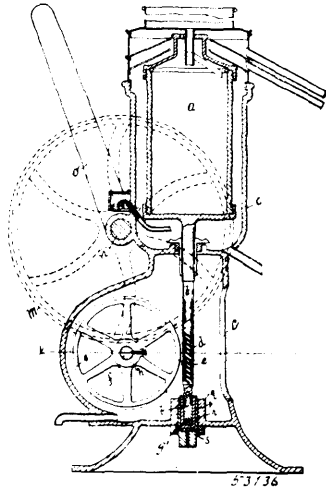
Frank P. Kessee and Duncan H. McDermid, both of Toronto, Ontario, Canada, 5th August, 1896; 6 years. (Filed 18th February, 1896.)

Claim.—1st. In a vending machine, the coin receiving operating lever, composed of the two perpendicular side plates 34, mounted upon the main shaft 33, the two guide plates 35 and 36, the two locking plates 37, 38, secured to side plates 34, the two coin placers 15, 25, having circular, ringed heads, and pivoted to side plates 34, the two cross stays 19, 29, secured to side plates 34, the two coin adjusting stops 20, 30, secured to cross stays 19, 29, the four locking pawls 45, secured to frame 34, the two adjusting lugs 22, the two adjusting lugs 31, the two pressure studs 23, the two pressure studs 32, all secured to the frame 34, the guide plates 34A, the removable cup 39, having coin slots and pull, the releasing shaft 10, the reciprocating push substantially as and for the purpose hereinbefore set forth. 2nd. In a vending machine, the tripping spring plate 9, having slots 9A and 9B, and having secured thereto the spring 12, and foot rest 14, substantially as and for the purpose hereinbefore set forth. 3rd. In a vending machine, the ejecting lever composed of the main lever, mounted upon the main shaft, the cross connecting arm secured to the main lever, the curved pointed arm, fixed to cross arm, the auxiliary lever mounted upon main shaft and connected to the cross arm, substantially as and for the purpose hereinbefore set forth. 4th. In a vending machine, the injector composed of the sliding plate, the spring journaled thereto, the spring press pawls, pivoted to sliding plate, and connected by cross plate, the adjusting screw operating through cross plate, substantially as and for the purpose hereinbefore set forth. 5th. In a vending machine the combination with the main frame with the operating levers, and with the ejecting levers, of the auxiliary frame 4, having curved projecting top, and two vertical slots, with the middle projecting top piece slotted for pawl bearing, substantially as and for the purpose hereinbefore set forth. 6th. In a vending machine, the combination with the main frame, with the auxiliary frame, and with the ejector lever, of the rubber cushions secured to auxiliary frames, substantially as and for the purpose hereinbefore set forth.

No. 53,136. Centrifugal Creamers and Motive Devices therefor. (Crèmeuse centrifuge.)

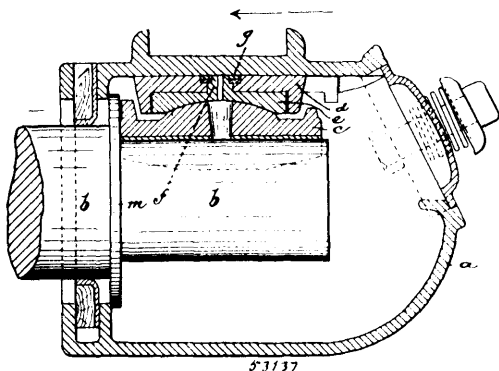
Oscar Anderson, Newark, New Jersey, U.S.A., 5th August, 1896; 6 years. (Filed 17th July, 1896.)

Claim.—1st. The combination with the centrifugal bowl *a*, threaded shaft *b*, worm wheel *c*, shaft *f*, and nut *k*, provided with clutch teeth,



of the clutching cog wheel *h*, spring *l*, speeding wheel *m*, and means for turning the same, all said parts being arranged and combined, substantially as set forth. 2nd. The combination with the centrifugal bowl *a*, bowl carrying shaft *b*, shaft *f*, and train of means for transmitting power from one of said shafts to the other, of the clutch parts *h*, fixed to said shaft *f*, and having teeth, a sliding cog-wheel *h*, having co-operating teeth, a spring, a speeding wheel *m*, and means for transmitting power thereto, all substantially as set forth. 3rd. The combination with the centrifugal bowl *a*, shaft *b*, shaft *f*, and train of means for transmitting power from one shaft to the other, of the clutch part *h*, fixed to said shaft *f*, and having under cut teeth, a sliding cog-wheel having correspondingly under cut teeth, a spring, a speeding wheel, and means for transmitting power thereto, all substantially as set forth. 4th. The combination with the centrifugal bowl and shaft carrying the same, a shaft *f*, and means for transmitting power from one shaft to the other, of the clutch part *h*, having under cut inclined teeth, a sliding cog-wheel having correspondingly under cut teeth, a bowed spring adapted to throw said teeth into engagement and to stand away from the said wheel when the latter is in operation, and means for transmitting power to said cog-wheel, substantially as set forth. 5th. The combination with the case *c*, centrifugal bowl *a*, bowl carrying shaft *b*, and means for rotating said shaft, of a hardened and separable piece *b'*, with a conical end, supplementing said shaft, of a cup-shaped piece adjustably fastened to the case, an elastic piece *s*, and hardened steel bearing *r*, receiving the conical end of said supplemental piece *b'*, substantially as set forth. 7th. The combination with the case *c*, centrifugal bowl *a*, bowl carrying shaft *b*, and means for rotating said shaft, of a supplemental piece *b'*, a cup-shaped, adjustable chair or seat *p*, stepped interiorly as described, and a hardened and cushioned piece within said cup-shaped seat serving as a bearing for said supplemental piece, substantially as set forth.

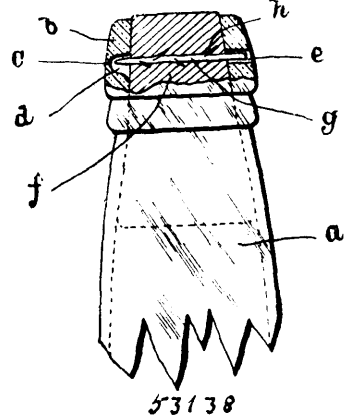
No. 53,137. Car Axle Box. (Boîte à graisse de chars)



Jackson R. Baker, Jersey, New Jersey, U.S.A., 5th August, 1896; 6 years. (Filed 17th June, 1896.)

Claim.—1st. The improved axle box or bearing, in which is combined with the box and brass *c*, having the convexity, a key *d*, and an intermediate concave bearing having a pivot extending up into the key, substantially as set forth. 2nd. The improved axle box or bearing in which is combined the box, the brass, intermediate bearing having a pivotal rivet and washer *g*, all arranged and operating substantially as set forth. 3rd. In combination with the car axle having the shoulder *b'*, a journal box, a brass arranged in said box and seated on said journal and carrying the said box and its load, and a loose collar *m*, also arranged in said box and lying between said brass and the shoulder of the journal, the said collar projecting from the journal beyond the shoulder thereof, substantially as set forth.

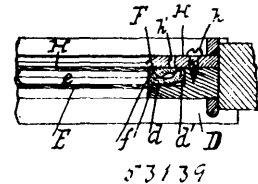
No. 53,138. Bottles and their Stopperings. (Bouteille et bouchon.)



Maurice Mary Joseph Owen O'Connor, Ballybrack, Dublin, Ireland, 5th August, 1896; 6 years. (Filed 11th July, 1896.)

Claim.—1st. A bottle neck made with a part of less thickness than the remainder, substantially as described for the purpose specified. 2nd. A bottle neck made with a part of less thickness than the remainder and with an internal recess in the side of the neck opposite to said thinner part, substantially as described for the purpose specified. 3rd. A bottle neck made with a hole through it at one side and with a part of its opposite side of less thickness than the remainder of the wall of the neck, substantially as described for the purpose specified. 4th. A bottle neck made with a hole through it at one side, a part of its opposite side of less thickness than the rest of the wall of the neck, and a recess inside the wall of the neck, next said thin part, substantially as described for the purpose specified. 5th. The combination in a bottle neck of a part of less thickness than the rest of the wall of said neck, a recess in the inner surface of the neck next to said thin part, a hole through the opposite side of the neck, a cork and a barbed pin extending through said cork and projecting at one end into said recess and at the other end into said hole in the bottle neck, substantially as described for the purpose specified. 6th. A stopper with a transverse hole through it enlarged at one end, substantially as described for the purpose specified.

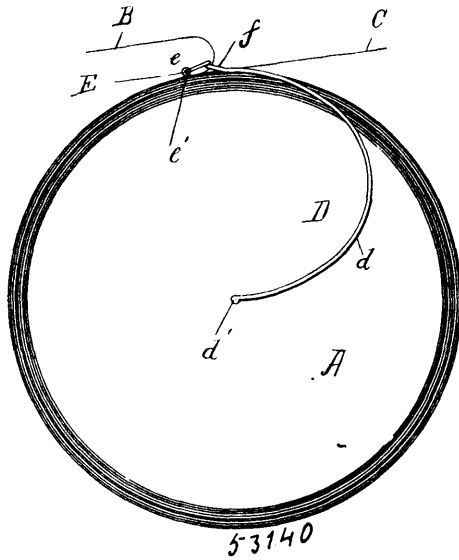
No. 53,139. Windows for Locomotive Cabs, etc. (Fenêtre de voiture, locomotive, etc.)



Albert Carey, Kane, Pennsylvania, U.S.A., 5th August, 1896; 6 years. (Filed 26th May, 1896.)

Claim.—1st. The combination in a window for locomotive cabs and other structures, of a frame having two glasses therein, an absorbent packing between the edges of said glass and projecting outward beyond the edges thereof, and stops for securing said glass in place, provided with openings therein over the projecting portion of the packing, substantially as and for the purpose set forth. 2nd. The combination in a window for locomotive cabs and other structures, of a frame *D* having grooves *d* and *d'* therein, an outer glass *E* mounted in the grooves *d*, an absorbent packing *F* in the grooves *d'* and projecting over the edge of the glass *E*, an inner glass *G* resting upon the inner edge of the packing *F*, and a step *H* having openings *h* therein for securing said glasses and packing in place, substantially as and for the purpose set forth.

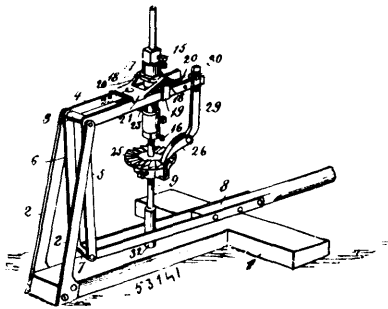
No. 53,140. Rolls for Holding Ribbons.
(*Rouleau à ruban.*)



John Leask, Gore Bay, Manitoulin, Ontario, Canada, 5th August, 1896; 6 years. (Filed 10th June, 1896.)

Claim.—The combination, with a ribbon roll, of a spring having curved arms pivoted to the axis of the roll, an oblong loop engaging with the ribbon, and intermediate portions connecting the said loop to the arms and bearing on the paper at the sides of the ribbon substantially as set forth.

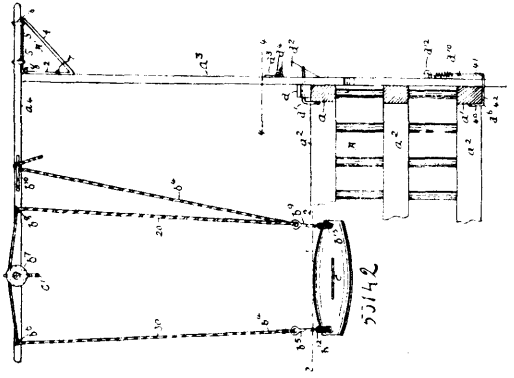
No. 53,141. Oil Pumping Apparatus. (*Pompe à huile.*)



James William Rhoades, Fostoria, Ohio, U.S.A., 5th August, 1896; 6 years. (Filed 26th June, 1896.)

Claim.—1st. In an oil-pumping apparatus, the combination of the polish-rod, the sleeve through which said rod passes, means for adjustably securing the rod to the sleeve so that they will rotate together, removable heads secured to both the upper and lower ends of the sleeve, a working beam, the collar journaled to the working beam and having the sleeve passing through it and supporting the sleeve and polish-rod from the beam, the ratchet-wheel adapted to be removed from the rod without removing the sleeve and the pawl connected with the beam and engaging the ratchet-wheel, substantially as and for the purpose described. 2nd. In an oil-well pumping apparatus, the combination of the rocking-beam, the polish-rod, the sleeve encircling said rod, nuts or heads attached to the opposite ends of said sleeve, means for securing the sleeve and polish-rod together, and a collar swiveled to the upper arm of the rocking-beam, said sleeve passing through and resting upon said collar, substantially as and for the purposes described. 3rd. In an oil-well-pumping apparatus, the combination of the rocking-beam, the polish-rod and adjustable sleeve connected thereto, the collar having pintles resting in boxes secured to the upper arm of the rocking-beam, and the arms attached to the rocking-beam and fitting over the pintles of said collar, said sleeve passing through and resting upon said collar, substantially as and for the purposes described. 4th. In an oil-well-pumping apparatus, the combination of the rocking-beam, the polish-rod connected therewith, the two-part ratchet-wheel secured to said polish-rod and provided with lips extending from one part of the ratchet-wheel to and under the opposite part to preserve the faces of the two parts flush with each other, and the pawl connected with the rocking-beam for rotating said ratchet, substantially as and for the purposes described.

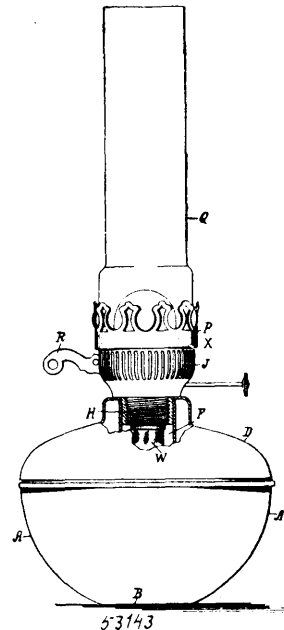
No. 53,142. Nursing Bottle Supporting Apparatus.
(*Support pour biberons.*)



William Gill, Boston, Massachusetts, U.S.A., 5th August, 1896; 6 years. (Filed 6th July, 1896.)

Claim.—1st. In a support for nursing bottles, the combination with a horizontally disposed arm, of a flexible suspension, consisting of a cord or like flexible body secured to said arm to form depending legs 20-30, and capable of adjustment, to vary the length of the said legs with relation to the said arm and to each other, a hollow bottle holder adapted to receive the nursing bottle and provided with devices at or near its ends for attachment to the flexible suspension, and means carried by the legs 20-30, to detachably engage the said devices and permit of horizontal adjustment of the bottle holder, substantially as described. 2nd. The combination with a cradle, of a bottle supporting apparatus, comprising an upright member secured to the cradle, a horizontally disposed arm or member secured to the upright member and adjustable longitudinally thereon, a flexible suspension 1¹ secured to the said horizontal arm to form legs 20-30, and capable of adjustment, to vary the length of the said legs with relation to the said arm and to each other, a hollow bottle holder to receive the nursing bottle and provided with devices at or near its ends for attachment to said flexible suspension, and clasp carried by the legs 20-30, to detachably engage the said devices and permit of horizontal adjustment of the bottle holder, substantially as described. 3rd. In a support for nursing bottles, a horizontally disposed arm provided with eyes, b⁶, b⁸, and with a tension device, a bottle holder, and a flexible support connected to the said holder and engaging the said eyes and tension device, substantially as described.

No. 53,143. Safety Lamp. (*Lampe de sûreté.*)

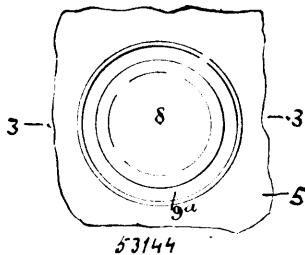


Walter Hare, London, England, 5th August, 1896; 6 years. (Filed 12th August, 1895.)

Claim.—1st. In an oil lamp, a drip receiver between the burner and the head of an inner tube, as described and as shown. 2nd. A lamp body A, in combination with a counterpoise weight C, sub-

stantially as and for the purpose set forth. 3rd. A lamp body A, and burner X, in combination with a drip receiver H, substantially as and for the purpose set forth. 4th. A lamp body A, and burner X, in combination with the tube F, substantially as and for the purpose set forth. 5th. A lamp body A, a counterpoise weight C, and burner X, in combination with a drip receiver H, substantially as and for the purpose set forth. 6th. A lamp body A, counterpoise weight C, and burner X, in combination with the tube F, substantially as and for the purpose set forth. 7th. A lamp body A, burner X, and cone cup I, in which the perforations K K are formed, in combination with a drip receiver H, substantially as and for the purpose set forth. 8th. A lamp body A, burner X, and cone cup I, in which the perforations K K are formed, in combination with a drip receiver H, in the bottom T, of which a pin hole S is formed, substantially as and for the purpose set forth. 9th. A lamp body A, and burner X, in combination with the tube F, and air compression chamber G, substantially as and for the purpose set forth. 10th. A lamp body A, counterpoise weight C, and burner X, in combination with the tube F, and air compression chamber G, substantially as and for the purpose set forth. 11th. A lamp body A, counterpoise weight C, and the burner X, in combination with the drip receiver H, and cone cup I, in which the perforations K K are formed, substantially as and for the purpose set forth. 12th. A lamp body A, counterpoise weight C, burner X, cone cup I, and perforations K K, in combination with the drip receiver H, in the bottom T, of which a pin hole S is formed, substantially as and for the purpose set forth. 13th. A lamp body A, of round or semi-spherical formation, and having a flattish bottom B, the upper part D of said body being formed with neck E, the tube F, and air compression chamber G, in combination with the burner X, cone cup I, in which the perforations K K are formed, and the drip receiver H, substantially as and for the purpose set forth. 14th. A lamp body A of round or semi-spherical formation and having a flattish bottom B, the upper part D of said body being formed with a neck E, the tube F, and the air compression chamber G, in combination with the burner X, cone cup I, in which the perforations K K are formed, and the drip receiver H, in the bottom T, of which a pin hole is formed, substantially as and for the purpose set forth.

No. 53,144. Creamer-Gauge or Indicator.
(*Jauge de crèmeuse ou indicateur.*)



Thomas Charles Davidson, Montreal, Quebec, Canada, 5th August, 1896; 6 years. (Filed 6th March, 1896.)

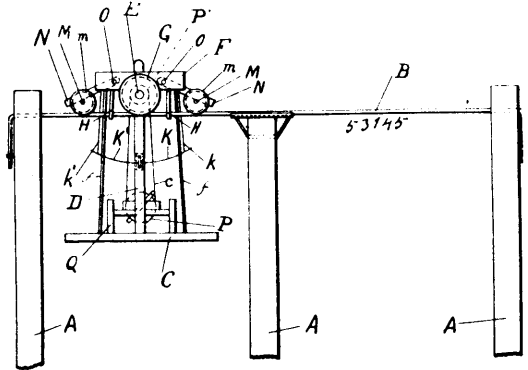
Claim.—1st. In combination with a milk can or receptacle, a circular transparent gauge or indicator detachably connected in the sides thereof, for the purpose set forth. 2nd. A milk can or receptacle having an opening through the side or body portion thereof, a shoulder formed upon the edge of such opening, a removable transparent section extending across said opening and located upon said shoulder, and means for detachably retaining said transparent section in place, for the purpose set forth. 3rd. In combination with a milk can or receptacle having a circular opening through the side or body portion thereof, an annulus having one edge secured to the edge of said opening and its opposite end formed with a shoulder, a transparent section closing said opening and located upon said shoulder, and a retaining section secured to said annulus, for the purpose set forth. 4th. In combination with a milk can or receptacle having a circular opening through the side or body portion thereof, a screw-threaded annulus having one edge secured to the edge of said opening and its opposite end formed with a shoulder having a laterally extending flange, a removable glass disc having a laterally extending flange located with the edge of said flange upon said shoulder, a retaining annular section screw-threaded to take onto said annulus, and a packing ring located between said shoulder and the edge of the flange of the said disc, for the purpose set forth.

No. 53,145. Appareil pour traverser les rivières, canaux, etc. (*Apparatus for Crossing Rivers, Canals, etc.*)

Firmin Longtin, St. Constant, Québec, Canada, 5 août, 1896; 6 ans. (Déposé 10 juillet 1896.)

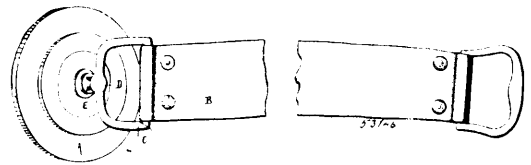
Résumé.—1° Un appareil pour traverser les rivières, etc., constitué par une plate-forme C suspendue à l'essieu E par des montants D, le dit essieu étant pourvu de roues à rainures G roulant sur des cables tendus, le tout tel que décrit et pour les fins indiquées. 2° Dans un appareil pour traverser les rivières, etc., la combinaison

avec une plate-forme convenablement suspendue à un essieu muni de roues à rainures se mouvant sur des cables tendus, d'une poulie



P1, fixée sur le dit essieu et d'une autre poulie P, convenablement fixée sur la plate-forme, les dites poulies pourvues d'une courroie c transmettant le mouvement, le tout tel que décrit et pour les fins indiquées.

No. 53,146. Suction Device. (*Appareil d'aspiration.*)

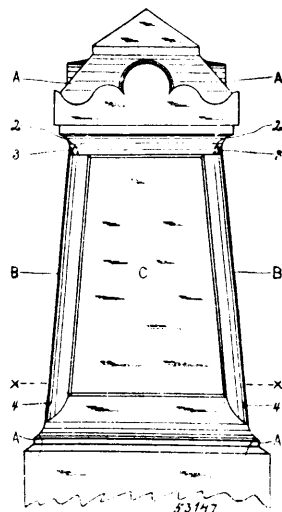


Joseph Stainton Tailor and Charles Davies, both of Liverpool, Lancaster, England, 5th August, 1896; 6 years. (Filed 12th March, 1896.)

Claim.—1st. A pneumatic joint or attachment, comprising a flexible rubber base and a metallic hook or projection, for the purpose set forth. 2nd. As a new or improved article of manufacture, a cup-shaped or concave piece of rubber provided with a central hook, eye, or its equivalent, to which a razor strop or other article may be attached, the said cup-shaped piece being so arranged that when pressed on to a flat surface, the adhesion between the two surfaces due to atmospheric pressure will hold the cup in place and resist any reasonable pull to remove it, as set forth. 3rd. A suction device, consisting of a slightly cup-shaped disc of rubber A and a hook, eye, or its equivalent, the shank of which is passed through a hole in the centre of the said cup-shaped disc in combination with a metal washer E, in front, and the washers G and a at back over which the shank aforesaid is riveted, whereby an airtight fastening is made between the concave rubber disc and the hook and eye, as set forth.

No. 53,147. Memorial Monument.

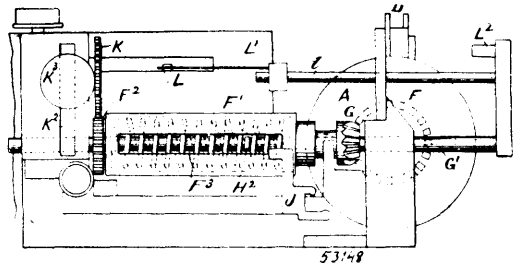
(*Monument commémoratif.*)



Freem A. Green, Hamilton, Ontario, Canada, 5th August, 1896; 6 years. (Filed 27th March, 1896.)

Claim.—1st. In a memorial monument, the combination of the glass plate panels C, bearing a suitable inscription on their inner sides and hermetically sealed, and secured to the inner frame E, and the adjustable corners B, of a metallic monument A, substantially as set forth. 2nd. In a memorial monument, the combination of the glass plate panels C, bearing inscriptions, and the adjoining coloured panels D, bearing portrait, or otherwise inscribed, sealed and secured in a metallic monument, substantially as described and for the purpose herebefore set forth.

No. 53,148. Freed or Coin Actuated Apparatus.
(Appareil actionné par une pièce de monnaie.)



William Alexander Birkenhead, Chester, and William Edward Thompson, Liverpool, Lancaster, both in England, 5th August, 1896; 6 years. (Filed 22nd April, 1896.)

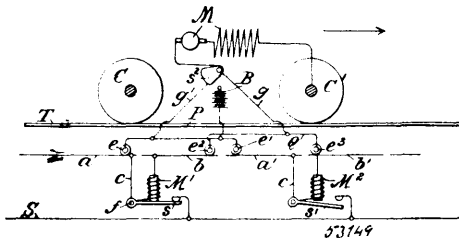
Claim.—1st. The improvements in or pertaining to coin freed mechanism for the purposes specified, which consist of a pawl or pawls in combination with a rotating coin carrier and a "scrape wheel" or its equivalent, acting as described and for the purpose set forth, and the improved gearing, whereby the rotation of the scape wheel releases the supply mechanism, and the index gearing or registering mechanism closes it. 2nd. In coin freed mechanism such as described, the improved coin connection consisting of the disc coin carrier C, in combination with pawls B, B', and scape wheel A whereby on the rotation of such coin carrier, the coin moving therewith will raise the pawl B clear of the scape wheel as the pawl B' enters a recess in the carrier, and on the further rotation of the latter the pawl B' will be forced out of the aforesaid recess thereby returning both pawls to their original position, and the scape wheel will be carried round a given distance and then again locked substantially as described. 3rd. The improved gearing consisting of a screw, spiral or helix, rotated by the coin mechanism and a slotted cylinder or other concentric rotatable device operated by the meter mechanism in combination with the nut, stop, or projection engaging in the threads or coils of the spiral and locking with the concentric rotatable device, whereby when the latter is rotated, the nut, stop, or projection is moved along the axis of the spiral or helix a given distance in one direction, and when the slotted cylinder or other concentric rotatable device is rotated, such nut, stop or projection is moved back again along the spiral path substantially as described. 4th. The improved gearing, such as described, which consists in providing the scape wheel with a spiral groove on its face, and in mounting on the same spindle a bracket or holder gearing with the supply mechanism and having sliding bars which engage the aforementioned spiral groove, whereby on the rotation of the scape wheel the bars are withdrawn, thereby freeing the supply mechanism and on the rotation of the aforementioned bracket forced outwards to stop such mechanism, substantially as described. 5th. In coin freed mechanism, such as described, the improved gearing consisting of two screwed spindles or worms placed parallel to each other, and a worm wheel gearing into each of them, one of such worms being connected by gearing with the space wheel or coin operated device, and the other with the ordinary index gearing whereby on the rotation of the scrap wheel by the insertion of the coin, the worm connected therewith will also be rotated, thus causing the worm wheel which also carries a stop to travel until such stop liberates the supply mechanism, which latter then operates the other worm and causes the worm wheel to travel back to its original position and to cut off the supply, substantially as described. 6th. The improved pawl M, such as described, whereby any part of the mechanism is free to rotate in one direction only.

No. 53,149. Electric Railway. (Chemin de fer électrique.)

Frederick Carleton Esmond, Brooklyn, New York, U.S.A., 5th August, 1896; 6 years. (Filed 17th December, 1895.)

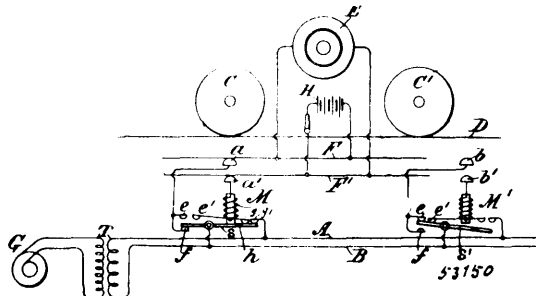
Claim.—1st. The combination of a main supply conductor, working conductor sections or points normally out of circuit with the supply conductor, electro magnetically-operated switches for coupling the working sections in circuit with the main conductor, and collectors on the car overlapping one another in a fore-and-aft direction for establishing a circuit through the pick-up magnet of an advance conductor section, as set forth. 2nd. The combination of a main conductor, a single row of working conductor sections or points normally insulated from the main conductor and from each other, electro magnetically-operated switches for coupling the work-

ing conductor sections temporarily into circuit with the main conductor, and collectors on the car overlapping each other in a fore-



and-aft direction for establishing a circuit through the pick-up magnet of an advanced section, as set forth. 3rd. The combination of an insulated supply conductor, working conductor sections or points, switches for connecting the working sections with the supply conductor, magnets for operating the switches whose coils form part of circuits connecting succeeding working sections in pairs, and overlapping sets of collectors on the car, connecting alternate working sections in pairs, for completing a circuit through the pick-up magnet of an advance section before the switch of a rear section is opened, as set forth. 4th. The combination of an insulated supply conductor, working conductor sections or points, switch-operating magnets whose coils join the conductor sections in pairs, and sets of collectors on the car, one of which bridges a given working section and the second section in advance, at the time when the switch of an advance section is thrown, while a second set overlapping the first set bridges under the same conditions, the remaining sections of two successive pairs of sections, as set forth. 5th. The combination of an insulated supply conductor, working conductor sections or points, magnets whose coils connect the sections in pairs, and collectors on the car forming a division on the motor current for actuating the pick-up switches between paths of substantially equal resistance, one of which, starting from a given switch passes from one of a pair of sections through the magnet of an advance section, while the second path passes through the magnet of the first-named section, whereby the magnets of successive sections are in multiple at the time the switch of an advance section is thrown, as set forth. 6th. The combination of an insulated supply conductor, working conductor sections or points, magnets whose coils join the working sections in pairs, and collectors having contact making parts adapted to engage simultaneously four of such conductor sections or points and form multiple circuits between the supply conductor and motor, one branch including the magnet of a given section, and the other the magnet of an advance section, as set forth. 7th. The combination of an insulated supply conductor, working conductor sections or points, switches for connecting the different sections with the supply conductor, conductors joining the working sections in pairs and including an electro magnet between one such section and the corresponding switch, and collectors forming a division of the motor current and placing the magnet coil of an advance section in multiple with the magnet of a rear section, the connections being so made that current flows in the same direction in the magnets just before and after a given switch is closed, as set forth. 8th. The combination of an insulated supply conductor, working conductor sections or points, switches and magnets for operating the switches whose coils connect the conductor sections in pairs, overlapping sets of collectors for forming a division of the motor current, and actuating the switch of an advance section by throwing its magnet in multiple with the magnet of a proceeding section, a battery connected at one terminal to one such set of collectors, and means for connecting the other terminal of the battery in the motor circuit, or to the second set of collectors, as set forth. 9th. The combination of an insulated supply conductor, working conductor sections or points, switches and magnets for operating the switches, with a double set of overlapping collectors leading to the motor and a switch for including a resistance in the circuit between the motor and the rear set of collectors in either direction of motion of the car, as set forth.

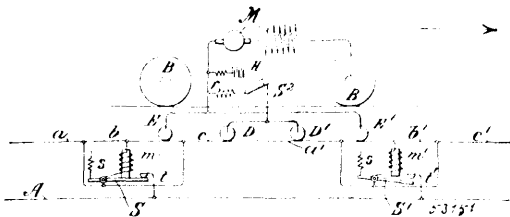
No. 53,150. Electric Railway. (Chemin de fer électrique.)



Frederick Carleton Esmond, Brooklyn, New York, U.S.A., 5th August, 1896; 6 years. (Filed 17th December, 1895.)

Claim.—1st. The combination of line conductors with working contact sections or points normally connected in pairs through a magnet circuit when the sections are disconnected from line, and a switch or set of switches actuated by the magnet on the presence of a car for breaking the first named magnet circuit, and connecting the corresponding contact sections respectively to opposite sides of the line circuit as set forth. 2nd. The combination of line conductors with working conductor sections or points arranged in pairs, collectors on the car connected to opposite terminals of the motor or motors, a magnet connected when de-energized in a circuit bridging the working sections of each pair, and a switch or set of switches actuated by the magnet for breaking the first named magnet circuit, connecting the conductor sections with opposite sides of the line circuit, and including the magnet in the line circuit as set forth. 3rd. The combination of line conductor and working conductor sections or points with a switch or set of switches normally disconnecting the line conductors from the contact sections, but connecting the sections constituting each pair through a magnet, collectors travelling with the car, and means for forming a circuit through the magnet by the collectors, and thereby throwing the magnet into line circuit, as set forth. 4th. The combination of an all-metallic supply circuit, pairs of contact sections or points, sets of collectors connected respectively to opposite terminals of the motor or motors, a switch for each pair of contact sections, a magnet for each switch in a circuit joining the sections of each pair when the line circuit is open, and adapted to throw the switch when energized, so as to break the magnet circuit between the contacts and couple the latter respectively to the line conductors, and means for holding the switch in the position closing the line circuit while the motor current is being collected from any given section or sections, as set forth. 5th. The combination of supply conductors, sectional working conductors between each branch of the motor circuit and the corresponding supply conductor, the sections being normally insulated from the corresponding supply conductors, switches for coupling the working sections to the respective supply conductors, and collectors on the car connected to opposite terminals of the motor, and bridging from one set of positive and negative sections to a similar set of sections, for establishing the circuit shunting the motor for throwing an advance set of working sections into circuit with the respective supply conductors. 6th. The combination of supply conductors, pairs of contact points or sections, forming sectional positive and negative working conductors, a series of switches for connecting the sections with the corresponding supply conductors, a magnet for operating each switch, whose terminals are joined to the contact sections making up a pair in the open position of the line switches, and collectors joined to opposite terminals of the motors, as set forth. 7th. The combination of an all-metallic supply circuit, pairs of contact sections or points, a magnet for each pair of sections normally in circuit between them, a switch or set of switches through which the circuit of the magnets is closed as described, when the line is open, and adapted when thrown, to connect the respective contacts to opposite sides of the line circuit, and means for establishing the circuit through each magnet when the car is over the corresponding contact sections, as set forth. 8th. In an alternating current railway system, the combination of an alternating source of supply, distributing mains and transformers with working conductor sections or points arranged in pairs, and forming the positive and negative conductors, a switch or set of switches for each pair of contact sections normally connecting the sections through a magnet and means for operating the switches on the presence of the car, so as to connect the working sections respectively with opposite branches of the accessory circuit of the transformer or transformers, as set forth.

No. 53,151. Electric Railway. (Chemin de fer électrique.)

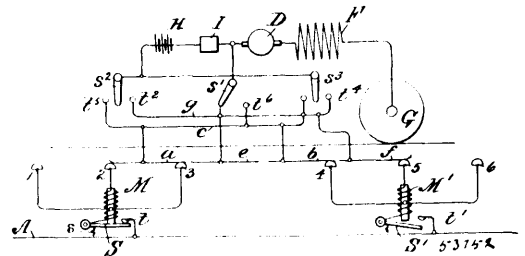


Frederick Carleton Esmond, Brooklyn, New York, U.S.A., 5th August, 1896; 6 years. (Filed 17th December, 1895.)

Claim.—1st. The combination in an electric railway of a supply conductor, working conductor sections or points arranged in sets of three, switches and magnets for operating the switches with double collectors so arranged and spaced with reference to the conductor sections that one spans the adjacent end sections of adjoining sets of conductors, while the second spans the central sections of the said sets for establishing a circuit through the magnet of an advance set of sections. 2nd. The combination in an electric railway of a supply conductor, working conductor sections or points arranged in sets of three, a switch adapted to connect all three sections making up each set to the supply conductor when closed, and an electro magnet for each switch having an energizing coil connected between at least two of such sections when the switch is in the open position,

as set forth. 3rd. The combination in an electric railway of a supply conductor, a series of working sections or points arranged longitudinally one after the other in the direction of the line of travel, and divided into sets, each of which comprises three successive sections switches adapted to connect the different sets of working conductors to the supply conductor, magnets for actuating the switches having a coil connected between two at least of the sections of each set when the switches are open, and collectors on the car arranged to form a circuit for a live section of one such set through the magnet of an advance set of sections for closing the corresponding advance switch, as set forth. 4th. The combination in an electric railway of a supply conductor, working conductor sections arranged in sets of three, a magnet and switch for each such set, and collectors on the car forming multiple paths to the motor at the time when an advance switch is to be closed, one path including the magnet operating the switch of a rear set of sections, and the other the magnet of an advance set of sections for closing the corresponding switch, as set forth. 5th. The combination in an electric railway of a supply conductor, working conductor sections or points arranged in sets of three, magnets and switches for connecting the sets of working conductor sections with the supply conductor, and collectors on the car resting on four sections and forming multiple circuits from the supply conductor at the time when the magnet of an advance set of sections is energized, one such circuit leading direct from one section to the motor, and the other circuit including the remaining three sections in series, as set forth. 6th. The combination in an electric railway of a supply conductor, working conductor sections or points arranged in sets of three, switches for connecting the said sets of sections with the supply conductor, and electro-magnets for operating the switches, the central section of each set being normally connected to the end sections of the said set through coils on the corresponding magnet, as set forth. 7th. The combination in an electric railway of an insulated supply conductor, working conductor sections or points arranged in sets of three, a switch-box for each set of sections, located outside the track, connections leading from the three sections of a set to a switch-box, and a switch for connecting the sections with the supply conductor, as set forth. 8th. The combination in an electric railway of a supply conductor, working conductor sections or points arranged in sets of three, double collectors arranged as described, and a battery or other source of current adapted to be connected to the different collectors, as set forth.

No. 53,152. Electric Railway. (Chemin de fer électrique.)



Frederick Carleton Esmond, Brooklyn, New York, U.S.A., 5th August, 1896; 6 years. (Filed 17th December, 1895.)

Claim.—The combination of an insulated supply conductor, a series of working contact sections normally disconnected from the supply conductor, a series of switches for connecting the contact sections with the supply conductor, and a series of electro magnets for operating the switches whose coils are connected at an intermediate point in such manner as to form a path for current through only a portion of the magnet coils, as set forth. 2nd. The combination of an insulated supply conductor, a series of working contact sections, a series of switches for connecting the working sections with the supply conductor, a series of electro-magnets for operating the switches and collectors on the car arranged to include the magnet of an advanced section or set of sections in series between a rear section and the motor, closing successively the different switches, as set forth. 3rd. The combination of an insulated line conductor, a series of working contact sections normally disconnected from the line conductor, switches for connecting the line conductor and working sections, electro-magnets for operating the switches having coils which are connected at an intermediate point to the contact sections, of switches and collectors on the car arranged to establish a circuit through the magnet of an advanced section, or set of sections, in series with the motor of the car and a rear section, as set forth. 4th. The combination of an insulated supply conductor, a series of collectors on the car, and a series of working conductor sections divided into sets of three and arranged along the line of travel, with a space between each set substantially equal to the distance which can be bridged by two of the collectors, as set forth. 5th. The combination of an insulated line conductor, working conductor sections divided into sets of three, a switching arrangement for connecting each set of working sections with the line conductor, and electro-magnets for operating the switches whose coils are so connected at an intermediate point to the working sections that the line current passes through only a portion of the coil, as set forth.

6th. The combination of an insulated supply conductor, a series of working conductor sections normally disconnected from the supply conductor, switches for connecting the working sections with the supply conductor, and electro-magnets for operating the switches, whose coils are connected at an intermediate point as described, and collectors on the car so arranged as to establish successively a circuit in series with the motor through the magnets for actuating an advance switch, and for including only a portion of the coils in the line circuit for holding the switches closed when they have been thrown. 7th. The combination of a supply conductor, a series of insulated working conductor sections, switches for connecting the supply conductor and sections, magnets for operating the switches, collectors establishing a circuit through the magnets in series between the line and motor for operating the switches, and a battery on the car connected in multiple with the line circuit through one of the magnets. 8th. The combination of a supply conductor, a series of insulated working conductor sections, switches for connecting the supply conductor and working sections, collectors on the car establishing a circuit through the magnets in series between the line and motor for operating the switches, a storage battery on the car, and switches on the car for connecting the battery so as to place the battery in a shunt circuit, shunting the line circuit through one of the magnets for a given direction of travel, and shunting a second magnet for the reverse direction of travel.

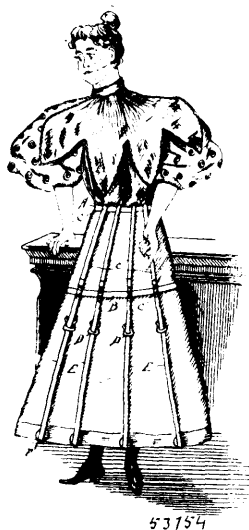
No. 53,153. Dessin de toute nature.

(Designs for decoration purposes.)

Marie Elmina Lefebvre, dite sœur Marie de l'Eucharistie, Québec, Québec, Canada, 5 août 1896; 6 ans. Déposé, 3 août 1896.

Résumé. — 1°. Dans un procédé de reproduction d'objets sur une surface plane et transparente telle que la vitre ou son équivalent le tracé du dessin par la photographie ou la transmission tel que décrit pour les fins mentionnées. 2°. Dans un procédé de décors d'objets reproduits sur verre, etc. la combinaison de Flowing Gelatine Colours, de l'aquarelle, de la peinture dite électrique ou leur équivalent, tel que décrit pour les fins susmentionnées. 3°. Dans un procédé de reproduction d'objets sur une surface plane, l'usage de nacre de perle, de cristaux, naturels ou artificiels, obtenus par déposition ou décomposition, soit sur place, ou autrement, de mica ou de métaux lamines tel que décrit pour les fins susdites. 4°. Dans un procédé de reproduction la manière de mettre le sujet en relief, par l'usage de vitre flexible de celluloid de gélatine ou de leurs équivalents, colorés au verso ou non tel que spécifié pour les fins susdites. 5°. Dans un procédé de reproduction d'images ou paysages sur une surface plane la combinaison de moyens par la vitre, les Flowing Gelatine Colours, la peinture dite électrique, le nacre de perle, les cristaux, les diamants, les métaux lamines, le verre flexible, pour les fins susmentionnées. 6°. Une combinaison de procédé de dessins et d'application de nacre de perle ou autres articles brillants, donnant à l'ensemble d'un tableau ou autre ouvrage d'art l'apparence d'une mosaïque romaine, le tout tel que décrit pour les fins mentionnées.

No. 53,154. Skirt Holder or Elevator. (Relève-jupe.)



Katie D. Head, Laurenceburg, Kentucky, U.S.A., 6th August, 1896; 6 years. (Filed 13th June, 1896.)

Claim. — The skirt holder described, consisting of an upper belt, a lower belt of greater diameter, straps connecting the upper and lower belt and having loops through which said belts are loosely

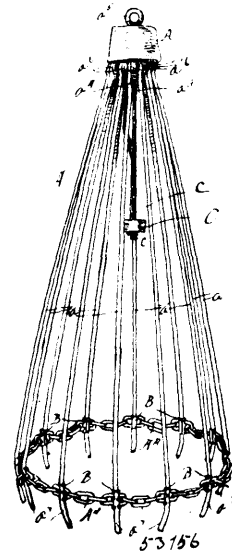
passed, said straps being extended beyond the lower belt and provided with loops and buckles held herein, clasp-carrying straps extending from the lower belt adapted to pass through and be adjustably held in said buckles, and clasps mounted in hangers on the lower ends of said straps and adapted to engage the bottom of the skirt, substantially as described.

No. 53,155. Process of Manufacturing Fermented and Distilled Liquors. (Procédé pour la fabrication de liqueurs fermentées et distillées.)

Angelo Myers, Philadelphia, Pennsylvania, U.S.A., 6th August, 1896; 6 years. (Filed 11th February, 1896.)

Claim. — 1st. In the manufacture of fermented and distilled liquors, the process of converting the starch contained in the mash into sugar, which consists in supplying to said mash, when said mash is at a temperature of from 110 to 170 degrees Fahrenheit, liquid in which bran has been steeped, substantially as specified. 2nd. In the manufacture of fermented and distilled liquors, the process of converting the starch contained in the mash into sugar, which consists in supplying to said mash, when said mash is at a temperature of from 110 to 170 degrees Fahrenheit, water and bran which have been standing commingled for from 18 to 36 hours at a suitable temperature, substantially as described. 3rd. In the manufacture of fermented and distilled liquors, the process of converting the starch contained in the mash into sugar, which consists in supplying to said mash, when said mash is at a temperature of from 110 to 170 degrees Fahrenheit a solution of bran, in the proportion of six to twelve pounds of bran, in the solution to the mash bushel, substantially as specified.

No. 53,156. Chimney Cleaner. (Nettoyeur de cheminée.)



Sylvester A. Wood, Manitowoc, Wisconsin, U.S.A., 6th August, 1896; 6 years. (Filed 22nd July, 1896.)

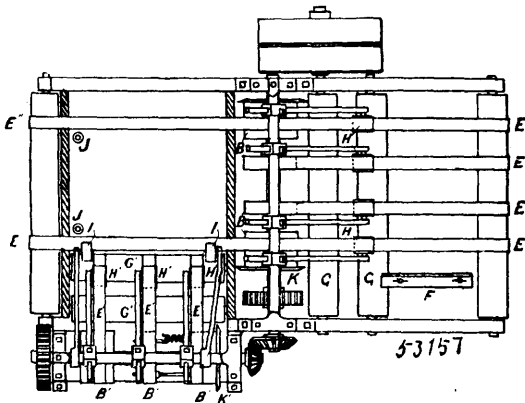
Claim. — 1st. In a chimney cleaner, the combination with an endless chain, of means to maintain said chain, normally, yieldingly expanded, said means comprising spring rods relatively long as compared with the size of the flues to be cleaned by said cleaner, so that said rods will extend substantially lengthwise of said flues, when the cleaner is inserted therein, a head to which one end of each of said rods is rigidly secured and the said endless chain being secured adjacent to the opposite ends of said rods, substantially as described. 2nd. In a chimney cleaner, the combination with an endless chain, of means to maintain said chain, normally, yieldingly expanded, said means comprising spring rods, relatively long as compared with the size of the flues to be cleaned by said cleaner, so that said rods will extend substantially lengthwise of said flues, when the cleaner is inserted therein, a head to which one end of each of said rods is rigidly secured, the endless chain being secured to said rods at a short distance from their opposite ends and the extreme ends of said rods, which project beyond said chain, being inwardly bent or curved, substantially as set forth. 3rd. In a chimney cleaner, the combination of an endless chain, spring rods, adjacent to one end of which said chain is secured and a head in which the opposite ends of the said rods are secured, said head comprising a core and an inclosing shell, between which said rods are inserted, substantially as described. 4th. In a chimney cleaner, the combination of an endless chain, spring rods adjacent to one end of which said chain is secured and a head in which the opposite ends of said rods are secured, said head comprising a core and an inclosing shell between

which said spring rods are inserted, the extreme inner ends of said rods being bent, substantially at right angles and engaging grooves formed in the inclosed end of said core, substantially as described.

5th. In a chimney cleaner, the combination of an endless chain, spring rods adjacent to one end of which said chain is secured and a head in which the opposite ends of the said rods are confined, said head comprising a core and an inclosing shell between which said spring rods are inserted, said rods being adjusted to grooves formed in the sides of said core and the extreme inner ends of said rods being bent, substantially at right angles, and engaging continuations of said grooves formed in the inclosed end of said core, substantially as described.

No. 53,157. Machine for Trimming Paper.

(Machine à préparer le papier.)

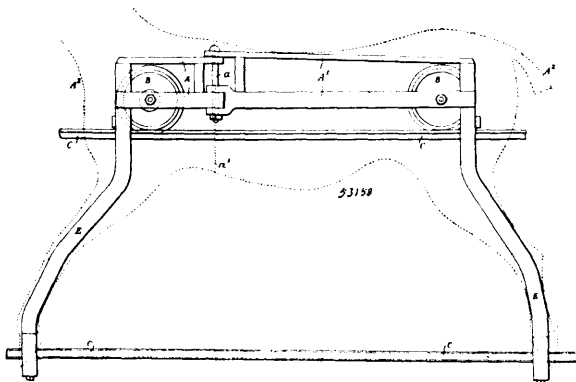


Robert Noble Adams, Dunedin, New Zealand, 6th August, 1896; 6 years. (Filed 10th June, 1896.)

Claim.—1st. In a machine for trimming paper, the combination of rollers A, A', A², B, B', B², having circular revolving knives secured to one or both ends as needed K, K', K², with tapes E, E², E', guide rollers G, G', and adjustment pulleys H, H', and automatic feed rollers I I worked by cams L L, substantially as described and shown. 2nd. The method of trimming paper in and by a machine consisting of rollers, circular knives, and feed gear in which one or two sets of such rollers are used, as described and shown on the drawing. 3rd. The method of keeping the upper knives pressing against the lower ones, by springs C, or spring washers C², and preventing their riding by distance bolts D, D², and the method of feeding to the second set of rollers by the pulleys I I, in a machine for trimming paper as described and shown.

No. 53,158. Switchback Railway.

(Aiguille de chemin de fer.)



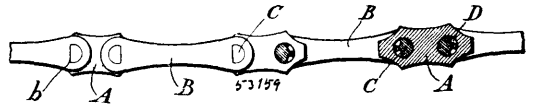
John William Cawdery, Oxford Street, London, England, 6th August, 1896; 6 years. (Filed 21st July, 1896.)

Claim.—1st. Continuous sets of undulating rails formed with curves and inclines at both ends of the track. 2nd. Standards for supporting the rails at intervals provided with side guide rails c, vehicles for travelling on the curved rails formed of (1) frames made in two or more parts, (2) vertical joints or hinges for connecting said parts together, (3) jointed bodies or shells mounted on said frames, (4) wheels mounted on the main part of the frames, and (5) friction rollers mounted on depending extensions of the frames, all substantially as hereinbefore described.

No. 53,159. Drive-Chain. (Chaîne sans fin.)

John Moore, St. Louis, Missouri, U.S.A., 6th August, 1896; 6 years. (Filed 21st July, 1896.)

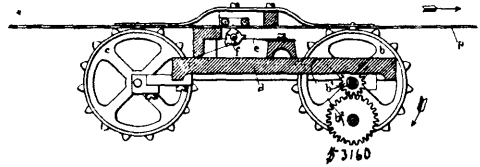
Claim.—A driving chain comprising central links having two cylindrical holes, the side links, the connecting pins having segmen-



tal concentric chambers located on one side thereof, and the rollers of slightly greater diameter than the depth and adapted to roll to and fro and move back and forth within said concentric segment chamber, substantially as described.

No. 53,160. Automatic Musical Instrument.

(Instrument de musique automatique)

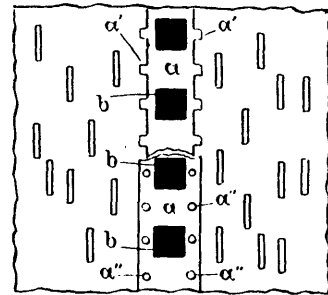


Adolph Richter, Rudolstadt, Schwarzburg-Rudolstadt, Germany, 6th August, 1896; 6 years. (Filed 8th July, 1896.)

Claim.—1st. In a mechanical musical instrument, the combination of two toothed music sheet controlling wheels arranged one behind the other in the same line, a music sheet having regularly spaced engaging apertures in the middle of the line of notes adapted to be engaged by the controlling wheels, substantially as described and for the purpose specified. 2nd. In a mechanical musical instrument a music sheet presser bar having two parallel and loosely revolving rods and in the middle an arm provided with one or more slots for the engagement of the teeth of the music sheet controlling wheel, substantially as described. 3rd. In a fly wheel for mechanical musical instruments, the combination of two overlapping wings pivoted parallel to the driving shaft and which overlap to their greatest extent when the fly is in position of rest, a connecting piece pivoted to each of said wings and carried thereby, whereby a movement of one wing will cause a corresponding movement of the other wing and a parallelism will always be maintained between the fans. 4th. In a mechanical musical instrument, the combination of a winding arbor, a main spring connected therewith, a spring-pressed arm pivoted on said arbor and tending to turn therewith, the free end of said arm having a notch therein, a spring-pressed pawl having a pin thereon adapted to be engaged by said arm and be received within the notch therein, and a ratchet-wheel adapted to be engaged by said pawl, whereby, when the arm starts to move in one direction, the pin upon the pawl is engaged by the arm and forced into the socket thereof to hold the pawl out of engagement with the ratchet and when said arm starts to turn in an opposite direction, the pawl will be released from engagement with said arm and be forced, by means of the spring thereof, into engagement with the ratchet, substantially as described.

No. 53,161. Note Sheets for Mechanical Musical Instrument.

(Feuille de musique pour instrument de musique mécanique.)



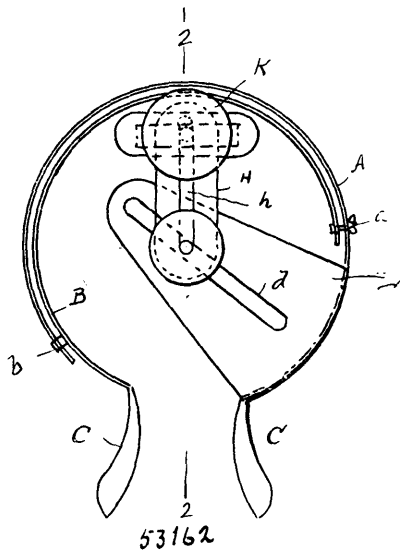
Rudolf Richter, Rudolstadt, Schwarzburg-Rudolstadt, Germany, 6th August, 1896; 6 years. (Filed 8th July, 1896.)

Claim.—1st. The combination of a music sheet of paperboard, paper or similar material, one or more metallic strips connected to said sheet and engaging means on said metallic strip or strips for co-operation with the driving means of a music box. 2nd. The combination of a music sheet of paperboard, paper or similar material, one or more metallic strips connected to said sheet and extending in the direction of the movement of the music sheet throughout the extent thereof and apertures in said metallic strip or strips for engagement with driving means of a music box, substantially as described. 3rd. The combination of a music sheet of paperboard,

paper or similar material, one or more metallic strips, each of which has tines struck up therefrom to form a plurality of holes, the tines being clamped to the music sheet to connect the metallic strip or strips thereto and to form metallic facings for the holes in the music sheets. 4th. An endless music sheet for mechanical musical instruments consisting of an upper and an under folding and at both sides between the same harmonica-like foldings, the upper and the under folding being about twice as long as the harmonica-like foldings, substantially as described.

No. 53,162. Can-Opener.

(Machine à ouvrir les boîtes métalliques.)



Claude Vernon Zinn, Ogden, Utah, U.S.A., 6th August, 1896; 6 years. (Filed 22nd July, 1896.)

Claim.—1st. The can-opener herein described, composed of two adjustable bands one of which is mounted in the other, and the outer ends of which are provided with a handle, a radial cross-plate secured to the upper side of one of said bands, and provided with a longitudinal slot, a bolt passing through said slot, an arm connected with said bolt and provided with a longitudinal slot through which said bolt passes, and a knife or cutter comprising a handle, a shank which passes through the slot in said arm and a cutting-blade secured to the lower side of said shank, substantially as shown and described. 2nd. The can-opener herein described, composed of two adjustable bands one of which is mounted in the other, and the outer ends of each are provided with a handle, a radial cross plate secured to the upper side of one of said bands, and provided with a longitudinal slot, a bolt passing through said slot, an arm connected with said bolt and provided with a longitudinal slot through which said bolt passes, and a knife or cutter comprising a handle, a shank which passes through the slot in said arm and a cutting-blade secured to the lower side of said shank, and said knife or cutter being also provided at the lower end of the handle with a guard-plate, substantially as shown and described. 3rd. A can-opener comprising two adjustable bands, which are adapted to inclose the end of a can, a radial plate secured to one of said bands, and extending inwardly, and a longitudinally adjustable bolt passing through said plate, an arm connected with said bolt and provided with a longitudinal slot, and a cutter comprising a handle and a blade connected therewith, said handle being provided with a shank which passes through the slot in said arm and to the lower end of which the blade is secured, substantially as shown and described.

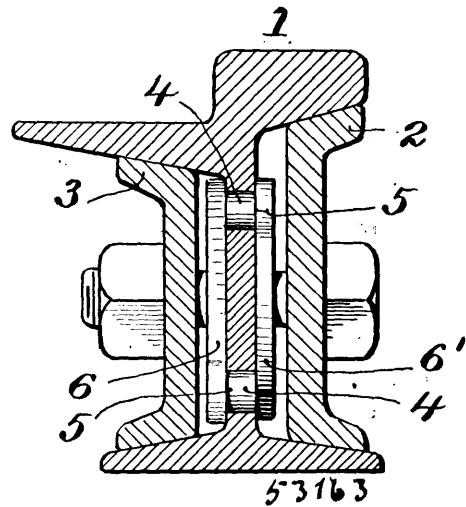
No. 53,163. Rail Bonds for Electric Railways.

(Lien de rails pour chemins de fer électriques.)

Rudd Jay Jones, Chicago, Illinois, U.S.A., 6th August, 1896; 6 years. (Filed 22nd July, 1896.)

Claim.—1st. A rail bond for electric railways, comprising a loop-shaped portion of a thin flattened formation in cross section, and rivet studs arranged to project laterally from the respective ends of the body portion of the bond and adapted to fit orifices in the rail ends, and be secured therein, the construction being such that the loop-shaped body portion will occupy a vertical plane, next to the rail web, and between the same and the fish-plate, substantially as herein described. 2nd. A rail bond for electric railways, comprising the rails 1, and fish-plates 2 and 3, in combination with a pair of loop-shaped bond members 6 and 6', having lateral rivet

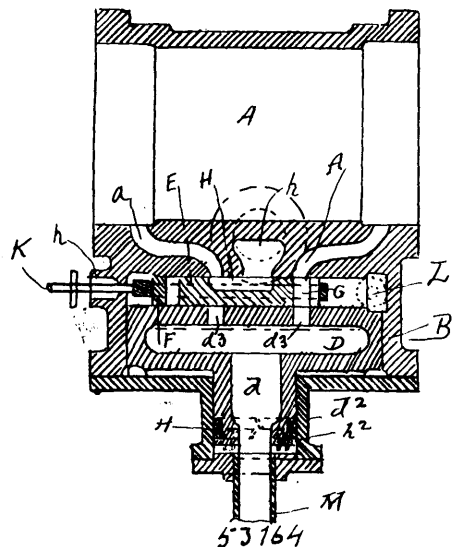
studs 5 on their respective ends, the one bond member having a greater spread than the other in order to bring the rivet studs



thereof out of line with the other member, such bond members being arranged on opposite sides of the rail webs, and between the same and the fish-plates, substantially as and for the purpose set forth.

No. 53,164. Steam Valve for Steam Cylinders.

(Tiroir pour cylindres.)



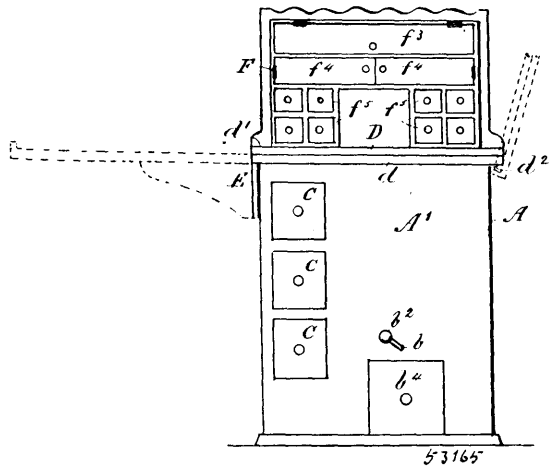
Matthew Berger, South Bethlehem, Pennsylvania, U.S.A., 6th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. The combination with a steam cylinder provided with a steam chest at one side thereof, which is provided with a tubular extension, of a steam receiver within said chest and provided with a tubular piston or extension which enters said tubular extension of the steam chest and said tubular extension or piston being provided with a packing ring or rings and follower and the steam cylinder being provided at each end with supply passages which curve inwardly and outwardly and which communicate with the steam chest and a balanced valve which is placed within the steam chest and between the walls of the steam chest and the steam receiver, said balanced valve being provided with two transverse passages, and said steam receiver with two similar ports or passages and said valve being also provided in its cylinder side with an exhaust passage which is formed therein and which is adapted to communicate with the supply passages of the cylinder and also with

the exhaust pipe thereof, substantially as shown and described. 2nd. The combination with a steam cylinder provided with a steam chest at one side thereof, which is provided with a tubular extension, of a steam receiver within said chest, and provided with a tubular extension or piston which enters said tubular extension of the steam chest, and said tubular extension or piston, being provided with a packing ring or rings and follower and the steam cylinder being provided at each end with supply passages which are curved inwardly and outwardly and which communicate with the steam chest and a balanced valve which is placed within the steam chest and between the walls of the steam chest and the steam receiver, said balanced valve being provided with two transverse passages, and said steam receiver with two similar parts or passages, and said valve being also provided in its cylinder side with an exhaust passage which is formed therein and which is adapted to communicate with the supply passages of the cylinder and also with the exhaust pipe thereof, and said valve being provided with a rod which passes through one of the ends of the steam chest and said steam chest being provided with an escape pipe or passage, substantially as described. 3rd. The combination with a steam cylinder provided with supply passages as *a*, at each end thereof, and a steam chest formed on or secured to, one side thereof, of a steam receiver within said steam chest and a balanced valve mounted within said steam receiver, and said cylinder and said balanced valve being provided with transverse passages and said steam receiver being provided with ports or openings adjacent to said valve, and the inner side of said valve being also provided with an exhaust passage which is adapted to communicate with the supply passages of the cylinder, and with the exhaust pipe, said valve being also provided with an operating rod and said steam chest with an escape pipe, substantially as shown and described.

nalls of the rollers and consisting of a longitudinal concave strip having two integral cross bars, with a detachable strip adapted

No. 53,165. Kitchen Cabinet. (Cabinet de cuisine.)



Wesley Albert Young, Jefferson, Iowa, U.S.A., 6th August, 1896; 6 years. (Filed 20th July, 1896.)

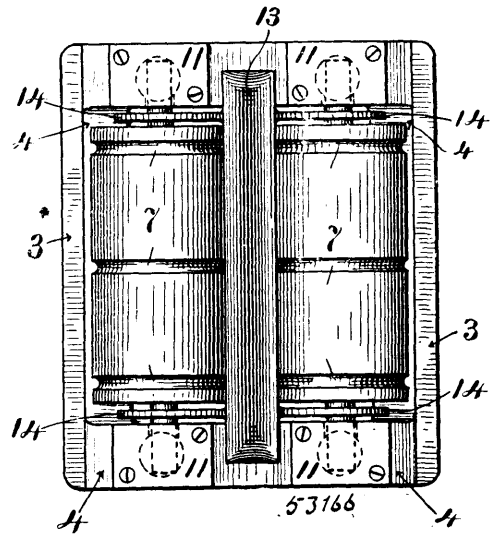
Claim.—A kitchen cabinet, comprising a main portion, a board forming the top of the main portion, the board being composed of two sections, the lower section being hinged to the main portion at one end, and the upper section being hinged to the lower section at the opposite end to that at which the lower section is connected to the main portion and being provided at its free end with an overhanging flange, and an arm pivotally connected to the main portion and adapted to support the board when extended, whereby a cover for the main portion, and a mold board having its face protected from dirt, etc., when not in use, is provided, substantially as described.

No. 53,166. Car Axle Lubricator. (Graisseur d'essieux de chars.)

(*Graisseur d'essieux de chars.*)

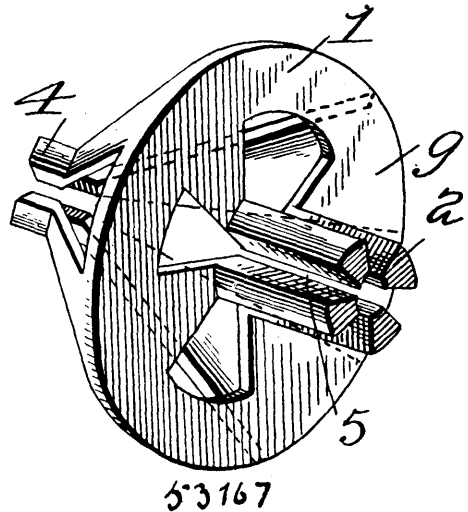
James Donovan, Brockville, Ontario, Canada, 6th August, 1896; 6 years. (Filed 21st July, 1896.)

Claim.—1st. In a railway journal box, a lubricator having a detachable strip along each longitudinal side of its frame, said strip having projecting pins to enter adapted holes in the frame of the lubricator, substantially as shown and described. 2nd. In a railway journal box, the combination of a lubricator consisting of an open frame, a pair of rollers journaled therein, cylindrical bearings supported on springs in chambers in said frame, cap plates over said bearings and springs, an oil distributing frame carried on the jour-



to be attached on opposite longitudinal sides of said lubricator frame, substantially as shown and described.

No. 53,167. Speed Pulleys. (Poulie de vitesse.)



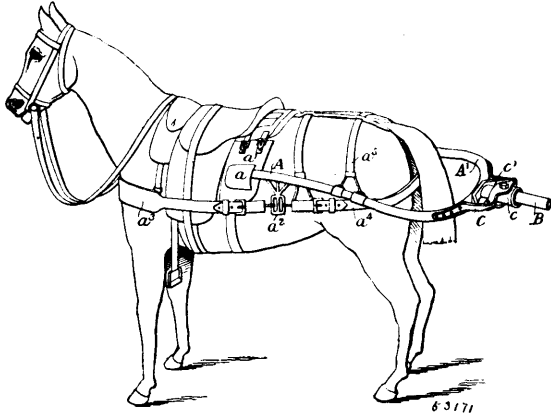
William Mathews McIntyre, Edgewood Park, Pennsylvania, U.S.A., 7th August, 1896; 6 years. (Filed 21st July, 1896.)

Claim.—1st. A speed pulley consisting of two interlocking skeleton sections, each of said sections comprising an elongated hub having a series of recesses extending lengthwise thereof, a ring extending from the front of each hub, and a series of inclined tapering segments in each ring alternating in position, the lower ends of the segments fitting the recesses in the hub, substantially as described. 2nd. A speed varying device, consisting of two pulleys, each comprising two interlocking sections, one stationary and the other slidable, a movable frame supporting one pulley, arms for moving the slidable sections longitudinally, one of said arms being bifurcated and having a loose connection with the slidable section to permit of the adjustment of the supplemental frame, substantially as described. 3rd. In combination, the main frame, the supplemental adjustable frame, a pulley carried by each of said frames comprising a stationary and slidable section, arms for moving said slidable sections, the connection between the arms and sections including a cap loosely fitted to the end of the hub of the slidable section, and projections 7 on said cap fitting the bifurcated end of the arm, sub-

of the other slot in the face plate, and pivoted dogs adapted to receive motion from the dial plate and longitudinally move the day date slide plate, substantially as described. 5th. In a calendar, the combination with a casing, having parallel slots in its face plate, and a rotary year date plate in the casing, a dial plate having a raised rim and a series of ears on the inner edge of said rim, of a slidable day date plate in the casing opposite one of the slots in said casing, and pivoted dogs engaging each other, one of the dogs engaging a notch in the slidable plate, both dogs being adapted to receive the impinge of the ears of the dial plate for the slidable movement of the day date plate, substantially as described.

No. 53,171. Traction Arrangements for Vehicles.

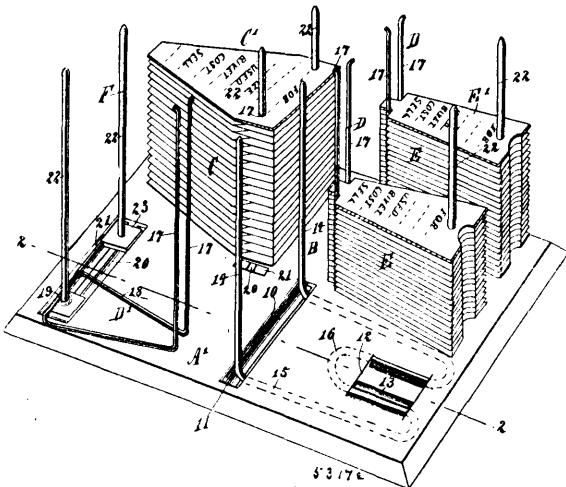
(Arrangement à traction pour véhicules.)



The Right Honourable Douglas Mackinnon Baillie Hamilton Cochrane, Earl of Dundonald, London, England, 7th August, 1896; 6 years. (Filed 7th July, 1896.)

Claim.—1st. A traction arrangement for a vehicle consisting of a pair of shafts or of a splinter bar with pole and shafts carried by the horse or horses, an arm projecting from the vehicle, and a readily separable connection of the arm to the shafts or splinter bar, substantially as and for the purpose set forth. 2nd. The separable connection of the vehicle arm to the shafts, constructed and operating substantially as described with reference to figures 2 to 6, inclusive. 3rd. The modified construction, substantially as described with reference with figure 7. 4th. A traction arrangement for a vehicle, consisting of a fore carriage attached to the horse or horses, an arm projecting from the vehicle, and a readily separable connection of the arm to the fore carriage, substantially as described with reference to figure 9.

No. 53,172. Device for Filing, Storing Sickle Sections, Ledger Plates, etc. (Porte-lames de faucheuses.)

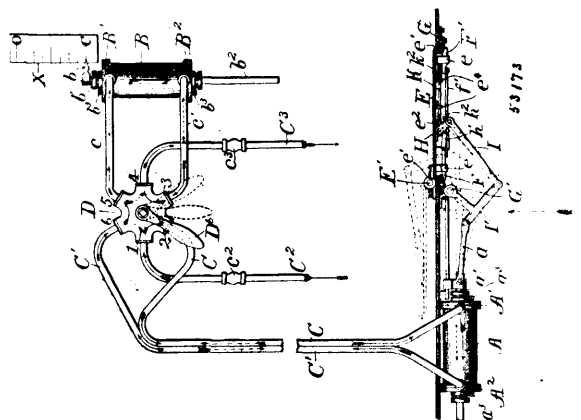


Daniel Henderson, Kingsley, Iowa, U.S.A., 7th August, 1896; 6 years. (Filed 6th July, 1896.)

Claim.—1st. In a device for filing sickle sections, ledger plates and the like, a holder, comprising posts, horizontal spring arms connecting the posts, and a base to which the arms are attached and on which the posts have movement to and from each other, substantially as shown and described. 2nd. In a device for filing sickle sections, ledger plates and the like, the combination, with a

support having openings therein at right angles to one another, and flanges formed at the side of the openings below the plane of the upper surface of the base, of a holder constructed of spring material and comprising parallel posts extending out through one of the openings in the said support, engaging with the flange of the same, horizontal base arms extended from the base beneath the support, and an arched connection between the said arms, the members of the connecting arch being supported by the flanges formed at the second openings in the support, as and for the purpose specified. 3rd. In a device for filing sickle sections, ledger plates and the like, the combination, with a standard of holder connected therewith, comprising a base section and standards projected upward in parallel lines from one end of the base section in front of the said standard, the holder being constructed of a spring material, and especially adapted, together with the post, for the filing of ledger plates, as and for the purpose specified. 4th. The combination, with adjustable standards or posts, and a support for the same, of sickle sections, the standards or posts being passed through the rivet holes of the said sections, as and for the purpose specified. 5th. The combination, with adjustable standards or posts, and a support for the same, of sickle sections, the standards or posts being passed through the rivet holes of the said sections, and a listing blank supported upon the uppermost sickle section, the said listing blank bearing information relative to the use, size and cost of the said plates covered by the blank, as and for the purpose specified. 6th. The combination, with a standard and a support for the same, of a holder constructed of a spring material, comprising parallel uprights diverging at their upper ends, base arms projecting from the bottom portions of the said uprights outwardly in opposite directions, being connected at their wider ends and formed with an eye between the said connected ends, arranged to receive the said standard, ledger plates through the rivet holes of which the standard is passed, the contracted end portion of the said plates being clamped between the uprights of the holder, as and for the purpose specified. 7th. The combination, with a standard and a support for the same, of a holder constructed of a spring material, comprising parallel uprights diverging at their upper ends, base arms projected from the bottom portions of the said uprights outwardly in opposite directions, being connected at their wider ends and formed with an eye between the said connected ends, ledger plates through the rivet holes of which the standard is passed, the contracted end portions of the said plates being clamped between the uprights of the holder, and a listing blank supported by the holder and standard on the uppermost ledger plate, the said listing blank being adapted to contain information relative to the size, character and cost of the ledger plates over which it is located, as and for the purpose specified. 8th. A holder for ledger plates, comprising a substantially triangular base, being open at its contracted end and provided with an eye at its wider end, and parallel uprights connected with the extremities of the side portions of the base at the contracted end thereof, substantially as described. 9th. In a device for filing sickle sections, ledger plates and the like, a listing blank of a shape corresponding to the shape of the article in connection with which it is to be used, and adapted to be held by the same holder upon which the said article may be filed, the listing blank being provided with spaces indicating the character of the machine to which the article belongs, the size of the article, the size and number of the rivet required, together with the cost and selling price and similar information, as and for the purpose set forth.

No. 53,173. Hydraulic System for Closing Watertight Bulkheads on board Ships, etc. (Système hydraulique pour mettre les cloisons étanches à bord des vaisseaux.)



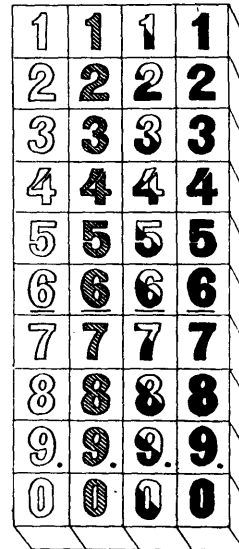
William Barnum Coules, Cleveland, Ohio, U.S.A., 7th August, 1896; 6 years. (Filed 2nd July, 1896.)

Claim.—1st. In a hydraulic system of the character described, the combination with a plurality of fluid circuits, of an operating cylinder in each of said circuits, a piston in each of said cylinders, valves

for controlling the admission of fluid pressure to said cylinders, with mechanism operated by one of said pistons for controlling the valves of a plurality of the other cylinders, substantially as described. 2nd. In a hydraulic system of the character described, the combination with a plurality of fluid circuits, of an operating cylinder and an indicating device in each of said circuits, a piston in each of said cylinders, a valve in each circuit for controlling the admission of fluid pressure to the cylinder in that circuit, with mechanism operated by one of said pistons for controlling the valves of a plurality of the other cylinders, substantially as described. 3rd. In a hydraulic system of the character described, the combination with a plurality of fluid circuits, of an operating cylinder in each of said circuits, a door and mechanism for moving the same operated by said cylinders, valves for controlling the admission of fluid pressure to said cylinders, with mechanism operated by one of said cylinders for controlling the valves of a plurality of the other cylinders, substantially as described. 4th. In a hydraulic system of the character described, the combination with a plurality of fluid circuits, of an operating cylinder and an indicating device in each of said circuits, a swinging door and mechanism for swinging the same operated by said cylinders, a valve in each circuit for controlling the admission of fluid pressure to the cylinder in that circuit, with mechanism operated by one of said cylinders for controlling the valves of a plurality of the other cylinders, substantially as described. 5th. In a hydraulic system of the character described, the combination with a plurality of fluid circuits, of an operating cylinder in each of said circuits, valves independently controlled for regulating the admission of fluid pressure to said cylinders, with mechanism operated by one of said cylinders for simultaneously controlling the valves of a plurality of the other cylinders, substantially as described. 6th. In a hydraulic system of the character described, the combination with a plurality of fluid circuits, of an operating cylinder and an indicating device in each of said circuits, a valve in each circuit independently controlled for regulating the admission of fluid pressure to the cylinder in that circuit, with mechanism operated by one of said cylinders for simultaneously controlling the valves of a plurality of the other cylinders, substantially as described. 7th. In a hydraulic system of the character described, the combination with a plurality of fluid circuits, of an operating cylinder in each of said circuits, a door and mechanism for moving the same operated by said cylinder, valves independently controlled for regulating the admission of fluid pressure to said cylinders, with mechanism operated by one of said cylinders for simultaneously controlling the valves of a plurality of the other cylinders, substantially as described. 8th. The mechanism for swinging a hinged door through approximately 180° about its hinges, comprising a T-lever pivoted on the opposite side of the door frame from said hinges, a reciprocating rod pivotally connected to one arm of said T-lever, a crank and crank shaft journaled on said door, and a connecting rod between the other arm of said T-lever and the said crank, substantially as described. 9th. The mechanism for swinging a hinged door through approximately 180° about its hinges and for automatically locking and unlocking said door comprising a reciprocating part, a T-lever pivoted on the opposite side of the door frame from said hinges and connected to said reciprocating part, a crank and crank shaft journaled on said door, means for automatically locking said crank shaft against revolution and for releasing the same when the door is in approximately the closed position, bolts carried by said door, and mechanism operated by said crank shaft when released for reciprocating said bolts, substantially as described. 10th. The mechanism for swinging a hinged door through approximately 180° about its hinges and for automatically locking and unlocking said door comprising a reciprocating part, a T-lever pivoted on the opposite side of the door frame from said hinges and connected to said reciprocating part, a crank and crank shaft journaled on said door, means for automatically locking said crank shaft against revolution and for releasing the same when the door is in approximately the closed position, wedge-shaped bolts sliding in guides carried by the door, crank arms on said crank shaft, and links connecting said bolts with said crank arms, substantially as described. 11th. The mechanism for swinging a hinged door through approximately 180° about its hinges and for automatically locking and unlocking said door, comprising a reciprocating part, a T-lever pivoted on the opposite side of the door frame from said hinges and connected to said reciprocating part, a crank and crank shaft journaled on said door, a spring operated rod normally locking said crank shaft and provided with a wedge-shaped head to engage the door frame when the door is in the closed position and to release said crank shaft, wedge-shaped bolts sliding in guides carried by the door, crank arms on said crank shaft, and links connecting said bolts with said crank arms, substantially as described. 12th. The mechanism for swinging a hinged door through approximately 180° about its hinges and for automatically locking and unlocking said door, comprising a reciprocating part, a T-lever pivoted on the opposite side of the door frame from said hinges and connected to said reciprocating part, a crank and crank shaft journaled on said door, a spring operated rod normally locking said crank shaft and provided with a wedge-shaped head to engage the door frame when the door is in the closed position and to release said crank shaft, wedge-shaped bolts sliding in guides carried by the door, crank arms on said crank shaft, and links connecting said bolts with said crank arms, substantially as described. 13th. In an apparatus of the character described, the combination with a rotary valve and valve

stem of a hand crank rigidly connected to said valve stem, and an auxiliary crank loose on said valve stem and provided with a curved slot, a lug or key on said valve stem engaging in said slot and allowing the valve stem a limited rotary motion independent of said auxiliary crank through the desired angle in either direction, substantially as described. 14th. In a hydraulic system of the character described, the combination with a cylinder and an operating piston, of a door, and mechanism operated by said piston for moving said door, an indicating cylinder, a double system of pipes connected thereto, a pipe for supplying fluid pressure and an exhaust pipe, and a six-way valve located between said cylinders and adapted to connect said supply pipe with either end of said operating cylinder, to connect the opposite end of the operating cylinder with one end of the indicating cylinder, and to connect the opposite end of the indicating cylinder with the exhaust pipe, substantially as described. 15th. In a hydraulic system of the character described, the combination with an operating cylinder and mechanism operated thereby, and a reciprocating indicating device, of a double system of pipes connecting the two, a pipe for supplying fluid pressure and an exhaust pipe, and a six-way valve placed between said cylinder and said device, adapted to connect said supply pipe with either end of said operating cylinder, to connect the opposite end of the operating cylinder with one end of the indicating device, and to connect the opposite end of the indicating device with the exhaust pipe, substantially as described.

No. 53,174. Game Apparatus. (Appareil pour jeu.)

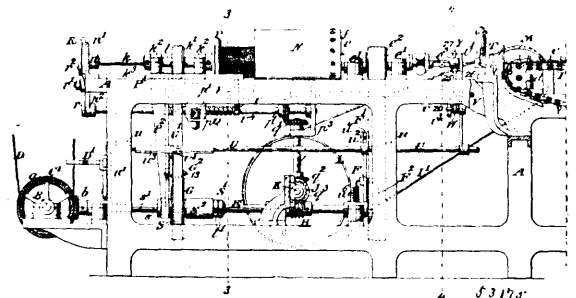


53174

William George Bristow, Kansas, U.S.A., 7th August, 1896; 6 years. (Filed 30th June, 1896.)

Claim.—The herein-described game apparatus, consisting essentially of forty blocks, arranged in four suits of ten blocks each, the blocks of each suit bearing numerals from 1 to 0 consecutively, each suit having a distinct colour, shade, or shape, and the blocks of the several suits adapted to be matched in runs or sequences and pairs, substantially in the manner and for the purpose herein specified.

No. 53,175. Spinning Machine. (Machine à filer.)



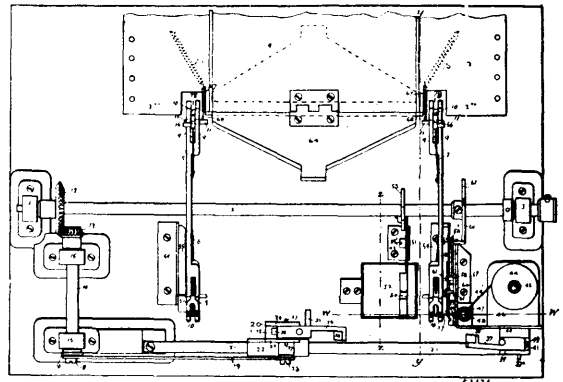
53175

John Good, Far Rockaway, New York, U.S.A., 7th August, 1896; 6 years. (Filed 8th February, 1896.)

Claim.—1st. The combination in a spinning flier, of a metal disc having a rim projecting from its face and a cylindrical seamless shell of paper fastened to said rim, substantially as herein described. 2nd. The combination with the bobbin carriage and bobbin driving spindle and a transverse screw for moving said carriage, of a pulley on said spindle, a driving shaft and a driving pulley thereon for driving the said pulley on the bobbin driving spindle, a connection between the said driving pulley and the bobbin carriage whereby the said driving pulley is moved lengthwise on its driving shaft by the bobbin carriage, and a driving belt between said pulleys, substantially as herein set forth. 3rd. The combination with the bobbin carriage and the bobbin driving spindle in said carriage furnished with a pulley, of a driving shaft, a driving pulley capable of turning about said driving shaft, a friction disc fitted to said shaft to turn therewith for driving said driving pulley, a transverse screw for moving the bobbin carriage, a connection between said carriage and the said friction disc and driving pulley whereby the said driving pulley and disc are moved lengthwise on the said shaft, and a belt between said driving pulley and the pulley on said spindle, substantially as herein set forth. 4th. The combination of a hollow bobbin driving spindle and a carriage therefor, a transverse screw for moving said carriage and a nut which connects the said carriage with said screw, a bobbin-supporting spindle movable lengthwise through said driving spindle, bearings for said supporting spindle and screw, stops for preventing the longitudinal movement of said spindle and screw in one direction and a connection between said stops whereby both are movable together to lock and unlock said spindle and screw, substantially as herein set forth. 5th. In a spinning machine comprising an endless series of gill-pin bars and gill-pins thereon, the combination with the feed rollers for supplying sliver to the gill-pins and mechanism for stopping the operation of the machine, of a stop lever for controlling said mechanism, a locking device for engaging with said stop lever to lock it in normal position to permit the running of the machine, a tripping shaft having a connection with one of said feed rollers, and a cam on said tripping shaft for disengaging said locking device from the stop lever, all substantially as herein described for producing the stoppage of the machine in case of interruption of the supply of sliver to the gill-pins. 6th. The combination with a spinning flier and driving mechanism therefor and a stop mechanism for stopping the operation of said driving mechanism, of a stop lever for controlling the operation of said stop mechanism, a locking device for locking said stop lever, and a centrifugal tappet fitted to the flier head for disengaging the said locking device from said stop lever on the interruption of the yarn or twine at the entrance to the flier, all substantially as herein set forth. 7th. The combination with the spinning flier having a transversely slotted head and driving mechanism for said flier, of a centrifugal tappet passing freely through the slot in said head, the said tappet having in it an opening for the passage of the yarn or thread into the flier and having one end heavier than the other, an automatic stop mechanism for stopping the operation of said driving mechanism and means for causing said tappet to control said stop mechanism, substantially as herein set forth. 8th. The combination with a flier and a bobbin spindle and driving mechanism therefor, of the stop shaft U arranged parallel with the flier and bobbin, means connected with said shaft for stopping the operation of said driving mechanism, the stop lever U¹ on said stop shaft, the locking lever W for locking said stop lever, the tripping shaft V arranged parallel with said stop shaft, the tripping cam v¹ on said shaft V for disengaging said locking lever, and the arm v² on said shaft V to be operated upon by the yarn or twine on a bobbin carried by said spindle for producing the operation of said tripping cam, substantially as herein set forth. 9th. The combination with a bobbin driving spindle and a carriage therefor, a traverse screw for producing a traverse movement of said carriage, a shaft for driving said spindle, a brake pulley on said shaft, a connection between the said pulley and the bobbin carriage whereby the said pulley is caused to move along the said shaft, and a spring-actuated brake attached to said carriage and means for causing said brake to operate upon the said pulley at any point in the traverse movement of the carriage, substantially as herein set forth. 10th. The combination with a bobbin-driving spindle and a carriage therefor, a transverse screw for producing a transverse movement of said carriage, a driving shaft for driving said spindle, a brake pulley on said shaft, a connection between the said pulley and the bobbin-carriage whereby the said pulley is caused to move along the said shaft, a spring-actuated brake attached to and moving with said carriage, and means for causing said brake to operate on said pulley, a rock-shaft arranged in fixed bearings parallel with said driving shaft, and a cam on said rock-shaft extending lengthwise thereof a distance equal to the length of the transverse movement of the carriage for keeping said brake out of operation throughout the whole of the said movement, substantially as herein set forth. 11th. The combination with the driving shaft E, the friction disc S provided with a sleeve S¹ having a screw-threaded end and fitted to said shaft to turn therewith but to move longitudinally thereon, the bobbin-driving pulley G fitted to turn on said sleeve, the coil spring t surrounding said sleeve, and the nut t¹ fitted to the screw-threaded end of said sleeve for adjusting the pressure of said spring against the said pulley and so adjusting the friction between said disc and pulley, substantially as herein set forth.

No. 53,176. Machines for Threads in Envelopes.

(Machine à fil pour enveloppes.)



Max Grube, San Francisco, California, U.S.A., 7th August, 1896; 6 years. (filed 25th February, 1895.)

Claim.—1st. An envelope-threading machine provided with a thread holder, a reciprocating thread carrier and thread conveyers adapted to receive the thread from the carrier and deliver it to the partially-folded envelope, substantially as described. 2nd. An envelope-threading machine provided with a thread holder, a thread carrier having grippers for seizing and drawing the thread across the machine, thread conveyers having jaws to grasp the thread in measured lengths and deliver it to the envelope, a cutter near the thread holder for cutting the thread after it has been caught by the jaws, substantially as described. 3rd. An envelope-threading machine provided with a thread holder, a thread carrier having grippers for seizing and drawing the thread across the plane of the envelope, thread conveyers having jaws to grasp the thread in measured lengths and deposit the same by a circular motion in the crease of a partially-folded envelope, substantially as described. 4th. An envelope-threading machine provided with a reciprocating thread carrier adapted to carry the thread in measured lengths across the plane of the envelope having two spring-actuated independently-vibrating gripping jaws to said carrier to seize the thread between practically flat parallel surfaces, substantially as described. 5th. An envelope-threading machine provided with a reciprocating thread carrier adapted to carry the thread in measured lengths across the plane of the envelope and gripping jaws having rubber-faced opposing surfaces adapted to compress the thread between them, substantially as described. 6th. An envelope-threading machine provided with a reciprocating thread carrier adapted to carry the thread across the plane of the envelope, gripping jaws having lateral projections thereon and pivoted jaws having inclined-face opposing ends which lift the jaws of the carrier to open them and are lifted out of the way upon the return movement of the carrier jaws, substantially as described. 7th. An envelope-threading machine provided with a thread carrier adapted to present the thread across the plane of the envelope, and thread cutters having a pivoted blade adapted to cut the thread in measured lengths by the movement of said pivoted blade, substantially as described. 8th. An envelope-threading machine provided with a thread carrier adapted to carry the thread across the plane of the envelope, a thread-cutting device adapted to cut the thread in measured lengths and a gumming device located in the plane of the envelope to gum the thread at the middle of its length without gumming the ends, substantially as described. 9th. An envelope-threading machine provided with a reciprocating thread carrier having gripping jaws and adapted to carry the thread in measured lengths across the plane of the envelope, and a tubular thread holder adapted to present the end of the thread to the gripping jaws of the carrier, substantially as described. 10th. An envelope-threading machine provided with the thread carrier for presenting the thread to the envelope, the mechanism for folding the flap over the thread, and an endless carrier consisting of bands or belts having movement as described and having compartments to receive the envelopes and carry them from the machine, substantially as described. 11th. An envelope-threading machine provided with a thread carrier, a thread cutter and two arms secured to a shaft and moving in a circular path to alternately receive the thread from the carrier and convey it to the partially-folded envelope, substantially as described. 12th. In a machine for fixing threads in envelopes, the combination of a pair of oscillating arms or fingers having intermittent movement in an arc and provided with nippers or thread-seizing devices on the ends, a thread-drawing and measuring mechanism adapted to draw and lay a line of thread across and in front of the oscillating fingers, consisting of a spool or bobbin supplying thread and situated at one side, and a reciprocating bar having intermittent rectilinear movement across the path of the fingers from the opposite side and provided with nippers which seize the threads at the end of the forward movement to draw it from the spool across and in front of the fingers, a thread-cutting device operating to sever the thread thus drawn from that on the spool,

a gumming roller having rotation in a trough from which it receives a coating of adhesive material, and located in the path traversed by the thread to come in contact therewith when brought forward by the oscillating fingers, and mechanism, substantially as described, to produce the movement of said parts in relative time, as set forth.

13th. In combination with the flap-folding mechanism of an envelope machine, the oscillating fingers L L, provided with nippers and mounted on a horizontal shaft having intermittent movement as described, the spool holder B, thread guide B², reciprocating bar C provided with nippers D D, and having intermittent movement across the path described by the ends of the oscillating fingers, the thread cutters K K, and mechanism by which the fingers, reciprocating bar and thread cutter are actuated with relation to one another to draw and lay a line or piece of thread from the supply spool across the oscillating fingers, sever the thread and finally by the forward movement of the fingers to lay the thread upon the envelope, as set forth.

14th. In a machine for fixing threads in envelopes, the combination with the oscillating fingers L L, the thread supply and envelope-holding bed or platform, of a gumming roller adapted to take a supply of adhesive material from a trough or receptacle and apply the same to the thread while it is held by the fingers, as set forth.

15th. In a machine for fixing threads in envelopes, the combination with the thread-laying fingers, jaws on the free ends thereof, and means for opening and closing said jaws, of the mechanism for folding the flap in position over the thread, and the endless carrier consisting of bands or belts mounted on rollers and having movement as described, and the boards forming compartments or receptacles to receive the envelopes from the oscillating fingers and carrying them out of the machine, as and for the purpose set forth.

16th. In a machine for fixing threads in envelopes, the combination of a reciprocating bar C provided with spring-actuated thread-seizing grippers, consisting of the gripper heads D with small pieces of rubber or other elastic or yielding material D¹ on their inner surfaces and with loops d² extending on either side of the gripper heads D, a spool holder, a thread guide tube B² between the spool of thread and the bar C, a pair of levers E E between the spool of thread and the bar C and at either side of the thread guide tube, said levers working on pivots E¹ E¹ and having their points or front ends E² E² a short distance above the lever and being connected by links E¹ E¹ to a sliding bar E³, and mechanism, substantially as described, to produce the movements in relative time or relation to each other, as set forth.

17th. An envelope-threading machine provided with a thread carrier for drawing the thread across the plane of the envelope, two oppositely disposed double-armed rotary conveyers having jaws to grasp the thread in measured lengths and deposit each thread alternately in the crease of partially folded envelopes, substantially as described.

18th. An envelope-threading machine provided with a reciprocating thread carrier and conveyer arms for receiving thread therefrom, each having a double plate parallel fixed jaw and a double plate pivoted jaw to engage therewith and seize the thread, with double bearing surfaces at each end to carry it securely to the envelope without slipping, substantially as described.

19th. An envelope-threading machine provided with a reciprocating thread carrier, and conveyer arms for receiving the thread therefrom, each having double plate jaws for gripping the thread, and a fixed finger upon the frame held between said plates during their movement to withdraw the scrap threads therefrom, substantially as described.

20th. An envelope-threading machine having thread carriers and conveyers for delivering the thread to a partially folded envelope, shears for cutting the ends of said threads in measured lengths, pickers for disengaging the scraps from the gripping ends of the thread conveyers, and a chute for conducting the thread from the machine, substantially as described.

21st. An envelope-threading machine having thread carriers for drawing the thread across the plane of the envelope, thread conveyers having a pivoted jaw to grasp the thread in measured length and deposit it in the crease of a partially folded envelope, and a curved track plate adapted to press against a projection of said jaw and open the same to receive the thread from the carrier at the proper moment, substantially as described.

22nd. An envelope-threading machine having thread carriers for drawing the thread across the plane of the envelope and delivering it to a partially folded envelope, and thread cutting shears supported upon a fixed pivot near the thread holder and operated by a spring-actuated swinging arm, and a cam upon a revolving shaft of the machine, substantially as described.

23rd. An envelope-threading machine having thread carriers for drawing the thread across the plane of machine and depositing it in thread conveyer arms for delivering to the partially folded envelope, and a vibratory gumming arm adapted to dip into a gum receptacle and lift the same to the thread at properly regulated intervals, substantially as described.

24th. An envelope-threading machine having thread carriers for delivering the thread to a partially folded envelope, a gumming device and a gum receptacle having a conduit connection with a gum reservoir, substantially as described.

25th. An envelope-threading machine having a reciprocating thread carrier for delivering it to a partially folded envelope, a thread holder having a gravity tension weight fitted in a holder thereof through the bottom of which the thread passes and is pressed upon by the weight, substantially as described, the tubular thread holder and cutting shears, substantially as described.

26th. An envelope-threading machine having a reciprocating thread carrier, conveyer arms for delivering the thread to a partially folded envelope, and cutters fixed to the table at the

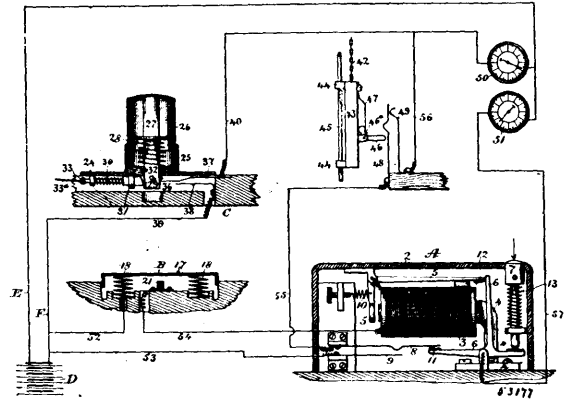
ends of the rear folding envelope flap, one of said cutters being pivoted and acted upon by a projection from the conveyer arm to operate the same and cut the ends from the said thread at the proper moment, substantially as described.

27th. An envelope-threading machine having a reciprocating thread carrier for delivering the thread from the thread holder to a partially folded envelope fitted upon a guide bar and having pivoted gripping jaws to crease the thread, an inclined plate or plates upon said jaws and similar oppositely inclined plate or plates upon a pivoted arm or arms for opening the said gripping jaws and for allowing them to close, substantially as described.

28th. An envelope-threading machine having a reciprocating thread carrier, conveyer arms for delivering the thread to a partially folded envelope, and a rear flap folder operated by said conveyer arms, substantially as described.

No. 53,177. Sleeping Car Berth Register.

(Registre pour lits de char dortoir.)



Stephen Chambers Skanks, Toronto, Ontario, Canada, 7th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. In a sleeping car berth, an electric circuit opening and closing device arranged on the frame of a seat so that the back cushion operates to break circuit when in position and when said cushion is removed said device is changed to closed circuit within it, said device consisting of a casing having a compression bolt projecting, a spring to operate said bolt, a T-lever operated by said bolt, an L-shaped armature to contact with said T-lever, a pair of magnets supported within the said casing, a contact spring to operate said T-lever, a second contact spring connected by wire to a battery and arranged to contact normally with said contact spring operated by and operating said T-lever, and a connection between the magnets and said armature, substantially as shown and described.

2nd. In a sleeping car berth, a seat contact device arranged on the seat frame and consisting of a channel plate, springs to support the plate, slots in said plate to permit of vertical movement on nails securing said plate, a stud to make said plate so as to contact on depression, a wire to connect said plate with a battery, and a wire to connect said stud with the magnets in the circuit opening and closing device, substantially as shown and described.

3rd. In a sleeping car upper berth, a contact device arranged at the central part of the berth and consisting of a plate having a chamber at centre, a spring within the chamber, a cap over said chamber and resting on said spring, a shank from said cup through said plate, a spring-actuated bolt to engage a catch in said shank, a projection on the shank, a contact spring to be deflected by said projection when passing, a second contact spring to contact with said former spring when engaged with said projection, and a connection from said spring-actuated bolt to the ordinary latching handle of the berth, substantially as shown and described.

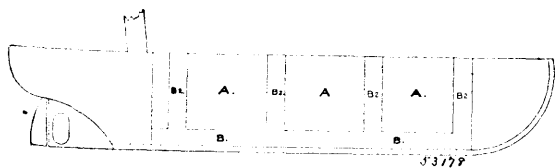
4th. In a sleeping car, the upper berth having a weight attached by chain to the hinge rail of the berth, a guide-rod secured to the car wall to stand vertically, sleeves on said weight to move along said guide-rod, a stop-jointed arm projecting from said weight, a spring to actuate said arm at right angles to said weight, and contact springs arranged so that one will contact with the other arm on said weight and thereby contact with the spring, substantially as shown and described.

5th. In a sleeping car, the combination of a battery, a register connected to said battery, a specified contact device in the upper berth of a compartment of said car, a contact spring connected to a wire from the register and operated by weight applied on said contact device, a second contact spring to contact with the former spring, and a wire to connect said second contact spring with said battery, substantially as shown and described.

6th. In a sleeping car, the combination of a battery, a register connected to said battery, a contact spring connected to said register, a second contact spring connected to a circuit opening and closing device on the seat frame and finally to said battery, a weight secured to the upper berth and adapted to slide vertically on a guide-rod, the guide-rod secured to the car wall by its upper and lower ends, an arm on said weight and adapted to contact with one of said con-

tact springs, and a spring on the weight to operate said arm, substantially as shown and described. 7th. In a sleeping car, the combination of a battery, a register connected to said battery, an upper berth contact device arranged near the centre of the upper berth, a connection from the contact device to the battery, a weight supported by the hinge rail of the upper berth, a guide to direct the weight vertically, a stop-jointed arm on the weight to cause the arm to deflect a contact spring on descent, the said contact spring, a wire from said spring to the circuit opening and closing device on the seat frame in lower berth, a wire from said device on seat frame to the battery, a second contact spring near said weight, and a wire connection from said second contact spring to the register, substantially as shown and described. 8th. In a sleeping car, the combination of a battery, a register connected to the battery and register, a lower berth contact device on the seat frame, wires from said lower berth contact device to the battery and a circuit opening and closing device, said circuit opening and closing device, a wire from the circuit opening and closing device to a contact spring operated by depression of the weight, a second contact spring, a wire from the second contact spring to the register, a weight connected to the hinge rail of the upper berth, an arm on the weight and provided with a spring and stop-joint so as to cause the contact springs contact on depression of the weight, substantially as shown and described.

No. 53,178. Freight Vessel. (Vaisseau à marchandises.)

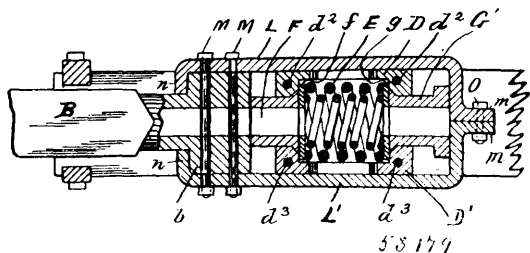


John William Glaholm, Nanaimo, British Columbia, 7th August, 1896; 18 years. (Filed 9th July, 1896.)

Claim.—1st. In a freight carrying vessel a tunnel extended lengthwise the vessel and provided with openings in the side, in combination with shafts opening into the tunnel and extended upward through the vessel, and receptacles adapted to receive the contents of the vessel through the openings in the tunnel and be hoisted through the said shafts, substantially as described. 2nd. A freight carrying vessel having ballast tanks on both sides the keel, a tunnel extended lengthwise the vessel and between the said tanks, openings provided with gates leading from the hold of the vessel into said tunnel, hoisting shafts opening into said tunnel and extended upward through the vessel, and suitable means for conveying hoisting receptacles to and from the said openings and shafts, substantially as described. 3rd. In a freight carrying vessel a tunnel extended lengthwise the vessel at the bottom thereof, in combination with hoisting shafts opening into said tunnel and extended upward through the vessel, openings provided with gates leading from the hold of the vessel into said tunnel, cars to carry hoisting receptacles to and from the said openings and shafts, and a track laid in said tunnel to operate the said cars upon, substantially as described. 4th. The method of handling freight carried in vessels which consists in loading into the hold of the vessel, taking the freight from beneath the hold into hoisting receptacles, and hoisting the said receptacles when filled through passage-ways provided, substantially as described.

No. 53,179. Draw-Bar Attachment.

(Attache de barre d'attelage.)



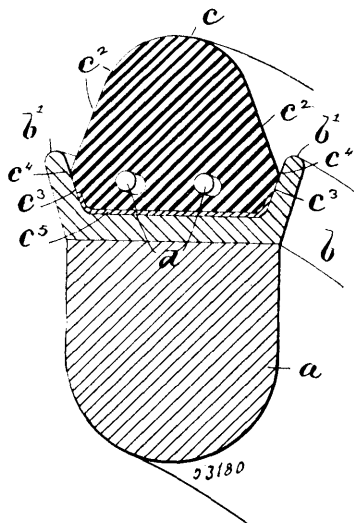
Albert D. Stentford, Pataska, Florida, U.S.A., 7th August, 1896; 6 years. (Filed 13th April, 1896.)

Claim.—1st. The combination with a draw-bar attachment, of a spring-case containing the springs and followers, which spring-case is composed of two parts mounted in horizontal places one above the other, of a yoke secured to the draw-bar and surrounding said case, said yoke being also formed in two parts arranged one above the other, and secured together at each end, whereby the lower part of said spring-case may be quickly and conveniently removed and replaced, substantially as set forth. 2nd. In a draw-bar attachment, the combination of the spring-case formed in two horizontal parts secured to the draft-timbers separate one from the

other, the spring and followers mounted therein, and a yoke secured to the draw-bar and embracing said case, being mounted to slides in ways formed on the upper and lower faces thereof, said yoke being also divided horizontally into two parts, whereby the lower part of said yoke and the lower part of said spring-case may be conveniently removed and replaced without disturbing the other parts, substantially as set forth. 3rd. In a draw-bar attachment, the combination with a spring-case composed of two parts each extending across the space between the draft-timbers in a horizontal position and secured independently of the other, and a suitable draw-bar, of the strap or yoke consisting of two separable parts one above the other bolted together and embracing said spring-case at top, bottom and rear, and securely attached by means of bolts and lugs to the rear portion of said draw-bar, and suitable sleeves extending through apertures in the ends of said case, one of said sleeves at the front of said case abutting the rear of said draw-bar, and the other of said sleeves at rear of said case abutting said yoke, substantially as shown and described.

No. 53,180. Rubber Tired Wheel.

(Roue avec bandage en caoutchouc.)



The Rubber Tire Wheel Company, assignee of Arthur W. Grant, both of Springfield, Ohio, U.S.A., 7th August, 1896; 6 years. (Filed 18th July, 1896.)

Claim.—1st. A vehicle wheel having a metallic rim with angularly-projecting flanges to form a channel or groove with tapered or inclined sides, a rubber tire, the inner portion of which is adapted to fit in said groove or channel and the outer portion having sides at an angle to the inner portion, the angle or corner between the outer and inner portions being located within the outer periphery of the flanges, and independent retaining wires passing entirely through the inner portions of said tire and also within the outer peripheries of the flanges, substantially as described. 2nd. A vehicle wheel having a metallic rim with outwardly-projecting flanges at an angle to the plane of said wheel so as to form a channel or groove having tapered or inclined sides, a rubber tire, the inner portion of which is adapted to fit in said tapered groove or channel, and the outer or exposed portions formed at an angle thereto, the angle or corner between the said portions being placed within the outer periphery of said flanges, openings extending entirely through the unexposed portion of said tire, and independent retaining wires in said openings, and a reinforcing strip of fibrous material placed at the bottom of said tire and wholly within said flanges, substantially as specified.

No. 53,181. Lamp Chimney etc.

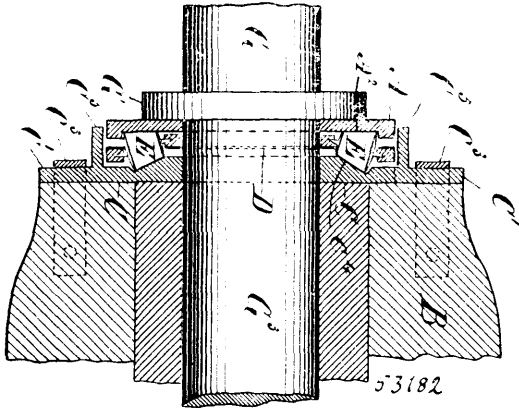
(Cheminée de lampes etc.)



Albert J. Alcock, Alfred A. Smith and Arthur Haines, all of Vancouver, British Columbia, Canada, 7th August, 1896; 6 years. (Filed 9th July, 1896.)

Claim. A lamp and gas chimney or globe for heating purposes provided at the top with a widened annular dished supporting base for vessels to be heated, said supporting base having at its edge a peripheral series of vertically disposed scallops consisting of regularly alternating projections and widened heat escape spaces, substantially as set forth.

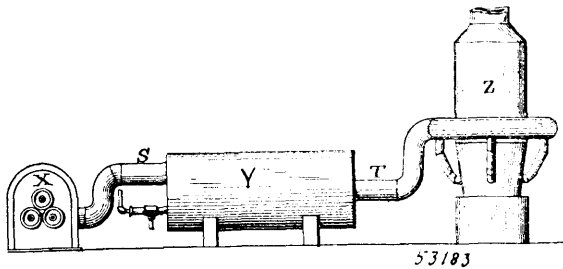
No. 53,182. End or Thrust Bearing. (Bulle.)



William Lawrence Eveland, Port Stanley, William Stephens, Joseph Stephens and Hugh Stephens, all of Port Bruce, all in Ontario, Canada, 7th August, 1896; 6 years. (Filed 18th July, 1896.)

Claim. The combination of the annular plates A, C, D, the plate C, having a bevelled annular groove, and the plate D, radial apertures D¹, and the truncated cone rollers, E, journaled in said apertures, to travel in said groove and on plate A, substantially as set forth.

No. 53,183. Method of and Apparatus for Heating the Blast of Smelting Furnaces. (Méthode et appareil de chauffer les hauts-fourneaux.)

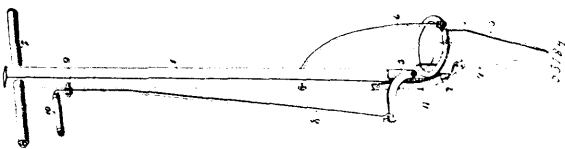


The Colorado Iron Works, assignee of John Wellington Nesmith, both of Denver, Colorado, U.S.A., 7th August, 1896; 6 years. (Filed 23rd January, 1896.)

Claim. 1st. The method hereinbefore described, which consists in forcing a blast of air to a smelting furnace, through an intermediate chamber, and at the same time maintaining a heating flame in said chamber, by means of fuel forced into the said chamber under pressure greater than that of the blast. 2nd. An apparatus for heating the air blast of furnaces, the same consisting of an air pipe having suitable forcing mechanism, an intermediate heating chamber in said air pipe and a burner in said heating chamber having air and fuel supply pipes with separate forcing mechanism therefor, all substantially as described.

No. 53,184. Plant Setter.

(Appareil à faire des plantations.)



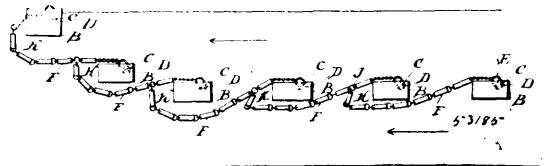
Otto Fischer, assignee of Elerson Wright, both of Herriman, Tennessee, U.S.A., 7th August, 1896; 6 years. (Filed 22nd July, 1896.)

Claim.—1st. A plant setter, comprising a handle, a semi-cylindrical fixed jaw, a semi-cylindrical jaw pivotally connected to the handle, the said jaws when together extending to a point, and a rod for moving the pivoted jaw relatively to the fixed jaw, substantially as specified. 2nd. A plant setter, comprising a handle, a semi-

cylindrical jaw fixed to the lower end thereof, an angle lever pivoted to the lower end of said handle, a jaw connected to one end of said angle lever, and co-acting with the first-named jaw, and an operating rod extended from said angle lever, substantially as specified. 3rd. A plant setter, comprising a handle, a semi-cylindrical jaw rigidly attached thereto, an angle lever fulcrumed to said handle, a semi-cylindrical jaw attached to the angle lever, the said jaws when together forming a cone, a rod extending upward from the end of the angle lever at the opposite end to that to which the jaw is secured, and a guide on the handle through which said rod extends, substantially as specified. 4th. A plant setter, comprising a handle, conical jaws attached thereto, one movable relatively to the other, an angle lever to which said movable jaw is attached, a spring secured to the handle and adapted to move said movable jaw toward the other jaw, a rod extended upward from said angle lever, and a guide on the handle through which said rod extends, substantially as specified.

No. 53,185. Boom Hitch and Loop Swing.

(Attache d'estacades.)

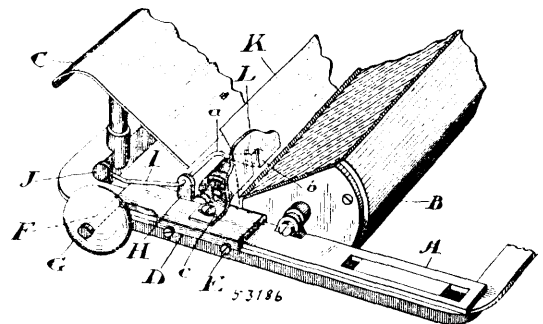


John Carter and Edward C. Colcord, both of West Virginia, U.S.A., 7th August, 1896; 6 years. (Filed 4th July, 1896.)

Claim.—1st. The combination of the piers anchored in the stream, the booms, each having one end connected to the inner side of one of the piers and passed around the next pier, and having the other end connected to the next boom section and forming a series of loops at each side of the piers to receive the logs. 2nd. The combination of the piers, the posts thereon, the bands or rings on said posts, the booms made in sections having their ends connected by loops or staples, and each of said booms having one end connected to the rings and passed around the next pier and having the other end connected to the next boom section forming a loop at each pier.

No. 53,186. Page End Alarm for Typewriters.

(Bout de page et avertisseur pour clavigraphes.)

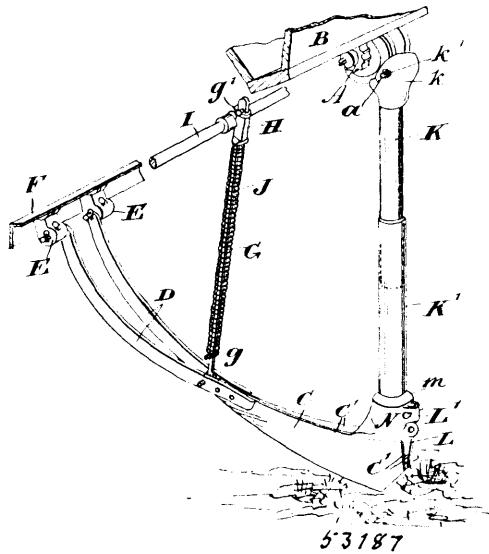


Robert McKenry and Robert C. Thorne, both of Chicago, Illinois, U.S.A., 7th August, 1896; 6 years. (Filed 16th July, 1896.)

Claim.—1st. As a page end alarm for typewriters, a lever of the first order pivoted on the frame of the machine, or a plate connected thereto, and having one end adapted to bear against the paper passing round the roller of the typewriter, the other end of the lever being weighted so as to drop when the end of the paper passes the first-mentioned end of the lever, substantially as and for the purpose specified. 2nd. As a page end alarm for typewriters, a lever of the first order pivoted on the frame of the machine, or a plate connected thereto, and having one end adapted to bear against the paper passing round the roller of the typewriter, the other end of the lever being weighted so as to drop when the end of the paper passes the first-mentioned end of the lever, in combination with a suitably supported plate adapted to maintain the paper in a position to hold the said lever end in its depressed position, substantially as and for the purpose specified. 3rd. As a page end alarm for typewriters, the lever I, journaled on the frame of the machine or a plate connected thereto, and so shaped and proportioned that its front end *a* is normally raised, in combination with the plate L, adjustably connected to the frame of the machine, or a plate connected thereto, and adapted to maintain the paper passing through the machine in a position to hold the end *a* of the lever in a depressed position, substantially as and for the purpose specified. 4th. As a page end alarm for typewriters, the pivoted lever I comprising the bell hammer J, and end *a* in combination with the bell G, and the plate L, suitably slotted or shaped to permit the end *a* to pass it, the parts being suitably supported on the frame of the machine or a plate com-

nected thereto, substantially as and for the purpose specified. 5th. An alarm attachment for typewriters, comprising the plate D, the lever I, pivoted thereon comprising the bell hammer J, and end *a*, the plate L, adjustably connected to the plate D, and slotted at *b*, and the bell G, supported on the stud F on the plate D, substantially as and for the purpose specified. 6th. An alarm attachment for typewriters, comprising the plate D, flanged as shown and provided with one or more set-screws E, the lever I, pivoted thereon comprising the bell hammer J, and end *a*, the plate L, adjustably connected to the plate D, and slotted at *b*, and the bell G, supported on the stud F, on the plate D, substantially as and for the purpose specified. 7th. An alarm attachment for typewriters, comprising the plate D, flanged as shown, and provided with one or more set-screws E, the lever I, pivoted thereon, comprising the bell hammer J, and end *a*, the plate L, adjustably connected to the plate D, and slotted at *b*, substantially as and for the purpose specified.

No. 53,187. Seeding Machine. (Semoir.)

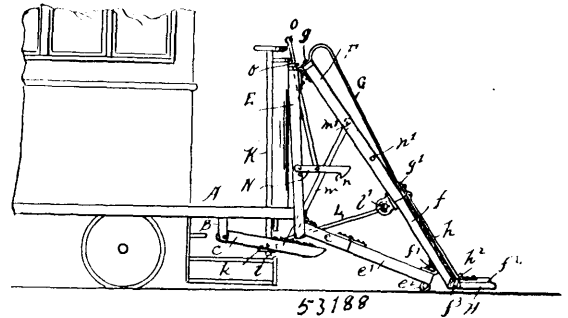


The Massey-Harris Company, assignee of Lyman Melvin Jones and William F. Johnston, all of Toronto, Ontario, Canada, 7th August, 1896; 6 years. (Filed 18th July, 1896.)

Claim.—1st. In a seeding machine, a telescopic seed conveyor, and detachable connections at each end in proximity to the seed inlet and outlet, as and for the purpose specified. 2nd. In a seeding machine, in combination, the feed-run, the shoe, the opening between the sides, the lower tubular conveyor detachably connected to the shoe and leading to the opening between the sides and the upper tubular conveyor detachably connected to the feed-run, extending into the lower tubular conveyor, and designed to have a telescopic movement therein, as and for the purpose specified. 3rd. In a seeding machine, a shoe or runner suitably supported and a tubular conveyor extending upwardly therefrom, and detachable means for connecting such conveyor to the shoe, as and for the purpose specified. 4th. In a seeding machine, a shoe or runner suitably supported, a conveyor socket secured between the sides of the shoe at the rear end thereof, a tubular conveyor extending upwardly from such socket and detachable means for connecting the tubular conveyor to the socket, as and for the purpose specified. 5th. In a seeding machine, a shoe or runner suitably supported, a conveyor socket secured between the sides of the shoe at the rear end thereof, a U-shaped extension to such socket, and pin extending through such U-shaped extension, and the tubular conveyor having a hook formed at its rear bottom end, and the co-acting pin extending through the U-shaped rearward extension, as and for the purpose specified. 6th. In a seeding machine, a shoe or runner suitably supported, a conveyor socket secured between the sides of the shoe at the rear end thereof, a U-shaped extension to such socket and pin extending through such U-shaped extension, the tubular conveyor, the thimble forming the extension thereof provided with an exterior intermediate flange, and having the end abutting an annular shoulder in the top of the socket, against which the end of the thimble abuts, and a hook on the thimble designed to grasp the pin extending through the U-shaped extension, as and for the purpose specified. 7th. In a seeding machine, a shoe or runner suitably supported, a conveyor socket secured between the sides of the shoe at the rear end thereof, a U-shaped extension to such socket and pin extending through such U-shaped extension, the tubular conveyor, the thimble forming the extension thereof provided with an exterior intermediate flange, and having the end abutting an annular shoulder in the top of the socket, against which the end of the thimble abuts, and a hook on the thimble designed to grasp the pin extending through the U-shaped extension, as and for the purpose specified. 8th. In a seeding machine, in combination, the feed-run, the upper rigid tubular conveyor detachably connected thereto, the shoe suitably

supported, and means for applying pressure thereto, and a lower rigid parallel tubular conveyor detachably connected to the shoe, and within which the upper rigid tubular conveyor is designed to have telescopic movement, as and for the purpose specified. 9th. In a seeding machine, in combination, the feed-run, the upper rigid tubular conveyor detachably connected thereto, the shoe and drag bars for the same suitably supported and connected thereto, and a lower rigid parallel tubular conveyor detachably connected to the shoe, and within which the upper rigid tubular conveyor is designed to have telescopic movement, as and for the purpose specified.

No. 53,188. Car Fender. (Défense de chars.)



Peter Best, North Elizabeth, and David Garvey, Elizabeth, both in New Jersey, U.S.A., 7th August, 1896; 6 years. (Filed 20th July, 1896.)

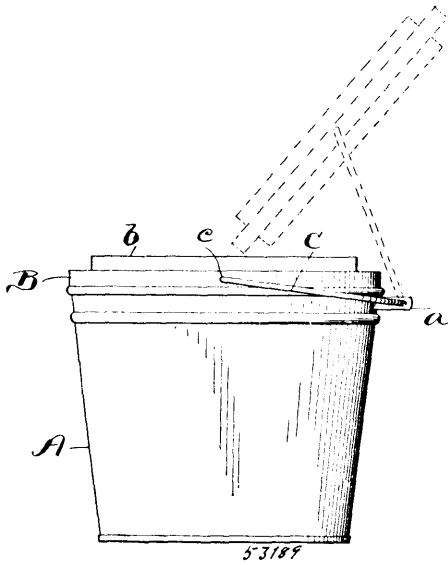
Claim.—1st. The combination with a car, of a fender-frame pivotally supported beneath the platform, a vertical frame secured to the end of the car and provided with a projection, to which is hinged a supplemental frame, adapted to be supported adjacent to the track, an outer frame composed of hinged sections, the upper end of which is hinged to the vertical frame, and the lower end of which is hinged to the outer end of the supplemental hinged frame, the upper section of the outer frame being pivotally connected with the frame beneath the platform by means of a rod, and a vertical rod extending through the platform of the car and having an arm secured to the lower end thereof, and a rod pivotally connected with the outer frame at the hinged connection of the separate parts thereof, and the inner end of said rod being adapted to be connected with said arm, substantially as shown and described. 2nd. The combination with a car, of a fender-frame pivotally supported beneath the platform thereof, a vertical frame secured to the end of the car and provided with a projection, to which is hinged a supplemental frame, adapted to be supported adjacent to the track, an outer frame composed of hinged sections, the upper end of which is hinged to the outer end of the supplemental hinged frame, the upper section of the outer frame being pivotally connected with the frame beneath the platform by means of a rod, and a vertical rod extending through the platform of the car and having an arm secured to the lower end thereof and a rod pivotally connected with the outer frame at the hinged connection of the separate parts thereof, and the inner end of the said rod being adapted to be connected with the lower end of the lower section of the outer frame and adapted to be supported adjacent to the track, substantially as shown and described. 3rd. The combination with a car, of a fender-frame pivotally supported beneath the platform thereof, a vertical frame secured to the end of the car and provided with a projection, to which is hinged a supplemental frame, adapted to be supported adjacent to the track, an outer frame composed of hinged sections, the upper end of which is hinged to the outer end of the supplemental hinged frame, the upper section of the outer frame being pivotally connected with the frame beneath the platform by means of a rod, and a vertical rod extending through the platform of the car and having an arm secured to the lower end thereof and a rod pivotally connected with the outer frame at the hinged connection of the separate parts thereof, and the inner end of said rod being adapted to be connected with said arm, and an auxiliary frame connected with the lower end of the lower section of the outer frame and adapted to be supported adjacent to the track, and means connected with the vertical frame for holding the outer frame in a depressed position, substantially as shown and described.

No. 53,189. Sap Bucket. (Seau à sève)

The G. H. Grimm, Manufacturing Company, assignee of Charles Bouton, both of Hudson, Ohio, U.S.A., 7th August, 1896; 6 years. (Filed 21st July, 1896.)

Claim.—1st. The combination of a sap bucket, with a frame pivoted thereto, and a cover pivoted to and adapted to turn in said frame, substantially as and for the purpose specified. 2nd. The combination of a sap bucket, with a curved wire pivoted near its middle to the bucket, and a cover pivotally connected at opposite points to the ends of said wire, substantially as and for the purpose

specified. 3rd. The combination of a sap bucket, with a curved wire pivoted near its middle to the side of the bucket and having



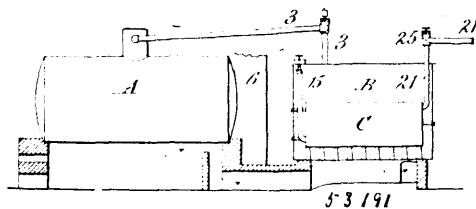
inwardly turned ends, and a cover having in its edge at opposite points holes which receive said inwardly turned ends of the wire, substantially as and for the purpose specified.

No. 53,190. Composition for Repairing Leaks in Pneumatic Vehicle Tires. (*Composition pour réparer les fissures dans les bandages pneumatiques.*)

Charles Sumner Howe and John Williams Langley, both of Cleveland, Ohio, U.S.A., 10th August, 1896; 12 years. (Filed 23rd July, 1896.)

Claim.—1st. A liquid for repairing leaks in pneumatic vehicle tires, consisting of a heavy non-oleous liquid containing a mineral gelatinous substance in suspension, substantially as set forth. 2nd. A liquid for repairing leaks in pneumatic vehicle tires, consisting of glycerine containing a mineral gelatinous substance in suspension, substantially as set forth. 3rd. A liquid for repairing leaks in pneumatic vehicle tires, composed of a heavy non-oleous liquid consisting partly or entirely of glycerine and containing a gelatinous mineral substance in suspension, substantially as set forth. 4th. A liquid for repairing leaks in pneumatic vehicle tires, consisting of a heavy non-oleous liquid containing gelatinous particles of silica in suspension, substantially as set forth. 5th. A liquid for repairing leaks in pneumatic vehicle tires, composed of a heavy non-oleous liquid consisting partly or entirely of glycerine, and containing gelatinous particles of silica in suspension, substantially as set forth. 6th. A liquid for repairing leaks in pneumatic vehicle tires, consisting of glycerine containing gelatinous particles of silica in suspension, substantially as set forth. 7th. A liquid for repairing leaks in pneumatic vehicle tires, consisting of a mixture of glycerine and a solution of water glass, said mixture being approximately neutralized by an added acid, substantially as set forth.

No. 53,191. Process of and Apparatus for Refining Petroleum. (*Procédé et appareil de raffinage du pétrole.*)



The Solar Refining Company, assignee of Herman Frasch, both of Cleveland, Ohio, U.S.A., 10th August, 1896; 6 years. (Filed 18th October, 1895.)

Claim.—1st. The improvement in refining Canadian or similar petroleum, consisting in burning the spent skunk-decomposing substance for the purpose of revivification, keeping the degree of heat below a caking temperature by conducting away the excess of heat as generated by means of the oil in distillation, and conveying away and condensing the so-generated vapours, substantially as described.

2nd. The improvement in refining Canadian or similar petroleum, consisting in burning the spent skunk-decomposing substance under a liquid adapted to sustain the temperature of oil-distillation so as to have the heat of such combustion absorbed by said liquid, and by the so-heated liquid maintaining an active skunk-decomposing substance at a temperature sufficient to prevent the condensation of skunk-decomposing vapours, which are exposed to such active skunk-decomposing substance contemporaneously with the burning of the spent skunk-decomposing substance, substantially as described.

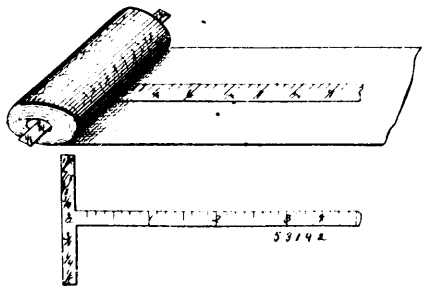
3rd. The improvement in refining Canadian or similar petroleum, consisting in burning the spent skunk-decomposing substance under distillable oil, so as to generate vapours from said oil, and to keep down the temperature of the burning substance, maintaining active skunk-decomposing substance by the so-heated oil, at a temperature to prevent condensation of skunk-bearing vapours, which are exposed to said active substance contemporaneously with the burning of the spent substance, and conveying away and condensing the vapours generated by such burning (preferably after exposure to said active substance) as constituting or forming part of the said skunk-bearing vapours, substantially as described. 4th. The improvement in refining Canadian or similar petroleum, consisting in distilling skunk-bearing oil and subjecting the vapours to active skunk-decomposing substance, maintained by the distilling oil (or a part thereof) at a temperature to prevent condensation of the vapours, while at the same time burning spent skunk-decomposing substance under said oil (or a part thereof) so as thereby to generate oil vapours which are purified as aforesaid, and to keep down the temperature of the burning substance, substantially as described.

5th. The combination with a still, and a distilling chamber, of a purifier box adapted to serve also as a revivifying furnace arranged in said chamber, a vapour pipe between the said box and the vapour space of said still (whether said pipe be or be not also in communication with the vapour space of said chamber), one or more air-inlet pipes for said box, means for opening and closing said pipes, a condenser, a condenser connection for the said box, and a separate condenser connection for the said chamber (the last-mentioned connection being preferably by way of a companion purifier box), substantially as described. 6th. The combination with a distilling chamber, of a purifier box adapted to serve also as a revivifying furnace arranged in said chamber, a vapour pipe between the said box and the vapour space of the chamber containing the same, one or more air-inlet pipes for said box, means for opening or closing said pipes, a condenser, a condenser connection for said box and a separate condenser connection for said chamber (the last-mentioned connection being preferably by way of a similar purifier box), substantially as described. 7th. The combination with a still, of purifier boxes, each adapted also to serve as a revivifying furnace, a chamber containing said boxes, a vapour pipe between each box and the vapour space of said still, one or more air-inlet pipes for each box, means for opening and closing said pipes, a condenser, and a condenser connection for each box, substantially as described. 8th. The combination with a still, and a distilling chamber, of purifier boxes each adapted also to serve as a revivifying furnace arranged in said chamber, a vapour pipe between each box and the vapour space of said still (whether said pipe be or be not also in communication with the vapour space of said chamber), one or more air-inlet pipes for each box, means for opening and closing said pipes, a condenser and a condenser connection for each box, the said chamber having also a condenser connection (preferably by way of each of said boxes in turn), substantially as described. 9th. The combination with a distilling chamber, of purifier boxes each adapted also to serve as a revivifying furnace, arranged in said chamber, a vapour pipe between each box and the vapour space of said chamber, one or more air-inlet pipes for each box, means for opening and closing said pipes, a condenser, and a condenser connection for each box, substantially as described. 10th. The combination with a distilling apparatus composed of distilling chambers, of purifier boxes in said apparatus, each box being adapted also to serve as a revivifying furnace, a vapour pipe between each box and the vapour spaces of said chambers, one or more air-inlet pipes for each box, means for opening and closing said pipes, a condenser, and a condenser connection for each box, substantially as described. 11th. The combination with a distilling apparatus composed of distilling chambers, having their liquid spaces in communication with each other, of purifier boxes in said apparatus, each box being adapted also to serve as a revivifying furnace, a vapour pipe between each box and the vapour spaces of said chambers, one or more air-inlet pipes for each box, means for opening and closing said pipes, a condenser, and a condenser connection for each box, substantially as described. 12th. The combination with a still, and a distilling chamber having its liquid space in communication with that of said still, of purifier boxes in said chamber, each box being adapted also to serve as a revivifying furnace, a vapour pipe between each box and the vapour spaces of said chambers, one or more air inlet pipes for each box, means for opening and closing said pipes, a condenser, and a condenser connection for each box, substantially as described. 13th. A box having a vapour duct therein, and provided with a pile or piles of numerous corrugated trays in said duct, open ended passages being left between the trays, substantially as described. 14th. A box having a vapour duct therein, and provided with a pile or piles of numerous corrugated trays in said duct, and with corrugated layers on said trays of a substance to act upon or be acted upon by the gaseous fluid passing through said duct, open ended passages

being left between the trays for the gaseous fluid to pass over said layers, substantially as described. 15th. A box having a vapour duct therein, and provided with a pile or piles of numerous corrugated trays held together by clamping means arranged to transmit the pressure through the corrugations, open ended passages being left between the trays, substantially as described. 16th. A box having a vapour duct therein and provided with a pile or piles of corrugated trays clamped together, the trays being arranged to bring the tops of the corrugations of each tray under the bottoms of the corrugations of the next higher tray, open ended passages being left between the trays, substantially as described. 17th. A pile of corrugated trays arranged to bring the tops of the corrugations of each tray under the bottom of the corrugations of the next tray above, in combination with separators between such adjoining corrugations, and clamping means, open ended passages being left between the trays, substantially as described. 18th. The combination with trays, of clamping means, and separator strips, the strips holding the trays apart, while leaving open ended passages between said trays, substantially as described. 19th. The combination of the corrugated trays, clamping means, and separator strips, the said strips holding the trays apart, while leaving open ended passages between said trays, substantially as described.

No. 53,192. Scale Measures for Cloth, Ribbon, etc.

(Echelle pour mesurer le drap, ruban, etc.)

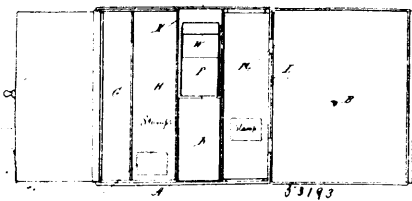


Joseph I. Wagner, El Dorado, Arkansas, U.S.A., 10th August, 1896; 6 years. (Filed 28th February, 1896.)

Claim.—In a flexible tape measure, adapted to be rolled up a piece of flexible material, and divided into measures on each edge and both sides, and having attached to one end a T-piece also divided into measures on both sides; said tape measure designed to show the length and breadth of the material with which it is rolled, substantially as shown and described and for the purposes set forth.

No. 53,193. Automatic Envelope and Stamp Stickers.

(Envelope et appareil automatique à coller les timbres.)

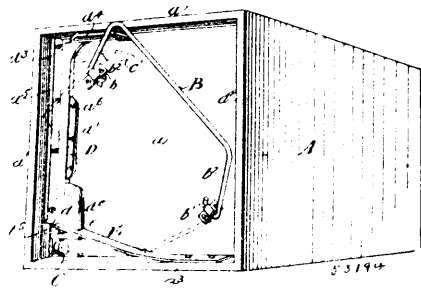


Linn Edson Wheeler, New Brunswick, New Jersey, U.S.A., 10th August, 1896; 6 years. (Filed 1st August, 1895.)

Claim.—1st. A box or receptacle divided into compartments, designed to receive stamps and means for applying the same, a roll of flexible material in one of said compartments, a roll of similar material adapted to receive moisture in another of said compartments, and means for applying the stamps, substantially as shown and described. 2nd. A box or receptacle divided into compartments, designed to receive stamps and means for applying the same, a roll of flexible material in one of said compartments, a roll of similar material adapted to receive moisture in another of said compartments, and means for applying the stamps, consisting of a base piece or plate provided with a roller or rollers, and a plunger having pins connected therewith, and adapted to be projected through the base plate or piece, substantially as shown and described. 3rd. A device for applying stamps, consisting of a base plate or piece, and spring-operated plunger connected therewith and provided with pins, the points of which are adapted to be projected through said base plate or piece, and a roller or rollers connected therewith, substantially as shown and described. 4th. A device for applying stamps, consisting of a base plate or piece, a spring-operated plunger connected therewith and provided with pins, the points of which are adapted to be projected through the base plate or piece, and rollers also connected therewith, one of which is adapted to receive moisture, and the other of which is adapted to be passed over the stamps to secure them in place, substantially as shown and described.

No. 53,194. Automatic Valve for Cans.

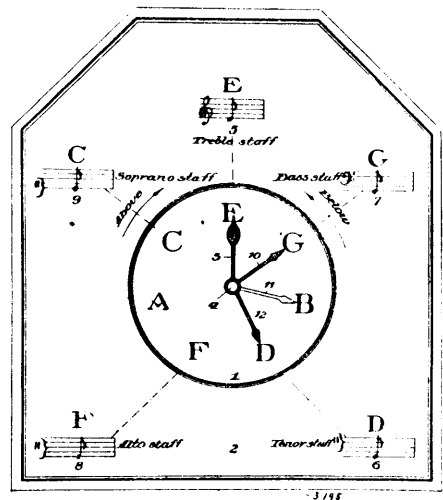
(Soupape automatique pour bidons.)



Nelson P. Bradish and William H. Fitzsimmons, both of Kansas, Missouri, U.S.A., 10th August, 1896; 6 years. (Filed 12th May, 1896.)

Claim.—1st. In a can for liquids having a flat top and a discharge opening in said top near one side of said can and an air vent in the said top near the other side of said can, a spring-actuated sliding plate or valve extending over the said discharge opening at one end and having an extension at the other end at right angles to the main valve extending over the air vent, substantially as and for the purpose described. 2nd. In a can for liquids having a flat top and a discharge opening in said top near one side of said can and an air vent in said top near the other side of said can and the sides of said can extended in an upward direction above said top, the combination of a sliding plate or valve extending over said opening and having an extension at right angles to the said valve extending over the air vent, a pin upon said valve, a guide upon the top of said can and upon one side of said sliding plate, and a spring plate upon said top having a notched end bearing upon the other side of said plate and against said pin, substantially as and for the purpose described. 3rd. In a can for liquids, the combination with the top portion, having an opening for the discharge of the liquid, and a handle of a self-acting valve adapted to close said opening, and a cam on said valve actuated by said handle, substantially as and for the purpose described. 4th. In a can for liquids, the combination with the top portion having an air vent and an opening for the discharge of the liquid, and a handle of separate valves provided with a valve stem connected with each valve, and a cam upon one of said valves actuated by said handle, substantially in the manner described.

No. 53,195. Musical Dial. (Cadran musical.)

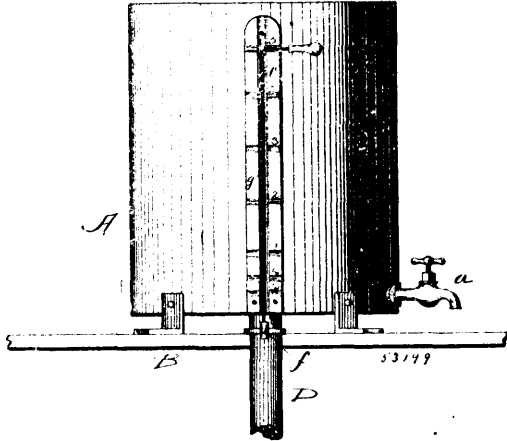


Frank Herbert Daniels, New York, State of New York, U.S.A., 10th August, 1896; 6 years. (Filed 9th July, 1896.)

Claim.—1st. A musical dial, comprising a dial proper bearing the musical notation letters A—G inclusive, following each other thereon in the order of triads, and a movable tonic hand or pointer, substantially as and for the purposes hereinbefore described. 2nd. A musical dial, comprising a dial proper bearing the musical notation letters A—G inclusive, following each other thereon in the order of triads, a movable tonic hand or pointer, and auxiliary pointers connected to and moving with the tonic pointer and arranged in position to point to those letters on the dial indicative of chords of the key to which the tonic pointer is set, substantially as and for the purpose hereinbefore set forth.

liquid above the filter bed, and directs a flow of liquid up through the filter bed to wash the same and a valve controlled by a float raised by the liquid discharged by the siphon which allows the washing liquid to escape from below the filter bed and prevents it from mixing with the filtered water. 6th. The combination of a filter bed, means for supplying liquid to and withdrawing filtered liquid from the filter bed, an automatic siphon which discharges liquid when it accumulates above the filter bed, a trough receiving liquid from the automatic siphon, regulated passages by which the liquid enters and leaves the trough, and a float in the trough controlling valves which regulate the passage of the liquid.

No. 53,199. Measure for Liquids. (*Mesureur de liquides.*)

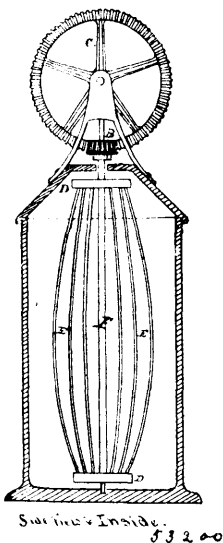


Charles Adelbert Fish, Syracuse, New York, U.S.A., 10th August, 1896; 6 years. (Filed 11th July, 1896.)

Claim.—1st. The herein described measuring device, comprising a receptacle provided with means for filling it and drawing off the liquid, a vertically adjustable stand-pipe, a rack upon one face, having a longitudinal groove and lateral grooves indicating the gallons or multiples thereof, as set forth. 2nd. A measuring device, comprising a receptacle having means for filling and drawing off the liquid, a vertically-adjustable stand-pipe, adapted to convey the overflow back to the storage vessel, and the rack *c* secured upon the outer face thereof, the rod *g* having its upper end bent over and adapted to travel in said groove and secured to the stand-pipe, as set forth.

No. 53,200. Machine for Making Butter.

(*Machine à faire le beurre.*)

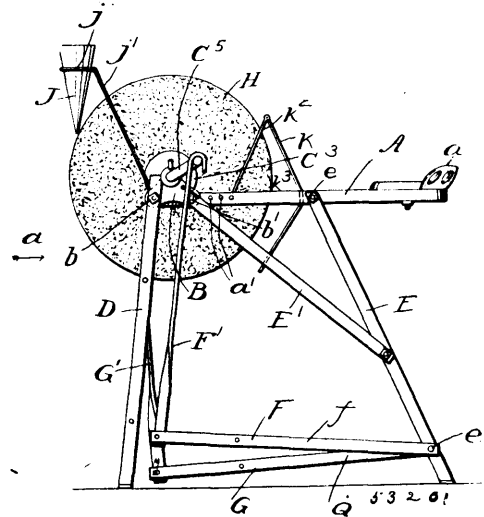


Margaret Jukes Gordon, Stratford, Ontario, Canada, 10th August, 1896; 6 years. (Filed 19th June, 1896.)

Claim.—1st. In a churn, a revoluble dash, comprising a vertically journalled shaft and a dash-head rigidly connected thereto, in combination with a series of flexible wires or bars connected at one end to the said dash-head, substantially as and for the purpose specified. 2nd. In a churn, a revoluble dash, comprising a vertically-journalled shaft, a dash-head rigidly connected thereto, and a dash-head movable thereon, in combination with a series of flexible wires or bars connected at each end to the said dash-heads, substantially as and for the purpose specified. 3rd. In a churn, a revoluble dash comprising a vertically-journalled shaft, a dash-head rigidly connected thereto, and a dash-head movable thereon, in combination with a series of flexible wires or bars connected at each end to the said dash-heads, the wires being set at different distances from the said shaft, substantially as and for the purpose specified.

No. 53,201. Frame for Grindstones.

(*Cadre pour meules.*)



Silas C. Schofield, Freeport, Illinois, U.S.A., 10th August, 1896; 6 years. (Filed 13th July, 1896.)

Claim.—1st. In a frame for grindstones and the like the combination with a piece of strap-iron bent into a U-shape and provided upon its ends with suitable bearing-blocks, of legs depending from said frame and pivotally secured thereto, the forward legs being provided with extensions above their pivots and adapted to rest against the bearing-blocks, and braces connecting the rear legs with the U-shaped member, substantially as described. 2nd. The combination with a grindstone provided with suitable shaft and cranks for its rotation of the U-shaped iron, A, bearing blocks, B, the pair of legs, D, pivotally secured to the U-shaped piece and provided with extensions above their pivots resting against the bearing-blocks a second pair of legs, E, also pivoted to the U-shaped piece, the braces, E', connecting the legs, E, with the U-shaped member and the seat *a*, secured upon the U-shaped piece, substantially as described. 3rd. The combination with a grindstone provided with a suitable shaft and cranks, of the U-shaped piece, A, bearing-blocks, B, the pair of legs, D, pivoted to the U-shaped piece, A, and having extensions resting against the bearing-blocks, a second pair of legs, E, pivoted to the U-shaped member, the braces E', connecting the legs, E, with the U-shaped piece, the bolt *b*, securing the connecting-bar and bearing-block to the U-shaped member whereby the removal of said bolt allows the legs, E, to fold up against the U-shaped member; substantially as described. 4th. The combination with a grindstone provided with a square hole at its centre, of a crank-shaft, two oppositely-arranged wings upon said shaft and adapted to fit into the two opposite corners of the hole, a flange adapted to bear upon one side of the stone, a collar upon the opposite side and a suitable tightening device whereby the flange and collar may be clamped tightly against the faces of the stone. 5th. The combination with a grindstone provided with a square hole at its centre, of a crank-shaft provided with wings adapted to fit into the two opposite angles of the hole, a flange upon the shaft, a ring substantially larger than the flange and adapted to rest against the side of the stone, a collar upon the opposite side and provided with a number of radial grooves of variable depths, a wedge passing through a slot in the shaft and adapted to enter said grooves and crowd the collar against the side of the stone.

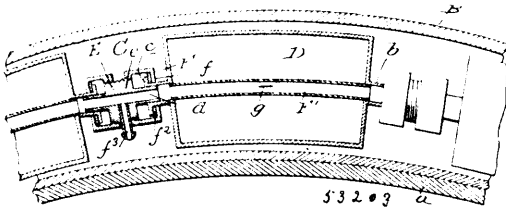
No. 53,202. Soldering of Metals Applicable to Aluminium Alloy. (*Soudage des métaux applicable aux alliages d'aluminium.*)

Frederick Arthur Ellis, Sylvan Grove, London, England, 10th August, 1896; 6 years. (Filed 13th July, 1896.)

Claim.—1st. A method of brazing or soldering aluminium alloys, consisting of the preparation of one surface to be united with an aluminium braze as herein described, carefully amalgamating the same with said surface, and the completion of the brazed joint with another part by the casting of the latter part upon the former prepared part, to fuze the braze, and make an homogeneous joint between them, substantially as described. 2nd. The composition of an aluminium braze, of great tenacity and power of amalgamation with aluminium alloy, of which the essentials are that 5-6ths of the compound by weight is composed of pure grain tin and pure aluminium in the proportion of their combining equivalents (that is in proportions of about 118 of tin to 27.4 of aluminium) and the remaining 1-6th is made up of variable proportions of copper and spelter. 3rd. The composition of an aluminium braze of great tenacity and power of amalgamation with aluminium alloy, consisting of 1 oz. of pure aluminium, 4.3 oz. of pure grain tin 1.2 oz. of refined copper and 1.4 oz. of spelter.

No. 53,203. Pneumatic Wheel Tire.

(*Bandage pneumatique pour roues.*)



Henry A. Veazie, New Orleans, Louisiana, U.S.A., 10th August, 1896; 6 years. (Filed 14th July, 1896.)

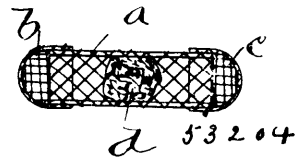
Claim.—1st. A wheel tire comprising a plurality of inflatable compartments, an inflation tube, and a conduit having collapsible portions of thin rubber or other collapsible material connected with the inflation tube and extending through the compartments and having apertures for connecting the interior of the conduit with the interior of the compartments, the said apertures being arranged at intermediate points in the length of the compartments. 2nd. A wheel tire comprising a plurality of separate inflatable compartments having nipples at their ends provided with flanges, a union interposed between the nipples of the compartments and having portions inserted in said nipples, and plates mounted on the nipples and connected, substantially as specified. 3rd. A wheel tire comprising a plurality of separate inflatable compartments having nipples at their ends provided with flanges, tubular unions having reduced portions inserted in the nipples of the inflatable compartments and also having exteriorly-threaded portions, and interiorly-threaded thimbles engaging the threaded portions of the unions and having flanges engaging the flanges of the nipples at the ends of the inflatable compartments, substantially as specified. 4th. A wheel tire comprising a plurality of separate compartments detachably connected together, an inflation tube, and a conduit for connecting the inflation tube with the interior of the compartments, the said conduit comprising collapsible tubes of thin rubber or other collapsible material arranged in the compartments and having apertures at an intermediate point of their length, substantially as specified. 5th. As an improved article of manufacture, an inflatable tire compartment containing a collapsible tube of thin rubber or other collapsible material, the said tube being provided with an aperture at an intermediate point of its length and being connected to the ends of the compartments, substantially as and for the purpose set forth. 6th. A wheel comprising a fellow having apertures at intervals in its length, a tire having a plurality of separate and distinct compartments arranged end to end upon the fellow, inflation tubes extending through the fellow and connected with the compartments, a cover arranged over the compartments and lapped over the inner side of the fellow and provided with hooks and also divided by transverse slits into flaps K, corresponding in length to the compartments, and a lace engaging the hooks of the cover and connecting the edges of said cover and securing the same upon the fellow, substantially as specified. 7th. The combination of an inflatable device and an inflation tube of suitable thin material as rubber, occupying a position within the inflatable device and having its inner end closed and also having the aperture E² at an intermediate point of its length for connecting its interior with the interior of the inflatable device, the walls of said aperture E², converging toward the outside of the tube, substantially as specified.

No. 53,204. Cigar. (Cigare.)

Abraham Jacob Bloomfield, Montreal, Quebec, Canada, 10th August, 1896; 6 years. (Filed 23rd July, 1896.)

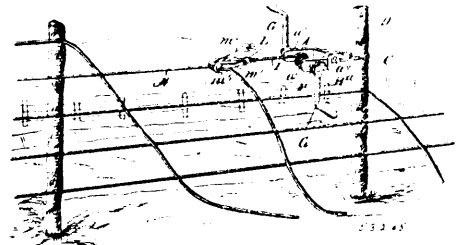
Claim.—1st. A cigar having a foraminiferous end piece inserted therein, for the purpose set forth. 2nd. A cigar having a foraminiferous cylinder inserted in the mouth end thereof, for the purpose set forth. 3rd. A cigar having a double ended cylinder of wire netting inserted in the mouth end thereof for the purpose set forth. 4th. A cigar having a foraminiferous cylinder inserted in the

mouth end thereof and containing a sponge, for the purpose set forth. 5th. A foraminiferous end piece for application to the mouth



end of cigars or cigarettes. 6th. A cigar having the cylinder a, b, c of wire netting inserted in the mouth end thereof and containing the sponge d, for the purpose set forth.

No. 53,205. Wire Stretcher. (Tendeur.)

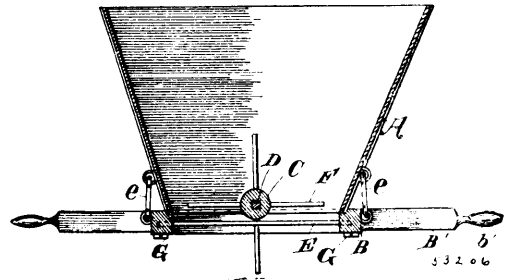


Morgan Morgan, Foxburg, Pennsylvania, U.S.A., 10th August, 1896; 6 years. (Filed 23rd July, 1896.)

Claim.—The combination with the side members m and m¹, of the grip lever m², having teeth m³, the member m, having the bottom space block m⁴, and the front space block m⁵, and the pivotal connecting bolt, all arranged substantially as shown and described.

No. 53,206. Vegetable Pulverizer.

(*Broyeur de végétaux.*)



Charles H. Wright and Thomas E. Redyard, both of Vancouver, British Columbia, Canada, 10th August, 1896; 6 years. (Filed 28th July, 1896.)

Claim.—1st. In a vegetable pulverizer, the combination of a rectangular frame having two of its opposite sides extending further than the frame proper, of horizontal parallel rods placed at regular intervals and secured between the two shorter sides of the said frame, of a cylinder shaft having shafts or rods extending from the same, and where rotary motion is imparted to the said shaft the extending rods made to pass between and in close proximity to the fixed horizontal rods, substantially as set forth. 2nd. In a vegetable pulverizer, the combination of a rectangular frame, with parallel rods securely fixed therein, of a cylinder-shaped shaft suitably mounted and carrying projecting rods, the said shaft lying above and at right angles to the parallel bars and means for imparting motion to the said cylinder shaft, substantially as and for the purposes hereinbefore set forth. 3rd. In a vegetable pulverizer, the combination of a rectangular frame carrying parallel bars, of a cylinder shaft having extended rods thereon and made to turn at right angles to the said frame, of a detachable hopper arranged above the rectangular frame and means for securing the same thereto, substantially as specified.

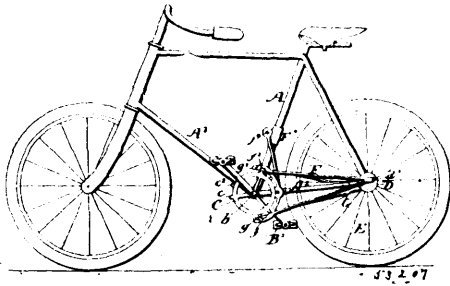
No. 53,207. Mechanical Movement for Bicycles.

(*Mouvement mécanique pour bicycles.*)

Hosmer Tuttle, Cedar Rapids, Iowa, U.S.A., 10th August, 1896; 6 years. (Filed 27th July, 1896.)

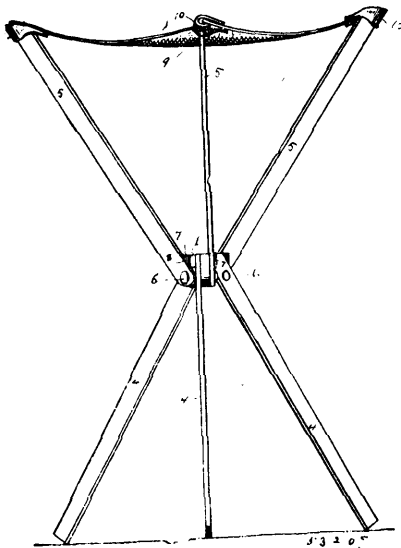
Claim.—1st. A mechanical movement consisting of an axle carrying two crank pins, a forked connecting rod mounted at one end upon each crank pin and having at the opposite end two oppositely disposed pockets, a suspension link for each connecting rod, and sprocket wheels for engagement with the pockets of each connecting rod, substantially as described. 2nd. In a mechanical movement for

bicycles the combination of the axle of one of the carrying wheels, two crank-pins carried by said axle, two branched connecting rods



mounted at one end upon each crank-pin and having at the opposite end two oppositely disposed retainers for sprocket teeth, a suspension link for each connecting rod, and sprocket wheels having sprocket teeth for engagement with the sprocket retainers carried by the branches of the connecting rods, substantially as described.

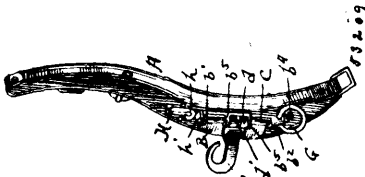
No. 53,208. Camp Stool. (Siège de camp.)



Linley G. Wade, Holly, Michigan, U.S.A., 11th August, 1896; 6 years. (Filed 27th July, 1896.)

Claim.—The combination with a core, a plurality of wings and a lug upon the side of each wing in alternate arrangement, of arms and legs pivoted, respectively, on opposite sides of the wings, the legs being provided with bevelled ends, whereby the arms when expanded bear with the edges against the lugs and the legs when expanded bear against the same with their bevelled ends, substantially as and for the purpose specified.

No. 53,209. Hame. (Attelle.)



Moses Johnson, Harrisburg, Illinois, U.S.A., 11th August, 1896; 6 years. (Filed 27th July, 1896.)

Claim.—1st. As an improvement in hame attachments, the combination with the hame A and the attachment plate B, having apertured ears b^1 b^2 and the socket member b^3 at the lower end of the bolt C held in the ears with its lower end seated in the socket b^3 and having its upper end held flush with the top of the ear b^1 and a latch member pivoted to the hame A, having a foot portion adapted to be swung over the upper end of the bolt C, all arranged substantially as shown and described. 2nd. An improved attachment for hames, comprising a base plate having apertured ears and a socket at the lower end, a pintle held in the apertures and a swinging latch member adapted to be hung on the hame body hav-

ing an outwardly extending horizontal member adapted when the latch is moved to its closed position to fit over the upper end of the pintle and hold it in place, all arranged substantially as shown and for the purposes described.

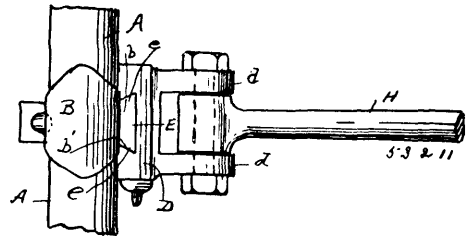
No. 53,210. Method of Preserving Milk and Cream.

(Méthode de préserver le lait et la crème).

Edward Petterson Hals, New York, State of New York, U.S.A., 11th August, 1896; 6 years. (Filed 27th July, 1896.)

Claim.—1st. The herein described method for preserving milk, cream, etc., which consists in first pasteurizing or sterilizing the liquid by heating the same to a temperature below that of boiling point, then cooling it and finally freezing it into blocks, substantially as described. 2nd. The herein described method of preserving milk, cream, etc., which consists in first pasteurizing or sterilizing the liquid by heating the same, then cooling it, freezing it in suitable vessels, removing the frozen blocks, and packing the same into suitable refrigerating containers, substantially as set forth. 3rd. The method of preserving milk or cream, which consists in first heating it to a temperature less than boiling to sterilize the same, then cooling it and freezing to reduce a part or the whole to the solid form. 4th. The method of preserving milk or cream, which consists in first heating to a degree sufficient to sterilize the same, then cooling and freezing to reduce a part or the whole to the solid form, and finally packing the refrigerated milk or cream in suitable holders.

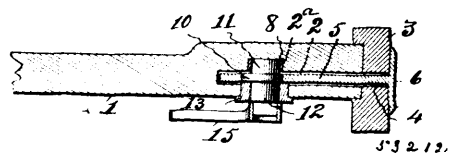
53,211. Thill Coupling. (Arçon de limonière.)



Walter K. Scribner, Oshkosh, Wisconsin, U.S.A., 11th August, 1896; 6 years. (Filed 25th July, 1896.)

Claim.—1st. A thill coupling comprising in its construction a clip formed on its front face with a wedge-shaped projection having downwardly-extending sides, a transverse passage in the face of said projection, a coupling-block formed on its rear face with a similarly shaped recess which is adapted to receive the projection on the clip, and a transversely arranged, rotatable half-round pin located in the coupling-block and adapted to be operated to lock the coupling-block to the clip, substantially as described. 2nd. In a thill coupling, the combination with a clip formed on its front face with a wedge-shaped projection having downwardly-flaring sides a transverse passage in the face of the said projection, of a coupling-block formed on its rear face with a similarly shaped recess, a transversely arranged, rotatable half-round pin located in the coupling-block and capable also of longitudinal movement, means for drawing the pin laterally and rotating the same into and out of the groove in the projection and the clip, and means for holding the pin in an adjusted position, substantially as described. 3rd. In a thill-coupling, the combination with a clip formed on its front face with a wedge-shaped projection having downwardly-flaring sides, a transverse passage in the face of said projection, of a coupling-block formed on its rear face with a similarly shaped recess adapted to receive the projection on the clip, a transversely arranged, rotatable, half-round pin located in the coupling-block and provided with a handle for drawing the pin laterally and giving it a rotary movement and also provided with a holding-lug, notches for receiving said lug, and a spring for holding the lug in either one of the notches, substantially as described.

No. 53,212. Bedstead Fastening. (Attache de lit.)

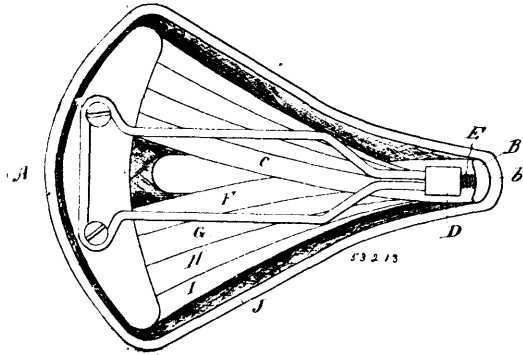


William H. Magalis, John W. Haskins and Charles A. L. Mahaney, all of Clifton Forge, Virginia, U.S.A., 11th August, 1896; 6 years. (Filed 27th July, 1896.)

Claim.—The combination of the post 3 having a vertical plain rail-mortise 2, and a vertical slot 4 extending through the post from the mortise, the rail 1 inserted in the vertical mortise and having a longitudinal mortise opening 2 in the end thereof and a circular transverse cavity 8 extending across the longitudinal mortise-open

ing and providing a cam-shaft bearing and the corner fastening comprising a concealed vertical plain plate 5 extending entirely through the slot in the post and into the longitudinal slot of the rail having a circular opening 7 at its inner end providing a cam-bearing and a transverse flanged head 6 at its outer end seating against the outside of the post, the cam-shaft having an inner hub 11, a cam 10, an outer hub 12 and a head 14, substantially as shown and described.

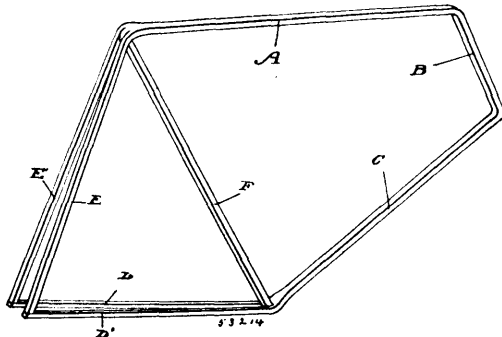
No. 53,213. Bicycle Saddle. (*Selle de bicyclee.*)



Charles F. Lavender and Thomas Fane, both of Toronto, Ontario, Canada, 11th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. A saddle for velocipedes comprised of a frame, a series of textile fabric bands suspended between the horn and rear of the frame, of varying degrees of tightness, substantially as specified. 2nd. A saddle for velocipedes comprised of a frame, a series of textile fabric bands suspended between the horn and rear of the frame, of varying degrees of tightness, and a cover for the said bands, substantially as specified. 3rd. In a saddle for velocipedes, the combination of the saddle frame, an adjusting clip, a supporting spring connecting the adjusting clip to the saddle frame, a series of textile fabric bands, each crossed to form a loop, the ends connected to the frame, and the loop held by the adjusting clip, substantially as specified. 4th. In a saddle for velocipedes, the combination of the saddle frame, an adjusting clip, a supporting spring connecting the adjusting clip to the saddle frame, a series of textile fabric bands, each crossed to form a loop, the ends connected to the frame, and the loop held by the adjusting clip and a cover for the said bands, substantially as specified. 5th. In a saddle for velocipedes, the combination of a frame, an adjusting clip comprised of a concavo-convex plate having outwardly extending flanges at the top and bottom, a supporting spring connected to the frame, a collar fitted on the opposite end of the said spring, an adjusting screw passing through the said collar, adapted to operate the adjusting clip, a series of textile fabric bands, each twisted to form a loop at the middle, the ends of the textile fabric bands secured to the frame, and a loop passed around the said clip and held by the said flanges, the middle band sufficiently tight to firmly support the rider when mounted, the other bands varying in tightness from the middle band, substantially as specified.

No. 53,214. Bicycle Frame. (*Cadre de bicyclee.*)



Charles F. Lavender and Thomas Fane, both of Toronto, Canada, 11th August, 1896; 6 years. (Filed 24th July, 1896.)

Claim.—1st. A bicycle frame comprised of a head, upper and lower reach bars, upper and lower rear forks, and a standard made of one continuous piece of material, bent to the requisite shape, substantially as specified. 2nd. A bicycle frame comprised of head, upper and lower reach bars, upper and lower rear forks, and a standard made of one continuous piece of material built up of veneer sections, and bent to the requisite shape, the parts constituting the standards cut from between the upper and lower rear forks respectively, the veneer sections so cut that when the opposite meeting edges are united no two joints in the standard will be opposed to

each other, substantially as specified. 3rd. A bicycle frame comprised of a head, upper and lower reach bars, upper and lower forks, and a standard made of one continuous piece of material built up of veneer sections, and bent to the requisite shape, the parts comprising the standard cut from between the upper and lower rear forks, the veneer sections so cut that no two joints are opposed to each other, a bicycle head clamped to the head of the frame, a crank axle bracket clamped to the lower reach bar and lower rear fork bars, a saddle post clamped to the standard, and bearings for the driving-wheel clamped to the lower rear fork bars, substantially as specified.

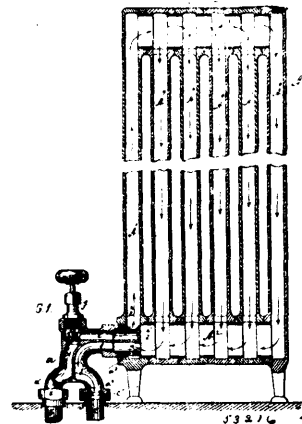
No. 53,215. Pencil. (*Crayon.*)



The Eagle Pencil Company, assignee of Claes William Boman, both of New York, State of New York, U.S.A., 11th August, 1896; 6 years. (Filed 15th July, 1896.)

Claim.—1st. A pencil having a case or sheath formed of a helix composed of a fillet, strip, or shaving, having its folds oblique or inclined to the axis of the helix and nested or packed one within the other, substantially as and for the purposes hereinbefore described. 2nd. A pencil having a case or sheath formed of a helix composed of a fillet, strip, or shaving, having its folds oblique or inclined to the axis of the helix and nested or packed one within the other, and formed so that when thus nested there will remain in the interior an axial hole for the reception of the lead or marking material, substantially as set forth. 3rd. A pencil case or sheath formed of a helix B composed of a fillet, strip, or shaving, having its folds oblique or inclined to the axis of the helix and nested or packed one within the other, in combination with the lead D, and the conical or tapering plug E secured to the lead, and seated in the upper or rear end of the sheath, as hereinbefore set forth. 4th. The hereinbefore described improvement in the manufacture of pencils, consisting first in forming a solid stick of wood into the shape of the finished pencil, or approximately so, then steaming and softening the same, then cutting it up into a helix composed of a thin continuous fillet, strip, or shaving, having its folds oblique or inclined to the axis of the helix, with an axial hole or passage through the helix for the reception of the lead, and then inserting the lead, nesting or packing the folds closely together, and finishing the pencil, substantially as and for the purpose hereinbefore set forth.

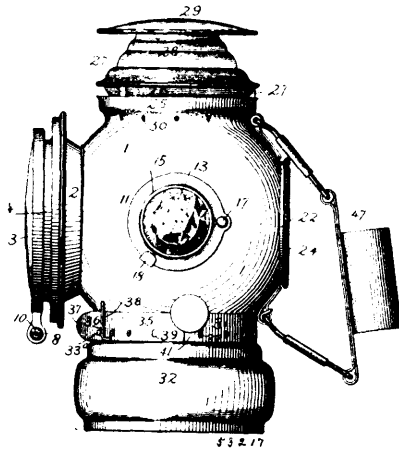
No. 53,216. Valve and Elbow for Hot Water Radiators. (*Souape et coude pour caloriferes.*)



Curt Julius Balthasar and John William Fryer, both of New York, State of New York, U.S.A., 11th August, 1896; 6 years. (Filed 23rd July, 1896.)

Claim.—1st. A valve and elbow for hot water radiators composed of a casing, a longitudinal diaphragm extending therethrough to form inlet and outlet passages, of which the inlet passage is closed at its horizontal end and provided with a discharge orifice in front of such end, and with a valve within the casing substantially as specified. 2nd. A valve and elbow for hot water radiators composed of a branched casing, a longitudinal diaphragm extending therethrough to form inlet and outlet passages, a threaded section on the casing at a distance from its discharge end, and a regulating valve, all being so constructed that the inlet passage is closed at its horizontal end and perforated in front of such end, while the outlet passage is open at its horizontal end, substantially as specified.

No. 53,217. Bicycle Lamp. (Lampe de bicycles.)



The Adams & Westlake Company, assignee of William S. Hamm, both of Chicago, Illinois, U.S.A., 11th August, 1896; 18 years. (Filed 27th July, 1896.)

Claim.—1st. In a lamp or lantern of the character described, the combination of an outer case having perforations, an internal chimney having perforations opposite those in the outer case, and supports for glasses and a reflector, respectively, which supports are fitted in and detachable from the perforations of said outer case and chimney, substantially as set forth. 2nd. In a lamp or lantern of the character described, the combination of a perforated outer case, a perforated chimney, a removable front lens, removable side glasses, a removable rear reflector and supports for said lens, glasses and reflector, said supports being detachably fitted to the perforations, respectively, of the outer case and chimney, substantially as set forth. 3rd. In a lamp or lantern of the character described, the combination of an outer perforated case, a perforated independent and removable chimney, a front lens, a rear reflector, side signal glasses, and supports for said lens, reflector and signal glasses, respectively, said supports entering the perforations of the outer case and of the chimney, respectively, and being detachably secured therein, whereby upon the liberation of the said supports it may be removed from the lamp or lantern, substantially as set forth. 4th. In a lamp or lantern of the character described, the combination of an outer case and an inner case, the latter consisting of a removable metallic chimney, substantially as set forth. 5th. In a lamp or lantern of the character described, the combination of an outer case having a front lens and a detachable rear reflector, and a perforated chimney, within which the supports of the front lens and the rear reflector are fitted, substantially as set forth. 6th. In a lamp or lantern of the character described, the combination of an outer case having a front lens made detachable from said case, a detachable rear reflector, detachable side signal glasses, and a perforated chimney, into which the inner ends of the supports of the front lens, the reflector and the side glasses are fitted, and from which they are removable, substantially as set forth. 7th. In a lamp or lantern of the character described, the combination of an outer case having a detachable support carrying a front lens, a detachable rear support, a part of which forms a reflector, detachable side supports, each carrying a side glass, and a perforated chimney into which the inner ends of said detachable supports are fitted when the parts are assembled and from which they may be liberated when the respective parts are to be separated, substantially as set forth. 8th. In a lamp or lantern of the character described, the combination of an outer case having a suitable wind cone or deflector, a removable oil receptacle carrying an ordinary burner and its accessories, and forming the base of the lamp or lantern, a metallic chimney extending into the upper part of the outer case, and serving as the inner bearing for the supports of the lenses and reflector, substantially as set forth.

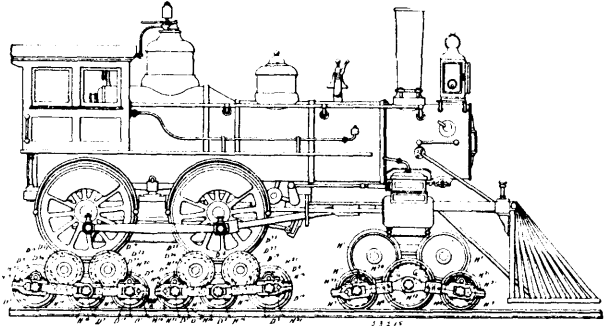
53,218. Attachment for Locomotives.

(Attache de locomotives.)

William J. Holman, Minneapolis, Minnesota, U.S.A., 11th August, 1896; 6 years. (Filed 9th Sept., 1895.)

Claim.—1st. The combination with a locomotive, of a speeding truck consisting of reversely flanged wheels having inwardly extended hubs running in contact with the threads of the locomotive drivers, and flanged traction wheels, coupled by their axles and running upon the track and having outwardly extended hubs supporting the threads of said reversely flanged wheels, whereby the speed of the locomotive may be increased without altering its run-

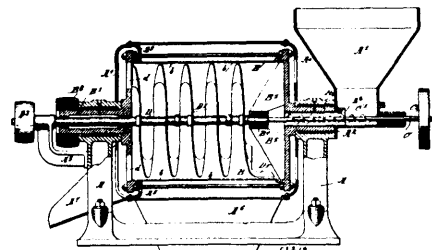
ing gear or increasing the speed of the moving parts, substantially as and for the purpose set forth. 2nd. The combination with a



locomotive, of a speeding truck consisting of reversely flanged wheels having inwardly extended hubs running in contact with the treads of the locomotive drivers, and flanged traction wheels having outwardly extended hubs supporting the treads of said reversely flanged wheels, and with the axles of said traction wheels coupled by independent side rods adapted to oscillate about the central axle, whereby the speed of the locomotive may be increased without altering its running gear, or increasing the speed of the moving parts, and the requisite flexibility secured, substantially as and for the purpose set forth. 3rd. An attachment for locomotives consisting of flanged wheels running upon the track and with extended hubs, reversely flanged wheels supported upon said extended hubs, and with extended hubs supporting the treads of the traction wheels of the locomotive, and coupling binder rods connecting the axles of said flanged wheels, and with anti-friction rollers therein adapted to carry the end thrust and support said coupling binder rods, substantially as and for the purpose set forth. 4th. In an attachment to a locomotive, flanged wheels running upon the track and having extended hubs and coupled by their axles, flanged wheels running upon their treads upon said extended hubs and with hangers upon their axles, anti-friction rollers within said hangers and supporting them upon the axles, and equalizing bars carried by said hangers and supporting the forward end of said locomotive, substantially as and for the purpose set forth. 5th. In an attachment to a locomotive, three sets of flanged wheels running upon the track, the central set being the largest in diameter, and with extended hubs and coupled by their axles, two sets of flanged wheels supported by their treads upon said extended hubs and with the hangers upon their axles, anti-friction rollers within said hangers and supporting them upon said axles, and equalizing bars carried by said hangers and supporting the forward end of said locomotive, substantially as and for the purpose set forth. 6th. In an attachment to locomotives, a series of flanged wheels mounted upon axles and running upon the track and with extended hubs, coupling rods connecting the axles of said flanged wheels and supported by their treads upon said extended hubs, and with extended hubs adapted to support the traction wheels of said locomotive, and safety rods or chains connecting the several axles loosely, substantially as and for the purpose set forth. 7th. In an attachment to locomotives, a series of sets of flanged wheels running upon the track and with extended hubs, one set of said wheels being larger in diameter than the others, coupling rods connecting the axles of said flanged wheels, reversely flanged wheels supported by their treads upon said extended hubs, and with reversely extended hubs supporting the traction wheels of the locomotive, substantially as and for the purpose set forth.

No. 53,219. Centrifugal Drying Machine.

(Machine à sécher centrifuge.)

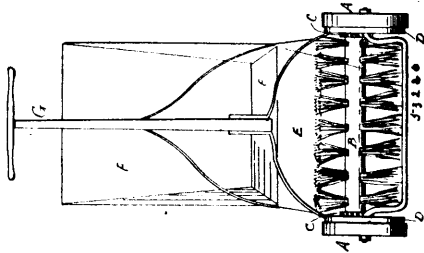


Manuel S. Ayau, Guatamala City, Guatamala, Central America, 11th August, 1896; 6 years. (Filed 28th May, 1896.)

Claim.—1st. In a centrifugal drying machine, the horizontal perforated drum, and means for revolving it rapidly, in combination with provisions for feeding in the material at one end and delivering it continuously at the other end, and with a shaft in the interior revolved relatively thereto, a spiral blade carried on such shaft for urging the material longitudinally in such drum by such revolution,

and also a scraper D⁵ carried by such shaft and extending horizontally beyond the end of such spiral close to the inner surface of the drum, all arranged for joint operation, substantially as herein specified. 2nd. In a centrifugal drying machine, the perforated drum and means for revolving it, in combination with the hopper A¹, tube A² and feeding screw C, C¹, with its driving means C² for supplying the loose material to be dried, and the shaft D with its spiral blade D¹, and means for turning it to urge the material longitudinally in such drum, all arranged for joint operation, substantially as herein specified. 3rd. In a centrifugal drying machine, the perforated drum and means for revolving it, in combination with provisions for feeding in the material at one end and delivering it continuously at the other end, and with a shaft mounted concentrically within the drum and revolved at a slightly different rate, a spiral blade carried on such shaft for urging the material longitudinally in such drum, and a casing A⁴ enclosing the drum and having two spouts A⁶ and A⁷, adapted the one to deliver the relatively dried material through one channel and the other to deliver the exuded water through the other channel, all arranged for joint operation, substantially as herein specified. 4th. In a centrifugal drying machine, the perforated drum B, and means B³ for revolving it, and having the bearing support B⁴ carried by oblique arms B² with the said drum, in combination with the shaft D with its spiral blade D¹, and means D² for turning it to urge the material longitudinally in such drum, and with the hopper A¹, tube A², and feeding screw C, C¹, with its driving means C² for supplying the loose material, all arranged for joint operation, substantially as herein specified.

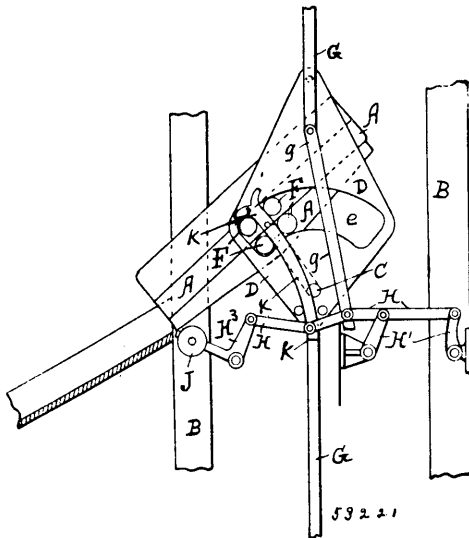
No. 53,220. Machine for Trimming and Cleaning Lawns. (*Machine pour finir et nettoyer les pelouses.*)



William Benson, London, Canada, 11th August, 1896; 6 years. (Filed 30th June, 1896.)

Claim.—1st. In a lawn-trimming machine, the circular brush B, operated by driving-wheels A, substantially as shown and specified. 2nd. In combination with the brush, B, of a lawn-trimming machine, the receiver F, substantially as shown and specified.

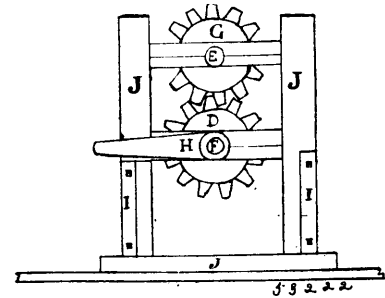
No. 53,221. Lift or Hoist for Warehouses. (*Monte-charge pour magasins.*)



Hay Frederick Donaldson, London, England, 11th August, 1896; 6 years. (Filed 6th July, 1896.)

Claim.—1st. In a lift or hoist, a platform supported on arms, such as E, and having guide-rollers such as F, engaging with guide-rails G, g, and K, whereby said platform when operated may be caused to be swung and tilted, substantially as set forth. 2nd. In a lift or hoist, the combination of a platform A, rollers F, arms E, cross-bar C, guide-rails G, g, and K, rods H, bell crank lever H³, and counterpoise J, all for the purposes and substantially as set forth. 3rd. In a lift or hoist, the combination with a platform A, supported on arms E, and having guide-rollers F, adapted to engage with guide-rails, of guide-plates D, provided with apertures c, and carrying the cross-bar C, all for the purpose, and substantially as set forth.

No. 53,222. Cheese Rack. (*Râtelier à fromage.*)

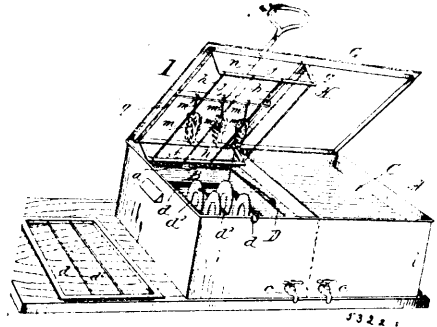


John Levey, Lindsay, Ontario, Canada, 12th August, 1896; 6 years. (Filed 14th July, 1896.)

Claim.—1st. The combination of double revolving racks, A, B, Fig. 1, 2, 3, hung and revolving upon journals working on ball or other bearings, as shown in Fig. 3, S, S, or upon centres K, K, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of segment slips c, c, secure to racks A, B, by bolts N, N, substantially as and for the purpose hereinbefore set forth.

No. 53,223. Dish Washing Machine.

(*Machine à laver la vaisselle.*)

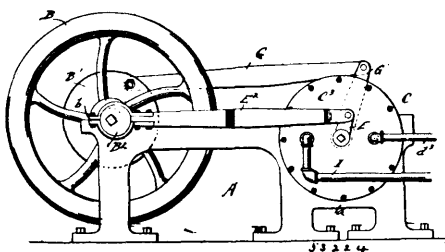


Bridget R. Mann, Holyoke, Massachusetts, U.S.A., 12th August, 1896; 6 years. (Filed 22nd July, 1896.)

Claim.—1st. In a dish washing machine, the combination with a tank having a washing compartment, and provided with a frame or cover to be set thereupon, of a removable dish-holding receptacle to be set into the washing compartment, and a part carrying one or more dish washers, which is mounted for a reciprocatory movement by and under said cover and having a handle for imparting thereto its movements, substantially as described. 2nd. In a dish washing apparatus, the combination with a tank having a washing compartment, and provided with a frame or cover to be set thereupon, of a removable dish-holding receptacle to be set into the washing compartment which has the lugs b, b, on its inner walls and the slatted frame d, supported thereon, and a like slatted frame at the bottom of the receptacle, and a part having one or more dish washers, which is supported for a reciprocatory movement by and under said cover, and having a handle for sliding it, substantially as described. 3rd. In a dish washing apparatus, the combination with a tank having a washing compartment, and provided with a frame or cover to be set thereupon, of a removable dish-holding receptacle to be set into the washing compartment and which has the apertures x, x, the bail a, the lugs b, b, on its inner walls, and the slatted frame d, supported by said lugs, and a support having one or more dish washers, which is supported for a reciprocatory movement on said cover and having a handle for sliding it, substantially as described. 4th. In a dish washing apparatus, the tank comprising the washing and rinsing compartments B, C, and the cover G, having at one end half, at its under side, the rigid opposite depending frames f, f, with the traversing rods g, g, near the plane of the cover and the series of traversing rods h, h, below and parallel with said rods g, the support bar j, supported by and movable along

said rods *g, g*, and carrying the dish washers *m, m*, the stems of which have sliding bearings along said rods *h, h*, and the operating handle-bar *n*, combined with the removable dish receptacle which has therein the traversing rods *d², d²*, above its bottom, all substantially as described and shown and for the purposes set forth.

No. 53,224. Oscillating-Piston Engine.
(*Piston de machine oscillante.*)



Benjamin H. Trucks, Caldwell, Kansas, U.S.A., 12th August, 1896; 6 years. (Filed 22nd July, 1896.)

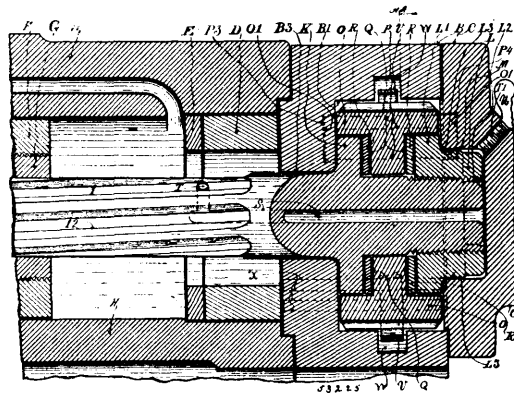
Claim.—1st. The combination in a steam-engine having a cylinder with an oscillating-piston the shaft of which extends through one of the cylinder-heads, the other cylinder-head having a bearing for the shaft and inlet and outlet ports, a stud-bearing *c¹* formed on the cylinder head and projecting into the steam-chest, a stub-shaft *E* bearing at one end upon the stud-bearing and projecting through the covering plate of the steam-chest, a pitman connected to a driven shaft end to an arm on the outer end of the stub-shaft, and a bar *F* mounted on the stub-shaft and provided with valves at its ends which slide over the ports in the cylinder-head, substantially as shown and for the purpose set forth. 2nd. The combination in an oscillating-piston steam engine, of a frame *A* consisting of side pieces connected by plates *a a* and a transverse shaft *A¹*, a fly-wheel mounted on the shaft between the side pieces of the frame, a wrist-wheel on one end of the shaft and an eccentric on the other end; together with a cylinder mounted upon the side pieces of the frame and having an oscillating-piston the shaft of which is connected to the wrist-wheel by a pitman, and valve operating mechanism consisting of a valve carrying bar mounted on a stub-shaft which is connected to the eccentric by a pitman, the parts being organized substantially as shown and described. 3rd. In a steam-engine, the combination of an oscillating piston, a cylinder having heads one of which is centrally apertured for the passage of the shaft of the oscillating piston and the other head having a recess to form a bearing for the other end of the shaft and ports which open into the cylinder and communicate with the steam-chest, and a valve carrying bar mounted on a stub-shaft which is rocked from a driven part of the engine, the cylinder-head having exhaust passages which lead from between the ports to the exhaust pipe. 4th. In combination with a steam-engine having an oscillating piston and inlet and outlet ports, of a cylinder head having a stub-shaft mounted independent of the oscillating piston, a bar *F* mounted on the stub-shaft and provided with valves *f* at its ends, an arm attached to the outer end of the stub-shaft and connected to an eccentric carried by the driven-shaft, substantially as shown and for the purpose set forth. 5th. In combination with a steam-engine having a cylinder with an oscillating piston therein connected to the shaft of the fly-wheel, one of the heads of the cylinder having inlet and outlet ports *d* and *d¹*, exhaust passages *d²* and a stud-bearing *c¹*, of a stub-shaft *E* having a socket which fits over the stud-bearing, an annular flange at its inner end and a squared portion adjoining the flange, a bar *F* mounted on the squared portion of the stub-shaft and carrying slide valves at its outer ends which operate over the ports in the cylinder head, an arm *E¹* connected to the outer end of the stub-shaft and a pitman *E²* connecting the arm to an eccentric on the shaft of the fly-wheel, the parts being organized substantially as shown and for the purpose described. 6th. In a steam-engine constructed substantially as shown, the combination, of a cylinder-head having inlet and outlet ports, exhaust passages communicating with the exhaust pipe and a central stud-bearing *c¹*; a stub-shaft *E* having a socket which fits over the stud-bearing, said shaft also having an annular flange at its inner end and a squared portion adjoining said flange, the outer end of the stub-shaft projecting through the covering-plate of the steam-chest and having an arm attached thereto which is connected to the driven-shaft of the engine by a pitman; together with a bar *F* mounted on the squared portion of the stub-shaft and provided at its outer ends with slide valves *f* which operate over the ports and exhaust channels, the parts being organized substantially as shown and for the purpose set forth.

No. 53,225. Safety Rotary Feeding Devices for Rock Drilling Engines.
(*Appareil d'alimentation de sûreté pour forets de mines.*)

John George Leyner, Denver, Colorado, U.S.A., 12th August, 1896; 6 years. (Filed 27th July, 1896.)

Claim.—1st. A safety rotary feed consisting of an independent ratchet wheel, one or more pawls arranged in operative engagement

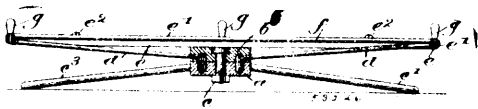
therewith, an independent axial support adapted to transmit the intermittent rotary feed of said ratchet wheel to the object to be



intermittently rotated, or from an intermittently rotating object through said axial support to said ratchet wheel, and means for securing said axial support to said ratchet wheel to permit one part to automatically turn upon the other when said pawls and ratchet wheel engage one another with destructive energy. 2nd. A safety rotary feeding device for rock drilling engines comprising a ratchet wheel mounted on the rifle-bar, spring actuated pawls in operative engagement with the teeth of said ratchet wheel, and means for securing said rifle-bar to said ratchet wheel whereby it will rotate in said ratchet-wheel when a ratchet tooth engages a pawl with destructive energy. 3rd. The combination with the cylinder, the piston and the cylinder head, of a rifle-bar in operative engagement with said piston and journaled in said cylinder head, a ratchet wheel freely mounted on said rifle-bar and seated in a suitable chamber in said cylinder head, spring actuated holding pawls arranged in operative engagement with the teeth of said ratchet wheel, and means whereby said rifle-bar is connected to said ratchet wheel to turn therein when one or more teeth thereof engages one or more pawls by back-lash movement of more than normal force, substantially as described. 4th. A safety rotary feeding device comprising a ratchet wheel, one or more pawls in operative engagement therewith, an independent axle, shaft, or ratchet supporting journal, and means for securing said axle or shaft to said ratchet wheel so that one part may slip and turn upon the other. 5th. A safety rotary feeding mechanism for rockdrilling engines comprising a rifle-bar having an enlarged collar portion thereon forming an abutting shoulder and journaled in the rear cylinder head, a thread upon the end of said rifle-bar adjacent to said shoulder portion, a nut threaded to said end, a ratchet wheel fitting loosely on said rifle-bar, one or more washers between said shoulder portion of said rifle-bar and said ratchet wheel between said nut and ratchet wheel, and spring actuated pawls arranged in engagement with said ratchet wheel, substantially as described. 6th. The combination in a safety rotary feed device for rock drills, of the rifle-bar having a shoulder portion, a threaded end adjacent thereto, a nut fitting said end, a ratchet wheel mounted on said rifle-bar, a recess in each side of said ratchet wheel concentric to said rifle-bar, one of which is adapted to receive said shouldered portion thereof, and the other, the engaging surface and end of said nut, friction washers preferably of vulcanized rubber interposed in said recesses between said shoulder or rifle-bar and said ratchet wheel, and between said nut and said ratchet wheel, means for tightening said nut to establish a frictional connection between said rifle-bar and said ratchet wheel, means for supporting said rifle-bar on each side of said ratchet wheel and for supporting said ratchet wheel, spring actuated pawls in operative engagement with said ratchet wheel and a piston and nut in engagement with said rifle-bar. 7th. The combination in a safety rotary feed for rock drills, of the cylinder head, the rifle-bar having the abutting shoulder, the friction washer, the ratchet wheel mounted on said rifle-bar, the spring actuated pawls in engagement therewith, the nut threaded to the end of said rifle-bar having a wrench receiving end and a circular portion adjacent thereto, the auxiliary cylinder head, a recess therein adapted to receive said circular portion and support said nut and the rear end of said rifle-bar and the cylinder and the piston, the several parts being combined, substantially as herein set forth and described. 8th. In a safety rotary feed for rock drilling engines, the combination of the cylinder, the piston, the rifle-bar, the ratchet wheel, the spring actuated pawls, the rear cylinder head adapted to receive and support said rifle-bar and said ratchet wheel, and the pawls and the friction washers, the auxiliary head having a recess therein and the nut adapted to frictionally connect said rifle-bar and ratchet wheel together whereby one may slip upon the other and relieve said ratchet teeth and said pawls from destructive concussions, and to journal in said auxiliary head, substantially as described. 9th. The combination in a safety rotary feed for rock drilling engines with the cylinder, the piston, of the rifle-bar, the back-head, the washers, the clamping nut, the ratchet wheel, and the pawls arranged in differential relation to the teeth of said ratchet wheel, substantially as described. 10th. The com-

bination in a safety intermittent rotary feed for rock drilling engines, of the cylinder, the piston, the rubber and steel buffers, the rifle-bar having an enlarged collar or shoulder portion and a clamping nut, the friction washers, the ratchet wheel adapted to be frictionally clamped to said rifle-bar, the back-head, the auxiliary head, and the spring actuated pawls arranged in differential relation to the teeth of said ratchet wheel whereby one pawl is in operative engagement with the face of some one tooth of said ratchet wheel and the other pawl is in operative engagement with one tooth at a predetermined point in its pitch, the several parts being constructed, combined and arranged substantially as herein set forth.

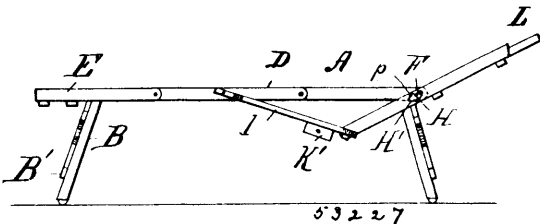
No. 53,226. Table-Waiter. (*Table.*)



Francis Augustus Clay, Newfields, New Hampshire, U.S.A., 12th August, 1896; 6 years. (Filed 28th July, 1896.)

Claim.—1st. The herein described table-waiter, consisting of a ring *c*, a top secured thereto, a hub *b*, a series of threaded spokes, screwed into said hub and engaging at their outer ends the said ring to hold it firmly, and a second hub *a*, pivoted with relation to the hub *b*, and having legs to support the said hub, substantially as described. 2nd. In a table-waiter, a top, to rings, *c*, *c'*, between the edges of the top are clamped, a hub *b*, a series of threaded spokes screwed into said hub, and having their outer ends engaged with the ring *c*, a hub *a* pivotally connected with the hub *b*, and a tripod to support said hub *a*, to operate, substantially as described.

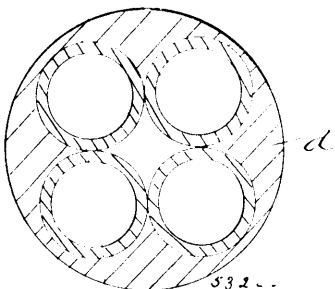
No. 53,227. Reclining Chair. (*Chaise inclinée.*)



Telesphore Fortier, Detroit, Michigan, U.S.A., 12th August, 1896; 6 years. (Filed 29th July, 1896.)

Claim.—1st. In a reclining chair, the combination with the frame, of an adjustable back section, the pivoted end section on the back, means for holding the end section at different angles when it is moved in one direction, comprising a notched member and a swinging carrier member projecting beyond the notches, and a spring dog for engaging the notched member and arranged to engage the carrier member by a further movement of the pivoted section, substantially as described. 2nd. In a reclining chair, the combination with the body and the adjustable back section, of the foot rest comprising the side bars centrally pivoted at one end of the frame, and being connected to the back section by the arms *I*, the pivot pins *F* engaging longitudinal slots *H*, in the side bars of the foot rest, and the entering slots *p*, of the lining *H*¹, for the slots, having the spring lips *O*, *O*¹ opposite the entering slots, substantially as described. 3rd. In a reclining chair, the combination of the frame, the folding legs hinged thereto, the back section hinged to the frame, the inclined brace pivoted centrally to the back and adapted to engage notches in the frame, the head section of the back hinged to the lower part thereof and devices for holding the head section in its adjusted position comprising the side plates *b* on the end of the back section, having the shoulder *c* and *d*, the notched carrier *i* between the plates, and the spring dog *e* on the head section, the parts combined as and for the purpose described.

No. 53,228. Wheel Tire. (*Bandage de roue.*)

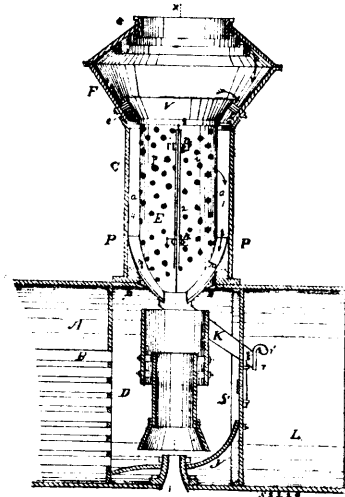


Finlay Alexander McRae, Montreal, Quebec, Canada, 12th August, 1896; 6 years. (Filed 3rd June, 1896.)

Claim.—1st. A rubber wheel tire having a single outer tread of wire netting, for the purpose set forth. 2nd. A wheel tire composed of a number of rubber tubes adjacent and parallel to each other, with an outer tubular covering or filling enclosing and fitting closely against the entire exposed surfaces of such tubes, for the purpose set forth. 3rd. In the manufacture of multi-tubular tires, first locating a series of inner rubber tubes adjacent to and parallel to each other, and then casting an outer rubber covering or filling about same, for the purpose set forth.

No. 53,229. Spark Arresters for Smoke Stacks.

(*Arrête étincelle pour cheminées.*)



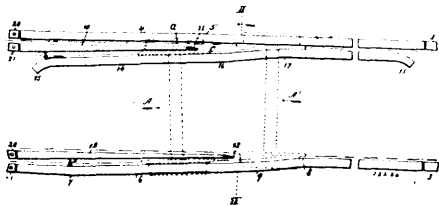
Martin M. Wilson, Honey Grove, Texas, U.S.A., 12th August, 1896; 6 years. (Filed 24th July, 1896.)

Claim.—1st. In a spark arrester for smoke stacks, the combination with the smoke box of a boiler, of a smoke stack having an outside vertical shell, a smaller concentric inner cylinder, the outer shell having a double-coned bonnet, the inner cylinder entering free the lower end of this bonnet and ending in a funnel-shaped section and having a single spirally twisted plate with spiral ribs attached inserted to form a vertical gyratory passage through it and longitudinal ribs to form cinder abutments and spark conveying passages from the lower edge of the bonnet to the base of the stack, substantially as set forth. 2nd. In a spark arrester for smoke stacks, the combination, with an outer vertical shell and its enlarged bonnet, of an inner concentric shell having vertical ribs the latter being branched or bifurcated at their lower ends forming chutes to deliver the sparks into a descending closed conduit pipe, substantially as set forth. 3rd. In a spark arrester for smoke stacks, the combination with an outer vertical shell and its joined double cone bonnet, of an inner smaller cylindrical shell having perforations in its body and a spirally bent plate extending the full length of the cylinder body interior to it having attached a number of spiral ribs set in the direction of the spiral and having its top end shaped to form deflectors, the outside of the cylindrical inner shell having rigidly secured vertical ribs that form abutments and descending passages to deliver sparks into attached conduit pipes that are automatically closed at their delivering ends, substantially as set forth. 4th. In a spark arrester for smoke stacks, the combination with an outer shell, its double conical attached bonnet and a concentric inner shell that projects with a free upper end into the bonnet and ending in a fan-shaped section of a spirally twisted plate secured to the inner side of the smaller shell with its upper end shaped to form deflectors, spiral ribs attached to the spiral plate vertical ribs attached to the outer surface of the inner shell, the lower ends of said ribs being branched or bifurcated forming chutes to convey sparks, and two attached spark conduits provided with self operating gates that are opened to discharge cinders by the accumulating weight of the cinders and closed by their own gravity, substantially as set forth. 5th. In a spark arrester for smoke stacks, the combination with an outer cylindrical shell and an inner concentric cylindrical shell the outer shell having a mounted double coned bonnet, the inner shell provided with a spirally twisted plate inserted in it and perforations made in its cylindrical wall, of a series of depending annular rings located in the top of the bonnet, two pairs of longitudinal ribs that form spark chutes, and two spark conducting pipes that have each an automatic acting cinder valve pivoted to the lower or discharging end of these spark conduits, substantially as set forth. 6th. In a spark arrester for smoke boxes, the combination with an outer cylindrical shell and an inner con-

centric shell and a double coned bonnet that has depending annular rings, of a spiral plate located within the inner shell, perforations in the inner shell, two attached spark conduits that have gates that close by gravity, and two steam pipes that lead exhaust steam from exhaust steam passage to the spark conduits, as substantially set forth. 7th. The combination with the smoke box of a locomotive flue boiler of a smoke stack possessing the following instrumentalities, viz.:—an outer shell, an inner shell that is concentric and smaller than the outer one, a fan-shaped section attached to top end of the inner shell, an intervening dead air space, series of spiral rows of perforations in the inner shell, a secured and tight fitting spirally twisted plate inserted in the inner shell having attached a number of spiral ribs set in the direction of the spiral and having its top end shaped to form deflectors, a double cone bonnet attached to the upper end of the outer shell, depending annular rings attached to the upper interior surface of this bonnet, the upper end of the inner shell projecting unattached into the lower end of the bonnet, vertical ribs rigidly attached to the outer surface of the inner shell and bifurcated at their lower ends to form spark passages, two attached spark conduits, a gravity operated pivoted gate to each cinder conduit pipe that closes air-tight their lower ends, and a stream conduit to introduce exhaust steam into each spark conduit, and a perforated plate or apron adjusted around the exhaust nozzle, substantially as set forth.

No. 53,230. Stationary Railway Switch.

(*Aiguille stationnaire pour chemins de fer.*)



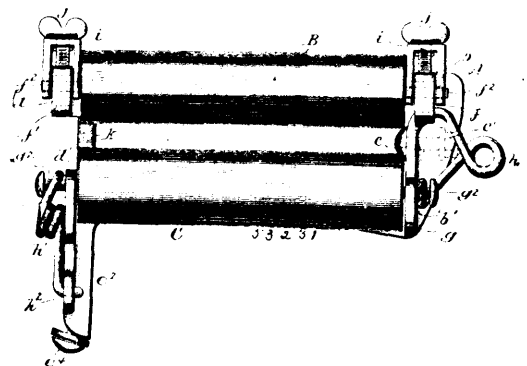
Moses S. Pittman, Independence, Missouri, U.S.A., 12th August, 1896; 6 years. (Filed 28th July, 1896.)

Claim.—1st. A stationary railway switch, comprising a pair of main track rails, single track rails in alignment with the main track rails, a bent rail connecting one of the main track rails with one of the single track rails, and having the bent portion or apex thereof disposed outwardly of the longitudinal line of said connected rails, a pointed rail 12 forming a continuation of the main track rail and inclining inwardly thereof, and a rail connecting with the other single track rail and inclining inwardly toward the free end of the pointed rail, substantially as described. 2nd. A stationary railway switch, comprising a pair of main track rails, single track rails in alignment with the main track rails, a bent rail connecting one of the main track rails with one of the single track rails, and having the bent portion or apex thereof disposed outwardly of the longitudinal line of said connected rails, a rail connecting with the other side track rail and inclining inwardly to a point inward of the longitudinal line of said single and the aligned main track rail, and a pointed rail 12, forming a continuation of said aligned main track rail, and inclining inwardly thereof, and having its inner side and end bevelled outwardly so as to dispose the extreme point of said rail outward of the vertical plane represented by the inner margin of the rail which inclines inwardly from the last-named single track rail, substantially as described. 3rd. A stationary railway switch, comprising a pair of main track rails, single track rails in alignment with the main track rails, a bent rail connecting one of the main track rails with one of the single track rails, and having the bent portion or apex thereof disposed outwardly of the longitudinal line of said connected rails, a rail connecting with the other single track rail and inclining inwardly to a point inward of the longitudinal line of the other single and main track rails, a pointed rail 12, forming a continuation of said other main track rail, and inclining inwardly thereof, and having its inner side and end bevelled outwardly so as to dispose the extreme point of said rail outward of the vertical plane represented by the inner margin of the rail which inclines inwardly from the last-named single track rail, and a guard-rail arranged at the inner side of and parallel with that portion of the bent rail connected to the first-named single track rail, and of such length that the flange of one wheel will overlap the bevelled end of the pointed rail 12 before the flange of the companion wheel passes from the controlling influence of said guard-rail, substantially as described. 4th. A stationary railway switch, comprising a pair of main track rails, single track rails in alignment with the main track rails, a bent rail connecting one of the main track rails with one of the single track rails, and having the bent portion or apex thereof disposed outwardly of the longitudinal line of said connected rails, a rail connecting with the other single track rail and inclining inwardly to a point inward of the longitudinal line of the other single or main track rails, a pointed rail 12, forming a continuation of said other main track rail, and inclining inwardly thereof, and having its inner side and end bevelled outwardly so as to dispose the extreme point of said rail outward of the vertical plane represented by the inner margin of the inclined rail connected to said other single track rail, a guard-rail arranged at the inner side of and parallel with

that portion of the bent rail connected to the first-named single track rail and of such length that the flange of one wheel will overlap the bevelled end of the pointed rail 12 before the flange of the companion wheel passes from the controlling influence of said guard-rail, and a short pointed rail arranged at the inner side of and parallel with the oppositely bent portion of said bent rail, and bevelled at its outer side as at 11, so as to dispose its extreme point inward of the vertical plane of the outer margin of said guard-rail, substantially as described. 5th. A stationary railway switch, comprising main and side track rails, a single track rail in longitudinal alignment with one of said main track rails, a bent rail connecting one of the single track rails with the longitudinally aligned main track rail, and having the bent portion or apex thereof disposed outwardly of the longitudinal line of said connected rails, a short pointed rail forming a continuation of one of said side track rails and arranged parallel with and at the inner side of said bent rail, but extending only about to the apex of said bent rail, and bevelled divergently away from said bent rail at its outer side, as at 11, a second pointed rail, of greater length than the first, and forming a continuation of the other main track rail, and extending inwardly of the longitudinal line represented by said main track rail and the other single track rail, and bevelled forwardly and outwardly at its inner margin, as shown at 13, a rail connecting said last-named single track rail with the remaining side track rail, and bent as at 7 to provide an outwardly extending portion which connects directly with said last-named side track rail, and an inwardly extending portion which extends approximately parallel with the short pointed rails, and bent also as at 8 to provide a portion which connects directly with the last-named single track rail, and extends inwardly therefrom to a point inward of the pointed end of the pointed rail 12, and to provide the oppositely extending portion 9, which connects the two inwardly extending portions, and a guard-rail, which is bent inwardly at its opposite ends and to extend approximately parallel with the short pointed rail 10 and that portion of the first-named bent rail leading directly to the first-named single track rail, and to produce a more abruptly inclined connecting portion 16, substantially as shown, and for the purpose described. 6th. A stationary railway switch, comprising main and side track rails, a single track rail in longitudinal alignment with one of said main track rails, a bent rail connecting one of the single track rails with the longitudinally aligned main track rail, and having the bent portion or apex thereof disposed outwardly of the longitudinal line of said connected rails, a short pointed rail forming a continuation of one of said side track rails, and arranged parallel with and at the inner side of said bent rail, but extending only about to the apex of said bent rail, and bevelled divergently away from said bent rail at its outer side, as at 11, a second pointed rail, of greater length than the first, and forming a continuation of the other main track rail, and extending inwardly of the longitudinal line represented by said main track rail and the other single track rail, and bevelled forwardly and outwardly at its inner margin, as shown at 13, a rail connecting said last-named single track rail with the remaining side track rail, and bent as at 7 to provide an outwardly extending portion which connects directly with said last-named side track rail, and an inwardly extending portion which connects directly with the last-named single track rail, and bent also as at 8 to provide a portion which connects directly with the last-named single track rail, and extends inwardly therefrom to a point inward of the pointed end of the pointed rail 12, and to provide the oppositely extending portion 9, which connects the two inwardly extending portions, a guard rail, which is bent inwardly at its opposite ends and to extend approximately parallel with the short pointed rail 10 and that portion of the first-named bent rail leading directly to the first-named single track rail, and to produce a more abruptly inclined connecting portion 16, and movable switch-rails connected together, and forming sections or continuations of the main and side track rails, substantially as and for the purpose set forth.

No. 53,231. Mop Wringer.

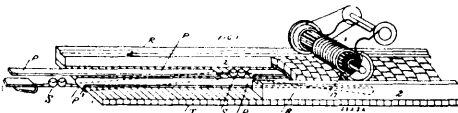
(*Essoreuse de torchon.*)



John George Maendler, Peter Maendler and Mary Miller, assignees of Augustus Sylvester Miller, all of St. Paul, Minnesota, U.S.A., 12th August, 1896; 6 years. (Filed 20th Jan., 1896.)

Claim.—1st. In a mop wringer, the combination with a frame, of a roller mounted therein, springs connected with the axle of the roller which throw the latter normally inward, a roller bearing a normally fixed relation to the yielding roller, and means for adjusting the fixed roller relatively to the yielding roller, substantially as set forth. 2nd. In a mop wringer, the combination with a frame having slotted arms, of a yielding roller mounted in two of said arms, a roller bearing a normally fixed relation to the yielding roller and having its journals passing through two other slotted arms of the frame, yokes adapted to receive the journals of the fixed roller and embrace the arms through which said journal pass, and thumb screws passing through said yokes and engaging said arms, whereby to adjust the fixed roller relatively to the yielding roller, substantially as set forth. 3rd. In a mop wringer, the combination with a frame having slotted arms, of rollers having journals passing through said slotted arms, springs secured at one end to the journals of one roller and at the other end to the frame, yokes constituting bearings for the journals of the other roller, and thumb screws passing through the ends of said yokes and engaging the arms of the frame through which the journals of said last mentioned roller pass, substantially as set forth. 4th. In a mop wringer, the combination with a frame close at one end and open at the other and rollers mounted in said frame, of a pivoted latch bar adapted to normally close said open end of the frame and to yield to permit the insertion of a mop head between the parts of the frame and a spring for returning said latch bar to its normally closed position, substantially as set forth. 5th. In a mop wringer, the combination with a frame comprising two arms connected together at one end and rollers mounted on said arms, of a latch pivotally connected to one of said arms at the opposite end of the frame some distance from its ends and having a notch near its free end and a pin on the other arm of the frame and adapted to enter said notch, substantially as set forth.

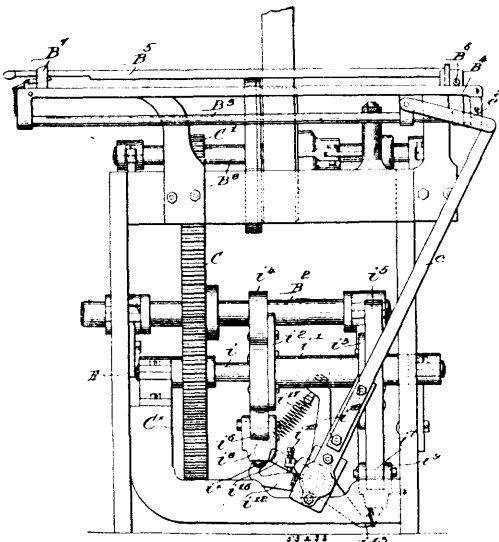
No. 53,232. Electro Magnetic Induction System of Propulsion. (*Système électro-magnétique d'induction de propulsion.*)



The Shuttleworth Electric Company, Camden, New Jersey, assignee of Alpheus C. Shuttleworth, Philadelphia, Pennsylvania, both in the U.S.A., 12th August, 1896; 6 years. (Filed 12th February, 1896.)

Claim.—In a system of distribution of electrical energy for railways, the combination with sections of laminated iron ties of a single insulated primary conductor wound around and at right angle above and below the sections of laminated ties, in a series of convolutions or spirals, said laminated ties forming stationary parts of the magnetic circuit, a movable part of the magnetic circuit, the secondary electric circuit encircling the movable part of the magnetic circuit, and automatic switches for producing a multiple or parallel arrangement of the upper and lower sections of the primary conductor when said switches are in their normal positions, substantially as described.

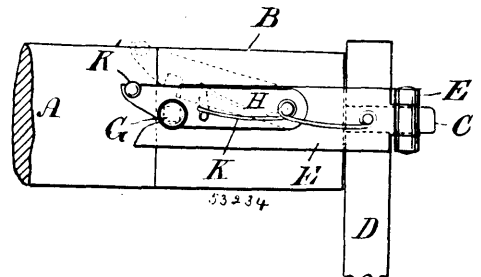
No. 53,233. Loom. (*Métier.*)



The Compton Loom Works, assignee of Horace Wyman and John Allesen Clark, all of Worcester, Massachusetts, U.S.A., 12th August, 1896; 6 years. (Filed 29th February, 1896.)

Claim.—1st. A weft-inserting mechanism for looms, containing the following instrumentalities, viz.: a weft-lever, two relatively adjustable cams continuously controlling and co-operating to vibrate said lever, and means to operate said cams, substantially as described. 2nd. A weft-inserting mechanism for looms, containing the following instrumentalities, viz.: a pivoted weft-lever, two actuating cams therefor, two arms continuously acted upon by the respective cams and to independently move said weft-lever in opposite directions, substantially as described. 3rd. A weft-inserting mechanism for looms, containing the following instrumentalities, viz.: an actuating shaft, two actuating cams thereupon, a weft-lever and its pivotal shaft, actuating arms co-operating with said cams to positively rock said pivotal shaft, a spring to draw said arms towards their respective cams, and a stop to limit such spring-actuated movement, substantially as described. 4th. A weft-inserting mechanism for looms, containing the following instrumentalities, viz.: an actuating shaft, two actuating cams thereupon, roller carriers co-operating with and moved by said cams, a weft-lever, its pivot shaft and rocking arms therefor, actuated by said roller carriers, to vibrate said weft-lever, substantially as described. 5th. A weft-inserting mechanism for looms, containing the following instrumentalities, viz.: an actuating shaft, two actuating cams thereupon, roller carriers co-operating with and moved by said cams, a weft-lever, its pivot shaft and rocking arms therefor, universal connections between said roller carriers and rocking arms, whereby the latter are rocked by the former, substantially as described. 6th. The actuating shaft, the actuating cams thereupon, the roller carriers, and their rollers in contact respectively with said cams, the weft-lever, its pivot shaft, a rocker arm fast thereon and co-operating with one of said roller carriers, a second rocker arm loose on said shaft and co-operating with the other of said roller carriers, and a spring connecting said rocker arms, substantially as described. 7th. In a weft-inserting mechanism for looms, the combination with a weft-needle, and means to actuate the same, of a guide for the pointed end of said needle, and a presser acting to press the said needle normally towards one guiding face of the said guide, substantially as described. 8th. In a weft-inserting mechanism for looms, the combination with a weft-needle having a portion removed near its pointed end, and means to reciprocate the said needle, of a guide for the pointed end of the said needle, and a yielding presser acting at the cut away side of the needle to press the latter normally towards the guiding face at the opposite side of the said needle, substantially as described.

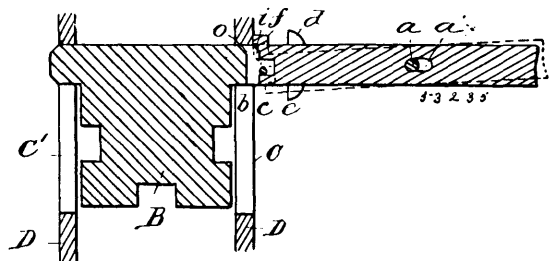
No. 53,234. Trace Fastener. (*Crochet de palonnier.*)



James De Lacey, Tacoma, Washington, U.S.A., 12th August, 1896; 6 years. (Filed 29th July, 1896.)

Claim.—1st. The combination with a whiffle-tree having a ferrule B, provided with a projection B', a pin C, extending from the end, and a catch or pin G, of a jointed hasp-fastener E, hinged to said projection and provided with a hole to receive said pin C, and a spring latch H, carried by said fastener, and engaging said pin or catch G, to prevent the trace slipping off pin C, until the fastener is released by hand, as set forth. 2nd. A trace fastener, comprising a ferrule B, having a headed pin or catch G, and a jointed hasp-fastener E, hinged to said ferrule and folding thereon, and provided with a spring latch H, to engage said catch, substantially as set forth.

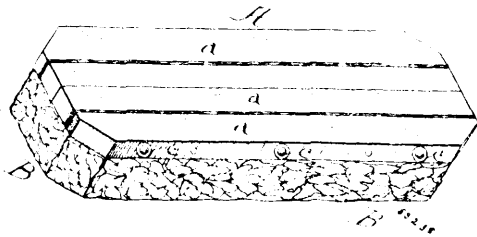
No. 53,235. Safety Key. (*Clé de sûreté.*)



Oscar Stoddard and Robert C. Preston, both of Detroit, Michigan, U.S.A., 12th August, 1896; 6 years. (Filed 15th July, 1896.)

furnace or other heat generator, provided with a heat accumulator and storer, which is placed therein, and which is provided with a plurality of vertical passages or spaces, through which the products of combustion pass, and with means for cleaning said passages and spaces, said device being designed to allow of the free passage of the smoke, and the gaseous products of combustion, and to accumulate and store the heat therein, and between the same and the heat generator, substantially as shown and described. 3rd. An escape pipe or flue for a furnace or other heat generator, provided with a heat accumulator and storer, which is placed therein, and which is provided with a plurality of vertical passages or spaces, through which the products of combustion pass, and with means for cleaning said passages or spaces, said device being designed to allow of the free passage of the smoke, and the gaseous products of combustion, and to accumulate and store the heat therein, and between the same and the heat generator, and the pipe or flue where said device is placed, being larger than the other portions thereof, substantially as shown and described. 4th. A heat accumulator and storer for the escape flue or pipe of a heat generator, which consists of a plurality of transverse bars between which are formed spaces, of predetermined width, and a shaft mounted transversely of said bars, and provided at its opposite sides, with parallel rods or bars, which are adapted to pass through said spaces between said parallel stationary rods or bars, when the shaft is turned substantially as shown and described.

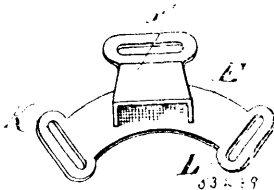
No. 53,238. Brush, etc. (Brosse, etc.)



Patrick J. Grace, Brooklyn, assignee of De Lacy Evans Ballam, Saratoga Springs, both in New York, U.S.A., 13th August, 1896; 6 years. (Filed 31st July, 1896.)

Claim.—1st. A mop or brush composed of a back made in strips, absorbent pads caught between the edges of the strips, and fastenings through the strips and absorbent pads. 2nd. A mop or brush made in a plurality of parts which are fastened together by elastic connections which on the one hand allow the brush to be deflected to squeeze out water or to clean various surfaces, and on the other hand tend to draw the said parts always into line.

No. 53,239. Harness. (Harnais.)

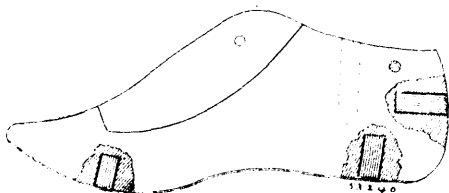


William N. Carlisle and Thomas R. Barnett, both of Detroit, Michigan, U.S.A., 13th August, 1896; 6 years. (Filed 7th April, 1896.)

Claim.—1st. In a harness, the combination with the saddle A, and the supplemental strap H suspended over the saddle, of the plates E on said straps, having eyes forward and back for the draft and hold back straps. 2nd. In a harness, the combination with the saddle, of the plate E, a guide loop F for the bearer and the eyes L, K for the hold back and draft straps.

No. 53,240. Tack Holder for Lasts.

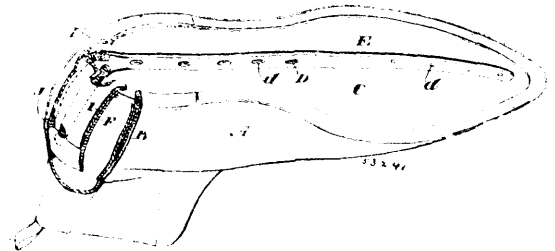
(*Porte-clous pour formes.*)



Irving Oscar Littlefield and John T. Bartlett, both of Raymond, New Hampshire, U.S.A., 13th August, 1896; 6 years. (Filed 28th July, 1896.)

Claim.—A plug made entirely of metal consisting of pointed parallel wires, attached to, imbedded in, or projecting from a metal back contained in a metal tube forming a retaining cushion or holder for receiving and holding in place tacks or brads, to be inserted in lasts at those places in them where tacks are driven into them to hold in place different parts of boots and shoes in process of manufacture.

No. 53,241. Boot, etc. (Chaussure, etc.)

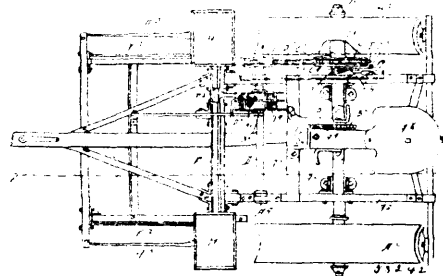


Donald Irving and Samuel John Moore, both of Toronto, Ontario, Canada, 13th August, 1896; 6 years. (Filed 30th July, 1896.)

Claim.—1st. In a ventilated boot or shoe, the combination with the sole and heel, and inner sole and a channel extending from toe to heel, and perforations extending through the lining sole of such channel, of spiral spring tubular conveyers extending around under the counter into the rear of the perforated channel at one end and up between the counter and the quarter of the boot, openings at the top of conveyers in the quarter and means for securing the spiral spring tubular conveyer in position as and for the purpose specified. 2nd. In a ventilated boot or shoe, the combination with the sole and heel, and inner sole and a channel extending from toe to heel, and perforations extending through the lining sole of such channel, of spiral spring tubular conveyers extending around under the counter into the rear of the perforated channel at one end and up between the counter and the quarter of the boot, openings at the top of such conveyers in the quarter and a reinforcing piece for the counter secured thereto, so as to closely enwrap the tubular conveyers as and for the purpose specified.

No. 53,242. Check Row Corn Planter.

(*Semoir à blé-d'inde.*)



Riley R. Spear, Waukeg, Iowa, U.S.A., 13th August, 1896; 6 years. (Filed 29th July, 1896.)

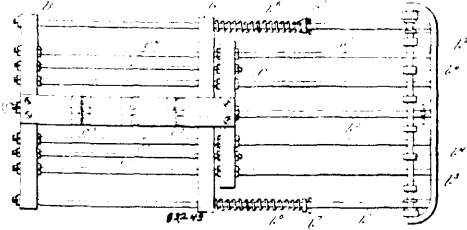
Claim.—1st. The combination in a corn planter, of a shaft driven from the traction-wheels, a disk fixed thereto and having two parallel peripheral grooves, a T-switch pivoted between the grooves with its long arm designed to be alternately forced against the outer edges of both grooves to form a guide from one groove to the other, and its short arms, each designed to reach to a point near the outer edge of one of the grooves, a slide mounted for movement on the machine, and an arm on said slide to extend into said grooves and engage and operate said switch and means for dropping the corn by an actuation of said slide. 2nd. The combination in a corn planter, of a wheel rotably mounted, means connected with said wheel for automatically dropping corn each time the wheel describes a complete revolution, a sprocket chain for gearing said wheel to the driving-wheels, a number of blocks fixed to said chain at intervals corresponding to the travel of the chain during one revolution of the wheel, and a rod having inwardly turned ends slightly mounted in the machine-frame adjacent to the said sprocket-chain, for the purposes stated.

No. 53,243. Car Fender. (Defense de chars)

Frederick J. Graf, New York, U.S.A., 13th August, 1896; 6 years. (Filed 30th March, 1896.)

Claim.—1st. The combination with the platform of a car, of a suitable supporting frame suspended therefrom, and a sliding fender or guard which consists of a suitable frame which is adapted to slide in the bottom of the supporting frame, and which is provided with springs by which it may be partially projected in front of the car,

and with a plate or bar provided with teeth or sprockets, and said frame being provided with a sprocket-wheel which is in operative

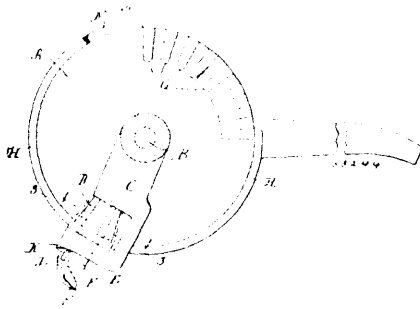


connection with one of the axles, and which is adapted to operate in connection with said teeth or sprockets, so as to assist in projecting the fender or guard, substantially as shown and described. 2nd. The combination with the platform of a car, of suitable frame suspended therefrom, and a sliding fender or guard which consists of a suitable frame which is adapted to slide in the bottom of the supporting frame, and which is provided with springs by which it may be partially projected in front of the car, and with a plate or bar provided with teeth or sprockets, and said frame being provided with a sprocket-wheel which is in operative connection with one of the axles, and which is adapted to operate in connection with said teeth or sprockets, so as to assist in projecting the fender or end pieces, and longitudinal rods or bars, which are passed through a cross-bar which forms a part of the supporting frame, near the middle thereof, and also a similar cross-bar at the forward end of said frame, and the springs which are adapted to project said fender or guard being mounted on a portion of said longitudinal bars or rods, forward of the middle cross-bar of the supporting frame, substantially as shown and described. 3rd. The combination with the platform of a car, of suitable hangers or supporting frames, a fender or guard in the bottom thereof, and adapted to be projected in front of the car, springs connected with said fender or guard, and bearing upon a portion of the supporting frame, and adapted to partially project the fender or guard, and means connected with the adjacent axle of the car, for finishing the projection thereof, substantially as shown and described. 4th. The combination with the platform of a car, of suitable hangers or supporting frames, a fender or guard mounted in the bottom thereof, and adapted to be projected in front of the car, springs connected with said fender or guard, and bearing upon a portion of the supporting frame, and adapted to partially project the fender or guard, and means connected with the adjacent axle of the car, and with the fender or guard frame, for finishing the projection thereof, said means consisting of a sprocket-wheel mounted in a vertically movable frame and adapted to operate in connection with sprockets or teeth, formed on the fender or guard frame, and said sprocket-wheel being in operative connection with the axle of the car, substantially as shown and described. 5th. The combination with the platform of a car, of suitable hangers or supporting frames, a fender or guard mounted in the bottom thereof, and adapted to be projected in front of the car, springs connected with said fender or guard, and bearing upon a portion of the supporting frame, and adapted to partially project the fender or guard, and means connected with the adjacent axle of the car, and with the fender or guard frame, for finishing the projection thereof, said means consisting of a sprocket-wheel mounted in a vertically movable frame and adapted to operate in connection with sprockets or teeth, forced on the fender or guard frame, and said sprocket-wheel being in operative connection with the axle of the car, substantially as shown and described. 6th. The combination with the platform of a car, of suitable hangers or supporting frame, a fender or guard mounted in the bottom thereof, and adapted to be projected in front of the car, springs connected with said fender or guard, and bearing upon a portion of the supporting frame, and adapted to partially project the fender or guard, and means connected with the adjacent axle of the car, and with the fender or guard frame, for finishing the projection thereof, said means consisting of a sprocket-wheel mounted in a vertically movable frame and adapted to operate in connection with the sprockets or teeth formed on the fender or guard, frame and said sprocket-wheel being in operative connection with the axle of the car, and the frame or support being provided with a spring which is adapted to hold the fender or guard in position beneath the platform and a shaft which extends upwardly through the platform, and operative devices by which the connection of the spring with the fender or guard is broken, substantially as shown and described. 7th. The combination with the platform of a car, of suitable hangers or supporters frames, a fender or guard mounted in the bottom thereof, and adapted to be projected in front of the car, springs connected with said fender or guard, and bearing upon a portion of the supporting frame, and adapted to partially project the fender or guard, and means connected with the adjacent axle of the car, and with the fender or guard frame, for finishing the projection thereof, said means consisting of a sprocket wheel mounted in a vertically movable frame, and adapted to operate in connection with sprockets or teeth, formed on the fender or guard frame, and said sprocket wheel being in operative connection with the axle of the car, and the frame or support being provided with a spring which is adapted to hold the fender or guard in its position beneath

the platform, and a shaft which extends upwardly through the platform, and operative device by which the connection of the spring with the fender or guard is broken, consisting of a shaft which is provided with depending arms or pins by which said spring is operated and means connected with said vertical rod or shaft by which the fender or guard may be withdrawn beneath the platform, substantially as shown and described. 8th. The combination with the platform of a car, of a suitable supporting frame or hangers suspended therefrom: a fender or guard mounted in the lower part of said frame and provided with springs by which it may be partially projected in front of the car, and devices connected with said fender or guard, and with said supporting frame, and with the adjacent axle of the car, for completing the projection of the fender or guard, said supporting frame being also provided at their forward end thereof, with a spring by which the fender or guard is retained beneath the platform, and means for operating said spring consisting of buffer bolts which are movably mounted in a suitable buffer, and which are adapted to operate in connection with suitably supported pins or arms which are adapted to bear upon said spring, substantially as shown and described. 9th. The combination with the platform of a car, of a suitable support suspended therefrom, a fender or guard-mounted therein, and adapted to be projected in front thereof, said fender or guard being provided with a plate having sprocket teeth or projections formed therein, and said support with a vertically movable frame, in which is mounted a sprocket wheel is adapted to operate in connection with said sprocket teeth, and the shaft of which is provided with other wheels which are in operative connection with one of the axles of the car, and means for operating said vertically movable frame consisting of a lever supported above the platform of the car, and provided with a chain, rope or chain which extends there-through, and which passes over suitable pulleys in said frame, substantially as shown and described. 10th. The combination with the platform of a car, of a suitable supports suspended therefrom, a fender or guard therein, and adapted to be projected by springs, and supplemented by the forward motion of the car, means for retaining said frame beneath the platform, and devices for operating the same consisting of longitudinally movable buffer bolts which project in front of the car, substantially as shown and described. 11th. The combination with the platform of a car, of suitable supports suspended therefrom, a fender or guard mounted therein, and adapted to be projected by springs, and supplemented by the forward motion of the car, means for retaining said frame beneath the platform, and devices for operating the same consisting of longitudinally movable buffer bolts which project in front of the car, and a vertically shaft or rod which extends through the platform, and which is adapted to be depressed so as to operate to release the fender or guard, and devices connected with said rod or shaft for withdrawing the fender or guard beneath the platform, substantially as shown and described. 12th. The combination with the platform of a car, of a spring operated fender or guard which is suitably supported beneath the same, and which is also provided with operating devices which are in connection with one of the axles of the car whereby it may be rejected in front thereof, said platform being also provided with a vertically movable shaft or rod, and means connected therewith and with the platform, substantially as shown and described. 13th. The combination with the platform of a car, of a spring operated fender or guard which is suitably supported beneath the same, and which is also provided with operating devices which are in connection with one of the axles of the car whereby it may be projected in front thereof, said platform being also provided with a vertically movable shaft or rod, and means connected therewith, and with the platform for withdrawing the fender or guard beneath the platform, consisting of sprocket teeth or projections formed on the fender or guard, a vertically movable frame in which is mounted a sprocket wheel which is adapted to operate in connection with said teeth or projections, substantially as shown and described. 14th. The combination with the platform of a car, of a car operated fender or guard which is suitably supported beneath the same, and which is also provided with operating devices which are in connection with one of the axles of the car whereby it may be projected in front thereof, said platform being also provided with a vertically movable shaft or rod, and means connected therewith, and with the platform for withdrawing the fender or guard beneath the platform, consisting of sprocket teeth or projections formed on the fender or guard, a vertically movable frame in which is mounted a sprocket wheel which is adapted to operate in connection with said teeth or projections, and devices connected with the platform for operating said vertically movable frame, consisting of a lever, substantially as shown and described. 15th. The combination with the platform of a car, of a spring operating fender or guard which is suitably supported beneath the same, and which is also provided with operating devices which are in connection with one of the axles of the car, whereby it may be projected in front thereof, said platform being also provided with a vertically movable shaft or rod, and means connected therewith, and with the platform for withdrawing the fender or guard beneath the platform, consisting of sprocket teeth or projections formed on the fender or guard, a vertically movable frame in which is mounted a sprocket wheel which is adapted to operate in connection with said teeth or projections, and devices connected with the platform for operating said vertically movable frame, consisting of a lever, substantially as shown and described. 16th. The combination with the platform or car, of a spring

operated fender or guard which is suitably supported beneath the same, and which is also provided with operating devices which are in connection with one of the axles of the car, whereby it may be projected in front thereof, said platform being also provided with a vertically movable shaft or rod, and means connected therewith and with the platform for withdrawing the fender or guard beneath the platform, consisting of sprocket teeth or projections formed on the fender or guard, a vertically movable frame in which is mounted a sprocket wheel which is adapted to operate in connection with said teeth or projections, and devices connected with the platform for operating said vertically movable frame consisting of a lever, provided with a rope or chain which passes downwardly through said platform, and which is in connection with devices for releasing said vertically movable frame, and for raising the same, substantially as shown and described. 17th. The combinations with the platform of a car, of a spring operated fender or guard, which is suitably supported beneath the same, and provided with means for retaining it in position, said fender or guard being in operative connection with one of the axles of the car, whereby it may be projected in front of the said fender or guard, being adapted to be released by means of longitudinally movable buffer bolts, and also by means of a vertically movable shaft which passes through the platform thereof, and which is provided with a ratchet wheel which is secured thereto, above the platform, and means for holding said shaft or rod in its raised position, consisting of a pivoted segmental plate which is adapted to be turned beneath the same, and which is provided with a pawl which is adapted to operate in connection with said ratchet wheel, said vertically movable shaft or rod being also provided with a wheel or pulley which is mounted thereon, beneath the platform, and which is in connection with devices whereby the fender or guard may be withdrawn beneath the platform after it has been projected, substantially as shown and described. 18th. The combination with the platform of a car, of a spring operated fender or guard which is suitably supported beneath the same, and which is adapted to be projected in front of a car, by means of operative devices connected with one of the axles thereof, a spring by means of which the fender or guard is retained beneath the car, and another spring by means of which it is held in the projected position, and means for releasing the spring by which it is held beneath the car, in order that it may be projected, and devices for releasing the spring by which it is held in the projected position, and for withdrawing it beneath the platform, substantially as shown and described.

No. 53,244. Knottor Operating Mechanism for Grain Binders. (*Appareil à nouer pour liesses à grain.*)

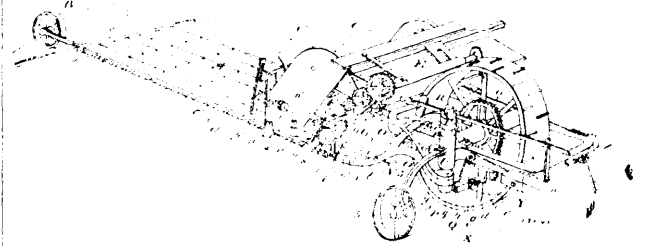


Maurice Kane, Austin, Illinois, U.S.A., 13th August, 1896; 6 years. (Filed 29th July, 1896.)

Claim.—1st. In a knottor operating mechanism, a knottor pinion carrying the usual bill and tongue, and having equally spaced gear teeth thereon, and a knottor operating wheel having the same number of gear teeth thereon as on said pinion, and adapted, when rotated one complete revolution, to engage and rotate said pinion slightly more than one complete revolution, and means for locking said pinion against reverse rotation beyond a desired point, as and for the purpose set forth. 2nd. In a knottor operating mechanism, a knottor pinion carrying the usual bill and tongue, a shoulder arranged to engage said tongue after a complete revolution thereof to lock the same against rotation, a knottor operating wheel provided with gear teeth thereon, equal in number to the number of gear teeth on said pinion, and adapted when rotated one complete revolution to engage and rotate said pinion slightly beyond a complete revolution, as and for the purpose set forth. 3rd. In a knottor operating mechanism, a pinion carrying the usual knottor bill and tongue, means for locking said pinion against reverse rotation beyond a desired point, a knottor operating wheel provided with gear teeth, adapted when rotated one complete revolution to engage and rotate said pinion slightly more than one complete revolution, and an elevation or cam surface formed on said wheel adjacent to the gear teeth formed thereon, adapted to engage and properly position said pinion to be engaged at the desired point by said gear teeth, as and for the purpose set forth. 4th. In a knottor operating mechanism, a pinion, carrying the usual knottor bill and tongue, a fixed shoulder, arranged to be engaged by said tongue to lock said

pinion against reverse rotation, and an operating wheel, provided with gear teeth adapted to engage and actuate said pinion and having a raised surface formed adjacent to said gear teeth, said raised surface adapted to engage and properly position said pinion to be engaged by said gear teeth, as and for the purpose set forth.

No. 53,245. Harvester Binder. (*Moissonneuse lieuse.*)



Frederick Duncan Mercer and John Smith Mercer, both of Alliston, Ontario, Canada, 13th August, 1896; 6 years. (Filed 9th Oct., 1895.)

Claim.—1st. In a harvester binder the combination of the platform frame and the main wheel sufficiently remote to permit of the delivery of the sheaf between the platform frame and the main wheel, substantially as specified. 2nd. In a harvester binder the combination with the platform frame of the main wheel and main frame sufficiently remote to permit of the delivery of the sheaf between the platform frame and main frame, substantially as specified. 3rd. In a harvester binder the combination with the elevator of the main wheel sufficiently remote to permit of the delivery of the sheaf between the elevator and main wheel substantially as specified. 4th. In a harvester binder the combination with the binding attachment of the main wheel sufficiently remote to permit of the delivery of the sheaf between the main wheel and binding attachment, substantially as specified. 5th. In a harvester binder the combination with the platform frame, elevator, conveyor and binding attachment of the main wheel sufficiently remote to permit of the delivery of the sheaf between the binding attachment and main wheel, substantially as specified. 6th. In a harvester binder, the combination with the main wheel, an elevator having a back substantially less in height than the height of the main wheel, and sufficiently remote to permit the delivery of the sheaf between the main wheel and elevator, substantially as specified. 7th. In a harvester binder, the combination of the elevator back, the elevator less in length than the elevator back, and means for making the elevator "opened" or "closed," substantially as specified. 8th. In a harvester binder, the combination with the conveyor table, the elevator back and elevator of a lesser length than the elevator back, and a rake pivoted in chains in the elevator and above the grain, substantially as specified. 9th. In a harvester binder, the combination with the main wheel of a binding attachment, an elevator having a back substantially less in height than the height of the main wheel and sufficiently remote to permit the delivery of the sheaf between the main wheel and the binding attachment, substantially as specified. 10th. In a harvester binder, the combination with the conveyable table, the elevator back and open end elevator of a lesser length than the elevator back of a rake pivoted in chains in the elevator and above the grain, substantially as specified. 11th. In a harvester binder, the combination with the elevator of an elevator back extending beyond the end of the elevator to form an open elevator, and a movable piece arranged to be placed against the end of the elevator and on the elevator back to form a closed elevator, substantially as specified. 12th. In a harvester binder, the combination with the elevator of an elevator back extending beyond the end of the elevator to form an open end elevator, substantially as specified. 13th. In a harvester binder, the combination with the elevator of an elevator back extending beyond one end of the elevator, a hinged leaf forming part of the elevator back and arranged to be turned up against the end of the elevator to form a closed elevator, substantially as specified. 14th. In a harvester binder, the combination of the platform frame, the conveyor table, a rake elevator, the elevator back, which together with the conveyor table extending beyond one end of the elevator, and an arched brace connected to the platform frame supporting the end of the elevator, substantially as specified. 15th. In a harvester binder, the combination of the conveyor table, the elevator, the elevator back projecting beyond the rear end of the elevator table, a leaf board arranged to be turned up at the back of the conveyor table and a movable piece arranged to be placed against the end of the elevator and elevator back substantially in alignment with the leaf board of the conveyor table, substantially as specified. 16th. In a harvester binder, the combination of the conveyor table, the elevator, an elevator back projecting beyond the end of the elevator, an arch brace connected to the platform frame and supporting the rear end of the elevator, and a rake pivoted in chains within the elevator, substantially as specified. 17th. In a harvester binder, the combination of the main frame and the platform frame pivotally connected to the main frame arranged to swing to the rear of the main frame, substantially as specified. 18th. In a harvester binder, the

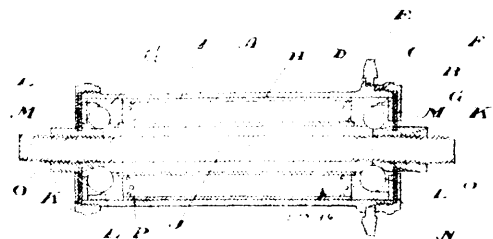
combination of the main frame, the platform frame pivotally connected to the main frame and arranged to swing to the rear of the main frame, and means for holding the platform frame in its proper working position, substantially as specified. 19th. In a harvester binder, the combination of the main frame, the platform frame, a pivotal arm connected to the platform frame, and means for pivotally connecting the end of the pivotal arm to the main frame, substantially as specified. 20th. In a harvester binder, the combination of the main frame, the platform frame, a pivotal arm one end of which is rigidly connected to the front of the platform frame, a socket on the main frame, and a pivotal pin carried by the said arm arranged to enter the said socket, substantially as specified. 21st. In a harvester binder, the combination of the main frame, a socket connected to the main frame, the platform frame, a pivotal arm one end of which is rigidly connected to the front of the platform frame, a pin carried by the said arm arranged to enter the said socket, and a stay connected to the front of the platform frame and to the main frame or tongue, substantially as specified. 22nd. In a harvester binder, the combination of the main frame, the platform frame pivotally connected to the main frame arranged to swing to the rear of the main frame, and a stay connected to the tongue or main frame and detachably connected to the platform frame to hold the platform frame in the proper working position, substantially as specified. 23rd. In a harvester binder, the combination of the main frame, the platform frame, a pivotal arm connected to the platform frame, means for pivotally connecting the end of the pivotal arm to the main frame, and a stay connected to the main frame or tongue, and detachably connected to the platform frame, substantially as specified. 24th. In a harvester binder, the combination of the main frame, a vertical socket secured to the main frame, the platform frame, a crane connected to the front of the platform frame having two arms arranged to extend respectively above and below the said socket, and a pivotal pin passing through said arms and said socket, substantially as specified. 25th. In a harvester binder, the combination of the main frame, a vertical socket secured to the main frame, the platform frame, a crane connected to the front of the platform frame having two arms arranged to extend respectively above and below the said socket, with sufficient clearance between the said arms and the said socket to permit of the vertical adjustment of the said crane, and means for vertically adjusting the said crane, substantially as specified. 26th. In a harvester binder, the combination of the main frame, the platform frame, the conveyor, the elevator, the binding attachment, and a crane pivotally connected to the main frame carrying a binding attachment, substantially as specified. 27th. In a harvester binder, the combination of the main frame, the pivotal post connected to the main frame, a crane mounted on the pivotal post, and the binding attachment carried by the said crane, substantially as specified. 28th. In a harvester binder, the combination of the main frame, the platform frame, an arm rigidly connected to the front of the platform frame and pivotally connected to the main frame, the binding attachment and a crane pivoted on said arm carrying a binding attachment, substantially as specified. 29th. In a harvester binder, the combination of the main frame, a vertical socket secured to the main frame, the platform frame, a crane connected to the front of the platform frame having two arms arranged to extend respectively above and below the said socket, a pivotal pin passing through the said arms and socket, a second crane having two arms pivoted on the said pin, the binding attachment carried by the said second crane, substantially as specified. 30th. In a harvester binder, the combination of a main frame, a crane pivotally connected to the main frame, the binding attachment carried by the said crane, sufficiently remote from the main frame to permit of the sheaf being delivered between the binding attachment and the main frame, substantially as specified. 31st. In a harvester binder the combination of the main frame, a vertical socket secured to the main frame, a platform frame, a crane connected to the front of the platform frame, a pivotal pin passing through the frame and socket, a second crane pivoted to the said pivotal pin, the binding attachment carried by the said second crane, and means for vertically adjusting the said pin and cranes, substantially as specified. 32nd. In a harvester binder the combination of the main frame, the platform frame pivotally connected to the main frame, and a stay connected to the rear of the platform frame and to the pivotal connection between the platform frame and the main frame to brace the rear end of the platform frame, substantially as specified. 33rd. In a harvester binder the combination of the main frame, the platform frame pivotally connected to the main frame, and a stay connected to the main frame, a shaft connected to the rear of the platform frame and to the arm above the platform frame, to brace the rear of the platform frame, substantially as specified. 35th. In a harvester binder the combination of the main frame, the platform frame, a pivotal arm, one end of which is rigidly connected to the front of the platform frame, a stay connected to the rear of the platform frame and to the pivotal arm above the platform frame, a socket on the main frame, and a pivotal pin carried by the said arm arranged to enter the said socket, substantially as specified. 36th. In a harvester binder the combination of the main frame, a socket connected to the main frame, the platform frame, a pivoted arm

one end of which is rigidly connected to the front of the platform frame, a pin carried by the other end of the said arm arranged to enter said socket, a stay connected to the rear of the platform frame and to the pivotal arm to brace the rear of the platform frame, and a stay connected to the front of the platform frame and to the main frame or tongue to keep the platform frame in its proper relative position to its work, substantially as specified. 37th. In a harvester binder the combination of the main frame, a vertical socket secured to the main frame, the platform frame, a crane connected to the front of the platform frame having two arms arranged to extend respectively above and below the said socket, a pivotal pin passing through the said arms and socket, and a stay connected to the rear of the platform frame and to the said crane to brace the rear end of the platform frame, substantially as specified. 38th. In a harvester binder the combination of the main frame, a vertical socket secured to the main frame, the platform frame, a crane connected to the front of the platform frame having two arms arranged to extend respectively above and below the said socket, a pivotal pin passing through the said arms and socket with sufficient clearance between the said arms and said socket to permit of the vertical adjustment of the said crane, means for vertically adjusting the said crane, and a stay connected to the rear of the platform frame and to the crane, substantially as specified. 39th. In a harvester binder the combination of the platform frame, the cutter bar, a truss rod extending along the front of the cutter bar beneath the guards, connected at one end to the stubble end of the platform frame, and bent slightly downwards and adjustably connected at its opposite end to the grain end of the platform frame, substantially as specified. 40th. In a harvester binder the combination of the platform frame, the cutter bar, a truss rod extending along in front of the cutter bar beneath the guards, connected at one end to the stubble end of the platform frame, and bent slightly downwards under the shoe plate, and adjustably connected at its opposite end to the grain end of the platform frame, substantially as specified. 41st. In a harvester binder the combination of the platform frame, the cutter bar, a truss rod extending along in front of the cutter bar beneath the guards, connected at one end to the stubble end of the platform frame, and bent slightly downwards, and adjustable connected at its opposite end to the grain end of the platform frame, and a truss rod extending along the back of the platform frame, one end of which is rigidly connected to the stubble end of the platform frame whilst the opposite end of the truss rod is adjustably connected to the grain end of the platform frame, the said truss rod bent slightly downwards, substantially as specified. 42nd. In a harvester binder the combination of the platform frame, a truss rod along the back of the platform frame and rigidly connected at one end to the stubble end of the platform frame and adjustably connected at its opposite end to the grain end of the platform frame, the said truss rod bent slightly downward, supporting the end of the elevator, substantially as specified. 43rd. In a harvester binder, the combination of the platform frame, a truss rod rigidly connected at one end to the stubble end of the platform frame and adjustably connected at its opposite end to the grain end of the platform frame, the said truss rod bent slightly downward, substantially as specified. 44th. In a harvester binder, the combination of the main frame, the platform frame pivotally connected to the main frame and arranged to swing to the rear of the main frame, a shaft connected to the main frame, mechanism for operating the shaft, a socket in the end of the said shaft, a tumbling rod connected to the platform frame arranged to enter the said socket adapted to withdraw from the socket in the said shaft on the swinging of the platform frame to the rear of the main frame, substantially as specified. 45th. In a harvester binder, the combination of the main frame, the platform frame pivotally connected to the main frame arranged to swing to the rear of the main frame, a shaft connected to the main frame a knuckle joint connected to the shaft, a socket in the end of the knuckle joint, mechanism for operating the shaft and knuckle joint, a tumbling rod connected to the platform frame arranged to enter the socket in the knuckle joint, substantially as specified. 46th. In a harvester binder, the combination of the main frame, the platform frame pivotally connected to the main frame and arranged to swing to the rear of the main frame, a shaft connected to the main frame, a knuckle joint connected to the shaft, a socket in the end of the knuckle joint, mechanism for operating the shaft and knuckle joint, a tumbling rod the end of which is arranged to enter the said socket and mechanism connected to the tumbling rod for operating the harvester binder, substantially as specified. 47th. In a harvester binder, the combination with the platform frame of a driving shaft mounted upon the same, mechanism for operating the said shaft, a gear wheel mounted on the said shaft, a cross shaft at substantially right angles to the driving shaft, a pinion on the cross shaft meshing with the said gear wheel, and means connected to the cross shaft for operating the pitman of the knife, substantially as specified. 48th. In a harvester binder, the combination with the platform frame of a driving shaft mounted thereon, a gear wheel mounted on the driving shaft, mechanism for operating the driving shaft, a cross shaft, a pinion mounted on the cross shaft engaging with the gear wheel on the driving shaft and a gear wheel on the cross shaft operating the knotted driving mechanism, substantially as specified. 49th. In a harvester binder, the combination of the main frame of the binding attachment, a rod connected to the main frame of the binding attachment, a packer

link journalled on the rod, an arm one end of which is rigidly connected to the packer link, whilst the opposite end is journalled on the said rod, substantially as specified. 50th. In a harvester binder, the combination of the main frame of the binding attachment, a rod connected to the main frame of the binding attachment, a packer link journalled on the rod, an arm one end of which is rigidly connected to the packer link, whilst the opposite end is journalled on the said rod, and a stay connected to the said link and arm, substantially as specified. 51st. In a harvester binder, the combination of the needle of a tripping device consisting of a frame, a spring operated bolt moving substantially horizontally in the said frame, means connected to the said bolt whereby it can be operated to release the compression lever, substantially as specified. 52nd. In a harvester binder, the combination of the needle an enlargement on the hub of the needle, a tripping device consisting of a frame, a spring operated main bolt working in the frame, a spring operated latch working in the outer end of the main bolt, a compressing lever the end of which is normally held by the inner end of the main bolt, the enlargement on the hub adapted to bear against the spring operated latch and move outward the main bolt when the needle commences its downward movement to release the end of the compressing lever, substantially as specified. 53rd. In a harvester binder, the combination of the needle a tripping device consisting of a frame, a main bolt, a spring operated main bolt working in the frame, a compression lever the inner end of the main bolt normally holding the end of the compression lever, and means for moving outwardly the main bolt and releasing the compression lever, substantially as specified. 54th. In a harvester binder, a tripping device consisting of a frame, a spring operated main bolt arranged to hold the end of the compression lever, and means for moving outwardly the main bolt to release the compression lever, substantially as specified. 55th. In a harvester binder, the combination of the needle, the needle back, a tripping device and a compression lever having two lugs, one of which is adapted to be held by the tripping device, and the other to come in contact with the needle back during the downward movement of the needle, substantially as specified. 56th. In a harvester binder, a tripping device consisting of a frame, a spring operated main bolt working in the frame, a spring operated latch working in the outer end of the main bolt, the inner end of the main bolt arranged to normally hold the end of the compressed lever, means for bearing against the spring operated latch to move outwardly the main bolt to release the compressed lever, substantially as specified. 57th. In a harvester binder, the combination of the needle, the needle back, an enlargement of the hub of the needle, a tripping device consisting of a frame, a spring operated main bolt working in the frame, the inner end of the main bolt arranged to hold the end of the compressed lever, a spring operated latch working in the outer end of the main bolt, the enlargement of the hub arranged to depress the spring operated latch to allow of the said enlargement passing to the inner side of the said spring operated latch during the upward movement of the needle, the said enlargement arranged to bear against the said latch and move outwardly the said bolt to release the compressed lever during the downward movement of the needle, substantially as specified. 58th. In a harvester binder, the combination of the frame of the knotter mechanism, an arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the arm, a holder sitting in the groove, means for adjusting the holder longitudinally in the said groove to operate the cord retaining mechanism, substantially as specified. 59th. In a harvester binder, the combination of the frame of the knotter mechanism, the disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, a ratchet holder sitting in the groove, means for adjusting the ratchet holder longitudinally in the said groove, a ratchet carried by the ratchet holder, the disc wheel operated by the ratchet, substantially as specified. 60th. In a harvester binder, the combination of the frame of the knotter mechanism, an arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the arm, a holder sitting in the groove, a slot in the holder, a bolt passing through the said slot and bottom of the groove of the holder to permit of the longitudinal adjustment of the holder, to operate the cord retaining mechanism, substantially as specified. 61st. In a harvester binder, the combination of the frame of the knotter mechanism, the disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, the ratchet holder sitting in the groove, a slot in the ratchet holder, a bolt passing through the said slot and bottom of the groove of the ratchet holder to permit of the longitudinal adjustment of the ratchet holder, the ratchet carried by the ratchet holder and the disc wheel, substantially as specified. 62nd. In a harvester binder, the combination of the frame of the knotter mechanism, the disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, the ratchet holder sitting in the groove, a slot in the ratchet holder, a bolt passing through the said slot and bottom of the groove of the ratchet holder to permit of the longitudinal adjustment of the ratchet holder, the ratchet carried by the ratchet holder and the disc wheel, a set screw passing through the disc wheel arm above the said groove, and a lug connected to the ratchet holder and bearing against the end of the said set screw, substantially as specified. 63rd. In a harvester binder, the combination of the frame of the knotter mechanism, a disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, the ratchet holder sitting in the groove, a slot in the ratchet holder, a bolt passing through the said slot and bottom of the groove of the ratchet holder to permit of the longitudinal adjustment of the ratchet holder, the ratchet carried by the ratchet holder and the disc wheel, a set screw passing through the disc wheel arm above the said groove, two lugs connected to the ratchet holder, one at either end of and bearing against the ends of the said set screw, and a serrated face on the under side of the ratchet holder engaging with a tooth in the bottom flange of the said groove, substantially as specified. 64th. In a harvester binder the combination of the frame of the knotter mechanism, a disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the said arm, a ratchet holder sitting in the said groove, a serrated face on the under side of the ratchet holder engaging with a tooth in the bottom flange of the said groove, a slot in the ratchet holder, a bolt passing through the said slot and bottom of the said groove, a ratchet carried by the ratchet holder, and a disc wheel operated by the said ratchet, substantially as specified. 65th. In a harvester binder the combination of the frame of the knotter mechanism, the disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, a ratchet holder sitting in the groove, a set screw passing through the disc wheel arm above the said groove, lugs connected to the ratchet holder arranged one at either end and bearing against the set screw, a ratchet connected to the ratchet holder, and a disc wheel operated by the ratchet, substantially as specified. 66th. In a harvester binder the combination of the frame of the knotter mechanism, the disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, a ratchet holder sitting in the groove, a set screw passing through the disc wheel arm above the said groove, lugs connected to the ratchet holder arranged one at either end and bearing against the set screw, a ratchet connected to the ratchet holder, and a disc wheel operated by the ratchet, substantially as specified. 67th. In a harvester binder the combination of the knotter deck, a leaf board connected thereto, a spring one end of which is connected to the binding attachment whilst the opposite end of the spring presses against the leaf board to hold the leaf board normally at right angles to the deck substantially as specified. 68th. In a harvester binder the combination of the knotter deck, a leaf board connected to the knotter deck, a spring one end of which is connected to the binding attachment, whilst the opposite end is bent at an angle to the body and presses against the leaf board to hold it normally at right angles to the knotter deck, substantially as specified. 69th. In a harvester binder the combination of the knotter deck, a leaf board connected to the knotter deck, a spring one end of which is connected to the binding attachment whilst the opposite end is bent at an angle to the body and presses against the leaf board to hold it normally at right angles to the knotter deck, a spiral formed between the bent end and the opposite end, a support passing through the said spiral to support the said spring, and a stop block to arrest the leaf board, substantially as specified. 70th. In a harvester binder the combination with the main frame and wheel of an arm connected to the main frame, and a wheel carried by the said arm to maintain the main frame and wheel in their upright position, substantially as specified. 71st. In a harvester binder the combination of the main frame and wheel, the platform frame pivotally connected to the main frame and arranged to swing to the rear of the main frame an arm pivotally connected to the main frame, and a wheel carried by said arm to maintain the main frame and wheel in an upright position when the platform is swung to the rear of the main frame, substantially as specified.

in the end of the disc wheel arm, the ratchet holder sitting in the groove, a slot in the ratchet holder, a bolt passing through the said slot and bottom of the groove of the ratchet holder to permit of the longitudinal adjustment of the ratchet holder, the ratchet carried by the ratchet holder and the disc wheel, a set screw passing through the disc wheel arm above the said groove, and two lugs connected to the ratchet holder, one at either end of and bearing against the end of the said set screw, substantially as specified. 64th. In a harvester binder, the combination of the frame of the knotter mechanism, the disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, the ratchet holder sitting in the groove, a slot in the ratchet holder, a bolt passing through the said slot and bottom of the groove of the ratchet holder to permit of the longitudinal adjustment of the ratchet holder, the ratchet carried by the ratchet holder and the disc wheel, a set screw passing through the disc wheel arm above the said groove, two lugs connected to the ratchet holder, one at either end of and bearing against the ends of the said set screw, and a serrated face on the under side of the ratchet holder engaging with a tooth in the bottom flange of the said groove, substantially as specified. 65th. In a harvester binder the combination of the frame of the knotter mechanism, a disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the said arm, a ratchet holder sitting in the said groove, a serrated face on the under side of the ratchet holder engaging with a tooth in the bottom flange of the said groove, a slot in the ratchet holder, a bolt passing through the said slot and bottom of the said groove, a ratchet carried by the ratchet holder, and a disc wheel operated by the said ratchet, substantially as specified. 66th. In a harvester binder the combination of the frame of the knotter mechanism, the disc wheel arm pivotally connected to the frame of the knotter mechanism, a groove in the end of the disc wheel arm, a ratchet holder sitting in the groove, a set screw passing through the disc wheel arm above the said groove, lugs connected to the ratchet holder arranged one at either end and bearing against the set screw, a ratchet connected to the ratchet holder, and a disc wheel operated by the ratchet, substantially as specified. 67th. In a harvester binder the combination of the knotter deck, a leaf board connected thereto, a spring one end of which is connected to the binding attachment whilst the opposite end of the spring presses against the leaf board to hold the leaf board normally at right angles to the deck substantially as specified. 68th. In a harvester binder the combination of the knotter deck, a leaf board connected to the knotter deck, a spring one end of which is connected to the binding attachment, whilst the opposite end is bent at an angle to the body and presses against the leaf board to hold it normally at right angles to the knotter deck, substantially as specified. 69th. In a harvester binder the combination of the knotter deck, a leaf board connected to the knotter deck, a spring one end of which is connected to the binding attachment whilst the opposite end is bent at an angle to the body and presses against the leaf board to hold it normally at right angles to the knotter deck, a spiral formed between the bent end and the opposite end, a support passing through the said spiral to support the said spring, and a stop block to arrest the leaf board, substantially as specified. 70th. In a harvester binder the combination with the main frame and wheel of an arm connected to the main frame, and a wheel carried by the said arm to maintain the main frame and wheel in their upright position, substantially as specified. 71st. In a harvester binder the combination of the main frame and wheel, the platform frame pivotally connected to the main frame and arranged to swing to the rear of the main frame an arm pivotally connected to the main frame, and a wheel carried by said arm to maintain the main frame and wheel in an upright position when the platform is swung to the rear of the main frame, substantially as specified.

No. 53,246. Wheel Hub. (Moyeu de roue.)

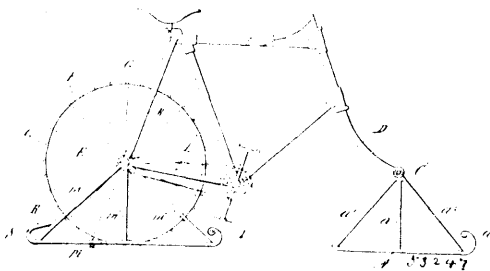


David S. Henderson, Brantford, Ontario, Canada, 13th August, 1896; 6 years. (Filed 7th December, 1895.)

Claim.—1st. A wheel hub consisting of a metallic sleeve, a ball-cup inserted in each end of the metallic sleeve, the axle, cone-bearings mounted on the axle, bearing balls running in the ball-race between the ball-cup and the cone-bearings, a metallic washer closing each ball race, an end-cap fitted on each end of the sleeve, and a textile fabric washer interposed between each end-cap and its adjacent metallic washer, substantially as specified. 2nd. A wheel hub consisting of a metallic sleeve, an end-cap fitted on each end of

the metallic sleeve, a projection on the sleeve contiguous to one of the end-caps, a shoulder at the inner side of the projection, a sprocket wheel screwed on the projection, and held in position by the shoulder and the inner face of the adjacent end-cap, substantially as specified. 3rd. A wheel hub consisting of a metallic sleeve, an end cap fitted on each end of the metallic sleeve, a projection on the sleeve contiguous to one of the end-caps, a shoulder at the inner side of the projection, a sprocket wheel screwed on the projection, and held in position by the shoulder and the inner face of the adjacent end-cap, a ball-cup in each end of the sleeve, a cone-bearing mounted on each end of the axle, bearing balls running in the ball race between the cone-bearings and the ball-cups, and a metallic washer closing the ball race, substantially as specified. 4th. A wheel hub consisting of a metallic sleeve, an end-cap fitted on each end of the metallic sleeve, a projection on the sleeve contiguous to one of the end-caps, a shoulder at the inner side of the projection, a sprocket wheel screwed on the projection, and held in position by the shoulder and the inner face of the adjacent end-cap, a ball-cup in each end of the sleeve, a cone-bearing mounted on each end of the axle, bearing balls running in the ball race between the cone-bearings and the ball-cups, a metallic washer closing the ball race, and a fabric washer interposed between each metallic washer and the inner face of its adjacent end-cap, substantially as specified. 5th. A wheel hub consisting of a metallic sleeve, an end-cap fitted on each end of the metallic sleeve, a projection on the sleeve contiguous to one of the end-caps, a shoulder at the inner side of the projection, a sprocket wheel screwed on the projection, and held in position by the shoulder and the inner face of the adjacent end-cap, a ball-cup in each end of the sleeve, a cone-bearing mounted on each end of the axle, bearing balls running in the ball race between the cone-bearings and the ball-cups, a metallic washer closing the ball race, a fabric washer interposed between each metallic washer and the inner face of its adjacent end-cap, and a groove in the cone-bearing to receive the fabric washer, substantially as specified. 6th. A wheel hub consisting of a metallic sleeve, an end-cap fitted on each end of the metallic sleeve, a projection on the sleeve contiguous to one of the end-caps, a shoulder at the inner side of the projection, a sprocket wheel screwed on the projection, and held in position by the shoulder and the inner face of the adjacent end cap, a ball-cup in each end of the sleeve, a cone-bearing mounted on each end of the axle, bearing balls running in the ball race between the cone-bearings and the ball-cups, a metallic washer closing the ball race, a fabric washer interposed between each metallic washer and the inner face of its adjacent end-cap, and a groove in the cone-bearing to receive the fabric washer, and two concentric sleeves inserted in the metallic sleeve to hold the ball-cups in position, substantially as specified. 7th. A wheel hub consisting of a metallic sleeve, a ball-cup inserted in each end of the metallic sleeve, a cone-bearing mounted on each end of the axle bearing, balls running in the ball races between the cone-bearings and the ball-cups, a metallic washer closing each of the ball races, an end-cap closing each end of the sleeve, a textile fabric washer interposed between the metallic washer and the inner face of its adjacent end-cap, and a groove in each of the cone-bearings to receive its respective textile fabric washer, substantially as specified. 8th. A wheel hub consisting of a metallic sleeve, a ball-cup inserted in each end of the metallic sleeve, a cone-bearing mounted on each end of the axle bearing, balls running in the ball races between the cone-bearings and the ball-cups, a metallic washer closing each of the ball races, an end-cap closing each end of the sleeve, a textile fabric washer interposed between each metallic washer and the inner face of its adjacent end-cap, a groove in each of the cone-bearings to receive its respective textile fabric washer, and concentric sleeves within the metallic sleeve to hold the ball-cups in position, substantially as specified. 9th. The combination with the wheel hub of a series of spoke holes formed in the wheel hub adjacent to each end of the spoke, each spoke having its inner end substantially Z-shaped and inserted through the spoke holes, substantially as specified.

No. 53,247. Bicycle Sleigh. (Bicycle traîneau.)

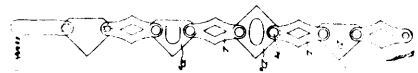


Frederick Jacob Mummann, Mount Vernon, New York, U.S.A., 13th August, 1896; 6 years. (Filed 13th January, 1896.)

Claim.—1st. The combination with the frame of a bicycle, of a runner as A, which is connected with the forward part of the frame, and which is substituted for the guide wheel of the machine, said runner being provided with a central vertical brace, and with a rear brace, which extends from the rear end thereof upwardly and for-

wardly and a forward brace which extends from the forward end of the runner backwardly and upwardly, and each of said braces being connected at their upper ends with a triangular head or hub through which passes a shaft connected with the lower end of the forward fork, and a pair of runners secured in the frame at each side of the rear or drive wheel, substantially as shown and described. 2nd. The combination with the frame of a bicycle, of a runner as A, which is connected with the forward part of the frame, and which is substituted for the guide wheel of the machine, said runner being provided with a central vertical brace, and with a rear brace, which extends from the rear end thereof upwardly and forwardly and a forward brace which extends from the forward end of the runner backwardly and upwardly, and each of said braces being connected at their upper ends with a tubular head or hub through which passes a shaft connected with the lower end of the forward fork, and a pair of runners secured to the frame at each side of the rear or drive wheel, said runners being provided with three separate stays or braces, which extend upwardly and connect with rings or bands at each end of the shaft, or axle of the drive wheel, and said runners being also connected by cross rods or bars at each end, substantially as shown and described.

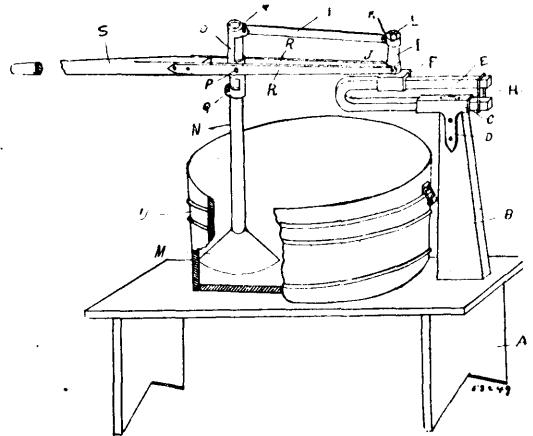
No. 53,248. Chain. (Chaîne.)



John Gould, Brantford, Ontario, Canada, 13th August, 1896; 6 years. (Filed 25th July, 1896.)

Claim.—The combination of a diamond-shaped link with an ordinary strap or link for the purposes hereinbefore set forth.

No. 53,249. Washing Machine. (Machine à laver.)

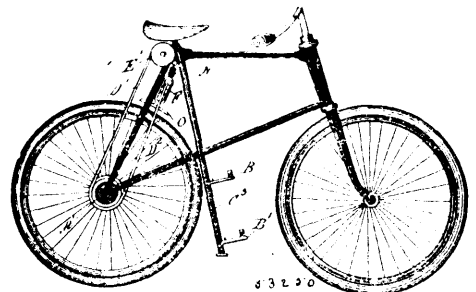


William Powe, Vancouver, British Columbia, 13th August, 1896; 6 years. (Filed 9th July, 1896.)

Claim.—The combination with a bench A, of a standard B rigidly supported thereon, a casing C at the upper end, a V-shaped bar E having one arm held by the said casing, a sleeve F movable on the remaining arm of the bar, a lever pivotally supported by the sleeve, and a plunger M connected with the lever, substantially as and for the purpose hereinbefore set forth.

No. 53,250. Bicycles and other like Vehicles.

(Bicycle et autres véhicules.)

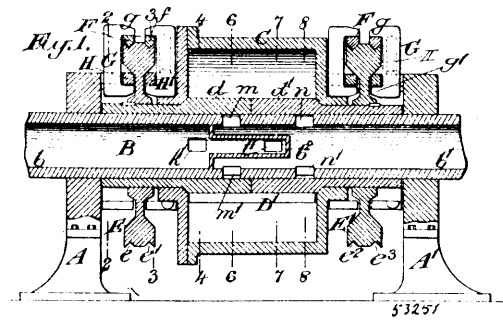


Arthur Harris, New York, State of New York, U.S.A., 13th August, 1896; 6 years. (Filed 28th July, 1896.)

Claim.—1st. In a cycle, friction clutch pulleys having surfaces of essentially the same curve as concentric casings surrounding them, with a gradual inclination thereto, and clutch balls contained

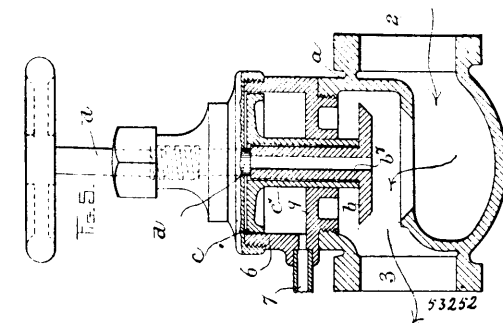
between said inclined surfaces and the inner surfaces of said casings as and for the purpose described. 2nd. In a cycle, friction clutches consisting of circular pulleys and balls and ring casings having inside surfaces of essentially the same curve as enclosed pulleys with gradual inclination thereto, substantially as shown and described. 3rd. In a cycle, the combination with a clutch pulley and surrounding casing, of two belts attached thereto, one at each side in such manner as to allow them to travel alternately on the same portion of the surface of such casing as shown and described. 4th. In a cycle, the combination with friction clutch pulleys of flanged surrounding rings, supported on ball bearings, substantially as shown and described. 5th. In a cycle, the combination with a clutch pulley casing, of a spoke flange for the driving wheel having a groove to hold a circle of balls which support said casing, as shown and described. 6th. In a cycle, the combination with a clutch pulley casing, of a screw flange to retain said casing in place, having a groove to hold a circle of balls which support said casings, as shown and described. 7th. In a cycle, a tube attached to the frame of the machine in a position parallel to the outstretched leg of the rider in which a rod or tube, to which is attached a belt or chord at one end and a pedal at the other end, moves vertically, substantially as described. 8th. In a cycle, the combination with a pedal guide-way tube attached to the frame of the machine, of a rod attached to the inside thereof or integral therewith, as and for the purpose described. 9th. In a cycle, a rod or tube attached to the frame of the machine in position parallel to the outstretched leg of the rider, on which a tube of larger diameter with attached pedal moves vertically, substantially as described. 10th. In a cycle, the combination with an outer tube attached to the frame of the machine of a tube or rod, lined on the outside at each end with a collar containing dividing plate and balls, with belt and pedal attached, moving vertically therein without lateral movement, substantially as described. 11th. In a cycle, the combination with an inner rod, of a tube, to which is attached a belt and pedal, and which is lined at each end with a collar containing balls to move vertically thereon, substantially as described. 12th. In a cycle, attached to pedal tubes moving vertically in or on guide-ways, pedals provided with a shank or band connection, and having a flat or concave surface, substantially as shown and described. 13th. In a cycle operated by a vertical movement of the feet, a pedal provided with a fixed base plate and a foot-rest adjustable thereon, substantially as described. 14th. In a cycle, elastic cushions located between the foot-rest and the base plate, substantially as described. 15th. In a cycle, a pedal provided with an adjustable heel-piece for the purpose set forth. 16th. In a cycle provided with pedals, attached to pedal tubes moving vertically in or on guide-ways, elastic stops secured to the lower ends of said guide-ways, substantially as set forth. 17th. In a cycle, the combination with driving pulleys and cords connecting said pulleys, of an intermediate pulley, mounted in a casing suspended from the frame of the machine by a spring placed in a direct line to said pulley, with a brake shoe attached to said frame, and devices for expanding and retracting said spring to cause a braking action, as shown and described. 18th. In a cycle, the combination of two driving pulleys, so constructed and arranged that the gear may be altered substantially as shown and described. 19th. In a cycle, the combination with a pulley intermediate to two driving pulleys of alterable size, of a pulley-holding frame, which can be adjusted to keep said pulley in line with the peripheries of said driving pulley, whenever altered in size, substantially as shown and described. 20th. In a cycle, the combination with a pulley or wheel axle, of balls arranged horizontally in two or more circles placed vertically, each two circles being divided by a horizontal ring of flat surface, the outside circle supporting the pulley rim or wheel hub and the inside one resting on said axle or on a loose ring encircling it, as shown and described. 21st. In a cycle, the combination with bearings consisting of circles of balls placed horizontally and vertically, of rings of flat surface, and attached flange projecting between two horizontal rows of balls, one such ring dividing every two vertical circles, substantially as shown and described. 22nd. In a cycle, the combination with bearings consisting of circles of balls placed vertically and rings placed between said circles, of flanges loosely encircling the axle, and kept one on each side loosely against said balls by lock-nuts attached to said axle, substantially as described. 23rd. In a cycle, the combination with a wheel or pulley axle, of balls arranged in two circles placed angle-wise, one of which is supported and retained in place by a screw cone on the axle or by a groove formed in a flange, said circle supporting a dividing doubly concave ring, which ring supports the other circle of balls, on which a cup, attached to the hub of the wheel or a pulley suitably grooved, rests, or of a larger number of circles of balls placed angle-wise, with a ring supported by one circle and supporting another, dividing any two of said circles substantially as described. 24th. In a cycle, the combination with a bearing consisting of circles of balls placed angle-wise, of a ring, placed between every two circles, having a concavity on each side, as shown and described. 25th. The combination of the operative parts, embodied in the bicycle illustrated in figure 1 of the drawings, constructed and arranged substantially as shown and described.

Claim. - 1st. A rotary engine, comprising two parts, a shaft and a cylinder, a plurality of pistons mounted within the cylinder and



...serving as valves for the admission and discharge of the actuating fluid, the said pistons being free to rotate independently of one of the said parts and the other of said parts being at the said time free to rotate independently of the pistons and means for clutching the pistons to one of said parts and to a stationary part, substantially as set forth. 2nd. A rotary engine comprising a cylinder, pistons mounted to rotate within the cylinder and serving as valves to admit and discharge the actuating fluid, means for clutching the pistons to and releasing them from the cylinder, parts located in proximity to the cylinder, means for clutching the pistons to and releasing them from said parts, the cylinder and the clutch receiving parts adjacent to the cylinder being, the one supported to rotate and the other stationary and means for conducting the actuating fluid to and from the interior of the cylinder, substantially as set forth. 3rd. The combination with a cylinder and a shaft on which the cylinder is mounted, the shaft and the cylinder being the one fixed and the other mounted to rotate, of pistons mounted to rotate freely within the cylinder, means for preventing the rotary movement of the pistons in one direction, clutching shoes carried by the aforesaid rotary part and means for drawing the clutching shoes towards the axis of rotation of the pistons for locking the rotary part to the pistons, substantially as set forth. 4th. The combination with the cylinder, the pistons mounted within the cylinder to rotate freely in one direction and means for preventing the pistons from rotating in the opposite direction, of clutching wheels or discs fixed to rotate with the pistons, clutching shoes carried by the cylinder and means for drawing the clutching shoes towards the axis of rotation of the pistons to lock the cylinder to the pistons, substantially as set forth. 5th. The combination with the shaft, the pistons mounted to rotate freely on the shaft and the cylinder mounted to rotate freely on the hubs of the pistons, of clutching discs carried by the hubs of the pistons, a set of clutching shoes secured to a fixed support, a set of clutching shoes secured to the cylinder and means for drawing the clutching shoes towards the periphery of the clutching discs as the pistons are forced in the one or the other direction, substantially as set forth. 6th. The combination with a shaft, pistons mounted to rotate freely on the shaft, a cylinder mounted to rotate freely on the hubs of the pistons and clutching discs carried by the hubs, of the pistons of different sets of clutching shoes in position to engage the periphery of each clutching disc, toggle clips engaged with the clutching shoes and with a fixed support and the cylinder respectively for locking the shoes to the clutching discs and means for tilting the toggle clips to determine the direction in which they shall clutch the disc, substantially as set forth.

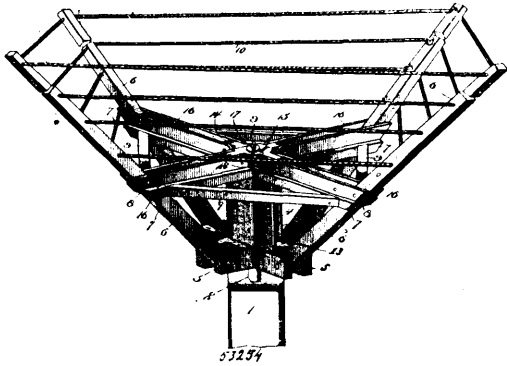
No. 53,252. Apparatus for Stopping Engines.
(Appareil à arrêter les machines à vapeur.)



No. 53,251. Rotary Engine. (Machine rotative.)
William Edgar Prall, jr., New York, State of New York, U.S.A.,
15th August, 1896; 6 years. (Filed 31st July, 1896.)

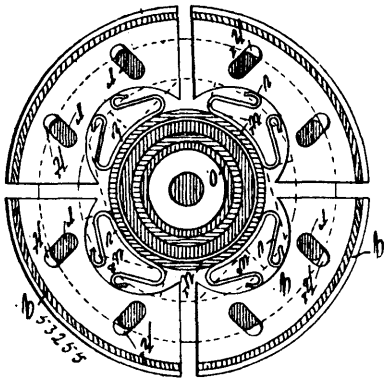
Gilman Weld Brown, West Newbury, Massachusetts, U.S.A., 15th
August, 1896; 6 years. (Filed 3rd August, 1896.)

a clothes drier, the combination with the supporting post, of the pivoted drier arms revolubly mounted on the post, a spreading



device consisting of a central vertically movable hub, and arms or links radiating therefrom and pivotally connected to said hub and to the drier arms, and a stay pin passing through an opening in the upper end of the post and engaging said hub, substantially as described. 3rd. In a clothes drier, the combination with one of the drier arms, of a grip or clutch consisting of a threaded bolt having a thumb nut and provided at its end with a hook, the said bolt extending through an opening in the drier arm and having its hooked end seated in a socket in said arm, whereby the rope cord or line is adapted to be clamped between the hook and the drier arm, substantially as described. 4th. In a clothes drier, the combination with the supporting post, of a sleeve mounted to turn thereon, a cross head at the lower end of the sleeve and rigid therewith, the drier arms pivotally connect d to said cross head, a second cross head rigidly connected to the top of said sleeve and having the radiating slots in which the drier arms are guided, the bearing plates secured to the upper and lower cross heads, the tie bolts connecting said bearing plates and cross heads, and the annular shoulders on the supporting post forming rests for said bearing plates, substantially as described. 5th. In a clothes drier, the combination of a suitable base, a short vertical pivot shaft fitted at its lower end in said base and provided at a point directly above the base and near its upper extremity with separate supporting shoulders, a vertical pivot post of substantially the same length as the distance between the two supporting shoulders of the shaft, said post being loosely and removably mounted on the pivot shaft and having fitted on its upper and lower ends perforated metallic bearing plates, said bearing plates on the upper and lower ends of the pivot post being arranged to loosely turn respectively on the upper and lower supporting shoulders of the shaft to permit of a free rotation of the drier by wind, a series of upwardly-divergent folding props pivotally connected at their lower extremities with the lower end of the pivot post so as to turn with the latter, and means for fastening the props in their folded and extended positions, substantially as set forth.

No. 53,255. Form of driving mechanism for safety bicycles. (*Mécanisme conducteur de sûreté pour bicycles.*)

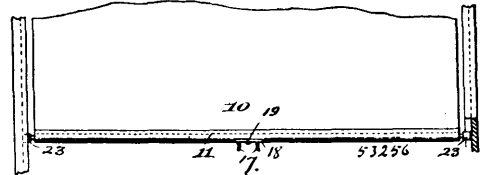


Walter William Curtis, 71 Cathedral Square, Canterbury, New Zealand, 15th August, 1896; 6 years. (Filed 24th July, 1896.)

Claim.—1st. In safety bicycle driving mechanism the combination with a pedal lever of projecting arms the ends of which when the lever is vibrated engage jointed wire rods connecting one end of a driving cord to the pedal lever the other end of such cord being coiled round a drum operating the driving wheel substantially as and for the purposes set forth and illustrated. 2nd. The combination with the pedal lever *a*, of an arm *h*, telescopically adjustable within a tubular base *h*¹, fixed upon the pedal lever a clamping

gland *h*², securing the arm in a desired position, substantially as and for the purposes herein described and illustrated. 3rd. The automatically adjusting arm *g*, consisting of the combination with the pedal lever *a*, of a cylinder connected thereto an arm provided with a piston reciprocating within such cylinder the length of the arm being regulated by the pressure of the driving cord (or rods connected thereto) when in contact with the end of the arm tending to force it into the cylinder against the pressure of a spring operating in the opposite direction substantially as and for the purposes herein described and illustrated. 4th. The arrangement for retarding motion of the cycle when the pedal levers are simultaneously depressed consisting of the combination with the hub of the driving wheel of friction sheaves upon either end thereof the peripheries of such sheaves surrounded by outer sheaves divided into segments a cord coiled around the segments of one sheave being continued across the machine and coiled around the segments of the other. Strain upon the connecting cord due to the simultaneous depression of the pedal levers overcoming the resistance of springs operating the segments on the opposite direction and causing them to move inwardly and their inner peripheries to come into contact with the outer peripheries of the sheaves upon the hub of the wheel substantially as herein described and illustrated. 5th. In combination with the friction sheaves *p*, upon the hub of the driving wheel the segmental friction sheaves *q*, surrounding the same guided by projecting lugs formed upon the side of clutch drums *f*, which take into recesses formed in the sides of the segments substantially as and for the purposes herein specified and illustrated. 6th. In combination the friction sheaves *p*, the surrounding segmental sheaves *q*, and the springs *r*, in the recesses *u*², formed in the segment substantially as specified and illustrated.

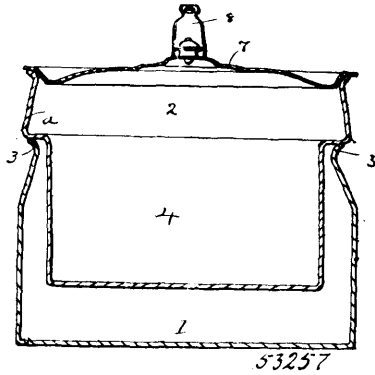
No. 53,256. Holding Mechanism for Spring Actuated Shades. (*Mécanisme d'arrêt pour ressort de persiennes.*)



Henry Haylett Forsyth, sr., Henry Haylett Forsyth, jr., and William Holmes Forsyth, all of Chicago, Illinois, U.S.A., 15th August, 1896; 6 years. (Filed 24th December, 1896.)

Claim.—1st. In a holding mechanism for spring actuated shades, the combination with a tube to be carried by the shade, of a spring actuated rod slidably mounted within the bore of the tube, a hand piece detachably connected with the inner end of the rod, and the outer end of the rod being engaged with the outer end of the tube for preventing the rotation of the rod and thereby the disengagement of the hand piece, and stops for limiting the endwise movement of the rod, substantially as and for the purpose described. 2nd. In a holding mechanism for spring actuated shades, the combination with a tube to be carried by the shade, a spring actuated rod slidably mounted in the tube and projecting beyond the end of the tube, the latter having an aperture toward its middle, a hand piece projecting through said aperture and detachably connected with the rod, a slot and pin connection between the rod and the tube, and an escutcheon having an aperture through which the hand piece also projects, the aperture of the escutcheon being of less length than the aperture of the tube whereby after the parts are assembled, the pin is prevented from leaving the slot, substantially as described. 3rd. In a holding mechanism for spring actuated shades, the combination with a tube having an aperture in its wall intermediate, its ends and longitudinal slots in its wall at its ends, spring actuated rods mounted within the tube, pins carried upon said rods and adapted to enter the slots of the tube, hand pieces connected with the inner ends of the rods and extending in position to be grasped, and an escutcheon having an aperture through which the hand pieces project and in which they slide, said aperture being of less length than that of the tube, whereby the parts may be assembled, and the pins are prevented from escaping the slots in operation, substantially as described. 4th. In a holding mechanism for spring actuated shades, the combination with a tube having an aperture in its wall intermediate its ends, and longitudinal slots in its wall at its ends, spring actuated rods having pins working in the slots and carrying friction devices beyond the ends of the tube, hand pieces secured to the inner ends of the rods, and an escutcheon having apertures through which the hand pieces work, the apertures in the escutcheon being separated by a bridge, and a binding screw passing through a perforation in the bridge and engaging the tube whereby to fix the escutcheon in place, substantially as described. 5th. In a holding mechanism for spring actuated shades, the combination with a tube, of a spring actuated rod mounted therein, the tube being apertured, and a hand piece having one of its ends connected with the rod and extending through the aperture in the tube, and its other end turned, or bent, and projected beyond the plane of the shade, and at an angle thereto, substantially as described.

No. 53,257. Cooking Utensil. (Ustensil de cuisine.)



Thomas Charles Davidson, Montreal Quebec, Canada, 15th August 1896; 6 years. (Filed 27th March, 1896.)

Claim.—1st. A cooking utensil comprising an upper and lower vessel, the former having a narrow bottomed section adapted to extend within the latter, and a wider top section with an intermediate connecting section, the wall of the top section formed with or without a curve at its lower end and being inclined and of greater diameter near such connecting section than at its edge, as and for the purpose set forth. 2nd. The improved method of forming vessels of the class described, which consists, in drawing the metal to present narrow and wide cylindrical sections with a connecting section at right angles thereto, and then rolling the metal of the wider cylindrical section to a desired form, as described.

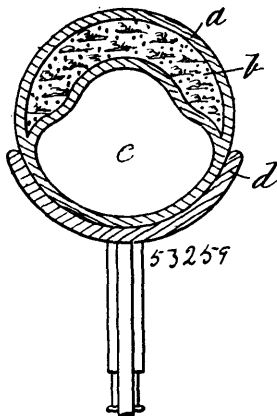
No. 53,258. Chain. (Chaîne.)



Jacob Boes, Cologne, Prussia, Germany, 15th August, 1896; 6 years. (Filed 4th May, 1896.)

Claim.—1st. In a chain-link, the combination of an eye *a*, with a hollow projection *b*, adapted to be introduced into the eye *a* of the neighbored link, substantially as described. 2nd. In a chain-link, the combination of an eye *a*, with the hollow projection *b*, adapted to be introduced into the eye *a* of the neighbored link, such parts being connected the one with the other by a piece *c*, having a conical hole *d*, substantially as described. 3rd. In chain-links, the combination of an eye *a*, and of a hollow projection *b*, adapted to be introduced into the eye *a* of the neighbored link with a pin adapted to be put into the hole of projection *b*, the eye *a* being connected with the projection *b*, by a piece *c*, having a conical hole *d*, substantially as described.

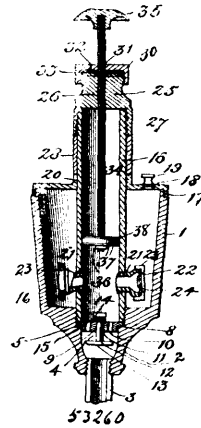
No. 53,259. Pneumatic Tire for the Wheels of Cycles and other Vehicles. (Bandage pneumatique pour roues de cycles et autres véhicules.)



James Francis Richard Wood, Stamford Hill, London, England, 15th August, 1896; 6 years. (Filed 29th June, 1896.)

Claim.—In tires, the combination of the tire *a*, pneumatic tube *c*, four or more channels *c*, and the porous sponge-like india rubber cushion tread *b* or its equivalent in any suitable material, substantially as herein described and for the purpose specified.

No. 53,260. Lubricator. (Graisseur.)

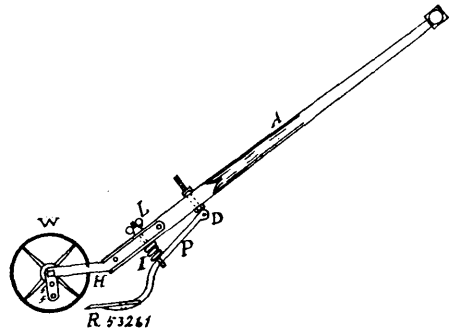


John J. Kennedy, Carbondale, Pennsylvania, U.S.A., 15th August, 1896; 6 years. (Filed 23rd July, 1896.)

Claim.—1st. In a lubricator, the combination with the reservoir externally tapered at its lower end, and within said tapered portion provided with a cavity of less diameter than the interior of the reservoir and at whose lower end is located a discharge, the wall of said cavity below the general bottom of the interior of the reservoir being provided with an annular recess, of a valve-seat within said recess and closing the top of the cavity and having a downwardly-opening valve, a pump-cylinder threaded in the wall of the annular recess and bearing upon and retaining the valve in position and above said point having inlet valved openings, and a plunger located in the cylinder, substantially as specified. 2nd. In a lubricator, the combination with the reservoir having a cavity formed in the bottom of its interior, which cavity terminates at its lower end in a discharge and at its upper end is provided with an annular recess, of a valve-seat arranged in the recess and carrying a downwardly-opening valve, a cylinder threaded in the recess and retaining the valve-seat in position and at its upper end projecting above the reservoir, valved openings located in the cylinder immediately above its lower end, a plunger arranged in the cylinder, and a cover removably threaded on the upper end of the reservoir and encircling the cylinder, substantially as specified. 3rd. In a lubricator, the combination with the reservoir having a cavity in the bottom of its interior, which cavity terminates at its lower end in a discharge and at its upper end is provided with an annular recess forming a valve-seat, of a downwardly-opening valve arranged in the seat and of a width or thickness less than the depth of the seat, a cylinder threaded at its lower end in the annular recess or seat and bearing upon and serving to retain the valve within its seat, said cylinder being provided with valved inlets communicating with the interior of the reservoir at points above the valve, and a plunger arranged in the cylinder, substantially as specified.

No. 53,261. Garden Hoe or Cultivator. (Houe ou cultivateur.)

(Houe ou cultivateur.)



William H. Retcheson, Belleville, Ontario, Canada, 15th August, 1896; 6 years. (Filed 10th June, 1896.)

Claim.—1st. A combination of wheel *W* with holes *f* in extended ends of bars *HH*, substantially as and for the purpose hereinbefore set forth. 2nd. A combination of slot-bolt *L*, shank *P*, spring *I* and handle *A*, substantially as and for the purpose hereinbefore set forth. 3rd. A combination of shank *P*, adjustable bolt *D* and handle *A*, substantially as and for the purpose hereinbefore set forth. 4th. A combination of adjustable pivot bolt *D*, slotted thumb bolt *L*, side bars *HH* with extended ends and holes *f*, substantially as and for the purpose hereinbefore set forth.

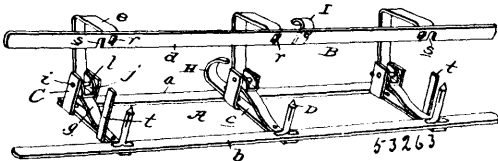
No. 53,262. Pencil. (Crayon)



Henry Hunt and Henry Hunt, jun., Wilkesbarre, Pennsylvania, U.S.A., 15th August, 1896; 6 years. (Filed 17th July, 1896.)

Claim.—1st. In a pencil, the combination of a tubular body adapted to receive a lead, clamping arms projecting beyond one end of the body and having their extremities normally held apart but adapted when moved toward each other to engage opposite sides of the lead, a band secured on one end of the body adjacent to said clamping arms, a spring-arm carried on the band and having one portion bent outward from the body and adapted to be flattened against the side of the same, and a clamping-sleeve having a roughened surface mounted to slide on the end of the body outside of said band and having a thickened portion the end of which is perforated for the passage of the lead, said thickened portion being adapted when the sleeve is moved to engage the spring-arms and press the same into engagement with the lead, said sleeve being movable longitudinally on the body outside of the spring-arm, and being adapted to be held in place on the body by engagement with said arm, substantially as set forth. 2nd. In a pencil, the combination of a body having a hollow to receive the lead, a band encircling one end of the body a spring-arm integrally formed on said band and having one portion bent outward from the body and adapted to be flattened against the side of the same, a clamping-sleeve having an aperture for the passage of the lead, said sleeve being movable longitudinally on the body outside of the said spring-arm and adapted to be held in place on the body by engagement with said arm, and spring-clamping-arms integrally formed on said band arranged to engage the lead between the aperture in the sleeve and the end of the body, said clamping-arms being actuated by the movement of the sleeve, substantially as set forth. 3rd. In a pencil, the combination of a hollow body, a band secured at one end thereof and having spring-clamping-arms extending beyond the end of the body and adapted to engage the lead, spring-arms projecting from the opposite end of the band and having their central portions bent away from the body and adapted to be pressed flat against the same, and a clamping-sleeve having a tubular portion adapted to slide on the body over the bent portion of the spring-arms, and to be held in place by engagement with said arms, said sleeve being provided with a conical portion having an opening for the passage of the lead, said conical portion being arranged to engage the clamping-arms and press the same into engagement with the lead, substantially as set forth.

No. 53,263. Files for Newspapers, Bills, Letters, etc. (Serre-papiers.)

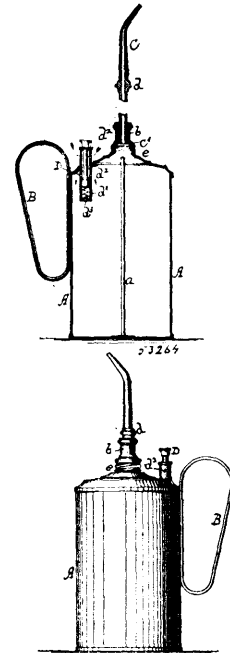


Bernard McGintz, Doylestown, Pennsylvania, U.S.A., 15th August, 1896; 6 years. (Filed 17th July, 1896.)

Claim.—1st. The newspaper file comprising the frame composed of the bar or strip having arms secured thereto and extending laterally therefrom, the perforators connected with and rising from the arms, fasteners or binders removably placed on said perforators and comprising a tubular portion and end portions adapted to be bent outwardly to hold papers on the tubular portion, the lug jour-

nals connected to and rising from the arms of the frame at the sides thereof, springs carried by said arms of the frame, and the clamp having arms formed at their hinged ends with angular branches adapted to be engaged by the springs, and in advance of said branches with lugs having journal apertures, pintles taking through the apertures of said lugs and the lug journals of the frame, and the bar connecting the several arms of the clamp and having apertures adapted to receive the perforators and fasteners or binders, substantially as and for the purpose set forth. 2nd. The newspaper file comprising the frame composed of the bar or strip *a*, arms secured thereto and extending laterally therefrom, the bar *b* connecting said arms at the outer ends thereof, and the lug journals *c* connected with the arms and rising from opposite sides of said arms, the springs carried by the arms of the frame, the gages connected to and rising from the end arms, and the clamp composed of the angular arms *c* formed at their hinged ends with angular branches adapted to be engaged by the springs and in advance of said branches with lugs having journal apertures. 3rd. A file comprising a base or frame, a perforator rising therefrom, and a spring-pressed clamp connected in a hinged manner with the base, the said clamp being so formed that it is adapted to press papers against the base and rest over and cover the perforator, substantially as specified. 4th. A file comprising a base or frame, a perforator rising therefrom, and a spring-pressed clamp connected in a hinged manner with the base and having an angular arm provided with an angular perforated branch at its end adapted to receive the perforator of the base, the said arm being adapted to press papers against the base and being also adapted to rest over and cover the perforator, substantially as and for the purpose set forth. 5th. A file comprising a base or frame, perforators rising therefrom, fasteners or binders removably placed on said perforators and comprising a tubular portion and end portions adapted to be bent outwardly to hold papers on the tubular portion, a clamp having angular arms connected at an intermediate point of their length in a hinged manner with the base or frame and having angular perforated branches at their free ends adapted to receive the perforators of the base, and flat springs carried by the base and extending beneath the connected ends of the arms, substantially as specified.

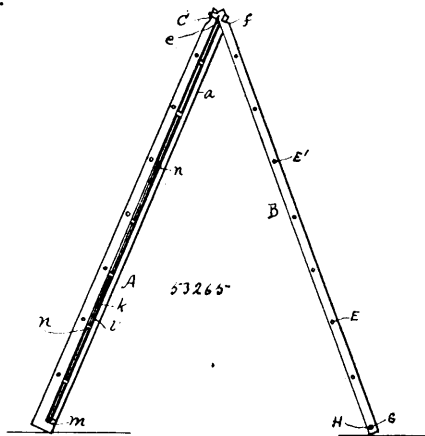
No. 53,264. Oiler for Bicycles. (Graisseur pour bicycles.)



Ludwig Hirsch, New York, State of New York, U.S.A., 17th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. An oiler, composed of a suitable body having a vent-device, a shifting spout or tube guided in a stuffing-box of the body, an inner elongated stationary guide-pin projecting from the bottom of the oiler in line with the spout to a point near the top of the body, said spout being adapted to be moved inwardly over the pin so as to abut against the bottom of the body, or outwardly so as to clear the same, substantially as set forth. 2nd. An oiler, composed of a suitable body having a vent-device, an inner elongated stationary guide-pin projecting from the bottom of the oiler to a point near the top of the body, a movable spout or tube, arranged in line with said pin, and guided in a suitable stuffing-box of the body, so as to fit onto said pin, said spout being provided with a flaring mouth at its inner end, adapted to seat upon the bottom of the body, at the base of the pin, and with a shoulder near its outer end, substantially as set forth.

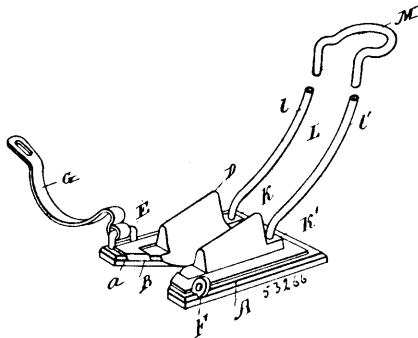
No. 53,265. Ladder. (Echelle.)



Jerome B. McShorer and James E. Carroll, both of Lansing, Michigan, U.S.A., 17th August, 1896; 6 years. (Filed 10th July, 1896.)

Claim. 1st. The combination in a ladder, of an outer section having recesses formed and open in the upper ends of its sides, an inner section having pins projecting from its sides into said recesses, and straps secured to the sides of the outer section and embracing the sides of the inner section, the sides of the inner section having notches forming seats for the straps, and the straps having their ends separated to form a passage for the rounds of the inner section when the latter is extended, substantially as and for the purpose set forth. 2nd. The combination in a ladder of an outer section having longitudinal grooves in its sides, and a series of inclined grooves in the rear walls of the longitudinal grooves, an inner extensible section having a tubular round projecting at each end into the said longitudinal groove, spring actuated rods in the tubular round projecting into the inclined grooves, and straps secured to the outer section and forming guides for the inner extensible section, as and for the purpose set forth.

No. 53,266. Bicycle Support, etc. (Support de bicyclette.)

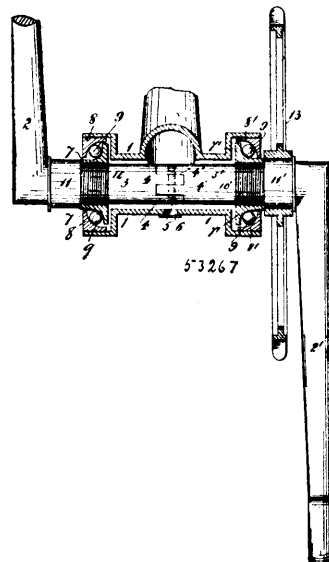


Jessie Elizabeth Keith and Frank B. Allan, assignees of Alexander Keith, all of Toronto, Ontario, Canada, 17th August, 1896; 6 years. (Filed 6th May, 1896.)

Claim.—1st. As a new article of manufacture, a bicycle support, consisting of a base plate, a substantially U-shaped wire, the lower ends of which are secured to the base plate, and the upper ends of which are bent into a plane, at an angle to the upright part, a pocket formed in the bent portion to receive the wheel, and an opening between the opposite sides of the said support, to permit of the admission or removal of the wheel, substantially as specified. 2nd. As a new article of manufacture, a bicycle holder, consisting of a base plate, capable of being secured to a stable object, a concealing plate fitted to the base plate to conceal the fastening medium, and a hasp, one end of which is pivotally connected, and the other end of which is secured to the said base plate, substantially as specified. 3rd. As a new article of manufacture, a bicycle holder consisting of a base plate, capable of being secured to a stable object, a channel formed in the base plate, the heads of the fastening mediums located within the said channel, a concealing plate located within the said channel, adapted to conceal the fastening mediums, and a hasp, one end of which is pivotally connected and the other end of which is secured to the base plate, substantially as specified. 4th. As a new article of manufacture, a bicycle holder, consisting of a base plate, capable of being secured to a stable object, a concealing plate fitted to the base plate to conceal the fastening

medium, a raised block on the top of the base plate, channeled longitudinally to receive the wheel, and a hasp, one end of which is hinged and the other secured to the base plate in front of the raised block, substantially as specified. 5th. As a new article of manufacture, a bicycle holder, consisting of a base plate, capable of being secured to a stable object, a concealing plate fitted to the base plate to conceal the fastening medium, a raised block on the top of the base plate, channeled longitudinally to receive the wheel, a hasp, one end of which is hinged and the other locked to the base plate in front of the raised block, and a support consisting of a substantially U-shaped wire, comprised of two opposite sides with a space between them, the lower ends of the sides fitted to a base plate, and the upper ends bent into a plane at an angle to the upright part, a pocket formed in the bent part of the support to receive the wheel, substantially as specified. 6th. As a new article of manufacture, a bicycle support and holder, consisting of a hasp, one end of which is fastened, and the other adapted to be temporarily secured to a stable object, arranged to hold the wheel and cover the fastening medium, substantially as specified. 7th. As a new article of manufacture, a bicycle support and holder consisting of a base plate fastened to a stable object, and a hasp, one end of which is hinged, and the other adapted to be secured to the base plate to hold the wheel and cover the fastening medium, substantially as specified.

No. 53,267. Crank. (Bielle.)



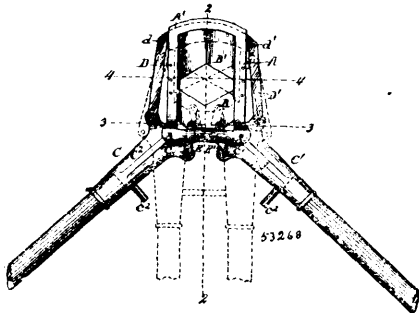
Robert Henry Harris, assignee of William E. Gard, both of New York, State of New York, U.S.A., 17th August, 1896; 6 years. (Filed 2nd July, 1896.)

Claim.—1st. In a crank, the combination, with two crank arms, and two crank shaft sections, secured each to one of said crank arms, and having ends adapted to interlock, of independent bearing cones mounted upon said crank shaft sections, and facing toward the crank arms, and other bearing cones, suitably supported and adapted to engage with said shaft cones, and facing toward the centre of the crank shaft, substantially as described. 2nd. In a crank, the combination, with two crank arms, and two crank shaft sections, secured each to one of said crank arms, and having ends adapted to interlock, of independent bearing cones mounted upon said crank shaft sections, and facing toward the crank arms, other bearing cones, suitably supported and adapted to engage with said shaft cones, and facing toward the centre of the crank shaft, and a key, passing through the interlocking ends of said shaft sections and adapted to hold the same together, substantially as described. 3rd. In a crank, the combination, with two crank arms, and two crank shaft sections, secured each to one of said crank arms, and having mortised and tenoned ends adapted to interlock, of independent bearing cones mounted upon said crank shaft sections, and facing toward the crank arms, other bearing cones, suitably supported and adapted to engage with said shaft cones, and facing toward the centre of the crank shaft, and a screw passing through the interlocking ends of said shaft sections and adapted to hold the same together, substantially as described. 4th. In a crank, the combination, with two crank arms, and two crank shaft sections, secured each to one of said crank arms, and having ends adapted to interlock, of independent bearing cones mounted upon said crank shaft sections, and facing toward the crank arms, other bearing cones, suitably supported and adapted to engage with said shaft cones, and facing toward the centre of the crank shaft, and means for stiffening the joint between said crank shaft sections at said joint and preventing flexure thereof, substantially as described. 5th.

In a crank, the combination, with two crank arms, and two crank shaft sections, secured each to one of said crank arms, having ends adapted to interlock, and having in said ends longitudinal and registering slots adapted to receive keys, of bearing cones mounted upon said crank shaft sections, other bearing cones suitably supported and adapted to engage with said shaft cones, flat keys, lying within the slots in the ends of said shaft sections, and arranged to stiffen the joint between the said shaft sections and prevent flexure thereof, and a key, passing through the interlocking ends of said shaft sections and holding the same together, substantially as described. 6th. The herein described crank, consisting of two separate crank sections, each consisting of a crank arm having secured rigidly thereto or formed integrally there with a section of the crank shaft, the ends of said crank shaft sections being adapted to interlock and being provided with an equal number of corresponding and registering mortises and tenons, whereby both of said crank sections may be made alike, and means for holding said crank sections together substantially as described.

No. 53,268. Dehorning Device.

(Instrument pour décorner.)

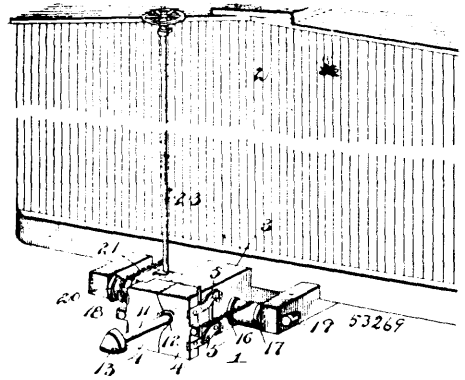


John Arms and Chester E. Arms, both of South Lyon, Michigan, U.S.A., 17th August, 1896; 6 years. (Filed 30th March, 1896.)

Claim. 1st. In a dehorning device, the combination of a frame and cutter blades reciprocatory toward and from each other, for the purpose described. 2nd. In a dehorning device, the combination of a frame, cutter blades reciprocatory toward and from each other in said frame, and operating levers to actuate both of said knives, for the purpose described. 3rd. In a dehorning device, the combination of a frame, reciprocatory cutter blades engaged in said frame, and operating levers fulcrumed upon said frame and connected with both of said cutter blades, for the purpose described. 4th. In a dehorning device, the combination of a frame, reciprocatory cutter blades engaged in said frame, and operating levers fulcrumed upon said frame and connected with both of said cutter blades, for the purpose described. 5th. In a dehorning device, the combination of a frame, operating levers fulcrumed upon said frame and connected with both of said cutter blades, for the purpose described. 6th. In a dehorning device, the combination of a frame, operating levers fulcrumed upon said frame, and links connecting said levers with said cutter blades, for the purpose described. 7th. In a dehorning device, the combination of a frame, operating levers fulcrumed upon said frame, and links connecting said levers with said cutter blades, the links engaged with said levers being pivotally connected therewith on opposite sides of the fulcrum of the lever, for the purpose described. 8th. In a dehorning device, the combination of a frame, operating levers fulcrumed upon said frame, and links connecting said levers with said cutter blades, the links engaged with said levers being pivotally connected therewith on opposite sides of the fulcrum of the lever, for the purpose described. 9th. In a dehorning device, the combination of a frame, operating levers fulcrumed upon said frame, and links connecting said levers with said cutter blades, the links engaged with said levers being pivotally connected therewith on opposite sides of the fulcrum of the lever, for the purpose described. 10th. In a dehorning device, the combination of a frame and cutter blades reciprocatory toward and from each other, one of said blades formed with projecting arms b^1, b^2 , for the purpose described. 11th. In a dehorning device, the combination of a frame, upper and lower cutter blades reciprocatory toward and from each other, operating levers fulcrumed on said frame, links connecting the upper cutter blade to the levers outside the fulcrums of the levers, and links connecting the lower cutter blade to the levers inside said fulcrums, for the purpose described. 12th. In a dehorning device, the combination of a frame and cutter blades reciprocatory toward and from each other, and means to prevent the knives from interfering the one with the other, for the purpose described. 13th. In a dehorning device, the combination of a frame, operating levers fulcrumed upon said frame, and links connecting said levers with said cutter blades, the links engaged with said levers being pivotally connected therewith on opposite sides of the fulcrum of the lever, for the purpose described. 14th. In a

dehorning device, the combination of a frame and reciprocatory cutter blades, having V-shaped cutting edges adjacent one to the other to give a shear cut, and levers fulcrumed to the frame connected with both said cutter blades to actuate the blades in opposite directions, substantially as described.

No. 53,269. Car Coupler. (*Attelage de chars.*)

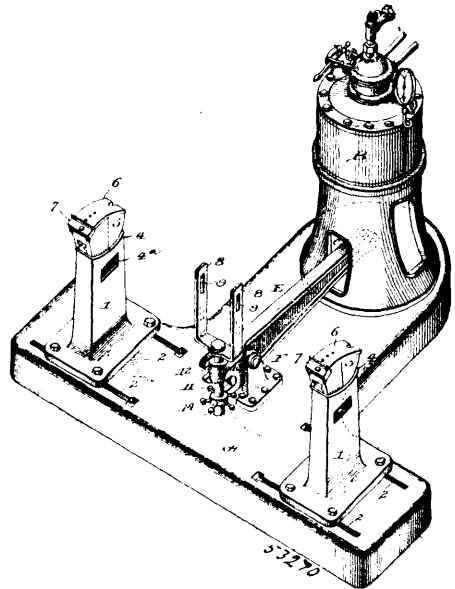


Andrew H. Bezzo, Horace W. Siler and Isaac C. Babb, all of Toone, Tennessee, U.S.A. 18th August, 1896; 6 years. (Filed 1st August, 1896.)

Claim. In a car coupling, the combination with a car provided with bearings, of a draw-head mounted thereon and comprising a body portion, and laterally-swinging spring-actuated jaws, a horizontal shaft passing through the draw-head and journaled in said bearings, the drums 17 and 18 located at opposite sides of the draw-head and fixed to the horizontal shaft, the drum 18 being provided with an extension or outer portion 20, a vertical operating shaft mounted on the car, flexible connections 16 between the drums and the jaws adapted to be wound round the drums to open the jaws, and the flexible connection 21 arranged on the outer portion of the drum 18, and connected with a vertical shaft, substantially as and for the purpose described.

No. 53,270. Testing Machine.

(*Machine pour faire l'épreuve.*)



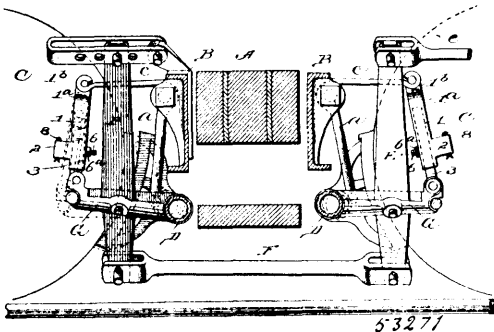
The Chicago Railway Equipment Company, Chicago, Illinois, assignee of Henry Benjamin Robischung, Kalamazoo, both in the U.S.A., 18th August, 1896; 6 years. (Filed 24th July, 1896.)

Claim. 1st. In a testing machine, the combination with a plurality of pedestals or supports each having an adjusting block, said blocks parallel with each other and at an angle to the plane of the pedestals, of power mechanism arranged to operate between said supports, substantially as and for the purposes specified. 2nd. In a testing machine, the combination with a plurality of pedestals or supports each having a rotatable adjusting block, said blocks par-

allel with each other and at an angle to the plane of the pedestals, of power mechanism arranged to operate between said supports, substantially as and for the purposes specified. 3rd. In a testing machine, the combination with power mechanism, of pedestals or supports provided with movable adjusting blocks having convex upper faces, substantially as and for the purposes specified. 4th. In a testing machine, the combination with a plurality of pedestals or supports and adjusting blocks, each of said pedestals and blocks having the one a concave and the other a convex face in juxtaposition, of power mechanism arranged to operate between said pedestals or supports, substantially as and for the purposes specified. 5th. In a testing machine, the combination with power mechanism of pedestals or supports, and adjusting blocks arranged thereon, said pedestals and blocks having the one a concave and the other a convex face in juxtaposition, and the adjusting block having a convex upper surface, substantially as and for the purposes specified. 6th. In a testing machine, the combination with a plurality of pedestals each having an adjusting block, of a power mechanism arranged to operate between said pedestals, said power mechanism having a swivel connection for engaging the power mechanism with the article to be operated upon, substantially as and for the purposes specified. 7th. In a testing machine, the combination with a plurality of pedestals, each having an adjusting block, of power mechanism arranged to operate between the pedestals, and an adjustable swivel connection for engaging the power mechanism with the article to be operated upon, substantially as and for the purposes specified. 8th. In a testing machine, the combination with power mechanism of pedestals or supports for the article to be operated on, a swivel yoke, and a journalled nut or threaded collar and screw connection between the yoke and power mechanism, substantially as and for the purposes specified. 9th. In a testing machine, the combination with a forked lever, of a nut or threaded collar journalled thereon, a screw arranged in said nut or threaded collar, a swivelled connection adapted to hold the article to be operated on, and suitable pedestals or supports for the article to be operated on, substantially as and for the purposes specified.

No. 53,271. Suspension Hanger for Brake Beams.

(Support pour suspensions de sommier de frein.)



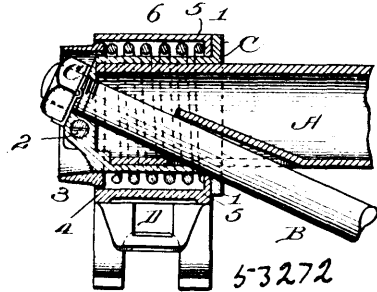
The Chicago Railway Equipment Company, Chicago, Illinois, assignee of Henry Benjamin Robischung, Kalamazoo, Michigan, both in the U.S.A., 18th August, 1896; 6 years. (Filed 24th July, 1896.)

Claim. 1st. An automatically adjustable suspension hanger for brake beams provided with means for maintaining the adjustment thereof, substantially as and for the purposes specified. 2nd. In an extensible hanger for brake beams, the combination of a plurality of movable sections, and a yielding grip device, substantially as and for the purposes specified. 3rd. In an extensible hanger for brake beams, the combination of a plurality of movable sections, and a spring actuated grip block, substantially as and for the purposes specified. 4th. In an extensible hanger for brake beams, the combination of a case section arranged in the case section, and a spring actuated grip block arranged in the grip pocket and engaging the plunger section, substantially as and for the purposes specified. 5th. In an extensible hanger for brake beams, the combination of a plurality of telescoping sections, one having an elongated slot and a yielding grip block, substantially as and for the purposes specified. 6th. In an extensible hanger for brake beams, the combination of a case provided with a grip pocket, a plunger provided with an elongated slot and arranged in said case, a spring supported yielding grip block arranged in the grip pocket of the case, and a through bolt which connects the parts, substantially as and for the purposes specified.

No. 53,272. Brake Beam. (Sommier de frein.)

The Chicago Railway Equipment Company, Chicago, Illinois, assignee of Henry Benjamin Robischung, Kalamazoo, Michigan, both in the U.S.A., 18th August, 1896; 6 years. (Filed 24th July, 1896.)

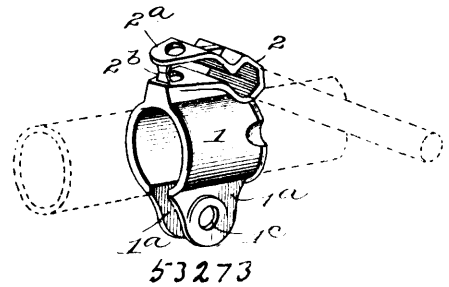
Claim. 1st. The combination with a brake-beam of an automatically yielding brake-head arranged to move laterally or in the axial



line of the beam, substantially as and for the purposes specified. 2d. The combination with a brake-beam of a laterally movable, automatically yielding rotatable head, journalled on said beam, substantially as and for the purposes specified. 3rd. The combination with a brake-beam, of a spring supported axially movable brake-head, substantially as and for the purposes specified. 4th. The combination with a brake-beam, of a laterally or axially movable brake-head, and a spiral spring housed within the brake-head, substantially as and for the purposes specified. 5th. The combination with a brake-beam, of a lateral or axially movable and rotatable brake-head journalled on the beam, and a spiral spring housed within the brake-head, substantially as and for the purposes specified. 6th. The combination with a brake-beam having a journal end, of a brake-head journalled thereon, and having an inwardly projecting flange, a spiral spring housed within the head and encircling the journal end of the beam, and an annulus or collar of less diameter than the opening of the brake-head which annulus is arranged to bear on the outer end of the spiral spring and is secured to the end of the beam, substantially as and for the purposes specified.

No. 53,273. Finger-Guard Clamp for Brake-Beams.

(Garde-couplets pour sommier de frein.)



The Chicago Railway Equipment Company, Chicago, Illinois, assignee of Henry Benjamin Robischung, Kalamazoo, Michigan, both in the U.S.A., 18th August, 1896; 6 years. (Filed 24th July, 1896.)

Claim. 1st. The combined finger-guard and beam clamp-sections superimposed one on the other and arranged in intersecting planes, each section having binding means whereby either finger guard or beam may be independently secured and released; substantially as and for the purposes specified. 2nd. A finger-guard clamp for brake beams, composed of conjoint clamp-sections having one section common to both, said clamps arranged at an angle one to the other and each provided with a separate binding device whereby either the beam or finger-guard may be separately secured and released; substantially as and for the purposes specified. 3rd. A finger-guard clamp for brake beams composed of the slotted annular beam clamp-section having a perforated pocket in its interior, and the superimposed finger-guard section having a perforated ear or lug arranged in line with the perforated pocket of the annular section; substantially as and for the purposes specified. 4th. The combination in a finger-guard clamp, of a beam section 1 having the perforate ears 1a and perforate pocket 1d; and a finger-guard section 2 arranged thereon and at an angle thereto, and provided with the perforate ear 2a; substantially as for the purposes specified.

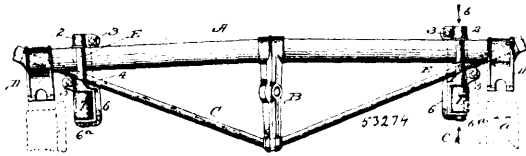
No. 53,274. Finger-Guard for Brake-Beams.

(Garde pour sommiers de frein.)

The Chicago Railway Equipment Company, Chicago, Illinois, assignee of Henry Benjamin Robischung, Kalamazoo, Michigan, both in the U.S.A., 18th August, 1896; 6 years. (Filed 24th July, 1896.)

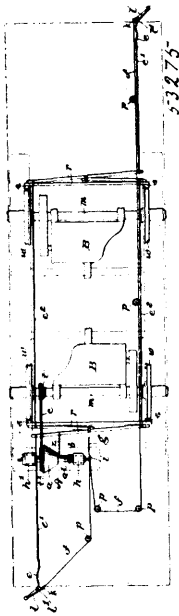
Claim. 1st. A finger-guard for brake beams provided with a loose sleeve or roller journalled thereon; substantially as and for the purposes specified. 2nd. The combination with a finger-guard,

of a bracket having a bearing for the free end of the finger-guard, and a sleeve or roller journalled on the finger-guard within the



bracket; substantially as and for the purposes specified. 3rd. The combination with a brake-beam finger-guard of a loose sleeve or roller, a clamp having a brass-plate and one or more clamp folds, and provided with a bracket or extension bearing for the free end of the finger-guard; substantially as and for the purposes specified. 4th. A finger-guard clamp having a base-plate, a plurality of clamp folds adapted to hold a finger-guard, and a beam seat between the clamp-folds; substantially as and for the purposes specified. 5th. A finger-guard clamp having a clamp fold adapted to bind on the guard finger or pin, and a bracket provided with a bearing for the free end of the guard finger or pin; substantially as and for the purposes specified. 6th. A finger-guard clamp, having a plurality of clamp folds adapted to bind on a guard finger or pin and provided with an extension or bracket having a bearing for the free end of the finger or pin; substantially as and for the purposes specified.

No. 53,275. Railway Car-brake. (Frein de chars.)

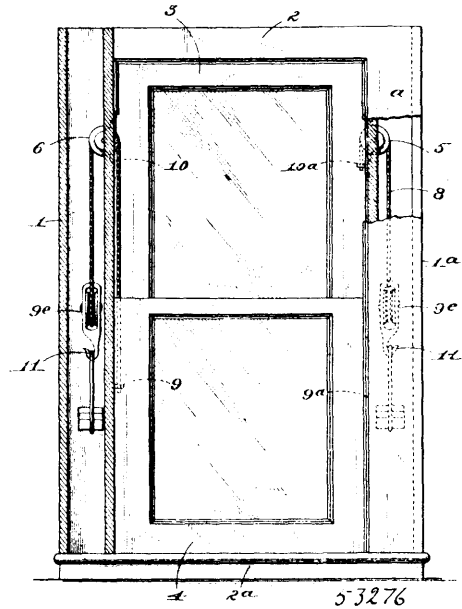


The La Rose Car Brake Company, New Bedford, Massachusetts, assignee of Eugene E. La Rose, Providence Rhode Island, both in the U.S.A., 18th August, 1896; 6 years. (Filed 29th June, 1896.)

Claim. 1st. In a railway car, a suitably mounted car-axle, track-wheels secured thereon, brake-shoes capable of being forced into frictional engagement with said wheels, levers and suitable connections substantially as usual arranged to be made operative by manual power, in combination with a cone-shaped friction-clutch having one member thereof positively driven by the said car-axle, a suitably mounted slidable member arranged to frictionally engage with said driven clutch member, thus forming a power brake, connected with some suitable part of the said manual power braking mechanism, and means consisting of a suitably mounted quick-acting screw and its nut, and flexible connections uniting said screw with a suitable arm or lever capable of being actuated and controlled by the brake-man for forcing said slidable member into engagement with its fellow member, for the purpose hereinbefore set forth. 2nd. In a railway car, the combination with the usual manual power braking mechanism, of a cone-shaped clutch-member driven by and in unison with the revolving car-axle, an endwise movable clutch-member forming the counterpart of said driven member, mechanism connected with the said movable member and with the operating-lever of said usual braking mechanism for throwing the movable member into yielding frictional engagement with the driven member, and a connection uniting the movable member with any suitable part of the manual braking members, substantially as described. 3rd. In a power-brake for street-cars, the combination with a revolving clutch member driven by and in unison with one of the

car-axes, of an endwise slidable member attached to the usual manual power braking mechanism which actuates the brake-shoes, mechanism connected with said slidable member for forcing the latter into frictional engagement with the said revolving fellow member, the usual hand-actuated brake-spindle, as *P*, around which the brake-chain is wound when braking by hand or manual power, having a short arm or dog *a* secured thereto, and flexible connection *f*, detachably secured to said dog and to the said slidable member mechanism, substantially as hereinbefore described. 4th. In a power-braking device for street-cars, a friction-clutch, consisting of two members, one of which is driven by the rotation of the car axle the other member being slidable and connected with the usual brake-shoe levers, a rotatable shaft having said clutch-members mounted thereon, a spring-resisted screw for forcing the said slidable member into frictional engagement with the other or driven member, a vertical brake-spindle controlled by the brakeman, and a connection, as *f*, uniting said screw and brake-spindle, all arranged and adapted for operation substantially as hereinbefore described and for the purpose set forth. 5th. In a power-brake for street cars, a suitable mounted rotatable shaft *b*, and a friction-clutch member secured thereon driven by the car-axle, in combination with an endwise movable clutch-member *a* loosely mounted on said shaft and connected with the usual manual-power braking mechanism, a collar, as *n*, mounted on the shaft and in engagement with said member *a*, a fixed nut, a screw fitted to the nut and extending there through, arranged to coact with said collar, a vertical brake-spindle connected with the usual manual-power braking mechanism, and a flexible connection uniting said brake-spindle and screw, substantially as hereinbefore described.

No. 53,276. Sash Balance. (Contrepois de croisée.)



James Anderson, assignee of Robert Anderson, both of Buffalo, New York, U.S.A., 18th August, 1896; 6 years. (Filed 13th July, 1896.)

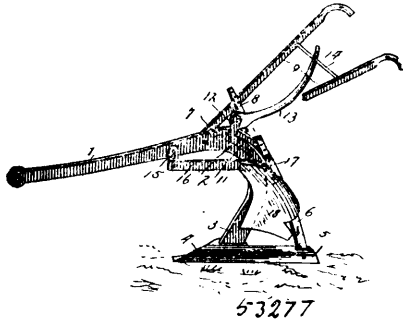
Claim. 1st. In a sash balance, the combination of a weight-holding stirrup, means for securing it to a sash cord, a plurality of weights each provided with an opening at each end adapting it to be placed within said stirrup, one above the other, to adjust the combined weight to the sash, substantially as described. 2nd. A sash weight provided with an opening 14 at each end, as and for the purposes described. 3rd. The combination with the upper and lower or front sash of a window, of two cords, one at each side of the window sash, one having its end secured to one side of the lower or front sash and the other to the opposite side thereof, a grooved pulley mounted in the window frame in a line above and at each side of the front or lower sash, up an over which the cords pass and then down and around a small pillow block carrying a sash weight (one at each side of the window sash) a second pair of grooved pulleys one mounted in each side of the window frame in a line with the upper or back window sash, up to and over which the same cords pass and are secured one at each side of the upper sash, as and for the purposes described.

No. 53,277. Plow. (Charrue)

John W. Goodall, Hays City, Kansas, U.S.A., 19th August, 1896; 6 years. (Filed 22nd July, 1896.)

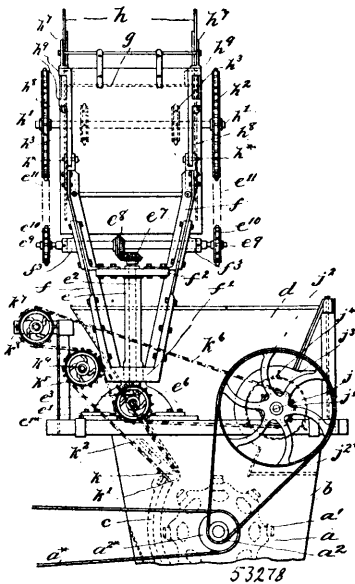
Claim. 1st. In a plow, the combination of a beam having a curved portion 2 provided with notches, of a share pivoted to the

lower end of said beam, of a brace pivoted to said share and having its upper end adapted to engage the notches on the beam, in the



manner and for the purposes set forth. 2nd. In a plow, the combination with a beam provided with notches on its upper edge, of a share pivoted to the lower end of said beam, of a brace pivoted to the rearward portion of the share and having its upper end adapted to engage the notches in the beam, and a cam lever pivoted above said brace, substantially as described. 3rd. In a plow, the combination with a beam having notches in a portion of its upper edge, of a share pivoted to the lower end of said beam, of a brace pivoted to the rearward portion of the share and having its upper end adapted to engage the notches in the beam, one pair of adjustably auxiliary braces between said brace and the plow handles and a cam lever pivoted above said brace and engaging the back thereof, in the manner described. 4th. In a plow, the combination of a beam having notches in a portion of its upper edge, of a share pivoted to the lower end of said beam, of a brace pivoted to the rearward portion of the share and having its upper end adapted to engage the notches in the beam, a cam lever pivoted above the brace and to normally be in contact therewith, and an auxiliary plowshare hung above the main share from a hanger adjustably secured to the beam in the manner and for the purposes shown.

No. 53,278. Threshing Machine. (*Machine à battre.*)

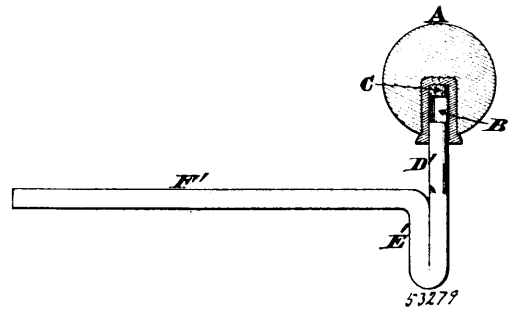


Luis Plaff, Buenos Ayres, Argentine Republic, 19th August, 1896; 6 years. (Filed 22nd July, 1896.)

Claim.—1st. In combination with a threshing machine, an elevator adjustably mounted upon a verticle centre of motion carried by the machine so as to be adapted to work in any position within a given arc, substantially as herein shown and described, and for the purpose stated. 2nd. In combination with a threshing machine, a pivot or axis mounted at each side or adapted to be mounted at either side thereof, and an elevator at its upper end provided with a mounting to seat upon the pivot or axis at either side of the machine so as to be adapted to work in any position within a given arc on either side of the machine, substantially as herein shown and described. 3rd. In combination with a threshing machine, an elevator adjustably mounted upon a centre of motion carried by the machine so as to be adapted to work in any position within a given arc, and suitable gearing driven by the machine for giving motion to the elevator mechanism in any position of the elevator, substantially as herein shown and described. 4th. In combination

with a threshing machine, a pivot or axis mounted at each side or adapted to be mounted at either side thereof, an elevator at its upper end provided with a mounting to removably seat upon the pivot or axis at either side of the machine so as to be adapted to work in any position within a given arc, and suitable gearing carried by or adjacent to the pivot and receiving motion from the machine, and corresponding gearing carried by the mounting for giving motion to the elevator mechanism in any position of the elevator, substantially as herein shown and described. 5th. In combination with a threshing machine, a short driven shaft mounted horizontally in bearings at each side of the machine frame, a tubular pillar adapted to be removably fixed with such frame at either side thereof, a shaft mounted with capability of revolution in the pillar and at its lower end gearing with the horizontal shaft, a vertical standard or frame connected with the upper end of an elevator, and formed to removably seat upon the pillar at either side of the machine, and suitable gearing for conveying the motion of the vertical shaft of the pillar to the elevator mechanism in any position of the elevator, substantially as herein shown and described. 6th. In combination with a threshing machine, a feed cylinder arranged above the drum and furnished with bars or teeth and means for imparting a rapid rotary motion thereto, substantially as herein shown and described. 7th. In combination with a threshing machine, a roller located at the top of the concave, and means for imparting a rapid rotary motion thereto in the opposite direction to that of the feed drum, substantially as herein shown and described.

No. 53,279. Detonating Toy. (*Jouet.*)

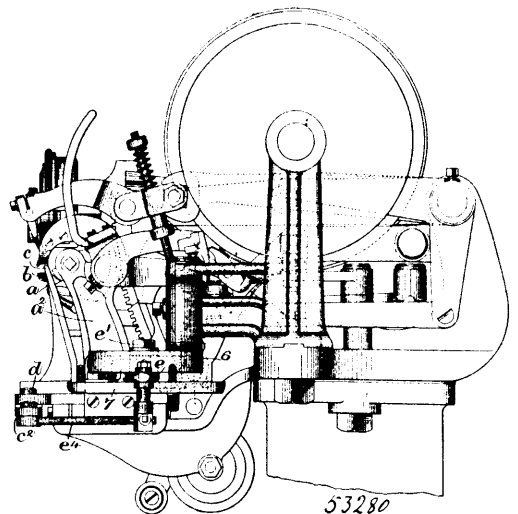


James Samuel Tobitt, Cincinnati, Ohio, U.S.A., 19th August, 1896; 6 years. (Filed 21st July, 1896.)

Claim.—1st. A detonating toy, consisting of a chambered projectile, adapted to receive a percussion wafer, and an exploding device having a firing plug that traverses said chamber and ignites the wafer, in the manner described, and for the purpose stated. 2nd. A detonating toy, consisting of the projectile A, having a tube B, fitted within it, which tube is adapted to receive a percussion wafer, and a hammer shaped exploding device D, E, F, the plug of which, D, is adapted to traverse said tube and ignite the wafer, in the manner described, and for the purpose stated.

No. 53,280. Sole Sewing Machine.

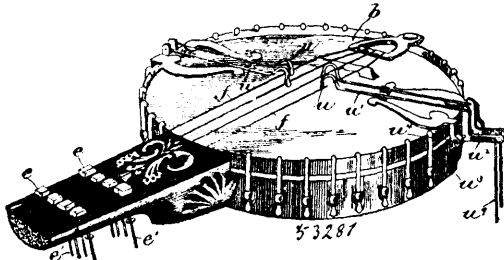
(*Machine à coudre les semelles.*)



Zachary Taylor French, and William Cristian Meyer, Boston, Massachusetts, U.S.A., 19th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. In a sole sewing machine, the combination of stitch forming mechanism, and two guides acting externally upon a lasted boot or shoe, one acting to guide the boot or shoe along the shank portions, and the other acting to guide the boot or shoe around the fore-part, substantially as described. 2nd. In a sole sewing machine, the combination of stitch forming mechanism, a shank guide, and a fore-part guide normally held out of engagement with the boot or shoe, and means for moving it into engagement with the boot or shoe, whereby the same may be properly guided around the fore-part, guides both acting externally upon a lasted boot or shoe, substantially as described. 3rd. In a sole sewing machine, the combination of stitch forming mechanism, a shank guide acting externally upon a lasted boot or shoe, and a sole-edge fore-part guide normally held out of engagement with the boot or shoe, and means for moving it into engagement with the boot or shoe, whereby the same may be properly guided around the fore-part, substantially as described. 4th. In a sole sewing machine, the combination of stitch forming mechanism, a shank guide acting externally upon a lasted boot or shoe, and a sole-edge fore-part guide *c*, a hand lever and connecting mechanism between said hand lever and sole-edge guide for moving it in and out, substantially as described. 5th. In a sole sewing machine, the combination of stitch forming mechanism, of a crease guide acting to externally guide a lasted boot or shoe along the shank portions, and a sole-edge guide acting to guide said boot or shoe around the fore-part. 6th. In a sole sewing machine, the combination with stitch forming mechanism, a shank guide held in fixed position with relation to the stitch forming mechanism, and acting externally upon a lasted boot or shoe, and an independent fore-part guide for externally engaging the lasted boot or shoe, moving it away from said shank guide, and thereafter guiding the boot or shoe. 7th. In a sole sewing machine, the combination with stitch forming mechanism, means for supporting a lasted boot or shoe in proper relation thereto, and for externally guiding it along the shank portions and a supplemental sole-edge guide movable in and out with relation to the stitch forming mechanism, substantially as described. 8th. In a sole sewing machine, the combination with stitch forming mechanism, a shank guide *b*, serving also as an external support for a lasted boot or shoe, and a sole-edge guide *c* moving in and out with relation to the stitch forming mechanism, and by such movement moving the lasted boot or shoe away from the acting face of the shank guide *b*, substantially as described. 9th. In a sole sewing machine, the combination with stitch forming mechanism and means for holding a lasted boot and shoe and externally guiding it along the shank portions, the sole edge guide *c* sliding in and out with relation to the stitch forming mechanism, and the pivoted lever *e* to which it is connected. 10th. In a sole sewing machine, the combination with stitch forming mechanism, a shank guide and an independent fore-part guide, both acting to externally guide a lasted boot or shoe, means for varying the length of the stitches, and an operating lever connected with and adapted to operate conjunctively both the fore-part guide and the stitch-varying mechanism. 11th. In a sole sewing machine, the combination with stitch forming mechanism, means for supporting a lasted boot or shoe and externally guiding it along the shank portion, a sole-edge guide movable with relation to the stitch forming mechanism, means for varying the length of the stitches, and an operating lever connected with and adapted to operate conjunctively both the stitch-varying mechanism and the sole-edge guide.

No. 53,281. Means for automatically playing Stringed Instruments. (*Moyen de jouer automatiquement les instruments à cordes.*)



William Sumner Reed, Leominster, Massachusetts, U.S.A., 19th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. In an apparatus of the character specified, the combination of a motor, a suction device and a sheet-feeding device operated by the motor, and a perforated sheet moved by said feeding device, a series of fingers and a series of pickers arranged to act on the strings of a musical instrument, and a series of finger and picker operating pneumatics operated conjointly by the said perforated sheet and by the exhaust device. 2nd. In an apparatus of the character specified, a finger or picker operating mechanism comprising a primary pneumatic normally closed, a channel-board connected by an air passage with the primary pneumatic, a suction chamber arranged to co-operate with the air admitted to the primary pneumatic to expand the latter, the primary pneumatic having a contracted opening into the suction chamber, a secondary pneumatic

normally expanded, connections between said secondary pneumatic and the finger or picker to be operated, and means operated by the expansion of the primary pneumatic to connect the secondary pneumatic with the suction box and by the collapse of the primary pneumatic to disconnect the secondary pneumatic from the suction chamber. 3rd. In an apparatus of the character specified, a finger or picker operating mechanism comprising a primary pneumatic normally closed, a channel-board connected by an air passage with the primary pneumatic, a suction chamber arranged to co-operate with air admitted to the primary pneumatic to expand the latter, the primary pneumatic having a contracted vent-opening into the suction chamber, a secondary pneumatic normally expanded, connections between said secondary pneumatic and the finger or picker to be operated, an intermediate air chamber between the secondary pneumatic and the suction chamber and having air connections therewith and an independent air inlet, and a valve adapted to alternately close the said air inlet and the connection between the intermediate chamber and the suction chamber, said valve being arranged to be actuated by the primary pneumatic. 4th. An apparatus of the character specified, comprising a banjo, fingers arranged to act on the banjo, rods carrying said fingers and passing through the neck of the banjo, and sheet-controlled pneumatically-operated mechanism for actuating said fingers. 5th. An apparatus of the character specified, comprising a banjo, pickers arranged to act on the strings of the banjo, supporting brackets mounted in suitable relation to the head of the banjo and projecting over said head without contact therewith, bell-crank levers pivoted to said supports and to the shanks of the pickers, and sheet-controlled pneumatically-operated mechanism for oscillating said bell-crank levers to operate the pickers. 6th. An apparatus of the character specified, comprising a banjo, pickers arranged to act on the strings thereof, fixed supports adjacent to the head of the banjo, bell-crank levers pivoted to said supports and jointed to the pickers, means for oscillating said bell-crank levers to give a back-and-forth movement to the pickers, and endless guides engaged with the pickers and adapted to raise and depress the same. 7th. A finger or picker operating mechanism comprising a suction box, a spring-closed primary pneumatic within said box provided with a sheet-controlled air inlet and with a vent communicating with the suction box, a spring-expanded secondary pneumatic outside the suction box, an air chamber between the secondary pneumatic and the suction box and having air connections therewith and an independent air inlet, and a valve which normally closes the connection between the suction box and air chamber when the primary pneumatic is closed and opens said connection and closes the independent air inlet of the air chamber when the primary pneumatic is expanded. 8th. An apparatus of the character specified, comprising a spring-depressing finger *c*, a rod or shank supporting the same, and means for operating said rod, the finger being adjustably mounted on the rod. 9th. In an apparatus of the character specified, the combination of a banjo, a bracket or support *u*³ formed to bear on the rim of the banjo and provided with an arm *u*⁴ overhanging the banjo, bell-crank levers pivoted to said support, wire shanks pivoted to said levers and having pins engaged with guides on the arm *u*⁴, and pickers on the outer ends of said shanks, each composed of a bent neck and a flattened end-portion. 10th. The finger-supporting bracket *u*³ having sound insulating pads *u*⁵ of yielding material arranged to bear on the rim of a banjo. 11th. The finger-supporting bracket *u*³ formed to bear on the rim of a banjo and provided with attaching-screws and with slots receiving said screws to permit the vertical adjustment of the bracket. 12th. The combination of the finger-supporting bracket, levers pivoted thereto, pickers connected to the upper ends of said levers, and picker-operating pneumatics connected with the lower ends of said levers.

No. 53,282. Composition for Preserving Railways and Destroying Vegetation on same. (*Composition pour détruire la végétation sur les chemins de fer.*)

William Thomas Owen and Thomas Tatcher, both of Wellington City, New Zealand, 19th August, 1896; 6 years. (Filed 27th February, 1896.)

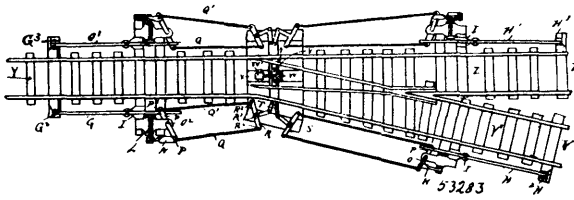
Claim.—1st. The herein described composition consisting of caustic soda, arsenic, carbolic acid and water in substantially the proportions specified, substantially as described. 2nd. The method of manufacturing the herein described compound consisting in heating a solution of caustic soda, adding arsenic and agitating, again heating the compound and finally adding carbolic acid and water while agitating the compound, substantially as described.

No. 53,283. Railroad Switch. (*Aiguille de chemin de fer.*)

August Klawon, Jackson, Michigan, U.S.A., 19th August, 1896; 6 years. (Filed 29th July, 1896.)

Claim. 1st. In a switch, the combination of a switch and actuating mechanism therefor, a cross-bar having a cam, a switch bar having a limited movement on the cross-bar, and provided with a vertical extension having notches, and switch locking bar operated by the said cam to release the switch, substantially as set forth. 2nd. In devices for operating track switches, the combination with a locomotive, of a transverse bar flexibly supported in brackets on said locomotive having wheels at its outer ends adapted to engage

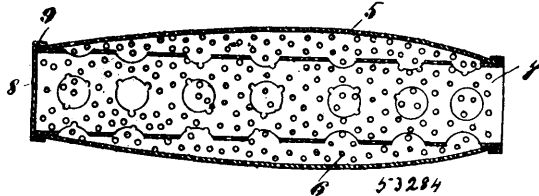
the pivoted arms of a track switch, a vertical arm attached to said transverse bar, engaged by one arm of an angle lever fulcrumed in



the locomotive, the other arm of said angle lever being pivoted to the end of a lever D, connected to the operating lever of the device, whereby upon the depression or elevation of said operating lever the said transverse lever is thrown from one side to the other, substantially as and for the purpose described. 3rd. In a device for operating track switches, the combination with the locomotive, of a transverse bar mounted therein, having wheels at its outer end adapted to engage the pivoted arms of a track switch, brackets supporting the said bar having elongated vertical slots, arms supported in said brackets to form bearings for the said bar, springs mounted on said arms to actuate the same to hold the said bar at the limit of its downward movement, and means for moving the said bar laterally, substantially as and for the purpose described.

No. 53,284. Handle for Bicycle, etc.

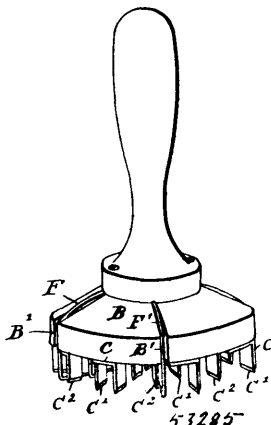
(Manche de bicycles, etc.)



Henry Busson Stacey, New York, State of New York, U.S.A., 19th August, 1896; 6 years. (Filed 27th July, 1896.)

Claim.—1st. The herein described handle for bicycles and similar vehicles, which consists of a perforated casing, which is larger in the middle than at the ends, and in which is placed a central tube by which it is connected with the handle bar, substantially as shown and described. 2nd. The herein described handle for bicycles and similar vehicles, which consists of a perforated casing, which is larger in the middle than at the ends, and in which is placed a central tube by which it is connected with the handle bar, said central tube being also perforated, substantially as shown and described. 3rd. The herein described handle for bicycles and similar vehicles, which consists of a perforated casing, which is larger in the middle than at the ends, and in which is placed a central tube by which it is connected with the handle bar, said central tube being also perforated, and said casing and said tube being connected at one end by means of a cap which is provided with an annular flange, and by which the end of the central tube is closed, the opposite end thereof being open, substantially as shown and described.

No. 53,285. Meat Tenderer. (Pilon à viande.)

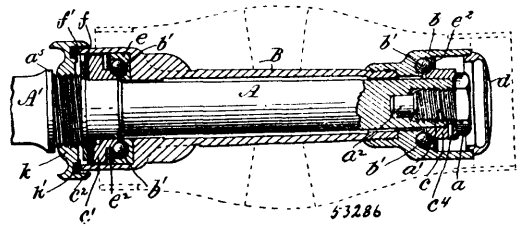


William G. Mumma, Warrensburg, Missouri, U.S.A., 19th August, 1896; 6 years. (Filed 21st July, 1896.)

Claim.—1st. A meat tenderer, comprising a handled head formed with grooves in its margin, a series of depending cutters secured on the under side of said head, and a raising device formed of spring wires crossing each other beneath the head, the said wires engaging the said grooves and having their ends secured to the head, substantially as shown and described. 2nd. A meat tenderer, comprising a handled head, a series of radially arranged cutter blades spaced apart and secured to the under side of said head, said blades decreasing in width toward the centre of said cutter-head, and sets of cutters turned upon the said blades and extending downwardly therefrom, the said cutters being arranged radially from the centre of the cutter-head, substantially as shown and described. 3rd. A meat tenderer, comprising a handled head, a series of radially arranged cutter blades secured to the under side of said head, and sets of cutters turned upon the said blades and extending downwardly therefrom, a screw for each blade to fasten the latter to the cutter-head, and a second screw screwing into the said head and engaging and holding with its head the inner ends of all the radially arranged cutter-blades, substantially as shown and described. 4th. A meat tenderer, comprising a handled head, a series of cutters on the under side thereof, and a raising device consisting of spring wires extending across the under side of the cutter-head, and crossing each other approximately at right angles beneath the head, said wires being bent upwardly and passing through grooves in the sides of the cutter-head, and the ends of said wires being secured to the top of said cutter-heads, substantially as shown and described.

No. 53,286. Ball Bearing Axle Box.

(Boîte d'essieu à coussinet à boule.)



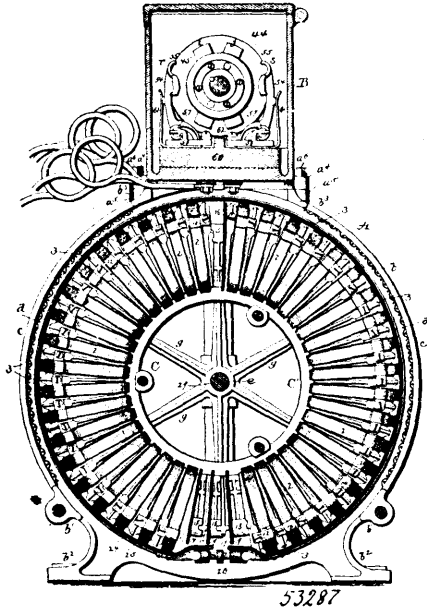
Robert Smith Crawford, and Charles Henry Carlile, both of Hagerstown, Maryland, U.S.A., 19th August, 1896; 6 years. (Filed 29th April, 1895.)

Claim.—1st. The combination with an axle, of an axle box provided with ball-bearings at or near its opposite ends, and a movable water excluding device at the inner end of the axle-box to be normally carried in an idle position but adapted to be shifted into an operative position, to form an absolutely water-proof joint at the inner end of the axle-box, when the carriage wheels are to be washed. 2nd. The combination with an axle spindle, of a sleeve surrounding the same, a cup secured to the outer end of said sleeve and provided with a suitable recess, balls in said recess to form a ball-bearing, a cone having a sliding fit on the outer end of said axle-spindle, and between which and the said cup said balls are held, and a cap-screw tapped in the outer end of the said axle-spindle and having a head of suitable size to abut against the said cone, and having also a nib or portion which abuts against the bottom of a recess formed in the outer end of the said axle-spindle, and a cap closing the outer end of said cup. 3rd. The combination with an axle spindle, of a sleeve surrounding the same, cones on said spindle, balls interposed between said sleeve and cones, an adjustable nut mounted at the inner end of said sleeve, and a packing ring co-operating with said nut so that when the latter is screwed toward said sleeve there will be an absolutely water-proof joint at the inner end of the axle-box. 4th. The combination with an axle spindle, of a sleeve surrounding the same, cones on said spindle, balls interposed between said sleeve and cones, an adjustable nut mounted at the inner end of said sleeve and a packing ring carried in the outer face of said nut and serving, when the said nut is screwed toward the inner end of the said sleeve, to abut against the said inner end of said sleeve and thus form an absolutely water-proof joint at the inner end of the said axle-box, as shown in Fig. 1 of the drawings. 5th. The combination with an axle, of an axle-box provided with ball bearings at or near its opposite ends, and having its inner end screw-threaded exteriorly, and a nut fitting the said screw-threaded inner end of the said axle-box and provided interiorly towards its outer end with an elastic ring which tightly hugs the sleeve or part on which the said nut is mounted so as to exclude water from the threads of said nut and sleeve. 6th. The combination with an axle having a flange, of an axle-box provided with ball-bearings at or near its opposite ends, and having its inner end screw-threaded exteriorly, and a nut fitting the said screw threaded inner end of the said axle-box and provided interiorly towards its outer end with an elastic ring which tightly hugs the sleeve or part on which the said nut is mounted, said nut being provided with an inwardly projecting flange between which and said flange on the axle is interposed a washer of leather or other suitable packing material, so that when the said nut is turned back to compress said packing material there will be an absolutely water-tight joint at the inner end of the axle-bar. 7th.

The combination with the axle A^1 and its spindle A , of the hub or sleeve B^1 loosely surrounding the said spindle, ball bearings interposed between the said hub or sleeve and the said spindle, the nut M carried at the inner end of the said hub or sleeve and having an inwardly projecting flange m , and felt and metal washers interposed between the ball-bearing at the inner end of the said hub and the said flange m .

No. 53,287. Controller for Electric Motors.

(*Contrôleur pour moteurs électriques.*)



William Henry Morgan, Alliance, Ohio, U.S.A., 19th August, 1896; 6 years. (Filed 12th November, 1895.)

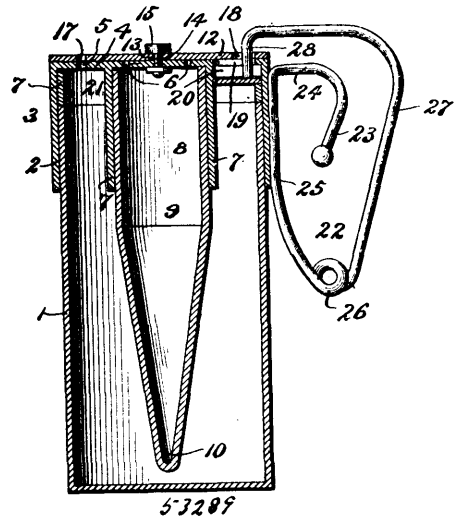
Claim. 1st. A frame for an electric controller having open faces and having elongated opening in its sides or edges, and wire netting in said elongated openings, substantially as set forth. 2nd. A frame for an electric controller, consisting of two open casings secured together so as to form a shell or casing having elongated openings in its sides or edges and wire netting in said elongated openings, substantially as set forth. 3rd. In an electric controller, the combination with a frame or shell, and coils of resistance material arranged therein in annular form, of an annular frame located within the annular series of coils, and insulating ring on said coils, said annular frame being so constructed as to rest at its edges only against said insulating rings and be free from the coils at other points substantially as set forth. 4th. In an electric controller, the combination with a frame or shell and an annular series of resistance coils therein, of an annular frame within said annular series of coils, said frame bearing at its outer edges against insulating material on the coils, and said annular frame having slots for the passage of air to the coils, substantially as set forth. 5th. In an electric controller, the combination with a frame or shell and an annular series of resistance coils therein, of an annular frame within said annular series of coils and bearing at its edges against insulating material on said coils, said annular frame being composed of two rings having perforated bosses for the reception of bolts, and each ring having a series of slots to permit the free passage of air to the resistance coils, substantially as set forth. 6th. In an electric controller, the combination with a frame or shell, of an annular series of frames or wedges secured to said frame, coils of resistance mounted on said frames or wedges and a band binding said coils together, substantially as set forth. 7th. In an electric controller, the combination with a frame or wedge having a hub, of a resistance material mounted on said hub and electrically connected at one end thereto, and a plate or strip constructed and adapted to bind the free end of the coil and serve to electrically connect it with the frame or wedge of an adjacent coil, substantially as set forth. 8th. In an electric controller, the combination with a series of resistance coils, of frames or wedges for supporting said coils, each frame or wedge comprising a hub on which the coil is wound and to which it is connected, and a series of radiating arms of varying thicknesses, radiating from said hub, and bearing against the faces of the coils, substantially as set forth. 9th. In an electric controller, the combination with a curved series of coils of resistance material, of a series of frames or wedges for supporting said coils and separating them to form ventilating spaces between them, each frame or wedge comprising a slotted hub on which the coil is wound and to which it is electrically connected, a series of arms radiating from said hub, and ribs projecting from said arms in both directions, the ribs on the

outer arms being wide and the ribs on the inner arms being narrow substantially as set forth. 10th. In an electric controller, the combination with a frame or shell and an annular series of resistance coils therein, of a series of frames or wedges for supporting said coils, each frame or wedge comprising a hub on which the coil is wound and with which it is connected, a series of arms radiating from said hub and bearing against two adjacent coils, shanks projecting from two of said arms and projecting through one face of the frame or shell, a cross bar connecting said last mentioned arms and bearing against insulating material on the frame or shell, an insulated ring secured to the frame or shell through which said shanks pass, contact plates connected with said shanks and nuts on the shanks, substantially as set forth. 11th. In an electric controller, the combination with a frame or shell, two sets of resistance coils therein, and contact plates connected with said coils, of a shaft mounted in the frame, a block of insulating material secured to one end of said shaft, a double switch arm mounted on said block, brushes carried at the ends of said arm and adapted to make electrical contact with said contact plates, a clamping plate connecting the switch arm with the insulating block, an insulating washer entering perforations in the switch arm and clamping plate, and a nut on the end of the shaft and bearing against said washer, substantially as set forth. 12th. In an electrical controller, the combination with a frame or shell made in two parts secured together, and an annular series of resistance coils in said frame, of an annular frame disposed within said annular series of coils and having its outer edges disposed between the parts of the main frame and the coils, and insulating rings disposed between said coils and the edges of the annular frame, substantially as set forth. 13th. In an electric controller having a series of coils constituting a variable resistance, of frames or wedges for supporting said coils and spacing them apart, each frame or wedge comprising a hub or sleeve, a series of radiating arms, a cross bar connecting two of said arms, and shanks or stems projecting from two of said arms, substantially as set forth. 14th. In an electric controller the combination with a frame or shell, of two semicircular sets of resistance coils located therein and having contact plates connected therewith, the coils of each set being connected in series spacing devices and insulating discs between the two sets of coils, and dummy contact plates between the two sets of coils at one end thereof, substantially as set forth. 15th. In an electric controller, the combination with a frame or shell, of an annular series of frames or wedges secured within said frame, contact plates connected with said frames or wedges, and two semicircular sets of resistance coils mounted on said frames or wedges, the coils of each set being connected together in series and the two sets insulated from each other, several of said frames or wedges at one point being dummies, and a double switch arm having brushes to make contact with said contact plates, substantially as set forth. 16th. In an electric controller, the combination with a frame or shell, a series of frames or wedges therein, and a series of resistance coils mounted on said frames or wedges and electrically connected at one end therewith, of a metallic strip bent around the free end of each coil and extending laterally therefrom, and a fastening device for securing the free end of each metallic strip with the adjacent frame or wedge whereby said coils will be connected together in series, substantially as set forth. 17th. In an electric controller, the combination with a rheostat or variable resistance, of a reversing switch located on top the same, and a common actuator for said rheostat and reversing switch, substantially as set forth. 18th. The combination with a frame or shell of two sets of resistance coils therein, contact plates for said coils, a shaft, a double switch arm for said contact plates carried by the shaft, an operating lever, gearing between said lever and shaft, a slotted arm through which said lever passes, and adjustable stops at the ends of said slotted arm, substantially as set forth. 19th. In an electric controller, the combination with a frame, and a variable resistance in said frame, a switch arm for said variable resistance, a box or casing located on top the frame, a reversing switch in said box or casing, and a common actuating lever for said reversing switch and the switch arm of the variable resistance, substantially as set forth. 20th. A reversing switch immersed in liquid, substantially as set forth. 21st. The combination with a box or casing containing liquid, of a reversing switch contained in said box or casing and immersed in said liquid, substantially as set forth. 22nd. The combination with a box or casing, having a bear in one side and an opening in the opposite side, of a disc closing said opening, packing between said disc, or box, or casing, a journal bearing on said disc and an oscillatory switch mounted in said bearings, substantially as set forth. 23rd. In an electric controller, the combination with a rheostat, comprising two sets of resistance coils of an oscillatory reversing switch mounted on top of the rheostat, an operating lever geared with the switch arm of the rheostat, a forked arm connected with the oscillatory switch, and a pin carried by said operating lever and adapted to engage said forked arm whereby to actuate said oscillatory switch, substantially as set forth. 24th. In a reversing switch, the combination with two groups of contact arms, of a drum mounted between said groups of arms, of four groups of contact blocks on the drum, said blocks being so electrically connected together in pairs that when two of said groups of blocks engage the contact arms, the electrical current will flow in the reverse direction through one element of an electric motor connected with the switch, substantially as set forth. 25th. In a reversing switch, the combination with a box or casing, of

contact arm, an oscillatory drum of insulating material, and having a series of longitudinal perforations, contact blocks on the drum to engage the contact arms when the drum is oscillated, and electrical connectors inserted in the longitudinal perforations in the drum, for connecting said contact blocks together in pairs, substantially as and for the purpose set forth. 26th. In a reversing switch, the combination with contact arms, of an oscillatory drum, of insulating material, a series of discs constituting annular flanges projecting from said drum, and between which said contact arms are disposed, and contact blocks on said drum electrically connected together in pairs and adapted to engage said contact arms, substantially as and for the purpose set forth. 27th. In a reversing switch, the combination with a contact arm, of an oscillatory drum composed of a series of sections of insulating material and discs of insulating material interposed between said sections, contact blocks secured and adapted to engage said contact arms, and electrical connectors connecting said contact blocks together in pairs, substantially as set forth. 28th. In a reversing switch, the combination with two groups of contact arms, of a drum disposed between said groups, contact blocks on said drum adapted to engage the contact arms, said contact blocks being electrically connected together in pairs, a forked arm connected with the shaft of said drum, a lever for actuating said forked arm to oscillate the drum, lugs on said forked arm, and a stop on the casing of the switch to be engaged by said lugs whereby to limit the oscillatory movement of the drum, substantially as set forth. 29th. In a switch, the combination with a drum carrying contact blocks, of contact arms adapted to be engaged by said blocks, each of said arms having a hinged connection at one end and a head at the other end, and a spring for pressing said heads against the contact blocks on the drum, substantially as set forth. 30th. In a switch, the combination with an oscillatory drum and a series of contact blocks secured to the face thereof, of contact arms to be engaged by said blocks, each contact arm being hinged at one end and provided at its other end with a head to be engaged by the blocks on the drum, springs for pressing said heads against said blocks and fingers on the contact arms to limit their movement toward the arm and prevent the engagement of the heads on the contact arms with the face of said drum, substantially as set forth. 31st. In a switch, the combination with an oscillatory drum and contact blocks thereon, of contact arms to be engaged by said contact blocks, a series of plates to which said arms are hinged, and springs held in position by said plates and adapted to press against said arms and ensure the proper engagement of the contact blocks on the drum therewith, substantially as set forth. 32nd. In a switch, the combination with a box or casing, and a base of insulating material therein, of an oscillatory drum, contact blocks on said drum, metallic plates secured to said base and having lugs thereon, contact arms having hooks or lips to engage said lugs, head at the free ends of said arms, and springs behind said arms whereby to insure the engagement of the contact blocks on the drum with the heads on the contact arms, substantially as set forth. 33rd. In a switch, the combination with a drum carrying contact blocks, of an insulated base plate secured thereto, and having lugs, contact arms hinged to said lugs, ears at the respective ends of said lugs to prevent lateral displacement of the contact arms, and springs behind said contact arms, substantially as set forth. 34th. In an electric controller, the combination of a hollow shell having a journal bearing in its face, a curved series of resistance coils within said shell, contact plates for said resistance coils, a shaft mounted in said journal bearing, a contact arm or bar carried by the shaft and adapted to engage said contact plates, and means for turning said shaft, substantially as set forth.

Claim.—1st. An office indicator, comprising a suitable casing formed with a recess to receive indicating mechanism, an hour dial fixed in the casing, a thumb-piece journaled in the upper end of the casing, a pinion on the inner end of the thumb-piece, an idler gear-wheel journaled in the casing and meshed by the pinion on the thumb-piece, a sleeve journaled in the casing, a pinion on the inner end of the said sleeve and meshing with the said idler-wheel, an hour indicator hand on the outer end of the said sleeve, an arbor journaled in the sleeve, a minute hand on the outer end of the arbor, a pinion on the inner end of the arbor and a pawl to engage the last named pinion. 2nd. An office indicator, comprising a suitable casing formed with a recess to receive indicating mechanism, an hour dial fixed on the casing, a thumb-piece journaled in the upper end of the casing, a pinion on the inner end of the thumb-piece, an idler gear-wheel journaled in the casing and meshed by the pinion on the thumb-piece, a sleeve journaled in the casing, a pinion on the inner end of the said sleeve and meshing with the said idler-wheel, an hour indicator hand on the outer end of the said sleeve, an arbor journaled in the sleeve, a minute hand on the outer end of the arbor, a pinion on the inner end of the arbor, a pawl to engage the last named pinion, a month and day dial in the hour dial, a thumb-piece journaled in the lower portion of the casing, a large gear-wheel mounted on the inner end of the thumb-piece, a sleeve journaled in the casing, an inner pinion on the said sleeve engaging the said gear-wheel, a month hand on the said sleeve, an arbor in the sleeve, a day hand on the outer end of said arbor, a pinion on the inner end of the arbor, and a pawl to engage and prevent the backward movement of the pinion, all as specified and for the purpose stated.

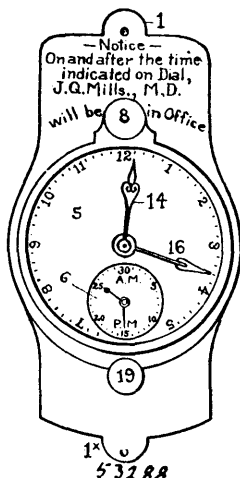
No. 53,289. Pepper and Salt Box. (Poirvier et salière.)



John Paynter Campbell, Spokane, Washington, U.S.A., 21st August, 1896; 6 years. (Filed 12th June, 1896.)

Claim.—1st. The combination of a box, canister or other receptacle, a perforated top, a disc or plate centrally pivoted on one face of said top and provided with perforations adapted to align with perforations in said top, and an operating spring eccentrically connected with the pivoted plate and arranged on the exterior of the receptacle, box or canister, and adapted to be depressed to revolve the said plate, substantially as and for the purpose described. 2nd. The combination with a suitable receptacle, of a perforated top therefor provided with a radial slot, a disc or plate centrally pivoted to said top and correspondingly perforated and provided with an oblique slot, the outer ends of said slots being arranged in normal alignment, and a spring provided with a projecting plunger adapted to enter said slots and to reciprocate therein, whereby pressure upon said spring will cause said plunger to travel inwardly along said slots, thereby causing said pivoted plate to rotate until part or all of the respective perforations are brought into alignment, substantially as described. 3rd. The combination with a suitable receptacle provided with two compartments, of a top provided with two sets of perforations, one set for each compartment, and also provided with a radial slot and an internal housing therefor, a disc or plate centrally pivoted to said top and provided with two sets of perforations adapted to align alternately with the corresponding sets of perforations in said top as said plate is revolved, and also provided with an oblique slot arranged to have its outer end normally in vertical alignment with the outer end of said radial slot, and an operating spring provided with a depending plunger at one end, adapted to enter said slots and to reciprocate therein and also provided with a suitable thumb portion, whereby pressure on said thumb portion will cause said plunger to travel inwardly along said slots thereby rotating said pivoted plate so as to throw one set of perforations thereof

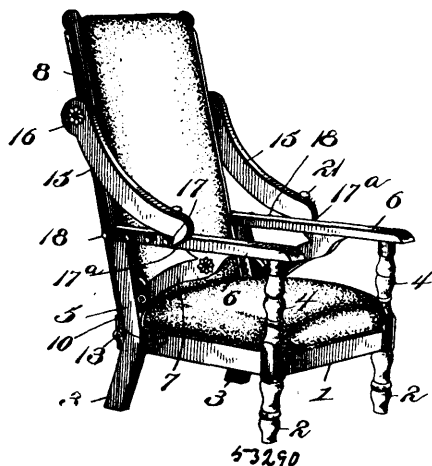
No. 53,288. Office Indicator. (Indicateur de bureau)



John A. Day, Rochester, New York, U.S.A., 21st August, 1896; 6 years. (Filed 24th April, 1896.)

out of alignment and to bring the outer set of perforations into alignment with the corresponding sets of the top, substantially as described. 4th. The combination with a suitable receptacle for salt, of a cover therefor, said cover comprising a top having outer coarse perforations and inner fine perforations and provided with a radial guiding slot and also provided with an outer depending flange to fit said receptacle and an inner depending flange concentric thereto enclosing said fine perforations and adapted to receive a pepper receptacle, said cover also comprising a disc or plate centrally pivoted to said top and provided with a diagonal slot and correspondingly perforated, said two sets of perforations being arranged so that the respective coarse perforations are normally in alignment and the respective fine perforations are normally out of alignment, a pepper receptacle tapering to a point at its lower end and adapted to fit the inner flange of said cover, and a spring secured vertically to the outer flange of said cover and provided with one or more coils at its lower end and with an upwardly-extending member or thumb portion bent over at the top and provided at its outer extremity with a depending end or plunger adapted to enter and to reciprocate in said oblique and radial slots whereby as the spring is pressed said plunger causes said plate to revolve so as to throw the salt perforations out of alignment and to bring the pepper perforations into alignment, all substantially as described. 5th. The combination with a suitable receptacle for salt, of a cover therefor, said cover comprising a top having outer coarse perforations and inner fine perforations and provided with a radial guiding slot protected by a suitable internal housing and also provided with an outer depending flange to fit said receptacle, and an inner depending flange concentric thereto enclosing said fine perforations and adapted to receive a pepper receptacle, said cover also comprising a disc or plate centrally pivoted to said top and provided with a diagonal slot and correspondingly perforated, said two sets of perforations being arranged so that the respective coarse perforations are normally out of alignment, and the respective fine perforations are normally out of alignment, a pepper receptacle tapering to a point at its lower end and adapted to fit the inner flange of said cover, and a spring secured vertically to the outer flange of said cover and having an outwardly curved portion adjacent thereto to serve as a finger-hold, and provided with one or more coils at its lower end and with an upwardly extending member or thumb portion curved outwardly substantially parallel to said finger-hold and bent over at the top and provided at its outer extremity with a depending end or plunger adapted to enter and to reciprocate in said oblique and radial slots whereby as the spring is pressed said plunger causes said plate to revolve so as to throw the salt perforations out of alignment and to bring the pepper perforations into alignment, substantially as described. 6th. The combination with a box, canister, or analogous receptacle of a perforated top provided with a radial slot and pivotally mounted plate arranged on the top, and having a slot disposed at an angle to that of the top, said plate being provided with perforations adapted to register with those of the top, and an operating device reciprocating in the radial slot and engaging the pivotal plate in the slot thereof, whereby the said plate is actuated, substantially as described.

No. 53,290. Couch. (Fauteuil.)

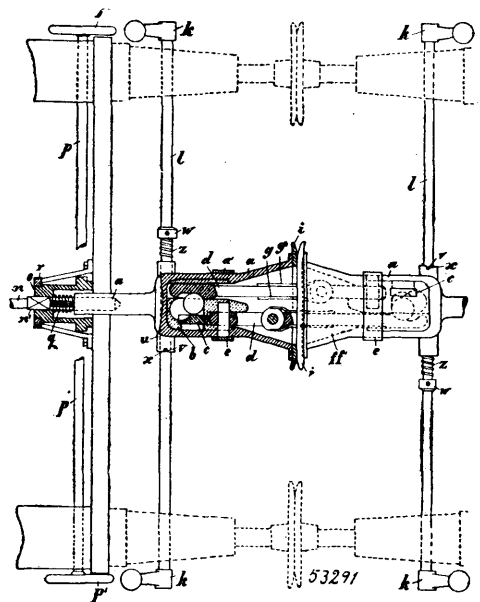


Oscar P. Breithut, Williamsport, Pennsylvania, U.S.A., 21st August, 1896; 6 years. (Filed, 22nd June, 1896.)

Claim.—1st. In a chair or couch, the combination with a stationary seat-frame, of a back-frame hinged to the seat-frame, the connection between said frames consisting of friction-hinges each embodying a pivot-pin or pintle, a pair of flat base-plates, a pair of cap-plates arranged respectively upon the base-plates and provided with aligned arched bearings to receive the pivot-pin or pintle, and adjusting-screws for drawing the cap-plates toward the base plates to vary the frictional contract thereof with the pivot-pin or pintle, said hinges being arranged with their pivot pins or pintles above the plane of the lower edge of the back-frame, and locking devices

for securing the back at the desired adjustment, substantially as specified. 2nd. In a reclining chair, the combination of a stationary seat-frame and fixed side arms, and a back-frame hinged at its lower end to the seat-frame, of catch-arms pivotally connected to the side edges of the back-frame and arranged, respectively, out of the vertical planes of the side arms, whereby they are adapted to be swung into a pendent or approximately vertical position to rest at their lower extremities upon the floor when the back-frame is arranged in an approximately horizontal position, said catch-arms being provided with means for engaging projections upon the side arms, and means for securing the catch-arms in said pendent position, substantially as specified. 3rd. In a chair, the combination with a stationary seat-frame and side-arms, of a back-frame hinged to the seat-frame, of catch-arms pivotally mounted upon the back-frame and adapted to be arranged at their free ends contiguous to the side arms when the back-frame is elevated and in contact with the floor to support the back-frame when the latter is in an approximately horizontal position and locking devices for securing the catch-arms at the desired adjustment in either of said positions, substantially as specified. 4th. In a reclining chair, the combination with a stationary seat-frame having side arms, and a back-frame hinged at its lower end to the seat-frame, of catch-arms hinged to the back-frame and approximately equal in length to the height of the seat, the connection between the catch-arms and the back-frame consisting of friction-hinges, whereby resistance is offered to the pivotal or swinging movement of said arms, means for securing the front ends of the catch-arms at any desired adjustment to the side arms, and locking-bolts on the back-frame to engage sockets in the catch-arms and lock the latter in a pendent position to support the back-frame by pressure upon the floor, substantially as specified.

No. 53,291. Car Coupler. (Attelage de chars.)



Hugo Oberläuter, Leipzig, Saxony, Germany, 21st August, 1896; 6 years. (Filed 13th July, 1896.)

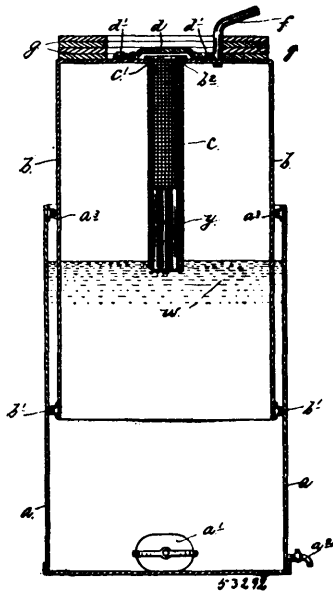
Claim.—1st. An automatic ball coupling each half of which is provided with a fork *a*, a casting *b*, slotted obliquely at its side and provided with a ball *b1*, and a tongue piece *d*, jointed to the coupling by a universal joint and hollowed out at its front end to receive the coupling ball *b1*, combined and operated substantially as described. 2nd. In an automatic ball coupling of the kind herein described, the mechanism for uncoupling which consists of a lever *k*, shaft *l*, crank arm *m*, and a slide *c*, arranged to slide in the casting *b*, combined and operating substantially as described. 3rd. In an automatic ball coupling of the kind herein described, the mechanism for shortening and lengthening the coupling, which consists of the shaft *p*, worm *s*, its corresponding worm wheel, the spring case *o*, and the draw bar *n*, combined and operating substantially as described. 4th. The new or improved coupling constructed and operating substantially as described.

No. 53,292. Gas Generator. (Générateur à gaz.)

Charles C. Jones, Minneapolis, Minnesota, U.S.A., 21st August, 1896; 6 years. (Filed 9th December, 1895.)

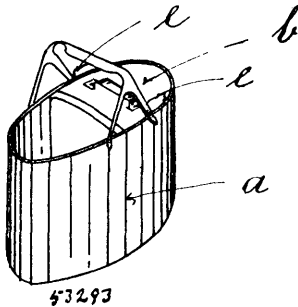
Claim.—In a gas generator and holder, a receptacle comprising the telescoping sections *a* and *b*, the lower member of which contains the gas producing liquid and the upper member of which is

provided with the central cage passage b^2 , the removable reticulate cage c , having the collar c^1 , engaging the upper head of said sec-



tion b to removably support said cage, and the removable air tight cover d , closely fitting over said passage b^2 and collar c^1 , and serving to hold said cage from displacement, substantially as described.

No. 53,293. Saucepan, etc. (*Casseroles, etc.*)

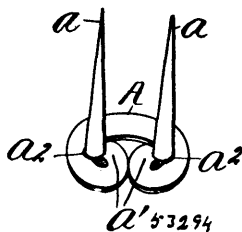


Thomas Llewellyn, Pentre, England, 21st August, 1896; 6 years. (Filed 13th July, 1896.)

Claim.—A saucepan, boiling or frying pan having divisions, into which fit movable receptacles having perforations or holds for the purpose of straining, and lids for covering same, substantially as described and illustrated herein.

No. 53,294. Fastening for Buttons, etc.

(*Attache pour boutons, etc.*)



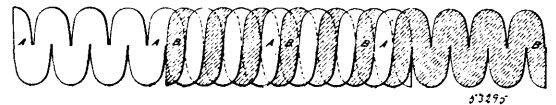
Franklin S. McKemey, Detroit, Michigan, U.S.A., 21st August, 1896; 6 years. (Filed 10th August, 1896.)

Claim.—1st. A fastening constructed of a single integral piece of wire, the main portion A of which is formed into a substantially crescent shaped outline, and having portions a^1, a^2 , bent toward each other and inwardly into the concavity of the crescent outline of the head, said portions alongside each other on the same plane and diverging toward the adjacent portions of the head, the ends of the wire being bent at substantially right angles to said diverging portions to form attaching prongs, for the purpose set forth. 2nd.

A fastening constructed of a single integral piece of wire, the body of which is formed into a substantially crescent shaped head, and having the ends of the wire bent to form attaching prongs, portions a^1, a^2 , of said head adjacent to the bases of the prongs being curved toward each other and inwardly into the crescent outline of the head, the one alongside and on the same plane with the other, and diverging within the crescent outline of the head to spread the bases of the prongs, for the purpose set forth. 3rd. A fastening constructed of a single integral piece of wire, the body of which is formed into a substantially crescent shaped head, and having the ends of the wire bent to form attaching prongs, portions a^1, a^2 , of said head adjacent to the bases of the prongs, being curved toward each other and inwardly into the crescent outline of the head the one alongside and on the same plane with the other and diverging within the crescent outline of the head to spread the bases of the prongs, the head forming a marginal seating flange round about the bases of the prongs, the surface of the head being swaged to form a flat seating flange, for the purpose set forth. 4th. A fastening constructed of a single integral piece of wire, the body of which is formed into a substantially crescent shaped head, and having the ends of the wire bent to form attaching prongs, portions a^1, a^2 of the head adjacent to the bases of the prongs being curved toward each other and inwardly into the crescent outline of the head, the one alongside and on the same plane with the other and diverging within the crescent outline of the head to spread the bases of the prongs, the head adjacent to the prongs forming a marginal seating flange around about the bases of the prongs, the surface of the head toward the prongs being swaged to form a flat seating flange, and the base of the prongs being intended into the adjacent edges of the head, substantially as set forth. 5th. A fastening formed of a single integral piece of wire bent intermediate the ends to form a head of crescent shaped outline, and attaching prongs, said head formed with portions a^1, a^2 bent toward one another and inwardly within the head crescent shaped outline and divergently therewithin, said prongs beveled on their inner faces toward their extremities and having their points set inward, substantially as set forth.

No. 53,295. Protector for Pneumatic Tires.

(*Protecteur pour bandages pneumatiques.*)

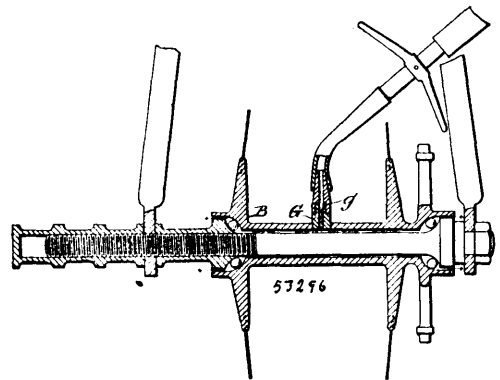


Edward Davies and Arthur Harrison, both of Adelaide, Australia, 21st August, 1896; 6 years. (Filed 10th August, 1896.)

Claim.—A protector for pneumatic and other similar tires composed of two bands having serpentine folds of any desired pitch interwoven or interlocked, substantially as herein described.

No. 53,296. Method of and Apparatus for Cleaning the Ball Bearings of Bicycles, etc.

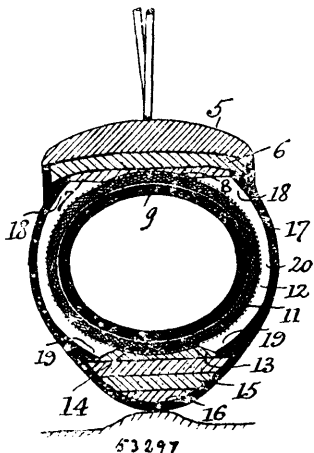
(*Méthode et appareil pour nettoyer les coussinets à boule de bicycles, etc.*)



Frederick Edwin Strangward, Stowell, Victoria, Australia, 21st August, 1896; 6 years. (Filed 10th August, 1896.)

Claim.—1st. The herein described method of cleaning the ball bearings of bicycles and other velocipedes consisting in forcing a current of compressed air through them from the interior outwards, substantially as and for the purposes specified. 2nd. In a bicycle or other velocipede, a nipple having screw threads cut upon it to correspond with the threads in a connecting piece in the end of the discharge tube of an air pump, substantially as and for the purposes specified. 3rd. In a bicycle or other velocipede, a tube (such as I) extending from the pneumatic tire either to the hub of the wheel or to any of the other adjacent bearings, substantially as and for the purposes specified.

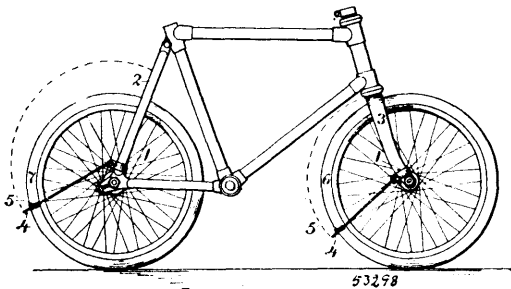
No. 53,297. Pneumatic Tire. (Bandage pneumatique.)



Henry Bingham, Melbourne, Victoria, Australia, 21st August, 1896; 6 years. (Filed 10th August, 1896.)

Claim.—1st. A bicycle or other like tire, having the flexible tube 9-12 impermeable to air and inflated under high pressure in combination with the foundation 6, 7 and the puncture shield 13-15, the said foundation and puncture shield having and being cemented to said tire along the respective arcs 8, 14, and the remainder of the tube being unattached, all substantially as described and for the purposes set forth. 2nd. In a bicycle or other like tire, the circular cover 17 having the circular lips 18 and in combination with the foundation 6-7 and the puncture shield 13-15, said foundation and puncture shield each having recesses with which said lips engage, all substantially as described and for the purposes set forth. 3rd. The combination of the parts 6 to 19 of the bicycle or other like tire, substantially as described and illustrated and for the purposes set forth.

No. 53,298. Mud Guard for Bicycles. (Garde-crotte pour bicycles.)



Robert S. Galbraith, Toronto, Ontario, Canada, 21st August, 1896; 6 years. (Filed 8th August, 1896.)

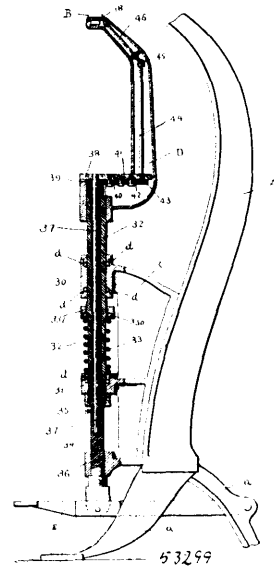
Claim.—1st. In a cycle, a clip adapted to clamp on either the rear stays or the forks of the cycle frame, said clip having means by which a frame is stop-jointed thereto, substantially as shown and described. 2nd. In a cycle, the U-shaped frame having eyes formed on its double end and at the bend or rounded end inclined to support an elastic band, substantially as shown and described. 3rd. In a cycle, the combination of the clips adapted to clamp on either the rear stays or front fork and having means thereon by which to form a stop-joint with a frame extending rearward round the bicycle wheel, and said frame jointed to the clips by means of eyes on its double end and at its rounded end adapted to support a band thereon, substantially as shown and described. 4th. In a cycle, the combination of the clips adapted to clamp on the cycle frame as provided, the frame stop-jointed to said clips by means of eyes on its double end and on its rounded end having means as specified to support a band thereon, and said elastic band carried on the rear or rounded end of said frame to bear on the bicycle wheel within the frame, substantially as shown and described.

No. 53,299. Pegging Machine. (Machine à cheviller.)

Patric Russell Condon, Spencer, Massachusetts, U.S.A., 21st August, 1896; 6 years. (Filed 6th August, 1896.)

Claim.—1st. The improvements in pegging machines, substantially as herein described. 2nd. In a pegging machine, the combination of a vertical spindle journaled in the frame of the machine by means of suitable ball-bearings, a horn carried by said spindle, a lifting spring coiled around said spindle, a button or anvil jour-

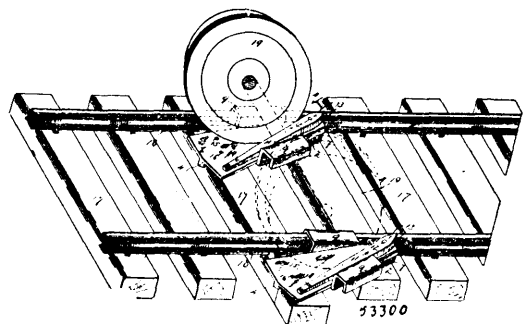
nalled in said horn, a treadle rod loosely connected to the lower end of said spindle, a rod rigidly connected to said treadle rod, and a



train of gearing for holding the button stationary independently of the rotation of the horn, substantially as described. 3rd. In a pegging machine, the combination of a vertical spindle journaled in the frame of the machine, a horn carried by said spindle, a button or anvil journaled in said horn, a treadle rod loosely connected to the lower end of said spindle, a rod or spindle rigidly connected to said treadle rod, and a train of gearing for holding the button stationary independently of the rotation of the horn, substantially as described. 4th. In a pegging machine, the combination of a peg-driving mechanism, means for advancing the work, a stationary knife, and a movable piece for engaging the ends of the pegs which project through the work, substantially as described. 5th. In a pegging machine, the combination of a reciprocating awl arranged to move transversely to advance the work, a peg-driving mechanism, a button or anvil, said button or anvil being provided with a movable piece, and a stationary knife or blade for trimming off the ends of the pegs, substantially as described. 6th. In a pegging machine, the combination of a peg-driving mechanism and a button or anvil having a stationary blade or knife, 23, a movable piece, 24, for receiving the projecting ends of the pegs, said piece 24 being provided with a torsional spring, 26, for holding the same in its normal position, substantially as described. 7th. A button or anvil for use in pegging machines, comprising a body portion, a blade or knife carried by said body portion, and a piece movably mounted in the body portion for engaging the ends of the pegs which project through the work, substantially as described.

No. 53,300. Car Replacer.

(Appareil à remettre les chars sur la voie.)

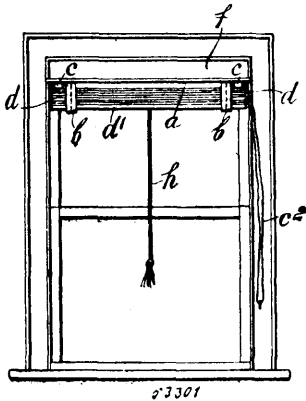


Patrick H. Durack, Pecos, Texas, U.S.A., 21st August, 1896; 6 years. (Filed 6th August, 1896.)

Claim.—1st. A car-replacing appliance, comprising a plate whose side margins converge and whose upper surface inclines upwardly from its rear to its front end, a tongue or lever pivoted near its front end upon and near the front end of said plate, a pin engaging an aperture in said tongue or lever near its rear end and adapted to engage one or another of a series of apertures in said plate, downwardly-disposed hook-arms secured to opposite sides of said plate,

and one of them engaging a track rail when in operative position, and an adjustable bolt carried at the front end of the plate and engaging the under side of the head of said track-rail, substantially as set forth. 2nd. A car-replacing appliance, comprising a plate whose side margins converge and whose upper surface inclines upwardly from its rear to its front end, a tongue or lever pivoted near its front end upon and near the front end of said plate, a pin engaging an aperture in said tongue or lever near its rear end and adapted to engage one or another of a series of apertures in said plate, downwardly-disposed hook-arms secured to opposite sides of said plate, and one of them engaging a track when in operative position, an adjustable bolt carried at the front end of the plate and engaging the under side of the head of said track-rail, a depending flange or shoulder at the rear end of said plate, and pointed dogs depending also from said plate, substantially as set forth.

No. 53,301. Venetian Blind. (Jalousies.)

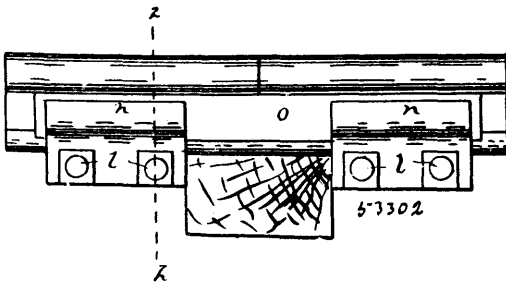


John Manttan, Wellington, New Zealand, 21st August, 1896; 6 years. (Filed 6th August, 1896.)

Claim.—1st. In a Venetian blind, a spring actuated roller around which lifting cords are wound to raise the laths, substantially as and for the purposes set forth herein. 2nd. In a Venetian blind, a spring actuated roller around which lifting cords are wound to raise corrugated laths, substantially as and for the purposes set forth herein. 3rd. In a Venetian blind, a spring actuated roller around which lifting cords are wound to raise corrugated laths of paper pulp or similar material, substantially as and for the purposes set forth herein. 4th. In a Venetian blind, in combination, a spring actuated roller with liberating catches, lifting cords, and laths, substantially as and for the purposes set forth herein. 5th. The improvements in Venetian blinds, constructed, arranged and operating, substantially as and for the purposes set forth herein and illustrated on the accompanying drawing.

No. 53,302. Rail Joint Fastening.

(Attache de joints de rails.)



Jonathan Dickason, Agosta, and Charles H. McElroy, Cochrantown, both in Ohio, U.S.A., 21st August, 1896; 6 years. (Filed 25th June, 1896.)

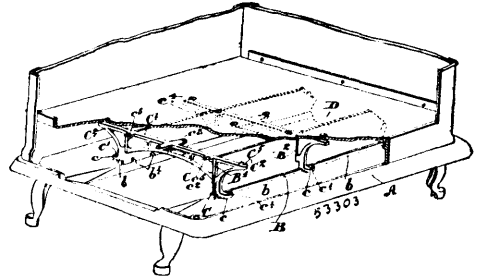
Claim.—The rail fastening comprising the two similar embracing clamps having the clamping bolts passing through their bottom plates beneath the rails, the inner edges of the upper embracing walls having the pins to enter the holes in the fish plates or splice bars, as set forth.

No. 53,303. Stove. (Poêle.)

Frederick William Moffat, Weston, Ontario, Canada, 21st August, 1896; 6 years. (Filed 6th August, 1896.)

Claim.—1st. In a cooking stove or range, the combination with a steel oven bottom and the leg bottom of the stove and flue strips provided with notches, of trusses having a flat top, legs secured to

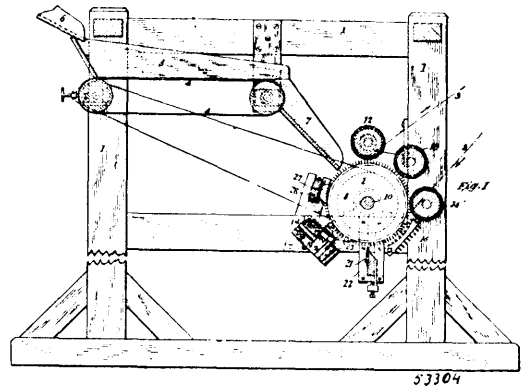
the leg bottom of the stove and extending through the notches made in the flue strips, and means for securing the bottom of the oven to



the flush top of such trusses, as and for the purpose specified. 2nd. In a cooking stove or range, the combination with the steel oven bottom and the leg bottom of the stove and flue strips provided with notches, of trusses having a flat top, legs secured to the leg bottom of the stove and extending through the notches made in the flue strips, and laterally extending lugs flush with the top of the trusses and forming part thereof, and bolts counter sunk in the bottom of the oven and extending through notches in the laterally extending lugs, as and for the purpose specified.

No. 53,304. Machine for Seeding Fruit.

(Machine à enlever les noyaux des fruits.)

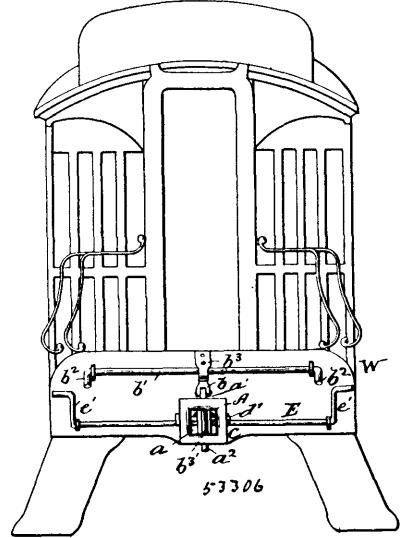


The Fruit Cleaning Company, assignee of George Clinton Ladue, both of Brooklyn, New York, U.S.A., 22nd August, 1896; 6 years. (Filed 29th July, 1896.)

Claim.—1st. In combination in a machine for seeding fruit, a carrier for conveying the fruit and which is provided with a series of points or teeth spaced to engage the seed of the fruit, a pressure mechanism the surface of which moves to and from the carrier and acts to partially impale the fruit upon the carrier, and a puncturing mechanism the surface of which moves to and from said impaling surface and acts subsequently to the action of said impaling mechanism to perforate the skin over the seeds of the impaled fruit for the purpose of uncovering the seed of the fruit. 2nd. In combination in a machine for seeding fruit, a carrier for conveying the fruit which is provided with a series of points or teeth spaced to engage the seed of the fruit, pressure mechanism having motion angularly with relation to the carrier and acting to partially impale the fruit upon the carrier and by further action to puncture or rupture the skin over the seeds of the impaled fruit to free the seed preliminarily to removing the same from the body of the fruit. 3rd. In combination in a machine for seeding fruit, a roll for receiving and conveying the fruit the surface of which is provided with a series of points or teeth spaced to exclude the seeds of fruit impaled thereon, a pressure roll acting to partially impale the fruit on the carrier teeth so that they engage the seed preliminarily to removing the same from the pulp, and a brush roll acting to rupture the skin of the fruit lying on and to force the same off the seed, substantially as set forth. 4th. In combination in a machine for seeding fruit, a carrier roll provided with a series of points or teeth spaced to exclude the seed of the fruit, a roll acting to partially impale the fruit on the carrier so that its teeth engage the seed, a roll acting to puncture or rupture the skin of the fruit lying on the seed, and a roll acting to force the punctured skin and pulp of the fruit from around the exposed seed. 5th. In combination in a machine for seeding fruit, a carrier roll provided with a series of teeth spaced to engage and exclude the seeds of fruit impaled thereon, and a series of two or more rolls adjusted at different distances from said carrier and successively acting to partially impale the fruit on the carrier teeth and rupture and displace the skin of the fruit lying over the seed preparatory to removing the seed. 6th. In combination in a machine for seeding fruit a carrier provided with teeth spaced to

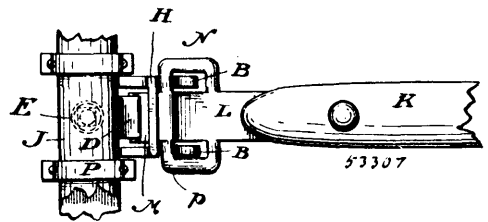
engage the seed of the fruit when impaled upon said teeth, a roll acting to partially impale the fruit upon the said carrier, a roll acting to perforate the skin of the fruit over the seeds thereof, and a series of stripping wires 23 located between the teeth and acting to lift from the teeth the fruit impaled thereon. 7th. In combination in a machine for seeding fruit, a carrier for conveying the fruit composed of a series of spaced teeth, a series of two or more rolls acting to impale the fruit upon the teeth and exclude the seeds therefrom, and a series of cleaning blades located in the circumferential spaces between the teeth and acting to remove therefrom collections of pulp or gum, substantially as set forth. 8th. In combination in a machine for seeding fruit, a carrier for conveying the fruit composed of a series of spaced projections, pressure mechanism acting to press the fruit upon the carrier, puncturing mechanism acting independently of the pressure mechanism to open the fruit and expose the seeds thereof, and seed removing mechanism operating to detach the seed from the said carrier. 9th. In combination with the toothed carrier, pressure mechanism acting to impale the fruit upon the carrier and exclude the seeds therefrom, and a wire or wires arranged parallel to the surface of the carrier and acting to loosen the seeds thereon, and a comb 21 acting to engage the loosened seeds and detach the same from the carrier. 10th. In combination with the toothed carrier, pressure mechanism acting to impale the fruit upon the carrier and exclude the seeds therefrom, mechanism such as comb 21 arranged parallel to the surface of the carrier for engaging the excluded seeds, and an air jet or nozzle 30 located to direct a blast of air against the surface of the carrier for the purpose of removing the excluded seeds. 11th. In combination in a machine for seeding fruit, a carrier for receiving and conveying the fruit provided with a series of spaced teeth, pressure mechanism acting to preliminarily or partially impale the fruit upon the teeth and rupture the skin over the seed so as to exclude the same from the fruit, mechanism acting to dislodge or remove the seed from the carrier, a series of stripping wires 23 acting to remove the seeded fruit from the teeth of the carrier, and a series of blades located in circumferential spaces between the teeth and acting to remove therefrom collections of pulp or gum.

Claim.—The herein described car coupling, comprising the draw-head having a chamber open at its ends, upper and lower holes or



openings, a cross-rod located in said chamber, a coupling pin, a shaft having a central crank arm to the outer end of which said pin is pivotally connected, a spring acting on said crank arm, a crank shaft journaled to the forward end of the car having a central crank portion, outer crank-operating handle ends, and an ejector having a forward flange or downwardly extended portion, said ejector being connected at its rear end to said crank portion of said latter shaft, substantially as set forth.

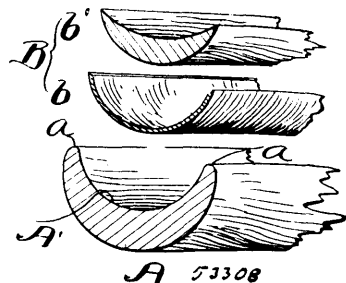
No. 53,307. Thill Coupling. (Armon de limonière.)



Rudolph Gustav Jahuke, Cincinnati, Ohio, U.S.A., 22nd August, 1896; 6 years. (Filed 5th August, 1896.)

Claim.—1st. In a thill coupling, a plate A, pin E and ears B, in combination with a spring F, a shaft iron L and bar C, as set forth. 2nd. In a thill coupling, the combination of a plate A, pin E, ears B, spring F, bar C, having foot a¹ and head D and shaft iron L, as set forth. 3rd. In a thill coupling, the combination of plate A, ears B, having recesses a, pin E, bar C, having head D and foot a¹, spring F interposed around said pin E and between the foot a¹ of bar C and the plate A, shaft iron L, having hooked end M and wings N, as set forth.

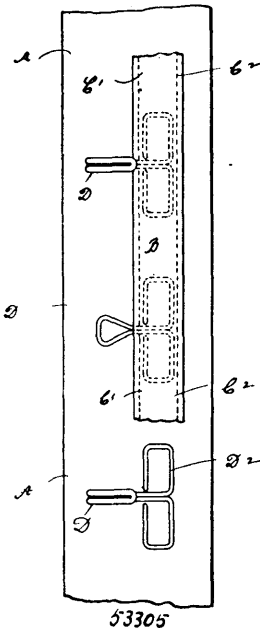
No. 53,308. Wheel Rim. (Jantes de roues.)



Theodor Kundtz, Cleveland, Ohio, U.S.A., 22nd August, 1896; 6 years. (Filed 5th August, 1896.)

Claim.—1st. A wheel rim, consisting of a wooden ring having an annular groove cut in its periphery circumferentially of the rim, and a wooden reinforcing ring fitting and suitably secured within

No. 53,305. Hook and Eye. (Agrafe et porte-agrafe.)



Emil Hirth, Stolberg, Rhine, Germany, 22nd August, 1896; 6 years. (Filed 1st August, 1896.)

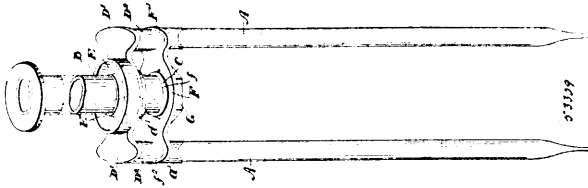
Claim.—1st. The combination with a girdle or girth or other piece of base stuff or garment of a strip or strips of a fabric secured to said base, hooks or eyes or hooks and eyes having their legs, feet or ears situated between said base and strip and being held thereby, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with a girdle or girth or other piece of base stuff or garment of a strip or strips of a fabric secured to said base by two parallel seams arranged in a distance one from the other, hooks or eyes or hooks and eyes having their legs, feet or ears situated between the base and strip as well as between said seams, and being held thereby, substantially as and for the purpose hereinbefore set forth.

No. 53,306. Car Coupler. (Attelage de chars.)

Alfred Pinkney Redmon, Adrian, Kansas, U.S.A., 22nd August, 1896; 6 years. (Filed 5th August, 1896.)

said groove. 2nd. A wheel rim, consisting of a wooden ring having an external annular groove extending circumferentially of the rim, and a wooden reinforcing ring secured within said groove and comprising a cross-grained wooden layer having its grain running crosswise of the rim. 3rd. A wheel rim, consisting of a wooden bar or strip A that forms the inner portion of the rim, which strip or bar has an external annular recess or groove whose walls form a curve or curves in the cross-section of the rim, a cross-grained wooden layer b lining the walls of and bent into said groove or recess with its grain running crosswise of said walls, and an outer wooden bar or strip b¹ extending annularly and circumferentially of said cross-grained layer, substantially as shown for the purposes specified.

No. 53,309. Bicycle. (Bicycle.)



William De Lang, Coburg, Ontario, Canada, 22nd August, 1896; 6 years. (Filed 5th August, 1896.)

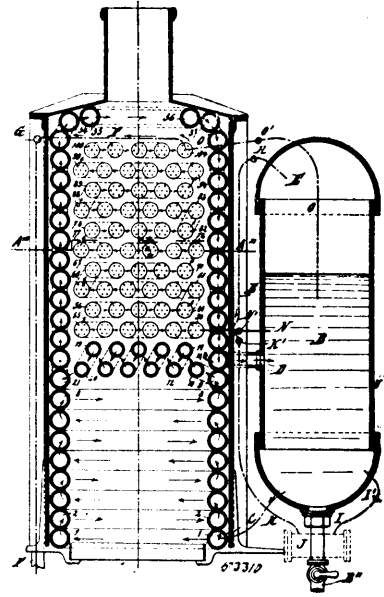
Claim.—1st. In a bicycle, the combination with the forks of a bicycle, of the fork-stem, the crown plate provided with downwardly extending sockets at the opposite ends and means for retaining the upper ends of the forks in such sockets, as and for the purpose specified. 2nd. The combination with the fork-stem and crown plate, of the forks, the connecting plate having openings through which the forks extend and detachable means for connecting the plates together, as and for the purpose specified. 3rd. The combination with the fork-stem of a bicycle, of the forks, plates connecting the fork-stem with the upper ends of the forks and a screw plug nut at the bottom of the fork-stem for tightening the connections between the forks and the plates, as and for the purpose specified. 4th. The combination of the fork-stem, the forks having enlarged upper ends, the plates separated from each other as described by the heads of the forks and a screw plug nut at the lower end of the forks stem for tightly connecting the two plates and holding the fork-rigidly in position, as and for the purpose specified. 5th. The combination of the fork-stem, the forks having enlarged upper ends, the crown-plate secured to the stem and provided with sockets extending over the heads of the forks, the hold-fast plate having openings at the opposite end, the edges of which abutt the shoulders formed at the bottom end of the enlargement of the forks and means for connecting the plates together, as and for the purpose specified. 6th. The combination of the fork-stem having the lower annular flange and threaded ring situated above the flange, the crown-plate provided with sockets, the collar internally threaded to fit over the top of the threaded ring on the stem, the forks provided with enlarged upper ends to fit into the sockets, the hold-fast plate provided with openings, the edge of which abutt the shoulder formed on the lower end of the enlargement at the upper ends of the forks and the flange screw plug designed to fit into the interiorly threaded lower end of the stem, as and for the purpose specified. 7th. In combination the stem, crown plate secured thereto provided with the enlarged upper ends a, and supplemental enlargements a', and the hold-fast plate provided with openings corresponding in diameters to the supplemental enlargements on the forks and means for securing the hold-fast plate in position, as and for the purpose specified.

No. 53,310. Steam-Generator for Self-propelled Vehicles. (Générateur à vapeur pour véhicules à propulsion automatique.)

Edouard Empain, Brussels, Belgium, 22nd August, 1896; 6 years. (Filed 4th August, 1896.)

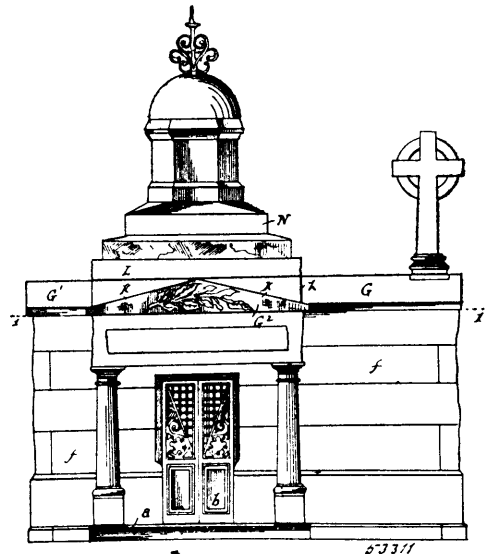
Claim.—1st. A steam-generator, comprising tubes or the like in which the water is heated and steam generated, one or more separate reservoirs in which the hot water and steam are stored, and a drier or superheater for the steam, substantially as described. 2nd. A steam-generator comprising a series of tubes or chambers forming a casing both to the fire box and boiler, and a perforated screen over the fire-box, a hot-water and steam reservoir, pipe connections between said tubes and reservoir, and a series of rods or bars of comparatively large cross-sectional area, each having several passages of small cross-sectional area, said rods or bars being arranged above said perforated screen within the casing of the boiler, substantially as described, and for the purposes specified. 3rd. A steam-generator, comprising a series of tubes forming a perforated screen across the combustion chamber of the boiler and a series of

ods or bars of comparatively large cross-sectional area, each having several passages of small cross-sectional area, also arranged in the



combustion-chamber of the boiler, a steam and hot-water reservoir, and pipe connections between the several parts, substantially as and for the purposes described. 4th. In a steam-generator, a series of rods or bars of comparatively large cross-sectional area each having several passages of comparatively small cross-sectional area formed therein, substantially as described. 5th. The combination in a steam-generator or metal rods or bars of comparatively large cross-sectional area having several passages therein of comparatively small cross-sectional area and a pump or the like for forcing water through said passages, substantially as and for the purposes described. 6th. The combination in a steam-generator of a fire-box having a chamber around the same to receive the exhaust-steam from a steam-engine, from which chamber said steam passes into the fire box to mingle with the combustible matter therein, substantially as and for the purpose described. 7th. The combination in a steam-generator of a fire-box having a chamber around the same to receive the exhaust-steam from a steam-engine, from which chamber the said steam passes into the fire-box to mingle with the combustible matter therein, and a tuyere for injecting a supply of hot air into such fire-box substantially as and for the purposes described.

No. 53,311. Mausoleum. (Mausolée.)

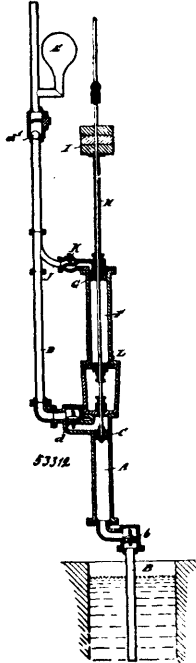


Rodney F. Caster, Hardwick, Vermont, U.S.A., 22nd August, 1896; 6 years. (Filed 3rd August, 1896.)

Claim.—1st. A stone structure whose walls form a plan shaped like a cross with four roof stones each covering one of the wings of

said cross and each of said roof stones having two mitered corners which abut those adjoining, and a central cap-stone resting on all four of the roof stones and covering the said mitered joints thereof. 2nd. A mausoleum having, in combination, walls in the form of a cross, four roof stones, each having two mitered corners, *b*, and a top horizontal face, *i*, and placed on the walls with their mitered corners adjoining and forming close joints, and a cap-stone covering the centre and resting on the said horizontal faces of all four roof stones and covering the said mitered joints which are above the walls.

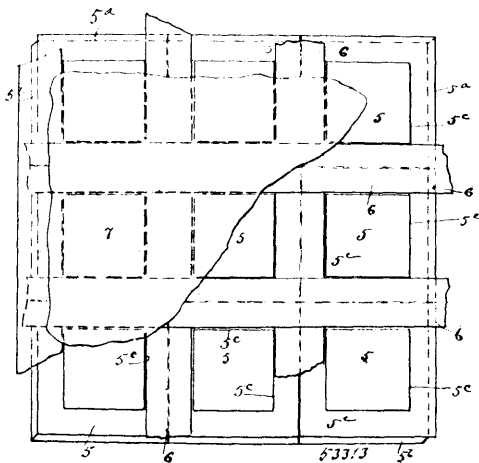
No. 53,312. Pump. (Pompe.)



George Lansell, Bendigo, Victoria, Australia, 22nd August, 1896; 6 years. (Filed 3rd August, 1896.)

Claim. The improved pump herein described, having two distinct cylinders each fitted with a piston or plunger together with the necessary valves and connections and adapted the one to raise water or other liquid and the other to force air into the delivery pipe of the pump, substantially as specified and as illustrated in the accompanying drawings.

No. 53,313. Plaster Board. (Planche à plâtrer.)



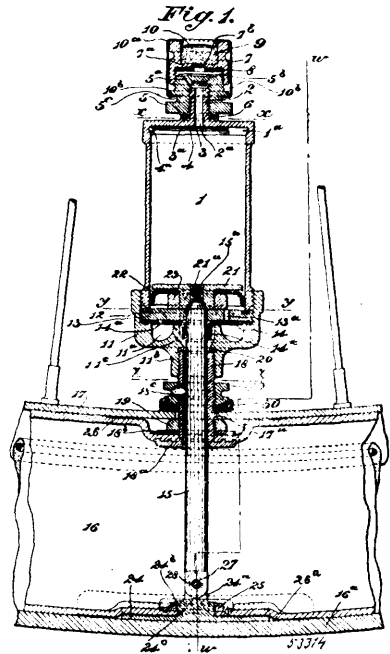
James Morrison, Montreal, Quebec, Canada, 22nd August, 1896; 6 years. (Filed 25th February, 1896.)

Claim.—1st. Plaster board sections having interlocking edges and a strip adapted to be secured to and overlap the adjacent edges of the faces of said sections, for the purpose set forth. 2nd. Plaster board sections each formed with its face adjacent to its edges recessed, a number of its side edges grooved and a number provided

with projections, said sections being adapted to be set with the projections from one section fitted into the grooves in other sections adjacent thereto, and a strip adapted to be secured to and overlap the adjacent edges of the faces of said sections in said recesses, for the purpose set forth. 3rd. Plaster board sections each formed with a number of its side edges grooved and a number provided with projections, said sections being adapted to be set with the projections from one section fitted into the grooves in other sections adjacent thereto, and a strip of canvas or the like adapted to be secured to and overlap the adjacent edges of the faces of said sections, for the purpose set forth. 4th. Plaster board sections arranged with their side edges contiguous to and abutting each other and contiguous strips of flexible material such as canvas secured to and overlapping the adjacent edges of the faces of two or more of the sections, and one strip crossing transversely of the other or others at the corners of said sections, for the purpose set forth. 5th. Plaster board sections formed with interlocking side edges and strips of flexible material such as canvas secured to and overlapping the adjacent edges of the faces of the sections, and one strip crossing transversely of the other or others at the corners of said sections, for the purpose set forth.

No. 53,314. Apparatus for Inflating Pneumatic Tires.

(Appareil pour gonfler les bandages pneumatiques.)



Benjamin Ratcliffe Adkins, Lewisham, and Charles Windsor, Brockley, both in Kent, England, 22nd August, 1896; 6 years. (Filed 3rd August, 1896.)

Claim.—1st. Apparatus for automatically inflating pneumatic tires, comprising an air pump having its cylinder adapted to be attached to a wheel rim and its piston rod adapted to extend across and within the tire and to be connected to the outer or peripheral or tread portion thereof so as to be reciprocated by inward and outward movement thereof, as set forth. 2nd. Apparatus for automatically inflating pneumatic tires, comprising an air pump having its cylinder adapted to be pivotally attached to a wheel rim so that it can rock or oscillate thereon, and its piston rod adapted to extend across and within the pneumatic tire and to be flexibly connected to the outer peripheral or tread portion thereof, as set forth. 3rd. Apparatus for automatically inflating pneumatic tires, comprising an air pump having its cylinder adapted to be attached to a wheel rim and its piston rod provided at its outer end with an attachment for connecting the rod to the outer peripheral or tread portion of the tire, the area of said attachment that is subject to the air pressure in the tire being greater than that of the pump piston, substantially as described. 4th. Apparatus for inflating pneumatic tires, comprising an air pump adapted to be pivotally secured to a wheel rim so that it can rock or oscillate thereon, and having its piston rod extending through the pivotal connection so as to extend into the tire to which the apparatus is applied, and a fastening device pivoted to the outer end of said piston rod and adapted to be secured to the outer peripheral or tread portion of said tire so as to form therewith a rigid connection of greater area than that of the pump piston, substantially as described for the purpose specified. 5th. In apparatus for inflating pneumatic tires, a pump cylinder having a suction valve consisting of a flat piece of flexible or elastic material held at its periphery against the inner end of

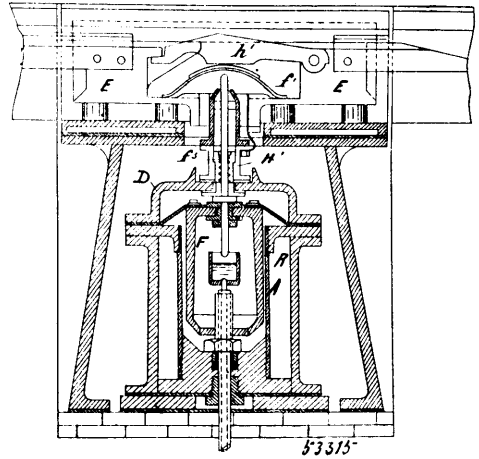
said cylinder, and formed with perforations that are arranged out of line with the air inlet to the said cylinder end, substantially as described. 6th. In apparatus for inflating pneumatic tires, a pump cylinder having at one end an extension with air inlet, a suction valve controlling said air inlet, and an air closure and filling device adjustably mounted on said extension, and whereby the end of the extension at which air enters, can be effectually closed when the device is screwed up, substantially as described. 7th. In apparatus for inflating pneumatic tires, an air pump cylinder having an air inlet pipe at one end, a cap screwed on said pipe and formed with inclined perforations at its free end, an adjustable nut screwed on said cap, provided with packing material adapted to tightly close the perforations in said cap and formed with a chamber charged with filtering material, and means for limiting the extent to which said nut can be unscrewed, substantially as described. 8th. In apparatus for automatically inflating pneumatic tires, the combination with the pump cylinder having an externally screw threaded air inlet pipe, 2, of a suction valve, 3, consisting of a flat piece of flexible or elastic material held against the inner end of said cylinder by its edge portion, and formed with air passages arranged out of line with the air inlet in the end of said cylinder, a cap 5 screwed on said pipe 2, and formed with air passages 5^a, a packing ring 6 between said cylinder and cap, a nut 7 screwed on said cap and formed with a centrally perforated division, 7^a, dividing the interior of said nut into two compartments, a packing ring 8 in the compartments next the screw cap, air filtering material 9 in the other compartments, a perforating plate 10 confining said filtering material in place, and metal clip pieces 10^a for limiting the endways movement of said nut, substantially as described. 9th. Apparatus for inflating pneumatic tires, comprising an air pump and a tubular stem through which the pump piston rod extends, said stem being secured at one end to said air pump, provided at the other end with a tire clamping device, and adapted to be pivotally secured to a wheel rim so that said pump can rock or oscillate on said wheel rim substantially as described for the purpose specified. 10th. Apparatus for inflating pneumatic tires, comprising an air pump adapted to be secured to a wheel rim and to the inner peripheral portion of a pneumatic tire with its delivery passage in communication with the interior of the latter, and with its piston rod extending through the connection into the tire, and a clamping device pivoted to the piston rod so that it can turn relatively thereto in the direction of the length of the tire and comprising clamping plates, between which a part of the outer periphery or head of the tire can be securely clamped, substantially as described. 11th. Apparatus for inflating pneumatic tires, comprising an air pump cylinder with suction valve at one end thereof, a valve box screwed to its other end, a perforated valve supporting plate located at the delivery end of said cylinder, a delivery valve of flexible sheet material secured between said plate and valve box, having a central tubular extension, and formed with air passages that are out of line with those in said plate, and are in communication with an air delivery passage extending around said valve extension, a hollow stem adapted to be secured in a detachable manner to the valve box, to a wheel rim and to a pneumatic tire, and having its interior in communication with said air delivery passage and the interior of said tire, and a pump piston provided with a cupped ring and having its rod extending through said plate, valve extension and stem, and adapted to be connected to the tire, substantially as herein described. 12th. In apparatus for inflating pneumatic tires, an air pump cylinder, 1, a valve box, 11, screwed to the delivery end thereof, and having an annular recess 11^a, therein a tubular extension 11^b, and holes 11^c, connecting said recess with the delivery passages through said extension, a perforated metal plate 13 secured between said cylinder end and valve box, and a valve 14 of perforated flexible material secured between the edges of said annular recess and said plate, and having a tubular extension, 14^b, through which and said plate the pump piston extends. 13th. In apparatus for inflating pneumatic tires, an air pump comprising a cylinder with tubular extension, an externally screwed hollow stem screwed at one end into said extension, and provided at its other with a head 18^a, and a clamped plate 18^b, a packing ring 20 between said cylinder end and stem, and nuts 19 and 29 screwed on said stem and having their adjacent ends rounded, substantially as described for the purpose specified. 14th. In apparatus for inflating pneumatic tires, an air pump comprising a cylinder, a hollow stem connected to said cylinder and adapted to be connected to a wheel rim and a pneumatic tire, a pump piston having its rod extending through said stem, and a clamping device comprising a plate 24 with a stem jointed to the outer end of said piston rod, and of larger area than said piston, and a clamping plate 25 adapted to be secured to said plate, substantially as described for the purpose specified.

No. 53,315. Contact Apparatus for Underground Current Conductors. (*Appareil de contact pour conducteurs de courants souterrains.*)

Carl F. Ph. Stendelbach, Leipzig, Germany, 24th August, 1896; 6 years. (Filed 10th January, 1896.)

Claim.—1st. A contact apparatus for underground current conductors, comprising a track, a contact rail, contact terminals under-

laying said rail, a movable cylinder enclosing both and carrying one of said contact terminals operated by the car engaging with the contact rail to close the current, substantially as described. 2nd. An electrical contact apparatus for underground current conduc-



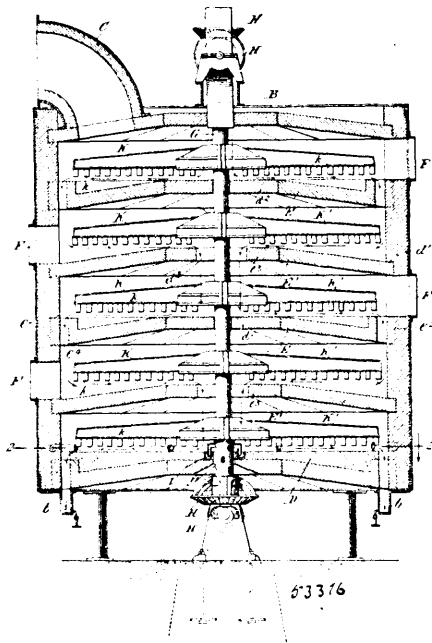
tors, comprising a track and main current conductors, and a series of short sections of current conductors, each having contact terminals adapted to be switched in the line of the main current by means of a contact rail, a contact pin and a movable cylinder, said cylinder and pin containing contact terminals, substantially as described. 3rd. A contact apparatus for electrical railways, comprising a main conductor, a contact rail, a contact pin H connected therewith, a cylinder F, a spring to act upon said cylinder, a flexible diaphragm secured to the top of said cylinder, a cup of mercury in which the pin H is immersed, and a return conductor thereby brought in circuit with the main conductor by the movement of the car upon the track, substantially as described. 4th. A contact apparatus for electric railways, comprising a track, a main line conductor, the casing A of said apparatus, an induction coil and cylinder F containing a terminal located within the compound coils of a main and secondary current, a flexible diaphragm connecting the cylinder and casing, and a contact pin forming the opposite terminal of the main line conductor, the said terminals being brought together by the magnetism of the current surrounding the terminal cylinder, substantially as described. 5th. In an electrical railway contact apparatus, the combination of the protecting rails, the cover D, the inner casing A, the cylinder F, the diaphragm N, the spring f, the contact pin H, the cable K, and mercury cup terminal G, and the contact rail S, supported upon the pin H, and combined for joint operation, substantially as described. 6th. In an electrical railway contact apparatus, the combination of the protecting rails, the cover D, the inner casing A, the movable cylinder F containing the contact terminals, the pin H, the conductors connected with the pin H and cylinder F, the exterior casing P, and the induction coils enclosed between the casings A and P and connected in circuit to lift the cylinder F and connect the contact terminals, substantially as described.

No. 53,316. Roasting Furnace. (*Fournaise à rôtir.*)

John Brown Francis Herreshoff, Brooklyn, New York, U.S.A., 24th August, 1896; 6 years. (Filed 27th March, 1896.)

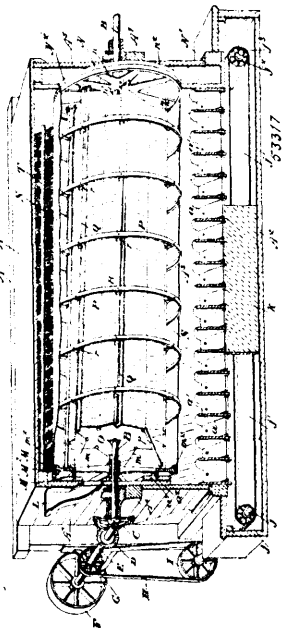
Claim.—1st. In a roasting furnace, the combination with the main shaft having a hub and having said hub provided with upwardly projecting lips j^1 , side wings j^2 , and with an overhanging flange j^3 , of stirrer arms K K¹, having stirrer pins or teeth k, said stirrer arms being also provided with the upwardly projecting toe j^4 , and with the laterally projecting pins j^5 , all arranged so that when the parts are assembled the pins j^5 rest on the lips j^1 , the toe j^4 entering beneath the flange j^3 , and so that one or more of the teeth k on the stirrer arm are nearer the centre of the shaft than the pins j^5 . 2nd. The herein described roasting apparatus, consisting of one or more roasting floors combined with a vertical main shaft running through the floors, the said shaft having a plurality of hubs, each hub provided with upwardly projecting lips j^1 , side wings j^2 , and with an overhanging flange j^3 , of a stirrer arm entered into each hub, each stirrer arm having stirrer pins or teeth k, said stirrer arms, each also provided with an upwardly projecting toe j^4 , and with laterally projecting pins j^5 , all arranged so that when the parts are assembled the pins j^5 , will rest on the lips j^1 , and the toe j^4 will

enter between the flange j^2 , so that one or more of the teeth k , on the stirrer arm are nearer the centre of the shaft than the pins j^7 ,



and the stirrer will be in position to stir material placed upon the roasting floor, substantially as described.

No. 53,317. Flour Dresser. (Blutoir.)

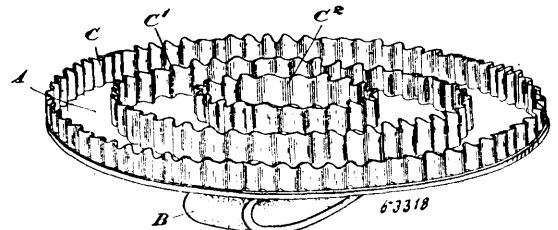


Harvey Christopher Malsness, Stratford, Ontario, Canada, 24th August, 1896; 6 years. (Filed 2nd June, 1896.)

Claim.—1st. In a flour dresser, in combination, a reel provided with suitable bolting cloth and suitably mounted upon the shaft, a series of inter-elevators and deflecting carriers extending between the elevators, as and for the purpose specified. 2nd. In a flour dresser, in combination, a reel provided with suitable bolting cloth, and suitably mounted upon the shaft, an internal drum situated within the reel, a series of troughs around the drum having the mouths facing in the one direction circumferentially forming inter-elevators, depressed angular deflecting carriers extending from the trough to the apex of the points of the star-shaped drum, and means for supporting the drum upon the main shaft, as and for the

purpose specified. 3rd. In a flour dresser, in combination, a reel provided with suitable bolting cloth, and suitably mounted upon the shaft, an internal drum situated within the reel, a series of troughs around the drum having the mouths facing in the one direction circumferentially forming inter-elevators, depressed angular deflecting carriers extending from the trough to the apex of the points of the star-shaped drum, open spider-shaped ends to the reel, the feed spout, a receiving chamber or space in the feed end of the reel, as and for the purpose specified. 4th. In a flour dresser, in combination, a reel provided with suitable bolting cloth, and suitably mounted upon the shaft, an internal drum situated within the reel, a series of troughs around the drum having the mouths facing in the one direction circumferentially forming inter-elevators, depressed angular deflecting carriers extending from troughs to the apex of the points of the star-shaped drum, open spider-shaped ends to the reel, the feed spout, a receiving chamber or space in the feed end of the reel, and longitudinal angular ribbed extensions to one side of the deflecting carriers extending into the receiving chamber or space, as and for the purpose specified. 5th. In a flour dresser, in combination, a reel provided with suitable bolting cloth, and suitably mounted upon the shaft, an internal drum situated within the reel, a series of troughs around the drum having the mouths facing in the one direction circumferentially forming inter-elevators, depressed angular deflecting carriers extending from troughs to the apex of the points of the star-shaped drum, means for supporting the troughs and deflecting plates, the open end rings secured to the shaft, a series of rib rings extending intermediately between the end rings and brackets for securing them in position and supporting them upon the inter-elevator troughs as and for the purpose specified. 6th. In a flour dresser in combination a reel provided with suitable bolting cloth and suitably mounted upon the shaft, an internal drum situated within the reel, a series of troughs around the drum having the mouths facing in the one direction circumferentially forming inter-elevators, depressed angular deflecting carriers extending into the receiving chamber or space, as and for the purpose specified. 7th. In a flour dresser reel in combination the open ended end rings, the inter-elevators supported on the shaft, the bolting cloth, means for supporting the same from the inter-elevators and the supplemental wooden rings supported on the end rings for securing the bolting cloth to as and for the purpose specified. 8th. In a flour dresser reel in combination the open ended end rings, the inter-elevators supported on the shaft the bolting cloth, means for supporting and securing the bolting cloth on the reel, the drum for supporting the inter-elevators, the outwardly projecting flange on the inner end of the ring next the feed spout, the stationary ring into a groove in which such flange extends, and the feed spout extending through the end of the casing as and for the purpose specified. 9th. In a flour dresser the combination with the reel and hopper, of a conveying chamber at the bottom of the hopper an endless belt conveyor extending from end to end of the chamber and supported on suitable pulleys and suitably driven as and for the purpose specified. 10th. In a flour dresser, in combination, a reel provided with a suitable bolting cloth, suitably mounted upon the shaft and a series of inter-elevators suitably supported within the reel upon the shaft at desired distances apart circumferentially and in proximity to the bolting cloth as and for the purpose specified. 11th. In a flour dresser, in combination, a reel provided with a suitable bolting cloth suitably mounted upon the shaft and a series of troughs forming inter-elevators suitably supported and having a spiral twist from end to end of the reel as and for the purpose specified.

No. 53,318. Curry Comb. (Etrille.)

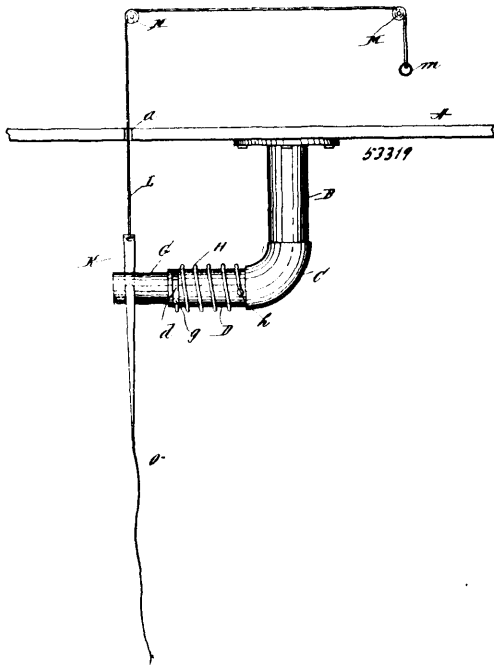


William Joseph Overend, assignee of Francis Henry Burke, both of Peterboro', Ontario, Canada, 24th August, 1896; 6 years. (Filed 18th October, 1895.)

Claim.—1st. In combination in a curry comb, the back, the corrugated rings having their edges scalloped to form teeth, each tooth having its highest point out of alignment to the adjacent tooth as and for the purpose specified. 2nd. In combination in a curry comb, the back, the corrugated rings having their edges scalloped to form teeth, portion of such teeth being bevelled outwardly from the interior to exterior and portion from exterior to interior and each tooth of the two differently bevelled sets having its highest point out of alignment to the adjacent tooth as and for the purpose specified.

No. 53,319. Horse Starting Device.

(Appareil à partir les chevaux.)



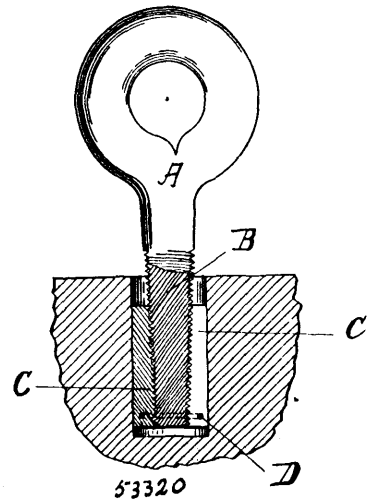
Hiram Porter Hall, Gibbstown, New Jersey, U.S.A., 24th August, 1896; 6 years. (Filed 19th June, 1896.)

Claim.—1st. The combination with the ceiling of a stable of a hanger connected therewith, which is provided at its lower end with an angular tubular extension in which is mounted a revolvable rod, which projects therefrom, said tubular extension being provided with a spring, one end of which is secured thereto, and said rod being provided with a pin which projects through a transverse slot in said tubular extension and to which the other end of the spring is secured, and an arm passing through said rod, and provided with a whip, and means for operating said arm, substantially as shown and described. 2nd. The combination with the ceiling of a stable, of a hanger connected therewith, which is provided at its lower end with an angular tubular extension in which is mounted a revolvable rod, which projects therefrom said tubular extension being provided with a spring, one end of which is secured thereto, and said rod being provided with a pin which projects through a transverse slot in said tubular extension and to which the other end of the spring is secured and an arm passing through said rod and provided with a whip, and means for operating said arm consisting of a cord or other device connected with the upper end thereof, and passes through the ceiling and over suitably supported pulleys, substantially as shown and described. 3rd. The combination with the ceiling of a stable of a hanger connected therewith a revolvable rod mounted in said hanger at an angle thereto, an arm passing through said rod, a whip connected with one end thereof, of a cord or other device connected with the other, substantially as shown and described. 4th. The combination with the ceiling of a stable, of a hanger connected therewith, a revolvable rod mounted in said hanger at an angle thereto, an arm passing through said rod, a whip connected with one end thereof, of a cord or other device connected with the other, said hanger being provided with a spiral spring one end of which is secured thereto, and the other to said revolvable rod, substantially as shown and described. 5th. The combination with the ceiling of a stable or other support of a hanger connected therewith, and provided with a tubular attachment which extends at an angle thereto, a revolvable rod mounted in said attachment, an arm passing through said rod and provided with a whip and means for operating said rod, substantially as shown and described.

No. 53,320. Sectional Nut. (Ecrou à expansion.)

Edwin B. Brewer, Northampton, Massachusetts, and Louis L. Grubel, Rhode Island, both in the U.S.A., 24th August, 1896; 6 years. (Filed 10th August, 1896.)

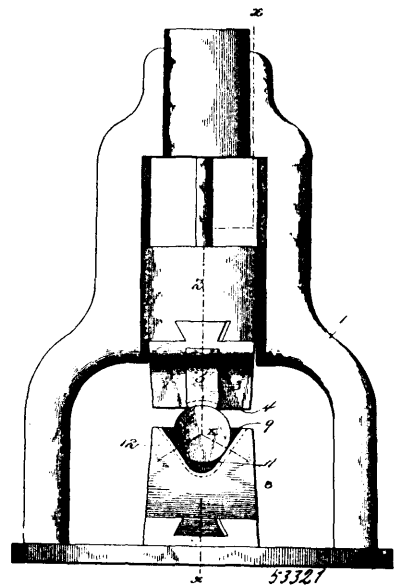
Claim.—An expansible nut, composed of two or more parts, having tapering screw threads upon their inner sides, and a



malleable wire cast in their inner ends for connecting them, combined with a tapering screw for expanding the parts of the nut, substantially as shown and described.

No. 53,321. Machine for Forging Car Wheels.

(Machine à forger les roues de chars.)

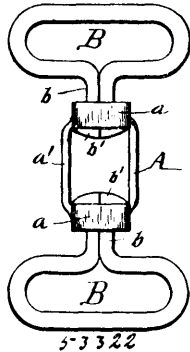


James A. Facer, Germantown, Pennsylvania, U.S.A., 24th August, 1896; 6 years. (Filed 26th June, 1896.)

Claim. 1st. In a machine for forging wheels, the combination with the hammer die having a side die projection, of the anvil die provided at one side with a two-sided pocket or notch having its vertical centre in alignment with the vertical centre of the hammer die, substantially as set forth. 2nd. In a machine for forging wheels, an anvil die provided at one side with a supporting pocket or notch having opposite contact surfaces, and a rabbet or groove at the inner edges of said pocket or notch, the vertical centre of said pocket or notch being in alignment with the vertical centre of the hammer die, substantially as set forth. 3rd. In a machine for forging car wheels singly, of an anvil die provided with a flat top face, and at one side and entirely below the plane of said top face with an integral offset portion, said integral offset portion being provided therein with a semi-elliptical or V-shaped supporting pocket or notch, and with a continuous rabbet or groove that is disposed at the extreme inner edge of said pocket or notch, the inner wall of the rabbet or groove being formed by the adjacent flat side of the main body of the anvil die, which side of the anvil die forms the closed inner side of the pocket or notch, and also forms a

lateral support for the wheel blank, the vertical centre of the pocket or notch being in alignment with the vertical centre of the hammer die projection, substantially as set forth.

No. 53,322. Swivel. (Emerillon.)

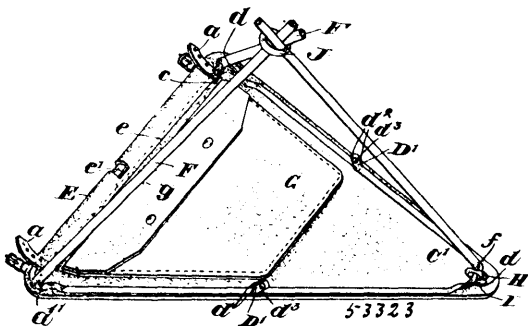


Reuben Caldwell Eldridge and Herbert Marion Eldridge, both of Niagara Falls, Ontario, Canada, 24th August, 1896; 6 years. (Filed 23rd July, 1896.)

Claim. 1st. A swivel, comprising two parts or members, one of which consists of an eye or loop having a stem provided with a head or enlargement, and the other member being constructed of malleable iron and having a sleeve or collar of sufficient size to admit the head of said eye or loop and adapted to be closed around the stem of the loop after inserting the stem, substantially as set forth. 2nd. A swivel, comprising two parts or members, one of which consists of an eye or loop having a stem provided with an elongated head, and the other member being constructed of malleable iron and having an elongated sleeve or collar of sufficient size to admit the head of said eye or loop and adapted to be compressed around the stem of the latter for confining the head in the sleeve or collar, substantially as set forth. 3rd. A swivel, comprising a pair of swivel eyes, each having a stem provided with an elongated head, and a body or co-operating member of malleable iron, consisting of a pair of elongated collars or sleeves connected by longitudinal side bars, said elongated collars being adapted to receive the heads of the swivel eyes respectively, and to be compressed around the stems of the eyes for confining their heads in the collars, substantially as set forth. 4th. A swivel eye or loop having a stem provided with an elongated head and constructed from a single piece of wire having its end portions bent outwardly from one side of the loop and arranged contiguous to each other to form the stem of the loop, and having the ends of its branches turned in opposite directions, substantially at right angles to the stem, to form the head of the stem, substantially as set forth.

No. 53,323. Bicycle Stool and Pouch.

(Tabouret et giberne de bicyclee.)

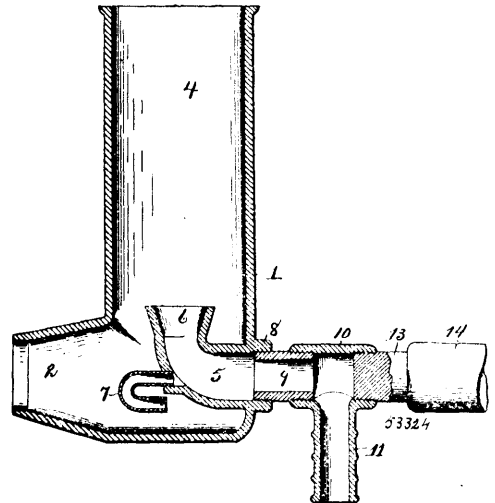


George Alexander Shaw and William Howard Hunter, both of Toronto, Ontario, Canada, 24th August, 1896; 6 years. (Filed 5th August, 1896.)

Claim. 1st. A combined camp stool and pouch, comprising the top with a continuous edge stiffening frame connected thereto and legs secured to the frame and adapted to slide thereon into the different apexes and a pouch flexibly connected to the bottom of the top of the camp stool in proximity to the adjacently held legs as and for the purpose specified. 2nd. In a combined camp stool and pouch, in combination, the top provided with an edge flap at one side, the continuous triangular wire frame having one side secured in the edge flap, the legs with holes at their inner end by which they are adapted to be slid to the apexes of the continuous wire frame, and a ring for holding the legs together when adjacent, the

camp stool being folded and when spread on the camp stool being set up as and for the purpose specified. 3rd. In a combined camp stool and pouch, the combination with the top and the pouch flexibly connected to the inner side of the top and the legs adjustably connected to a frame secured to the top of the end straps passing through the holes in the tops and buckled over to encompass the legs and the reach, as and for the purpose specified. 4th. In a combined camp stool and pouch, in combination the top provided with an inwardly turned flap secured to it underneath the wire frame, the single angle portion of the frame and suitable pivotal joints connecting it to the remaining portion of the frame and means for securing one angle or corner of the top and the angle of the frame folded to the opposite edge, as and for the purpose specified. 5th. In a combined camp stool and pouch, in combination the top provided with an inwardly turned flap secured to it underneath, the notch in the flap, the wire frame, the single angle portion of the frame and suitable pivotal joints connecting it to the remaining portion of the frame and a hook designed to clip over the frame inside of the notch in the flap, so as to hold the article folded, as and for the purpose specified. 6th. In combination, the top, the continuous angular frame suitably secured thereto underneath the legs having holes in the upper ends, the U-shaped apexes made in the frame and the ring for holding the legs together when spread, as and for the purpose specified. 7th. In an article such as described, in combination, the top, the continuous wire angular frame secured thereto, the legs provided with extensible portions with end knobs, as and for the purpose specified. 8th. In an article such as described, in combination, the top, the continuous wire angular frame secured thereto, the legs provided with a tubular portion F, a rod portion F', the sleeves F' secured to the tubular portion and internally threaded to receive the upper threaded end of the rod portion, as and for the purpose specified. 9th. In an article such as described, in combination, the top, the continuous wire angular frame secured thereto, the supporting legs having holes in their upper ends and designed to be slid into the apexes of the frame, as and for the purpose specified. 10th. In an article such as described in combination, the top, the continuous wire angular frame secured thereto, the supporting legs having holes in their upper ends and designed to be slid into the apexes of the frame and a swivelled hook designed to clasp the free apex to the top, as and for the purpose specified.

No. 53,324. Flue Cleaner. (Nettoyeur de tube.)



Harry B. White, assignee of William Henry Howe, both of Toledo, Ohio, U.S.A., 24th August, 1896; 6 years. (Filed 3rd August, 1895.)

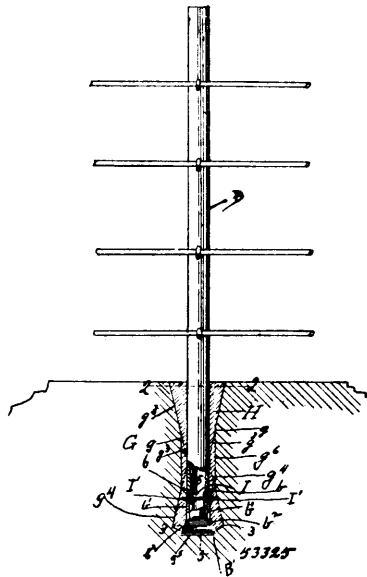
Claim. 1st. In a flue cleaner, a body portion comprising an upright shell and an angular tapered nozzle for insertion into the flue with an integral diametrically opposed jet pipe extending horizontally to the centre of the body portion and vertically central of the diameter thereof, with means for connecting the same with the steam supply. 2nd. In a flue cleaner, a body comprising a vertical cylindrical portion and a tapered nozzle at right angles thereto, with a steam jet pipe arranged diametrically opposite the nozzle and extending horizontally thereof to the centre of the body portion and having a flaring discharge end, with an auxiliary jet nozzle tapered into the pipe and discharging below the same, with means for introducing live steam to the jet nozzle.

No. 53,325. Iron Fence Post. (Poteau de clôture en fer.)

Simon C. Davis, Cleveland, Ohio, U.S.A., 24th August, 1896; 6 years. (Filed 7th August, 1896.)

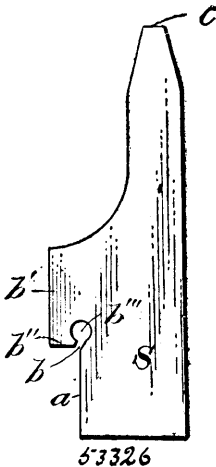
Claim. 1st. A metallic fence post, that, at the portion adapted to enter the ground, is provided with two plates, b' b', secured to

the outer surface of opposite sides, respectively, of the post, said plates being bent laterally and outwardly to form members *b b*,



substantially as and for the purpose set forth. 2nd. The combination with the body portion of a metallic fence post, of two plates, *b' b'*, engaging the outer surface of opposite sides, respectively, of the post, and a pin or member extending through the body portion of the post and instrumental in securing both of said plates in position, said plates being bent laterally and outwardly to form members *b b*, substantially as shown, for the purpose specified. 3rd. The combination with a metallic fence post provided with a V-shaped lower end, of the two plates, *b' b'*, engaging the outer surface of opposite sides, respectively, of the post, a pin extending through said plates and post and provided with heads engaging the outer surfaces of the plates, said plates extending downwardly and having their lower ends bent to partially embrace the edges of the V-shaped end of the post, said plates being also bent laterally and outwardly to form members, *b b*, substantially as shown, for the purpose specified. 4th. The combination with the metallic post extending into the ground and provided with laterally projecting members, of an anchorage of cement engaging and surrounding the underground portion of the post, said anchorage being gradually enlarged in thickness from the central part of said portion of the post both upwardly and downwardly, substantially as shown, for the purpose specified.

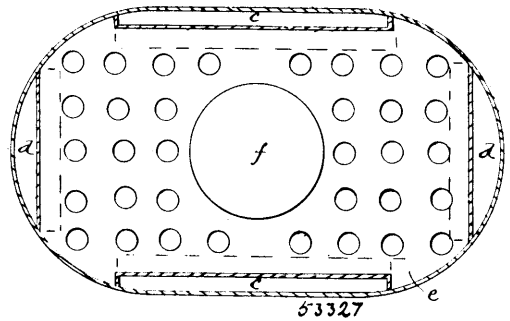
No. 53,326. Saw Set. (*Fer à contourner.*)



Silas Toles, Galt, Ontario, Canada, 24th August, 1896; 6 years. (Filed 6th August, 1896.)

Claim.—A saw set consisting of a piece of flat steel of moderate thickness, having a straight vertical face or flat edge adapted to lie flat on the flank of a saw tooth, a part of the body projecting over said face, an angular slot forming a continuation of the upper end of said straight face or edge and an anvil or head above and on the body side of said face, substantially as set forth.

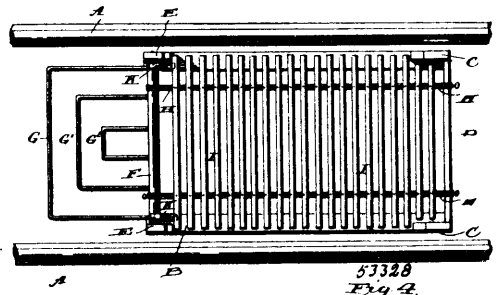
No. 53,327. Clothes Boiler. (*Bouilloire à linge.*)



Arthur Lecavalier, and Edward Crevier, both of Montreal, Quebec, Canada, 24th August, 1896; 6 years. (Filed 8th August, 1896.)

Claim.—1st. A clothes boiler having a free water space at the bottom thereof and vertical passages secured to the sides and ends of said boiler such passages being adapted to guide the boiling water upward from such bottom space to the top of said passage and from there distribute same throughout the clothes. 2nd. A clothes boiler *b*, having a series of water passages *c, d*, formed with open lower ends, closed upper ends, and perforations *c', d'*, near such upper closed ends in the inner faces of such passages, such faces being horizontally off-set as at *c''* and *d''*, a perforated diaphragm *e*, supported upon said off-set portions *c''* and *d''* and provided with a central opening *c'*, a central tubular section *f* having its upper end closed by an overhanging cap with the underside thereof perforated as at *f'*, the edge of the lower open end of said tubular section being connected to the edge of said central opening *c'*, all as and for the purposes set forth.

No. 53,328. Cattle Guard for Railroads. (*Garde-bétail.*)

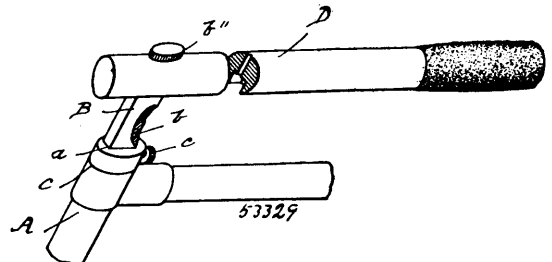


George H. Goldrick and Charles C. Vogl, both of Aniwa, Wisconsin, U.S.A., 24th August, 1896; 6 years. (Filed 8th August, 1896.)

Claim.—In a railway cattle guard, the combination with two horizontal parallel timbers or sills having a cross-timber connecting the same at one end, and at the opposite ends provided with a transverse shaft or drum, a gate secured to the shaft, flexible connection between the cross-timber and shaft, said connections passing over and being secured to the under side of the shaft, and a series of transverse strips attached to the said flexible connection, substantially as shown and for the purpose specified.

No. 53,329. Handle Bar for Bicycles.

(*Barre de poignée de bicyclic.*)

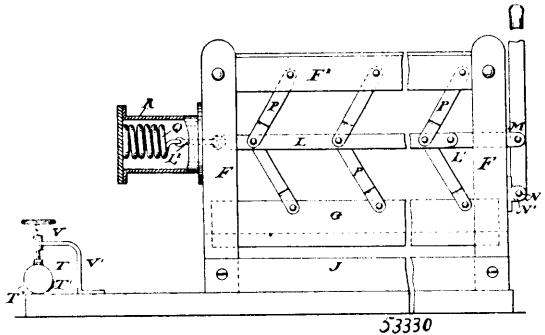


John H. Higbee, Toronto, Ontario, Canada, 24th August, 1896; 6 years. (Filed 7th August, 1896.)

Claim.—1st. A means for securing the handle bar post or saddle post to the frame of a bicycle consisting of a socket having a one or more flat sides to prevent the turning of the post when therein, and a post-shaped to correspond to the shape of the socket in combina-

tion with a means for holding the post in any adjusted position, substantially as specified. 2nd. A means for securing the handle bar post or saddle post to the frame of a bicycle consisting of a socket having one or more flat sides to prevent the turning of the post when therein, and a post-shaped to correspond to the shape of the socket in combination with a cap fitted to the top of the socket and a set screw to bind the post in any adjusted position within the socket, substantially as specified. 3rd. In a bicycle, the combination of the handle bar post of a handle bar alterably connected thereto, having a series of sockets formed in its underside to receive the top of the said post and so arranged as to permit of the handle bar being set at right angles to or parallel with the advance of the machine, and in the latter instance to also permit of the longitudinal adjustment of the handle bar to bring the end of it into the proper relative position to the rider, substantially as specified.

No. 53,330. Roller for Blinds and Apparatus for Making Same. (*Appareil pour faire les bâtons de persiennes.*)

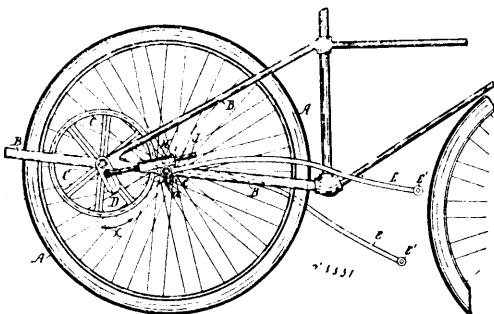


Edwin Arthur Powell, Melbourne, Victoria, Australia, 24th August, 1896; 6 years. (Filed 10th August, 1896.)

Claim.—1st. In blind rollers, a hollow roller formed of sheet metal or other material, one edge of which forms a groove or recess and the other edge being arranged to lie within the said groove or recess, substantially as and for the purposes set forth. 2nd. In blind rollers, the combination of a roller as claim 1, with metal caps E, substantially as and for the purposes set forth. 3rd. In blind rollers, the combination of a roller as claimed in claim 1, with one or more clips as W, substantially as and for the purposes set forth. 4th. In apparatus for forming blind rollers, in combination a female die plate G having an inverted V edge, male die plate as H having a corresponding inverted V top, plate as J and stop plate as K, substantially as and for the purposes set forth. 5th. In apparatus for forming blind rollers, in combination a female die plate as G, male die plate as H, roller as Y and stop plate as K, substantially as and for the purposes set forth. 6th. In apparatus for forming blind roller, in combination a mandrel as S consisting of a metal plate turned into tubular form and having a slot formed by the adjacent edges of such plate, a core as S¹ and recess as S², substantially as and for the purposes set forth. 7th. In apparatus for forming blind rollers, in combination a bore as T consisting of a hinged or plain tubular plate having its edges apart and a pressure device, substantially as and for the purposes set forth. 8th. The combination and arrangement of the several parts, substantially as and for the purposes described and as illustrated on the accompanying drawing.

No. 53,331. Driving Gear for Cycling Machines.

(*Roue de commande pour cycles.*)

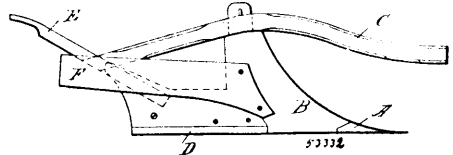


James John Marshall, Sydney, New South Wales, 24th August, 1896; 6 years. (Filed 10th August, 1896.)

Claim.—1st. In cycling machines, in combination a fixed pivot on or near the axis of the driving wheel of the cycle, a pedalling lever that will slide or roll upon the fixed pivot, the rear end of the lever being secured to a crank arm connected to a differential wheel that

gears with a pinion fixed to the axis of the driving wheel of the cycle, as and for the purposes herein set forth. 2nd. In cycling machine in combination a fixed pivot on or near the axes of driving wheel of the cycle, a pedalling lever the rear end of which oscillates upon the fixed pivot and is provided with a longitudinal bearing in which a rod may slide longitudinally, one end of such sliding rod being connected to a crank arm on a differential wheel that gears with a pinion fixed on the axle of the driving wheel of the cycle, as and for the purposes herein specified. 3rd. In cycling machines, in combination a pedalling lever or levers such as are claimed in the previous claims and a differential wheel that is constructed in the form of a rigid chain, as illustrated in figure 3 of the drawing and for the purposes specified. 4th. The general arrangement, construction and combination of parts in the improved driving gear for cycling machines, as specified and for the several purposes herein set forth.

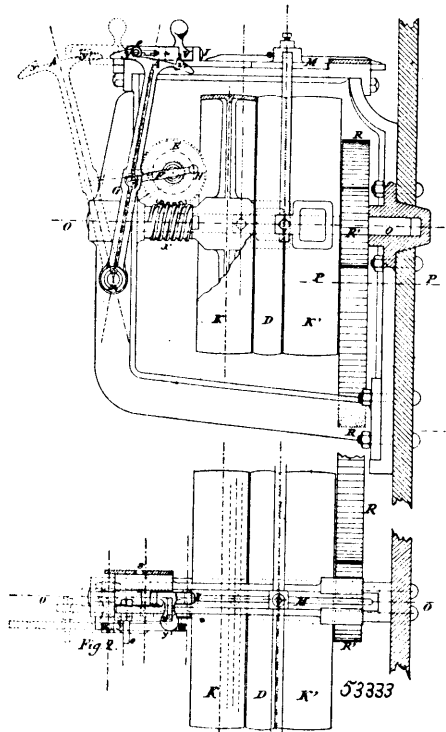
No. 53,332. Plough. (*Charrue.*)



Charles Borromée Fleuret, de Sainte-Brigide du Sault, Québec, Canada, 24 Août 1896; 6 ans. (Filié 1 Août.)

Résumé.—Une machine à faire les rigoles, comprenant une double pointe A, un double socle B et des oreilles F, en combinaison avec la perche C, les mancherons E et les pièces D, le tout tel que décrit et pour les fins indiquées.

No. 53,333. Machine à laver. (*Washing machine.*)



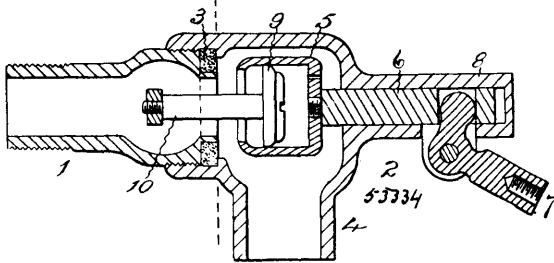
Alphonse Couet, Montréal, Québec, Canada, 24 août 1896; 6 ans. (Filié le 3 août 1896.)

Résumé.—1°. Dans une machine à laver le linge, la combinaison de la roue E et de la manivelle F actionnant le levier G et lui imprimant un mouvement alternatif continu et l'emploi du dit levier. 2°. Dans une machine à laver le linge la combinaison du levier G animé d'un mouvement alternatif continu, de l'arc A, des butoirs Y Y¹, du verrou V, faisant que le mouvement alternatif continu du levier est transformé en un mouvement alternatif intermittent de la coulisse etc, des guides des courroies.

No. 53,334. Ball Cock. (*Robinet modérateur.*)

Cornelius Berkery, Hartford, and Thomas Standish, Wetherfield, both in Connecticut, U.S.A., 26th August, 1896; 6 years. (Filed 13th May, 1896.)

Claim.—1st. A ball cock consisting of a shell with an inlet and outlet and seat between the inlet and outlet, a reciprocating cylin-



drical valve with an annular seat edge movable within the shell on the outlet side of the seat and having an interior opening of larger diameter than the diameter of the port through the seat, with a vent at the back end of the cylinder, and a packing of larger diameter than the port through the seat fitting the opening in the valve, said packing being held connected with the shell against longitudinal movement, substantially as specified. 2nd. A ball cock consisting of a shell with an inlet and outlet and seat between the inlet and outlet, a reciprocating hollow cylindrical valve with an open seat end, said valve having a stem that extends through the end of the shell on the same side of the seat as the valve, and a packing larger in diameter than the port through the seat fitting the opening in the valve, said packing being rigidly connected to the shell and exposed to pressure exerted through the open seat end of the valve only, substantially as specified. 3rd. A ball cock consisting of a shell with an inlet and outlet and seat between the inlet and outlet, a reciprocating hollow cylindrical valve on the outlet side of the seat and having an open seat end, a packing larger in diameter than the port through the seat fitting the opening in the valve, said packing being exposed to pressure through the open seat end of the valve only, and a stem that extends through the port in the seat and is connected with the interior of the shell on the pressure side of the seat and with the packing on the escape side of the seat, substantially as specified. 4th. A ball cock consisting of a shell with an inlet and outlet and seat between the inlet and outlet, a reciprocating hollow cylindrical valve on the outlet side of the seat, and a packing connected by a stem with the shell fitting the opening in the valve and exposed to pressure through the open seat end of the cylindrical valve, said valve having a stem that extends through the shell of the valve on the same side of the seat as the packing, substantially as specified. 5th. A ball cock consisting of a shell with an inlet and outlet and seat between the inlet and outlet, a reciprocating tubular valve with openings at both ends, said valve having a stem that extends through the end of the shell, a packing larger in diameter than the port through the seat fitting the interior of the valve, and a stem connecting the packing with the shell, substantially as specified.

No. 53,335. Varnish. (Vernis.)

Edward George Kubler and John Martin Beck, both of Akron, Ohio, U.S.A., assignees of Louis Knoche, Hamm, Westphalia, Germany, 26th August, 1896; 6 years. (Filed 12th Feb., 1896.)

Claim.—1st. An oil-varnish consisting of varnish made according to any formula heretofore employed, mechanically mixed with an oil-compound diluted with a suitable reducer, such for instance, as naphtha or spirits of turpentine, and consisting of linseed oil and the oil that is pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacea or euphorbiaceae, substantially as set forth. 2nd. An oil-varnish consisting of varnish made according to any formula heretofore employed, mechanically mixed with an oil-compound diluted with a suitable reducer, such, for instance, as naphtha or spirits of turpentine, and consisting of linseed oil and the oil that is pressed from the nuts or seeds of a tree known botanically under the name of aleurites cordata, or elaeococca cordata, or dryandra cordata, substantially as set forth. 3rd. An oil-varnish consisting of varnish made according to any formula heretofore employed, mechanically mixed in about equal proportions with an oil-compound diluted with a suitable reducer, such, for instance, as naphtha or spirits of turpentine, and consisting of linseed oil and the oil that is pressed from the nuts or seeds of a tree known botanically under the name of aleurites cordata, or elaeococca cordata, or dryandra cordata, substantially as set forth. 4th. The process of making oil-varnish hereinbefore described, consisting in mixing together a suitable quantity of linseed-oil and a suitable quantity of oil pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacea or euphorbiaceae, and heating the oil-compound to a suitable temperature and maintaining it in a heated condition during a suitable fraction of a day; then allowing it to cool a suitable number of degrees; then adding and mixing therewith a suitable quantity of a suitable reducer, such, for instance, as naphtha or spirits of turpentine, and then mechanically mixing with the diluted oil-compound varnish made according to any formula heretofore employed, in about equal proportions, sub-

stantially as set forth. 5th. The process of making oil-varnish hereinbefore described, consisting in mixing together linseed-oil and oil pressed from the nuts or seeds of a tree belonging to the genus of trees known botanically under the name of euphorbiacea or euphorbiaceae, in the portion of about one part of linseed oil to about two parts in weight of the tree-seed oil and heating the same to a temperature of about 400° Fahrenheit and maintaining the heated oil-compound at said temperature for from two to four hours; then reducing the temperature of the heated compound about 50° Fahrenheit, or more; then suitably mixing therewith a quantity of reducer, such for instance, as naphtha or spirits of turpentine, that in weight shall be equal to about one-third of the weight of the quantity of the oil-compound with which it is mixed, and then mechanically mixing with the diluted oil-compound varnish made according to any formula heretofore employed in about equal proportions, substantially as set forth. 6th. The process of making oil-varnish hereinbefore described, consisting in mixing together linseed-oil and oil pressed from the nuts or seeds of a tree known botanically under the name of aleurites cordata, or elaeococca cordata, or dryandra cordata, in the proportion of about one part in weight of linseed-oil to about two parts in weight of the tree-seed oil and heating the same to a temperature of about 400° Fahrenheit and maintaining the heated oil-compound at said temperature for from two to four hours; then reducing the temperature of the heated compound about 50° Fahrenheit; then mixing therewith a quantity of reducer, such for instance, as naphtha or spirits of turpentine, that in weight shall be equal to about one-third of the weight of the quantity of the oil-compound with which it is mixed, and firstly adding about one-third of the reducer in a luke-warm condition and then adding the remaining fraction of the reducer at its ordinary temperature, and then mechanically mixing with the diluted oil-compound varnish made according to any formula heretofore employed, in about equal proportions, substantially as set forth.

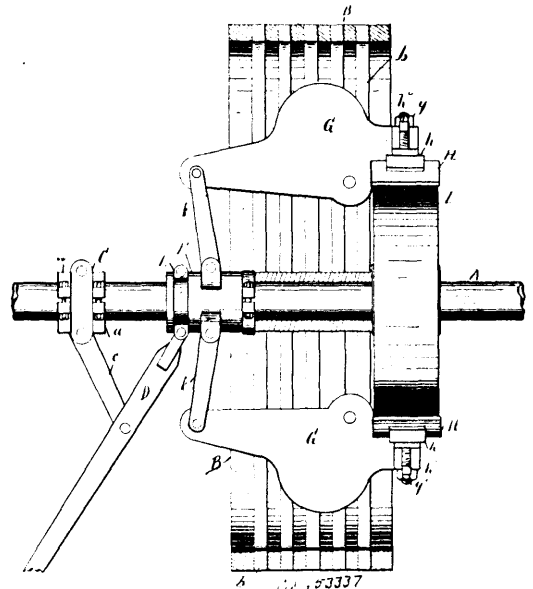
No. 53,336. Photographic Emulsion.

(*Emulsion photographique.*)

Hermann Wandrowsky, Ehrenfeld, Rhineland, Prussia, 27th August, 1896; 6 years. (Filed 20th March, 1896.)

Claim. Emulsions, sensitive to light, prepared with gelatine, starch, gutta-percha or similar substance, to which white of egg is added after the emulsions have been prepared, in order that the white of egg, after the emulsions have been spread on glass or paper and been dried, may be made indissoluble by treatment with substances which regulate the white of egg.

No. 53,337. Friction Clutch. (Embrayage à friction.)



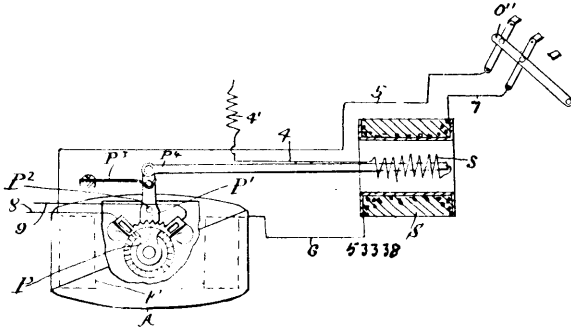
The Reeves Pulley Company, assignee of Milton O. Reeves, all of Columbus, Indiana, U.S.A., 27th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. The combination with a shaft of a separable pulley loosely mounted thereon and provided with spoke bars; a separable friction wheel secured to the shaft; levers pivoted to the spoke bars and adapted to swing between them; brake shoes carried by the levers and adapted to engage with the friction wheel; and means for actuating the brake shoe levers, substantially as and for the purpose set forth. 2nd. The combination with a shaft of a separable pulley; having diametrical spoke bars, a separable friction wheel

secured to the shaft; levers pivoted to the spoke bars adapted to swing between the pulley halves and carrying at one end shoes adapted to engage with the friction wheel; a collar loosely mounted on the shaft; a brake lever having a link connected with the collar and connected with and adapted to actuate the sleeve, and links connecting the sleeve with the shoe-carrying levers, substantially as and for the purpose set forth. 3rd. The combination with a shaft of a separable pulley having diametrical spoke bars; a separable friction wheel secured to the shaft; levers pivoted to the spoke bars adapted to swing between the pulley halves and carrying at one end shoes adapted to engage with the friction wheel; a collar loosely mounted on the shaft; a brake lever having a link connection with and adapted to actuate the sleeve; links connecting the sleeve and shoe-carrying levers and a stop adapted to arrest the engaging movement of the sleeve as the links pass the perpendicular, substantially as and for the purpose set forth. 4th. The combination with a shaft of a separable pulley B, having diametrical spoke bars *b*; a separable friction wheel I; levers G, pivoted to the spoke bars and carrying friction shoes H, a collar C, brake lever D, pivoted to links *c*, a sliding sleeve F, and links *f* all arranged to co-operate substantially as and for the purpose set forth.

No. 53,338. Electric Current Controlling Apparatus.

(Appareil à contrôler les courants électriques.)



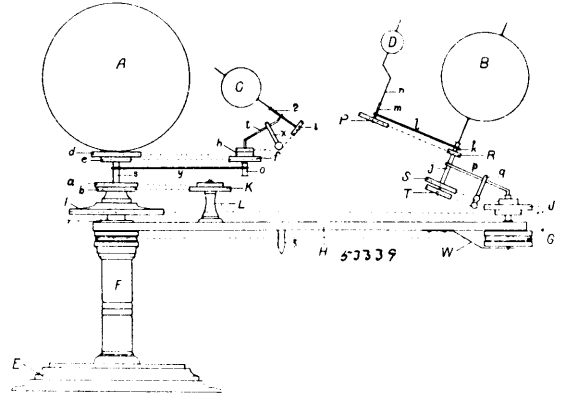
Elmer Ambrose Sperry, Cleveland, Ohio, U.S.A., 27th August, 1896; 6 years. (Filed 3rd December, 1895.)

Claim. 1st. The method of controlling electric motors, consisting, first in connecting said motor with a source of electrical supply through a current controlling device, second of increasing the current flowing in said motor from said source of supply by manipulating said current controlling device, and third coupling a shunt circuit about the field magnet coils of such motor by means of a device responsive to the variations in current flowing from the said source. 2nd. The method of controlling electric motors, consisting, first in connecting said motor with a source of electrical supply through a current controlling device, second of increasing the current flowing in such motor from said source of supply by manipulating such current controlling device, and third reducing the magnetization of the field of said motor automatically whenever the current from said source of supply passing to such motor falls below a predetermined amount. 3rd. In a shunting switch for a motor, the combination, with a manually actuated contact, of a resistance included in circuit with said contact, an additional resistance shunting the aforesaid resistance, an electro-magnetically operated contact in the circuit of such last named resistance. 4th. The combination with a motor, of a current supply, a resistance in the motor circuit, means for gradually decreasing such resistance up to some predetermined point, means for then more or less suddenly decreasing the counter electro-motive force at constant speed of the motor, and simultaneously increasing the resistance in the motor circuit, and means whereby the said resistance may then be again gradually decreased from this point. 5th. In an electric machine, movable brushes for such machine, means for changing the inducing capacity of the machine at constant speed, in combination with a device for simultaneously shifting said brushes. 6th. In an electric machine capable of rotating in either direction, a commutator, movable brushes for such machine, means for changing the inducing capacity of the machine at constant speed, in combination with a device for simultaneously shifting said brushes in either one or the other direction around the commutator dependent upon the direction of the rotation of the machine. 7th. In a controller for an electric machine, a moving part of said controller, and a pendulum-actuated stop for the moving part. 8th. In a controller for a motor, a moving element of the controller, means connected with the controller for decreasing the inducing capacity of such motor at a predetermined point in the movement of said moving part, and an automatic stop for such controller so located as to arrest the moving part in its excursion just before reaching the aforesaid means.

No. 53,339. Planetarium.

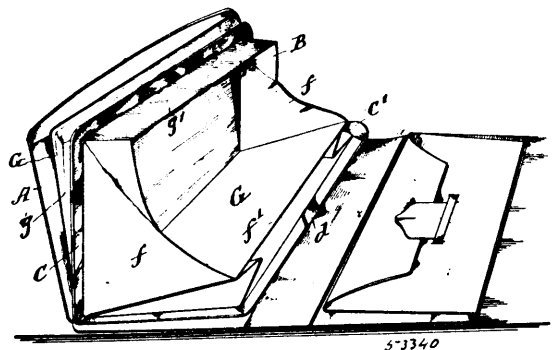
Alexander Laing, Essex, Ontario, Canada, 27th August, 1896; 6 years. (Filed 2nd March, 1896.)

Claim.—1st. The combination, in a Planetarium of a bent rod *p* with its perpendicular part running freely down through triple



pulley J and arm H, firmly through pulley G, and freely through brass plate W, substantially as set forth. 2nd. In a Planetarium, the combination of the diagonal part of rod *p*, carrying with it the square rod *q* with its four idlers, also the *j* firmly fixed to P, sleeve *i* being carried at an angle of 23 1/2° from the perpendicular, substantially as described. 3rd. The combination of a sleeve *j* (as it is inclined from the perpendicular 23 1/2°), having within it a sleeve *k*, with the pulley S firmly fixed on lower end of sleeve *k*, and having the rod which forms the axis of the globe B running down through *k* firmly through pulley T, substantially as set forth. 4th. The combination of the sleeve *k*, carrying with it the arm *l*, and the sleeve *m*, also the belt from stationary pulley R to pulley P, all substantially as described. 5th. The combination of the jog in the rod *n* with the sleeve *m*, and pulleys P and R, and string between said pulleys, substantially as shown for the purpose specified. 6th. The combination of the cross belt from stationary pulley I to lower part of triple pulley J, and the belt from centre part of pulley J through below idlers to pulley T, also the belt from top part of pulley J through below idlers to pulley S, all substantially as set forth for the purpose specified. 7th. The combination in a Planetarium of the stud L, secured to arm H, carrying with it the differential loose pulley K, with a straight belt running from stationary pulley *b* to lower part of pulley K, and a cross belt from top part of pulley K back to pulley *a* imparting to pulley *a* a rotary motion which imparts to arm *u*, bent rod *t*, and globe *c* an orbital motion, all substantially as described. 8th. The combination in a Planetarium of a stationary pulley *e*, communicating by means of a straight belt with the pulley *f* which is fixed to bent rod *t* along with the cross belt communicating with the stationary pulley *d*, and the loose pulley *h*, (pulleys included) and the pulley *i* communicating with the pulley *h* by means of a belt running through below the idlers on the box *s*, all substantially as set forth for the purpose specified. 9th. The combination of a straight belt running from top part of standard P to pulley G for the purpose of keeping the latter from rotating.

No. 53,340. Pocket Book. (Carnet.)

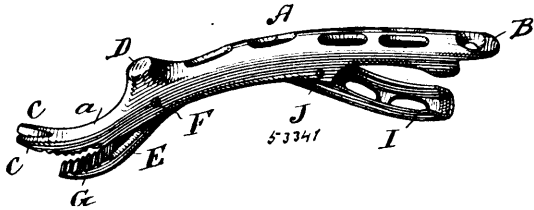


Frederick Hasselberger, New York, State of New York, U.S.A. 27th August, 1896; 6 years. (Filed 20th July, 1896.)

Claim.—1st. A pocket book, provided with a folding pocket formed of pivoted jaws and a locking device for said jaws said folding pocket being provided with a partition and folding side gussets at both sides of said partition, so as to form a compartment for bank notes at one side and a compartment for coin at the other side of the partition, and a straight top flange or lip connecting the upper ends of the side gussets of the coin compartment, said top flange forming a protecting device for the coin compartment, substantially as set forth. 2nd. A pocket-book, provided with a folding pocket formed of pivoted jaws and a locking device for said jaws, said folding pocket being provided with a partition and folding gussets at both

sides of said partition, so as to form a compartment for coin and bank notes respectively, a straight top flange or lip connecting the upper ends of the folding side gussets of the coin compartment, and auxiliary partitions having side gussets and connecting top gussets both for the coin and bank note compartments, substantially as set forth.

No. 53,341. Kitchen Utensil. (Ustensile de cuisine.)



Frank G. High, San Francisco, California, U.S.A., 27th August, 1896; 6 years. (Filed 2nd May, 1896.)

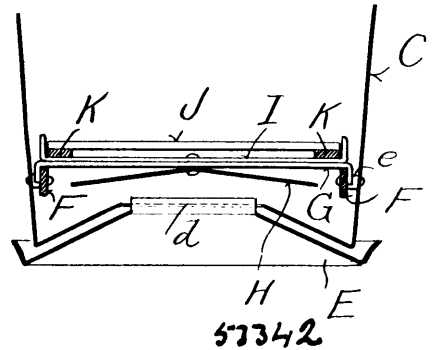
Claim.—1st. A utensil consisting of the hollow handle having a curved projecting point at one end, a lever fulcrumed to the lower front portion of the handle having a correspondingly curved point adapted to close and fit the lower surface of the first named point, said curved portions having their adjacent surfaces formed as gripping faces, a second lever fulcrumed behind the first one connected therewith so that when the handle is grasped it will act to close the front end of the forward lever against the front tip or point of the handle, said levers being contained within the hollow of the handle portion. 2nd. A utensil consisting of a curved handle, channelled or made hollow upon the under side and having the front curved and tapered to the point or edge, a lever centrally fulcrumed in the channel beneath the front portion of the handle having a tip corresponding in shape with the tip at the front of the handle and adapted to close against it, a spring by which this point is normally held away so as to leave an open channel between the two, a second lever fulcrumed midway of its length in the channel in the handle behind the first lever, the ends of the two levers being bevelled or overlapping, as shown, whereby pressure upon the rear end of the second lever will act through the first one to close the points or tips together. 3rd. A utensil consisting of a curved handle, channelled or chambered on the lower side having an upwardly curved tip or point, levers fulcrumed in the channel beneath the handle having bevelled overlapping meeting ends, a tip formed upon the front end of the forward lever with a corrugated face, corresponding with the corrugated lower surface of the tip of the handle and adapted to be closed against it by pressure upon the rear end of the rearmost lever, a spring by which the tips are normally held separate from each other with the rear end of the rearmost lever projecting from the channel in the handle, and a device at the rear of the handle adapted to engage the rear of the rearmost lever to retain it against the handle when the tips of the levers are closed together. 4th. A utensil consisting of a handle having a curved bifurcated tip at the front, an upward projection formed behind the tip and a wedge shaped projection from the rear end with a groove or channel extending longitudinally along the lower side of said handle, levers fulcrumed midway of their lengths, one behind the other, within the channel of the handle and having their adjacent ends bevelled and overlapping, a curved tip formed upon the front end of the forward lever corresponding in shape to the lower portion of the handle tip and adapted to be closed against it, a spring acting to normally hold the lever tip away from the handle tip and leave an opening between the two for grasping articles, and a swinging link pivoted to the rearmost end of the handle adapted to swing beneath the end of the rearmost lever so as to close it upon the handle and close the tips or jaws at the front end to form a single continuous tip. 5th. A utensil consisting of a hollow handle having a curved bifurcated tip at the front end, levers contained within the hollow of the handle, and fulcrumed, one behind the other with the adjacent ends adapted to engage, a curved tip formed on the forward lever of less length than that of the handle and adapted to be closed against it from below, the lower part thereof forming a fulcrum about which the handle tip is movable.

No. 53,342. Refrigerator. (Refrigérateur.)

George Augustus Bowen, Fond du Lac, Wisconsin, U.S.A., 27th August, 1896; 6 years. (Filed 7th May, 1896.)

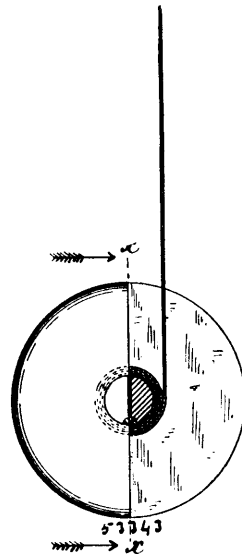
Claim.—1st. A refrigerator having its ice box interiorly provided with supporting strips held in place against spacing devices, and a deflector having suspending strips that rest on those aforesaid. 2nd. A refrigerator having its ice box interiorly provided with supporting strips held in place against spacing devices, a deflector, and suspending strips for the deflector, these latter strips being arranged to rest on those aforesaid and turned down at their extremities to come outside the same. 3rd. A refrigerator having its ice box interiorly provided with supporting strips held in place against

spacing devices, a deflector provided with suspending strips that rest on those aforesaid, and ice rack guards rising from the deflector



suspending strips. 4th. A refrigerator having its ice box interiorly provided with a transverse bracing strip adjacent to one of its ends, and a water cooler having hooks that detachably engage said strip.

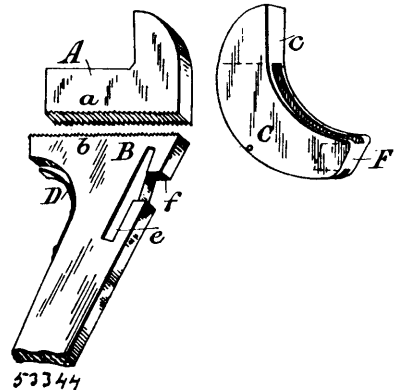
No. 53,343. Toy. (Jouet.)



Upton Harwood, Leamington, Ontario, Canada, 27th August, 1896; 6 years. (Filed 10th June, 1896.)

Claim. A toy composed of two circular discs held apart by a central shaft, a perforation in said shaft to receive a cord, substantially as shown and for the purpose specified.

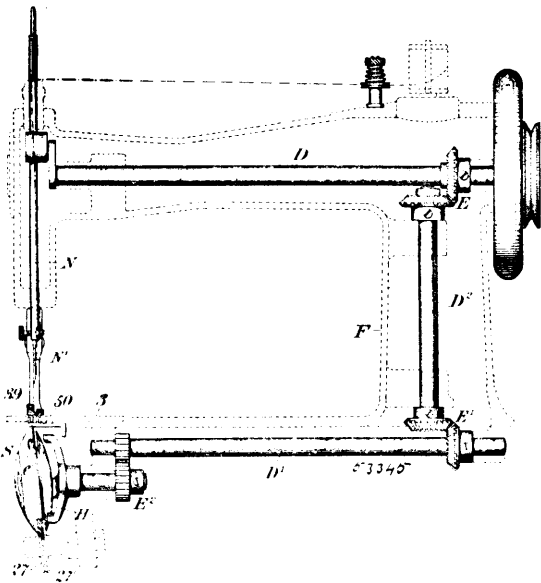
No. 53,344. Wrench. (Clé à écrou.)



Richard Michael Carroll, Woodville, Marrickville, Sydney, New South Wales, Australia, 27th August, 1896; 6 years. (Filed 15th June, 1896.)

Claim. 1st. The improved spanner or wrench, substantially as described and illustrated in the accompanying specification and drawings. 2nd. In spanners or wrenches, the interlocking device consisting essentially of a loose jaw with ratchet engaging with a corresponding ratchet on the handle bar, in combination with a loose clamp, substantially as described and set forth in the accompanying specification and drawings. 3rd. In spanners or wrenches, the modification of the interlocking device consisting essentially of a loose jaw working on a pivot and having teeth which engage in the ratchet of the sliding jaw, substantially as described and illustrated in the accompanying specification and drawings. 4th. In spanners or wrenches, the means for effecting the finer adjustment of the jaws, substantially as described and illustrated in the accompanying specification and drawings.

No. 53,345. Needle and Loop Taker. (Aiguille, etc.)

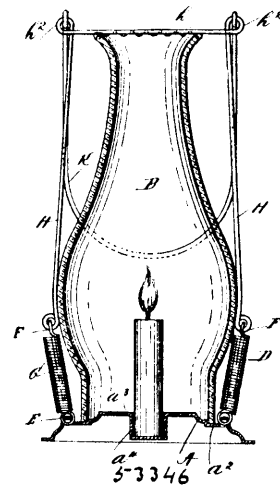


Francis Henry Richards, Hartford, Connecticut, U.S.A., 27th August, 1896; 6 years. (Filed 6th July, 1896.)

Claim. 1st. The combination with a needle having an expanding wedge and a groove for receiving and protecting the thread during its passage through the fabric, of means for reciprocating said needle, and a loop taker co-operating with said needle, substantially as described. 2nd. The construction, combination and co-operative arrangement herein described of a needle having an expanding wedge, a revoluble loop taker having one or more peripheral loop-engaging hooks, and needle and loop-taker-actuating mechanism for effecting a downward passage of the needle wedge into, and an upward passage of the needle wedge out of the fabric, immediately preceding the engagement of the loop of the needle-thread by the hook of the loop taker, and timed to effect an engagement of the hook of the loop taker with the loop immediately succeeding the withdrawal of the wedge from the fabric, whereby the needle opening in the fabric is expanded immediately preceding the drawing out of the loop by the loop taker, and a free movement of the needle thread through the fabric is facilitated. 3rd. The construction, combination and co-operative arrangement herein described of a reciprocatory needle and a revoluble loop taker, comprehending means whereby the loop-forming end of the needle thread will, during the descent of the needle, be carried laterally of the sewing line and downward through the fabric in a spiral path, and whereby the needle opening and the fabric will be expanded near the lower end of the down stroke of the needle and immediately preceding the engagement and drawing out of the loop by the loop taker, and whereby the loop of the needle thread will be engaged by the loop taker immediately succeeding the withdrawal of the wedge from the fabric, as herein set forth. 4th. A reciprocatory needle having a transverse eye, and having a thread-receiving channel at one side thereof which extends downward from said eye in an inclined path, and is adapted for receiving the needle side of the loop and for holding the same out of the path of movement of the fabric side of said loop, combined with a co-operating revoluble loop taker supported peripherally at an inclination to the path of movement of the needle, and having peripheral loop-engaging hooks for engaging the loop of the needle thread, and for so carrying the same laterally out of the path of movement of the needle as to draw the needle side of the loop into the thread-receiving channel of the needle and out of the path of movement of the fabric side of said loop while the needle eye is below the fabric side of said loop, and mechanism for simultaneously actuating the loop taker and

needle to carry the two portions of the loop past each other while separated, substantially as herein described. 5th. The herein described construction, combination and co-operative arrangement of loop-forming mechanism, comprehending a reciprocatory eye-pointed needle having a transverse groove extending upwardly from the eye in a spiral path, and adapted during the descent of the needle for receiving and carrying the fabric side of the needle thread laterally of the sewing line and downward in a spiral path through the fabric to inaugurate the formation of the loop, and also having a thread-receiving channel at one side thereof, which extends downwardly from the needle eye in an inclined path, and which is adapted for receiving the needle side of the loop and for holding the same out of the path of movement of the fabric side of said loop during the ascent of the needle, and loop taker mechanism comprehending a revoluble loop taker supported with the plane of its periphery intersecting the path of movement of the needle, and having means for engaging the loop and for so carrying the same laterally out of the path of movement of the needle as to draw the needle side of said loop out of the path of movement of the fabric side of said loop and into the thread-receiving channel of the needle while the needle eye is below the fabric side of the loop. 6th. A sewing machine needle having a transverse eye therethrough, a transverse groove communicating with and extending upward from said eye in a spiral path, and an inclined channel in communication with said eye and extending downward and sidewise therefrom. 7th. A sewing machine needle having an eye therethrough, a needle thread groove formed in one face of the needle and extending upward from one end of the needle eye in substantial parallelism with the axis of the needle, a transverse groove formed in the periphery of the needle and extending upward from the opposite end of said needle eye in a spiral path, and a thread-receiving channel extending downward from the needle eye in an inclined path. 8th. An eye-pointed sewing machine needle, substantially as described, having a groove in communication with and extending upward from the needle eye in a spiral path, and also having a laterally-projecting wedge located between the upper and lower ends of the transverse groove with its working face above and in alignment with the lower end of said transverse groove. 9th. A sewing machine needle having a transverse eye therethrough, a transverse groove communicating with and extending upward from said eye in a spiral path, an inclined channel in communication with said eye and extending downward and sidewise therefrom, and a laterally-projecting wedge located between the downwardly-extending channel and the upper end of the transverse groove. 10th. An eye-pointed sewing machine needle having a needle thread groove in communication with and extending upward from one end of the needle eye in substantial parallelism with the axis of the needle, a transverse groove in communication with and extending upward from the opposite end of the needle eye in a spiral path, a thread-receiving channel communicating with and extending downward from the needle eye in an inclined path, and a wedge located above and having its working face in alignment with the lower end of the transverse groove, and extending laterally beyond the side walls of the lower end of said groove, substantially as herein described.

No. 53,346. Lantern. (Lanterne.)



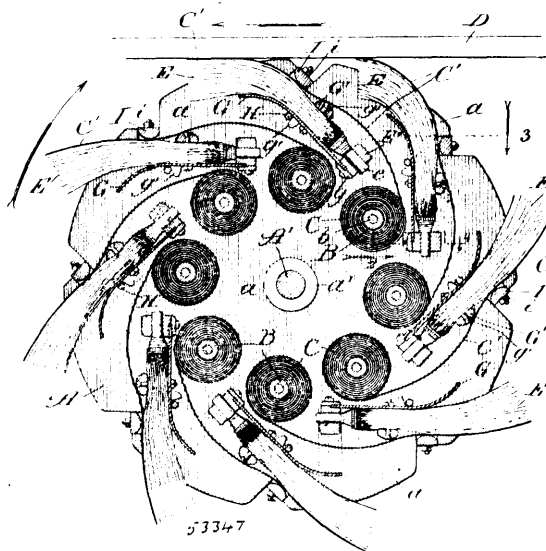
William Miller Bauchelle, Elizabeth, New Jersey, U.S.A., 27th August, 1896; 6 years. (Filed 20th June, 1896.)

Claim. 1st. The combination in a lamp or lantern of a base plate which is adapted to support a candle or lamp reservoir and which is provided with a central raised portion, of a chimney holder consisting of two spiral springs which are connected with the opposite sides of said base plate and the upper ends of which are connected

by a cross rod which is adapted to bear upon the chimney, substantially as shown and described. 2nd. In a lamp or lantern, the combination with a base plate which is adapted to support a candle or lamp reservoir and which is provided with a central raised portion, of a chimney consisting of two spiral springs which are connected with the opposite sides of said base plates and the upper ends of which are connected with the opposite sides of said base plate, and the upper ends of which are connected by a cross rod which is adapted to bear on the chimney, and a bale connected with the upper ends of said vertical rod, substantially as shown and described. 3rd. The combination in a lamp or lantern of a base plate which is adapted to support a candle or lamp reservoir and which is provided with a central raised portion, of a chimney holder consisting of two spiral springs which are connected with the opposite sides of said base plate and the upper ends of which are connected by a cross rod which is adapted to bear on the chimney, and a bale connected with the upper end of said vertical rod, and said base being provided with a central depending tubular socket or receptacle which is adapted to support a candle or lamp reservoir, substantially as shown and described. 4th. The combination in a lamp or lantern of a base plate which is adapted to support a candle or lamp reservoir and which is provided with a depending annular rim or flange of spring attachments connected therewith at each side thereof, and rods or wires connected with said spring attachments and provided at their upper ends with a cross rod which is adapted to extend transversely across the top of the chimney, substantially as shown and described. 5th. The combination in a lamp or lantern with a base plate which is adapted to support a candle or lamp reservoir, of spring attachments connected therewith at each side thereof, and wires or rods connected with said spring attachments and provided at their upper ends with a cross rod which is adapted to extend transversely across the top of a chimney, and a bale connected with the upper ends of said wires or rods, substantially as shown and described.

No. 53,347. Sand Papering Machine.

(Machine à appliquer le papier de verre.)



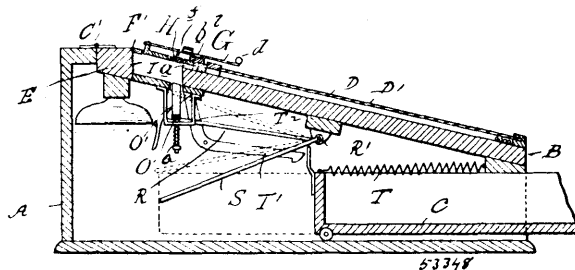
Walter Black, Chicago, Illinois, U.S.A., 27th August, 1896; 6 years. (Filed 7th July, 1896.)

Claim.—1st. In a sand-papering machine, the combination of two or more rolls of sand-paper arranged on a circle and adapted to have their free ends brought into operative position, means for holding and rotating them in that position, and a flexible back for holding the free ends of the sand-paper in operative position, substantially as described. 2nd. In a sand-papering machine, the combination of a rotatable supporting drum, a plurality of rolls of sand-paper arranged on a circle and adapted to have their free ends brought out into operative position, a flexible back for each roll to hold the free ends of the sand-paper in operative position, and a rigid back to limit the movement of the flexible back, substantially as described. 3rd. In a sand-papering machine, the combination of a rotatable supporting drum comprising two flange side portions mounted upon a rotatable shaft, a plurality of rolls of sand-paper mounted in a circle and between the flanged sides of the drum and adapted to have their free ends brought out into operative position, a flexible back portion for each roll to hold the free ends of the sand-paper in operative position, a rigid back to limit the movement of the flexible portion, and means for keeping the sand-paper in operative engagement with the flexible back, substantially as described. 4th. In a sand-papering machine, the combination of a rotatable supporting drum comprising two flange side portions mounted upon a rotatable shaft, a plurality of rolls of slitted sand-paper removably mounted

in a circle between the flanged side portions and adapted to have their free ends brought out into operative position, a brush for each roll forming a flexible back to hold the free ends of the sand-paper in operative position, a rigid back to limit the movements of the flexible back, means for securing such back portions together, and means for keeping the sand-paper in operative engagement with the flexible back, substantially as described. 5th. In a sand-papering machine, the combination of a flexible back portion adapted to support and hold sand-paper in operative position, and means for holding and rotating such flexible portion, substantially as described. 6th. In a sand-papering machine, the combination of a flexible back portion having a free protruding end or ends adapted to hold a piece of sand-paper in operative position, means for clamping and holding at least one end of the piece of sand-paper in contact with the flexible backing, and means for rotating the parts, substantially as described.

No. 53,348. Registering Machine.

(Machine à enregistrer.)



Luther E. Allen, Detroit, Michigan, U.S.A., 27th August, 1896; 6 years. (Filed 18th July, 1896.)

Claim.—1st. In a registering machine, the combination with a top having a series of ball race ways therein, a supply chamber at the upper end of the race ways, and balls therein, of sliding gates between the race ways and receptacle, vertically reciprocating chargers working in the supply chamber and having ball retaining grooves or seats on their upper ends, keys for laterally shifting the gates, and means actuated by the keys for controlling the movement of the chargers in one direction, substantially as set forth. 2nd. In a registering machine, the combination with a frame, a series of raceways, a supply chamber, and balls therein, of gates between the raceways and supply chamber, reciprocating chargers working in the supply chamber, springs for actuating the chargers in one direction, keys for shifting the gates, means for moving the chargers against the tension of the springs and means controlled by the keys for controlling said charger moving means, substantially as described. 3rd. In a registering machine, the combination with a casing, a series of race ways therein, a supply chamber, a series of receptacles, and balls, of gates between the raceways and the receptacles, a series of chargers acting as conveyances to lift the balls from the supply chamber to the receptacles, a series of keys for shifting the gates and moving the chargers in one direction, and means for moving the chargers in the opposite direction, substantially as described. 4th. In a registering machine, the combination with the ball races, gates near the upper ends thereof, keys for actuating the gates, ball receptacles above the gates, a ball supply chamber, the balls, and a series of chargers, one for each receptacle, and means for actuating all the chargers upon the operation of any key. 5th. In a registering machine, the combination with the ball races, gates near the upper end thereof, keys for actuating the gates, the balls, plungers for carrying balls to the gates, and a cash drawer for actuating the plungers, substantially as described. 6th. In a registering machine, the combination with a case having a hinged top, ball race ways in the top, a supply chamber, of gates between the receptacle and race ways, means for independently shifting the gates, means for simultaneously removing all of the gates, a series of balls, a cash drawer and means actuated by the drawer for transferring the balls from the chamber to the race ways, substantially as described. 7th. In a registering machine, the combination of the casing, an inclined cover thereon, a series of ball races formed in the top of the cover, balls adapted to move therein, and the receptacle in the cover at its upper edges below the plane of the ball races, a gate frame secured to the cover at the upper end of the races, laterally movable gates therein, and laterally movable keys pivoted on the frame and adapted to control the gates. 8th. In a registering machine of the kind described, the combination of the gate frame, the actuating key levers G, the gate b, controlled thereby, stops for limiting the motion of the keys in one direction, the spring actuated bar H having pins adapted to engage the keys on the opposite side from the stops, and the latch for the drawer, actuated by the bar H, substantially as described. 9th. In a registering machine of the kind described, the combination of the gate frame, the key levers pivoted thereon, the gates therein actuated by the keys, the cash drawer, a lock for the cash drawer, a spring actuated sliding bar H, having pins (one for each key) with which the key levers engage, and means for releasing the drawer lock through said bar H, substantially as described. 10th.

In a registering machine, the combination with the ball races, the gates controlling the same, and the receptacle *a* above the gates, of the ball receptacle, the ball races, the balls therein, the bar *O* below the receptacle, the plungers *O'* on the bar, springs acting normally to hold the said plungers in their lower position, a cash drawer and connection between the cash drawer and the plungers for actuating the same as and for the purpose described. 11th. The combination, with a series of inclined ball race-ways, a ball supply chamber located at the upper end and below the plane of the same, having capacity for a stack or collected series of balls, a series of chargers working in a portion only of the chamber, and having ball receiving recesses at their ends, means for reciprocating the charges, and gates for the raceways, substantially as described. 12th. In a registering machine, the combination of a receptacle, a series of balls therein, a series of races connecting at their upper ends with the receptacle, a gate controlling the passage of the balls from the receptacle, and a switch for controlling the movement of the ball into any of the ball races, substantially as described. 13th. In a registering machine, the combination of the bed having ball races therein, a transverse gate guide having grooves registering with the ball races, key actuated laterally movable gates in said guide, balls in the ball races controlled by said gates, and a movable switch for conducting the balls laterally to the gates, substantially as described. 14th. In a registering machine, the combination with a series of ball races, the balls therein, switches controlling the movement of the balls through the races and a movable common bar to which all the switches are secured, substantially as and for the purpose described.

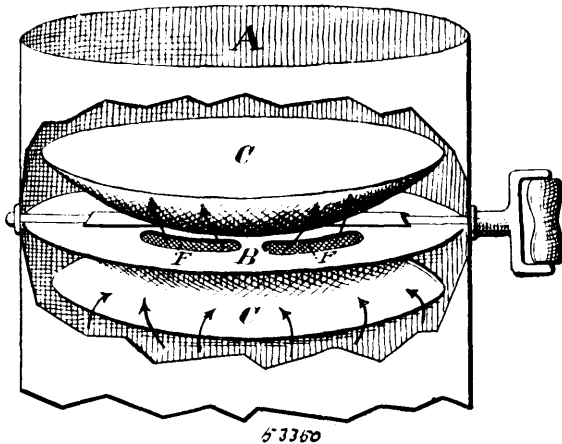
No. 53,349. Composition Médicale.

(Medicinal Compound.)

Alphonse Daze, St. François de Sales, Comté de Laval, Québec, Canada, 27 août, 1896; 6 ans. (Filé le 20 juillet, 1896.)

Résumé. Une composition médicale consistant dans le mélange d'huile de castor, d'huile d'olive et de soufre dans les proportions indiquées.

No. 53,350. Clef de Tuyau. (Store Pipe Damper.)



Louis Harry Gaudry, Québec, Canada, 27 août, 1896; 6 ans. (Filé le 6 nov., 1895.)

Résumé. La combinaison des proportions des réflecteurs E E, Fig. 2. Le diamètre de un dixième plus petit que la pièce du centre B. Et le degré de concavité qui forme un angle de 25 degrés de

chaque côté de la pièce B pour permettre le passage de la fumée, et la proportion des ouvertures G, G, G, G, de la pièce B ce qui permet un passage suffisant de l'air et de la fumée et cause une économie de combustible en conservant la chaleur; le tout tel que ci-dessus décrit et pour les fins indiquées.

No. 53,351. Composition Médicale.

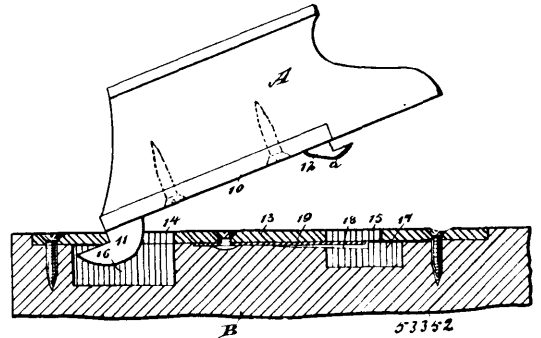
(Medicinal Compound.)

Alfred Houle, St. Hugues, Comté de Bagot, Québec, Canada, 27 août, 1896; 6 ans. (Filé le 24 juin, 1896.)

Résumé.—Une composition médicale constituée de vinaigre, de thérbenthine, d'alcool et de blancs d'œufs dans les proportions indiquées.

No. 53,352. Vehicle-seat Lock.

(Serrure pour siège de voiture.)



Thomas Ludwick Pfelegor, Burlingame, Pennsylvania, U.S.A., 27th August, 1896; 6 years. (Filed 8th July, 1896.)

Claim. 1st. A seat lock, the same consisting of oppositely projecting angled bolts adapted for the rigid attachment to the forward and rear portion of a seat riser, a face plate adapted for attachment to the body of the vehicle, having openings to receive the under surface of the said bolts, and a spring secured to the said face plate, and having its free end extending partially across one of the openings therein and adapted for engagement with one of the bolts, as and for the purpose specified. 2nd. A vehicle-seat lock, the same consisting of a plate adapted to be attached to the riser of a vehicle-seat, the said plate being provided with a forwardly-extending angular bolt at its forward end, and a rearwardly-extending angular bolt at its rear end, the bolts being rigid with the plate and the forward surface of the rear bolt being inclined, a face plate having openings to receive both bolts, and a spring secured to the under surface of the said face plate, the free end whereof extends across and beneath the opening in the plate, adapted to receive the rear and bevelled bolt, as and for the purpose specified. 3rd. In a vehicle-seat lock, the combination thereof with a seat, of a bolt secured to the forward end of each riser thereof, the said bolt being of angular construction and forwardly projected, and a bolt attached rearward to the centre of each riser, being also of angular construction, rearwardly projected and provided with a bevelled forward face, of a vehicle body having recesses in its upper edges adapted to receive the bolts of the seat, each rear recess being made to meet a rearwardly and downwardly inclined recess which is continued in its side walls, a face plate secured over the recessed portions of the body, having openings to receive the bolts, of less length than the recesses in the body with which they are in registry, and a spring attached to each face plate, being located in the inclined recesses of the body, as and for the purpose set forth.

*CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO
THE FOLLOWING PATENTS.*

4441. EUTROPE CHARTIER, 2nd term of Patent No. 37,116 from the 6th day of August 1896. Wall Plastering Composition, 3rd August, 1896.
4442. DAVID JOHNSON, 3rd term of No. 24,962, from 10th August, 1896. Explosive Compound, 3rd August 1896.
4443. JAMES JOSEPH BUSH and THOMAS FRANCIS POWERS, 2nd term of No. 37,166, from the 15th August, 1896. Steam Generator, 5th August, 1896.
4444. HARRY BARRINGER COX, 2nd term of No. 37,112, from the 6th August, 1896. Thermo-electric Generator, 6th August, 1896.
4445. GARTH & CO. (assignee), 3rd term of No. 24,949, from the 13th September, 1896. House Heating Apparatus, 6th August, 1896.
4446. CHARLES ERASTUS PATRIC, 3rd term of No. 24,786, from the 23rd day of August, 1896. Seed Sowing Machine, 6th August, 1896.
4447. AUGUSTUS HARPER RAINELL GUILLEY, 2nd term of No. 37,686, from the 27th of October, 1896. Electrical Block System for Railways, 7th August, 1896.
4448. THOMAS McDONALD, 2nd term of No. 37,409, from the 15th day of September, 1896. Cylindrical Boiler, 7th August, 1896.
4449. GEORGE KINGSLEY, 3rd term of No. 27,162, from the 13th July, 1887. Steam Boiler, 7th August, 1896.
4450. ALEXANDER LOGAN, 3rd term of No. 24,707, from the 11th August, 1896. Machine for Extracting Stumps, 8th August, 1886.
4451. CHARLES G. SHEPARD and WALTER J. SHEPARD, 3rd term of No. 24,997, from the 23rd September, 1896. Stove Pipe Damper, 10th August, 1896.
4452. HILLMAN WILLIAMS ROBINSON, 3rd term of No. 24,884. Machine for Uniting Soles and Upfers of Boots and Shoes, 12th August, 1896.
4453. GEORGE WETTLANFER, 2nd term of 37,172, from the 19th day of August, 1896. Pea Harvester, 12th August, 1896.
4454. T. DELAHEY, 3rd term of 24,756, from the 18th August, 1896. Harvester Knife Grinder, 13th August, 1896.
4455. THE KNICKERBOCKER COMPANY (assigned), 3rd term of No. 24,854, from the 3rd of September, 1896. Dust Collector for Flour Mills, etc., 14th August, 1896.
4456. WILLIAM JOHN VERNEY, 2nd term of No. 37,175, from the 20th August, 1896. Hay Rack, 14th August, 1896.
4457. HARLOW MILLARD CRITTENTON, 2nd term of Patent 37,163, from the 14th August, 1896. Apparatus for Thawing Logs, 14th August, 1896.
4458. THE ALPAUGH FLOUR BIN COMPANY (assignee), 2nd term of No. 37,174, from the 19th August, 1896. Flour Bin, 18th August, 1896.
4459. THE SOLAR REFINING COMPANY (assignee), 2nd term of No. 37,266, from the 1st day of September, 1896. Method of Refining Petroleum Oil, 19th August, 1896.
4460. THE SOLAR REFINING COMPANY, (assignee), 2nd term of No. 37,267, from the 1st September, 1896. Method of Purifying Petroleum, 19th August, 1896.
4461. THE SOLAR REFINING COMPANY, (assignee), 2nd term of No. 37,268, from the 1st September, 1896. Art of Purifying Petroleum, 19th August, 1896.
4462. THE SOLAR REFINING COMPANY, (assignee), 2nd term of No. 37,269, from the 1st September, 1896. Art of Purifying Petroleum, 19th August, 1896.
4463. THE SOLAR REFINING COMPANY, (assignee), 2nd term of No. 37,270, from the 1st September, 1896. Art of Purifying Petroleum, 19th August, 1896.
4464. THE SOLAR REFINING COMPANY, (assignee), 2nd term of No. 37,271, from the 1st September, 1896. Composition for Purifying Petroleum, 19th August, 1896.
4465. THE SOLAR REFINING COMPANY, (assignee), 2nd term of No. 37,272, from 1st September, 1896. Method of Purifying Petroleum, 19th August, 1896.
4466. THE SOLAR REFINING COMPANY, (assignee), 2nd term of No. 37,273, from the 1st September, 1896. Art of Purifying Petroleum, 19th August, 1896.
4467. JACOB HERBERT MICKLER, WILLIAM STAHL-SCHMIDT and JACOB EMIL KLOTZ, 2nd term of No. 37,191, from the 22nd of August, 1896. Drilling Machine, 21st August, 1896.
4468. THE CONSOLIDATED CAR HEATING CO., (assignee), 2nd term of No. 37,202, from the 25th August, 1896. Heating Systems, 21st August, 1896.
4469. JESSE ASCOUGH, 2nd term of No. 37,435, from the 19th September, 1896. Art of Making Boron Compounds, 21st August, 1896.
4470. COFRAN J. HALL, 2nd term of No. 37,225, from the 27th August, 1896. Valve, 22nd August, 1896.
4471. COFRAN I. HALL, 2nd term of No. 37,432, from the 18th day of September, 1896. Elevator valve, 22nd August, 1896.
4472. SAMUEL P. RUSSELL, 2nd term of No. 37,282, from the 2nd day of September, 1896. Ledger, 24th August, 1896.
4473. SAMUEL GILBERT CROW, 2nd term of No. 37,289, from the 2nd day of September, 1896. Chart for Marking Garments, 25th August, 1896.
4474. HENRY STANTON WILLIAMS, 2nd term of No. 37,221, from the 27th day of August, 1896. Reciprocating Grate, 26th August, 1896.
4475. CARLTON ELLIS BAILEY, 3rd term of No. 24,816, from the 7th day of August, 1896. Wrench, 27th August, 1896.
4476. JOHN D. McEACHRAN, 2nd term of No. 37,261, from the 1st day of September, 1896. Boiler Cleaner, 27th August, 1896.
4477. C. KLOEPFER, 3rd term of No. 25,007, from the 24th day of September, 1896. Running Gear for Vehicles, 27th August, 1896.
4478. CHRISTOPHER CLARK, 2nd term of No. 37,259, from the 1st day of September, 1896. Spiral Stairway. 28th August, 1896.
4479. HERMANN KOEHLER, 2nd term of No. 37,443, from the 19th day of September, 1896. Method of Refining Petroleum, 29th August, 1896.
4480. JOSEPH JOHN BYERS, 3rd term of 24,881, from the 4th day of September, 1896. Waterproof Garments, etc., 31st August, 1896.
4481. LEVI J. ODELL, 2nd term of No. 37,406, from the 15th day of September, 1896. Type-writing machine, 31st August, 1896.

TRADE - MARKS

**Registered during the month of August, 1896, at the Department of Agriculture--
Copyright and Trade-Mark Branch.**

5712. THE BRITISH COLUMBIA CANNING COMPANY, LIMITED, London, England, and Victoria, British Columbia. Preserved Salmon, 3rd August, 1896.
5713. JOHN EDMUND GILLOY, Brussels, Belgium. Toilet Soap, 3rd August, 1896.
5714. KOKO MARICOPAS COMPANY, LIMITED, London, England. Preparations for the Hair and Teeth, Perfumed Soap and other toilet articles, 3rd August, 1896.
5715. JOHN JAMESON & SON, LIMITED, Bow Street Distillery, Dublin, Ireland. Whiskey, 10th August, 1896.
5716. THE JOHN GRIFFITHS CYCLE CORPORATION, LIMITED, Dublin, Ireland, trading also as THE DUNLOP CYCLE COMPANY, Oriel House, Westland Row, Dublin, Ireland, and Coventry, England. Cycles and Cycle accessories, 10th August, 1896.
5717. WILLIAM BOWLER & WESLEY KNIGHT, St. Johns, Que., trading as THE DOMINION SANITARY POTTERY COMPANY. Water Closets and other articles of sanitary earthenware, 10th August, 1896.
5718. LUDGER GRAVEL, Montreal, Que. Une Huile pour lubrifier les essieux de carrosses, voitures légères, charettes, etc., 10 août, 1896.
5719. JOHN MORRISON BELL AND ARCHIBALD DE MOWBRAY BELL, Ottawa, Ont. Inks, 13th August, 1896.
5720. THE GEO. F. BLAKE MANUFACTURING COMPANY, New York, N.Y., U.S.A. Pumping Machines, 14th August, 1896.
5721. CALDECOTT, BURTON AND SPENCE, Toronto, Ont. Dress Goods, 15th August, 1896.
5722. THE MONTREAL COTTON COMPANY, LIMITED, Valleyfield, Que. Cotton, 17th August, 1896.
5723. THE HARMONY SOCIETY, Harmony Township, Allegheny County, Pennsylvania, U.S.A. Bitters, Cordials, &c., 20th August, 1896.
5724. J. AND P. COATS, LIMITED, Paisley, Scotland. General Trade Mark, 27th August, 1896.
5725. JAMES MARSHMAN BRAYLEY AND RICHARD ENGLISH BRAYLEY, Montreal, Que., trading as THE TURKISH DYE COMPANY, and BRAYLEY, SONS & CO. Dyes, 29th August, 1896.
5726. JAMES MARSHMAN BRAYLEY AND RICHARD ENGLISH BRAYLEY, Montreal, Que., trading as THE TURKISH DYE COMPANY, and BRAYLEY, SONS & CO. Medical Preparations, 29th August, 1896.
5727. THE ACADIA SUGAR REFINING COMPANY, LIMITED, Halifax, N.S. Sugar, 31st August, 1896.
5728. L. P. LANGLOIS & CIE, Trois Rivières, Qué. Cigars, 31 août, 1896.
5729. THE DUNLOP PNEUMATIC TIRE COMPANY, LIMITED, 160 Clerkenwell Road, London, Eng. Pneumatic Tires for the wheels of Velocipedes and other vehicles and parts of such Tires, 31st August, 1896.
5730. THE CYCLE COMPONENTS MANUFACTURING COMPANY, LIMITED, Bournbrook, Birmingham, England. Cycles, Cycle Fittings made of Metal, and Pneumatic Tires of India Rubber, 31st August, 1896.

COPYRIGHTS

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Copyright and Trade-Mark Branch.

8653. NEW CROKINOLE DIRECTIONS. William Bryce, Toronto, Ont., 1st August, 1896.
8654. ART SUPPLEMENT OF THE DAILY MAIL AND EMPIRE, TORONTO, SATURDAY, 1st AUGUST, 1896. The Mail Printing Co., Toronto, Ont., 1st August, 1896.
8655. THE BELL TELEPHONE COMPANY OF CANADA, LIMITED, MONTREAL EXCHANGE, SUBSCRIBERS' DIRECTORY, JULY, 1896. The Bell Telephone Company of Canada, Ltd., Montreal, Que., 3rd August, 1896.
8656. PHOTOGRAPH OF THE LATE SIR LEONARD TILLEY. Hamilton C. Martin, St. John, N.B., 5th August, 1896.
8657. THE BELL TELEPHONE COMPANY OF CANADA, LIMITED, KINGSTON EXCHANGE, SUBSCRIBERS' DIRECTORY, ONTARIO DEPARTMENT, JUNE, 1896. The Bell Telephone Company of Canada, Ltd., Montreal, Que., 6th August, 1896.
8658. THE BELL TELEPHONE COMPANY OF CANADA, LIMITED, TORONTO AND TORONTO JUNCTION EXCHANGES, SUBSCRIBERS' DIRECTORY, ONTARIO DEPARTMENT, JUNE, 1896. The Bell Telephone Company of Canada, Ltd., Montreal, Que., 6th August, 1896.
8659. MASSEYS MAGAZINE, AUGUST, 1896. The Massey Press, Toronto, Ont., 7th August, 1896.
8660. LUDWIG, THE EMIGRANT. (A Comedy in Three Acts.) By William and Louisa Schubart, Toronto, Ont., 7th August, 1896.
8661. DANSE AUX SABOTS (WOODEN SHOE DANCE). Danse caractéristique, pour le Piano, par F. Boscovitz, Whaley, Royce & Co., Toronto, Ont., 7th August, 1896.
8662. STELLINA. Polish Dance, pour le Piano, par F. Boscovitz. Whaley, Royce & Co., Toronto, Ont., 7th August, 1896.
8663. THE BISHOPS OF THE CHURCH OF ENGLAND IN CANADA AND NEWFOUNDLAND. By Rev. Charles H. Mockridge, D.D. F. N. W. Brown, Toronto, Ont., 8th August, 1896.
8664. ART SUPPLEMENT OF THE DAILY MAIL AND EMPIRE, TORONTO, SATURDAY, 8th AUGUST, 1896. The Mail Printing Co., Toronto, Ont., 8th August, 1896.
8665. THE DELINEATOR, SEPTEMBER, 1896. (A Journal of Fashion, Culture and Fine Arts.) The Butterick Publishing Co., (Ltd.), New York, N.Y., U.S.A., 12th August, 1896.
8666. THE CANADIAN MAGAZINE, AUGUST, 1896. The Ontario Publishing Co., (Ltd.), Toronto, Ont., 12th August, 1896.
8667. THE BELL TELEPHONE COMPANY OF CANADA, LIMITED, QUEBEC EXCHANGE, SUBSCRIBERS' DIRECTORY. The Bell Telephone Company of Canada, (Ltd.), Montreal, Que., 12th August, 1896.
8668. CULTURES FOURRAGÈRES, PÂTURAGES ET PELOUSES. Jean B. Plante, Stadacona, (près Québec), Qué., 12 août 1896.
8669. LAUNCH OF THE CORONA. (The Niagara Navigation Company's New Steamer.) Wm. T. Freeland, Toronto, Ont., 14th August, 1896.
8670. THE HIGH SCHOOL ALGEBRA. (Part I.) By W. J. Robertson, B.A., LL.B., and I. J. Birchard, M.A., Ph. D. (Second Edition.) Wm. Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 15th August, 1896.
8671. HIGH SCHOOL HISTORY OF GREECE AND ROME. By W. J. Robertson, B.A., LL.B., and John Henderson, M.A. The Copp, Clark Co. (Ltd.), Toronto, Ont., 15th August, 1896.
8672. REV. JAMES CALLAHAN. (Photo A.) Wm. Notman & Son, Montreal, Que., 15th August, 1896.
8673. REV. JAMES CALLAHAN. (Photo B.) Wm. Notman & Son, Montreal, Que., 15th August, 1896.

8674. REV. JAMES CALLAHAN. (Photo C.) Wm. Notman & Son, Montreal, Que., 15th August, 1896.
8675. REV. JAMES CALLAHAN. (Photo D.) Wm. Notman & Son, Montreal, Que., 15th August, 1896.
8676. ART SUPPLEMENT OF THE DAILY MAIL AND EMPIRE, TORONTO, SATURDAY, 15th AUGUST, 1896. The Mail Printing Co., Toronto, Ont., 15th August, 1896.
8677. SELECT POEMS. (Being the Literature prescribed for the Junior Matriculation and Junior Leaving Examinations, 1897.) Edited with Introduction, Notes and Appendix, by W. J. Alexander, Ph. D. The Copp, Clark Co. (Ltd.), Toronto, Ont., 17th August, 1896.
8678. THE LAW OF THE WHEEL. (A Handbook for the use of Cyclists.) William T. Murray and Henry Cartwright, Toronto, Ont., 17th August, 1896.
8679. MANUEL DES ENGRAIS. Par Dr. G. LaRoque, Québec, Qué., 19 août 1896.
8680. THE BELL TELEPHONE COMPANY OF CANADA, LIMITED, LONDON EXCHANGE SUBSCRIBERS' DIRECTORY, ONTARIO DEPARTMENT, AUGUST, 1896. The Bell Telephone Company of Canada (Ltd.), Montreal, Que., 21st August, 1896.
8681. SADDLE, SLED AND SNOWSHOE: PIONEERING ON THE SASKATCHEWAN IN THE SIXTIES. By John McDougall. William Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 21st August, 1896.
8682. DRESS, PRIDE AND BEAUTY. (A Plea for Plainness and Naturalness.) By Rev. Reuben Stillwell, Frankville, Ont., 21st August, 1896.
8683. HIS HONOUR, AND A LADY. By Mrs. Everard Cotes. Theodore W. Gregory, Toronto, Ont., 21st August, 1896.
8684. CUTHBERT'S ARITHMETIC EXERCISE BOOKS, Nos. 2, 3, 4, 5. (For use in Second and Third Book Classes.) The Copp, Clark Co. (Ltd.), Toronto, Ont., 21st August, 1896.
8685. ART SUPPLEMENT OF THE DAILY MAIL AND EMPIRE, TORONTO, SATURDAY, 22ND AUGUST, 1896. The Mail Printing Co., Toronto, Ont., 22nd August, 1896.
8686. THE ONTARIO DIGEST, 1891-95. Compiled by Order of the Law Society of Upper Canada. By J. F. Smith, Q.C., E. B. Brown and R. S. Cassels, Barristers-at-law. The Law Society of Upper Canada, Toronto, Ont., 22nd August, 1896.
8687. SIR J. A. CHAPLEAU GRANDE MARCHE. Par Max Bachmann, Montreal, Que., 24th August, 1896.
8688. ALL COONS LOOK ALIKE TO ME. Words and Music by Ernest Hogan. Whaley, Royce & Co., Toronto, Ont., 24th August, 1896.
8689. ISABELLE. (A Girl who is one of the Boys) March Song. Words by Walter H. Ford, Music by John W. Bratton. Whaley, Royce & Co., Toronto, Ontario, 24th August, 1896.
8690. MY GAL IS A HIGH BORN LADY. (Song and Chorus.) Words and Music by Barney Fagan. Arranged by Gustave Luders. Whaley Royce & Co., Toronto, Ontario, 24th August, 1896.
8691. SINGING IN A TROLLEY CAR. (Song and Chorus.) Words and Music by John H. Fuchsius. Whaley, Royce & Co., Toronto, Ontario, 24th August, 1896.
8692. THE LAST ROSE OF SUMMER. (Unaccompanied Part Song for Male Voices.) Arranged by Stocks Hammond, Mus. D., Toronto, Ontario, 24th August, 1896.
8693. MANUEL DE DROIT CIVIQUE. (Notre Constitution et Nos Institutions.) Par C. J. Magnan, Québec, Qué., 24 août, 1896.)
8694. APPENDIX TO HIGH SCHOOL BOOK-KEEPING. Illustrating Single and Double Entry Methods, by H. S. McLean. The Copp, Clark Co. (Ltd.), Toronto, Ontario, 25th August, 1896.
8695. NOTES, EXERCISES AND VOCABULARY TO "LE VOYAGE AUTOUR DE MA CHAMBRE," of XAVIER DE MAISTRE, AND "LA GRAMMAIRE," of EUGENE LABICHE. By F. H. Sykes, M. A., and E. J. McIntyre, B. A. The Copp, Clark Co. (Ltd.) Toronto, Ontario, 25th August, 1896.
8696. CALENDRIER PERPÉTUEL. F. J. Audet, Ottawa, Ontario, 25 août 1896.
8697. THE DANDY. (Society Two-Step March.) By C. M. Hattersley, Trenton, New Jersey, U.S.A., 26th August, 1896.
8698. A KANSAS TWO-STEP. Characteristic Dance by Arthur W. Pryor. Willmott H. Billing, Toronto, Ontario, 26th August, 1896.

8699. SONGS OF THE NEW WORLD. By J. Alexander Armstrong. Toronto, Ontario, 27th August, 1896.
8700. IROQUOIS MARCH. (Two-Step for Piano.) By Vincenzo Glionna. Whaley, Royce & Co., Toronto, Ontario, 27th August, 1896.
8701. MARCH RENDEZVOUS. (For Piano.) By Otto Henneberg. Whaley, Royce & Co., Toronto, Ontario, 27th August, 1896.
8702. A PRACTICAL ENGLISH GRAMMAR. By Mary F. Hyde. (Adapted to the use of Canadian Schools.) By Dr. Fred. W. Kelley and P. J. Leitch. The Copp, Clark Co. (Ltd.), Toronto, Ont., 29th August, 1896.
8703. PRACTICAL LESSONS IN THE USE OF ENGLISH. By Mary F. Hyde. (Adapted to the use of Canadian Schools.) By Dr. Fred. W. Kelley and P. J. Leitch. The Copp Clark Co. (Ltd.), Toronto, Ont., 29th August, 1896.
8704. ART SUPPLEMENT OF THE DAILY MAIL AND EMPIRE, TORONTO, SATURDAY, 29th AUGUST, 1896. The Mail Printing Co., Toronto, Ont., 29th August, 1896.
8705. IS THE SABBATH BINDING UPON THE CHRISTIAN CONSCIENCE? By John Haldane, Toronto, Ont., 29th August, 1896.
8706. DOMINION OF CANADA HOTEL GUIDE. Davis & Henderson, Toronto, Ont., 29th August, 1896.
8707. LIVRE DE LECTURE COURANTE. (Cours Élémentaire.) Les Frères du Sacré-Cœur, Arthabaskaville, Qué., 31 août 1896.
8708. SAFE CITIZENSHIP; OR, CANADIAN AND AMERICAN CITIZENSHIP. By J. Frith Jeffers, M.A., and J. L. Nichols, M.A. J. L. Nichols & Co., Toronto, Ont., 31st August, 1896.